

MIDLAND COUNTY ROAD COMMISSION

BID FORM

Sealed Proposals will be received at the office of the Board of Road Commissioners, County of Midland, at 2334 N. Meridian Road, Sanford, Michigan 48657 until:

DATE: Friday, March 15, 2019, at 1:00 pm.

Item No. 5 – Geotextile Materials

Paving Interlayer, Installed (approx. 3000 syd)

Geosynthetic Paving Interlayer, Non Woven.....	\$ _____/Syd
Geosynthetic Paving Interlayer, Fiberglass Reinf.....	\$ _____/Syd
Tack Coat, PG 64-22 Asphalt.....	\$ _____/Gallon
Tack Coat, PG 58-28 Asphalt.....	\$ _____/Gallon

Material Only

Geosynthetic Paving Interlayer, Non Woven.....	\$ _____/Roll, specify Syd. _____
Geosynthetic Paving Interlayer, Fiberglass Reinf.....	\$ _____/Roll, specify Syd. _____
Geotextile Liner, Non Woven.....	\$ _____/Roll, specify Syd. _____
Heavy Geotextile Liner, Non Woven.....	\$ _____/Roll, specify Syd. _____
High Strength Woven Polypropylene Fabric	\$ _____/Roll, specify Syd. _____
Medium Strength Woven Polypropylene Fabric..	\$ _____/Roll, specify Syd. _____
Silt Fence, Fabricated.....	\$ _____/Roll, specify Lft. _____
High Velocity Straw Mulch Blanket	\$ _____/Roll, specify Syd. _____
Single Net Straw Mulch Blanket.....	\$ _____/Roll, specify Syd. _____

DESCRIPTION

This work consist of all equipment, material, and labor required to furnish and install the specified Geosynthetic Paving Interlayer in accordance with MDOT 2012 Standard Specifications for Construction and as detailed in the special provision here in. Estimated quantity of Geosynthetic Paving Interlayer Non Woven is 3,000 Syd, to be place on Badour Road from Stewert Road to south approx. 1500’.

MATERIALS

- Geosynthetic Paving Interlayer Non Woven shall be Tencate Marafi MPV500 or equal.
- Geosynthetic Paving Interlay Fiberglass Reinforced shall be Tencate Marafi PGM-30 or equal.
- Geotextile Liner, Non Woven (including Heavy) must meet requirements set forth in MDOT Standard Specification for Construction 2012 section 910.
- High Strength Woven Polypropylene Fabric must have a wide width tensile strength of 4800 Lbs/ft in both directions per ASTM D 4595.

- Medium Strength Woven Polypropylene Fabric must have a wide width tensile strength of 2400 Lbs/ft in both directions per ASTM D 4595.

If proposing alternate material submit all material data sheets for approval.

The bid price for items under Material Only shall include delivery of said materials to MCRC at 2334 N. Meridian Road, Sanford MI 48657.

COMPANY BIDDING _____

CONTACT PERSON _____

ADDRESS _____

PHONE/FAX _____

AUTHORIZED SIGNATURE

TITLE

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

MIDLAND COUNTY ROAD COMMISSION

SPECIAL PROVISION FOR
GEOSYNTHETIC PAVING INTERLAYER

1 of 2

02-01-16

MCRC:ALB

a. Description. Furnish and place Geosynthetic Paving Interlayer consisting of non-woven geotextile or composite grid/geotextile according to the plans, the Michigan Department of Transportation 2012 Standard Specifications for Construction, pertinent special provisions, and as specified herein.

b. Materials. Furnish geosynthetic materials of the type (Class and Grade) shown on the plans, composed of polypropylene, polyester, fiberglass, or a blend or composite of these fibers, according to section 910 and as described herein:

1. Class I – Composite Grid. Full width moisture barrier with reflective crack/joint control and/or rutting resistance reinforcement consisting of high strength fiberglass grid mechanically affixed to nonwoven geotextile.

2. Class II – Paving Mat. Full width moisture barrier and reflective crack control consisting of high temperature resistant nonwoven polyester or fiberglass/polyester oleqd geotextile with or without fiberglass grid reinforcement.

3. Class III – Paving Fabric. Full width moisture barrier consisting of needle-punched non-woven polypropylene geotextile. This category also includes bond breaker fabric used under thin concrete overlay applications.

Furnish tack coat meeting Section 904.03.A requirements for Performance Grade asphalt binder or approved equal.

c. Acceptance. Geosynthetics will be accepted based upon a Test Data Certification. Provide the manufacturer's certification and published installation guidelines to the Engineer at least 10 business days prior to installation. Damaged, defective, or deteriorated geosynthetics will be rejected.

Tack Coat will be accepted by General Certification.

d. Construction. Install geosynthetic paving interlayer in strict accordance with the manufacturer's published installation guidelines and as described herein. The Engineer will resolve any conflict between this specification and published guidelines.

Place geosynthetic material on prepared surfaces as shown on typical cross sections. Install paving fabric only to the limits that can be covered by new pavement the same day. Remove dirt and debris, clean and dry all application surfaces. Additional work to prepare surfaces, including milling existing HMA or concrete surfaces, joint repairs, and joint sealing will be included in other workitems.

HMA Overlay Applications. Apply tack coat at a rate between 0.1 - 0.4 gal/syd as directed by the Engineer, depending on fabric type and pavement conditions (a higher application rate may be appropriate for placement on milled surfaces). Monitor tack coat application closely to prevent bleeding, particularly at high lateral stress locations such as steep grades, intersections, and corners. Adjust the application rate to maintain the optimum tack coat rate for pavement conditions. Prohibit traffic from driving on the tack coat.

Concrete Overlay (Bond Breaker) Applications. Punch or drive pins or nails through 2 to 2½ inch galvanized washers/discs, spaced 6 feet or less on center, into the existing concrete pavement in both transverse and longitudinal directions.

Install geosynthetic material using a truck or tractor mounted frame with metal rollers and integral broom aligned with the fabric roll, to smoothly un-roll the paving fabric onto the prepared surface and seat the fabric into the applied tack coat. Remove bubbles and wrinkles in the geosynthetic, ensuring complete contact with the prepared surface. Except as otherwise approved, overlap longitudinal joints 1.5 - 3 inches and transverse joints 3 - 6 inches, with the top lap surface toward the curb and paving direction, respectively. Where required by manufacturer's recommended installation guidelines, use pneumatic tired rollers to ensure bond and complete permeation of PG Asphalt Tack Coat into the geotextile.

Permit traffic upon the installed fabric only for limited periods as approved by the Engineer. Coordinate fabric installation with paving operations to minimize exposure to traffic.

e. Measurement and Payment. This work will be measured and paid for by the square yard, completed in place. No allowance will be made for overlap, splices or material cut off or wasted. Payment for **Geosynthetic Paving Interlayer, Class__** will include furnishing all material, labor, and equipment required to prepare surfaces, and to furnish, place and smooth the geosynthetic material as described herein.

Tack coat will be measured and paid for separately as Tack Coat, PG Asphalt. Payment for Tack Coat, PG Asphalt includes all equipment, materials, and labor necessary to furnish and place tack coat at the application rate within the specified range, as directed by the Engineer.

<u>Contract (Pay) Item</u>	<u>Pay Unit</u>
Geosynthetic Paving Interlayer, Non Woven	Square Yard
Geosynthetic Paving Interlayer, Fiberglass Reinf.	Square Yard
Tack Coat, PG 64-22	Gallon
Tack Coat PG 58-28	Gallon