

Honey Creek Watershed Levee System LOMR

Vigo County, Indiana

September 3, 2024

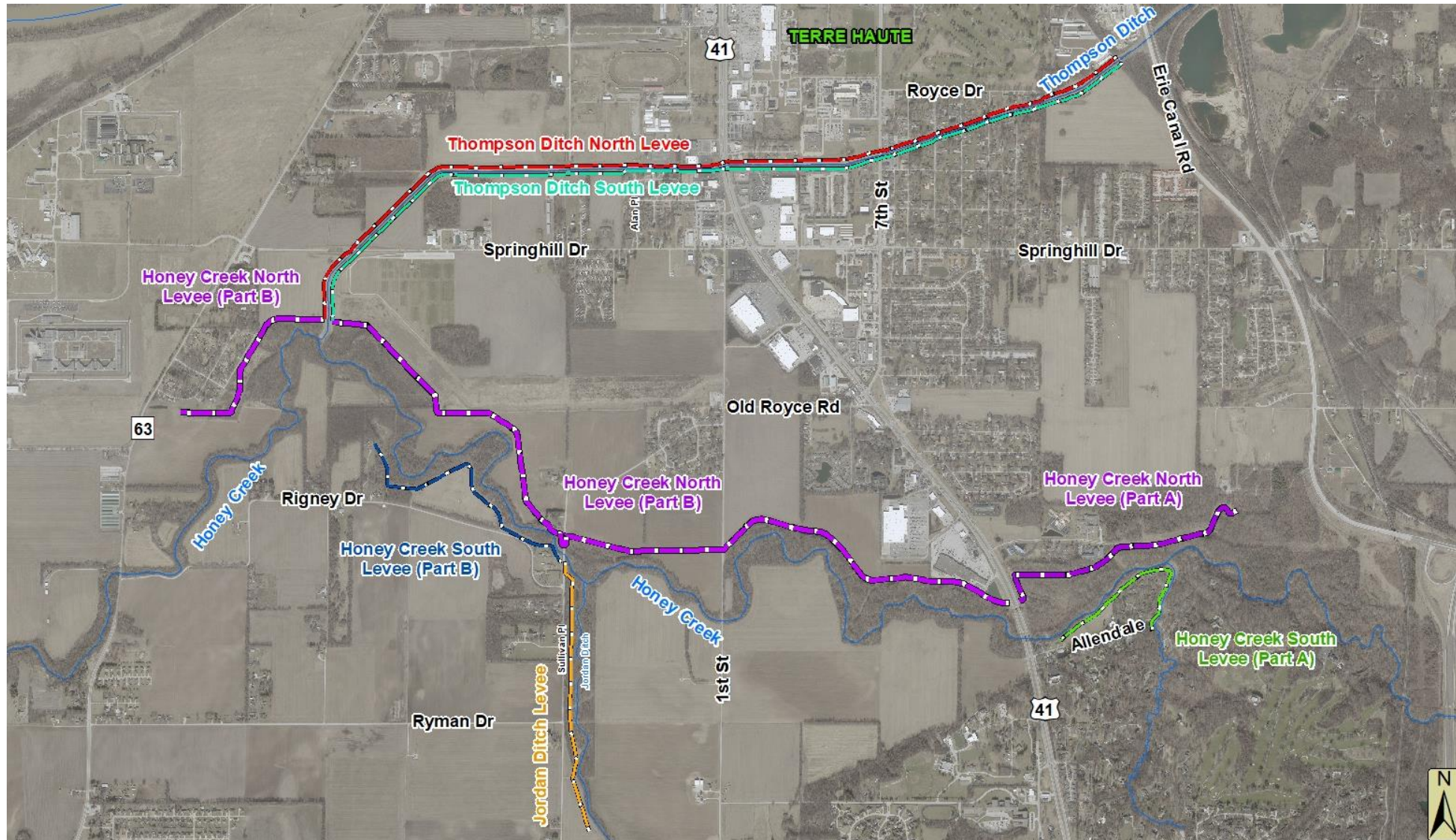




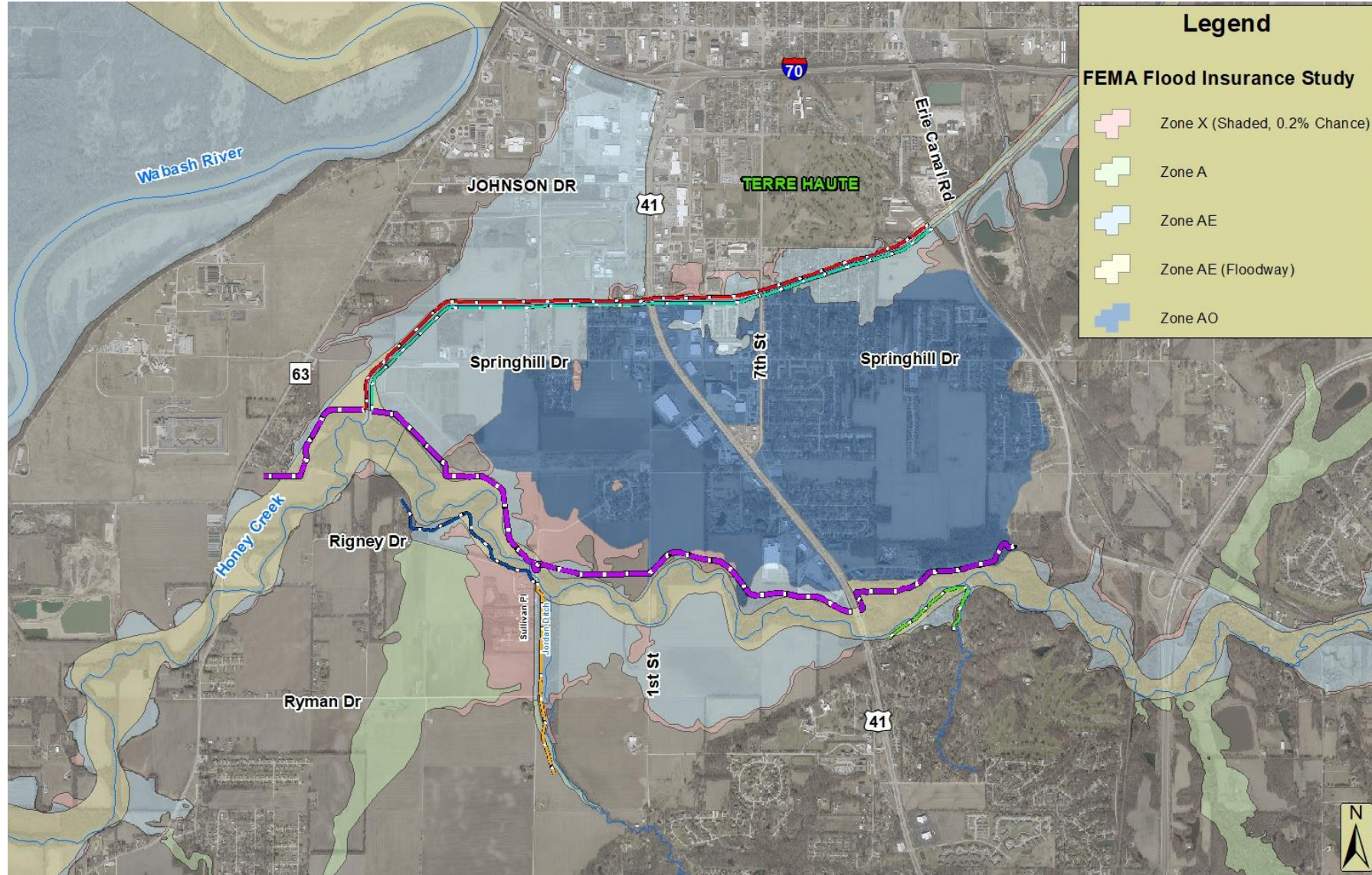
Presentation Overview

- Levee System Overview
- Existing Flood Insurance Rate Mapping
- LOMR Project
- Proposed Flood Insurance Rate Mapping
- Levee Raise Project
- Thompson Ditch Outfall Maintenance
- Conclusions and Next Steps

