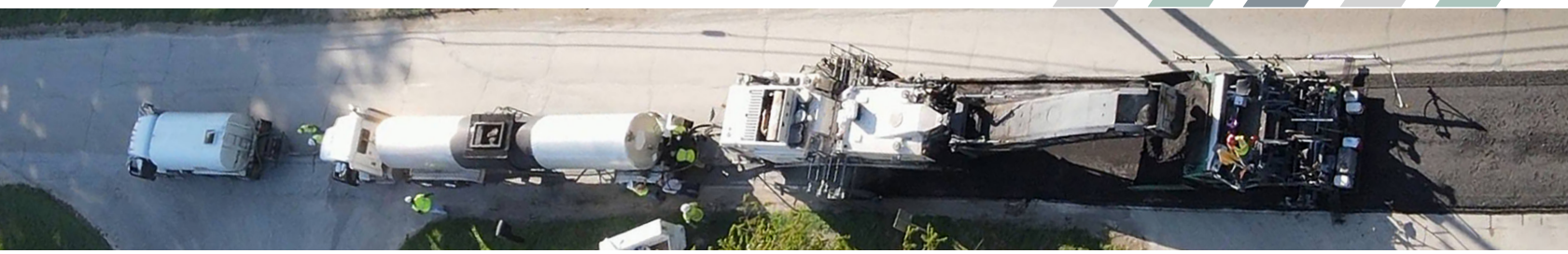
EVERGREEN ROADWORKS

CIR

Cold In-Place Recycling

Cold in-place recycling (CIR) is a long-lasting, cost-effective, greener alternative to traditional hot mix asphalt (HMA) paving. This process prevents the reclaimed asphalt pavement (RAP) from ever leaving the roadway, which significantly reduces the cost of trucking and natural resources.



THE PROCESS

A CIR train is used to mill up the top 2-5 inches of asphalt into RAP. The RAP is then mixed with asphalt emulsion/ foamed asphalt and placed back on the roadway using a continuous train operation. Rollers are used to compact the final surface. Often, a new wearing course is placed over the CIR. HMA, chip seal or micro surfacing are wearing course options.

*BENEFITS

- 20-50% less expensive than conventional maintenance and reconstruction methods
- Reduces greenhouse gas emissions by up to 90% over typical HMA paving
- Reuses 100% of existing materials
- Adds 15-20 years to the roadway (when combined with an appropriate wearing course)
- 20-40% faster construction than HMA
- Minimizes traffic disruption

*ISSUES ADDRESSED

- All distresses within the recycling depth
- Reflective cracking from below the recycling depth

MATERIALS USED

- RAP from the existing roadway: Most will make a great CIR mix. Occasionally a corrective aggregate is added
- Asphalt: Asphalt emulsion or foamed asphalt cement
- Chemical additive: Chemical additives such as lime or cement are used to improve the mix. These additives are introduced either dry or in a slurry form

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HERITAGE CONSTRUCTION + MATERIALS