



NWPMA Asphalt Interlayer Presentation

Patti Murray, P.E. (NV)

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1. Introduction

Interlayer Opportunity / Potential



Total Roads in the USA: 4.2 million miles

Paved Roads in the USA: 2.6 million miles (60+%) – 1.5 Municipal/City

Local governments maintain about 78% of all roadway miles

Many Geotechs and Civil Engineers still use asphalt



** Residential Streets : 1.1 million miles **

** 109 billion \$ spent on highway and street construction in 2022 **



2. Why use interlayers?

Benefits of using an asphalt interlayer beneath your new overlay.

Slows the deterioration per year by delaying cracks.

Reduces or eradicates future patching

Increases traffic capacity.

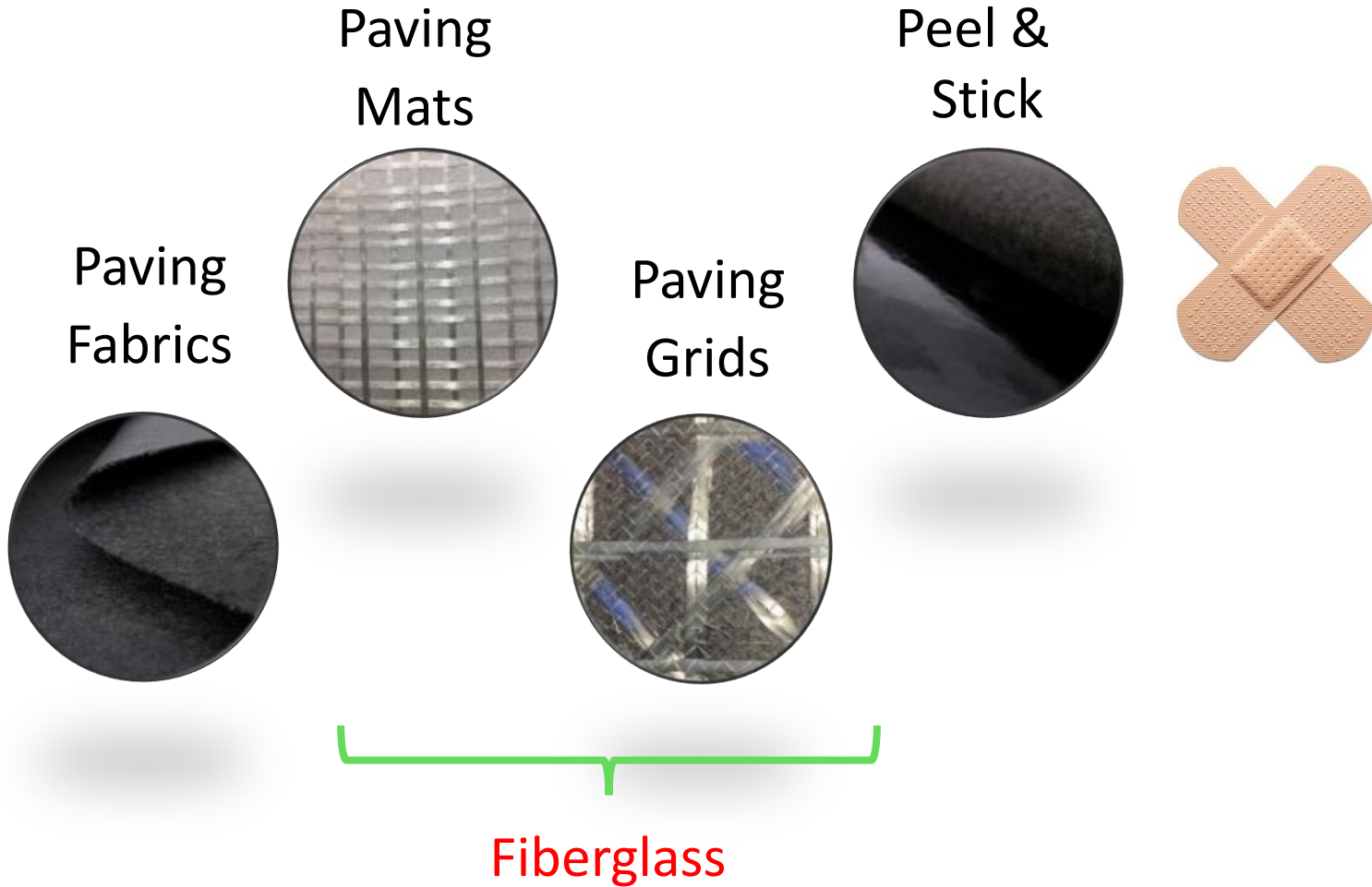
So What:

