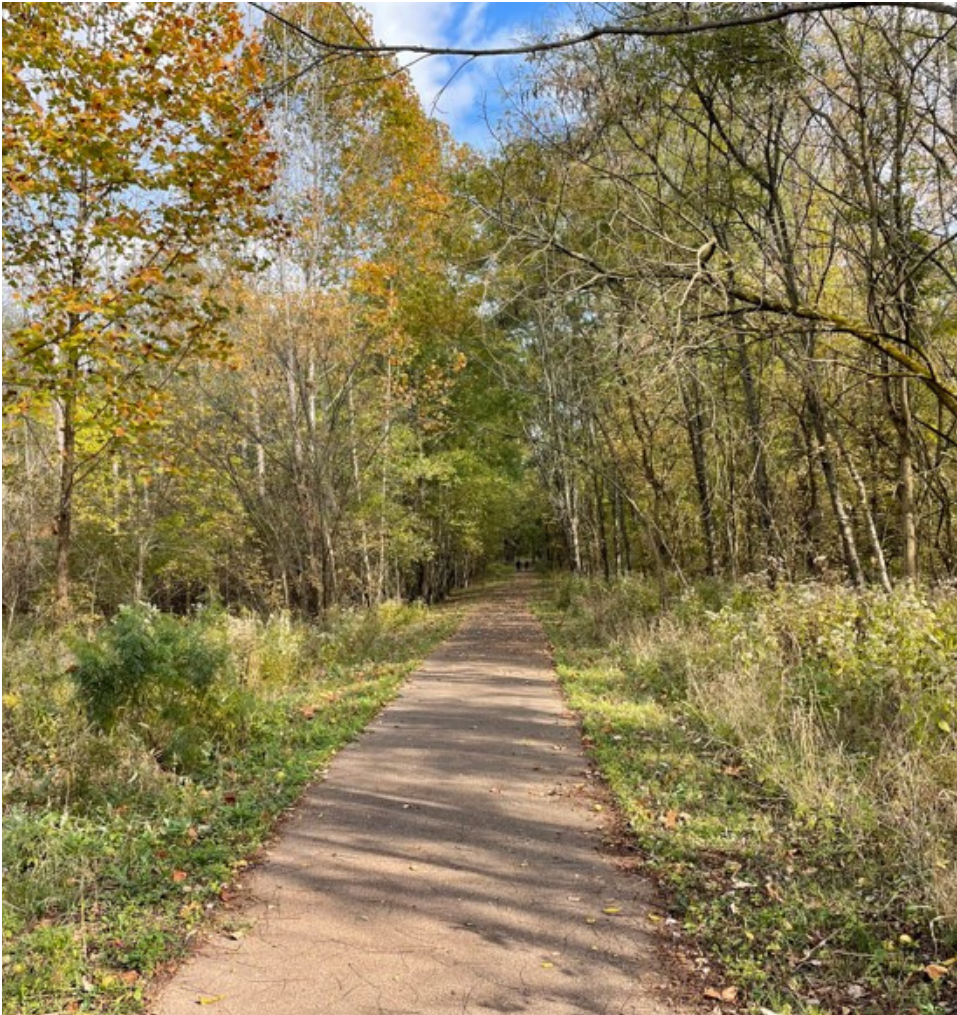


Improved Accessibility From Ecologic Ingenuity and Innovative Surfacing



With a focus on inclusion and access, the journey of reimagination began.

Carmel Clay Parks and Recreation (CCPR) acclaimed park system includes River Heritage Park. Historically, since its inception in 1998, the park has faced public access challenges, particularly in the wooded areas, where prior to renovation, access was limited to ad hoc paths that were often muddy and impassable. Additionally, the existing playground and park shelters were at the end of their lifecycle and in need of upgrading. That's why River Heritage Park received a major overhaul in 2022 as part of CCPR's Reimagining Parks initiative. The goal was for park updates to focus on inclusion and providing access to the White River, the communities most significant natural resource.

Of course, there were restrictions and challenges to overcome.

