The City of West University Place

A Neighborhood City

CITY COUNCIL
Bob Higley, Mayor
Kevin Trautner, Mayor Pro Tem
John P. Barnes, Councilmember
Lauri Lankford, Councilmember
Ed Sobash, Councilmember

STAFF
David J. Beach, City Manager
Alan Petrov, City Attorney
Thelma Gilliam, City Secretary

CITY COUNCIL MINUTES

The City Council of the City of West University Place, Texas, remotely met in a workshop on **Monday, July 20, 2020**, at **5:00 p.m.** in the Municipal Building located at 3800 University Boulevard.

Agenda items were as follows:

WORKSHOP (5:00 PM)

1. <u>Call Workshop to Order</u>

Mayor Higley called the workshop to order at 5:02 p.m. from the City Hall Conference Room. Mayor Pro Tem Trautner, Councilmembers Barnes, Lankford and Sobash were in attendance via video/teleconference.

City Manager Beach, City Secretary Gilliam, City Attorney Petrov, and Public Works Director Barrera were physically present in the Council Chambers.

Also physically in attendance were Nawa Panthi and Hui-Fong Change with HTJ Engineers

John Robuck with BOK Financial Services attended via video/teleconference.

2. <u>Drainage/Modeling Study</u>

Matters related to the City's Drainage/Modeling Study and funding sources.

Nawa Panthi with HTJ Engineers provided a follow-up to the drainage/modeling study workshop held on June 22, 2020. The focus of the discussion was mainly on the City's five major drainage systems:

- Academy Street System
- College Street System
- Poor Farm Ditch
- Buffalo Speedway System
- Kirby Drive System

At the conclusion of the presentation/discussions, it was noted that:

- Proposed storm Sewer Improvements provide nearly 50-yearLevel-of-Service (LOS)
- Estimated Cost Of Proposed Improvements
    - Estimated cost of road and associated drainage improvements, **$21M.** (Priority Area 1-3 of Infrastructure Program)
        - These roadways will need replacement in the next five years, if not sooner

- Estimated cost of the proposed drainage improvements, total **$39M.**
- Total estimated cost of improvements, **$60 Million** (in today's dollars)

After the presentation by HTJ engineers and questions and answers, Mr. John Robuck with BOK Financial Services discussed funding and possible funding sources.

A copy of the drainage presentation is attached.

3. Virtual Gate Discussion

Matters related to Phase I of the Virtual Gate project.

City Manager Beach proposed that staff be allowed to move forward with a decorative base for poles within the City of West U City limits for this project, which would cost approximately $80,000 and be on target for completion by the end of the year.

It was the consensus of Council for Mr. Beach to move forward as proposed.

4. Adjourn

Mayor Higley adjourned the workshop at 7:10 p.m.

Audio of this workshop is available on the City's website or contact the City Secretary's office to obtain a copy.

Prepared by: City Secretary Thelma A. Gilliam

Approved by City Council on: August 10, 2020

Attachment to July 20, 2020 Minutes

City of West University Place
Citywide Storm Sewer Analysis

July 20, 2020

Prepared for:

City of West University Place

Prepared by:

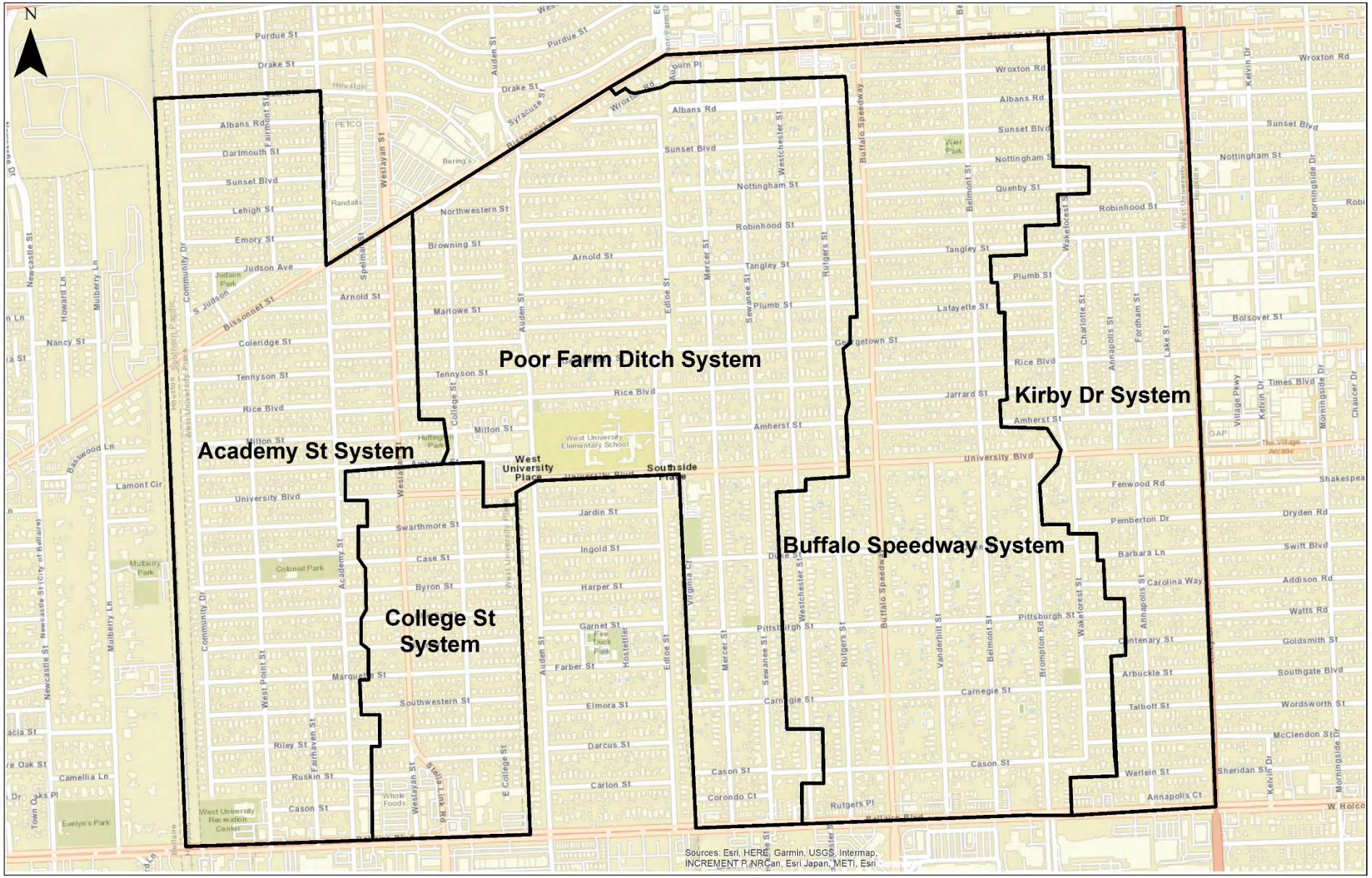
HT&J, LLC

Agenda

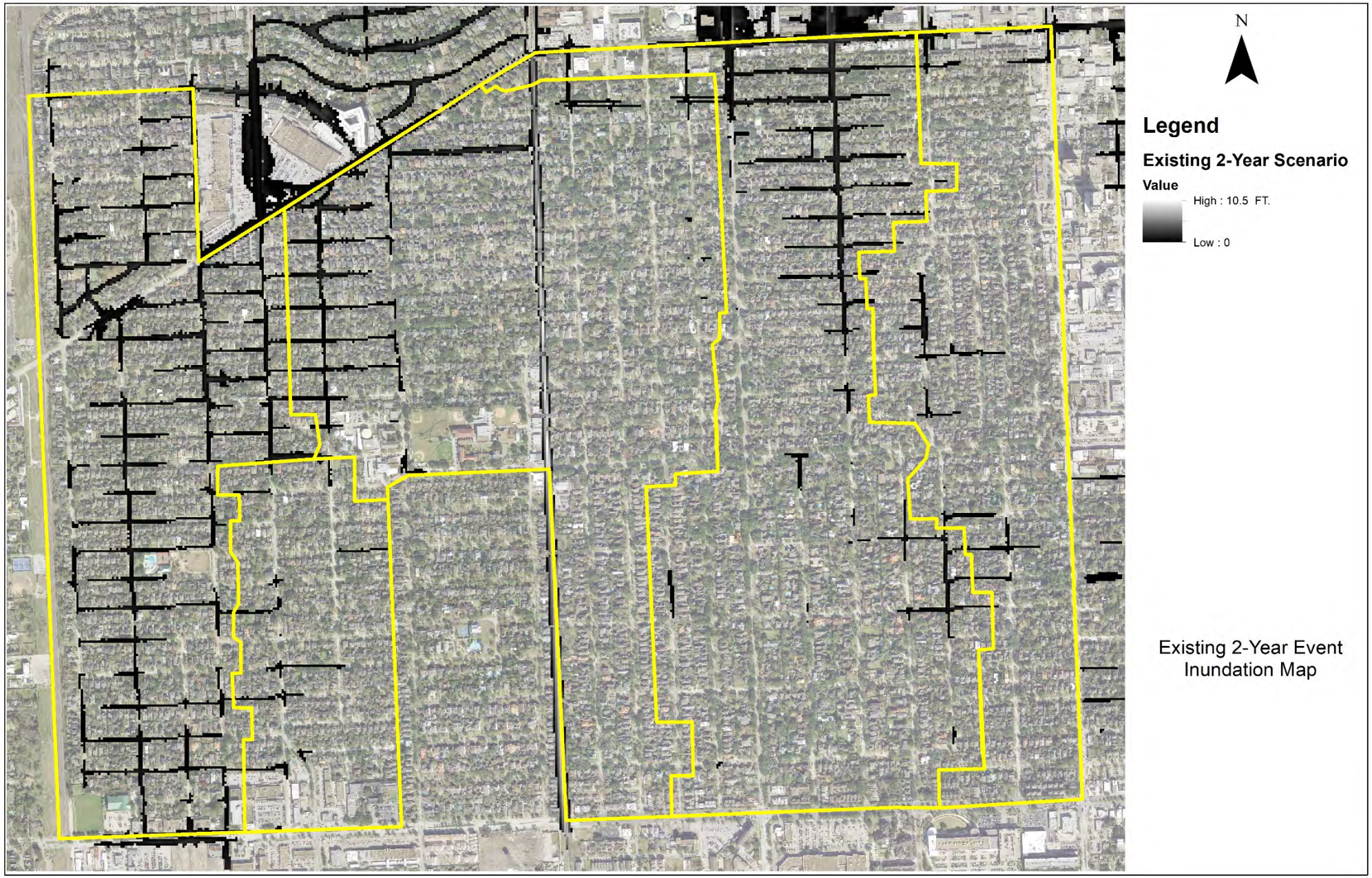
Additional Results Discussion

Existing Conditions

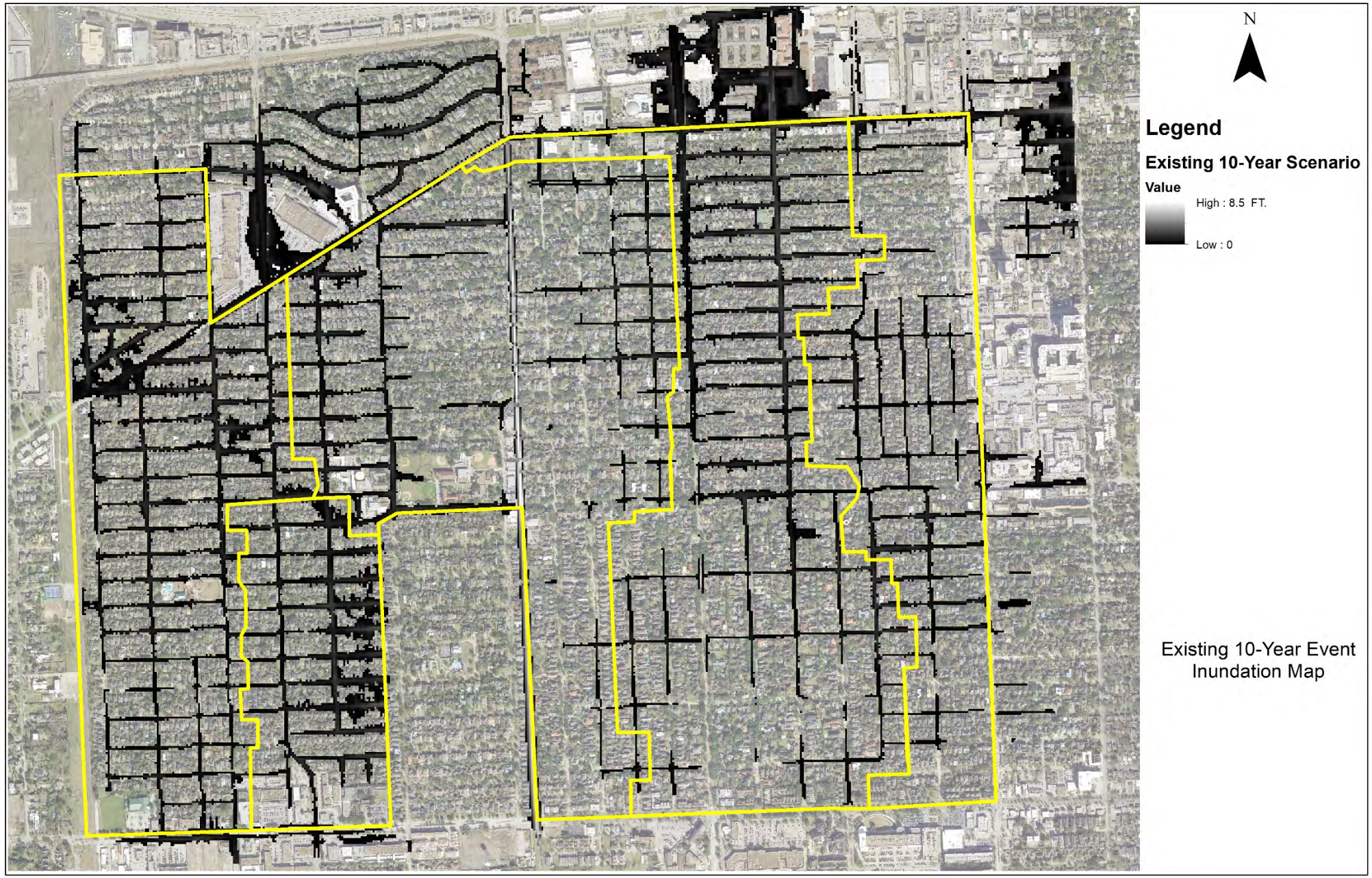
Flooding Conditions for Different Rain Events



