NIVINE OF	CONTRACTOR	
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DO NOT SEPARATE OR REMOVE SHEETS FROM THIS PROPOSAL

#### PROPOSAL AND SPECIFICATIONS

FOR

HIGHWAY CONSTRUCTION

**COUNTY LOCAL ROAD SYSTEM** 

<u>PROJECT NO. 4623</u> – 0.90 miles of roadway renovation including clearing, station grading, replacing culverts, adding gravel, crushing, shaping, HMA paving, concrete curb and gutter, concrete driveways, and restoration on 12<sup>th</sup> Street from 115<sup>th</sup> Avenue to M-222, Martin and Watson Townships, Allegan County.

MARTIN & WATSON TOWNSHIPS

April 22, 2015

BOARD OF COUNTY ROAD COMMISSIONERS OF ALLEGAN COUNTY, MICHIGAN

1308 Lincoln Road, Allegan, MI 49010

#### ALLEGAN COUNTY ROAD COMMISSION

#### ADVERTISEMENT FOR BIDS

#### COUNTY LOCAL ROAD CONSTRUCTION

Sealed bids will be received by the Allegan County Road Commission at their office at 1308 Lincoln Road (M-89), Allegan, Michigan until 11:00 A.M., Local Time, April 22, 2015 and, at such time, be publicly opened and read aloud for the following:

<u>PROJECT NO. 4623</u> – 0.90 miles of roadway renovation including clearing, station grading, replacing culverts, adding gravel, crushing, shaping, HMA paving, concrete curb and gutter, concrete driveways, and restoration on 12<sup>th</sup> Street from 115<sup>th</sup> Avenue to M-222, Martin and Watson Townships, Allegan County.

Complete specifications and bid forms are available at the Road Commission office and the Road Commission website <a href="https://www.alleganroads.org">www.alleganroads.org</a> under the Projects link.

All bids must be submitted on forms furnished by the Road Commission and sealed in envelopes with the name and address of the bidder, and the item bid upon clearly marked thereon.

A bid deposit of at least 5% of the bid amount will be required for this item. The bid deposit may be in the form of certified check, cashier's check or bid bond.

The Commission reserves the right to reject any or all bids, to waive minor technicalities, and to accept the bid that is deemed to be in the best interest of the County of Allegan.

BOARD OF COUNTY ROAD COMMISSIONERS OF ALLEGAN COUNTY, MICHIGAN

> Bruce D. Culver, Chairman Robert Kaarlie, Vice-Chairman John Kleinheksel, Member

The undersigned bidder agrees that the forcontractors to be utilized is awarded this contractor only with the consent of the Board of Court NAME OF EACH SUB-CONTRACTOR AND	ntract and any cha nty Road Commis	ange from this list will be permitted ssioners of Allegan County. <b>LIST</b>
I hereby state that all of the information I have state that I have the authority to submit accepted by the Board of County Road Conhave not communicated with nor otherwise agreement with nor offered or accepted and Board of County Road Commissioners of Afree competition.	this bid, which was signers of All colluded with any nything of value for	will become a binding contract if egan County. I hereby state that I other bidder, nor have I made any om an official or employee of the
In case the bidder is a co-partnership, each is a Corporation, this proposal must be exe with its articles of incorporation and a certific	ecuted by its duly	authorized officials in accordance
I hereby state that I have read, understand document.	and agree to be	bound by all the terms of this bid
SIGNATURE:	NAME:	
TITLE:	DATE:	(Type or Print)
FIRM NAME:		
ADDRESS:		
ADDRESS:(Street Address)	(City)	(State) (Zip)
FOR COUNTY USE ONLY – DO NOT WRI	TE BELOW	
ACCEPTED BY: BOARD OF COUNTY FALLEGAN, MICHIGAN	ROAD COMMISS	SIONERS OF THE COUNTY OF
Chairman		
Vice-Chairman		
Member		

#### STANDARD SPECIFICATIONS

The Standard Specifications for Construction of the Michigan Department of Transportation, 2012 Edition shall apply. Nothing herein will be construed to create any obligation or duty on the part of the Board of County Road Commissioners of Allegan County, including obligations or duties which may be expressed or implied in the Standard Specifications for Construction of the Michigan Department of Transportation, unless specifically set forth in the contract documents.

<u>CLEARING</u>: The contractor will remove all trees, stumps, and brush within 33' of the existing road centerline unless instructed otherwise by the project engineer. Trees will remain the property of the adjacent landowner, if they want them. If not, the contractor will dispose of them. The contractor will dispose of all stumps. Where called for on the plans or when directed by the engineer in the field, the contractor shall grind stumps to avoid disturbing underground facilities. The tree and stump removal will be done in accordance with Section 201 & 202 of the 2012 Standard Specifications for Construction.

The Contractor will not receive any additional compensation due to delays caused by utility companies.

<u>METHOD OF PAYMENT FOR CLEARING</u>: The item of "Clearing" will be paid for as a lump sum. No tree count is provided. It is the contractor's responsibility to inspect the site. No change in payment will be made for variances. Direct any questions to the Allegan County Road Commission.

PAY ITEM PAY UNIT

Clearing Lump Sum

STATION GRADING: The item of "Station Grading" will include all culvert removal, curb removal, guardrail removal, fence removal, fence relocation regardless of fence type, obliterating roadway, rock excavation, concrete removal, HMA removal, earth excavation, embankment, and saw cuts required. The contractor will place ditches and slopes as shown on the project cross section sheets and described in the project specifications. The earth excavation quantity does include the existing topsoil and pavement that must be stripped. The embankment quantity does include material to replace stripped topsoil and pavement in fill sections. The embankment quantity does not reflect shrinkage. Some excavation and embankment will be required to make a smooth transition into driveways; included in this item. Additional driveway changes in slopes or ditch depths will not result in extra payment on this item. Some material excavated from ditches will not be suitable for embankment and will be disposed of at the contractor's expense. All slopes in yard areas will be finished to Class A tolerance. Slopes not in yards will be trimmed to Class B tolerance.

The Controlled Density Method (Section 205.03 page 135) of the Standard Specifications for Construction will apply. The engineer will run density tests at his discretion.

Any salvaged gravel required to maintain local traffic will be included in the item of Station Grading.

#### STATION GRADING (CON'T):

METHOD OF PAYMENT FOR STATION GRADING: The item of "Station Grading" will be paid for as a lump sum. The quantities listed above are approximate; any changes in quantity will not alter the lump sum pay quantity for Station Grading.

