

Midland County Road Commission

Schedule of Items (Itemized Bid Sheet)

Item No. 1 – EASTMAN ROAD SCRAP TIRE GRANT PROJECT

Sealed Proposals will be received at the office of Board of Road Commissioners, County of Midland, at 2334 N. Meridian Road, Sanford, Michigan, until: **Thursday, January 24, 2019 at 1:00 PM**

Contract ID: 5025-17-0120
Location: Eastman Road Mier Road to South of Schneider Court
Description: HMA mill and resurface, shoulder widening, ditch & drainage improvements, tire derived aggregate subbase, pavement marking and signing.

Project Number: CO-175056	Project Engineer: John Kelley
Estimate Number: 3	Date Created: 12/21/2018
Project Type: Resurfacing	Fed/State #:
Location: Eastman Road	Fed Item:
Mier Road to South of Schneider Court	Control Section: 885901

Description: HMA mill and resurface, shoulder widening, ditch & drainage improvements, tire derived aggregate subbase, pavement marking and signing.

Instructions to Bidders: IMPORTANT NOTICE:

The undersigned understands and agrees that the local agency reserves the right to reject any and all bids and no contractual relationship shall exist between the undersigned and the local agency for the work described herein until such time as award is formally given.

The undersigned agrees upon submitting this bid that its agents, officers or employees have not directly or indirectly entered into any agreements, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal for the above project.

Subject to Section 102.17 of the MDOT Standard Specifications for Construction, the undersigned agrees to pay to the Midland County Road Commission (Local Agency) the proposal guaranty sum of: \$25,000.00, if the undersigned fails to provide the required materials and/or execute the contract in accordance with Section 102.15 of the MDOT Standard Specifications for Construction within twenty-eight (28) days after being furnished with necessary contract and bond forms. The Local Agency may, upon request by the undersigned based on valid considerations and made prior to expiration of the twenty- eight (28) day period, extend said period of time as the Local Agency may deem appropriate. A written request for return, or cancellation, of the proposal guaranty under Section 102.17 of the MDOT Standard Specifications for Construction must be filed with the Local Agency within fifteen (15) days after mailing by the Local Agency of notice that the proposal guaranty is being forfeited. Upon an adverse decision by the committee or failure to file a timely request for return, or cancellation, of proposal guaranty, payment shall be made within 20 days after the mailing by the Local Agency of a Final Demand for Payment. If payment is not made within 20 days, the undersigned hereby authorizes the Local Agency to withhold said sum from any money which may now, or hereafter, become due and owing by the Local Agency to the undersigned.

COMPANY BIDDING _____

CONTACT PERSON _____

ADDRESS _____

PHONE/FAX _____

 AUTHORIZED SIGNATURE TITLE

INDICATE ON ENVELOPE: Company Name, Bid Item, Time and Date

Pay Item	Description	Quantity	Units	Unit Price		Bid Amount	
				Dollars	Cts	Dollars	Cts
1500001	Mobilization, Max	1	LSUM				
2030001	Culv, Rem, Less than 24 inch	28	Ea				
2030002	Culv, Rem, 24 inch to 48 inch	10	Ea				
2030003	Culv, Rem, Over 48 inch	4	Ea				
2030011	Dr Structure, Rem	3	Ea				
2030015	Sewer, Rem, Less than 24 inch	174	Ft				
2030016	Sewer, Rem, 24 inch to 48 inch	245	Ft				
2050010	Embankment, CIP	3,000	Cyd				
2057002	_ Machine Grading, Modified	84.77	Sta				
2080036	Erosion Control, Silt Fence	500	Ft				
3017021	_ Subbase, TDA	3,028	Cyd				
3020016	Aggregate Base, 6 inch	11,068	Syd				
3060020	Maintenance Gravel	100	Ton				
3070021	Approach, CI II	175	Ton				
3070121	Shoulder, CI II	632	Ton				
3070200	Trenching	169.54	Sta				
4010012	Culv End Sect, 12 inch	14	Ea				
4010015	Culv End Sect, 15 inch	3	Ea				
4010018	Culv End Sect, 18 inch	6	Ea				
4010036	Culv End Sect, 36 inch	1	Ea				
4010055	Culv End Sect, Conc, 48 inch	2	Ea				
4010057	Culv End Sect, Conc, 60 inch	2	Ea				

