

**MANAGING
ASPHALT
PAVEMENTS**
CONFERENCE AND TRADE SHOW
MAY 15-17, 2023 ★ WACO, TEXAS

Patching Materials: Your Maintenance MVP

Track 2: Materials, Construction, Maintenance

The background of the entire slide is a light gray, stylized map of Waco, Texas, showing a grid of streets and various building footprints.

MANAGING ASPHALT PAVEMENTS

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PRESENTED BY:



**HOT
MIX
COLD
LAID**

Hot Mix Cold Laid



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POTHOLES



Patching

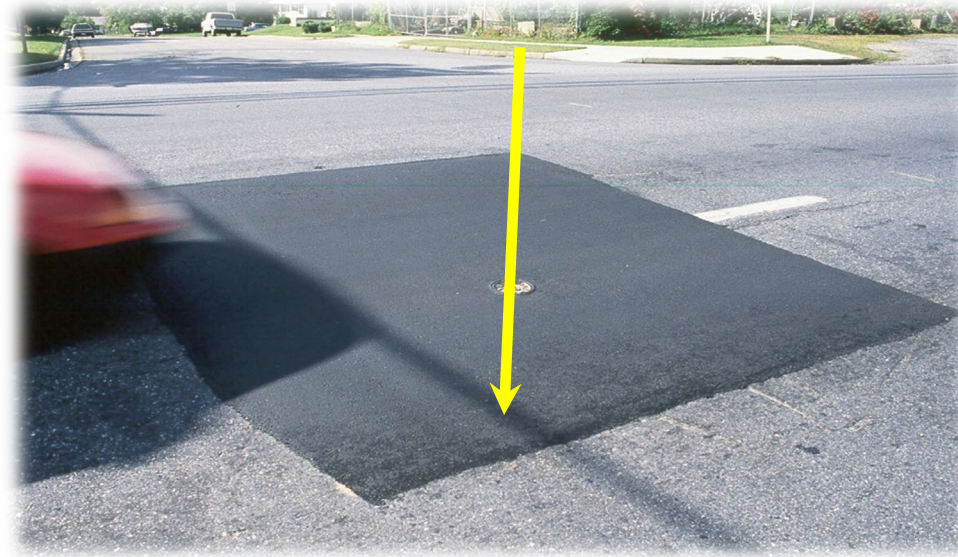


- **Make sure to get at least 1 foot into the sound pavement when you mark the patch for removal**
- **Use good straight lines that are cut with vertical faces**
- **Remove all loose material**
- **Tack base and all vertical surfaces**
- **Patches must be strong enough to become a part of the permanent structure or they *will* be back!**

Patching

Irregular patch - getting proper compaction is going to be difficult on this one.

Nice straight lines, no distress visible outside the patched area



Squared up, Quality



Repairs



Tack Coat

- To promote the bond between old and new pavement layers.
- To prevent slippage between pavement layers
- To provide an additional moisture barrier, especially when applied along the transverse and longitudinal vertical surfaces



LIMESTONE ROCK ASPHALT (LRA)

- A unique deposit of limestone that has natural oil (bitumen) imbedded in the aggregate.
- Located west of Uvalde, Texas



LRA PRODUCTS

- Item 330 Premix and Trapmix
- Item 302 Precoat - Sac B
- High Performance Cold Mix (all weather mix)

WHO DO WE SUPPLY?

- Texas Department of Transportation (TxDOT)
- Cities and Counties
- Contractors (TxDOT & Commercial)

VARIETY OF MIXES / APPLICATIONS

Surface Mixes

- Type D - $\frac{1}{4}$ " (top size)
- Type CC - $\frac{3}{8}$ "
- Type DS – $\frac{1}{4}$ " Trapmix
- Type CS – $\frac{3}{8}$ " Trapmix

Patching & Edge Repair

- Type B - $\frac{5}{8}$ "
- Type A - $\frac{7}{8}$ "

Base Failure Repair

- Type AA - $1\frac{1}{4}$ "

ADVANTAGES TO USING LRA MIXES

- User friendly – hand or machine laid
- Stockpile shelf life – two to three months
- Improved Yield - 10 - 15% lighter than other products

TRAPMIX BENEFITS

- Utilizes Sac A (Traprock) aggregate to
 - Improve pavement skid numbers
 - Increase mix durability

MIXING OF LRA PRODUCTS

- Utilize pugmill batch type mixers
- Automated with precise weighing of aggregates and asphalt liquids.
- Mixing of products is a cold process (no heat)
- Quality control – VMC and TxDOT QC Personnel on site

APPLICATION & WORKABILITY

- Motor grader used in level ups
- Laydown machine used for overlays
- Hand laid for use in pot holes

LEVEL-UP PROJECT

- Dimmit County FM 190
- Trapmix CS
- 1 1/2" Mat Thickness



LEVEL-UP APPLICATION

- Motorgrader
- Pneumatic roller always follows
- Steel wheel is used for final roll (single pass)



OVERLAY PROJECT

- Uvalde, Tx - US 90
- Trapmix CS
- 1 1/2" Mat Thickness



OVERLAY APPLICATION

- Lay down machine
- Steel Wheel (Single pass)
- Pneumatic roller



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Questions