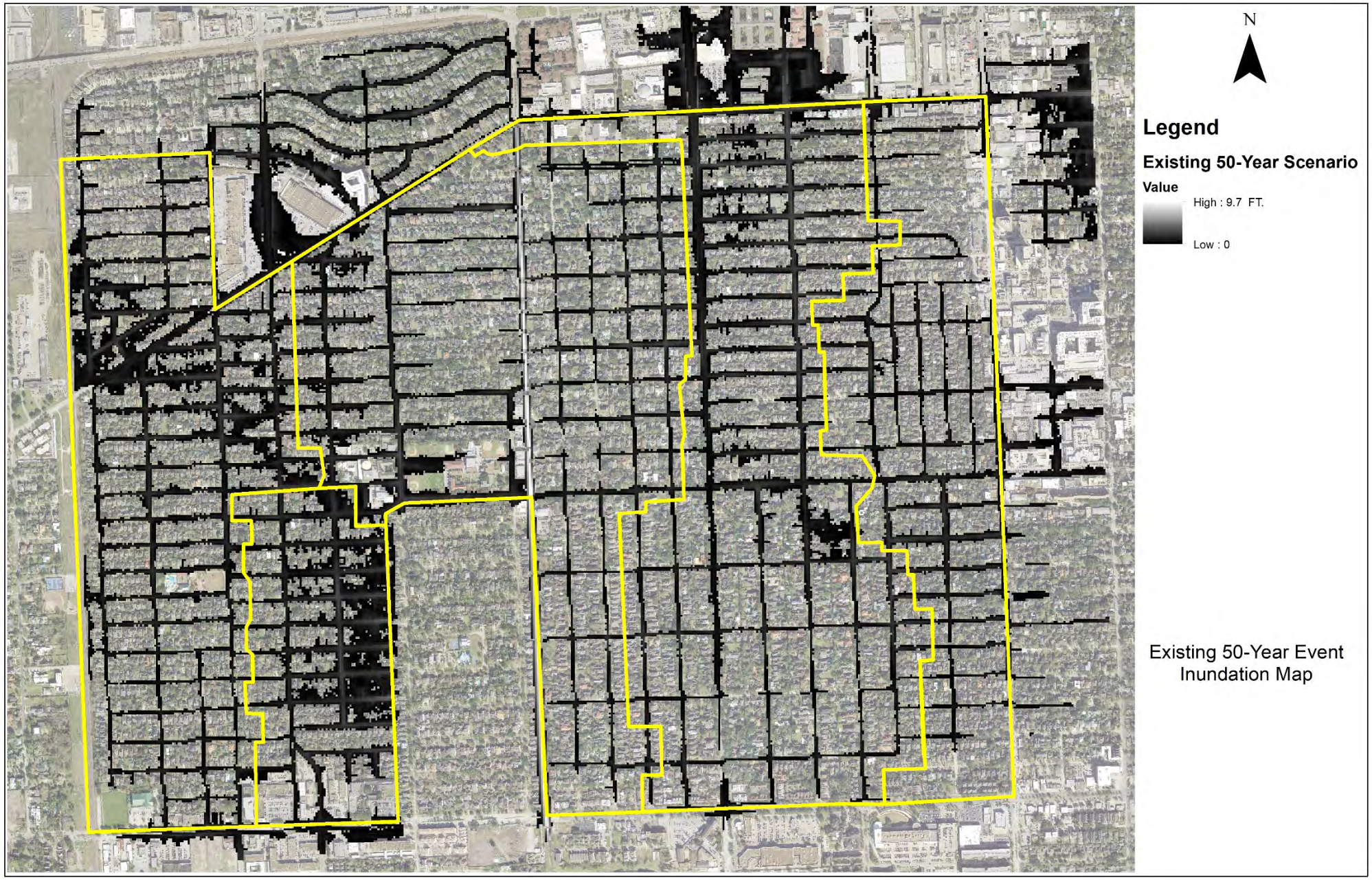
Major Drainage Systems



Existing 2-Year Event Inundation Map



Existing 10-Year Event Inundation Map



Existing 50-Year Event Inundation Map

Existing 100-Year Event Inundation Map

Existing Conditions

Flooding Conditions 100-Year Vs Harvey Reported Structure Flooding

WSEL = Water Surface Elevation

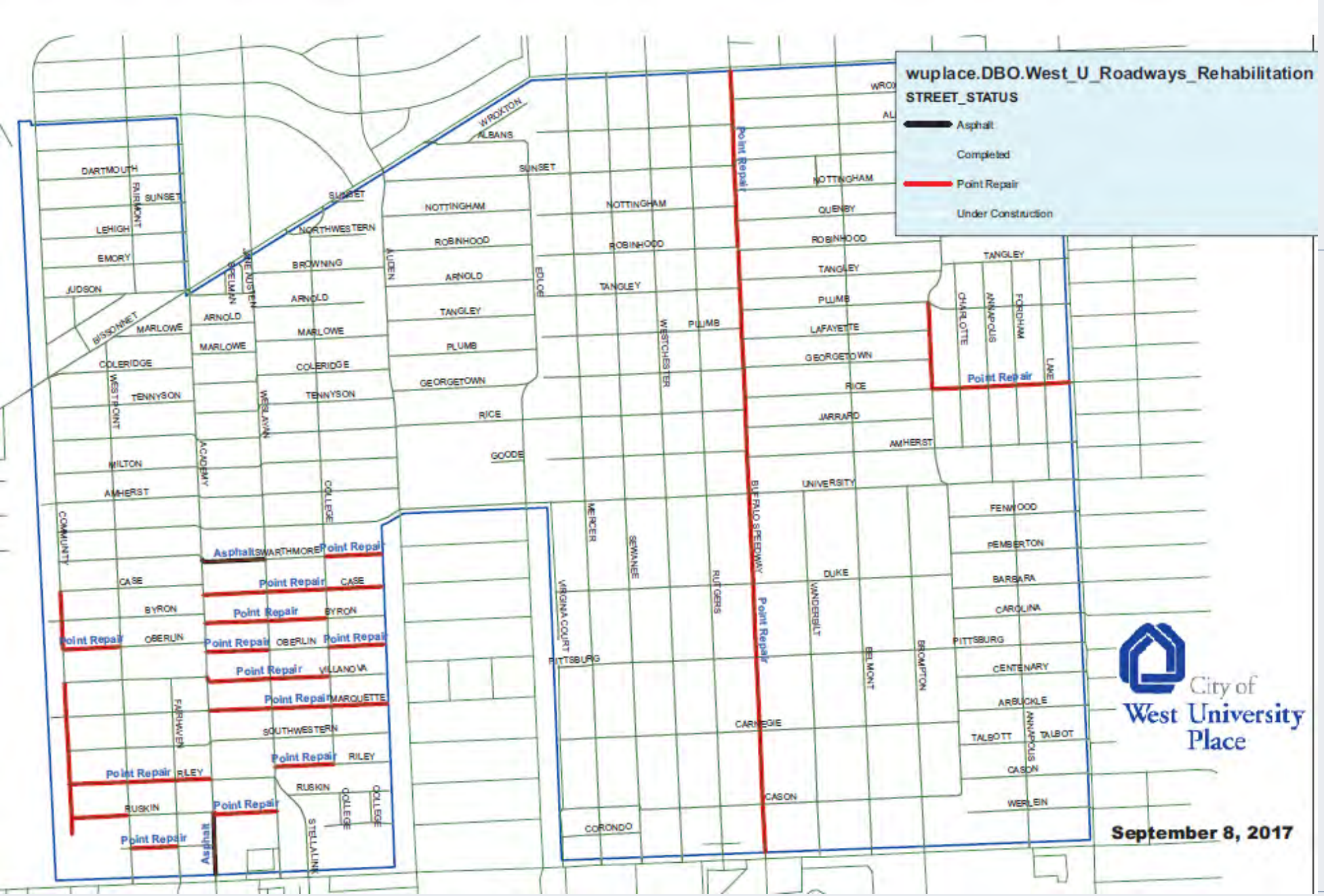
Proposed Conditions

Flooding Conditions Comparison

Existing Vs Proposed

Without Restrictor

Road Reconstruction



* Work includes road and storm sewer replacement needed within the next 5 years.

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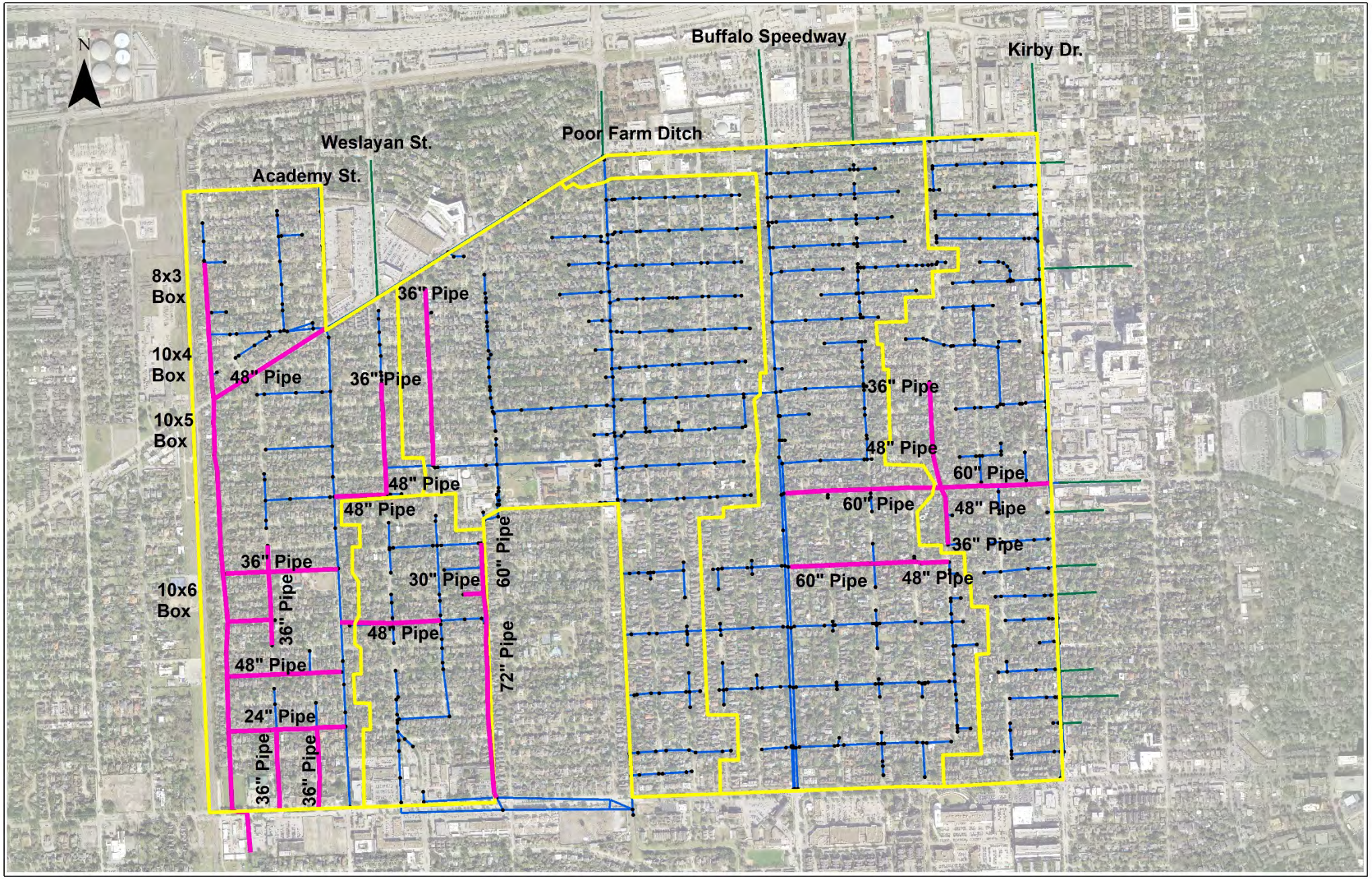
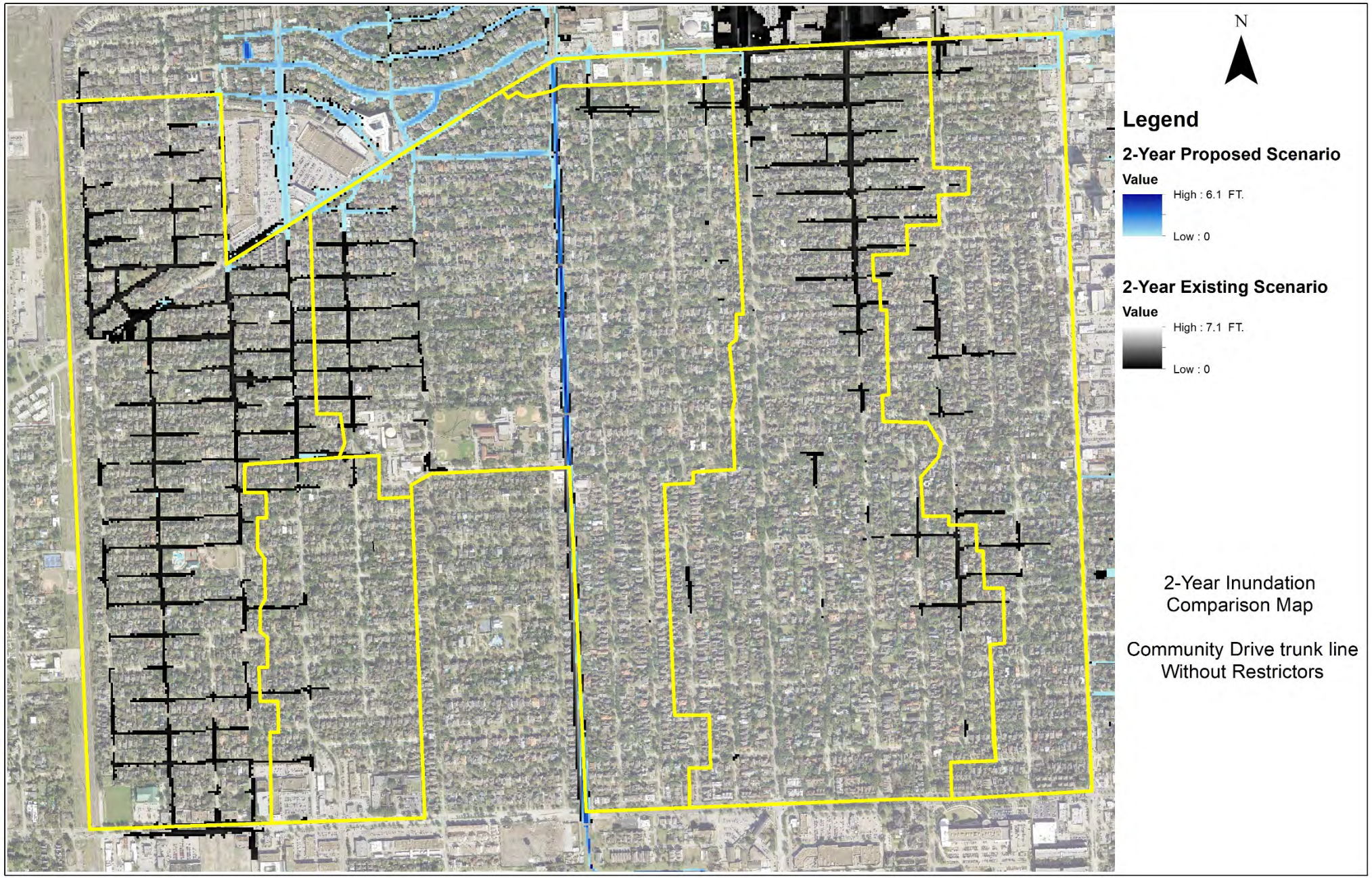