Levee System Overview



Existing Flood Insurance Rate Mapping



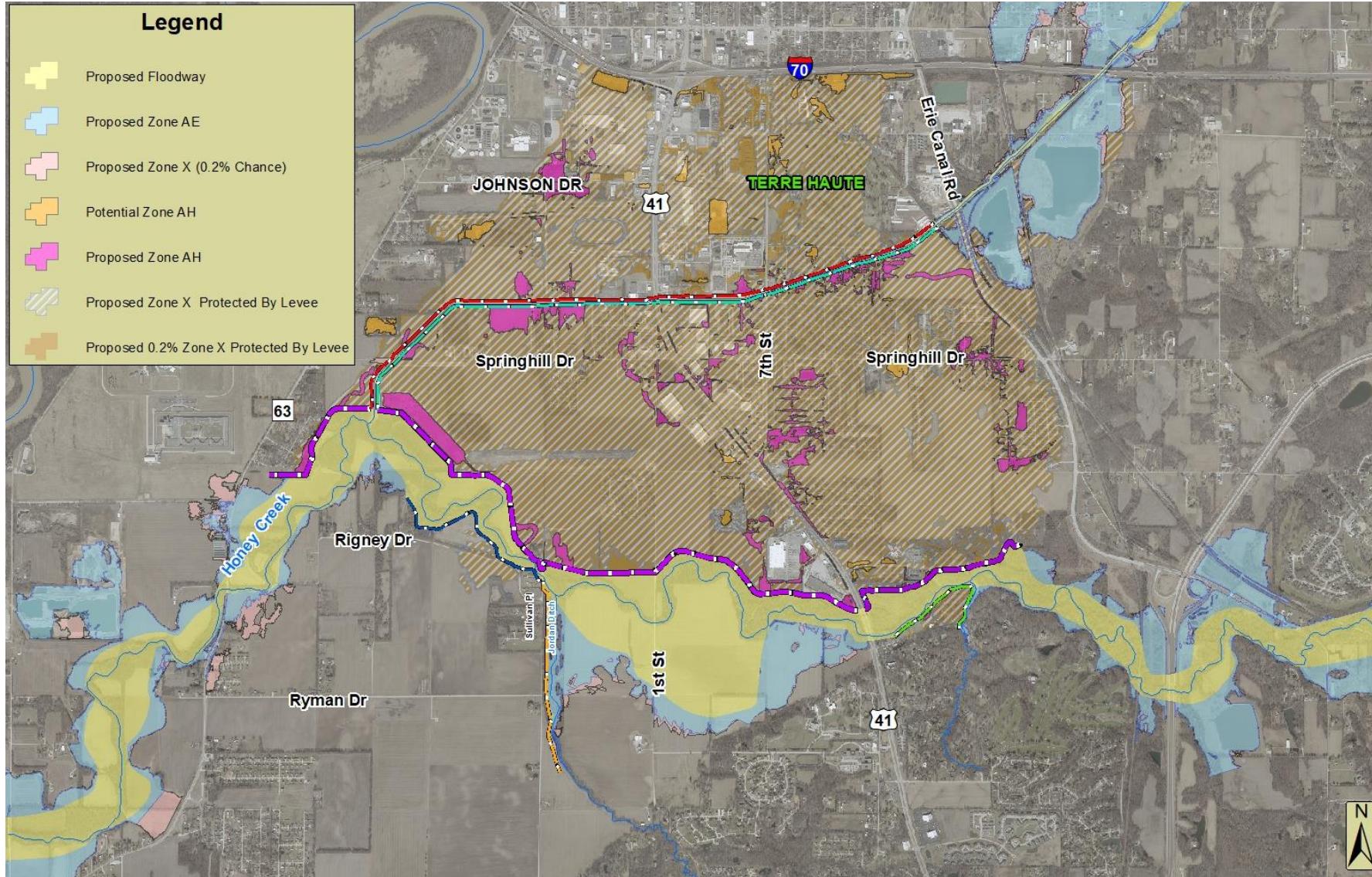
Realities of Existing Mapping

- Doesn't accurately reflect flood risk
 - Benefits of completed levee project not fully realized
- Mandatory flood insurance purchase requirements for federally-backed mortgages
- New construction or substantial improvements to existing structures must have lowest floor 2 feet above the base flood elevation
 - Article 5, Section B, Paragraphs (2) and (3), Ordinance for Flood Hazard Areas for Vigo County
 - Chapter 10, Section 10-5 of Terre Haute City Code

LOMR Project Overview

- Goal: Revise the Flood Insurance Rate Maps through a Letter of Map Revision (LOMR) request to FEMA
- Must demonstrate that requirements of 44 CFR 65.10 are met
 - Freeboard (levee height)
 - Embankment Protection
 - Embankment and Foundation Stability
 - Settlement
 - Interior Drainage
 - Operations & Maintenance Criteria
- District has been working for many years and has invested a significant amount of funds to achieve this goal to benefit the community

