

Memorandum

To: Harmony CDD Board of Supervisors
From: Steve Boyd, District Engineer
Date: 5/17/2020
Re: Harmony CDD – Recommendations Regarding Alley Maintenance

As requested by the Board of Supervisors at during the April 30th CDD meeting, I visited each of the Harmony CDD owned and maintained alleys for the purpose of inspecting the present condition. The purpose of the visit was to report on the present maintenance needs and for the purpose of updated the Reserve Allocation Worksheet.

Findings and Recommendations are summarized as follows (Refer to the attached exhibits as referenced):

Neighborhoods D-1 and B:

The alleys in these two neighborhoods were resurfaced in 2014 and are in good condition. Minor reflective cracking from the soil cement base is present but does not represent a structural problem to the pavement surface. In a few locations, where tire traffic does not impact the pavement (the centerline), some small grass and weeds have taken root in some of the larger cracks.

Maintenance Recommendation:

1. The resurfacing from 2014 remains in good condition.
2. Where some weed growth is visible this should be routinely killed back.
3. Repaving should not be required for at least 10 years. Seal coat should be considered in the next 5 years.

Neighborhood C-1:

The alleys within Neighborhood C-1 were constructed in 2003 and are due for resurfacing. Some spot repairs were performed in 2014 and at that time, Neighborhood C-1 was identified as the next neighborhood that would be ready for resurfacing. It is recommended that resurfacing of the C-1 alleys be scheduled and proceed within the next year. If resurfacing is not performed, there are two locations that require repairs. Simple patching is not recommended as a long term repair. These two locations will require complete removal of the asphalt surface with the base being reconstructed, or full depth asphalt to replace the base. This work should be performed as part of the resurfacing operation. Resurfacing consists of milling the existing ally pavement a minimum of $\frac{3}{4}$ " and installing a new $\frac{3}{4}$ " alley surface, followed by restriping.

Maintenance Recommendation:

1. Mill and Resurface within the next year.
2. Full Depth repairs at the two location identified on the attached Exhibit.

Neighborhood C-2:

The alleys within Neighborhood C-2 were constructed in 2005 and remain in generally good condition with some reflective cracking from the soil cement base. Although this asphalt is 15 years old and is approaching the window where resurfacing should be considered, resurfacing is not required at this time. Neighborhood C-2 should be scheduled as the next neighborhood to be resurfaced following C-1 or in conjunction with C-2.

Maintenance Recommendation:

1. Mill and Resurface within the next one to two years.
2. Seal Coat and Restripe now if resurfacing will not occur within the next year.

Neighborhood G:

The alleys within Neighborhood G were constructed in 2006 and remain in generally good condition with some reflective cracking from the soil cement base. Although this asphalt is nearly 15 years old and is approaching the window where resurfacing should be considered. Resurfacing is not required at this time. There is one location where the alley radius has been impacted by truck traffic. This area has been repaired in the past but continues to be a problem. A more extensive repair is required at this location. Neighborhood G is recommended for resurfacing as the next neighborhood following C-1 and C2.

Maintenance Recommendation:

1. Immediate repair to the alley radius. Recommend saw cutting out a section of the existing alley , to overlap with new pavement in the repair area. A new base should be constructed extended through the entire area of damaged pavement and tire rutting.
2. Investigation and asphalt filling of a depression within the same alley. (See attached exhibit).
3. Seal Coat and Restripe within the next two years.
4. Mill and Resurface within the next five years

Neighborhood A-1:

The alleys within Neighborhood A-1 were constructed in 2005 and remain in generally good condition with some reflective cracking from the soil cement base. Although this asphalt is nearly 15 years old and is approaching the window where resurfacing should be considered. Resurfacing is not required at this time. There is one location where the alley radius has been impacted by truck traffic. This area has been repaired in the past but continues to be a problem. A more extensive repair is required at this location. Neighborhood A-1 is recommended for resurfacing as the next neighborhood following Neighborhood G. C2.

Maintenance Recommendation:

1. Immediate repair to the alley radius. Recommend saw cutting out a section of the existing alley , to overlap with new pavement in the repair area. A new base should be constructed extended through the entire area of damaged pavement and tire rutting.
2. Seal Coat within the next 1 to 2 years.
3. Mill and Mill and Resurface within the next five years.

Neighborhood H -1:

The alleys within Neighborhood H-1 were constructed in 2014 and remain in good condition. No maintenance is required at this time.

Maintenance Recommendation:

1. Seal Coat within the next 5 years.
2. Plan for Milling and Mill and Resurfacing within the next 10 to 15 years based on condition at that time.