

parallel to the faces of the cribbing.

635.6-BASIS OF PAYMENT:

The quantity, determined as provided above, will be paid for at the contract unit price bid for the item below, which price and payment will be full compensation for furnishing all the materials and doing all the work prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, and incidentals necessary to complete the work, except that the necessary structure excavation, with limitations as specified above, will be paid for as Item 212001-*, "STRUCTURAL EXCAVATION". The cost of granular filling of the interior and backfilling behind the crib shall be included in the unit price bid for "Metal Cribbing".

635.7-PAY ITEMS:

ITEM	DESCRIPTION	UNIT
635001-*	METAL CRIBBING	FOOT (METER)

* Sequence number

SECTION 636 MAINTAINING TRAFFIC

636.1-DESCRIPTION:

This work shall consist of all necessary measures to maintain and to protect traffic, to protect the work in process, to protect adjacent property from excess dust resulting from the construction area and to maintain traffic through, around or adjacent to the construction area, in accordance with these Specifications or as directed. The work shall include the furnishing and maintaining of all traffic control devices, flaggers and pilot truck; construction of temporary structures when required; labor, equipment and materials to keep the traveled road smooth; and the furnishing and application of dust palliatives.

636.2-MATERIALS:

Materials shall conform to the following requirements of Division 700, except as otherwise noted:

MATERIAL	SUBSECTION
Aggregate	704.6 Class 1 *
Asphalt Emulsion	705.4 SS-1, SS-1h, CBAEP, or AEM-1 **
Cationic Emulsified Asphalt	705.11 CSS-1 or CSS-1h **
Calcium Chloride	715.1
Traffic Control	715.9
Traffic Zone Paint	711.41 (Type II) or 711.40 (Temporary Paint).
Raised Pavement Markers and Other Pavement Marking Material	715.40
Pilot Truck	A Vehicle of the pick-up or jeep type, equipped with a prescribed sign mounted on the rear portion of the vehicle in such a manner as to be easily visible by following motorists.
Day	As used in this Specification, a day is considered to be a 24-hour period.

* When aggregate for maintaining traffic is not to be part of any succeeding base or pavement course, the appropriate aggregate size shall be determined by the Engineer and the requirements for gradation, Los Angeles abrasion and sodium sulphate soundness shall be waived.

** SS-1, SS-1h, CSS-1 and CSS-1h may be diluted with water.

CONSTRUCTION METHODS

636.3-CONTROL OF TRAFFIC THROUGH WORK AREAS:

Control and protection of traffic through work areas shall comply with these Specifications and the provisions of the Plans. Traffic shall be maintained over the project, over such other routes as shown on the Plans, or as directed by the Engineer. The traffic route shall be kept as smooth as possible, passable and safe for anticipated speeds.

All traffic control devices shall be fabricated and installed according to the

manual, "Traffic Control for Street and Highway Construction and Maintenance Operations", published by the Division. The type of construction operation being performed will dictate the traffic control case (scheme) to be used as outlined in this manual and as called for on the Plans.

All stockpiles of materials shall be located so that they will not interfere with traffic being routed through or adjacent to work areas. Stockpiles of materials shall be located a minimum of 30 ft. (10 m) from the edge of the traveled roadway unless traffic is protected by a positive barrier. Parking areas for the Contractor's employees, and all other vehicles shall be at locations which do not interfere with the safety of the traveling public, and on freeway type facilities shall be a minimum of 30 ft. (10 m) from the edge of the traveled roadway unless traffic is protected by a positive barrier. At the end of a day's operation the Contractor shall have no equipment or materials on the traveled roadway, median area or shoulders or in any areas which interfere with the safe movement of traffic.

The traffic control plan specified in the contract for each traffic control situation is considered the plan to be followed by the Contractor. However, should the Contractor desire to adopt another traffic control plan during construction, this alternate method shall be submitted to the Engineer for review and approval at least 14 days in advance of the commencement of work in the affected areas.

The traffic control devices shall be installed immediately before the beginning of construction and shall remain in place only as long as they are needed and shall be removed immediately. Any traffic control device that does not apply to the existing condition shall be removed, covered or turned so as not to be readable by oncoming traffic.

All traffic control devices erected by the Contractor shall be maintained as indicated by a weekly inspection, cleaned when directed by the Engineer and removed by the Contractor when the conditions no longer warrant the devices. Maintaining the control devices shall include keeping them in good condition, correct position, unobscured by weeds, brush, trees, work material or equipment. The Contractor shall designate a trained person with authority to take all actions necessary for the safe control of traffic through the work zones.