Proposed Flood Insurance Rate Mapping



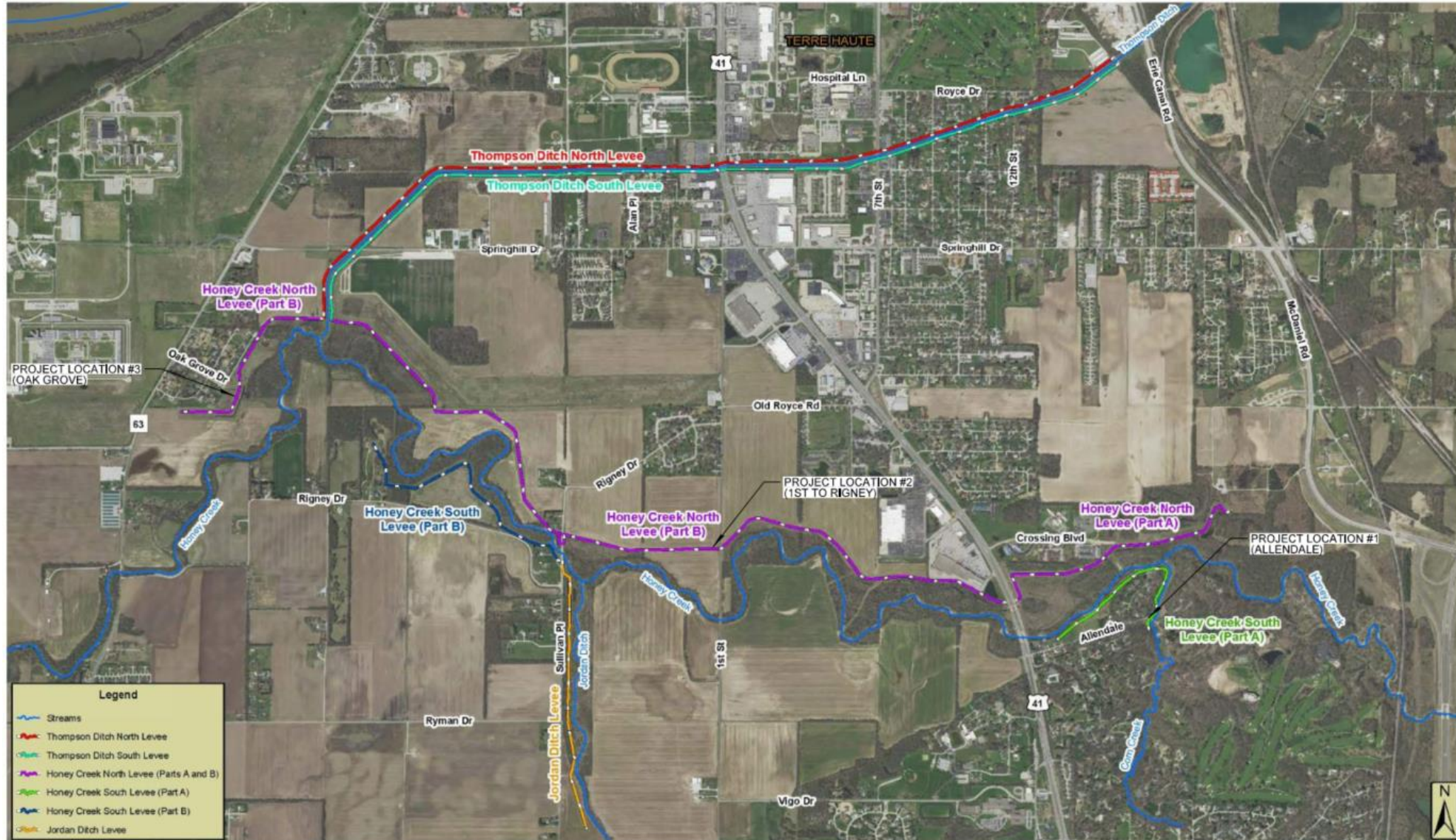
Outcomes of a Successful LOMR

- No mandatory flood insurance purchase requirement in levee-protected areas
 - Property owners still encouraged to purchase insurance
 - Some lenders may still require insurance purchase
- Elevating the lowest floor 2 feet above the base flood elevation NOT required for construction or substantial improvements to existing structures
- Potential for economic development in levee-protected areas