1. Delays the need to come back and fix the road.
2. Delays cracks from coming back.
3. Slows the network condition from reducing.



3. Interlayer types?

These are the “five” types of interlayer’s available worldwide.



There are only three main functions of an asphalt interlayer.

⬇️ Moisture Barrier



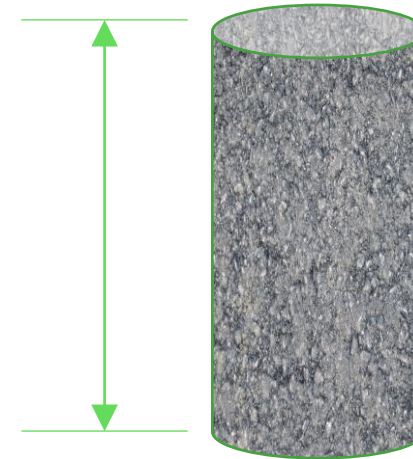
⬇️ Reflective Cracking



⬇️ Traffic Improvement



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4. Where to Use Interlayers?

Use Under Asphalt Overlays 1.5 inches or more, or Under Chip Seals and Slurries.

HMA

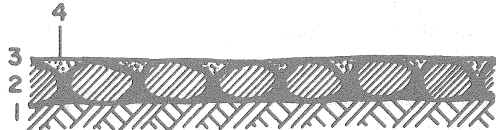


>1.5"

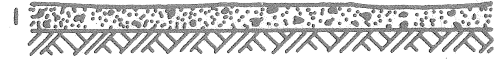
- DOUBLE SEAL**
- 1 TACK COAT
 - 2 LARGE STONE (1st Stone layer)
 - 3 PENETRATION COAT
 - 4 SMALL STONE (2nd Stone layer)



- CAPE SEAL**
- 1 TACK COAT
 - 2 STONE
 - 3 PENETRATION COAT
 - 4 SLURRY



- SLURRY SEAL**
- 1 SLURRY



- SAND SEAL**
- 1 TACK COAT
 - 2 SAND
 - (3 PEN. COAT)
 - 4 SAND



Surfaces on Which you can Install Solmax Interlayers:

Install on: Existing, Milled or New Asphalt

***** **NEW** *****

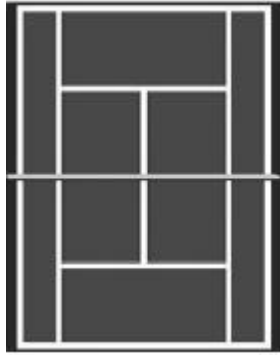
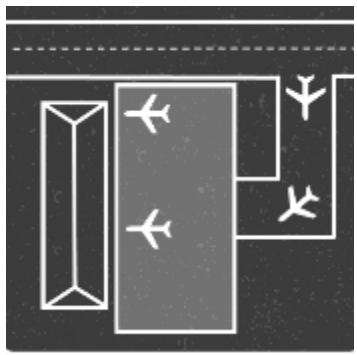
Primed Aggregate Base

Primed Lime or Cement Treated Base

Primed Rubbelized Concrete

Contact Solmax to get more information.

