Hancock County Flood Risk Reduction Program

Hydraulic Improvements (Phase 1) Project 2018 MWCD Annual Meeting Presentation



Agenda





Project Overview

- Floodplain Benching & Soil Disposal
- In-River Structure Removal
- Soils Management & Disposal
- Utility Coordination
- Site Restoration

Opinion of Probable Cost Anticipated Benefits Project Schedule Questions & Comments



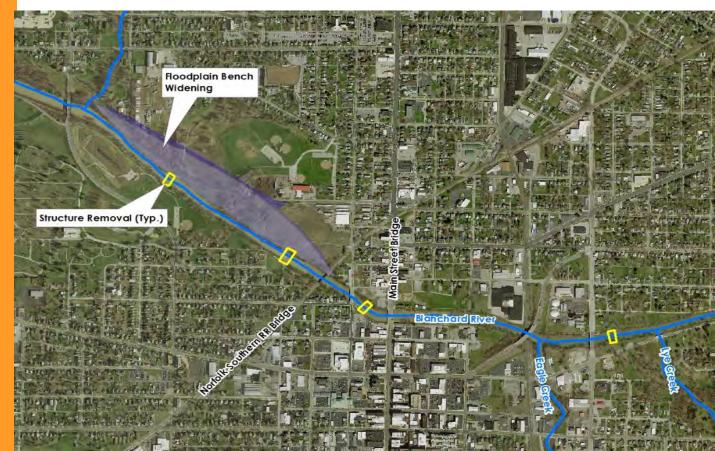
Floodplain Bench Widening

> Remove Inline Riffles/Dams

Norfolk-Southern RR Bridge Modifications in Phase 2



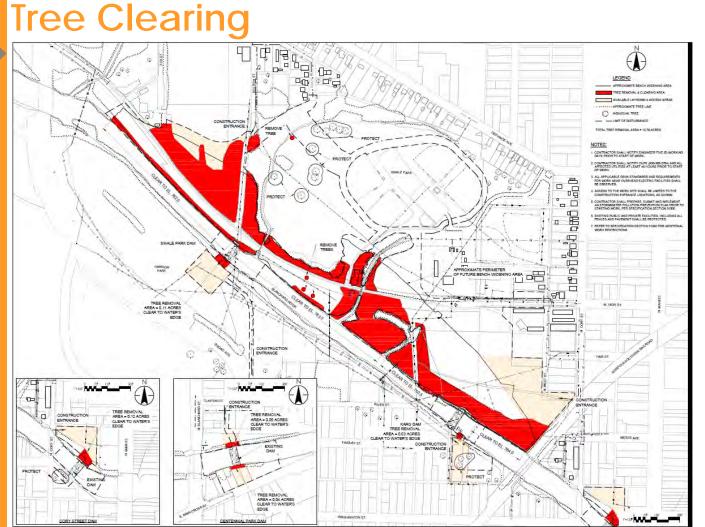
Hydraulic Improvements (Phase 1)





Tree Clearing Completed March 31, 2018

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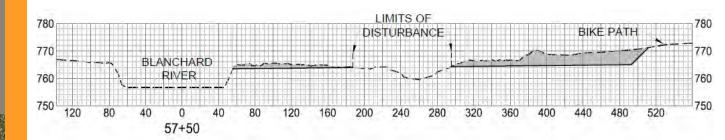


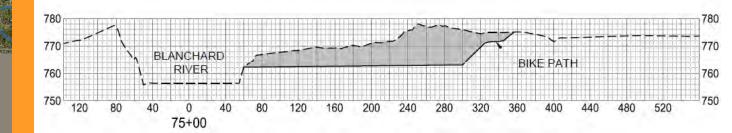


Floodplain Benching



Floodplain Benching Cross Sections











Existing Inline Structure Removals



Figure 1 - Blanchard River - Existing Inline Structure - (Cory Street Dam)

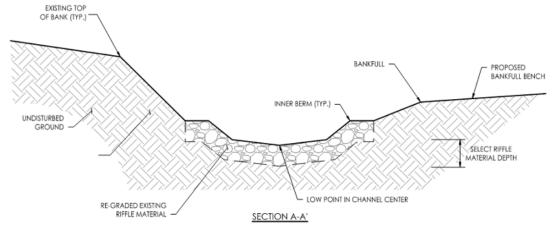


Figure 2 - Blanchard River - Existing Inline Structure - (Centennial Park Dam)



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Constructed Riffles





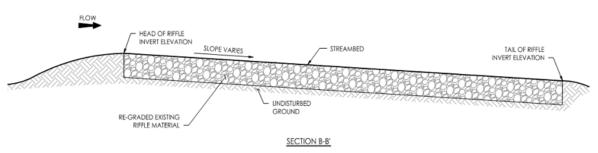


Figure 6 - Example Constructed Riffle - (Profile View)

Example Project





Figure 7 – Kalamazoo River – Example Before Dam Removal (Pre-Construction)