PAY ITEM PAY UNIT

Station Grading Lump Sum

#### PAVEMENT FOR BUTT JOINTS, REM

When a butt joint is specified, the Contractor will mill the existing bituminous surface to the thickness of the proposed overlay. The material will be removed for the full width of the joint. The removal will be tapered up to the original surface over a distance specified by the engineer. This item will also include any cold milling required on the project. This item will also include disposing of the material milled.

<u>METHOD OF PAYMENT FOR PAVEMENT FOR BUTT JOINTS, REM:</u> The item of "Pavement for Butt Joints, Rem" will be paid for by the square yard.

PAY ITEM PAY UNIT

Pavement for Butt Joints, Rem Square Yard

#### HMA BASE CRUSHING AND SHAPING

This item will include all labor, material and equipment required to scarify, crush, grade, shape roll and compact the existing HMA surface to a depth specified by the engineer. The pay item does not differentiate between various depths of crushing required. Gravel will be added to the area prior to the crush and shape operation and will be paid for separately as Aggregate Surface Course. This item will include the final shaping compaction required prior to paving on the entire project.

METHOD OF PAYMENT FOR HMA BASE CRUSHING AND SHAPING: The item of "HMA Base Crushing and Shaping" will be paid for by the square yard.

PAY ITEM PAY UNIT

HMA Base Crushing and Shaping Square Yard

#### AGGREGATE SURFACE CSE

This item will include all labor, material, and equipment required to add MDOT 21AA gravel to the HMA surface prior to pulverizing and mixed thoroughly with the existing material. This item may also be used to add additional aggregate after pulverizing.

METHOD OF PAYMENT FOR AGGREGATE SURFACE CSE: The item of "Aggregate Surface Course will be paid for by the ton. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless an error in calculations is proven.

PAY ITEM PAY UNIT

Aggregate Surface Cse Ton

<u>GEOTEXTILE FABRIC:</u> The item of "Geotextile Fabric" will include all labor, material and equipment to place material as instructed by the engineer. The seam will be double stitched with <u>nylon</u> thread or with a 2 feet overlap. (Overlap NOT paid for). Fabric will be Exxon GTF 300 or equal.

METHOD OF PAYMENT FOR GEOTEXTILE FABRIC: The item of "Geotextile Fabric" will be paid for by the square yard as measured in place.

PAY ITEM PAY UNIT

Geotextile Fabric Square Yard

SUBGRADE UNDERCUTTING, TYPE II: The item of "Subgrade Undercutting, Type II" will consist of cutting out undesirable material below the Subgrade and will include backfilling with Class II material (Section 205 Standard Specifications for Construction). Subgrade undercutting will be done only if requested by the engineer. Backfill of Subgrade Undercutting will be compacted to not less than 95% of the Maximum Unit Weight. Tests will be run at the discretion of the engineer. This item will also include all muck, morrow and peat excavation and backfill required up to 6 feet deep.

METHOD OF PAYMENT FOR SUBGRADE UNDERCUTTING, TYPE II: The item of "Subgrade Undercutting, Type II" will be paid for by the cubic yard as measured from the area actually excavated from the roadway. Backfill for the undercutting is included in the price for Subgrade Undercutting, Type II. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission.

PAY ITEM PAY UNIT

Subgrade Undercutting, Type II Cubic Yard

<u>SEWER, CULVERT AND END SECTIONS:</u> The items of sewer, culvert and end section will include all labor and material for placing the new storm sewer, culverts and end sections as specified. Excavating and backfilling will be included in the item of Sewer and Culverts. If any material more than 0.5 feet below the sewer or culvert is ordered to be removed by the project engineer, it will be paid for as "Subgrade Undercutting, Type II". Granular bedding and backfill will be included in the item of Sewer and Culverts. Connections to existing storm sewer are included in the storm sewer pay item.

All sewer, culverts and end sections will be laid true to the lines and grades given, bells or grooves upgrade, ends fully and closely jointed, and each section will have a full, firm bearing throughout its length. All pipe sections/joint assemblies for use in culvert will be selected from the Qualified Products List for Watertight Sewer and Culvert Joint Systems. Pipes with diameters greater than 24 inch will have the pipe joints wrapped with a non-woven Geotextile fabric. The fabric will have a minimum width of 36 inch and will be centered on the joint.

It is the contractor's responsibility to protect all new culverts and existing culverts to be left in place from damage by heavy equipment by ramping or other means necessary. All cross culverts and sewer will be placed prior to the crushing and shaping.

All drainage structures and covers will meet the requirements of Section 403 of the 2012 MDOT Standard Specifications for Construction and the current MDOT Standard Plans R-1 thru R-24. They will be of the size noted on the plans or as directed by the Engineer in the field and will include all labor, material, equipment to furnish and install the drainage structures for a functional installation. Drainage Structure Covers will be the type noted on the plans.

Storm sewer will be placed at the locations listed below. Replace driveway culverts as directed by the engineer.

<u>STATION</u>	<u>TYPE</u>	END SECTIONS	<u>LENGTH</u>
7+50	Culv, CI E, Conc, 18 inch	0	80
17+50	Culv, CI E, Conc, 24 inch	2	48

METHOD OF PAYMENT FOR SEWER, CULVERT, AND END SECTION: The item of "Culvert" will be paid by the linear foot and the item of "End Section" will be paid for by the individual unit.

PAY ITEM	PAY UNIT
Culv, Cl F, inch	Foot
Culv, Cl, Conc, inch Culv End Sect, Conc, inch	Foot Each
Cuiv End Sect, Conc, inch	Eacn

<u>APPROACH, CL II:</u> The item of "Approach, Cl II" will include all labor, material and equipment to place and compact the material specified on the plans. Section 307 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR APPROACH, CL II: The item of "Approach, Cl II" will be paid for by the ton. Weight slips will be required. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless an error in calculations is proven.

PAY ITEM PAY UNIT

Approach, CI II Ton

<u>SHOULDER, CL II:</u> The item of "Shoulder, Cl II" will include all labor, material and equipment to place and compact the material specified on the plans. Section 307 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR SHOULDER, CL II: The item of "Shoulder, Cl II" will be paid for by the ton. Weight slips will be required. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless an error in calculations is proven.

PAY ITEM PAY UNIT

Shoulder, Cl II Ton

<u>TOPSOIL SURFACE:</u> The existing topsoil will be stripped from the areas within the right-of-way or grading limits shown or as directed in the field, adjacent to roadway as detailed in the project description. The salvaged topsoil will be stockpiled for measurement. The item includes picking up, stockpiling, replacing and shaping the topsoil.

Prior to seeding, the Contractor will be required to drag all front and back slopes that are 1 on 3 or flatter. Slopes that are steeper than 1 on 3 must be left in a relatively smooth condition. Slope preparation will be included in the item of Topsoil Surface.

