

CITY OF BASTROP

# STREET MAINTENANCE PROGRAM

INFORMATION, UPDATES, & FAQ

UPDATED: SEPTEMBER 20, 2024







# CITY OF BASTROP IS CONTINUING A MULTI-MILLION DOLLAR PERPETUAL STREET MAINTENANCE PROGRAM

In fall of 2023, the Citizens of Bastrop voted to redistribute a portion of sales tax (.375%) to fund a robust street maintenance program. This will result in a completely re-imagined approach to how we maintain the City's roadways.

The prior approach adopted a philosophy of 'keep the good streets good.' This strategy was a direct reaction to the low level of funding dedicated to streets. While there was logic behind it - a good street could be kept good with far less money than it takes to rehabilitate a bad street, this plan had no way of addressing miles of severely damaged or falling-apart roadway.

Bastrop is not alone in this situation. Across the country, cities are facing streets that are reaching

the end of their useful lives that were developed without any plan to maintain or rebuild. Bastrop is unique in that the Bastrop City Council made the decision to let the voters choose to fund the maintenance of such a vital asset to our City.

Today. Streets will be maintained in three separate & distinct approaches:

- 1. Repair 2. Rehabilitation 3. Reconstruction

Phase 1 & 2 begin with the program described in this document. Phase 3 relates to the Transportation Impact Fee that council recently adopted. The fee addresses new development in a cost that will not burden the residents. These dollars will be used to build new streets such as Blakey and Agnes.

## STREETS SCHEDULED FOR MAINTENANCE:

### Historic Downtown

- Austin St.
- Emile St.
- Pecan St.
- Spring St.

Smith St.

### Pecan Park

Sterling Blvd.

### Main Street

- Cedar St.
- Elm St.
- Main St.
- Water St.

### Piney Creek Bend

- Carter Dr.
- Dragonfly Loop
- Juniper St.
- Linden St.
- Nature Walk Dr.
- Prickley Pear Dr.

### Tahitian Village

- Kukui Ct.
- Mokalau Dr.
- Ori Ct.
- W. Hilo Ct.

### Perkins Street

Perkins St.



