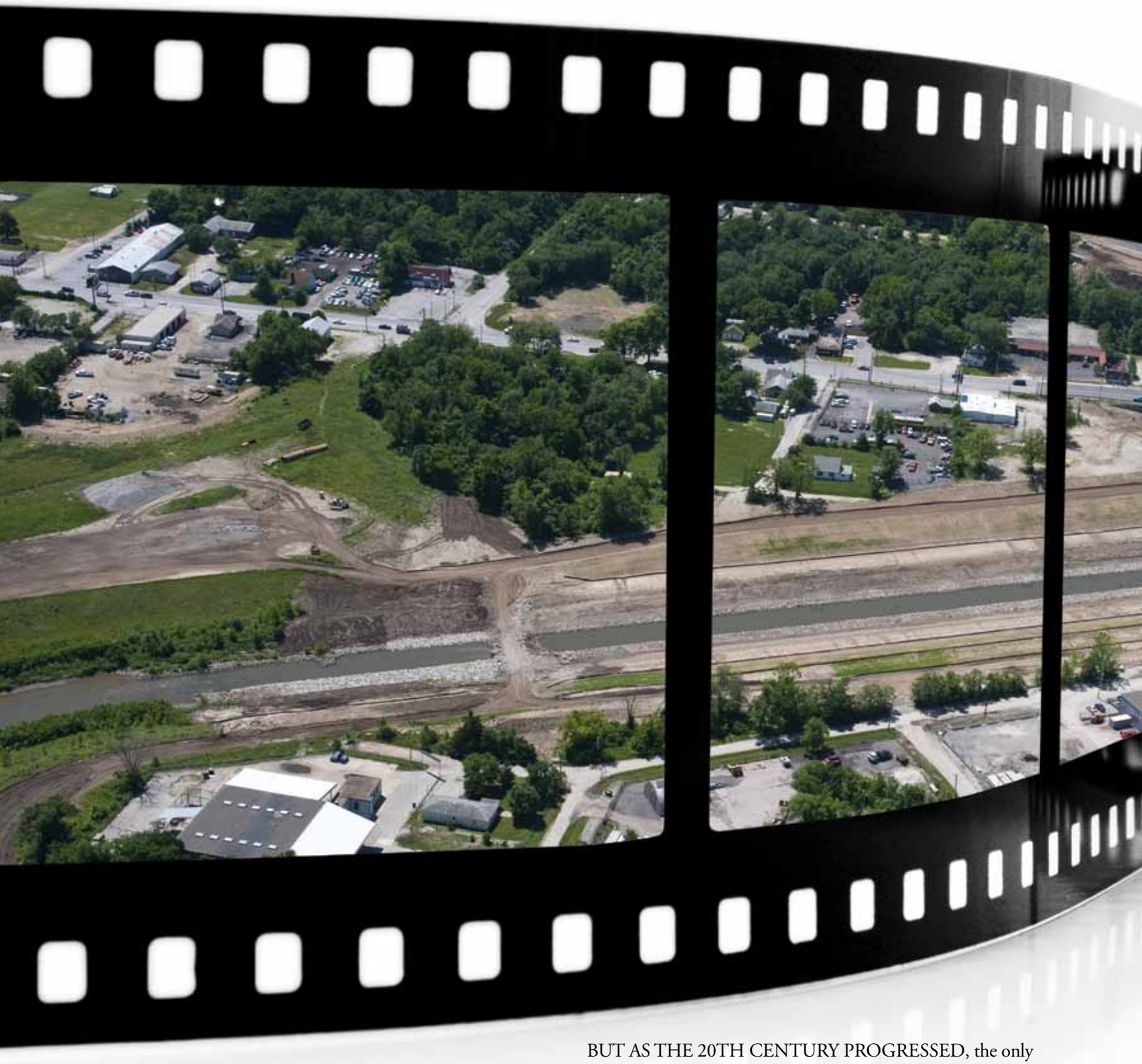

Just over a century ago, the Blue River meandered through the Kansas City metropolitan area as a scenic tributary of the Missouri River. With its banks lined with boat houses and resorts that served as social and cultural meeting points, the Blue River was a treasured spot of beauty and recreation.

BUT AS THE 20TH CENTURY PROGRESSED, the only thing blue about this river were the attitudes toward it as a source of flooding and its evolution into a predominantly industrialized zone.

That is now changing as the ninth in a series of U.S. Army Corps of Engineers projects to implement channel modifications along a 12.5-mile segment of the Blue River nears completion. When finished, this phase of the project will provide flood protection along with environmental enhancements to increase and diversify aquatic habitat in the river.

DESIGN-BUILD BRINGS RAPID FINISH, LONG TIME COMING

After decades of work, with construction on the first segment of the Blue River flood protection and channel modification project beginning in 1983, this latest and ninth segment is the first to be

GREENING THE *Blue River*

contracted as a design-build project. The result is that this project is moving to the finish line faster, enabling Kansas City and the Corps to take advantage of available federal funding, including stimulus funds.

HDR is designing the channel modifications in partnership with construction contractor ESI Contracting Corporation of Kansas City for this reach of the Blue River project, which stretches from 53rd Street to Brush Creek, a tributary to the Blue River, before the river flows into the Missouri River approximately 10 miles downstream. The effort involves designs for about 3,300 linear feet of river channel, an upstream channel transition, modification of storm sewer outlets and sanitary sewer lines, relocation of utilities, removal of solid waste from the river banks and a series of environmental enhancements.

MAJOR CLEAN-UP RECREATES A PLACE OF BEAUTY

This isn't the first time Kansas City has worked to transform the Blue River and its banks into a pleasant place. In the 1920s, city officials tried to jumpstart an effort to build a 10-mile parkway along the lower Blue River with 100-foot easements. Although a majority of voters favored the project, the final vote fell short of the two-thirds majority required to approve the $1 million in bonds to fund the project.

The result was the continuing transformation of the banks of the Blue River into steel and iron works industrial facilities, leading to an era of economic boom, but not without consequences. Along with new development came more stormwater runoff, and properties along the Blue River experienced increased flooding. Some viable manufacturing businesses left the area with some of the vacated properties now used for salvage operations and dumping of demolition waste, which increased flooding as debris encroached into the channel.

As the channel modification projects progressed since they began in 1983, contractors removed tons of trash and tires from the river and its floodplain. The ESI-HDR segment of the project includes removal of about 100,000 tons of solid waste from the channel.

CLEAN RIVER IMPROVES FISH AND AQUATIC HABITAT

A major part of the channel modification project involves installation of "environmental enhancement" features along the redesigned river channel. Incorporation of in-stream structures, such as boulder clusters, lunker logs, engineered rock riffles, rootwads, pole stakings and native vegetation, will improve terrestrial and aquatic habitat diversification. Adjoining drainageways will feature best management practices (BMPs) of native vegetation swales and a wetland swale.

As the project moves toward completion later this year, the now bare and brown edges of the reworked river channel will gradually grow into lush, green banks. The water draining to the river will be cleaner, with runoff filtered by the environmental enhancements, supporting development of improved habitat for fish and aquatic populations. In the end, this reach of the Blue River will be a gem in the midst of a much larger project and a key step to achieve the goal of a "green" Blue River. ❑