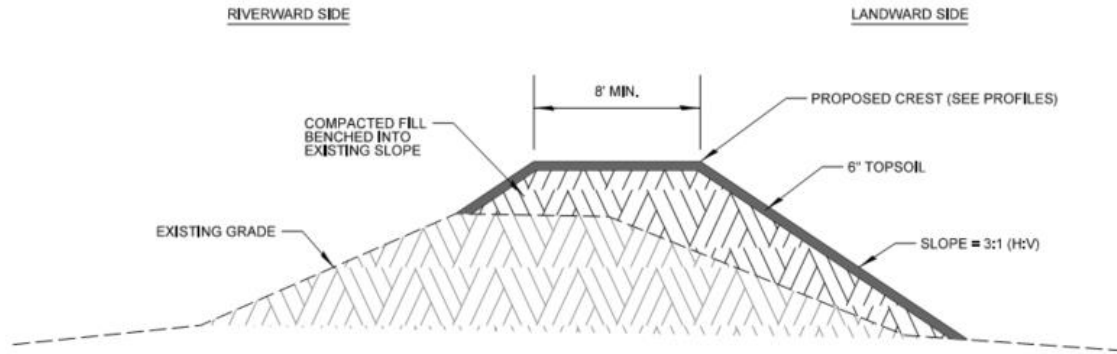
LOMR Timeline and Current Efforts

- LOMR application originally submitted to FEMA in April 2022
- Revised submittal to FEMA in November 2022
- FEMA provides response in March 2023
 - Levee to be raised in certain locations to meet freeboard (height) requirements
- District initiates design, permitting, and bidding of project
 - Construction commenced August 2024
 - Completion by end of 2024 at cost of \$548,540
- District initiates design of outfall modifications project along Thompson Ditch
 - Needed maintenance project
 - Improves probability of achieving LOMR
 - Estimated cost \$150,000 - \$200,000
- Anticipate resubmittal to FEMA in early 2025

Levee Raise Project Overview



Levee Raise Project – Earthen Segments

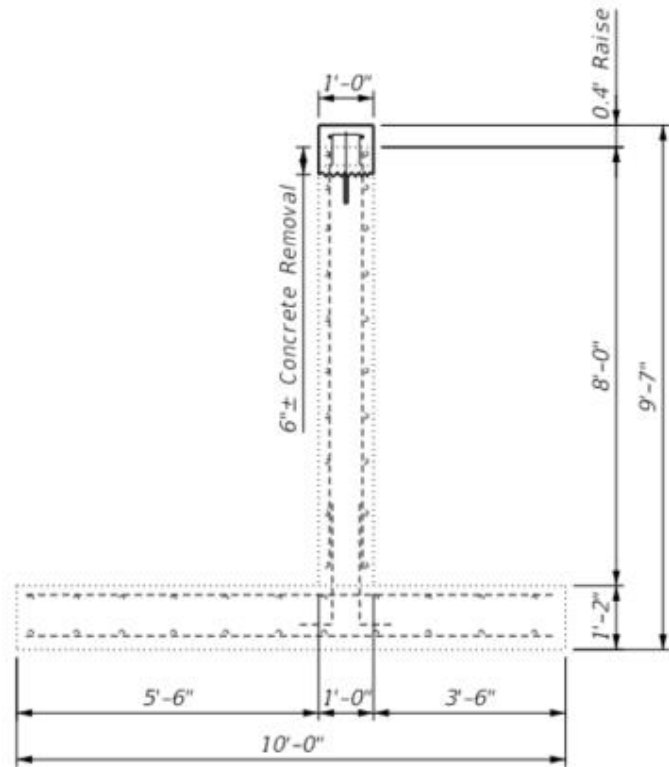


- NOTES:
1. STRIP TOPSOIL FROM EXISTING LEVEE PRIOR TO PLACING FILL.
2. BENCH INTO EXISTING SLOPE AND SCARIFY SUBGRADE SURFACE PRIOR TO PLACEMENT OF FILL MATERIAL TO PROVIDE BONDING BETWEEN THE FILL AND PREPARED SUBGRADE. BENCHING IS NOT REQUIRED FOR FILL DEPTHS LESS THAN 6 INCHES.
3. PLACE A MINIMUM OF 6 INCHES OF TOPSOIL IN A SINGLE LOOSE LIFT. GRADES SHOWN ON PLAN AND PROFILE SHEETS ARE FOLLOWING TOPSOIL PLACEMENT.