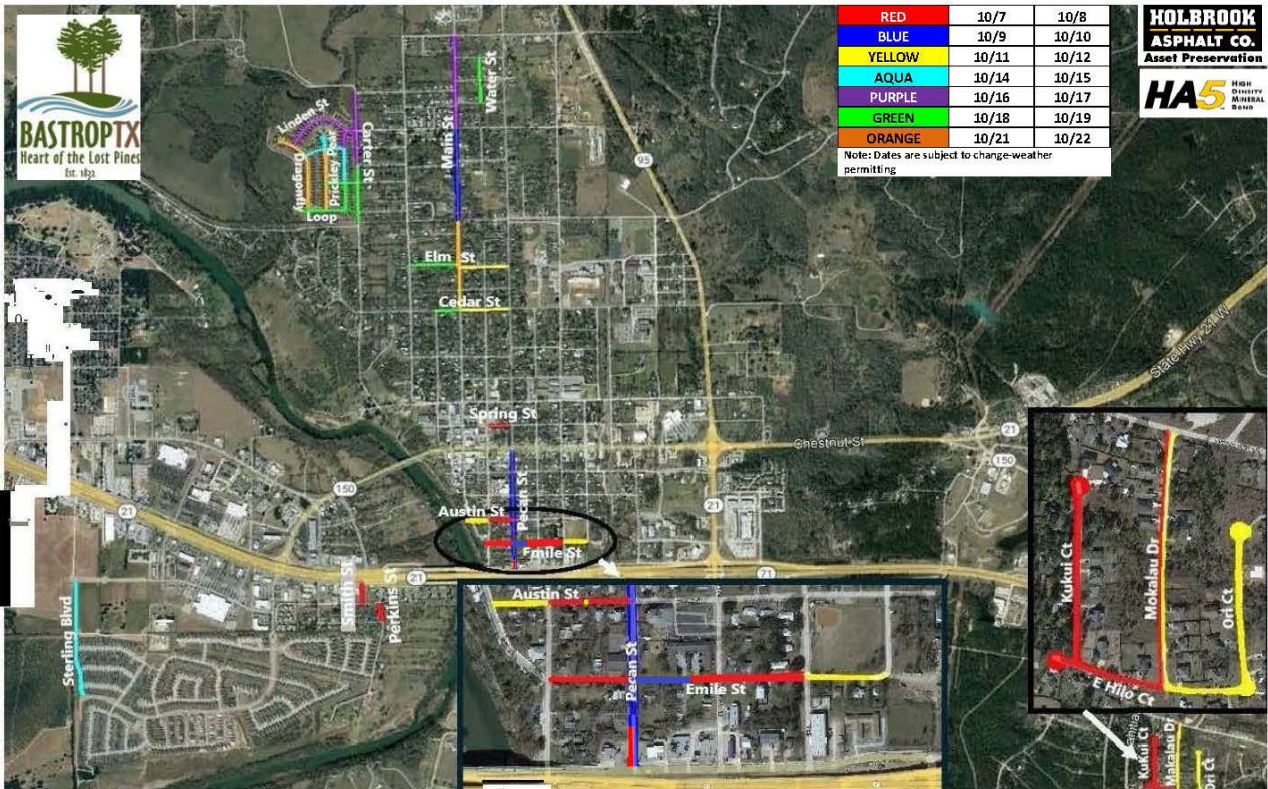


# Bastrop City Council



Top left to right: Mayor Pro Tem John Kirkland, Mayor Lyle Nelson, Member Kevin Plunkett.  
Bottom left to right: Member Kerry Fossler, Member Cynthia Meyer, Member Cheryl Lee.

Map: Upcoming maintenance areas, color coded by treatment days. This phase will begin in April and be completed in June 2024. These areas will be treated with a product known as HA5 (High Density Mineral Bond). See detailed maps and learn more about this innovative treatment and its performance in the following pages.



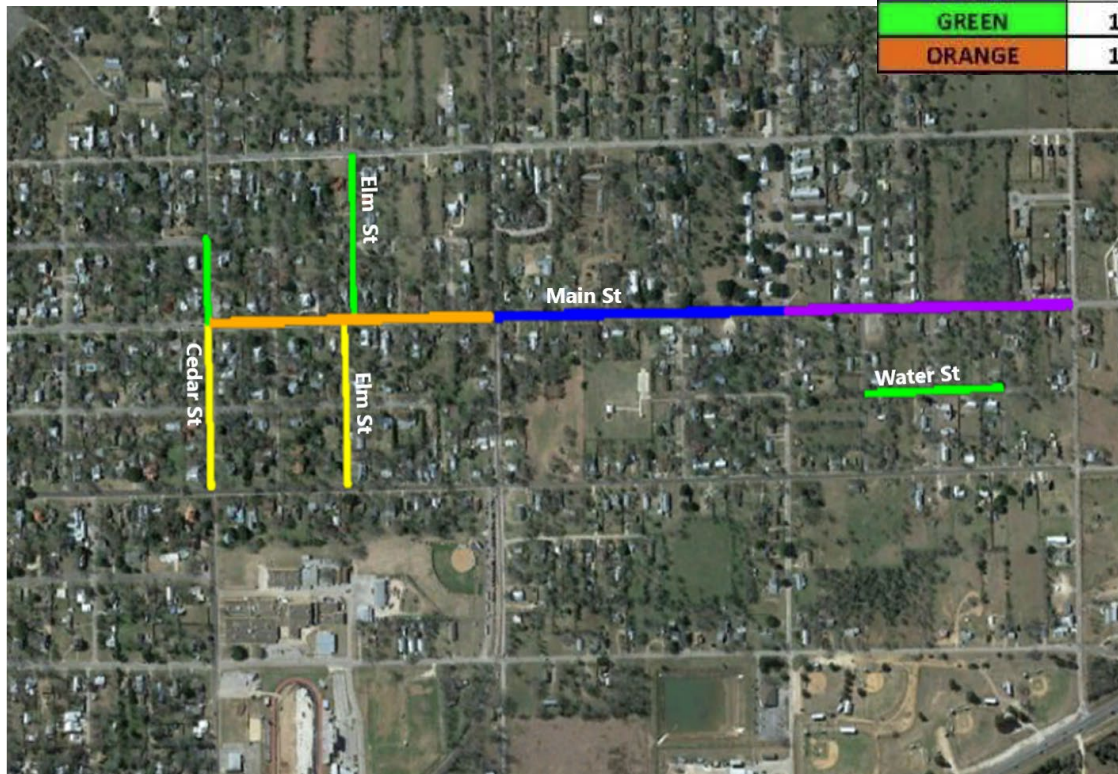


# HISTORIC DOWNTOWN



## MAIN STREET

RED	10/7	10/8
BLUE	10/9	10/10
YELLOW	10/11	10/12
AQUA	10/14	10/15
PURPLE	10/16	10/17
GREEN	10/18	10/19
ORANGE	10/21	10/22