Pay Item	Description	Quantity	Units	Unit Price		Bid Amount	
				Dollars	Cts	Dollars	Cts
4010059	Culv End Sect, Conc, 72 inch	2	Ea				
4010102	Culv End Sect, Metal, 48 inch	1	Ea				
4010131	Culv, CI A, 12 inch	69	Ft				
4010546	Culv, CI E, 48 inch	58	Ft				
4010548	Culv, CI E, 60 inch	41	Ft				
4010550	Culv, CI E, 72 inch	46	Ft				
4020004	Sewer, CI A, 12 inch, Tr Det A	31	Ft				
4020008	Sewer, CI A, 30 inch, Tr Det A	593	Ft				
4020009	Sewer, CI A, 36 inch, Tr Det A	1,283	Ft				
4020033	Sewer, CI A, 12 inch, Tr Det B	48	Ft				
4020036	Sewer, CI A, 24 inch, Tr Det B	119	Ft				
4020040	Sewer, CI A, 48 inch, Tr Det B	68	Ft				
4020605	Sewer, CI E, 36 inch, Tr Det B	89	Ft				
4021200	Sewer Tap, 4 inch	4	Ea				
4021201	Sewer Tap, 6 inch	3	Ea				
4021204	Sewer Tap, 12 inch	2	Ea				
4030040	Dr Structure Cover, Type G	19	Ea				
4030200	Dr Structure, 24 inch dia	1	Ea				
4030210	Dr Structure, 48 inch dia	14	Ea				
4030220	Dr Structure, 60 inch dia	3	Ea				
4030231	Dr Structure, 84 inch dia	1	Ea				
4030290	Dr Structure, Cleaning	1	Ea				

Pay Item	Description	Quantity	Units	Unit Price		Bid Amount	
				Dollars	Cts	Dollars	Cts
4030315	Dr Structure, Tap, 15 inch	1	Ea				
4037050	_ Dr Structure, 12 inch Tee Riser	16	Ea				
4037050	_ Dr Structure, 15 inch Tee Riser	4	Ea				
4037050	_ Dr Structure, 18 inch Tee Riser	4	Ea				
4037050	_ Dr Structure, 24 inch Tee Riser	2	Ea				
4037050	_ Dr Structure, 30 inch Tee Riser	2	Ea				
4037050	_ Dr Structure, 36 inch Tee Riser	5	Ea				
4047001	_ Underdrain, Pipe, 12 inch	6,285	Ft				
4047001	_ Underdrain, Pipe, 15 inch	765	Ft				
4047001	_ Underdrain, Pipe, 18 inch	1,900	Ft				
4047001	_ Underdrain, Pipe, 24 inch	930	Ft				
4047001	_ Underdrain, Pipe, 4 inch	900	Ft				
5010002	Cold Milling HMA Surface	1,059	Syd				
5010005	HMA Surface, Rem	1,556	Syd				
5017031	_ Hand Patching, GRT	166	Ton				
5017031	_ HMA Approach, GRT	224	Ton				
5017031	_ HMA, 4E1, GRT	430	Ton				
5017031	_ HMA, 5E1, GRT	1,549	Ton				
8070095	Post, Mailbox	20	Ea				
8100371	Post, Steel, 3 lb	369	Ft				
8100397	Sign, Type II, Rem	3	Ea				
8100398	Sign, Type IIA	26	Sft				