If the Total Contract Bid Amount is over \$500,000 or is otherwise noted on the plans this person shall be American Traffic Safety Service Association (ATSSA) certified or shall demonstrate equal qualifications, approved by the Division. The Contractor shall provide the Engineer with the telephone number of this person, along with the telephone number of any other personnel who is in charge of traffic control devices, in case of emergencies at night or on weekends.

All conflicting pavement markings, as determined by the Engineer, shall be eradicated by the Contractor as soon as practicable. The eradication shall be performed prior to shifting traffic.

Positive barriers shall be either temporary concrete barrier, or temporary guardrail barrier. Temporary guardrail barrier shall be installed with 6 ft. 3 in. (1.905 meter) post spacing with block outs, unless otherwise specified. The end

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treatment for temporary guardrail barrier shall be FET or TET as specified on the Standard Details. Payment for the end treatment shall be made under the regular pay item. The ends of the temporary concrete barrier shall be either flared or protected, as indicated on Plans. Where temporary guardrail barrier is used, a minimum clearance behind the barrier of 4 feet (1.2 m) from the face of the guardrail shall be provided.

Barricades shall be used only as channelizing devices. When temporary guardrail barricades (mounted on barrels) are used, the ends of the guardrail shall be either flared or tapered as shown on the Plans.

636.4-AGGREGATES AND DUST PALLIATIVES:

Aggregates required for the maintenance of traffic, water, liquid asphalt, asphalt emulsion, cationic emulsified asphalt or calcium chloride for use as dust palliatives, shall be furnished and applied as directed by the Engineer. Water or other dust palliative shall be used on haul roads and any location on the project to minimize pollution from dust, when dust is creating a nuisance to the traveling public or adjacent property owners. No payment will be made for other dust control. Temporary roads shall be constructed when called for, and such roads, as well as the road under construction, shall be surfaced and maintained with aggregates, as shown on the Plans or as directed by the Engineer.

636.5-TEMPORARY STRUCTURES:

Temporary structures shall be constructed and maintained as shown on the Plans or as called for in the Proposal.

636.6-PILOT TRUCK AND DRIVER OR SHADOW VEHICLE:

636.6.1 - Pilot Truck & Driver: A vehicle and a qualified driver shall be furnished by the Contractor when shown on the Plans or directed by the Engineer.

636.6.2 - Shadow Vehicle: A shadow vehicle shall be furnished by the Contractor when called for on the Plans or directed by the Engineer. This vehicle shall be a standard truck weighing between 10,000 GVW (4 536 kg) and 24,000 GVW (10 880 kg) maximum, and shall be equipped with a flashing or rotary yellow beacon which can be seen in all directions and a truckmounted attenuator mounted on the rear.

The shadow vehicle shall be used at the locations shown on the Plans where a lane is closed and work is in progress. When work is completed for the day, the shadow vehicle shall be relocated behind a positive barrier or off the job site in a safe location.

636.7-ERADICATION OF PAVEMENT MARKINGS:

All markings which may conflict with desired traffic movement, as determined by the Engineer, shall be fully eradicated as soon as practicable.

Eradication shall be performed prior to shifting of traffic.

Eradication shall be performed by hydro-blasting, sand blasting, chemicals, burning with excess oxygen or other suitable method.

Full eradication shall be defined as the removal of at least 90 percent of the existing marking. A 90 percent removal will be determined by the Engineer by comparison with the Eradication Visual Standard. This Standard can be obtained from the Engineer. In addition to the visual comparison, the 90 percent removal level is defined such that there will not be any remaining surface of the original paint film in the eradicated area. The remaining 10 percent of the existing marking will appear to be as part of the texture of the pavement.

The method used shall not materially damage the surface or texture of the pavement. Any damage caused by the Contractor's operations shall be corrected at the Contractor's expense and in a manner approved by the Engineer.

The Contractor shall take precaution to protect the public from any damage due to their operations. Accumulation of sand, water, dust or other residue resulting from the eradication operation shall be removed as the work progresses.

636.8-TEMPORARY PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS:

Temporary pavement markings and raised pavement markers shall be in accordance with 663.

Temporary pavement markings, to be used in delineating pavement lane and edge lines, shall be either temporary reflectorized pavement marking tape or reflectorized paint as approved by the Engineer.