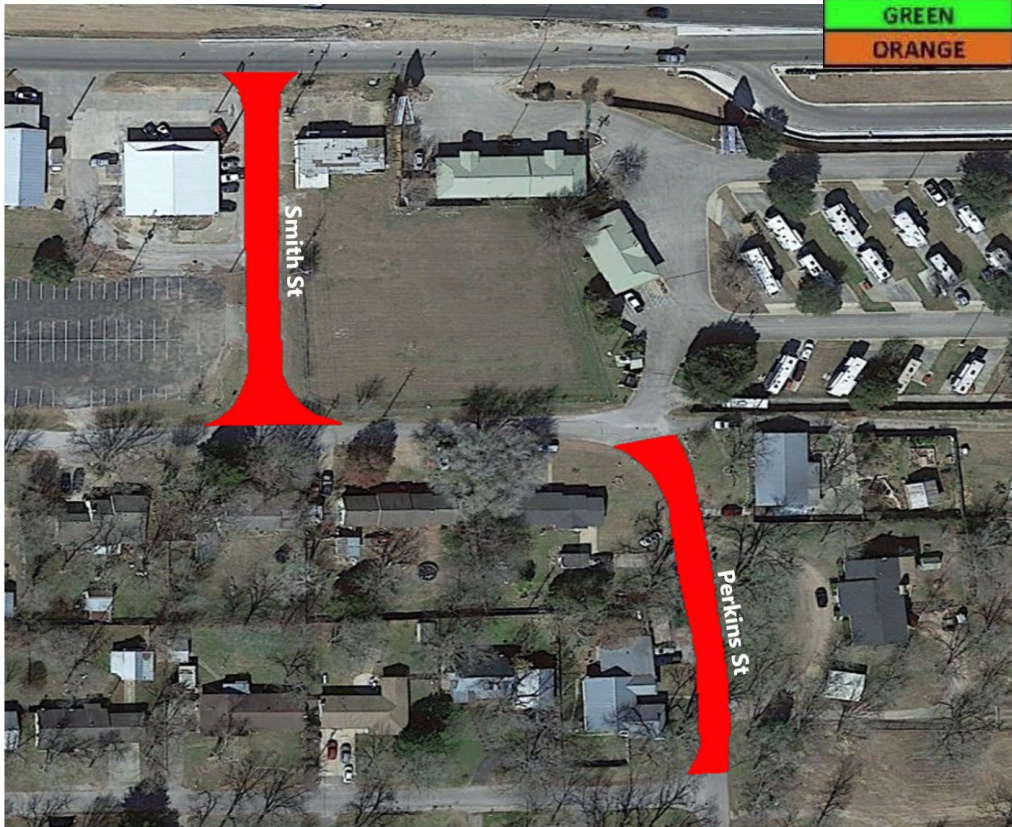


# TAHITIAN VILLIAGE



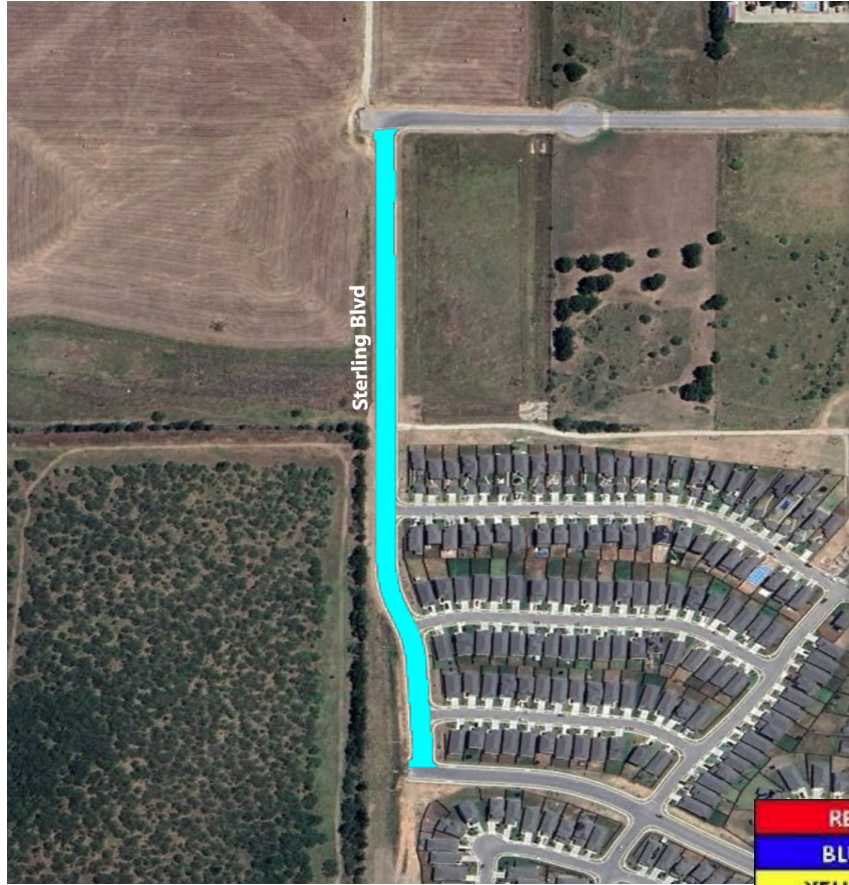
# PERKINS STREET

RED	10/7	10/8
BLUE	10/9	10/10
YELLOW	10/11	10/12
AQUA	10/14	10/15
PURPLE	10/16	10/17
GREEN	10/18	10/19
ORANGE	10/21	10/22



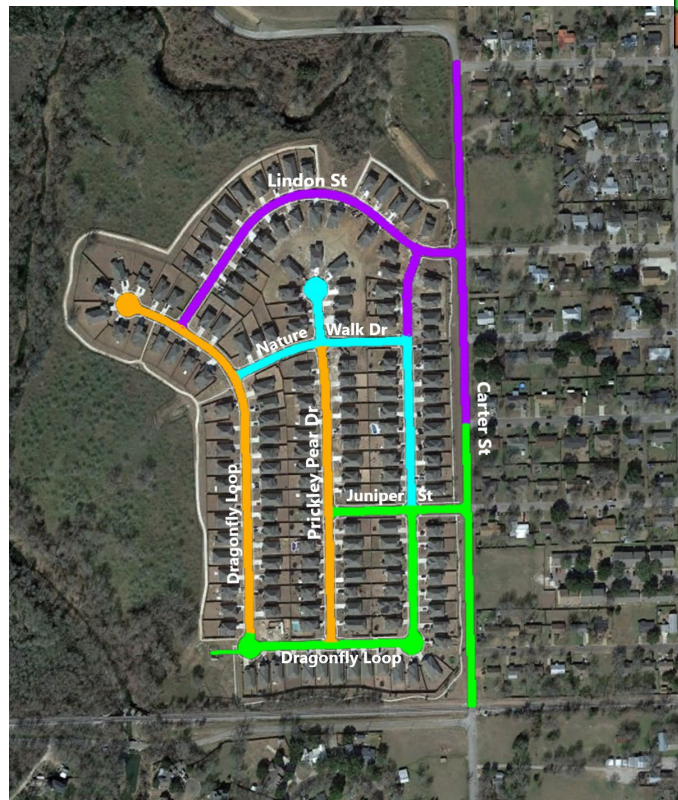


# PECAN PARK



RED	10/7	10/8
BLUE	10/9	10/10
YELLOW	10/11	10/12
AQUA	10/14	10/15
PURPLE	10/16	10/17
GREEN	10/18	10/19
ORANGE	10/21	10/22

# PINEY CREEK BEND





# FREQUENTLY ASKED QUESTIONS

## HA5 ROADWORK & PAVEMENT PRESERVATION

### **What is pavement preservation work and why is it occurring in the City of Bastrop now?**

Pavement preservation treatment, contracted through Holbrook Asphalt, will significantly extend the life of asphalt streets. The benefits of properly maintained streets include higher property values, a smoother/safer ride, and reduced costs to the community by prolonging the need for replacement.