Install on any pavement surface for any use case (e.g. airport aprons, parking lots, tennis courts, bridges, etc.) where you are applying asphalt overlays or surface treatments.

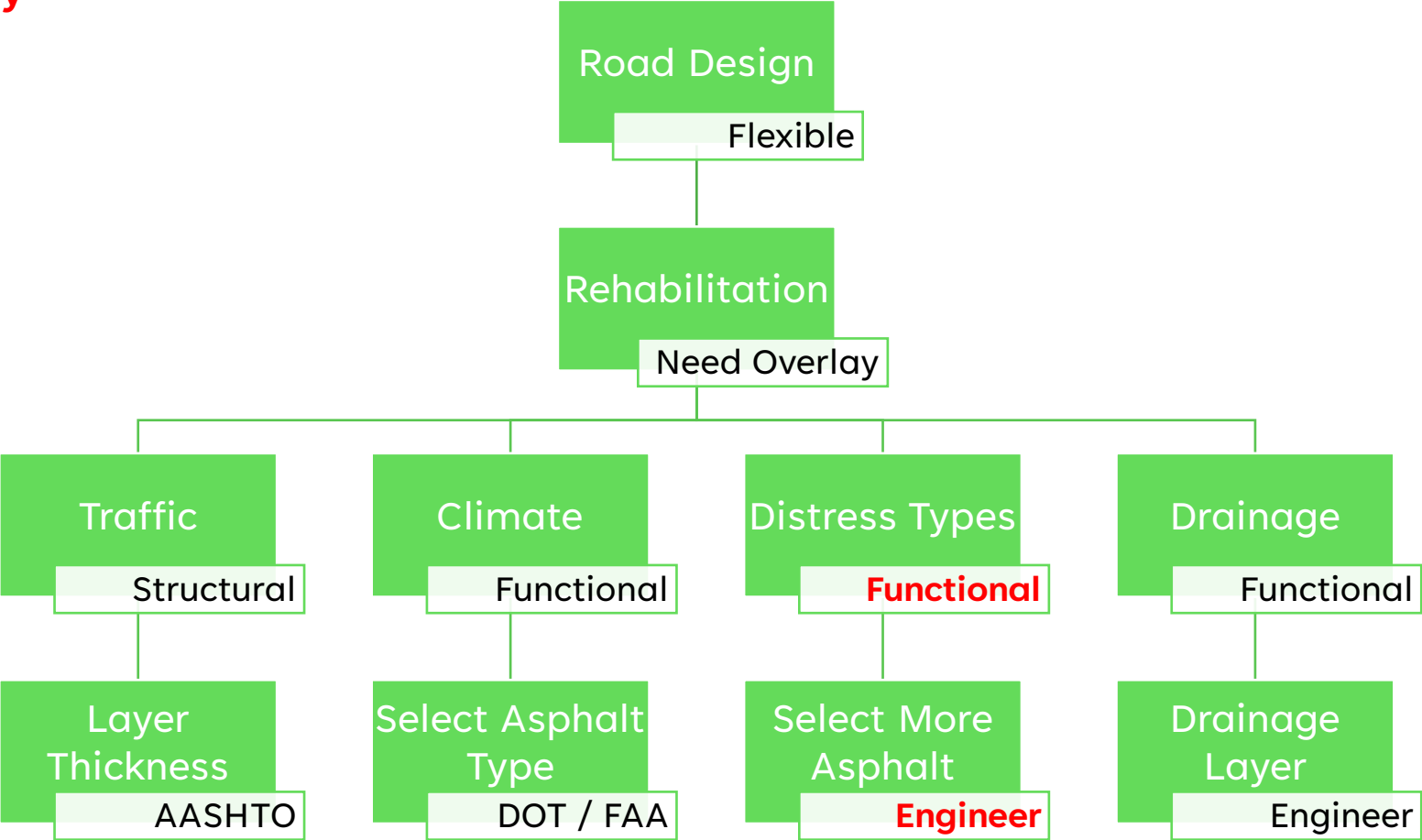


This includes all categories of roads as well (e.g. Arterials, etc.)