When placing temporary pavement lane markings to separate traffic traveling in the opposite directions, it should be noted that, if there is no passing in both directions, double-yellow solid lines shall be placed; i.e. single-yellow solid lines are prohibited for separating opposite flowing traffic. In addition to temporary marking tape or paint, temporary raised, reflectorized pavement markers shall be placed, when called for on the Plans, for added delineation, at approximately 40 ft. (12 meter) intervals along the lane lines that separate traffic traveling in the opposite directions, with the markers centered transversely between double-yellow lines, or at the spacing required on the Plans.

When temporary raised pavement markers are specified as an alternate to temporary paint or to temporary tape, the configurations shall be as follows: solid line - markers shall be placed on five foot (1.5 m) centers along the entire length of line; lane line - four markers shall be placed on three foot four inch (1 m) centers with 40-foot (12 m) spacing, first marker to first marker; double yellow - markers shall be placed on five foot (1.5 m) centers in pairs.

Temporary pavement markings and raised markers shall be placed as soon as practicable after construction of a detour or other roadway requiring this

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type of delineation.

636.9-TRAFFIC CONTROL DEVICES:

Traffic control devices for work areas include, but may not be limited to, signs, barricades, drums, cones, delineators and flashers. They shall be installed in accordance with standards detailed in the manual, "Traffic Control for Street and Highway Construction and Maintenance Operations," published by the Division, or as shown on the Plans.

If the Total Contact Bid Amount is over \$500,000 or otherwise noted on the plans Traffic Control Devices also include work area signs indicating fines. These signs shall be installed 500' (150 m) after the first maintenance of traffic sign installed for each project. The signs shall be installed in both directions on the road under construction. The sizes, messages, and designs shall as shown in the Sign Frabrication Manual or as directed by the Engineer. with the larger size used for four lane expressway roadways with speeds of 55 MPH or greater and the smaller sign used for two lane roadways with speeds of 50 MPH or greater and with an ADT at 3,000 or greater. A 12' x 6' expressway sign (item 636011-* - 300 units) placed behind guardrail on 3 - 4 #BB U-Channel or on 3 - 4" x 4" wood post (breakaway) or 8' x 4' - two lane highway sign (item 636011-* - 180 units) placed behind guardrail on 2- 4 #BB U-Channel or on 2 - 4" x 4" wood post (breakaway).

636.10-CLEANING OF TRAFFIC CONTROL DEVICES:

Cleaning of all traffic control devices, when directed by the Engineer, shall consist of hand cleaning with a mild detergent followed by a thorough rinse with clear water. No harsh chemical, abrasive cleaner or tool shall be used that will damage the reflectorized surfaces or otherwise reduce the useful life of the device.

636.11-FLAGGER-TRAFFIC DIRECTOR:

The flagger-traffic director are separate functions and therefore, shall not be interchanged.

All flaggers shall be furnished by the Contractor, and it shall be the Contractor's responsibility to provide flaggers at any location necessary to assure the safety of the travelling public. When flaggers are required at locations as a result of operations considered reasonable and necessary by the Engineer to complete the project, payment will be made under this provision.

Hand signaling devices, orange headgear and vests shall be used by the Contractor's personnel assigned to traffic control responsibilities. Headgear and vests worn by the Contractor's flagger shall not bear the Division symbol.

Two-way radios shall be provided to the flaggers when they are out of sight of each other.

The traffic director shall be an off-duty police officer. The traffic director shall have all of the necessary equipment including uniform and properly identified police vehicle so that the public recognizes the law enforcement power of the individual. The Contractor shall provide the traffic director.

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The traffic control plan (TCP) and any approved revisions will be strongly considered in determining the appropriateness of payment. Flagger-Traffic Director required for operations that are not necessary but are initiated by the Contractor for their benefit or ease of operations shall not receive payment under this provision. Flagger-Traffic Director required outside of the project limits as a result of any of the Contractor's operations shall not receive payment. Flagger-Traffic Director required within the project limits in regards to the Contractor's transportation to or from waste areas, borrow pits, concrete plants or other necessary sites shall receive payment if considered reasonable and necessary as previously discussed.

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636.14-TEMPORARY CONCRETE BARRIERS:

This barrier type shall conform to the details on the Plans, set as directed on the Plans, with the barrier sections securely connected together by satisfactory fastening devices to Provide a more stable structure against impact.