METHOD OF PAYMENT FOR TOPSOIL SURFACE: The item of "Topsoil Surface" will be paid for by the cubic yard as measured in the stockpile. Plan quantity is the maximum Cubic Yards that will be paid.

PAY ITEM PAY UNIT

Topsoil Surface Cubic Yard

<u>RESTORATION:</u> The item of "Restoration" will include all labor, material and equipment required to do the restoration. Restoration will consist of placing Seeding, Mixture TUF (220#/acre); Fertilizer, Chemical Nutrient, Cl A (176#/acre); Mulch (2 ton/acre); and Mulch Anchoring.

Section 816 of the Standard Specifications for Construction will apply.

<u>METHOD OF PAYMENT FOR RESTORATION:</u> The item of "Restoration" will be paid for as a lump sum.

PAY ITEM PAY UNIT

Restoration Lump Sum

EXTENDED RESTORATION: The item of "Extended Restoration" will include all labor, material and equipment required to maintain the restoration of the construction site. The contractor shall be responsible for the permanent establishment of turf and maintaining the temporary and permanent soil erosion control measures for a period of one year from the date of final approval or when the site is stabilized and approved by the engineer. This may include reseeding, maintaining check dams and spillways, and fixing erosion on site.

METHOD OF PAYMENT FOR EXTENDED RESTORATION: The item of "Extended Restoration" will be paid for as a lump sum.

PAY ITEM PAY UNIT

Extended Restoration Lump Sum

<u>CEREAL RYE SEED:</u> The item "Cereal Rye Seed" will include all labor, material and equipment to place the seed as instructed by the engineer. When directed by the Engineer, cereal rye seed will be placed at a rate of 70 pounds per acre.

METHOD OF PAYMENT FOR CEREAL RYE SEED: The item of "Cereal Rye Seed" will be paid for by the pound.

PAY ITEM PAY UNIT

Cereal Rye Seed Pound

MULCH BLANKET, HIGH VELOCITY: The item of "Mulch Blanket, High Velocity" will include all labor, material and equipment to place the blanket as instructed by the engineer. Mulch Blanket, High Velocity shall meet the specifications set on page 853 (Section 917.15) of the 2012 MDOT Standard Specifications for Construction.

METHOD OF PAYMENT FOR MULCH BLANKET, HIGH VELOCITY: The item of "Mulch Blanket, High Velocity" will be paid for by the square yard. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless an error in calculations is proven.

PAY ITEM PAY UNIT

Mulch Blanket, High Velocity Square Yard

<u>RIPRAP</u>, <u>PLAIN</u>: The item of "Riprap, Plain" will include all labor, equipment and material to place the Riprap as instructed by the engineer.

Section 813 of the Standard Specifications for Construction will apply to this item.

The Riprap will be placed over Geotextile Fabric, included in this item.

METHOD OF PAYMENT FOR RIPRAP, PLAIN: The item of "Riprap, Plain" will be paid for by the square yard. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless an error in calculations is proven.

PAY ITEM PAY UNIT

Riprap, Plain Square Yard

<u>EROSION CONTROL</u>, <u>SILT FENCE</u>: The item of "Erosion Control, Silt Fence" will include all labor, material and equipment to place silt fence as instructed by the engineer.

Section 208 of the Standard Specifications for Construction will apply to this item.

METHOD OF PAYMENT FOR EROSION CONTROL, SILT FENCE: The item of "Erosion Control, Silt Fence" will be paid for by the linear foot. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission.

PAY ITEM PAY UNIT

Erosion Control, Silt Fence Foot

SIGN, TYPE B, TEMP, MODIFIED: The item of "Sign, Type B, Temp, Modified" will include supplying all materials, equipment and labor required to erect and maintain construction signs as designated by the project engineer. Materials and placement will conform to the MDOT Standard Specifications for Construction and the Michigan Manual of Uniform Traffic Control Devices. Signs will be placed as instructed by the project engineer. All "CONSTRUCTION AHEAD" and "ROAD CLOSED AHEAD" signs will be 48" x 48" mounted on two posts with one steady burn light. (Steady burn light and posts are included in the Sign, Type B, Temp, Modified item).

METHOD OF PAYMENT FOR SIGN, TYPE B, TEMP, MODIFIED: The item of "Sign, Type B, Temp, Modified" will be paid for by the square foot of Sign Face.

PAY ITEM PAY UNIT

Sign, Type B, Temp, Modified Square Foot

<u>PLASTIC DRUM, HIGH INTENSITY, LIGHTED, MODIFIED:</u> The item of "Plastic Drum, High Intensity, Lighted, Modified" will include all labor, equipment and material to furnish, set up, move and maintain the drums as required by the engineer. Drums will be equipped with one light.

Section 812 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR PLASTIC DRUM, HIGH INTENSITY, LIGHTED, MODIFIED: The item of "Plastic Drum, High Intensity, Lighted, Modified" will be paid for by the individual unit.

PAY ITEM PAY UNIT

Plastic Drum, High Intensity, Lighted, Modified Each

BARRICADE ,TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, MODIFIED: The item of "Barricade, Type III, High Intensity, Double Sided, Lighted, Modified" will include all labor, equipment and material to furnish, set up, move and maintain the barricades.

The Contractor will furnish and maintain Barricades, Type III with three lights and an R-11-4 Sign (ROAD CLOSED TO THRU TRAFFIC) mounted above the barricade. Section 812 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, MODIFIED: The item of "Barricade, Type III, Double Sided, Lighted" will be paid for as individual units.

PAY ITEM PAY UNIT

Barricade, Type III, High Intensity, Double Sided, Lighted, Modified Each

<u>HMA</u>: This item includes furnishing, hauling, and placing the required HMA mixture as indicated below. This work will also include furnishing and applying bond coat, cleaning and sweeping as required, and placing mixes around catch basins and downspouts. No additional payment will be made for HMA valley curb. HMA material used on driveways, side roads, and intersections will also be included in this item and paid for as the HMA mixture used, no additional payment will be made.

#### MIX DESIGNS:

#### HMA – 13A

- 1. The Contractor shall submit a mix design with a range of 5.0 to 8.0 percent (effective bitumen) of bitumen content. Target air voids 3.00%.
- 2. The Limits for the bitumen content of Range 1 shall be  $\pm$  0.30% from the optimum mix design.
- 3. **PG 64-28** Performance Grade Asphaltic Cement Bituminous Material shall be combined with the mineral aggregate.
- 4. The Contractor shall submit a mix design and test results of the aggregates to be used at least two weeks before commencing paving. The mix design shall be submitted to an approved testing laboratory for design compliance tests. The Road Commission shall require a 1 point Marshall Test Mix Design.
- 5. All mix designs must be approved by the Engineer.