Pay Item	Description	Quantity	Units	Unit Price		Bid Amount	
				Dollars	Cts	Dollars	Cts
8100403	Sign, Type III, Rem	8	Ea				
8100404	Sign, Type IIIA	38	Sft				
8100405	Sign, Type IIIB	25	Sft				
8100421	Sign, Type V, Rem	5	Ea				
8100425	Sign, Type VB	31	Sft				
8110231	Pavt Mrkg, Waterborne, 4 inch, White	16,588	Ft				
8110232	Pavt Mrkg, Waterborne, 4 inch, Yellow	3,925	Ft				
8110251	Pavt Mrkg, Waterborne, 2nd Application, 4 inch, White	16,588	Ft				
8110252	Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	3,925	Ft				
8120170	Minor Traf Devices	1	LSUM				
8120370	Traf Regulator Control	1	LSUM				
8130011	Riprap, Plain	68	Ton				
8167011	_ Slope Restoration, Modified	24,542	Syd				
8210001	Monument Box	4	Ea				
8210010	Monument Preservation	4	Ea				
8230096	Hydrant, Relocate, Case 2	4	Ea				
8230432	Gate Box, Adj, Case 2	4	Ea				

Pay Item	Description	Quantity	Units	Unit Price		Bid Amount		
				Dollars	Cts	Dollars	Cts	
Total Bid:								

PROGRESS CLAUSE: Eastman Road Scrap Tire Grant

The Owner anticipates that construction can begin no earlier than 10 calendar days after award or as directed by the Engineer. In no case shall any work be commenced prior to receipt of formal notice of award by the Department.

The Contractor shall prepare and submit a complete, detailed, and signed MDOT Form 1130, Progress Schedule, according to 12SP-101A.

The Progress Schedule shall include, at minimum, the controlling work items for the completion of the project, as well as the planned dates or work days that these work items will be controlling operations. All contract dates including open to traffic, project completion, interim completion and any other controlling dates in the contract, must be included in the progress schedule.

If the bidding Proposal specifies other controlling dates, these shall also be included in the Progress Schedule.

The Project shall be completed in its entirety including final site restoration and clean-up on or before June 28, 2019.

After award and prior to the start of work, the Contractor must attend a preconstruction meeting with the Engineer. The Engineer will determine the day, time and place for the preconstruction meeting. The meeting will be conducted after project award and may be rescheduled if there are delays in the award of the project. The named subcontractor(s) for Designated and/or Specialty Items, as shown in the Proposal, should attend the preconstruction meeting if such items materially affect the work schedule.

Liquidated Damages shall be assessed in accordance with Section 108.10 of the 2012 Standard Specifications for Construction.

MIDLAND COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
MAINTENANCE OF TRAFFIC

OHM:JTK

1 of 3

12-21-2018

a. General Requirements. This work shall be in accordance with Sections 104.07, 104.11 and 812 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction including any Supplemental Specifications and Special Provisions, the 2011 Michigan Manual of Uniform Traffic Control Devices (MMUTCD), and as specified in the proposal.

b. Construction Influence Area (CIA). The CIA shall include the Rights-of-Way of the following roadways, within the approximate limits described below:

- At the project location and 200 ft north and south

In addition, the CIA shall include the Rights-of-Way of any other roads intersecting/crossing Eastman Road for a distance of 100 ft from the point of intersection or crossing.

c. Maintenance of Traffic. Traffic shall be maintained by single lane closures in accordance to MDOT Maintaining Traffic Typical M0140a.

During the installation of storm sewer and culvert pipe crossing Eastman Road, traffic shall be detoured to Sturgeon Road via Mier Road and Bombay Road. The detour route shall be installed and maintained by the Contractor throughout the project in accordance with Sections 104.07, 104.11 and 812 of the MDOT 2012 Standard Specifications for Construction, and any supplemental specifications in this proposal. Detour shall be in allowed for single work day closures only.

The Contractor shall, for the safety and protection of through and local traffic, furnish, erect, and maintain traffic control devices as specified herein and as directed by the Engineer. The work to be completed is designated in the contract plans, and shall include, but is not limited to, trenching for proposed shoulder widening, machine grading for proposed ditches, storm sewer installation, pavement widening, placement of tire-derived aggregate subbase drainage course, HMA overlay, driveway approaches, signing and pavement markings.