Where temporary concrete barrier adjoins guardrail barrier, regardless if one is temporary and the other is permanent (newly constructed or previously in existence) or if both are temporary, they must be connected with a Temporary Guardrail Connector conforming to 636.16.2.

Where temporary concrete barrier adjoins bridge parapet or other essentially non-yielding barrier or obstacle, they must be joined in a manner to maintain barrier continuity and prevent vehicle snagging during impact. If they cannot be joined in this manner, a connecting device must be used to assure barrier continuity and to prevent vehicle snagging during impact.

When the temporary concrete median barriers are no longer needed, they will become the property of the Contractor, unless otherwise noted on the Plans.

636.15-REMOVING AND RESETTING TEMPORARY CONCRETE BARRIERS:

Temporary concrete barriers that are to be relocated within a project shall be salvaged and reinstalled as specified in 636.14 and set as indicated on the Plans.

636.16-TEMPORARY GUARDRAIL:

636.16.1-Temporary Guardrail Barrier: Temporary guardrail barrier shall consist of guardrail (beam) mounted on 6 ft. 3 in. (1.905 m) post spacing with blockouts, conforming to the requirements of 607. Where temporary guardrail barrier adjoins concrete barrier, bridge parapet, or other essentially non-yielding obstacle, regardless if one is temporary and the other is permanent (newly constructed or previously in existence) or if both are temporary, they must be connected with a Temporary Guardrail Connector conforming to 636.16.2.

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636.16.2-Temporary Guardrail Connector: This connector shall consist of the last 25 feet (7.62 m) of guardrail (beam) prior to the physical connection to a non-yielding barrier or obstacle, mounted on 3 ft. 1½ in. (0.9525) post spacing with blockouts, conforming to Standard Sheet G.R. 5 and an End Shoe conforming to Standard Sheet G.R. 2A. Four bolts shall be used in the End Shoe and standard posts may be substituted for the oversized wood posts.

636.17-REMOVING AND RESETTING TEMPORARY GUARDRAIL BARRIER:

Temporary guardrail barrier that is to be relocated within the project shall be salvaged and reinstalled as specified in 636.16.

636.18-ELECTRIC ARROW:

The electric arrow panel shall be located as shown in the manual, "Traffic Control for Street and Highway Construction and Maintenance Operations", published by the Division, or as shown on the Plans. For construction areas, the electric arrow shall be portable, trailer mounted on a nonreflective flat black panel 48 in. high by 96 in. (1.2 meters high by 2.4 meters) wide with a minimum legibility distance of one mile (1.6 km). Minimum mounting height, measured from the roadway to the bottom of the panel, shall be 7 feet (2.1 m) except on vehicle mounted panels which shall be as high as practicable. The electric arrow shall have the capability of the following mode selection Left Arrow, Right Arrow, Left and Right Arrow and Caution, with Caution mode consisting of four or more lamps arranged in a pattern which will not indicate a direction. Arrow panels shall automatically dim 50 percent from their rated lamp voltage during hours of darkness. The flashing rate of the lamps shall be between 25 and 40 flashes per minute. Minimum lamp "on time" shall be 50 percent.

636.19-CHANGEABLE MESSAGE SIGN:

Changeable message sign shall consist of the furnishing, installing and maintaining of a three-line variable message sign on a portable trailer. Each unit shall be self-contained and consist of a message board, controller, power supply, electrical cable and adjustable height structural support system. It shall be equipped to accept power supply from a completely self-contained diesel generator, existing commercial electrical service, or battery pack which is recharged automatically by solar panels. The trailer system assemblage shall conform to the laws of the State of West Virginia and all articles of the licensing regulations presently in effect. The sign shall only be attached to its tow vehicle when installation or removal is in progress. The trailer and its leveling jacks shall be designed to keep the unit from changing its deployed position once placed. Devices which lock the wheels and/or leveling jacks into place shall be employed. Sandbagging of the frame and/or leveling jacks is not an acceptable manner of lock down.

All parts of the system shall comply with codes annotated in the National Fire Protection Association and Underwriters Laboratory and all local electrical codes. Earth ground shall be tied to the sign's chassis. Lightning protection

shall be supplied for the load site.