#### ROLLING OF THE HMA MIXTURE

Nuclear gage testing requirements may be waived; the rolling operation will be controlled by the "Number of Roller Method" outlined in the MDOT 2003 Standard Specifications for Construction.

METHOD OF PAYMENT FOR HMA MIXTURES: The item of "HMA, \_\_\_\_" will be paid for by the Ton. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless an error in calculations is proven.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
HMA,	Ton

# MICHIGAN DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR ACCEPTANCE OF HMA MIXTURE ON LOCAL AGENCY PROJECTS

- **a. Description.** This special provision provides acceptance testing requirements for use on local agency projects that do not include the QC/QA special provision. The HMA mixture shall be provided to meet the requirements of the 2012 MDOT Standard Specifications for Construction except where modified herein.
- **b. Materials.** Aggregates, mineral filler (if required), and asphalt binder shall be combined as necessary to produce a mixture proportioned within the master gradation limits shown in the project documents, and meeting the uniformity tolerances listed in Table 1. The master gradation range is to be used for establishing mix design only. Topsoil, clay, or loam shall not be added to aggregates which are to be used in plant mixed HMA mixtures.
- **c. Construction.** After the job-mix-formula is established, the aggregate gradation and the binder content of the HMA mixture furnished for the work shall be maintained within the Range 1 uniformity tolerance limits permitted for the job-mix-formula specified in Table 1. However, if deviations are predominantly either below or above the job-mix-formula, the Engineer may order alterations in the plant to bring the mixture to the job-mix-formula. If two consecutive aggregate gradations on one sieve, or binder contents as determined by the field tests, are outside Range1 but within Range 2 tolerance limits, the Contractor shall suspend all operations. Contract time will continue during these times when the plant is down. Before resuming any production, the Contractor shall propose, for the Engineer=s approval, all necessary alterations to the materials or plant so that the job-mix-formula can be maintained. The Engineer, after evaluating for effects on AWI and mix design properties, will approve or disapprove such alterations.

Acceptance sampling and testing will be performed by the Engineer using the sampling method and testing option selected by the Engineer. Each day of production, a minimum of two samples will be obtained for each mix type. Acceptance testing will be performed at the frequency specified by the Engineer. No less than three samples shall be obtained for each mix type. Quality control measures to insure job control are the responsibility of the Contractor.

The crushed particle content of the aggregate used in the HMA mixture shall not be more than 10 percentage points above or below the crushed particle content used in the job-mix-formula nor less than the minimum specified for the aggregate in the project documents.

Pavement density will be measured by the Engineer with a Nuclear Density Gauge using the Gmm from the Job Mix Formula (JMF) for the density control target. The required in place density of the HMA mixture shall be 92.0 - 96.0% of the density control target. The Contractor is responsible for establishing a rolling pattern that will achieve the required in place density.

**Table 1: Uniformity Tolerance Limits for HMA Mixtures** 

	TOP & LEVELING COURSE		BASE COURSE	
PARAMETER	* Range 1	Range 2	* Range 1	Range 2
Binder Content	± 0.40	± 0.50	± 0.40	± 0.50
% Passing # 8 and Larger Sieves	± 5.0	± 8.0	± 7.0	± 9.0
% Passing # 30 Sieve	± 4.0	± 6.0	± 6.0	± 9.0
% Passing # 200 Sieve	± 1.0	± 2.0	± 2.0	± 3.0

<sup>\*</sup>This range allows for normal mixture and testing variations. The mixture shall be proportioned to test as closely as possible to the Job-Mix-Formula.

d. Rejected Mixtures. If for any one mixture, two consecutive aggregate gradations on one sieve or binder contents as determined by field tests exceed the uniformity tolerance of Range 2 under Table 1, or do not meet the minimum requirements for crushed particle content specified in the project documents, the mixture will be rejected. If such mixtures are placed in a pavement, the remaining portions of the failing field samples (split sample) will be sent to the MDOT Central Laboratory to confirm the field test results. If the Laboratory's results do not confirm the field test results and there are no price adjustments required due to test failures on the asphalt binder, then no price adjustments will be made for the mixture involved. If the Laboratory's results confirm the field test results and if, in the Engineer's judgment, the defective mixture can remain in place and there are no price adjustments required due to test failures on the asphalt binder, the contract unit price for the defective mixture involved, as determined from field tests, will be decreased on the following basis: The contract unit price for material outside of Range 2 or with a crushed particle content below that specified in the project documents will be decreased 25 percent. If three consecutive aggregate gradations on one sieve, or bitumen contents as determined by field tests are outside Range 1 but within Range 2 tolerance limits, the mixture produced from the time the third sample was taken until the gradation, or bitumen content is corrected back into Range 1 will be decreased in contract unit price by 10 percent. Field tests indicating that mixtures are subject to the 10 percent penalty will be confirmed in the same manner as mixtures subject to the 25 percent penalty as described herein.

#### ROLLING OF THE HMA MIXTURE

Nuclear gage testing requirements may be waived; the rolling operation will be controlled by the "Number of Roller Method" outlined in the MDOT 2003 Standard Specifications for Construction.

METHOD OF PAYMENT FOR HMA MIXTURES: The item of "HMA, \_\_\_\_" will be paid for by the Ton. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless an error in calculations is proven.

PAY ITEM	<u>PAY UNIT</u>
HMA,	Ton

MONUMENT BOX, ADJ.: This item includes all equipment, labor, and material required to remove existing monument boxes and reset them to match the final surface elevation of the HMA. Any new boxes required will be furnished by the Allegan County Road Commission.

METHOD OF PAYMENT FOR MONUMENT BOX, ADJ.: The item of "Monument Box, Adj." shall be paid for by the individual unit.

PAY ITEM PAY UNIT

Monument Box, Adj. Each

<u>PAVT MRKG, TYPE NR, TAPE, 4 INCH, YELLOW, TEMP:</u> This item includes furnishing all equipment, labor, and material required to place temporary pavement marking tape four (4) inches wide of the appropriate color. Marks shall be four (4) foot long and placed every 50 feet.

METHOD OF PAYMENT FOR PAVT MRKG, TYPE NR, TAPE, 4 INCH, YELLOW, TEMP: The item of "Pavt Mrkg, Type NR, Tape, 4 inch, Yellow, Temp" will be paid for by the linear foot.

PAY ITEM PAY UNIT

Pavt Mrkg, Type NR, Tape, 4 inch, Yellow, Temp. Station

<u>PAVEMENT MARKING, WATERBORNE, 4-INCH, YELLOW:</u> This item will include all equipment, labor, and material required to place the pavement marking according to Section 811 of the MDOT Standard Specifications.