The contractor shall furnish, place, and maintain signs, barricades, lights, arrow panels, and minor traffic control devices along the detour route and within the CIA, and upon completion of the work, remove these items from the project.

The Contractor shall notify the Project Engineer a minimum of 72 business hours prior to the implementation of any lane closures and/or traffic shifts.

The cost of traffic maintenance as outlined in this special provision is included in the pay items "Minor Traffic Devices" and "Traf Regulator Control". All other costs due to traffic maintenance are the responsibility of the Contractor.

d. Materials.

Refer to the MDOT Maintaining Traffic Typical WZD-100-A and WZD-125E. In addition, all construction warning signs shall be prismatic.

Barricades

Barricades and traffic cones necessary for traffic control and public safety shall be furnished and erected by the Contractor as shown on the plans or as directed by the Engineer. The barricades shall be lighted as shown in the MDOT 2012 Standard Specifications for Construction and the 2011 MMUTCD. Any signs required at Type III Barricade locations shall be mounted above the barricade on separate sign supports.

Signing and Traffic Control

The Contractor shall furnish and install all signing necessary for the maintenance of traffic. All signs shall conform to the 2011 MMUTCD.

Cleaning Streets

Dirt, mud, construction materials, or other debris deposited on streets as the result of spilling, tracking on the wheels of trucks or construction equipment, or by other actions of the Contractor, his employees, or his subcontractors shall be immediately removed by the Contractor.

Other Requirements

Failure to comply with all stipulations of the above traffic specifications may be cause for complete shutdown of the project.

In the event of an emergency, these restrictions are subject to change if traffic conditions indicate such a necessity. At all times on the project during periods of traffic control set up and traffic regulation the Maintenance of Traffic specifications are to be on the person or individual(s) responsible to perform this work for the Contractor.

The Contractor shall be subject to the requirements of the MDOT Special Provision for Traffic Control Quality and Compliance contained in the proposal. If in the opinion of the Engineer, conditions require immediate attention by MCRC forces, the cost of signs, lights, etc. and placement of the same will be charged to the Contractor. In addition, a charge of \$300 per operation shall be assessed to cover coordination and supervision. These charges shall be over and above the price adjustments contained in the MDOT Special Provision for Traffic Control Quality and Compliance.

This applies along with all other restrictions of the Michigan Department of Transportation's holiday work stoppage memorandums.

e. Work Restrictions. No lane closures shall be allowed or work performed over the Memorial Day, 4th of July, and Labor Day holiday periods, which are defined below:

- Memorial Day – 6:00PM Wed May 22, 2018 thru 6:00AM Tues May 28, 2018
- 4th of July – 3:00PM Tues July 3, 2018 thru 6:00AM Monday July 8, 2018

Conduct all work during daytime hours only. Night work will not be permitted. Saturday work will only be allowed if approved by the Engineer. No Sunday work will be allowed.

f. Measurement and Payment. Lump sum temporary traffic control items have been set up for maintenance of traffic during construction zone operations and shall be measured and paid for in accordance with Section 812 of the MDOT 2012 Standard Specifications for Construction including any Supplemental Specifications and Special Provisions.

MIDLAND COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
MACHINE GRADING, MODIFIED

OHM:JTK

1 of 1

12-21-2018

a. Description. Machine Grading, Modified shall be constructed as shown in the plans and as specified in Section 205 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction with the following exceptions and additions.

b. Construction. Machine Grading, Modified shall include all earthwork between the shoulder and the right of way including proposed ditches, grading for driveway approaches, and grading around intersection radii. Operations may include scarifying, plowing, disking, moving, compacting, and shaping the earth. Disposal of excess material at an upland off site location shall be included in this pay item. This item shall also include clearing, stripping and stockpiling of topsoil. Excavated material, as approved by the Engineer, may be stockpiled along the right of way and placed back above the underdrain CI II backfill and TDA subbase to shape the proposed ditches. Additional fill material required beyond what is excavated will be paid for separately as Embankment, CIP. Trenching for proposed shoulder widening in paid for separately.

c. Measurement and Payment. The completed work as measured for Machine Grading, Modified will be paid for at the contract unit price for the following:

Contract Item (Pay Item)	Pay Unit
Machine Grading, Modified	Station

Machine Grading, Modified will be measured in place by length in stations along the centerline of the project proper (includes both sides) which price shall be payment in full for all labor, equipment, and materials shown on the plans, as specified in this provision, and as directed by the Engineer to accomplish this work. Restoration items will be paid for separately.