The changeable message sign shall be the disc matrix or LED lamp matrix panel type capable of operating in temperatures from -30° to $+160^{\circ}$ F (-36° to 72° C) and capable of displaying alphanumeric characters and arrows. The sign panel assembly, including the mounting brackets, shall not exceed 128 inches (3.15 meters) in overall width. The bottom of the sign panel shall be a minimum of 7 feet (2.13 m) above the roadway. The display shall be yellow or amber character on black background, a 7 x 5 character font, minimum character height of 18 inches (450 mm), and character spacing at a minimum of two dots or one half the character width unless otherwise approved by Traffic Engineering Division. The unit shall have several preprogrammed messages and be capable of programming at least fifty new messages and storing such. The controller shall be housed in a weatherproof lockable cabinet that is accessible from a suitable mounting on the trailer. The controller shall be a microprocessor controller or lap-top computer with an incorporated keyboard and CRT which allows the users to access, generate, and store messages. The controller display shall be a miniaturized approximation of the actual display or a message being assembled.

The cycle time and duration of message for a changeable message sign is a function of the highway operating speeds and the size letters displayed. The entire message should be visible at least twice at the operating speed. When traveling at 65 MPH (105 km/h) (freeway speeds), a driver has approximately seven (7) seconds to read the message, resulting in that the message should not be longer than four (4) words or numbers and not longer than two (2) units of information. The message displayed from each unit shall be visible from one-half mile (805 meters).

The sign shall be capable of changing to and displaying a programmed default message or four corner dots flashing in the event of power failure. If battery backup (in event of power interruption) is called for on the plans, all functional operations to include sign lighting shall be operational up to two hours. Fluorescent lighting or LED lamp matrix shall be applied to provide nighttime visibility and the intensity of the sign shall be adjustable by automatically dimming or manual control.

Site selection and message displayed shall be approved by the Engineer. The changeable message sign shall always be located behind the channelizing devices or barriers away from moving traffic lanes. In work zones, it shall be located in clear buffer barricades without reducing the sign's visibility.

The unit shall be kept in good repair at all times. The Contractor shall maintain the device if failures occurs. Failure, malfunction or damage to the unit for any reason shall require the Contractor to expedite the repair and furnish adequate signing and flaggers as deemed necessary by the Engineer to safely control traffic through the work area. Maintenance shall include periodic cleaning of the unit.

When the changeable message sign is to become the property of the Division, each unit shall be delivered with the following items:

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- i. Operator's manual for sign-raising mechanism and sign operations.
- ii. Schematic wiring diagram of the sign, remote control console and the control unit.
- iii. Service manual for the sign, sign-raising mechanism control unit and the remote control console.
- iv. Record of Serial Numbers, Model Numbers, and Model Types for the changeable message sign and any attendant diesel engine.
- v. Warranty on the sign-raising mechanism, sign remote control console and control unit.
- vi. Inspection and operational tests.

636.20-TEMPORARY TRAFFIC SIGNAL(S) OR TEMPORARY LIGHTING:

Temporary traffic signal(s) shall consist of furnishing, installing, maintaining and subsequent removal of various types of traffic signal systems as necessary due to the maintenance of traffic plan. It shall include, but not be limited to, traffic signals and traffic signal interconnections to be installed in accordance with Section 660 and Subsection 715.42 of the Specifications. As a minimum, the temporary traffic signal(s) shall be equipped with a three-dial fixed time controller. When the temporary traffic signal(s) are no longer needed, they will become the property of the Contractor.

Temporary lighting shall consist of furnishing, installing, maintaining, and subsequent removal of various types of lighting systems as necessary due to the maintenance of traffic plan. It shall include but not be limited to lighting to be installed in accordance with Section 662 of the Specifications. When the temporary lighting is no longer needed, it will become the property of the Contractor.

636.21-TEMPORARY PIPE FOR MAINTAINING TRAFFIC:

Temporary pipe for maintaining traffic shall conform to the requirements of 604.

636.22-WARNING LIGHTS:

Warning lights shall consist of the furnishing, installation and maintenance of a portable, lens directed, enclosed light. The warning lights shall be in accordance with the requirements of 715.9.5 of the Standard Specifications.

636.23-METHOD OF MEASUREMENT:

The quantities of work done will be measured as follows:

636.23.1-Aggregate: The quantity of "Aggregate for Maintaining Traffic" will be measured in tons (megagrams) of aggregate applied and accepted.

The number of tons (megagrams) shall be determined by the total of the weights shown on receipted railroad freight bills when materials are shipped by rail; by actual measured displacement of barges certified by the producer when

water shipments are made, providing materials delivered by the methods are not stockpiled or stored; or determined by the Contractor from the total of weigh slips for each vehicle load weighed on an approved standard scale or from digital printout slips from an automatic batching plant, and certified by the Contractor to be correct.