METHOD OF PAYMENT FOR PAVEMENT MARKING, WATERBORNE,4-INCH, YELLOW: The item of "Pavement Marking, Waterborne, 4-inch, Yellow" shall be paid for by the linear foot.

PAY ITEM PAY UNIT

Pavement Marking, Waterborne, 4-inch, Yellow Foot

<u>PAVEMENT MARKING, WATERBORNE, 4-INCH, WHITE:</u> This item will include all equipment, labor, and material required to place the pavement marking according to Section 811 of the MDOT Standard Specifications.

METHOD OF PAYMENT FOR PAVEMENT MARKING, WATERBORNE, 4-INCH, WHITE: The item of "Pavement Marking, Waterborne, 4-inch, White" shall be paid for by the linear foot.

PAY ITEM PAY UNIT

Pavement Marking, Waterborne, 4- inch, White Foot

<u>PROJECT CLEANUP:</u> The item of "Project Cleanup" will include all labor, material and equipment to pick up stone, sticks, branches, roots and other debris from the project.

This item will also include moving all mailboxes to a temporary location to be approved by the mail carrier and to reset the boxes permanently on the project. If new boxes or posts are required, they will be supplied by the Road Commission.

METHOD OF PAYMENT FOR PROJECT CLEANUP: The item of "Project Cleanup" will be paid for as a lump sum.

PAY ITEM PAY UNIT

Project Cleanup Lump Sum

<u>GUARDRAIL</u>, <u>TYPE B</u>: The item of "Guardrail, Type B" will include all labor, material and equipment to place guardrail as instructed by the Engineer. All guardrail posts will be 8' in length. Used guardrail materials in good condition may be used.

Section 807 of the Standard Specifications and MDOT Standard Plan R-60-Series will apply to this item.

METHOD OF PAYMENT FOR GUARDRAIL, TYPE B: The item of "Guardrail, Type B" will be paid for by the linear foot.

PAY ITEM PAY UNIT

Guardrail, Type B Foot

<u>GUARDRAIL</u>, <u>CURVED</u>, <u>TYPE B</u>: The item of "Guardrail, Curved, Type B" will include all labor, material and equipment to place guardrail as instructed by the Engineer. All guardrail posts will be 8' in length. Used guardrail materials in good condition may be used.

Section 807 of the Standard Specifications and MDOT Standard Plan R-60-Series will apply to this item.

METHOD OF PAYMENT FOR GUARDRAIL, CURVED, TYPE B: The item of "Guardrail, Curved, Type B" will be paid for by the linear foot.

PAY ITEM PAY UNIT

Guardrail, Curved, Type B Foot

<u>GUARDRAIL APPROACH TERMINAL</u>, <u>TYPE 2B</u>: The item of "Guardrail Approach Terminal, Type 2B" will include all labor, material and equipment to place terminals. All guardrail posts will be 8' in length. Used guardrail materials in good condition may be used.

Section 807 of the Standard Specifications and MDOT Standard Plan R-62-Series will apply to this item.

METHOD OF PAYMENT FOR GUARDRAIL APPROACH TERMINAL, TYPE 2B: The item of "Guardrail Approach Terminal, Type 2B" will be paid for by the individual unit.

PAY ITEM PAY UNIT

Guardrail Approach Terminal, Type 2B Each

<u>GUARDRAIL BUFFERED END</u>: The item of "Guardrail Buffered End" will include all labor, material and equipment to place guardrail as instructed by the Engineer. All guardrail posts will be 8' in length. Used guardrail materials in good condition may be used.

Section 807 of the Standard Specifications and MDOT Standard Plan R-60-Series will apply to this item.

METHOD OF PAYMENT FOR GUARDRAIL BUFFERED END: The item of "Guardrail Buffered End" will be paid for by the individual unit.

PAY ITEM PAY UNIT

Guardrail Buffered End Each

<u>GUARDRAIL REFLECTOR</u>: The item of "Guardrail Reflector" will include all labor, material and equipment to install the guardrail reflectors. Used guardrail materials in good condition may be used.

Section 807 of the Standard Specifications and MDOT Standard Plan R-60-Series will apply to this item.

METHOD OF PAYMENT FOR GUARDRAIL REFLECTOR: The item of "Guardrail Reflector" will be paid for by the individual unit.

PAY ITEM PAY UNIT

Guardrail Reflector Each

<u>DRIVEWAY, NONREINF CONC, 8 INCH</u>: The item of "Driveway, Nonreinf Conc, 8 inch" will include all labor, material and equipment to install the concrete driveways according to Section 601 and 602 of the Standard Specifications. Material will be Concrete Grade P1.

METHOD OF PAYMENT FOR DRIVEWAY, NONREINF CONC, 8 INCH: The item of "Driveway, Nonreinf Conc, 8 inch" will be paid for by the square yard.

PAY ITEM PAY UNIT

Driveway, Nonreinf Conc, 8 inch Square Yard

<u>CURB AND GUTTER, CONC, DET B</u>: The item of "Curb and Gutter, Conc, Det B" will include all labor, material and equipment to install the curb and gutter according to Section 802 of the Standard Specifications.

METHOD OF PAYMENT FOR CURB AND GUTTER, CONC, DET B: The item of "Curb and Gutter, Conc, Det B" will be paid for by the lineal foot.

PAY ITEM PAY UNIT

Curb and Gutter, Conc, Det B Foot

<u>DRIVEWAY OPENING, CONC, DET M</u>: The item of "Driveway Opening, Conc, Det M" will include all labor, material and equipment to install the opening according to Section 802 of the Standard Specifications.

METHOD OF PAYMENT FOR DRIVEWAY OPENING, CONC, DET M: The item of "Driveway Opening, Conc, Det M" will be paid for by the lineal foot.

PAY ITEM PAY UNIT

Curb and Gutter, Conc, Det B Foot

<u>DITCHING</u>: The item of "Ditching" will include all labor, material and equipment to relocate, cleanout or cut a ditch as directed by the Engineer. The ditch will be cut to a maximum depth of 2' from the edge of shoulder grade and provide positive drainage to the direction determined by the Engineer.

METHOD OF PAYMENT FOR DITCHING: The item of "Ditching" will be paid for by the lineal foot.

PAY ITEM PAY UNIT

Ditching Foot

AGGREGATE BASE, 6 INCH: The item of "Aggregate Base, 6 inch" will include all labor, material and equipment to place, and compact the base course.