MIDLAND COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
SUBBASE, TDA

OHM:JTK

1 of 1

12-21-18

a. Description. This work consists of installing a tire derived aggregate (TDA) subbase drainage course as detailed in the project plans.

b. Materials. Provide TDA in accordance with ASTM D6270 specifications for a Class I fill with Type A TDA.

TDA shall be purchased from:

CM Rubber Technologies, Inc
4602 W Saginaw Road, Coleman, MI 48618
Contact: Rebecca Mullins (989) 465-0200, rebecca@cmrubbertech.com

Material for the geotextile blanket shall be in accordance to section 910 of the MDOT 2012 Standard Specifications for Construction.

c. Construction. Place and compact the TDA in accordance to ASTM D6270 Section 6 with the following exception: Soil cover thickness may be reduced to a minimum of 9 inches.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

Pay Item	Pay Unit
Subbase, TDA.....	Cyd

The unit price for **Subbase, TDA** includes all labor, equipment, and materials necessary for the installation of the geotextile blanket and compacted volume of the tire derived aggregate.

MIDLAND COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
DR STRUCTURE, __ INCH TEE RISER

OHM:JTK

1 of 1

12-21-18

a. Description. This work consists of installing a Drainage Structure, __ inch Tee Riser (size as specified) at the location and elevation as shown on the plans.

b. Materials. Provide materials in accordance with Sections 902 and 909 of the MDOT 2012 Standard Specifications for Construction, except as modified herein.

Material for the plastic tee and extension pipe may be smooth-lined corrugated polyethylene pipe (CPE) or Polyvinyl Chloride (PVC) in accordance to section 909.06 of the MDOT 2012 Standard Specifications for Construction.

c. Construction. Construction shall be in accordance with section 403 and 404 of the MDOT 2012 Standard Specifications for Construction, except as modified herein.

Install a plastic tee at locations shown on plans and the appropriate length of vertical extension pipe to match the rim elevations per plan. Connect tee to underdrain and extension pipe with water tight joints in accordance to section 909.03 of the MDOT Standard Specifications for Construction.

Install a round drain grate at the top of the extension pipe at the rim elevation shown on the plans. The diameter of the grate shall match the tee diameter.

Electronically submit shop drawings, at least 14 calendar days prior to starting the work, showing the plastic tee, extension pipe, and grate cover, including the watertight joints. Do not begin work until the shop drawings are approved.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

Pay Item	Pay Unit
Dr Structure, __ inch Tee Riser	Each

The unit price for **Dr Structure, __ inch Tee Riser** includes all labor, equipment, and materials necessary for the installation of a plastic tee, extension pipe, connections, and drain grate cover.

MIDLAND COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
UNDERDRAIN, PIPE, __ INCH

OHM:JTK

1 of 1

12-21-18

a. Description. This work consists of installing a underdrain, pipe __ inch (size as specified) at the location and elevation as shown on the plans.

b. Materials. Provide materials in accordance with Sections 902, 909, and 910 of the MDOT Standard Specifications for Construction, except as modified herein.

Underdrain pipe may be smooth-lined corrugated polyethylene pipe (CPE) or Polyvinyl Chloride (PVC) in accordance to section 909.06 of the MDOT Standard Specifications for Construction.

Underdrain pipe made from recycled content is permitted.

Contractor shall submit shop drawings for engineer approval two weeks prior to work being performed.

c. Construction. Construction shall be in accordance with section 404 of the MDOT 2012 Standard Specifications for Construction, except as modified herein.