Estimate

$60M*

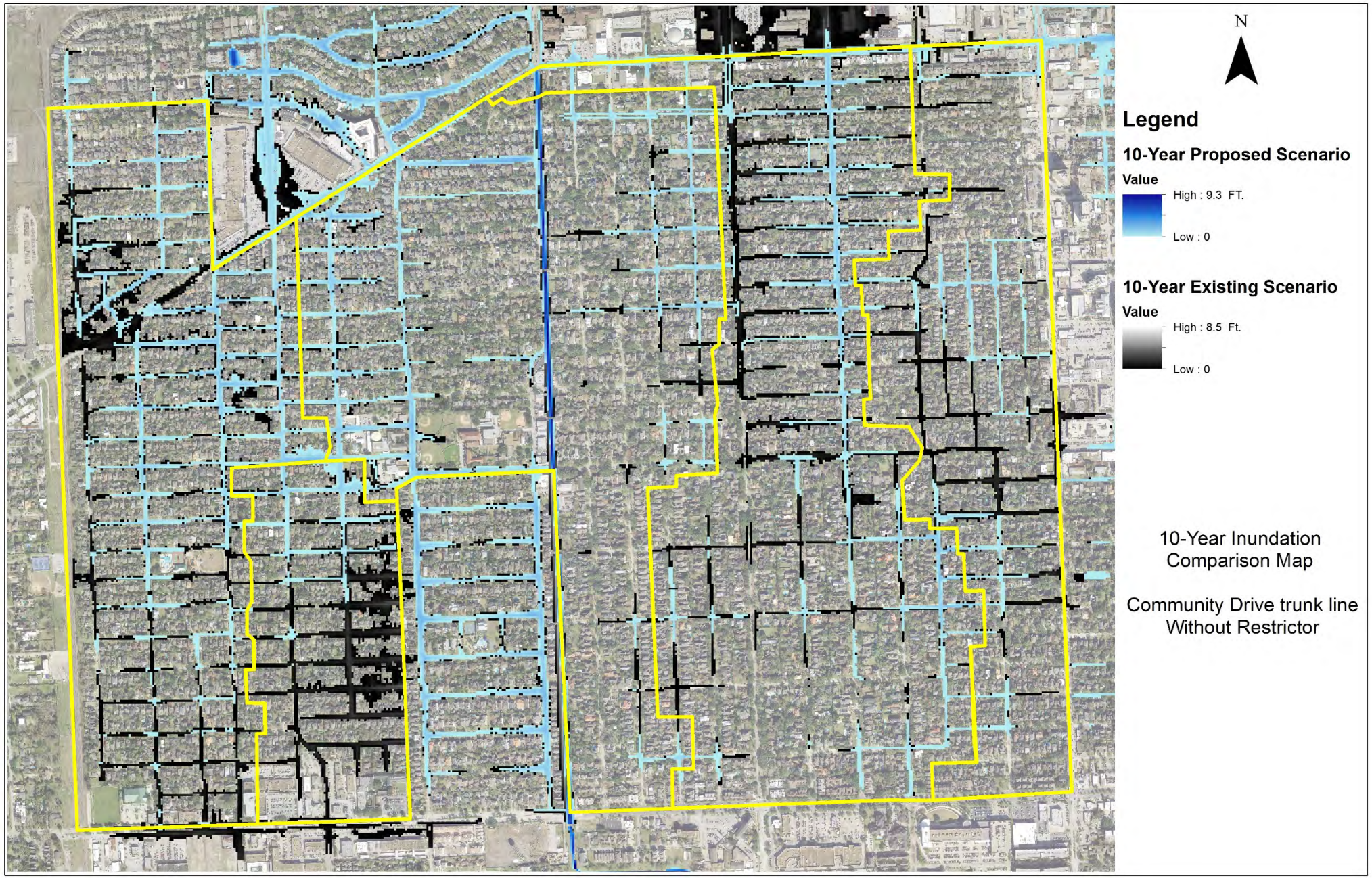
* Estimated cost for drainage upgrades and associated road replacement for sections as shown

Along Community Drive and shared line at city limit



Note

Appearance of Black hatch in the proposed conditions indicates the improvement to the flooding conditions



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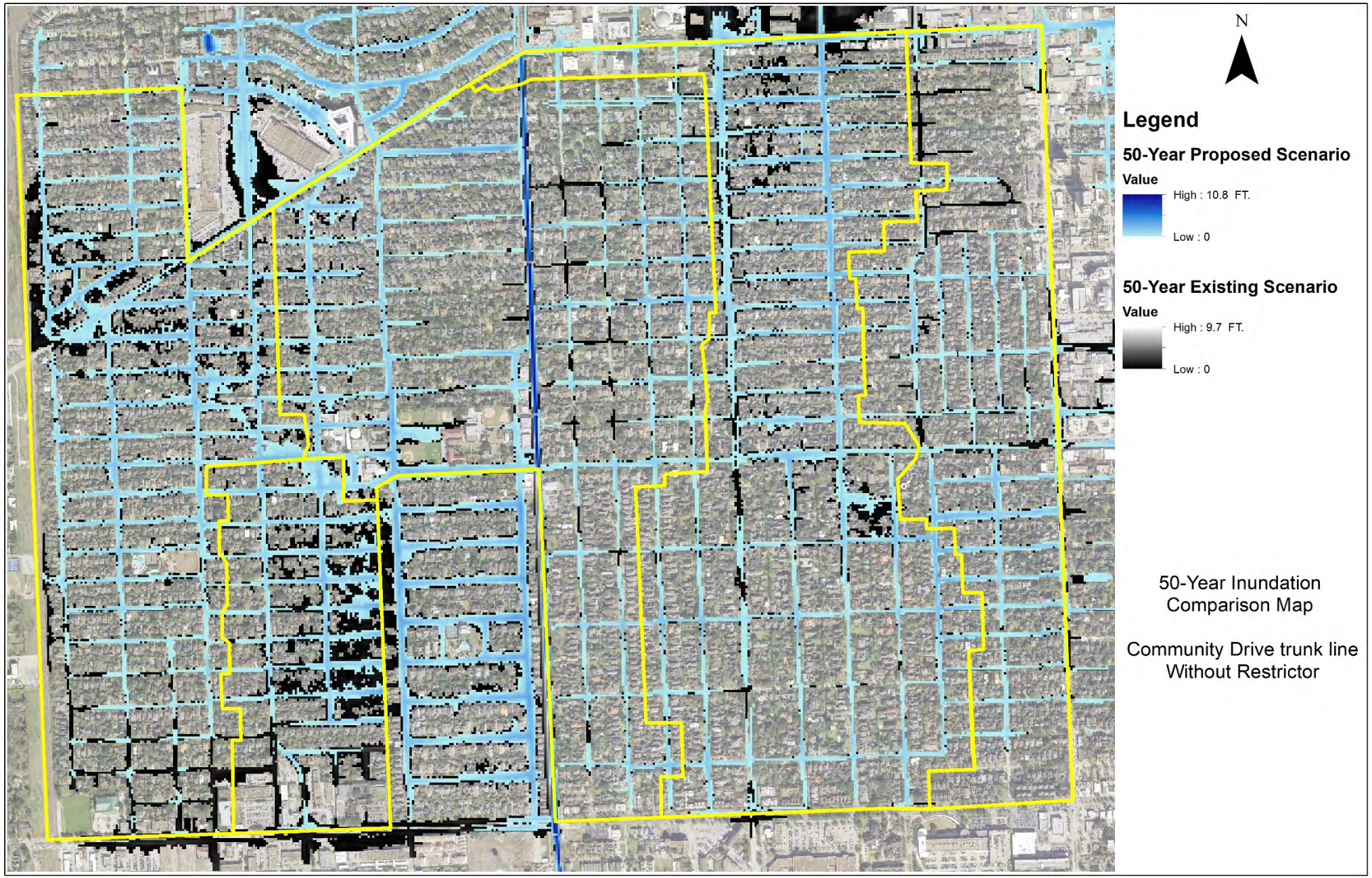

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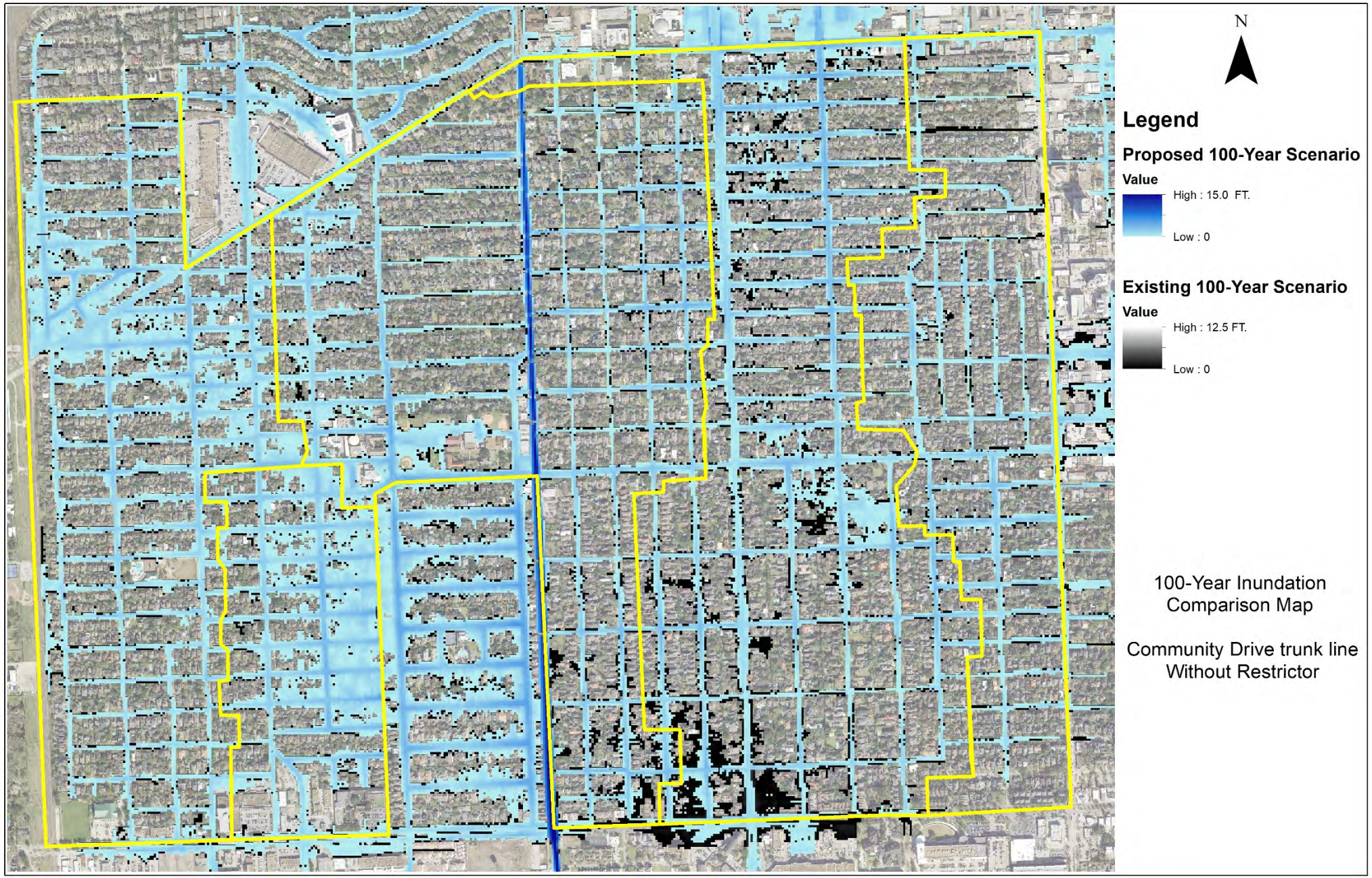