The contractor may use 22A gravel, 22A slag, 22A limestone, 22A recycled concrete, or cold-milled bituminous material, which approximates the gradation for 22A material. When milled bituminous material is used as aggregate base, the density provisions of Standard Specifications are not waived. Milled bituminous material may be used full depth or on top of 22A gravel to obtain the specified thickness. 22A gravel shall not be placed on top of bituminous millings.

Section 302 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR AGGREGATE BASE, 6 INCH: The item of "Aggregate Base, 6 inch" will be paid for by the square yard, compacted in place.

PAY ITEM PAY UNIT

Aggregate Base, 6 inch Square Yard

### ALLEGAN COUNTY ROAD COMMISSION ALLEGAN, MICHIGAN

#### **GENERAL SPECIFICATIONS**

#### MICHIGAN DEPARTMENT OF TRANSPORTATION-STANDARD SPECIFICATIONS

The work covered by the plans and specifications will be done in accordance with the 2012 Michigan Department of Transportation Standard Specifications for Construction, except as qualified in supplemental specifications and special conditions of the Allegan County Road Commission or as agreed to in writing at the time of the award of the contract.

#### **DEFINITION OF TERMS**

See Section 101 of Michigan Department of Transportation Standard Specifications for Construction.

#### **SPECIAL CONDITIONS**

Special requirements, regulations or directions applying to a particular project may be made a part of these specifications.

#### THE WORK

The work consists of the completed services, construction and/or paving by the Contract Documents and includes all materials and labor incorporated or to be incorporated therein.

#### **RESPONSIBILITIES OF CONTRACTOR**

- A. <u>Responsibility for and Supervision of Construction.</u> Unless otherwise stated herein, Contractor will be solely responsible for all construction under this Contract, including the methods, techniques, sequences, procedures, and means, and for coordination of all work. Contractor will supervise and direct the work to the best of Contractor's ability, and give it all attention necessary for such proper supervision and direction.
- B. <u>Discipline and Employment.</u> Contractor will maintain at all times strict discipline among Contractor's employees, and contractor agrees not to employ for work on the project any person unfit for without sufficient skill to perform the job for which he or she was employed.
- C. <u>Furnishing of Labor, Materials, etc.</u> Unless otherwise stated herein, Contractor will provide and pay for all labor, materials, and equipment, including tools, construction equipment, and machinery, utilities, including water, transportation, and all other facilities and services necessary for the proper completion of work on the project in accordance with the Contract Documents.

#### RESPONSIBILITIES OF CONTRACTOR (CONT.):

- D. <u>Payment of Taxes</u>; <u>Procurement of Licenses and Permits</u>. Contractor will pay all taxes required by law in connection with work on the project in accordance with this agreement including sales, use, and similar taxes, and will secure all licenses and permits necessary for proper completion of the work, paying the fees for such licenses and permits. <u>RESPONSIBILITIES OF CONTRACTOR</u> (CONT.):
- E. <u>Compliance with Laws and Regulations.</u> Contractor will comply with all laws and ordinances, and the rules, regulations or orders of all public authorities relating to the performance of the work under and pursuant to this Agreement including, but not limited to, the Occupational Safety and Health Act of 1970, the Michigan Occupational Safety and Health Act, and the rules and regulations of the Michigan Construction Safety Commission.
- F. <u>Responsibility for Negligence of Employees and Subcontractors.</u> Contractor assumes full responsibility for acts, negligence or omissions of all of Contractor's employees on the project, for those of Contractor's subcontractors and their employees, and for those of all other persons doing work under a contract with Contractor.
- G. Responsibility for Safety. Unless otherwise stated herein, at Contractor's expense, Contractor will take all necessary precautions (including, without limitation, the furnishing of traffic control, barricades, traffic control devices, flaggers, warning lights, signs, warning signs, safety channels, channelization devices, guards, fences, walks, flags, cables and lights) for the safety of, and the prevention of injury, loss and damage to, persons and property (including, without limitation, in the term persons, members of the public, employees, Contractor's subcontractors and their respective employees, other contractors, their subcontractors and respective employees) on, about or adjacent to the location where the work is being performed, and will comply with all applicable provisions of safety rules, ordinances, codes, regulations, and orders of duly-constituted public authorities including, but not limited to, the Michigan Manual of Uniform Traffic Control Devices.
- H. Responsibility of Subcontractors. The Contractor will require any subcontractor hired by the Contractor for the purpose of performing any of the work described by the Contract documents to be bound by all of the terms and conditions of the Contract documents and to perform the work in accordance with the Contract documents. Each and every condition of the Contract documents, including without limitation, the RESPONSIBILITIES OF THE CONTRACTOR, will be made a condition of each subcontract entered into by the Contractor in conjunction with the performance of the work.

#### INDEMNIFICATION

To the fullest extent permitted by law, the Contractor will indemnify, defend, and hold harmless The Board of County Road Commissioners of Allegan County, its officers, employees, representatives and agents from and against any and all claims, damages, demands, payments, suits, actions, recoveries, judgements, losses and expenses, including attorney fees, interest, and court costs, which are made, brought or recovered against the Board of County Road Commissioners of Allegan County, arising out of or resulting from performance of the Contractor's work under this Contract, provided that such claims, damages, losses, demands, payments, suits, actions, recoveries, judgements and/or expenses are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including loss of use resulting therefrom, but only if caused in whole or in part, by the act, omissions, fault, negligence or breach of the conditions of this Contract by negligent acts or omissions of the Contractor, the Contractor's sub-subcontractors, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. The Contractor will not, however, be obligated to indemnify the Board of County Road Commissioners of Allegan County, for any damage or injuries caused by or resulting from the sole negligence of the Board of County Road Commissioners of Allegan County.

Such obligation will not be construed to negate, abridge or otherwise reduce other rights or obligations of indemnity which would otherwise exist as a party or person described in this paragraph.

In claims against any person or entity indemnified under this Agreement by an employee of the Contractor, the Contractor's sub-subcontractors, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this paragraph will not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or the Contractor's subcontractors under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

#### **INSURANCE**

A. <u>Contractor's Insurance.</u> Prior to start of the Contractor's work, the Contractor will procure for the Contractor's work and maintain in force until the completion of the work, workers' compensation insurance, employer's liability insurance, comprehensive general liability insurance and all insurance required of the contract under the contract documents.

The Board of County Road Commissioners of Allegan County will be named as an additional insured on each of these policies except for worker's compensation.

The insurance will include contractual liability insurance covering the Contractor's obligations under its agreement of indemnification as set forth herein.