Underdrain with geotextile sock or wrapped in geotextile blanket shall be backfilled with granular material Class II AA. The contractor may elect to install open-graded underdrain, which shall then be backfilled with open-graded aggregate 34R and the trench lined with geotextile blanket.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

Pay Item	Pay Unit
Underdrain, Pipe, 6 inch.....	Each
Underdrain, Pipe, 12 inch.....	Each
Underdrain, Pipe, 15 inch.....	Each
Underdrain, Pipe, 18 inch.....	Each
Underdrain, Pipe, 24 inch.....	Each

The unit price for **Underdrain, Pipe, __ inch** includes all labor, equipment, and materials necessary for the installation of the pipe, geotextile sock or blanket, and backfill material.

MIDLAND COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
HMA, GRT

OHM:JTK

1 of 2

11-20-18

a. Description. Substitution of recycled tire rubber for part of the new materials required to produce the HMA shall be in accordance with the following subsections. This work consists of furnishing and placing hot mix asphalt (HMA) recycled tire rubber (RTR) mixture(s) using Superpave mix design methods. Furnish Superpave HMA RTR mixtures according to section 501 of the Standard Specifications for Construction, except as modified herein. No deviations to acceptance test methods/procedures will be allowed. This specification includes mix specifications for recycled tire rubber terminal blend (RTRTB). Supply a RTRTB modified binder.

b. Mix Design. Furnish an HMA mixture design for the HMA RTR mixtures specified to the Engineer and to the HMA Operations section at Construction Field Services. The submitted mix design shall meet the requirements of HMA, 5E10 and HMA, 4E10 and will be evaluated according to the MDOT *HMA Production Manual*, Procedures for HMA Mix Design Processing. Provide the manufacturers recommended mixing temperature for the rubber modified binder.

c. Materials. Furnish modified Superpave HMA recycled tire rubber mixtures consisting of aggregates of the highest quality available to meet the minimum specifications herein. Furnish a mix design according to the standard specifications.

1. Aggregates. Furnish aggregates free of topsoil, clay, and loam for use in plant mixed HMA mixtures. For RTRTB the gradation must meet the requirements for the designated Superpave mix per the standard specifications.
2. Recycled Tire Rubber. Furnish RTR composed of recycled scrap tires free from metal and other contaminants.

Furnish samples of RTRTB binders to the Engineer for performance evaluation.

- i. Recycled Tire Rubber Terminal Blend (RTRTB) Method. Furnish RTRTB binder as described herein.
- ii. Furnish RTRTB modified asphalt cement binder meeting the requirements and the properties of specification and section 904 of the Standard Specifications for Construction.

d. Quality Control, Sampling for Performance Testing, and Acceptance of Modified HMA Mixtures.

FUSP 12SP501U and/or 12SP501V will apply except as modified herein.

Asphalt Binder Content will be determined by the ignition method. Vacuum extraction will not be allowed.

e. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

Pay Item	Pay Unit
HMA, 4E1, GRT.....	Ton
HMA, 5E1, GRT.....	Ton
HMA Approach, GRT.....	Ton
Hand Patching, GRT.....	Ton

The pay items listed above will be paid for in full for material, labor, and equipment needed to accomplish the work, including furnishing, placing, and compacting the HMA material.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
SLOPE RESTORATION, NON-FREEWAY

C&T:DMG

1 of 3

C&T:APPR:TWK:DBP:04-25-12

a. Description. This work consists of preparing all lawns and slopes on non-freeway projects designated for slope restoration on the plans or as directed by the Engineer and applying topsoil, fertilizer, seed, mulch with mulch anchor, mulch blanket, high velocity mulch blanket and permanent turf reinforcement mat to those areas. Turf establishment must be in accordance with section 816 of the Standard Specifications for Construction and Standard Plan R-100 Series, except as modified herein or otherwise directed by the Engineer.

b. Materials. The materials and application rates specified in sections 816 and 917 of the Standard Specifications for Construction apply unless modified by this special provision or otherwise directed by the Engineer. The following materials must be used on this project:

