Big Creek / I-71 Relocation & Restoration Initiative

Prepared by
Big Creek Connects

March, 2015
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Funding provided by:

Northeast Ohio Regional Sewer District

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EXECUTIVE SUMMARY

The Big Creek / I-71 Relocation and Restoration Initiative looks at a number of environmental, economic, and community challenges and opportunities in the heart of a highly urbanized area straddling the cities of Cleveland and Brooklyn, Ohio. It questions the value of the Denison Avenue partial interchange and proposes removing part of its ramps and opening up land that will allow the stream to be naturalized by re-routing it into much of its historic streambed, thus addressing flooding, erosion and water quality issues and allowing fish passage upstream into the Big Creek Reservation and other areas.

As study progressed, broader transportation, economic, community and land use issues were examined. Industrial, retail and other commercial activity was found to be underperforming, particularly in the industrial areas north of the area of concern in both cities. And, housing in the Stockyards and adjacent Cleveland neighborhoods was found to be distressed, due in part to the lack of community assets found in other neighborhoods. Several alternatives to address many of these issues, both planned and proposed, were examined.

Concept plans were developed that propose the stream re-alignment along with expanded recreational space and a trail system that connects the Brookside and Big Creek Reservations to each other and the surrounding communities. Another set of concept plans add a new I-71 interchange at Ridge Road to capitalize on its economic potential and its potential to divert truck traffic away from residential areas. They propose that the interchange would help address issues related to urban sprawl and redirect investment into this urban core.

Land, stream, highway, roadway and trail data based on these concept plans were calculated along with cost estimates. However, there is a need for further study that will:

- Solicit public input
- Assess economic impacts
- Perform traffic modeling, and
- Develop a preferred plan with recommendations

This study acts as the foundation for a planning grant that will address these needs. In March of 2015 the City of Brooklyn, in partnership with the City of Cleveland and Big Creek Connects, applied for funding for this purpose through the Northeast Ohio Coordinating Agency’s Transportation for Livable Communities Initiative (TLCI) grant program. Grant award announcements are anticipated in June 2015.

During Interstate 71’s construction in the 1960’s the “Parma Freeway” was planned to combine with I-71 in the Big Creek valley in a “weave-free, braided-type interchange”. In order to make room for this extensive infrastructure, the land above the natural meander of the creek was cut and leveled, the railroad line was moved southward and Big Creek was placed in a concrete lined channel parallel to it. A “drop structure” was constructed in Brookside Park to make up for the 26’ elevation difference due to the loss of the stream’s natural meander. The planned freeway alignment north to I-90 was eventually abandoned and left the Denison Access ramps that remain to this day.

Each concept plan in this study proposes constructing two sets of short bridges to allow Big Creek to leave its one mile concrete channel and meander north under the railroad and highway into much of its original stream bed. The stream will then bridge back under the freeway and railroad and re-connect with its existing stream bed in Brookside Reservation, just down-stream from the drop structure.
An extensive recreational trail network could be realized, following the new stream alignment, and connecting the Brookside and Big Creek Reservations with each other and the surrounding communities.

- Concept Plan A proposes the removal of most of the Denison Access ramps without a new interchange in an alternate location. Combined with relocating the Cleveland Police firing range, over 50 acres of underutilized land could be opened up to potential environmental remediation and recreational use. Each concept plan envisions:
  - 10 acres stream/floodplain
  - 25 acres recreational space
  - 15 acres roadways, parking, other uses
  - 1.5 miles new access roads/parkway
  - Over 5 miles new all-purpose trails

Taken together, these changes could significantly alter the neighborhood character, housing value, and quality of life of residents in the Stockyards and adjacent neighborhoods.

- In addition to these features, Concept Plan B proposes a new interchange at Ridge Road to capitalize on its economic potential and its potential to divert truck traffic away from residential areas.

Although a full interchange may be more valuable than the existing partial interchange, concerns were raised that the loss of the I-71 Denison Access ramps may cause a burden to industrial and commercial activity currently dependent on it.

This led to the development of three concept plans that build on a previously proposed idea of constructing a connector road from the Denison Access ramps to Ridge Road utilizing the existing road network in the Ridge Road [Waste] Transfer Station:

- Concept Plan C-1 proposes to make the connection to the new industrial access road with West 58th Street only. It assumes that traffic from West 56th Street will use Denison Avenue to reach West 58th Street and the new industrial access road.

- Concept Plan C-2 proposes that West 56th Street be extended south, then across the modified access ramp, where the grades are level with each other, to connect with West 58th Street and the new industrial access road.

- Concept Plan C-3 proposes re-building the Denison Access bridge over the Norfolk-Southern railroad to accommodate an extension of Tradex Parkway, connecting West 56th Street with West 58th Street. Although the most costly alternative, this option would provide a direct connection between these streets while maintaining a grade separation between industry and recreational users.

Big Creek Connects estimated land, stream, highway, roadway and trail data based on these conceptual plans. These figures were further defined and cost estimates were calculated by one of the private consulting firms providing pro-bono services for this study. A contingency of 30% was figured into the costs. However, the calculations do not consider potential land acquisition, environmental remediation, wetland construction, facility re-location or landscaping costs. The total budget for each concept ranges from $83,130,000 for Concept A to $115,900,000 for Concept C-3.

The TLCI planning grant, if awarded, will further evaluate these concept plans with input from the public and develop a preferred plan that will include a planning level cost estimate, a phasing/implementation strategy and identify funding sources.
Figure 20: Southwest Aerial rendering – Existing
Figure 21: Southwest Aerial rendering – Proposed