Pavement preservation roadwork will occur on various streets in the City of Bastrop beginning October 7 and continuing through October 22, generally 7 a.m. – 7 p.m., weather permitting. A high-density mineral bond, with the brand name HA5, roadwork is occurring in the areas of Historic Downtown, Tahitian Village, Piney Creek Bend, Hunter's Crossing, and other neighborhoods and areas. Please do not park within 50 feet of any street where the roadwork is occurring. A tow truck will be called for any cars parked on the streets scheduled to be treated that day. Towing expenses will be the owner's responsibility.

### **How were streets selected?**

The most cost effective method to manage a network of roads is to avoid the major costs associated with major repairs or reconstruction. Therefore, keeping good roads good by prolonging their life is the most cost-effective and least burdensome to taxpayers. HA5 is focused on keeping the good roads good by reducing the rate of deterioration.

There are several different types of pavement preservation techniques utilized on streets depending on their age and condition. HA5 is best used on streets typically between the ages of 2-8 years of age with minimal cracking and no failures. The colored streets on the area map show the sections that best met the parameters for best use of the HA5 treatment to extend the life of the streets being worked on.

### **What if a resident has limited mobility and needs to access their house or vehicle located on another street during the closure?**

Persons with limited mobility can call project contacts at the Holbrook Asphalt office for coordination at 214-416-7999 so that accommodations can be made and/or scheduled.

### **How will residents on affected streets receive deliveries, such as Amazon and UPS, during the roadwork?**

If at all possible, please DO NOT have Amazon, FedEx, UPS packages scheduled to be delivered on your street closure day(s). HA5 representatives have provided Amazon officials with Bastrop roadwork schedules and are providing residents where roadwork is occurring with 48-hour notification to have them be attentive to their package delivery dates, as it corresponds to their specific street closure to help limit potential delivery problems. Delivery drivers who come upon a delivery address where a street is closed for the HA5 roadwork have been asked to walk packages to residents' homes. The United States Postal Service also has been made aware of the street closures.

### **Who is the contractor's project contact for Bastrop's pavement preservation?**

Ryan Jones. He can be reached at 801-668-4447.







# HIGH DENSITY MINERAL BOND



## City of Bastrop Strategy for Pavement Preservation Total Project Size: 79,594 SY Proposal for HDMB Project

### Summary:

The highest return on investment (ROI) is achieved by installing HA5 - High Density Mineral Bond.

Performance is calculated to be two to three times longer compared to using seal coats and premium seal coats.

Beyond the preservation benefits that HA5 provides, residents experience less community intrusion as road closures are needed much less frequently.

### Performance History of Surface Treatments

The biggest items to focus on for preservation treatments are:

- » What will provide the maximum extension of pavement life per every dollar spent?
- » Validating a product's performance goes beyond pictures of black roads. Initially, all tools for pavement preservation turn a road black, but HA5 has proven to slow the age hardening of asphalt pavement that leads to cracking and deterioration.



[www.holbrookasphalt.com](http://www.holbrookasphalt.com) | 214-935-2042





# HA5<sup>TM</sup> High Density Mineral Bond

A breakthrough that is changing the aging characteristics of asphalt, and confirmed by university testing, is igniting enthusiasm for a profound reduction in pavement life-cycle costs.

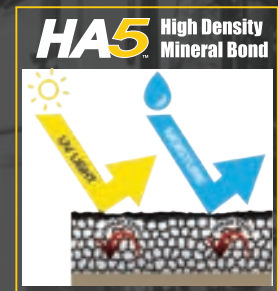
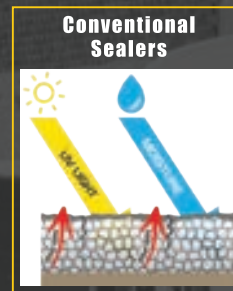
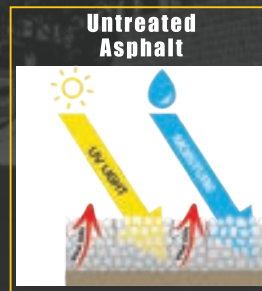
**RESEARCH PROVES  
HA5 DELAYS AGE  
HARDENING**

**67%**

DELAY IN ASPHALT AGING



## HOW HA5 IMPACTS ASPHALT AGING



"Using conventional as well as leading-edge testing methods to identify the age hardening of the asphalt binders, researchers have identified a 67% delay in the age hardening of the asphalt binder with HA5 installed as a pavement preservation strategy. This ability to reduce flexibility loss supports an in-field case study where after just a four-year period a side-by-side comparison identified cracking to be reduced by nearly 9 times with HA5 installed."