5. Functional Design Criteria to Use to Select Interlayers?

So why is reflective cracking not dealt with adequately today?



Not all Cracks are Equal!

↓ Environmental Cracks

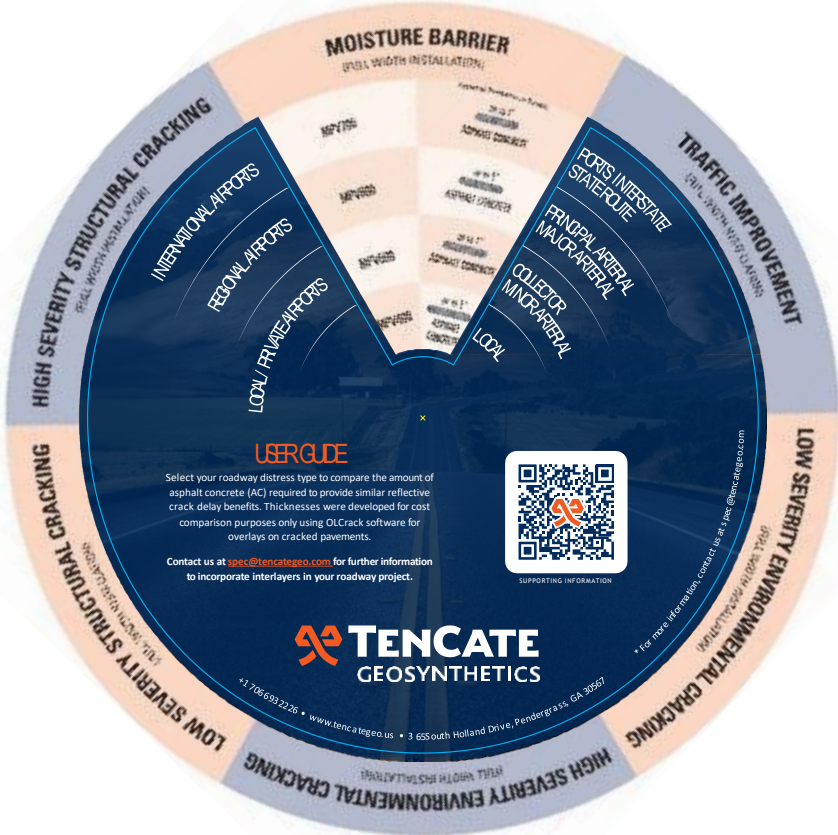
- ↓ Oxidation Cracks
- ↓ Block Cracks
- ↓ Thermal Cracks

↓ Structural Cracks

- ↓ Alligator Cracks
- ↓ WP Longitudinal Cracks
- ↓ PCC Joint Cracks



Solmax Product Selection Guide



This is a two-sided wheel.