1. Seeding mixture as called for on the plans
2. Fertilizer, Chemical Nutrient, Class A
3. Topsoil Surface, Furnished or Salvaged, 4 inch. Remove any stones greater than 1/2 inch in diameter or other debris from all topsoil.
4. Mulch and Mulch Anchoring, Mulch Blanket and High Velocity Mulch Blanket
5. Permanent Turf Reinforcement Mat (TRM) must be 100 percent synthetic and consist of 100 percent ultraviolet (UV) stabilized polyolefin fibers sewn between two layers of black UV stabilized polypropylene netting with polyolefin thread. The TRM must meet the following "minimum average roll value" requirements:

Property	Test Method	Requirement
Mass/Unit Area	ASTM D 6566	10 oz/syd
Ultraviolet Stability @ 1000 hrs	ASTM D 4355	80 percent
Tensile Strength (MD)	ASTM D 6818	165 lbs/ft

Acceptance. Supply a Test Data Certification for the permanent TRM from one of the following manufacturers:

Recyclex - American Excelsior Co., Arlington, TX (800) 777-7645

P300 - North American Green, Poseyville, IN (800) 772-2040

Landlok 450 - Propex, Inc., Chattanooga, TN (800) 621-1273

PP5-10 - Western Excelsior, Mancos, CO (800) 833-8573

c. Construction. Construction methods must be in accordance with subsection 816.03 of the Standard Specifications for Construction. Begin this work as soon as possible after final grading of the areas designated for slope restoration but no later than the maximum time frames stated in

subsection 208.03 of the Standard Specifications for Construction. It may be necessary, as directed by the Engineer, to place materials by hand.

Shape, compact and assure all areas to be seeded are weed free prior to placing topsoil. Place topsoil to the minimum depth indicated above, to meet proposed finished grade. If the area being restored requires more than the minimum depth of topsoil to meet finished grade, this additional depth must be filled using topsoil or, at the Contractor's option, embankment. Furnishing and placing this additional material is included in this item of work.

Topsoil must be weed and weed seed free and friable prior to placing seed. Remove any stones greater than 1/2 inch in diameter or other debris. Apply seed mixture and fertilizer to prepared soil surface. Incorporate seed into top 1/2 inch of topsoil

Apply mulch at a rate of 2 tons per acre. Place Mulch Anchoring over the mulch at a rate specified in subsection 816.03.F of the Standard Specifications for Construction. Mulch Blanket and High Velocity Mulch Blanket must be placed in accordance with subsection 816.03.H of the Standard Specifications for Construction and as shown on Standard Plan R-100 Series.

Areas constructed with the TRM must be installed on prepared (seeded) grades as shown on the plans in strict accordance with the manufacturer's published installation guidelines. The top edge of the TRM must be anchored in a minimum 6 inch deep trench. Operation of equipment on the slope will not be allowed after placement of the TRM. No credit for splices, overlaps, tucks or wasted material will be made.

If an area washes out after this work has been properly completed and approved by the Engineer, make the required corrections to prevent future washouts and replace the topsoil, fertilizer, seed and mulch. This replacement will be paid for as additional work using the applicable contract items.

If an area washes out for reasons attributable to the Contractor's activity or failure to take proper precautions, replacement will be at the Contractor's expense.

The Engineer will inspect the seeded turf to ensure the end product is well established, weed free, in a vigorous growing condition, and contains the species called for in the seeding mixture.

If the seeded turf is not well established at the end of the first growing season, the Contractor is responsible to re-seed until the turf is well established and approved by the Engineer.

If weeds are determined by the Engineer to cover more than 10 percent of the total area of slope restoration, the Contractor must provide weed control in accordance with subsection 816.03.J of the Standard Specifications for Construction. Weed control will be at the Contractor's expense with no additional charges to the project.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Slope Restoration, Type _____	Square Yard

1. Place **Slope Restoration, Type A** in all areas not described in the other types of slope restoration and will be measured by area in square yards in place. **Slope Restoration, Type A**

includes all labor, equipment and materials required to install Topsoil Surface, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and Mulch and Mulch Anchoring which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type A**.

