

JANE ADDAMS MEMORIAL TOLLWAY



Building Green

“GREEN” ROADWAY FEATURES – ENVIRONMENTAL BENEFITS

Recycled materials, including recycled concrete aggregate, reclaimed asphalt pavement, reclaimed asphalt shingles and industrial waste products such as fly ash and ground granulated blast-furnace slag, are being used extensively on this project. In addition to preserving our natural resources, using recycled materials will reduce emissions and energy consumption by eliminating the need to source and transport virgin materials to and from job sites and save money by recycling pavements and other materials.

FACT: In 2014, recycled materials on the Jane Addams Memorial Tollway (I-90) Rebuilding and Widening Project - 1,190,574 tons - could be used to build a bike path 2,334 miles long. These materials included:

- 567,328 tons of recycled asphalt pavement - enough to build a 1.3-mile-square parking lot
- 156,963 tons of recycled aggregate - enough to fill nearly 36 Olympic-size swimming pools
- 466,283 tons of recycled concrete - enough to fill a bumper-to-bumper line of dump trucks 140 miles long

The use of **warm-mix asphalt** in lieu of hot-mix asphalt is now required on all Tollway projects. Using warm-mix asphalt reduces energy consumption and greenhouse gas emissions during production, increases the quantity of recycled asphalt in mixes and improves the overall quality of pavements. Warm-mix asphalt can be paved at lower temperatures, which extends the construction season into cold weather months.

A comprehensive approach to **stormwater management** through the construction of 40 acres of new stormwater detention and a stormwater treatment train system that consists of approximately 54 miles of bioswales help filter out sediments and pollutants associated with roadway runoff and minimize the potential for downstream flooding. The removal of sediments and pollutants is accomplished by holding the stormwater in the Tollway property adjacent to the road allowing them to either settle out of the water or be absorbed into the surrounding soils over a period of days via infiltration.

The use of energy efficient **light emitting diode (LED)** lights throughout the I-90 corridor will reduce energy consumption and maintenance when compared to conventional high-pressure sodium (HPS) lighting.

ILLINOIS ROUTE 47 – THE FIRST GREEN TOLLWAY INTERCHANGE

Illinois Route 47 is **the first "green" interchange** on the Tollway system. It features several new green construction initiatives including:

- A geothermal water piping system that makes use of the earth's natural heating and cooling abilities to help heat and cool nearby plaza buildings in a more cost-effective and sustainable manner
- Reflective roofs and trellised vegetation for plaza buildings to further reduce heating and cooling costs
- Permeable pavement asphalt mixture on ramp shoulders that allows water to seep through and reduce stormwater runoff
- Bioswales and innovative stormwater detention design provides a treatment train for stormwater runoff in the project area that slows water velocities, aids in removing sediment and encourages infiltration

RESTORING THE ENVIRONMENT



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For more information,
visit www.illinoistollway.com or call 1-800-TOLL-FYI



Black sandshell mussels from the Kishwaukee River were collected in 2013 and sent to a fish hatchery in Wisconsin for captive rearing. The river will be restocked with the mussels once they are reared to the appropriate size. Additionally, a stock of inoculated wall eye (juvenile mussel host fish) will be introduced to the Kishwaukee River in 2016 to ensure adequate distribution of the state-threatened species.

The Tollway is **helping to protect and restore** the site formerly known as the Fox River Country Day School, a 53-acre site in Elgin that contains architecturally significant buildings and a rare forested fen, one of only two forested fen wetlands in Illinois. The Tollway's efforts will ensure limited future development, as well as the dedication of the forested fen as an Illinois Nature Preserve, the highest level of protection for land in Illinois. The fen will be restored by the Forest Preserve District of Kane County as part of the Tollway's wetland mitigation efforts for the I-90 corridor.

Native prairie and wetlands will be restored at the 162-acre Orland Grassland South site near Orland Park. Work includes native planting and seeding, control of invasive plant species, removal of farm drain tiles, along with the meandering of a section of a tributary to Marley Creek. The Tollway will also construct a new entrance road, parking lot, restroom facilities, boardwalks and path system to provide public access to the site in 2015.



Illinois Route 47 Interchange on the Jane Addams Memorial Tollway (I-90) bioswales and stormwater detention areas.