Truck scales shall be provided by the producer or Contractor, except that truck scales are not required where the material is weighed at properly calibrated automatic batching plant facilities which are equipped with digital print-out equipment. The scales shall be of sufficient size and capacity to weigh the heaviest loaded trucks that are used for delivery of the material.

All truck scales shall be mounted on solid foundations which will insure their remaining plumb and level. All truck scales shall be inspected and sealed by the West Virginia Division of Labor, Bureau of Weights and Measures, or other appropriate agencies of the State or its political subdivisions. The Division may, at its option, accept inspection and sealing by out of state agencies when the material is weighed outside West Virginia.

A weigh person shall be provided by the producer. The weigh person shall certify that the weight of the material, as determined either by the truck scales or from the digital print-out of the weights, is correct.

Each truck shall be weighed empty prior to each load, except at automatic batch plants approved to operate without truck scales. A digital recorder and print-out shall be required on all truck scales. The digital recorder shall produce a printed record of the gross, tare and net weights, and the time, date, truck identification and project number.

Provision shall be made for constant zero compensation and further provision shall be made so that scales may not be manually manipulated during the printing process. The system shall be interlocked so as to allow printing only when the scale has come to rest. In case of a breakdown of the automatic equipment, the Engineer may permit manual operation for a reasonable time, normally not to exceed 48 hours, while the equipment is being repaired.

636.23.2-Bituminous Material: The quantity of "Bituminous Material for Dust Palliative" shall be the number of gallons (liters), prior to dilution in the field, incorporated into the completed work and will be measured as prescribed in [109.1](#).

636.23.3-Calcium Chloride: The quantity of "Calcium Chloride for Dust Palliative" shall be the number of tons (megagrams) actually used for the work, determined by the total of the weights of the individual units when shipped in packages.

636.23.4-Temporary Structures: "Temporary Structures for Maintaining Traffic", as detailed on the Plans or called for by the Engineer, shall be on a lump sum basis for completing, maintaining and removal of the work.

636.23.5-Pilot Truck and Driver: "Pilot Truck and Driver" shall be on a

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per day basis and shall include auxiliary barriers and warning signs of all necessary types used in conjunction with the pilot truck.

636.23.6-Traffic Control Devices: "Traffic Control Devices" will be measured by the number of units of traffic control devices used and accepted. The relative value of each traffic control device in units shall be as shown in the traffic control device rate schedule. The total units of traffic control devices shown in the Contract is an estimated amount only and may be adjusted up or down by the Engineer in accordance with the needs of the project. When more than one sign is attached to a post(s), mount(s) or barricade, the signs will be measured as a sign assembly and not as individual signs.

The price bid per unit of traffic control devices shall include furnishing, maintaining and removing, filling drums with sand as required, providing sand bags as ballast on barricades, replacement batteries for flashers, turning, covering or otherwise causing signs to be unreadable to traffic when the message does not pertain to the existing condition and all other miscellaneous items required for maintaining traffic.

Traffic control devices completely destroyed by traffic or any other means shall be replaced by the Contractor, with no additional payment to the Contractor.

A payment of $\frac{1}{4}$ the rate shown shall be made to the Contractor for any traffic control devices that the Contractor moves more than 500 ft. (150 m) when directed by the Engineer.

This rate shall not apply for continuous type operations such as resurfacing projects. Payment for continuous type operations shall be made for the initial placement only. No additional compensation will be made for the moving of traffic control devices made necessary due to the nature of continuous type work.

TRAFFIC CONTROL DEVICES RATE SCHEDULE		
Device #	Description	Value in Units Each Traffic Control Devices
1	Signs on portable mounts and barricades (Total sign area 16 sq. ft. (1.5 sq. meters) or greater)	170
2	Signs on portable mounts and barricades (Total sign area less than 16 sq. ft. (1.5 sq. meters))	80
3	Signs on permanent posts (Total sign area 16 ft. (1.5 sq. meters) or greater.)	180
4	Signs on permanent posts (Total sign area less than 16 sq. ft (1.5 sq. meters).)	90
5	Barricades-Type I	35
6	Barricades-Type II	60
7	Barricades-Type III	90
8	Drums	60
9	Cones	5
10	Vertical Panel or Ground Mounted Delineators	10
11	Barrier or Guardrail Mounted Delineators (Bid Incidental to Barrier or Guardrail)	0

Orange sign sheeting to be Reflective Fluorescent Orange, Type V. All other signs shall be High Intensity, Type II.