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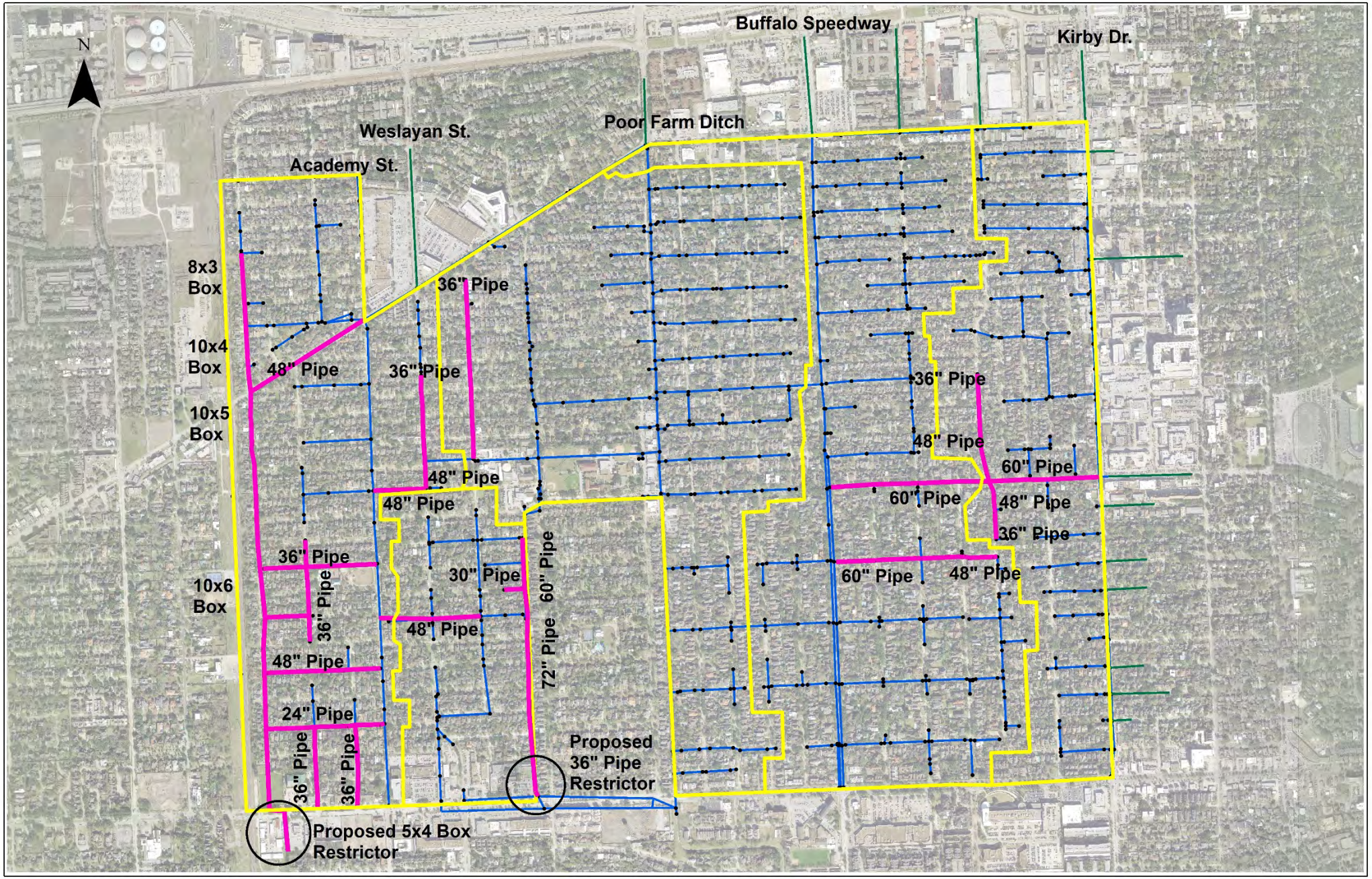
HT&J, LLC

Proposed Conditions

Flooding Conditions Comparison

Existing Vs Proposed

With Restrictor



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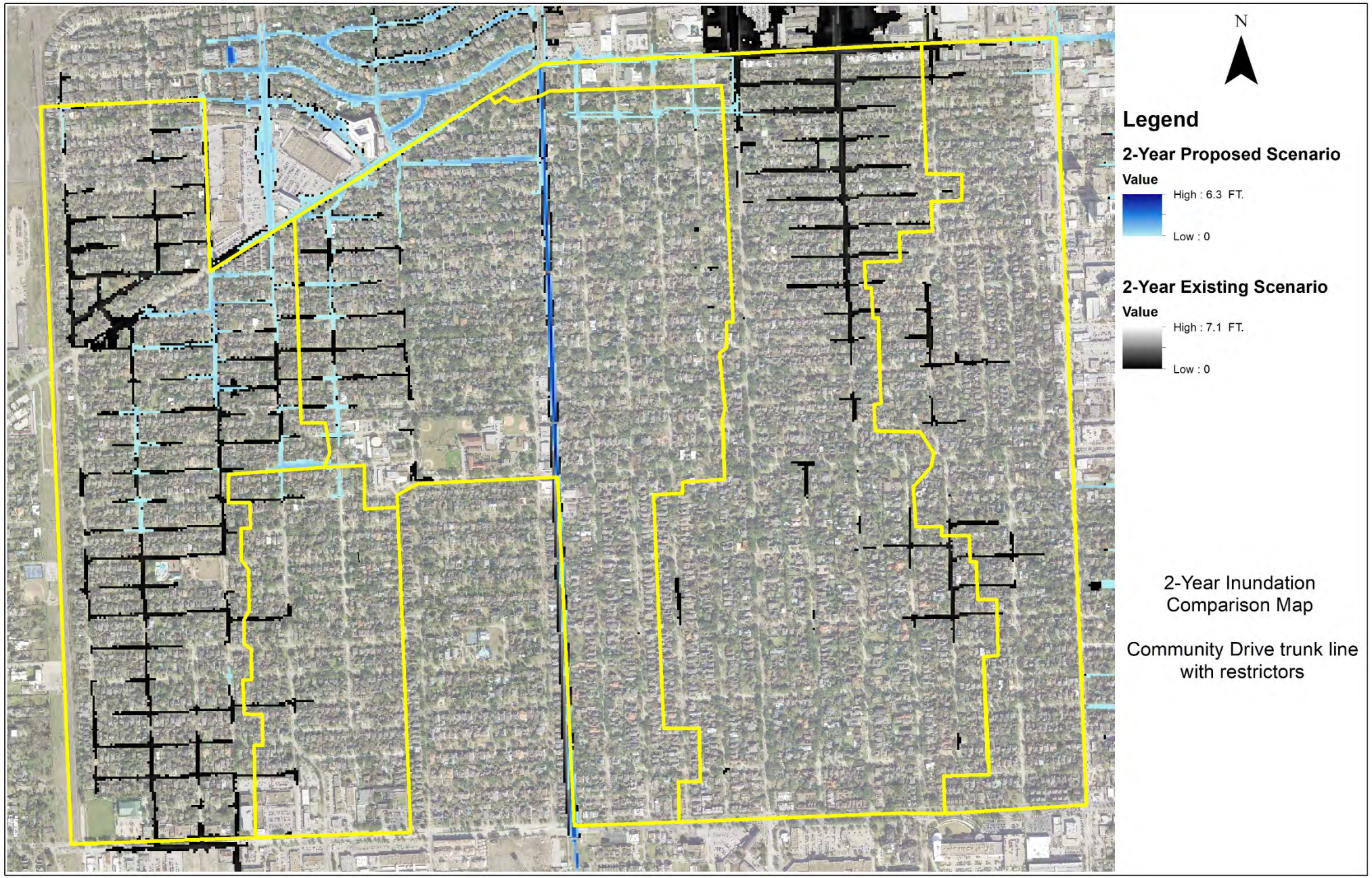

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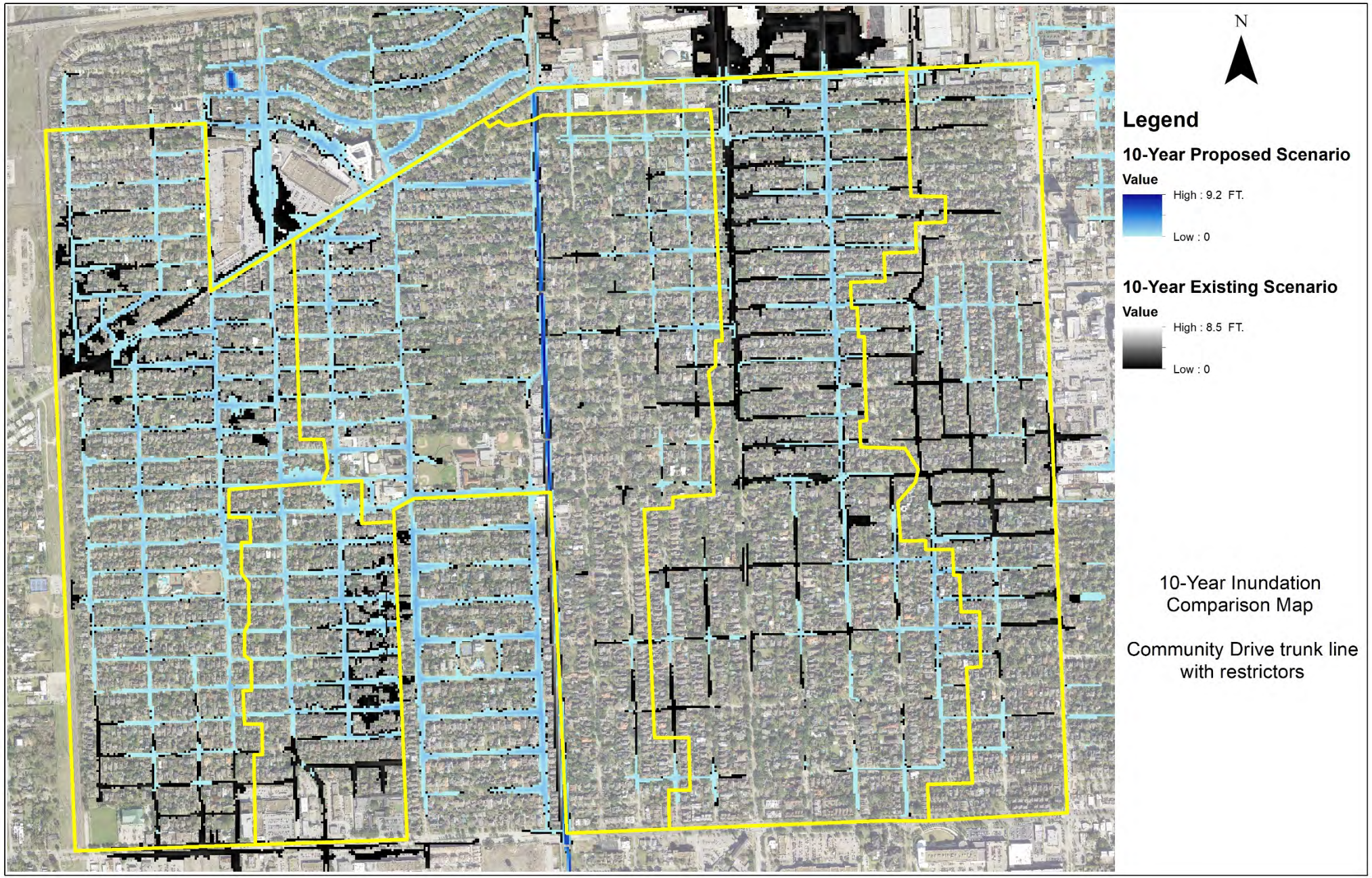