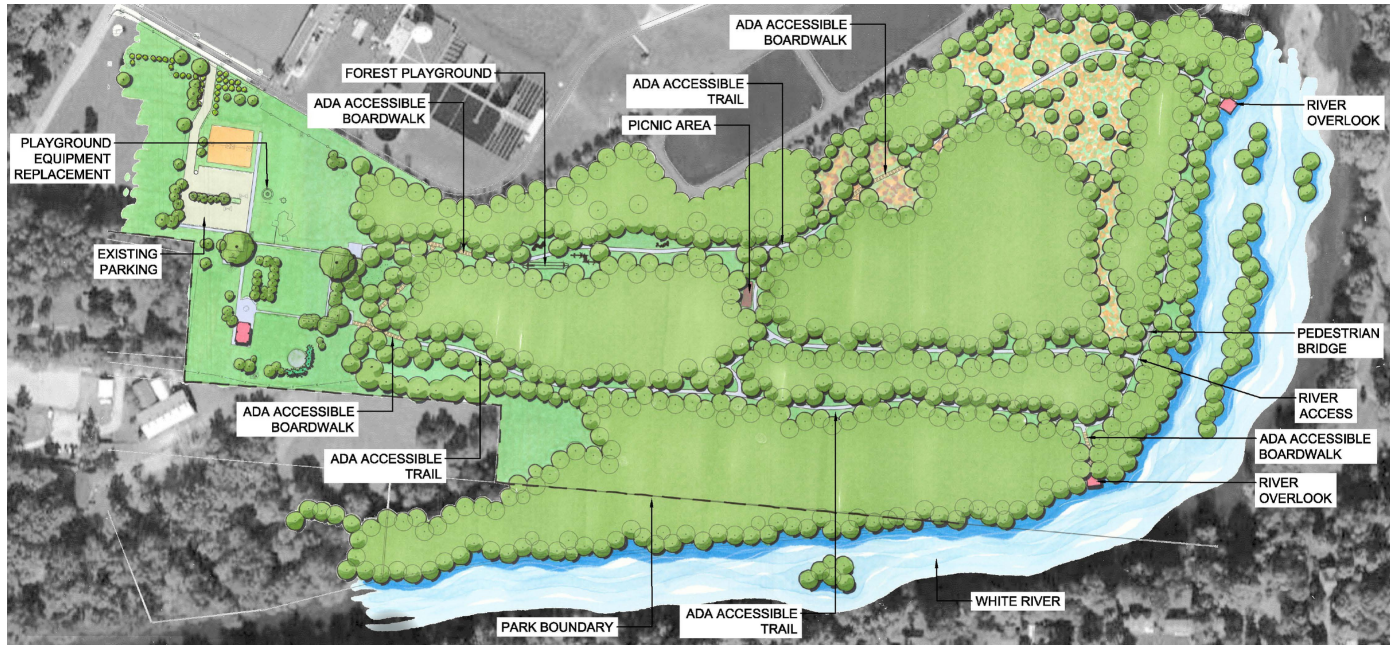
The project's entire 40-acre area is situated within the White River floodway. Proposed park improvements required approval by the US Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act, the Indiana Department of Natural Resources (IDNR) Floodway Permit, including adherence to IDNR's Information Bulletin #17, Habitation Mitigation Guidelines, and Indiana Department of Environmental Management (IDEM). These restrictions on disturbance and filling in the floodway needed to be successfully addressed in the redesign effort.



Previous Conditions



Flood Zone Map



Preliminary Trail Concept

What's needed is some ecologic ingenuity.

The opportunity to provide over a mile of new, universally accessible nature trails through the wooded areas of the park required thoughtful planning to limit disturbance caused by construction. And, given the importance of accessibility, it was imperative for the trail design to follow Americans with Disabilities Act (ADA) standards.

Early in the planning process, a topographic survey and wetland delineation was conducted to document the existing environmental conditions that would direct the design. This allowed designers to locate trails in the field to avoid the most ecologically sensitive areas, including wetlands. Potentially disturbed areas needed to be creatively addressed by classifying areas as either “wetland forest” or “non-wetland forest.” As a result calculations enabled precise mitigation of tree removals. This ensured that the proposed trail alignment would limit ecological impact.

There's more to the solution than meets the eye.

Two paving strategies were utilized to develop the trails within the wooded floodway. To navigate through the low areas that were prone to extended periods of standing water, 600 feet of modular boardwalk system was incorporated in the design.

For at-grade trail segments, a variety of potential paving materials were studied and evaluated for their permeability as well as their aesthetic appeal, durability, long-term maintenance, cost, and permitting considerations. The paving material selected must be permeable to prevent standing water in the flood-prone park. The criteria used in selecting the paving material were, 1) preserve floodway integrity, 2) ensure universal accessibility, and 3) meet regulatory requirements. Ultimately, the recommendation was made for poured-in-place rubberized surfacing material which met requirements while also exceeding expectations. Installation cost ranged from \$12 to \$15 per square foot.



Modular Boardwalk System



Rubberized Trail Surfacing



New access into previously unventured areas

New, accessible park features are now open to the public.

Through a mindful, eco-conscious transformation, the 30-acres of once underutilized wooded areas of River Heritage Park became new integral parts of the park's redesign. This design effort opened previously inaccessible sections, inviting users to stroll through two new trail loops to immerse themselves in the beauty of nature, enjoy the scenic White River, and explore the unique woodland play experience.



New seating areas to enjoy the beauty



New nature-play areas along the trail