Drum sheeting to be 6" (150 mm) Flexible High Intensity, Type IV

Barricade sheeting shall be High Intensity, Type II or IV

Cone sheeting shall be Flexible High Intensity, Type IV

Only those drums which have been field tested and approved by the Division

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will be permitted. A list of the approved suppliers and their code numbers may be obtained by contacting:

West Virginia Division of Highways
Contract Administration Division
312 Michigan Avenue
Charleston, West Virginia 25311

Payment for furnishing, installing, and maintaining the work area signs indicating fines shall be as part of Item 636011-*. "TRAFFIC CONTROL DEVICES." and all the previous provisions of this Article shall apply.

636.23.7-Water for Dust Palliative: Water for dust palliative will be measured and paid for under Item 637001-*.

636.23.8-Eradication of Pavement Marking: The quantity of "Eradication of Pavement Markings" shall be the equivalent linear feet (meters) of 4 in. (100 mm) solid line actually removed from the pavement. As an example, an 8 in. (200 mm) solid line would double the linear quantity.

636.23.9-Temporary Pavement Markings-Paint: The quantity of "Temporary Pavement Markings-Paint" shall be the equivalent linear feet (meters) of 4 in. (100 mm) solid line actually placed on the pavement. See example in 636.23.8.

636.23.10-Temporary Pavement Markings-Tape: The quantity of "Temporary Pavement Markings-Tape" shall be the equivalent linear feet (meters) of 4 in. (100 mm) solid line actually placed on the pavement. See example in 636.23.8. Payment for Temporary Pavement Markings includes the removal of the pavement marking tape.

636.23.11-Temporary Raised Pavement Markers: The quantity of "Temporary Raised Pavement Markers" shall be the actual number of markers placed on the pavement. Payment shall include the subsequent removal of the temporary pavement markers.

636.23.12-Cleaning of Project Traffic Control Devices: The quantity of "Cleaning of Project Traffic Control Devices" shall be the actual number of times that all of the traffic control devices, including all channelizing devices, are cleaned on the entire project. Payment will be made for each time all the devices on the whole project are cleaned.

636.23.13-Cleaning of Individual Traffic Control Devices: The quantity of "Cleaning of Individual Traffic Control Devices" shall be the actual number of individual traffic control devices cleaned. When temporary guardrail barricades are cleaned, each barrel will be considered an individual device

when payment is made under this item.

No additional payment shall be made for the cleaning of any delineator regardless of the type of material. Such costs shall be incidental to the cost of cleaning other traffic control devices. For cleaning purposes, any traffic control device attached to a barricade shall be considered part of the barricade. Similarly, any warning light attached to a sign shall be considered part of the sign.

636.23.14-Flagger-Traffic Director: Flagger shall include the cost of furnishing, installing, maintaining and moving of the "AdvanceFlagger" signs along with the actual flagging of traffic. The flaggers shall be paid for the actual authorized time controlling traffic and up to 30 minutes travel from a previous assignment.

The quantity "Traffic Director" shall be the actual number of hours worked in traffic control. The traffic director shall be paid for the actual authorized time controlling traffic which includes the cost for the police vehicle.

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636.23.17-Temporary Concrete Barrier: The quantity of "Temporary Concrete Barrier" shall be the linear feet (meters) of barrier actually placed. Payment shall include terminal connecting devices, dismantling, removal and disposal of the barrier and devices when no further use is required.

636.23.18-Removing and Resetting Temporary Concrete Barrier: The quantity of "Removing and Resetting Temporary Concrete Barrier" shall be the linear feet (meters) of barrier reused in a different location. Payment shall include temporary storage if necessary, re-erecting, maintaining, dismantling, removal and disposal of the barrier.

636.23.19-Temporary Guardrail Barrier: The quantity of "Temporary Guardrail Barrier" shall be the linear feet (meters) of barrier actually placed, including the last twenty five foot (7.62 M) connector section. Payment shall include the dismantling, removal and disposal of the barrier and temporary connectors when no further use is required.

636.23.20-Removing and Resetting Temporary Guardrail Barrier: The quantity of "Removing and Resetting Temporary Guardrail Barrier" shall be the linear feet (meters) of barrier reused in a different location. Payment shall include temporary storage, if necessary, re-erecting, maintaining, dismantling, removal and disposal of the barrier.