1 TYPICAL LEVEE RAISE CROSS-SECTION
NOT TO SCALE



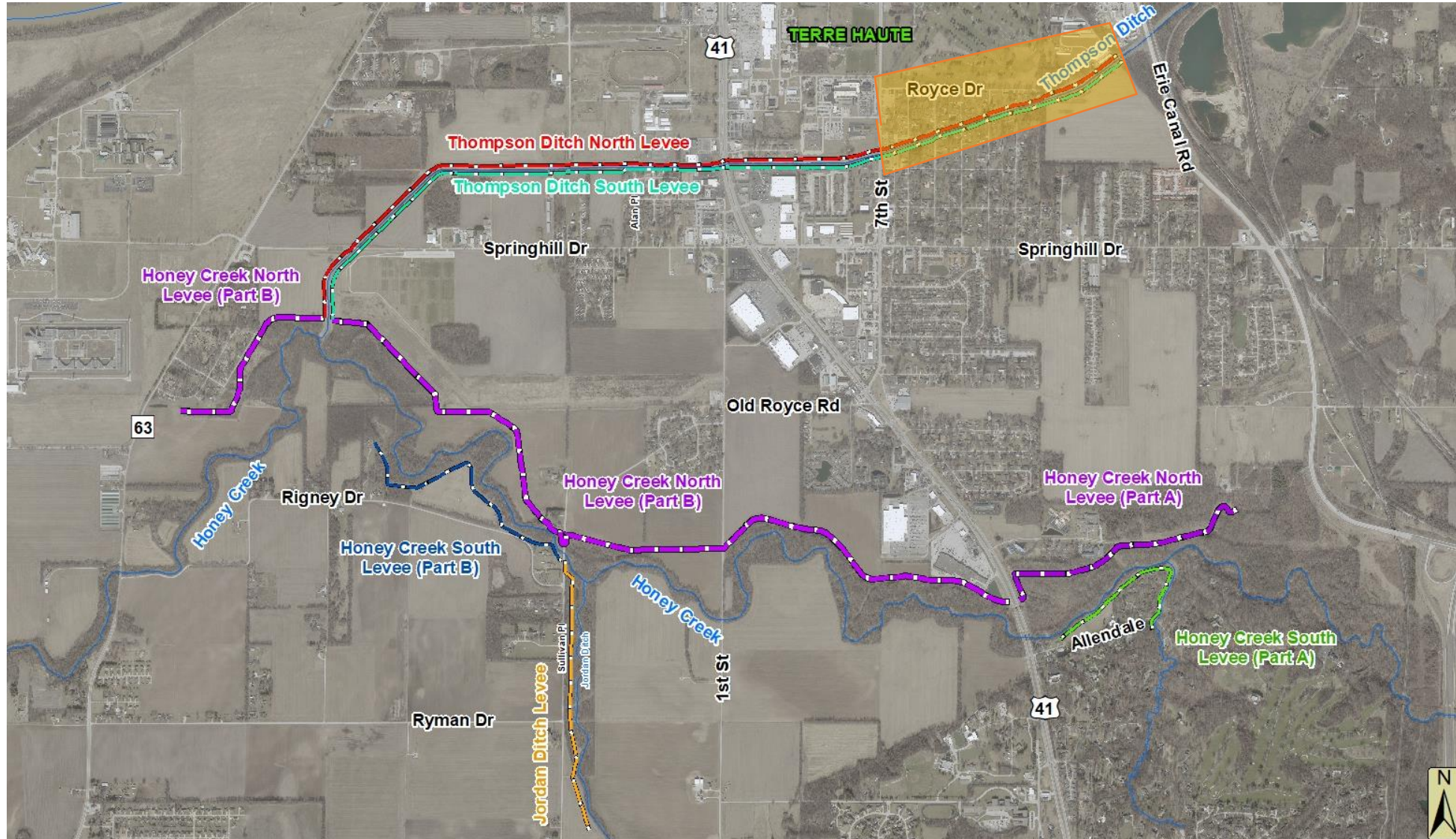
Levee Raise Project - Floodwalls



TYPICAL SECTION



Thompson Ditch Outfall Maintenance Overview



Thompson Ditch Outfall Maintenance Overview



- 20 outfalls ranging in size from 12" to 36"

Conclusions and Next Steps

- A LOMR for the Honey Creek Watershed Levee System would benefit the community
 - Relief from mandatory flood insurance purchase requirements
 - Relief from development restrictions
 - More accurate depiction of flood risk on Flood Insurance Rate Maps
- District initiated a LOMR request to FEMA
- Improvements to the levee system required to achieve a LOMR
 - Levee raise project
 - Thompson Ditch outfall maintenance project (potential for comment)
- Anticipated resubmittal of LOMR to FEMA in early 2025

Questions?