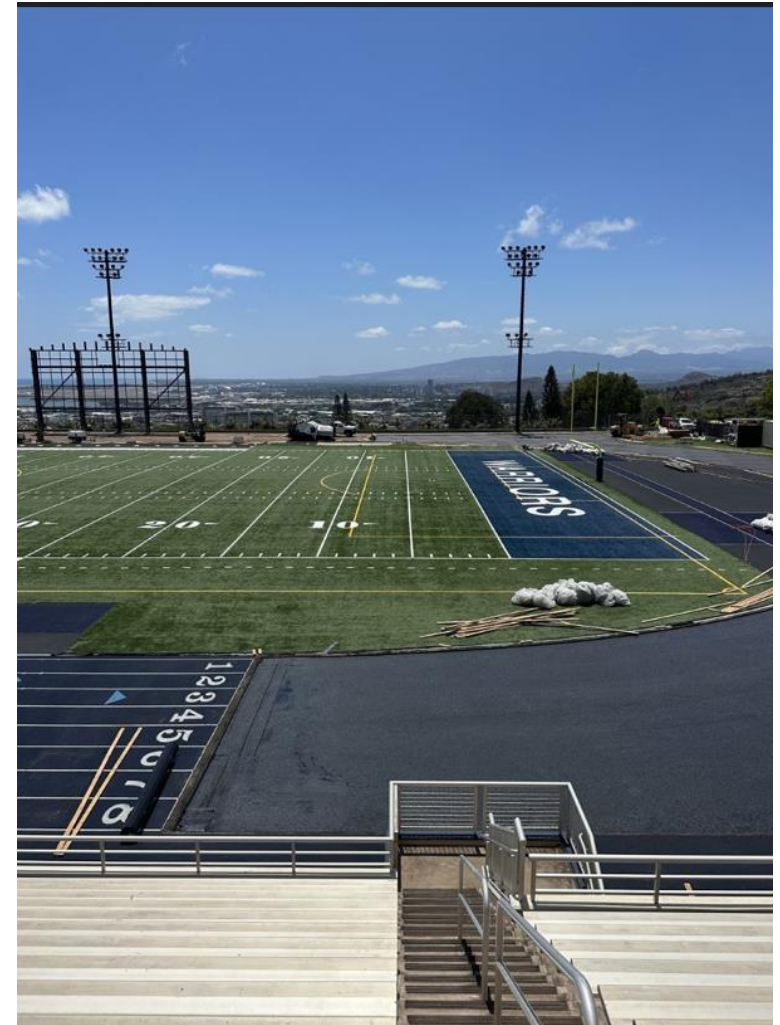
7. Typical Interlayer Projects

Pavement Rehabilitation Solutions



PCI = 28!! - Does it need Reconstruction per the guidelines.

Kamehameha School Oahu, HI – Paving Fabric



Athletics Track Rehabilitation

Heber City, UT – Composite Paving Grid



Edge Milling and Installation of Paving Grid Using PG58-28 Binder

Heber City, UT – Composite Paving Grid



Pavement Rehabilitation Solutions

Rural Roads Preservation Kayak Point Road Stanwood, WA



East West Bound Lanes were Reinforced with Paving Mat and a 1.8 inch Wearing Course