Example Project



Proposed Riffle Structures

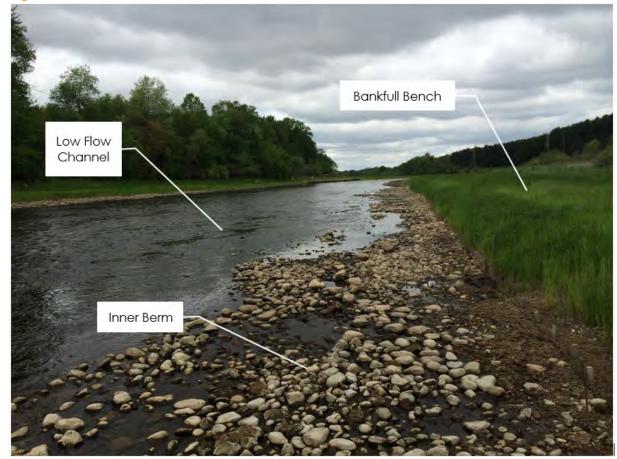
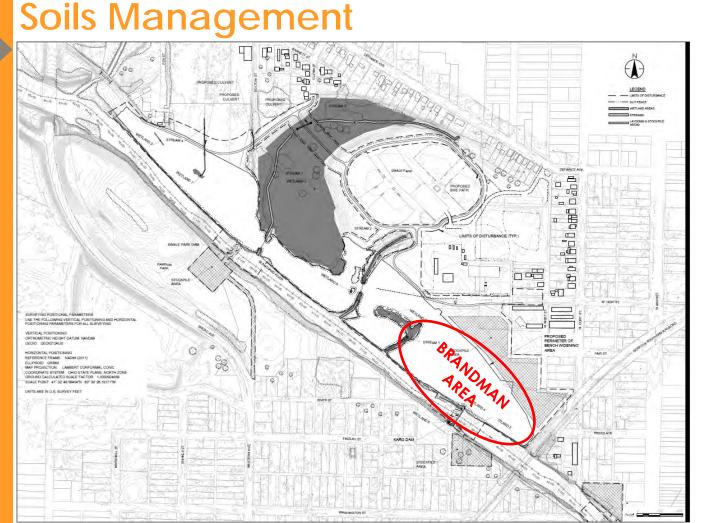


Figure 8 – Kalamazoo River – Constructed Riffle (Post-Construction)

Avoidance of Wetland Areas & Streams

Brandman Area





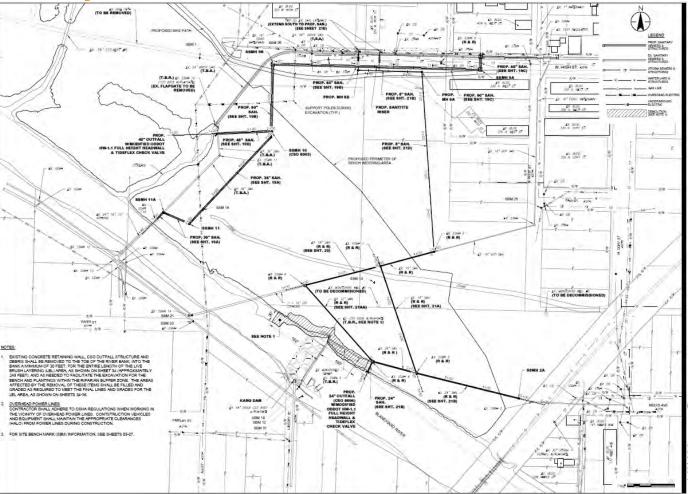
Utility Coordination

Project Overview

AEP Overhead Electric

City Combined Sewers

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Opinion of Probable Costs

Hydraulic Improvements (Phase 1) Only



Project Costs

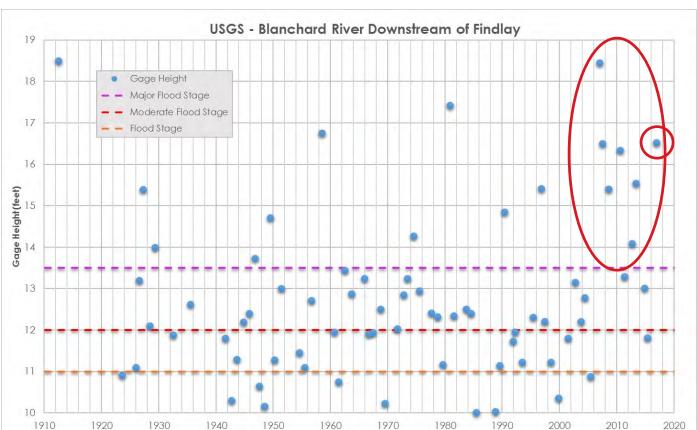
Hydraulic Improvements - Phase I - Opinion of Probable Costs							
Description	Amount						
Construction Costs							
In-Stream Improvements:	\$1,638,000						
Floodplain Bench Widening Improvements:	\$7,099,200						
Utility and Bike Path Improvements:	\$1,347,900						
Utility Coordination:	\$768,800						
CONSTRUCTION SUBTOTAL	\$10,853,900						
Contingency (10%)	\$1,085,390						
CONSTRUCTION TOTAL	\$11,939,290						
Other Costs							
Tree Removal (Including Debris Removal)	\$105,000						
Stream Wetland and T&E Mitigation	\$77,250						
Construction Administration	\$675,000						
OTHER SUBTOTAL	\$857,250						
TOTAL PROJECT COSTS	\$12,797,000						