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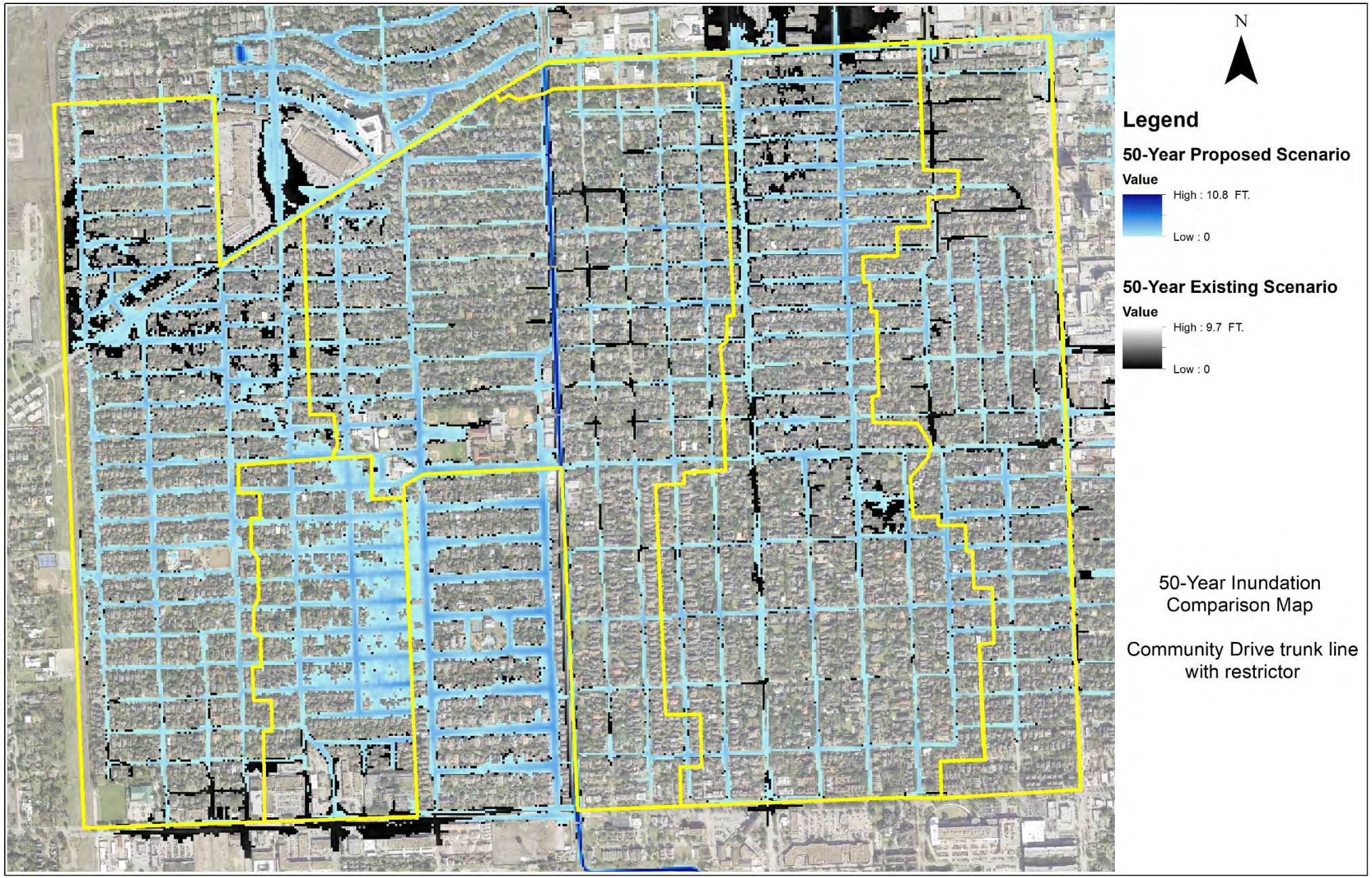

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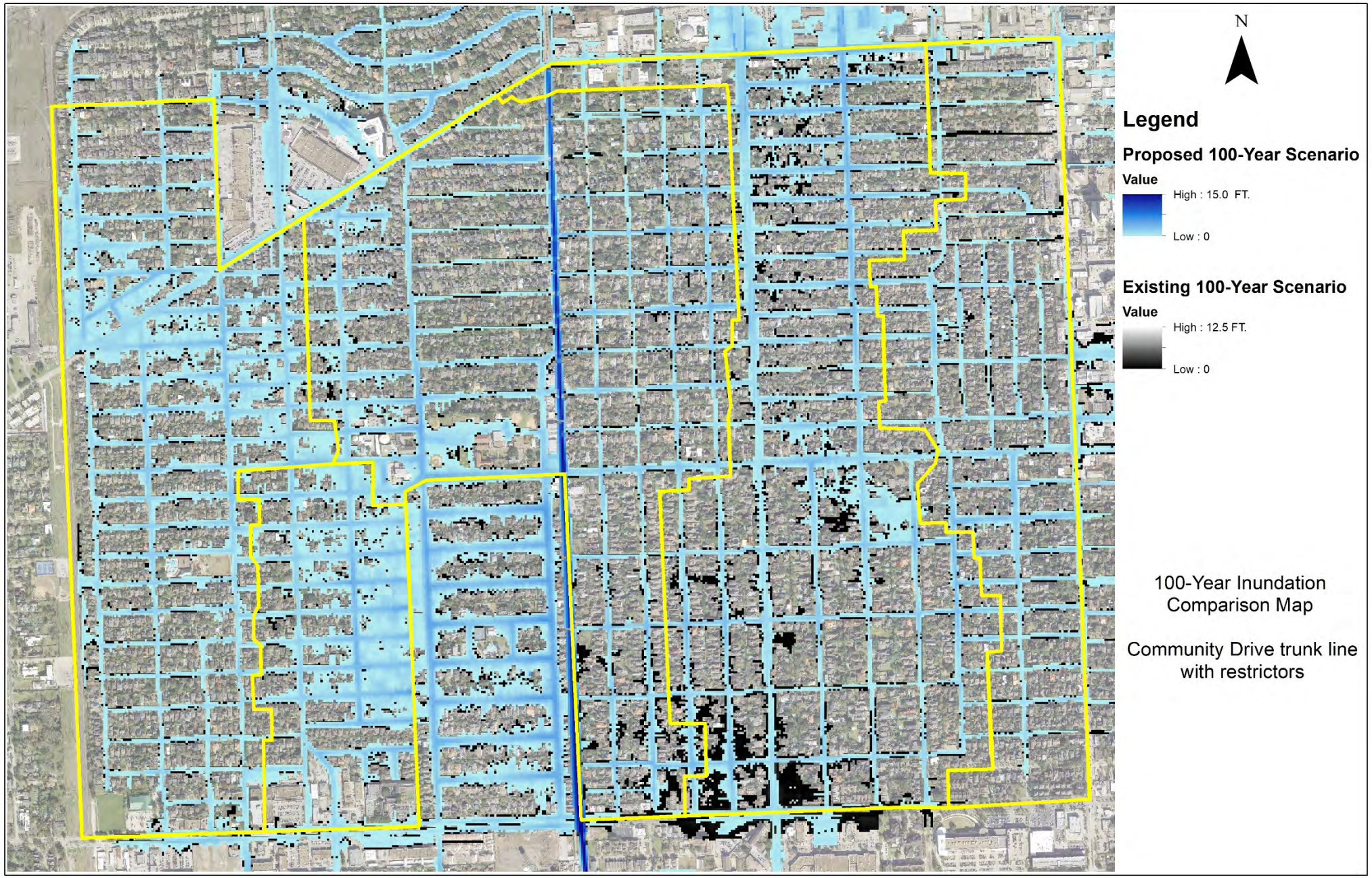

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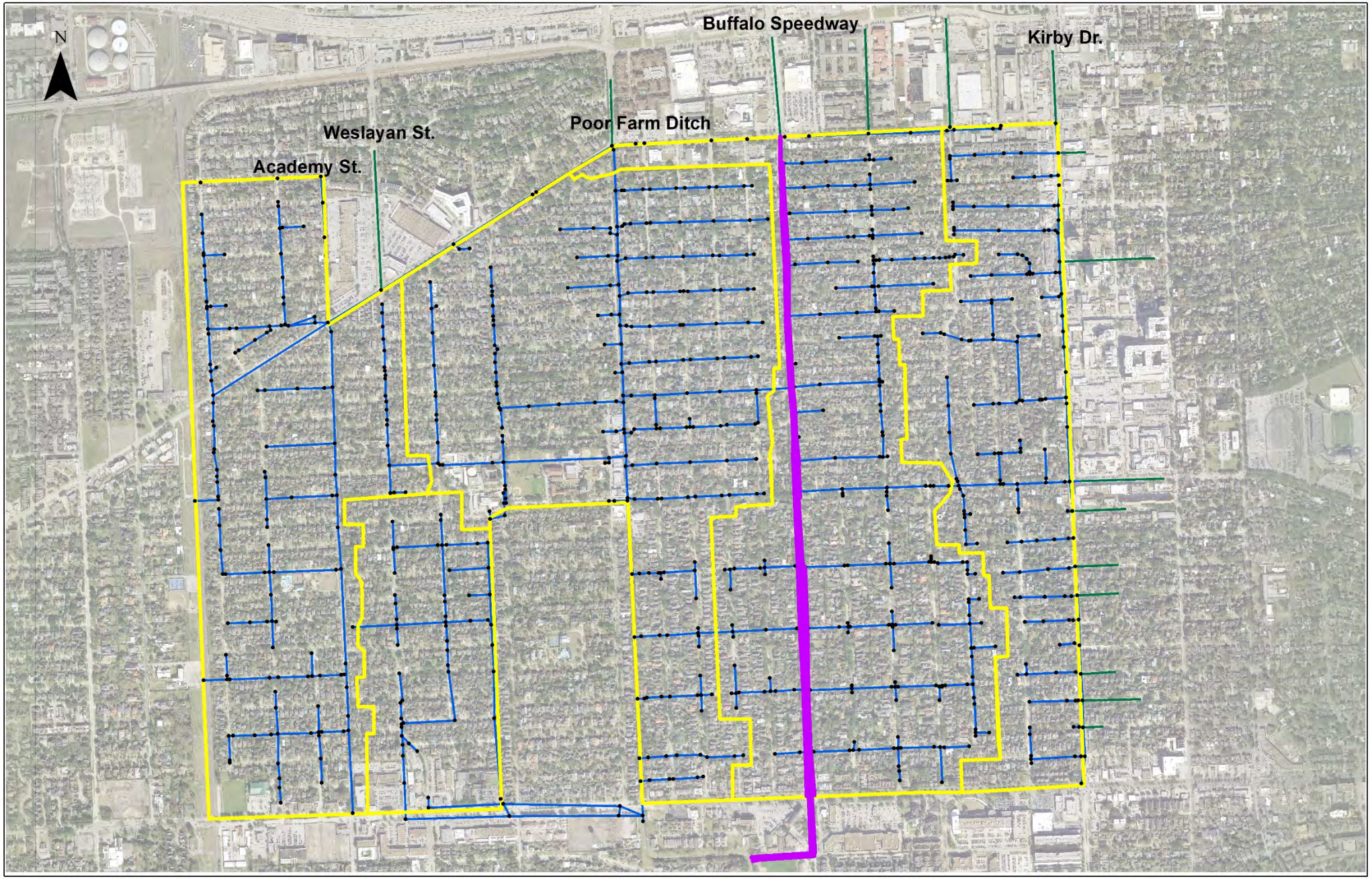
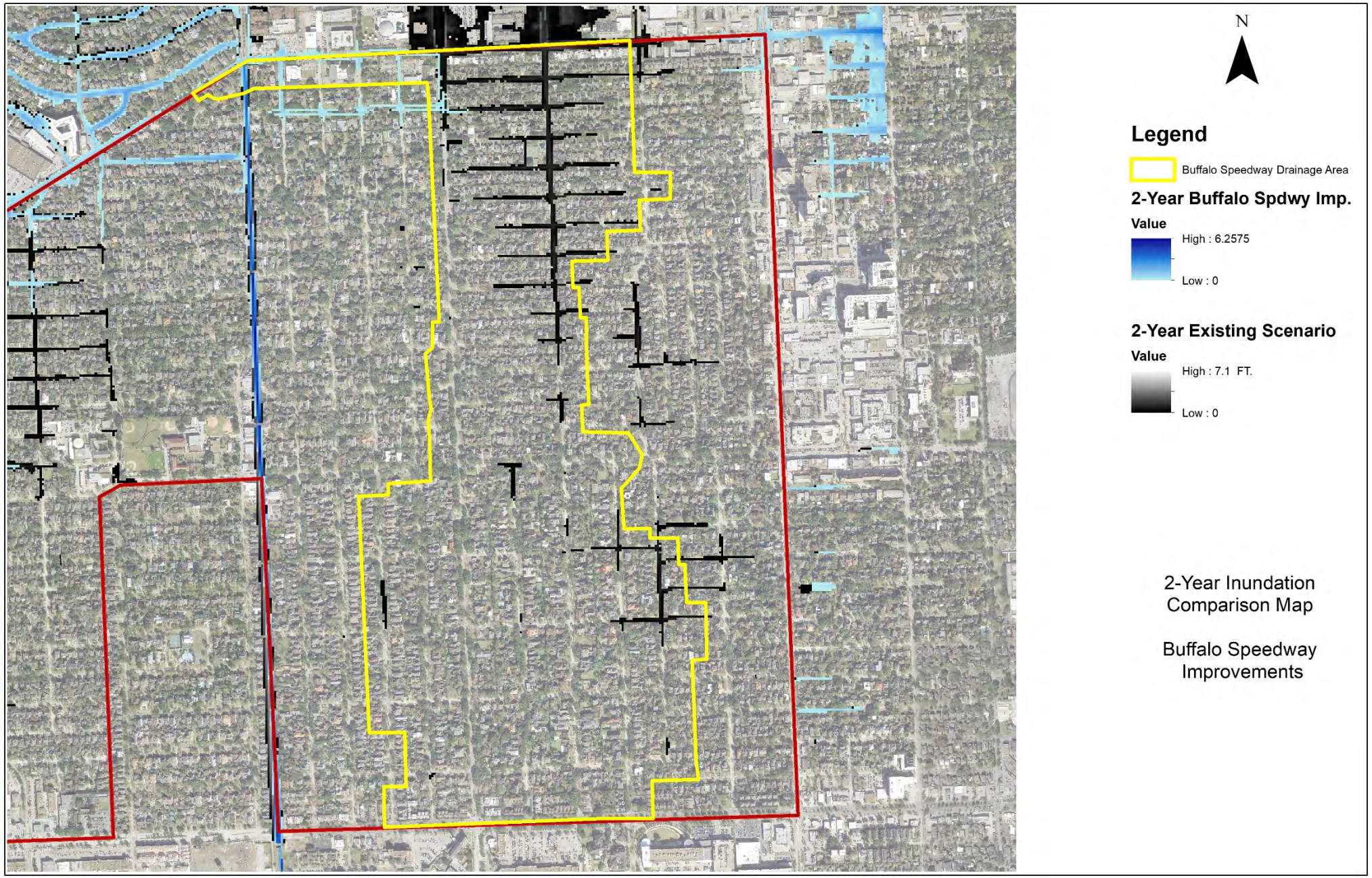
Buffalo Speedway Improvement