#### **INSURANCE (CONT.):**

- B. <u>Minimum Limits of Liability</u>. The Contractor's comprehensive general and automobile liability insurance as required herein, will be written with limits of liability not less than the following:
  - a. Comprehensive general liability including completed operations
    - (1) \$ 500,000 each occurrence
  - b. Property damage
    - (1) \$ 500,000 each occurrence
- C. <u>Number of Policies</u>. Comprehensive general liability insurance and other liability insurance may be arranged under a single policy for the full limit required or by combination of underlying policies with the balance provided by an excess or umbrella liability policy.
- D. <u>Cancellation, Renewal or Modification.</u> The Contractor will maintain in effect all insurance coverage required under this Agreement at the Contractor's sole expense and with insurance companies acceptable to the Board of County Road Commissioners of Allegan County.

All insurance policies will contain a provision that the coverage afforded thereunder will not be cancelled or not renewed nor restrictive modifications added at any time after a certificate of insurance required under agreement has been issued and before the work; as defined herein, has been completed, until at least thirty (30) days prior thereto written notice has been given to the Board of County Road Commissioners of Allegan County unless otherwise specifically required in the Contract Documents.

Certificates of insurance or certified copies of policies acceptable to the Board of County Road Commissioners of Allegan County will be filed with the Board of County Road Commissioners of Allegan County prior to the commencement of the Contractor's work.

In the event that the Contractor fails to obtain or maintain any insurance coverage required under this Agreement, the Board of County Road Commissioners of Allegan County may:

- 1. Purchase such coverage and charge the expense thereof to the Contractor, and
- 2. Withhold from any payment due or to become due to the Contractor an amount sufficient to protect the Board of County Road Commissioners of Allegan County from such claims, damages, demands, payments, suits, actions, recoveries, judgements, losses and expenses, including attorney fees, interest and court costs, and
- 3. Terminate this agreement.

Nothing contained in this Agreement, nor the Board of County Road Commissioners of Allegan County's compliance therewith, will relieve the Contractor from its obligations under the Contract to purchase and maintain required insurance or to indemnify the Board of County Road Commissioners of Allegan County.

#### PROGRESS CLAUSE

The successful bidder will be required to submit a Progress Schedule, giving an outline of his proposed order of work and to indicate the dates for completion of the work. This outline, when approved by the Road Commission, will become a part of the contract.

#### PROSECUTION OF THE WORK

The Contractor will begin the work within five (5) days after being notified by the Road Commission of the award of the contract, unless this is inconsistent with the Progress Schedule, in which case the Progress Schedule will govern. He will prosecute the work in the order given in the Progress Schedule, with force and equipment adequate to complete the sections within the time limit therein fixed for completion. In case of failure to proceed with the work as rapidly as is provided in the Progress Schedule, or if it appears at any time that such work is not being prosecuted in such a manner as to insure its completion within time specified, the Road Commission will have the right to require the contractor to furnish and place in operation such additional force and equipment as the Road Commission will deem necessary to bring the work up to the Progress Schedule; and in case of the Contractor's neglect to do so, the Road Commission may place such working force and equipment on the work and charge the Contractor the cost of the labor and such rental and depreciation rates for the plan and equipment as in its judgment is reasonable, and for such time as the plant and equipment are in service.

#### **ESTIMATED QUANTITIES**

The quantities listed in the proposal are the estimated quantities. Increases or decreases in quantities will not be considered as a basis for adjustment in unit prices and Section 109.03 of M.D.O.T. Standard Specifications for Construction will not apply in this regard.

#### FINAL PAYMENT

Final payment will not be made until the contractor will have filed with the Board of County Road Commissioners the consent of the Surety of the payment of the final estimate and satisfactory evidence by affidavit or otherwise that all his indebtedness by reason of the contract has been fully paid or satisfactorily secured. In case such evidence is not furnished, the Road Commission may retain out of any amount due said contractor sums sufficient to cover all lienable claims unpaid.

#### AFFIRMATIVE ACTION POLICY (EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER)

The Allegan County Road Commission will require the Contractor to submit an Affirmative Action Policy stating that they are an equal employment opportunity employer and will recruit, hire and promote in all job classifications without regard to race, color, religion, sex or national origin, except where sex is a bona fide occupational qualification. The Affirmative Action Policy will be signed by the Contractor or one of the Company's Authorized Officers.

#### **CONTRACT BONDS**

The Successful Bidder will furnish satisfactory performance and lien bonds, each in the amount of not less than one hundred (100) percent of the total contract price. Such bonds will be on forms provided and will meet the regulations of the Allegan County Road Commission and the requirements specified in the laws of Michigan.

Bonds will not be required for contracts of less than \$5,000.00.

#### M.D.O.T. – PREQUALIFICATION

Contractors bidding on this work must be pre-qualified by the Michigan Department of Transportation to do similar work on State or Federal-aid Secondary projects.

#### **LIQUIDATED DAMAGES**

Failure to complete the project on or before the completion date specified will be assessed according to the following schedule:

Original Contract Amount	Liquid Damages Per Calendar Day
\$ 0 to 49,999	75
50,000 to 99,999	150
100,000 to 499,999	450
500,000 to 999,999	900
1,000,000 to 1,999,999	1,300
2,000,000 to 4,999,999	1,550
5,000,000 to 9,999,999	2,650
10,000,000 and above	3,000

The liquidated damages may be delayed if the contractor meets the requirements set forth in Section 108.11 of the 2012 Standard Specifications for Construction. Approval of the project engineer is required.

<u>PROJECT NO. 4623</u> – 0.90 miles of roadway renovation including clearing, station grading, replacing culverts, adding gravel, crushing, shaping, HMA paving, concrete curb and gutter, concrete driveways, and restoration on 12<sup>th</sup> Street from 115<sup>th</sup> Avenue to M-222, Martin and Watson Townships, Allegan County.

BID and AWARD	
Date	

Board of County Road Commissioners Of Allegan County 1308 Lincoln Road Allegan, MI 49010

#### Gentlemen:

The undersigned has examined the plans, specifications, and location of the work described herein and is fully informed as to the nature of the work and the conditions relating to its performance and understands that the quantities shown in the estimate are approximate only and are subject to either increase or decrease; and hereby proposed to furnish all necessary machinery, tools, apparatus and other means of doing the work, do all the work, furnish all the materials except as otherwise specified herein, and, for the unit prices named in the accompanying unit price schedule, to complete work in strict accordance with the plans and specifications therefore.

The undersigned further proposes to such extra work as may be ordered by you, prices for that are not included in the itemized bid, compensation therefore to be made on the basis agreed upon before such extra work is begun.

The undersigned agrees to complete all items of work on or before <u>July 31, 2015</u>. The Townships method of award will not change the project completion date. The schedule for liquidated damages is located in the general specifications.

The contractor shall submit a progress schedule subject to approval of the project engineer prior to the award of the contract.

