

Street
Maintenance
Program



*Public Works Department
Street Division*

*For more information contact
Street Superintendent at 767-0409*

Asphalt Overlay

What is it?

Hot mix asphalt

How Is It Applied?

Clean and prepare surface. Spray down adhesive tack coat. Lay asphalt with lay down machine. This is done by a contractor. Overall buildup is 1" to 3" typically.

What Does It Look Like?



Without having new curb and gutter, it has the appearance of a new asphalt street

Where Can I Find It?

North Union from Grand to Fresno

Pros

Asphalt overlay works very well on streets with few base failures if the buildup does not adversely affect drainage.

Cons

Sometimes the new asphalt does not adhere very well and is not a good application to a severely deteriorated street.

Mill and Overlay

What is it?

Basically the same as an overlay but the surface is milled down typically 1" to 4"

How Is It Applied?

Mill down surface to desired depth. Clean and prep surface and lay asphalt. This is done by a contractor.

What Does It Look Like?



It looks like a new street without having to replace the curb and gutter.

Where Can I Find It?

5th from Hartford to Prospect

Pros

Mill & Overlay is a very cost effective way to rehabilitate a street without having the expense of total removal and base stabilization and total replacement

Cons

Must have a fairly large project to make it economically feasible.

Chip and Seal

What is it?

Oil and ½” limestone chips

How Is It Applied?

Spray the oil and evenly spread limestone chips; then compact with rollers. Sweep up excess chips in about a week. This process is done with city-owned equipment and manpower. Overall build-up is about 5/8” inch.

What Does It Look Like?



Gray in color for about 90 days until the oil bleeds through and then a darker gray/black

Where Can I Find It?

North Osage from Highland to Overbrook

Pros

Very effective and economical treatment to seal out moisture and prolong pavement life

Cons

Dusty for about a week or so, especially in high traffic areas

Micro Surfacing

What is it?

Polymerized asphalt emulsion with aggregate and Portland cement (cold applied)

How Is It Applied?

Apply continuously with specialized equipment (contractor). Overall build-up is usually ½” to 1” unless surface is milled down.

What Does It Look Like?



Has the same appearance as hot mix asphalt, but it is more porous resulting in better traction numbers.

Where Can I Find It?

North 5th from Oklahoma to Brookfield

Pros

Micro-surfacing is a very good preventive maintenance procedure for higher traffic areas.

Cons

The process is fairly expensive compared to chip and seal because the project size has to be much larger in order to make it more cost effective

Crack Seal

What is it?

Hot poured rubberized crack sealant (tar)

How Is It Applied?

Use pressurized air to thoroughly clean all cracks and joints and then fill them with hot poured rubberized crack sealant. Let sealant cure about 48 hours (depending on temperature). Sweep the entire street clean of debris. This procedure is done with city equipment and manpower.

What Does It Look Like?



All the cracks and joints will be very black on a recently sealed street.

Where Can I Find It?

West Prospect from Railroad tracks east to Pecan

Pros

Very cost effective way to prolong pavement life by preventing moisture penetration into the sub base.

Cons

The fact that it is a rolling procedure, there are minor complaints of temporary road or lanes closures (usually about an hour).

Fog Seal

What is it?

GSB-88 asphalt rejuvenating oil

How Is It Applied?

Mix oil 1:1 with water. Clean area to be sealed and apply with oil distributor truck (city owned & operated). Virtually no build-up to surface.

What Does It Look Like?



After oil has cured (2-4 hours depending on temperature), it has the appearance of new asphalt.

Where Can I Find It?

Oklahoma Avenue from 10th to 13th Streets

Pros

Fog Seal is designed to penetrate the asphalt surface and dramatically prolong pavement life if reapplied every 3 to 4 years.

Cons

Although Fog Seal maintains good solid pavement, it will not restore deteriorated pavement.

Bricks

What is it?

Rectangular blocks of clay or a similar material that is baked until hard

How Is It Applied?

Excavate and pour 6" concrete base, apply approx 2" sand leveling course and install bricks and sweep in dry mortar mix and wet down with water

What Does It Look Like?



Ponca City uses red clay bricks; many of them date back to the original brick streets built in 1912.

Where Can I Find It?

6th Street from Grand Avenue to Highland

Pros

Very durable long lasting pavement that is very flexible and appealing

Cons

Installation is very time consuming and labor intensive; not very smooth; very slick when wet or icy

Reconstruction

What is it?

Total removal of existing pavement, replaced by asphalt or concrete; this is done by a contractor.

How Is It Applied?

The asphalt is removed; the base is stabilized with fly ash. Then the asphalt or concrete is laid back in place.

What Does It Look Like?



Basically it looks like a new street with total replacement of pavement and curb and gutter.

Where Can I Find It?

Asphalt: Pecan from Lake Road to Juanito
Concrete: Highland from Sunset to Waverly

Pros

Reconstruction provides a brand new street with improved drainage.

Cons

Reconstruction is expensive and takes several weeks to complete. Disrupts traffic flow to the affected area.