Buffalo Speedway Improvements



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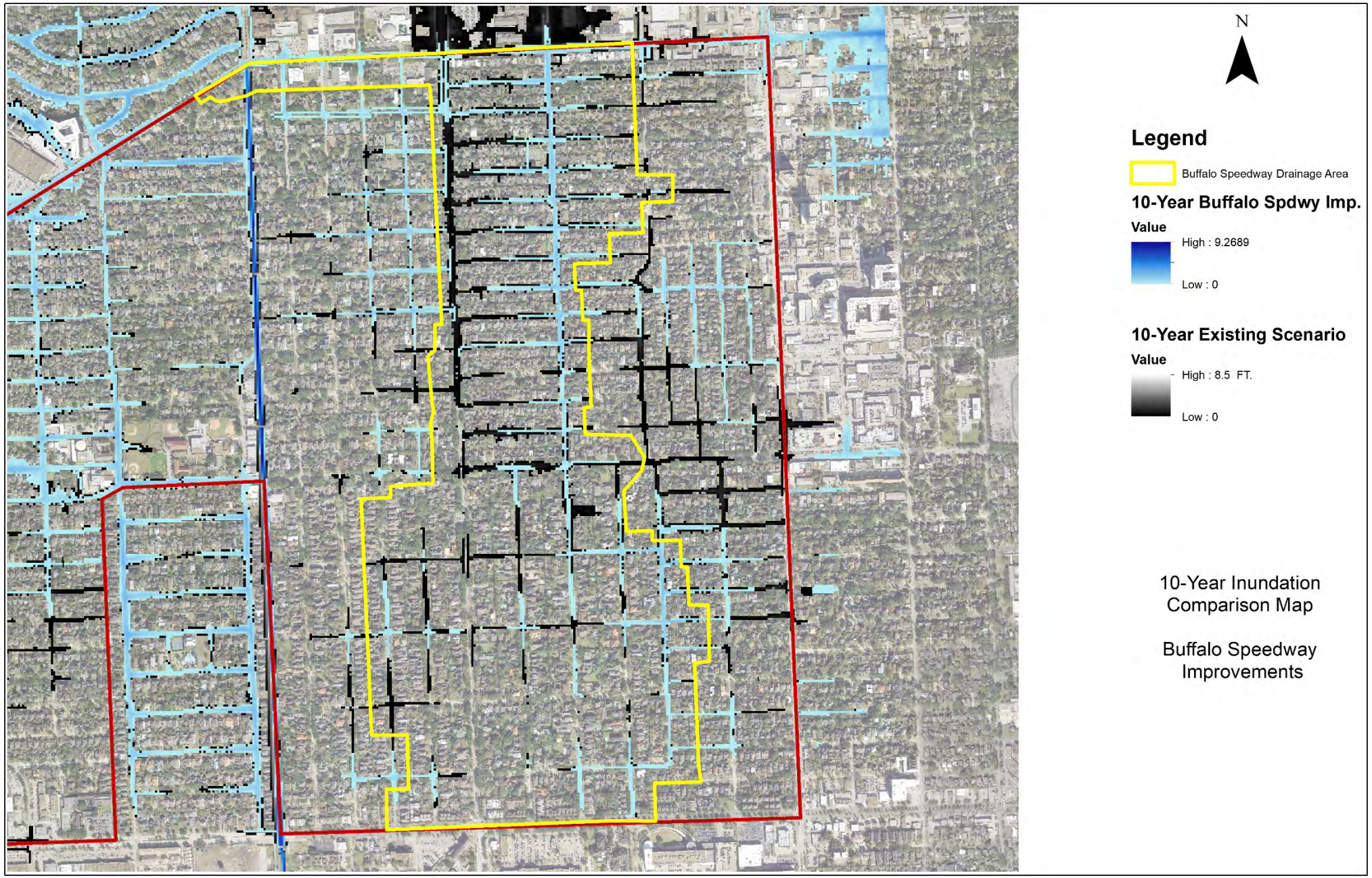

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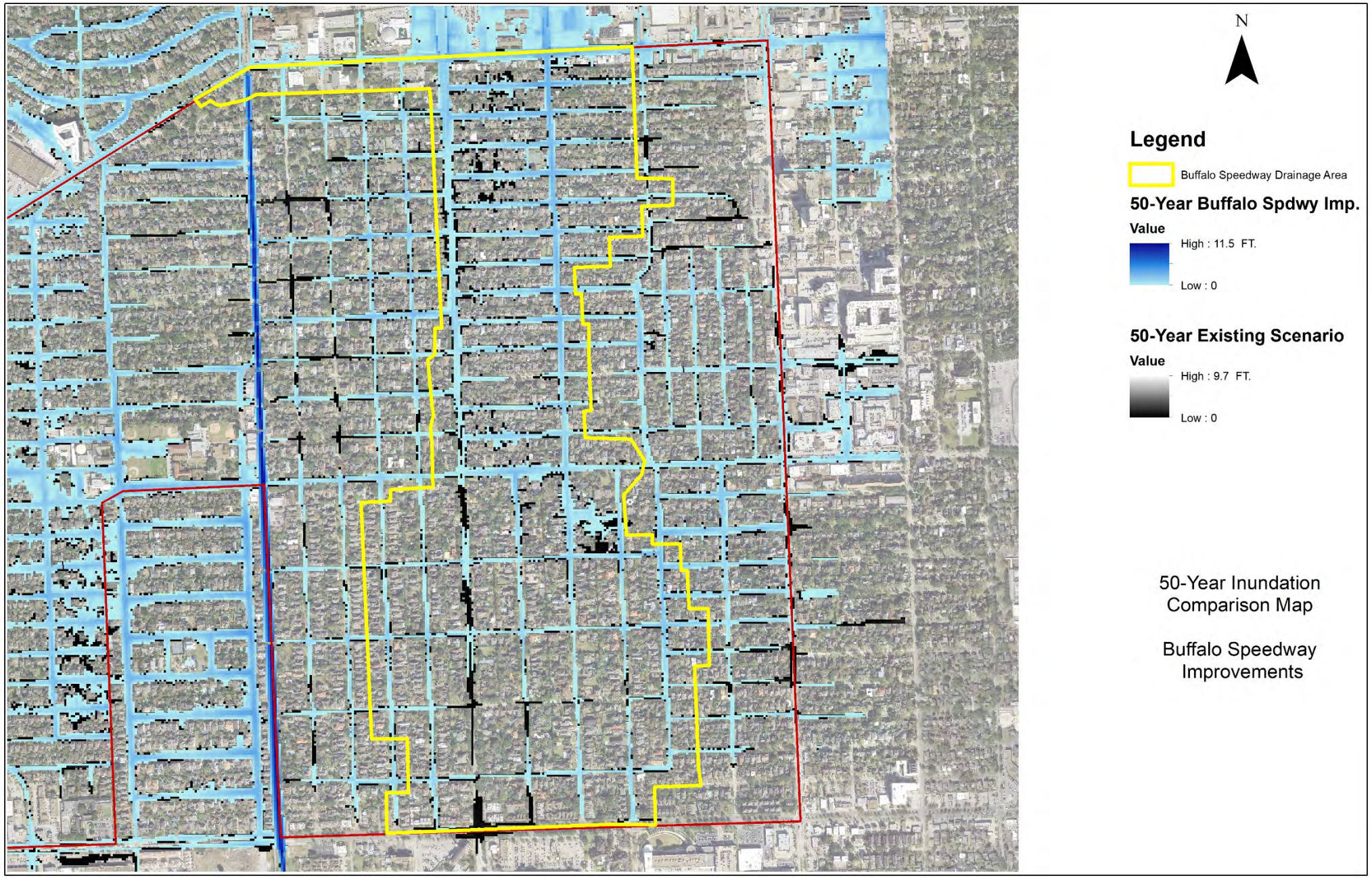

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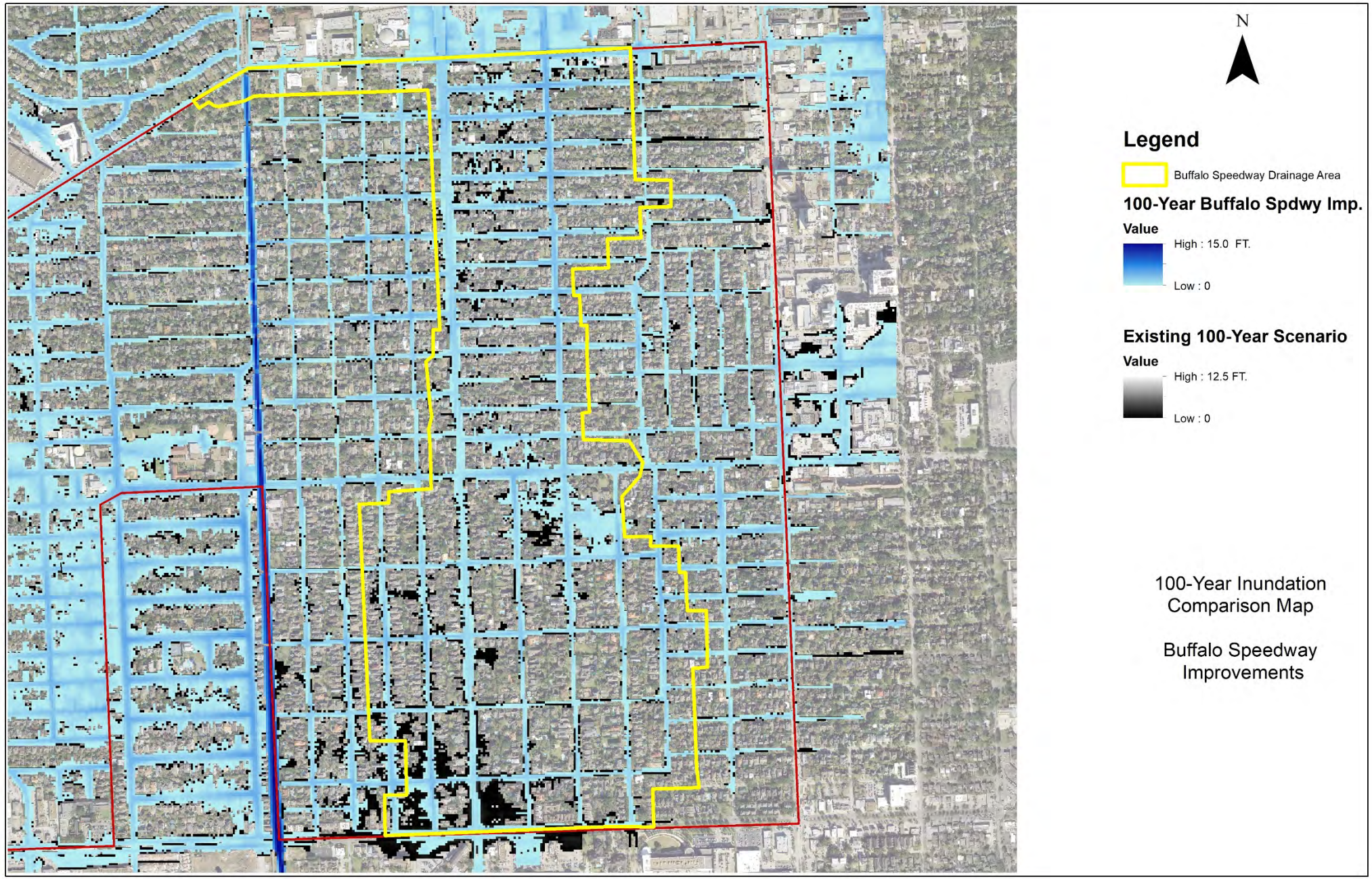

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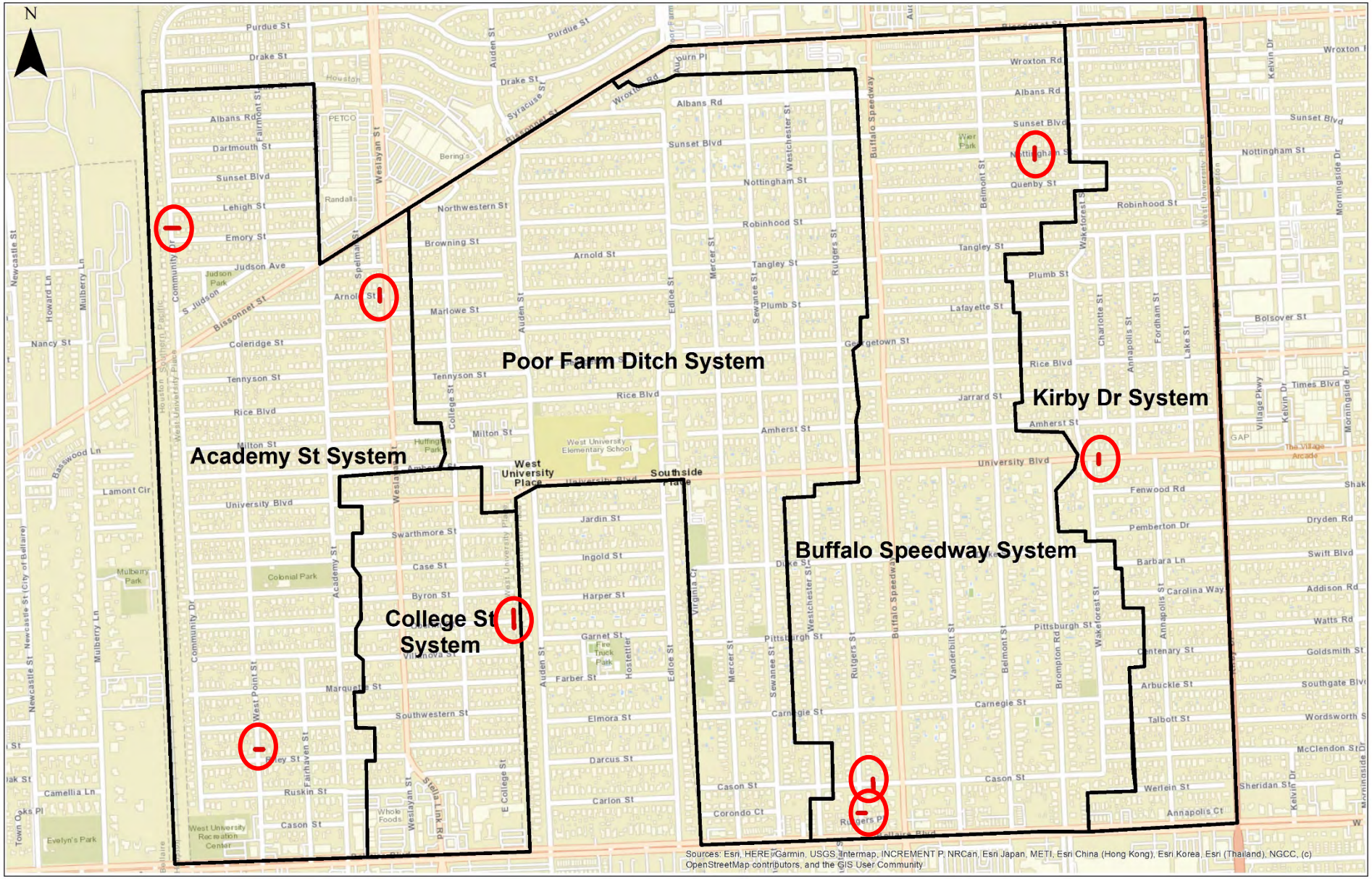
Water Surface Comparison at Selected Locations