636.23.21-Electric Arrow: The quantity of "Electric Arrow" shall be the actual number of days that the arrow is used on the project.

636.23.22-Changeable Message Sign: The quantity of "Changeable

636.23.23

Message Sign" shall be the actual number of days that the sign is used on the project.

636.23.23-Temporary Traffic Signal(s) or Temporary Lighting:

"Temporary Traffic Signal(s)" or "Temporary Lighting" shall be on a lump sum basis and shall include the furnishing, installation, maintaining and subsequent removal of all equipment and material necessary to adequately meet the requirements of the Traffic Control Plan.

636.23.24-Temporary Pipe for Maintaining Traffic: The quantity of "Temporary Pipe for Maintaining Traffic" shall be the linear feet (meters) of pipe actually placed, as detailed on the Plans. Payment shall include the removal and disposal of the pipe when no longer needed.

636.23.25-Warning Lights: The quantity of "Warning Lights" shall be the actual number of days that a light is used on the project.

636.23.26 - Shadow Vehicle: A shadow vehicle shall be on a per-day basis and shall include the flashing beacon, fuel, crew and truck-mounted attenuator used in conjunction with the vehicle.

636.24-BASIS OF PAYMENT:

The quantities, determined as provided above, will be paid for at the contract unit price bid for the items listed below, which prices and payment shall be full compensation for furnishing all the materials and doing all the work prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies and incidentals necessary to complete the work. When aggregate for maintaining traffic, dust palliatives, flagger, traffic director, cleaning of traffic control devices or the electric arrow are contained in the contract as pay items, payment for such pay items will not be made subsequent to the date of required completion of the project.

If during the prosecution of the work, additional items under this Section, not included in the contract, are found to be necessary as determined by the Engineer, payment for such additional items will be made under the provisions of 104.3.

636.25-PAY ITEMS:

ITEM	DESCRIPTION	UNIT
636002-*	AGGREGATE FOR MAINTAINING TRAFFIC, “**”	TON (MEGAGRAM)
636003-*	BITUMINOUS MATERIAL FOR DUST PALLIATIVE	GALLON (LITER)
636004-*	CALCIUM CHLORIDE FOR DUST PALLIATIVE	TON (MEGAGRAM)
636005-*	TEMPORARY STRUCTURE FOR MAINTAINING TRAFFIC	LUMP SUM
636006-*	PILOT TRUCK AND DRIVER	DAY
636007-*	ERADICATION OF PAVEMENT MARKING	LINEAR FOOT (METER)
636008-*	TEMPORARY PAVEMENT MARKING-PAINT 4-IN SOLID LINE	LINEAR FOOT (METER)
636009-*	TEMPORARY PAVEMENT MARKING-TAPE 4-IN SOLID LINE	LINEAR FOOT (METER)
636010-*	TEMPORARY RAISED PAVEMENT MARKER	EACH
636011-*	TRAFFIC CONTROL DEVICE	UNIT
636012-*	PROJECT TRAFFIC CONTROL DEVICE CLEANING	EACH
636013-*	INDIVIDUAL TRAFFIC CONTROL DEVICE CLEANING	EACH
636014-*	FLAGGER	HOUR
636014B-*	TRAFFIC DIRECTOR	HOUR
636017-*	TEMPORARY CONCRETE BARRIER	LINEAR FOOT (METER)
636018-*	REMOVE AND RESET TEMPORARY CONCRETE BARRIER	LINEAR FOOT (METER)
636019-*	TEMPORARY GUARDRAIL BARRIER	LINEAR FOOT (METER)
636020-*	REMOVE AND RESET TEMPORARY GUARDRAIL BARRIER	LINEAR FOOT (METER)
636021-*	ELECTRIC ARROW	DAY
636022-*	CHANGEABLE MESSAGE SIGN	DAY
636023-*	TEMPORARY TRAFFIC SIGNAL	LUMP SUM
636024-*	TEMPORARY PIPE FOR MAINTAINING TRAFFIC	LINEAR FOOT (METER)
636025-*	WARNING LIGHTS, TYPE “TYPE”	DAY
636026-*	TEMPORARY LIGHTING	LUMP SUM
636027-*	TRAFFIC CONTROL	SITE
636028-*	SHADOW VEHICLE	DAY

* Sequence number

** Type of aggregate such as stone, gravel, or slag.