Snohomish County Kayak Point Road – Paving Mat



County Overlaid Road with Paving Mat to Address Reflective Cracking

Big Timber Airport Apron, MT – Paving Mat

Leveling Course



Emulsion

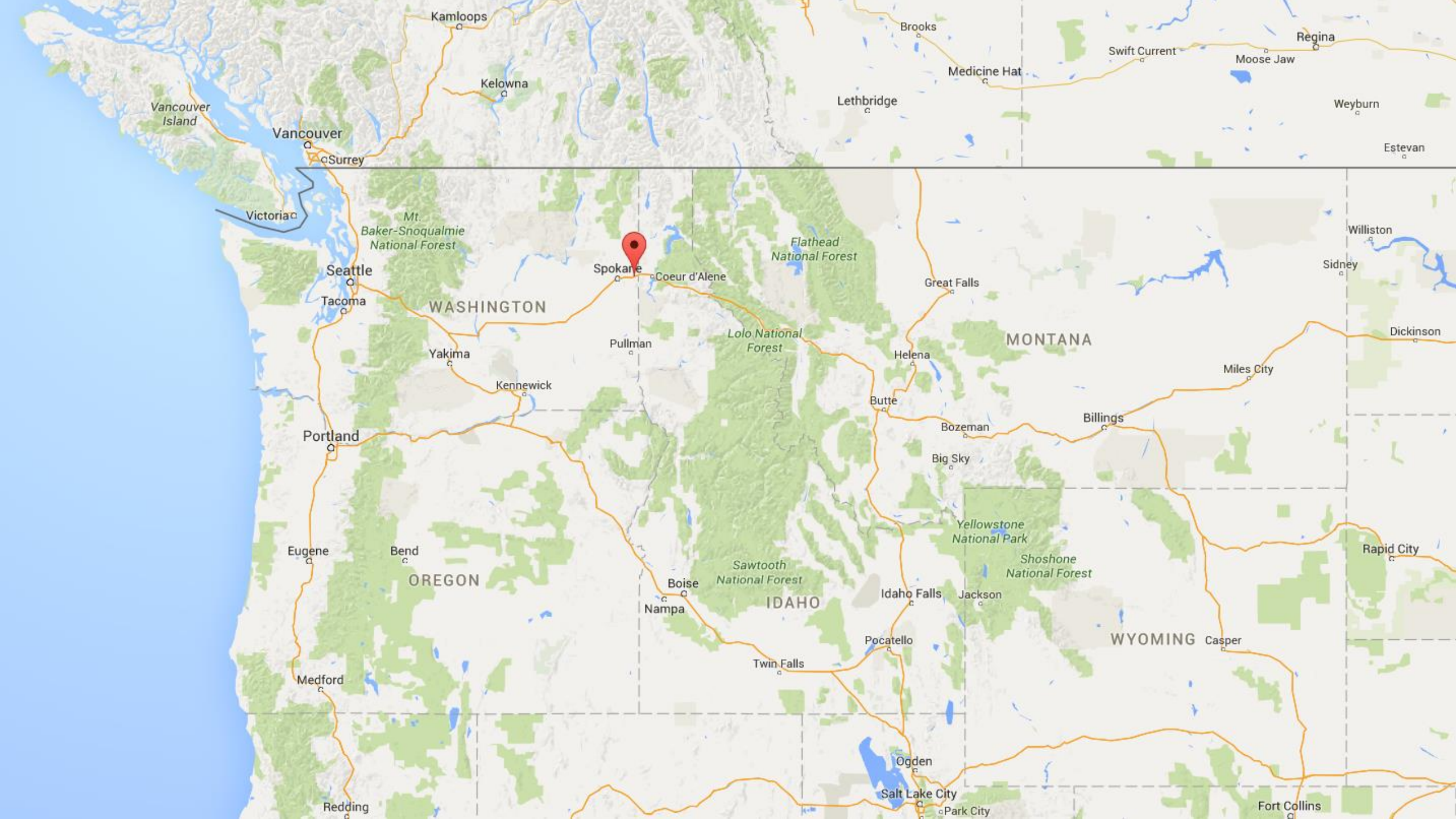


Paving Mat Laydown



Big Timber Airport Apron, MT – Paving Mat











US Patent No. PENDING

SVT

Length (ft) 200.00
Width (inches) 24.40
Area (sq. Yards) 244.40
Gross Lbs. 20160.18
Date

163981233

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US Patent No. PENDING

US Patent No. PENDING

163981231

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163981233





JOHN DEERE

DEERE

3032 E







1 year later

Interlayer Types – Detail Repair



Joint repairs are one of the most common DOT applications and use strip membranes.

Interlayer Types – Detail Repair



Milled 60” wide centered on the joint, the surface is primed and a 48” Petrotac installed.

Petrotac Installation on Steel Bridge Deck Folsom Road, Lane County

Starting from Guardrail



Working towards the Center




One Roll to Go



7. Inspector Certification


Certification Training for Inspectors




**Geosynthetic Materials
Association**

Training Program
for
Interlayer Project Inspectors

__ 2021



 Geosynthetic
Materials Association

www.gmanow.com

Thank you / Questions

Patti Murray P.E. (NV)

EBM Pavement Rehabilitation West

(m) +1 510 410 3299 | pmurray@solmax.com

[365 S. Holland Drive, Pendergrass, GA 30567](https://www.solmax.com)

[SOLMAX.COM](https://www.solmax.com)