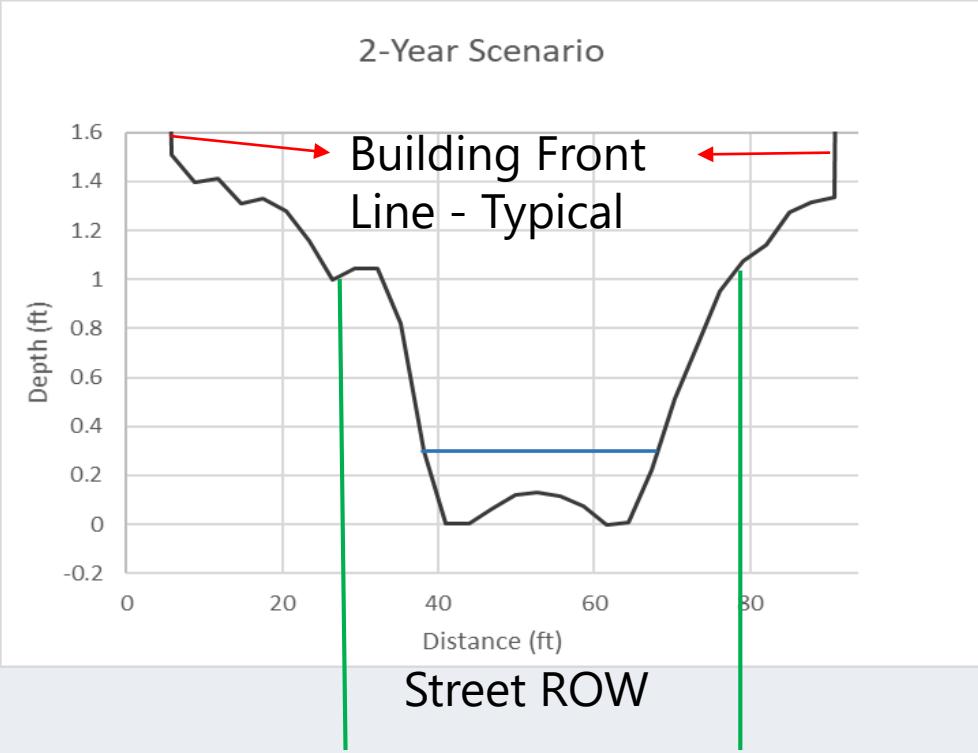
Locations of Cross Sections

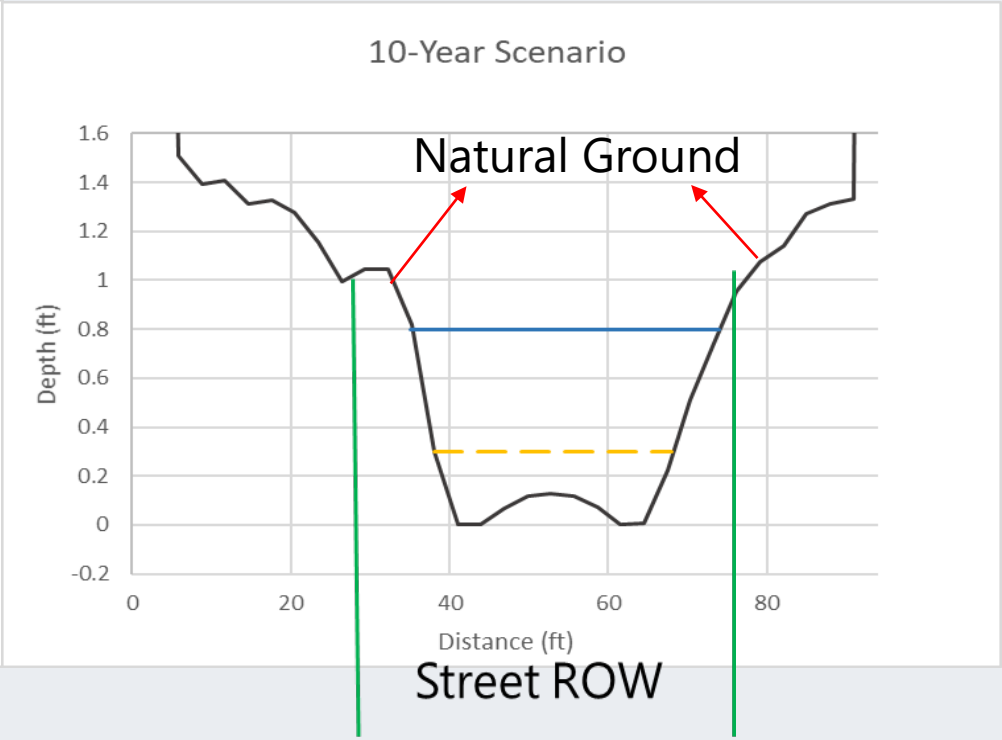
Typical WSEL Drop Vs Horizontal Shift

- At the critical elevation (near door step), the shift is more than the average shift (est.10 ft. for 3 inches drop)
- This is a typical section, not relevant to any storm event – only the relationship based on the slope
- Average shift = 6ft. per 3 inches drop.

WSEL = Water Surface Elevation

No WSEL line means the WSEL is below the street elevation





WSEL Existing

WSEL Proposed w/ Restrictor

WSEL Proposed w/o Restrictor

- **Cross Sections were taken building to building from 2018 LiDAR**
- **Vertical Line at the end indicate the face of the structure.**
- **ROW is approximate**

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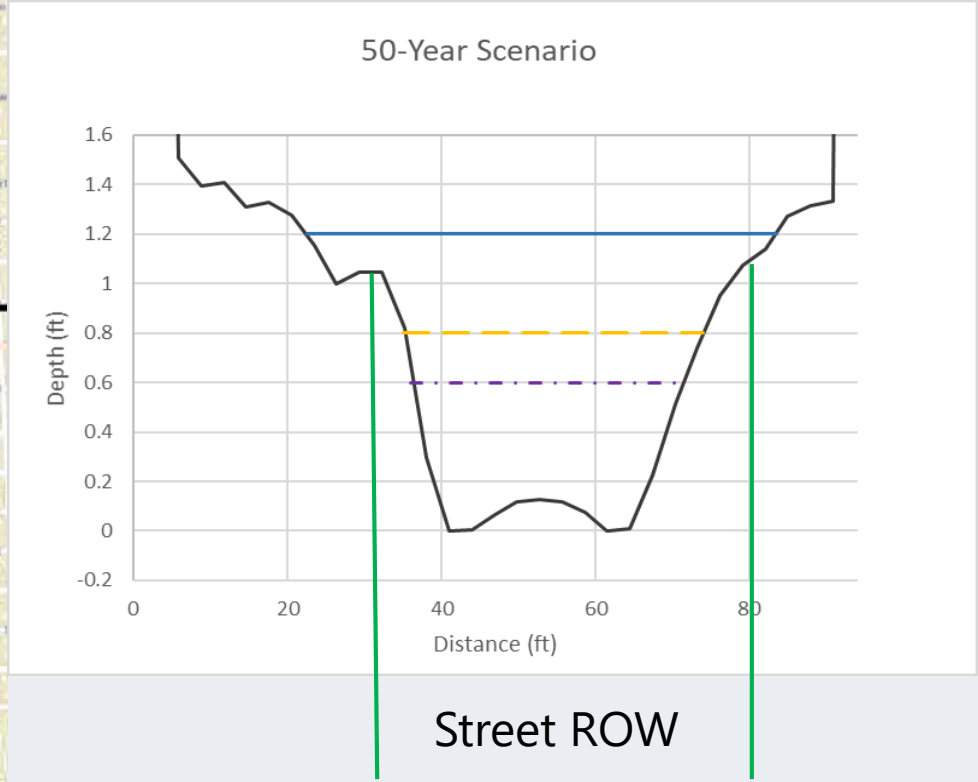

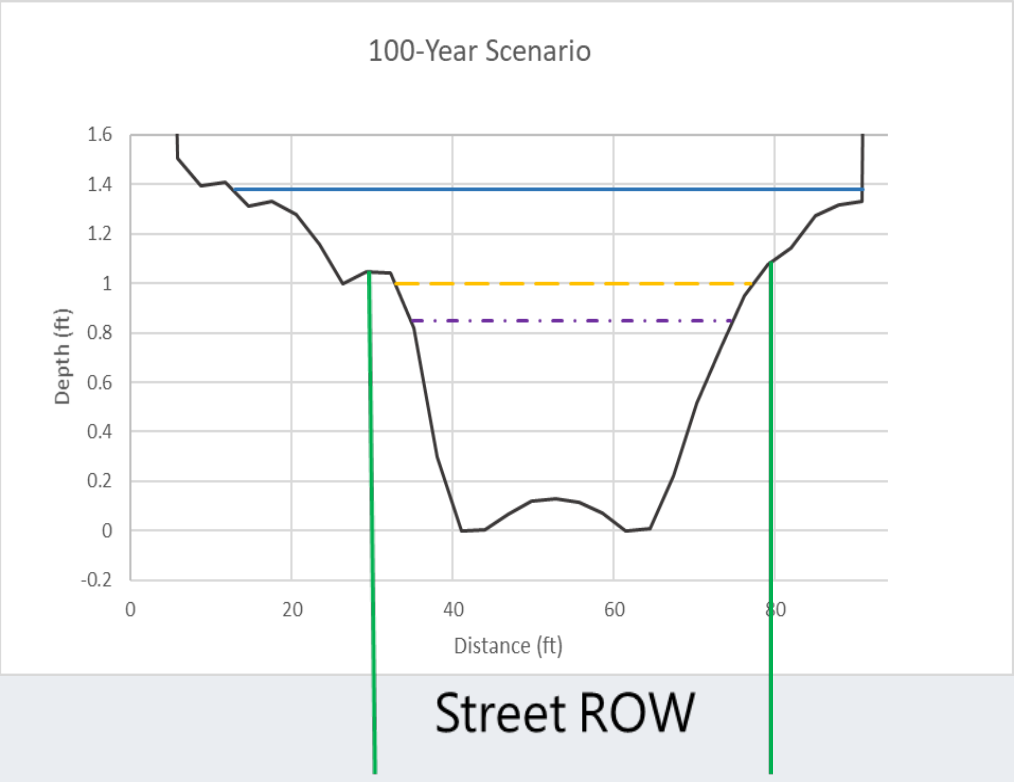

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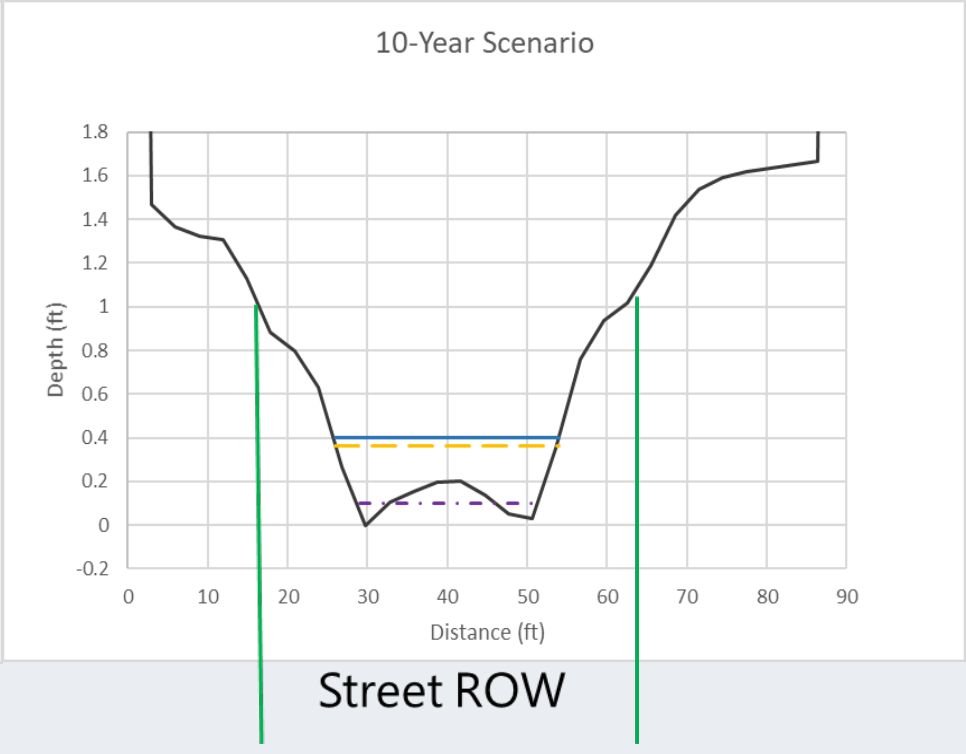