"Transportation Research 2020" Dr. Shakir Shatnawi, Ph.D., P.E. Former State Pavement Engineer and Division Chief at Caltrans with 30 years of experience in pavement design, management, and preservation.

For more information visit:

[www.holbrookasphalt.com/HA5](http://www.holbrookasphalt.com/HA5)



**STREET MAINTENANCE PROGRAM**

[CITYOFBASTROP.ORG/STREETS](http://CITYOFBASTROP.ORG/STREETS)



## HA5 Treatment Report

Below are core samples taken from roadways comparing municipality specified, time-tested pavement preservation treatments. Look closely at each core. The HA5 core aesthetically looks to be the most desirable with the darkest surface. However, what the engineering community has identified is the darker color beneath the surface. This uncovers HA5's ability to retain the critical oils and resins that keep asphalt pavements flexible. **More flexibility results in pavements lasting longer with less cracking and other manifestations of deterioration**

### Core Sample Comparison



#### Slurry

Date Pavement Installed:  
**1999**

Preservation:  
**Type II Slurry**

#### Chip Seal

Date Pavement Installed:  
**1999**

Preservation:  
**Chip Seal**

#### HA5

Date Pavement Installed:  
**1995**

Preservation:  
**HA5 (High Density Mineral Bond)**

A report from the engineering firm Rosenberg & Associates, assessing a side-by-side of HA5 to a premium seal coat installation, found **9x less cracking** in the HA5 treated section compared to the premium seal coat treated section after a **4-year period**.

#### KEYS TO PAVEMENT PRESERVATION:

*The Right Treatment, on the Right Road, at the Right Time.*

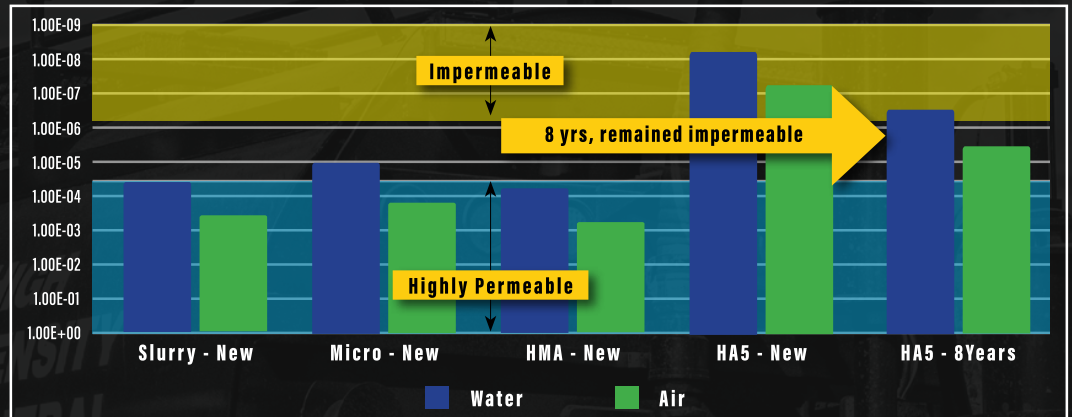
*For more information visit:*

[www.holbrookasphalt.com/HA5](http://www.holbrookasphalt.com/HA5)





# AIR & WATER PERMEABILITY COMPARISON



Research on binder elasticity and pavement permeability proves that asphalt treated with HA5 significantly increases the useful life of asphalt pavement and therefore dramatically lowers the cost of transportation infrastructure.