The undersigned encloses a certified check, cashier's check, or Bid Bond, representing 5% of the bid, in the amount of \$\_\_\_\_\_\_\_\_, payable to the Allegan County Road Commission as a guarantee of good faith. If the contract is awarded to the undersigned, and the undersigned fails to furnish satisfactory bonds to the Road Commission within fifteen (15) days after being given notice of award said check will be forfeited to the Allegan County Road Commission as liquidated damage.

#### THE CONTRACT

The Contract Documents consist of the bid documents, this Agreement, Conditions of the Contract (General Supplementary, Special and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement; these form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negation, representations or agreements, either written or oral. If anything in the other Contract Documents is inconsistent with this Agreement, this Agreement will govern.

#### ALLEGAN COUNTY ROAD COMMISSION

#### SPECIAL PROVISIONS

#### FOR

<u>PROJECT NO. 4623</u> – 0.90 miles of roadway renovation including clearing, station grading, replacing culverts, adding gravel, crushing, shaping, HMA paving, concrete curb and gutter, concrete driveways, and restoration on 12<sup>th</sup> Street from 115<sup>th</sup> Avenue to M-222, Martin and Watson Townships, Allegan County.

#### **CONSTRUCTION COORDINATION**

Coordinate construction work to maintain thru traffic Thursday – Sunday each week. Temporary closures for culvert / storm sewer replacement and crushing and grading operations will be done Monday – Wednesday. In addition, maintain thru traffic on June 3 and June 15.

A minimum of one driveway and road access to the gas station must be maintained at all times.

#### SCOPE OF THE WORK

The work will consist of clearing within 33' each side of the existing centerline, removing the excess material from the shoulders, adding the aggregate surface course material to the existing HMA surface, crushing and shaping the aggregate and HMA surface, then placing a HMA 4E1 Mod leveling and surface course as listed below. A 2' wide gravel shoulder will then be placed from the POB to POE as listed below.

Excess embankment may be disposed of on site at the approval of the engineer.

The work shall also include furnishing and applying Bond Coat (included in HMA items), MDOT Standard Specifications MS-2a or SS-1h before placing both HMA courses. Bond Coat will be placed at the rate of 0.05 – 0.10 gallons per square yard prior to placing HMA.

Intersections, driveway approaches, and valley curb are included in the bid quantities for HMA items. All approach HMA will be paid for as HMA 4E1, Mod.

#### HMA Widths:

<u>Station</u>	Pavement Width	<u>Yield</u>	Gravel Shoulder Width
POB to 41+00	28'	165 lb/syd	2' Rt & Lt
41+00 to 45+00 45+00 to 47+60	28' – 46' 46'	165 lb/syd 220 lb/syd	2' Lt, 0' Rt 2' Lt, 0' Rt

#### Miscellaneous Items of Work Quantity

0+00	POB, South side of 115 <sup>th</sup> Avenue
0+75 Rt	HMA Drive, Pavement for Butt Joints, Rem (150'x6') 100 Syd
1+50 Lt	Intersection, 115 <sup>th</sup> Avenue (Reference)
21+56	Monument Box, Adj
23+00 Lt	HMA Drive, Pavement for Butt Joints, Rem (12'x6') 8 Syd
28+17 Rt	HMA Drive, Pavement for Butt Joints, Rem (12'x6') 8 Syd
32+66 Lt	Concrete Drive, match with HMA
34+75 Rt	HMA Drive, Pavement for Butt Joints, Rem (12'x6') 8 Syd
34+93 Rt	Begin Guardrail, Install 25' of curved rail with buffered end
35+36 Lt	Begin Guardrail, Install 25' of curved rail with buffered end
37+50 Rt	End Guardrail, Install Approach Terminal, Type 2B
38+80 Lt	End Guardrail, Install Approach Terminal, Type 2B
47+70	POE, Match existing HMA surface

<u>PROJECT NO. 4623</u> - 0.90 miles of roadway renovation including clearing, station grading, replacing culverts, adding gravel, crushing, shaping, HMA paving, concrete curb and gutter, concrete driveways, and restoration on  $12^{th}$  Street from  $115^{th}$  Avenue to M-222, Martin and Watson Townships, Allegan County.

## ALLEGAN COUNTY ROAD COMMISSION ALLEGAN, MICHIGAN ITEMIZED UNIT PRICE BID SCHEDULE

ITEM OF WORK	QUANTITY	UNIT PRICE	TOTAL
Clearing	1 LS		
Station Grading	1 LS		
Pavt for Butt Joint, Rem	124 Syd		
HMA Base Crushing and Shaping	12,000 Syd		
Aggregate Surface Cse	1,800 Ton		
Aggregate Base, 6 inch	300 Syd		
Geotextile Fabric	500 Syd		
Subgrade Undercutting, Type II	500 Cyd		
Culv, Cl F, 12 inch	180 Ft		
Culv, Cl F, 18 inch	40 Ft		
Culv, Cl E, Conc, 24 inch	48 Ft		
Culv End Sect, Conc, 24 inch	2 Ea		
Storm Sewer, 18 inch	80 Ft		
Approach, Cl II	300 Ton		
Shoulder, Cl II	350 Ton		
Topsoil Surface	300 Cyd		
Restoration	1 LS		
Extended Restoration	1 LS		
Cereal Rye Seed	25 Lb		

#### ITEMIZED UNIT PRICE BID SCHEDULE (CONT.):

ITEM OF WORK	QUANTITY	UNIT PRICE	TOTAL
HMA 4E1, Mod	3,000 Ton		
Guardrail, Type B	487.5 Ft		
Guardrail Approach Terminal, Type 2B	2 Ea		
Guardrail, Curved	50 Ft		
Guardrail, Buffered End	2 Ea		
Guardrail Reflectors	24 Ea		
Pavt Mrkg, Waterborne, 4 inch, White	9,500 Ft		
Pavt Mrkg, Waterborne, 4 inch, Yellow	6,000 Ft		
Sign, Type B, Temp, Modified	160 Ft		
Barricade, Type III, High Intensity, Dbl Sided, Ltd, Mod	3 Ea		
Plastic Drum, High Intensity, Modified	20 Ea		
Flag Control	1 LS		
Rip Rap, Plain	40 Syd		
Mulch Blanket, High Velocity	600 Syd		
Erosion Control, Check Dam	50 Ft		
Erosion Control, Silt Fence	100 Ft		
Ditching	825 Ft		
Driveway, Nonreinf Conc, 8 inch	300 Syd		
Curb and Gutter, Conc, Det B2	250 Ft		
Driveway Opening, Conc, Det M	140 Ft		
Project Cleanup	1 LS		

TOTAL	OF BID	\$	
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