2. Place **Slope Restoration, Type B** parallel (6 feet minimum) to the edge of the roadway, in areas that have a 1 on 3 slope and in any ditch with a grade less than 1.5 percent, or as directed by the Engineer. **Slope Restoration, Type B** will be measured by area in square yards in place. **Slope Restoration, Type B** includes all labor, equipment and materials required to install Topsoil Surface, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and Mulch Blanket which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type B**.

3. Place **Slope Restoration, Type C** in areas that have a 1 on 2 slope, any ditch with a grade of 1.5 percent to 3 percent or as directed by the Engineer. **Slope Restoration, Type C** will be measured by area in square yards in place. **Slope Restoration, Type C** includes all labor, equipment and materials required to install Topsoil, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and High Velocity Mulch Blanket which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type C**.

4. Place **Slope Restoration, Type D** in areas that have a slope steeper than 1 on 2, any ditch with a grade steeper than 3 percent or as directed by the Engineer. **Slope Restoration, Type D** will be measured by area in square yards in place. **Slope Restoration, Type D** includes all labor, equipment and materials required to install Topsoil, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and TRM which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type D**.



MIDLAND
COUNTY ROAD COMMISSION
2334 N. MERIDIAN ROAD
SANFORD, MI 48657

Phone (989) 687-9060
Fax (989) 687-9121
www.midlandroads.com

Notice to Bidders

Art Buck

art@midlandroads.com

E-mail

989-687-9060

Phone number

You are notified that all inquiries must be made thru the above employee of the Midland CRC. All inquiries shall be made at least 2 days in advance before the opening of bids. Inquires must include the in the subject line the job number and Bid Inquiry

MIDLAND COUNTY ROAD COMMISSION

NOTICE TO BIDDERS
UTILITY COORDINATION

MCRC:OHM

1 of 2

12-21-2018

The Contractor must cooperate and coordinate construction activities with the owners of utilities as stated in Section 104.08 of the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction. In addition, for the protection of underground utilities, the Contractor shall follow the requirements in Section 107.12 of the 2012 MDOT Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon Section 109.05E of the 2012 MDOT Standard Specifications for Construction.

For protection of underground utilities and in conformance with Public Act 53, the Contractor shall dial 1-800-482-7171 a minimum of three full working days, excluding Saturdays, Sundays, and holidays prior to beginning each excavation in areas where public utilities have not been previously located. Members will thus be routinely notified. This does not relieve the Contractor of the responsibility of notifying utility owners who may not be a part of the "Miss Dig" alert system.

PUBLIC UTILITIES

The following Public Utilities have facilities located within the right-of-way:

CITY OF MIDLAND

Mr. Andrew Parrott
333 W. Ellsworth St.
Midland, MI 48640
(989) 837-6958
aparrott@midland-mi.org

Water

MIDLAND COUNTY DRAIN COMMISSION

Douglas Enos
220 W. Ellsworth Street
Midland, MI 48640
(989) 832-6770

Drain

AT&T

Mr. Rob Augustine
309 S. Washington Ave. Rom 438A
Saginaw, MI 48607
(989) 771-5404
ra3174@att.com

Communications

CHARTER COMMUNICATIONS

Mr. Mark Kelly
1408 South Valley Center Drive
Bay City, MI 48706
(989) 233-9404
mark.kelly@charter.com

CENTURY LINK

Mr. Bill Marchand
(989) 879-8709

CONSUMERS ENERGY (Electric)

Mr. Matt Duncan
1929 Wright Avenue
Alma, MI 48801
(989) 466-4271

Electric

CONSUMERS ENERGY (Gas)

Mr. Kyle Skrabut
2400 Weiss Street
Saginaw, MI 48602
(989) 751-1284

Gas

Kyle.Skrabut@cmsenergy.com

Owners of public utilities will not be required by the County to move additional poles or structures in order to facilitate the operation of construction equipment, unless it is determined by the Engineer that such poles or structures constitute a hazard to the public, or are extraordinarily dangerous to the Contractor's operations.