## ROI

Primary Treatment Strategy	Avg PCI	(Subdivision Public Acceptance Rating) PAR	\$/Centerline Mile*	Cost of Ownership Savings
1. Do Nothing	70	4	\$5,642,846.54	0%
2. Partial Recon/ Surface removal	73	4	\$3,612,576.63	36%
3. Mill & Overlay	76	6	\$3,099,706.96	45%
4. Thin Overlay	75	6	\$2,961,391.49	48%
5. Seal Coat/Mastic Sealer	79	7	\$2,639,047.53	53%
6. FOG/Rejuvenator	81	7	\$2,590,647.40	54%
7. Type II Slurry	86	4	\$1,281,249.01	77%
8. Micro Surface	80	5	\$1,247,331.18	78%
9. Chip Seal	80	2	\$1,115,431.75	80%
10. High Density Mineral Bond (HA5)	88	9	\$954,838.49	83%

- Highest Return on Investment (ROI)
- Highest Pavement Condition Index (PCI)
- Highest Public Acceptance Rating (PAR)

Every agency's design specifications and goals are different but HA5 has proven its effectiveness at extending design life no matter what your goals look like.



Data analysis provided by Scot Gordon, PE, IAM, President, Roadway Asset Services, LLC. Scot has a Bachelor's and Master's degree in civil engineering from Texas A&M University with 30 years experience involving design of major highway infrastructure, evaluation and research of pavements, soil stabilization, and pavement management plan development.







# HIGH DENSITY MINERAL BOND

Proactive DOTs, Municipalities, and HOAs across the country have uncovered a strategy that saves them money while effectively preserving their pavement assets using HA5 High Density Mineral Bond

- » Lower & more predictable costs
- » Extends pavement life
- » Unmatched Durability
- » No loose or grainy residue
- » Fewer premature failures
- » High Homeowner acceptance

Garland, TX



Sachse, TX



Claremore, OK



Alabama DOT



St. George, UT



Queen Creek, AZ



Matthews, NC



Rocklin, CA



Nashville, TN



For more information visit:  
[www.holbrookasphalt.com/HA5](http://www.holbrookasphalt.com/HA5)







# HA5™

- Lower Costs
- Extend Pavement Life
- Increase Public Approval
- No Loose or Grainy Residue
- Proven Durability
- Published Specifications

## THE TESTED, PROVEN, AND RELIABLE CHOICE FOR PRESERVING MUNICIPALITY ROADWAYS

Over 400 Million Sq Ft Installed • 20-Year Performance Evaluations • The Choice of Over 300 Public Agencies

### WHAT IS THE TREATMENT CATEGORY?

High Density Mineral Bond (Brand name: HA5 is the only product meeting the specification)

### WHAT IT'S NOT...

Fog seal, chip seal, polymer/mastic seal coat, slurry, microsurface, or overlay.

### WHAT ARE THE DETAILS?

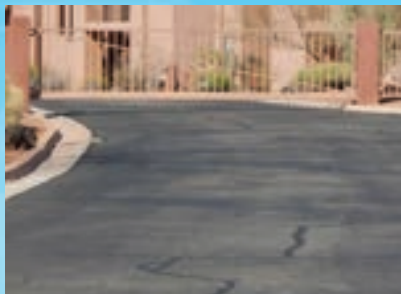
To put it simply, HA5 (categorized as a High Density Mineral Bond) provides an shell with exceptionally durability that extends the life of asphalt binder by resisting oxidative deterioration.

HA5 combines uniquely emulsified asphalt with a near-neutral charge that is able to hold exceptionally high concentrations of fine aggregates and other components that resist deterioration. HA5 also contains a protective barrier from ultraviolet rays which accelerate pavement deterioration.

### A RECENT ENGINEER'S REPORT

When comparing 8 treatment options noted the following benefits of HA5:

- Least expensive annualized cost.
- A high level of community satisfaction with appearance.
- Effectively seals existing pavement surface from moisture and air intrusion.
- Long life expectancy compared to most other surface treatments.
- No loose aggregate on pavement surface after installation.
- Black surface appearance lasts for many years.