Local Historic Flood Events Flooding USGS - Blanchard River D

Seven Events Since 2000

July 2017 Event ~4% (25-year) ACE





Year

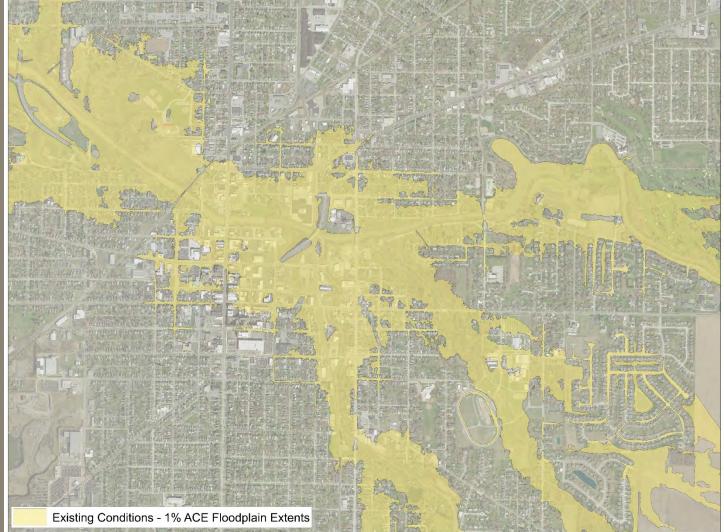
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	and the second second	Fair Fair			4	Main Cross St - Western Ave To Bright Rd 3 (Blanchard St)	12,000
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Phase I Modeled Flooding	Unnamed Street		Statement Statement Statement	5	And Area	8	BAR ST
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Anticipated Benefits

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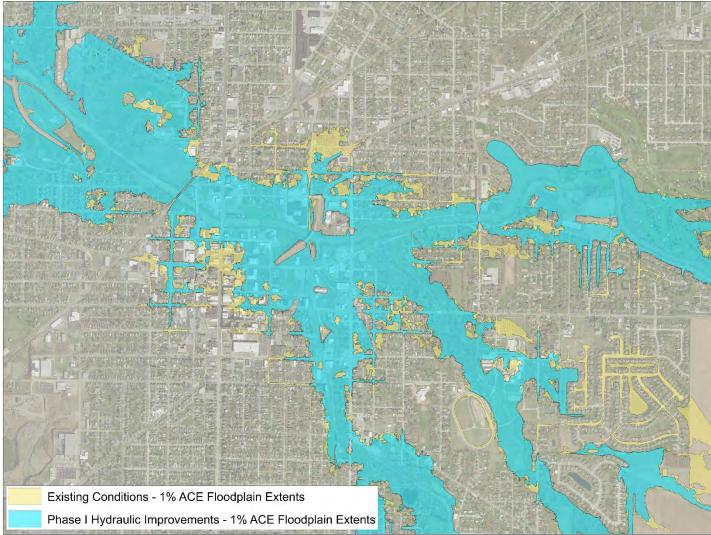
- Increased Wetland Function
- Improved Water Quality
- Fish Passage & Aquatic Habitat
- Enhanced Recreational Opportunities
- Reduced Transportation Impacts
- 1% ACE Floodplain Reduction ~ LOMR To Be Filed Following Construction

1% ACE Floodplain





1% ACE Floodplain





Anticipated Schedule

<u>Targeting</u> <u>permits to be</u> <u>issued</u> <u>Summer 2018</u>



Permitting

- USACE 404 Permit
 - Public Comment Period Closed
 - Inter-Agency Coordination On-Going
- OEPA 401 WQC Permit
 401 Public Hearing ~ June 26th
- OEPA Permit to Install (Sewer Replacements)
- OEPA Rule 27-13 Application (Brandman Site)
- Floodplain Permit (City)

Anticipated Schedule

Critical Path of Project is through Permitting

Design & Construction

- Tree Clearing Project
 - S.C.: Mar. 31st / F.C.: May 15th
- Final Design
 - 60% Design submitted Dec. 8, 2017
 - 95% Design submitted May 1st
 - Final IFB Package (estimate July 2018)
- Construction
 - Bidding & Award: Aug. 2018 / NTP: Sep. 2018
 - S.C.: Aug. 2019 / F.C.: Oct. 2019



Questions & Comments

Documents Posted to Project Webpage

www.HancockCountyFlooding.com

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