**FOG SEAL**  
(Approx. **9 months** after Fog Seal was installed)



**TYPE II SLURRY**  
(Approx. **6 months** after Type II Slurry was installed)



**HA5 HIGH DENSITY MINERAL BOND**  
(Approx. **3 years** after HA5 was installed)





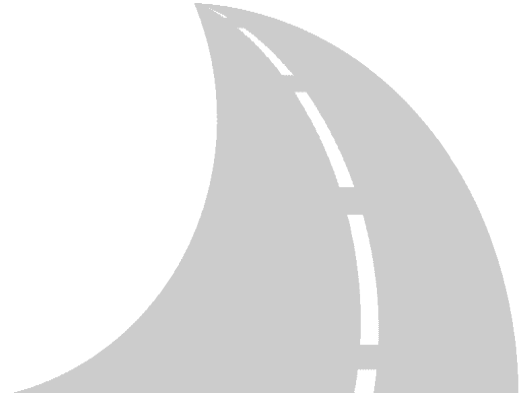
# STREETS UPDATE

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## Why was my street closed?

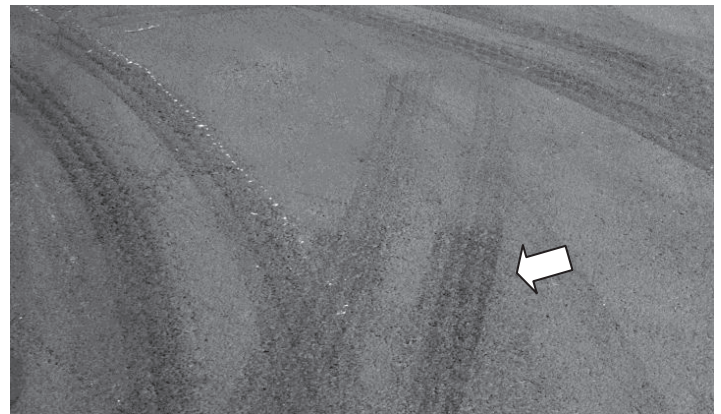
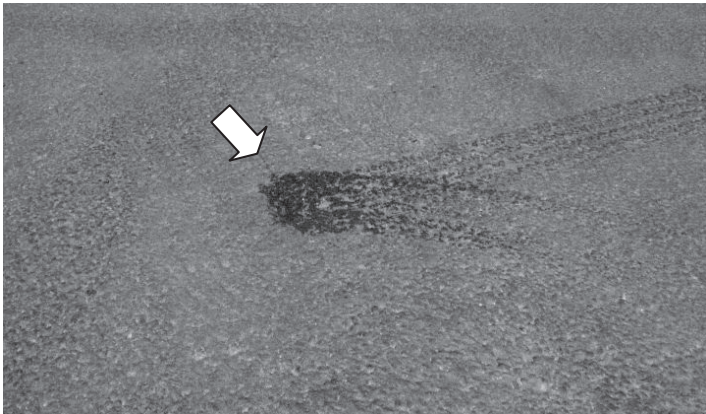
Your street had HA5™ High Density Mineral Bond installed which is a pavement preservation treatment that significantly extends the life and quality of streets. The amount of cracking and pot holes over time will be reduced. Streets in good condition also support higher property values.

Note: HA5 meets the rigid specifications of a High Density Mineral Bond established by the American Public Works Association.



## What to expect following installation:

While HA5™ significantly extends the life and improves the condition of the pavement surface, there are some unique qualities you should be aware of. Most significant is the scuffing and marking that takes place for the first several weeks following the installation and again with higher temperatures during the first several months. **THIS IS NORMAL AND WILL GO AWAY.**



Slow moving and tight turning traffic will slightly scuff the HA5™, leaving marks and tracks on the pavement. Again, **THESE MARKS ARE TEMPORARY AND EXPECTED.** Over time, the markings on the pavement will heal themselves with regular traffic. Traffic is actually an essential part of the curing process.

## What to expect following installation (long-term):

The key to effectively preserving pavement is taking action early in the pavement's life. When HA5 is applied early in a pavement's life, you can anticipate that your street will experience less cracking, pot holes, and other manifestations of aging pavement. Your street will also have a blacker appearance as it ages which is generally considered more aesthetically pleasing and is attributed to higher property values in a community.

**HOLBROOK**  
**ASPHALT CO.**  
Asset Preservation





For continued updates and information:

[www.cityofbastrop.org/streets](http://www.cityofbastrop.org/streets)

[www.facebook.com/bastroptx](https://www.facebook.com/bastroptx)

Streets & Drainage - 512-332-8920

[info@cityofbastrop.org](mailto:info@cityofbastrop.org)

Project Website: <https://ha5roads.com/city-of-bastrop-pavement-preservation>



English



Spanish