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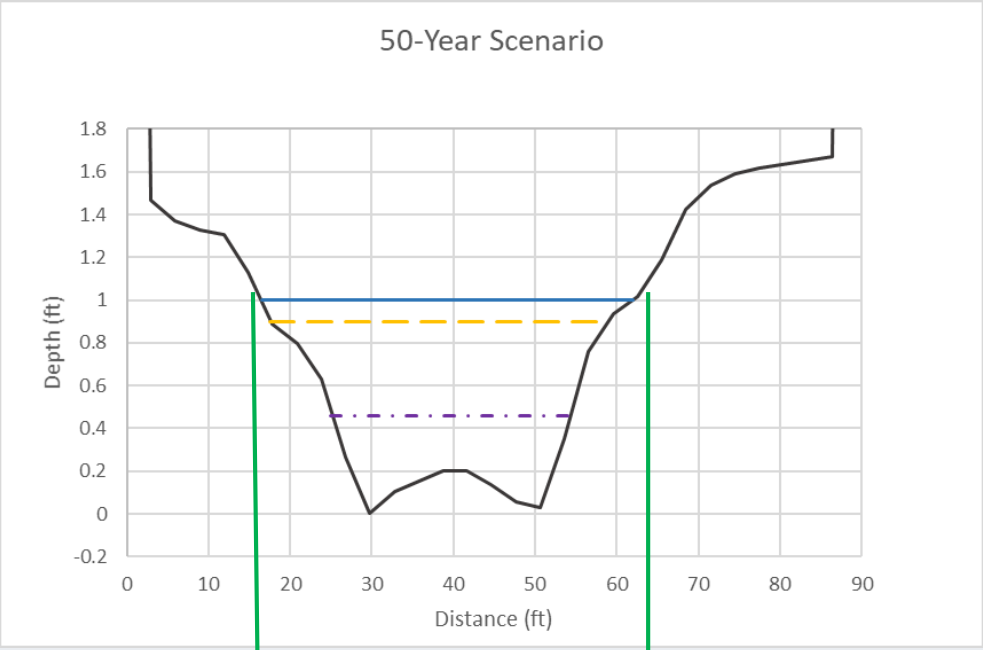

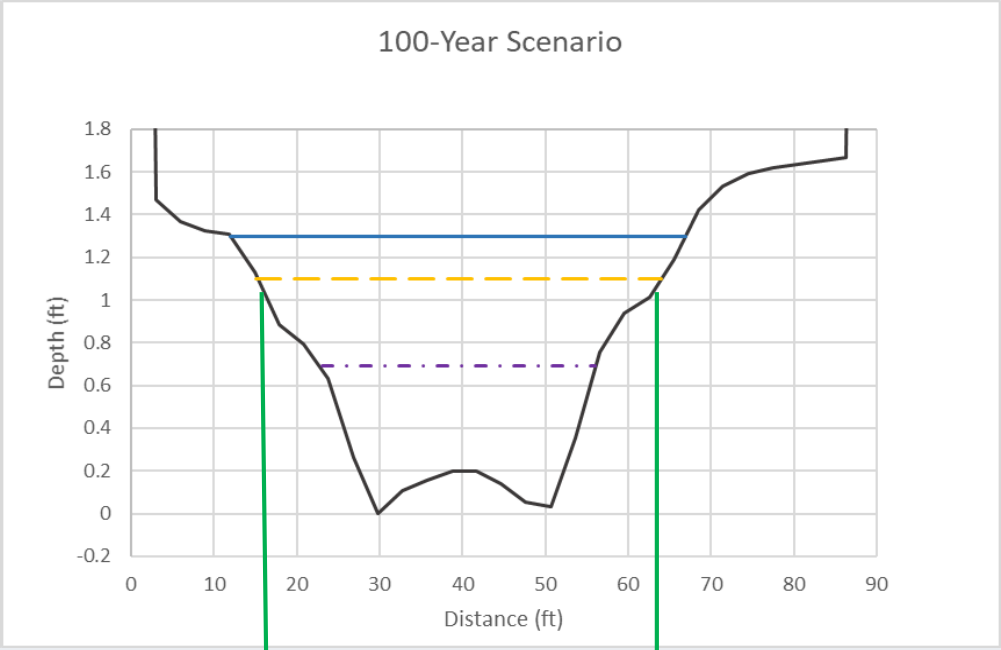

Street ROW

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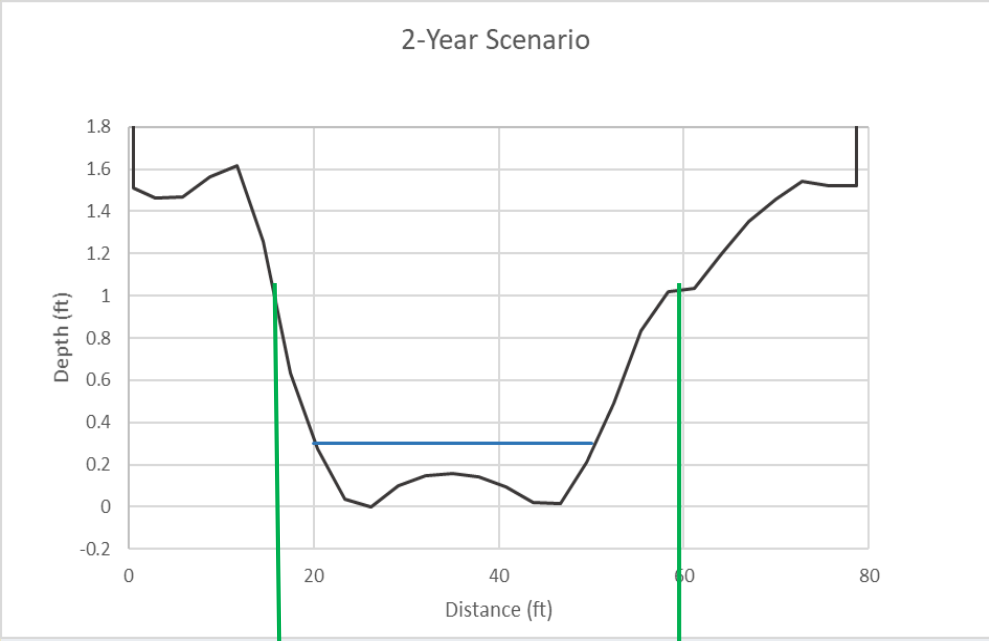

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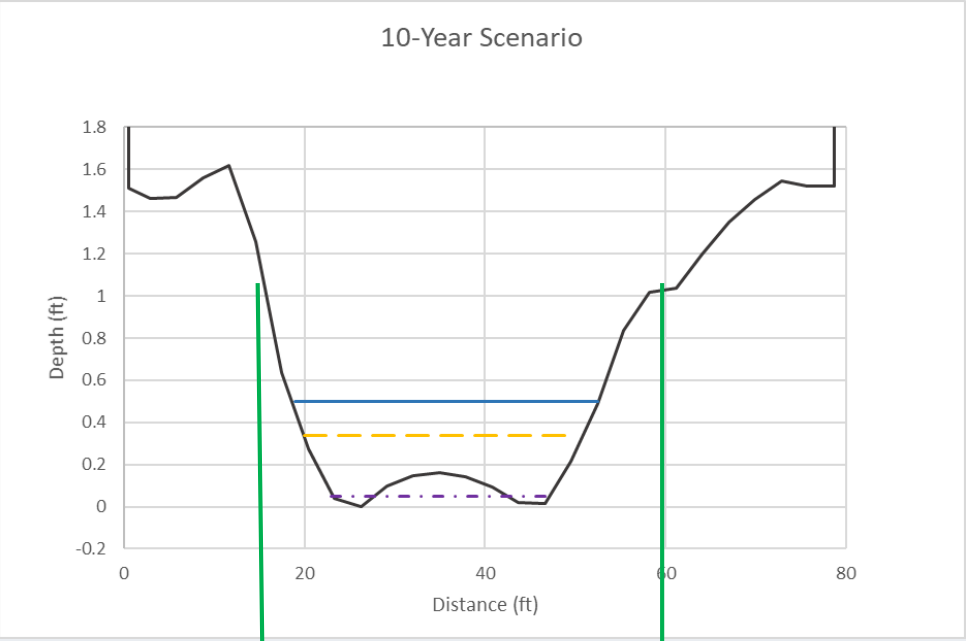

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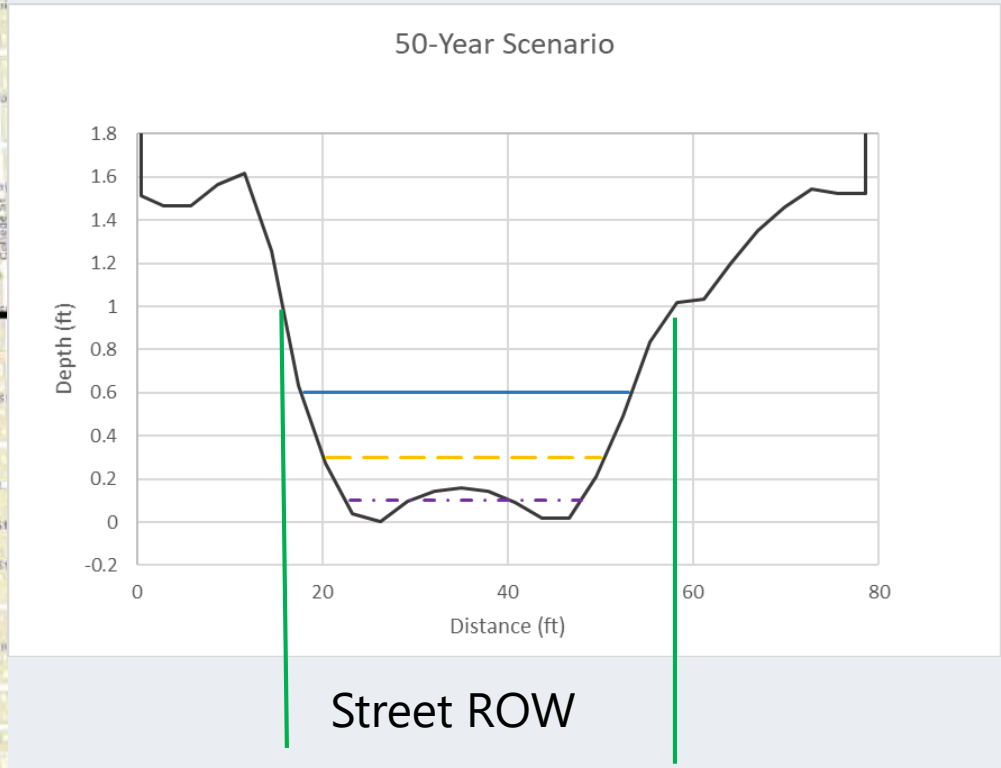

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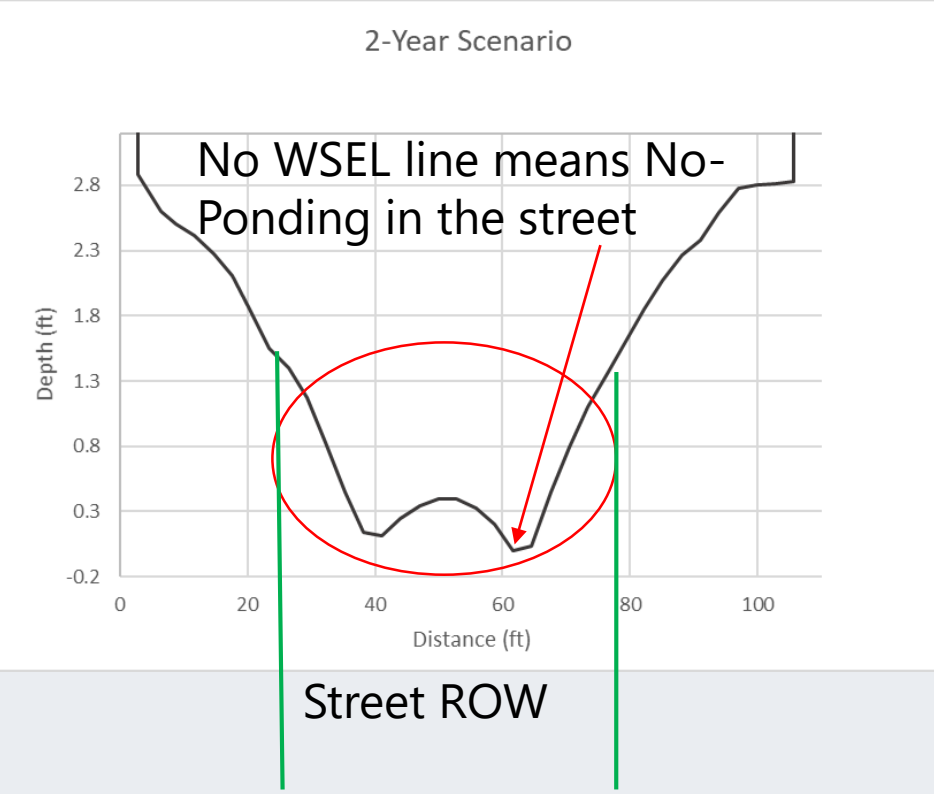

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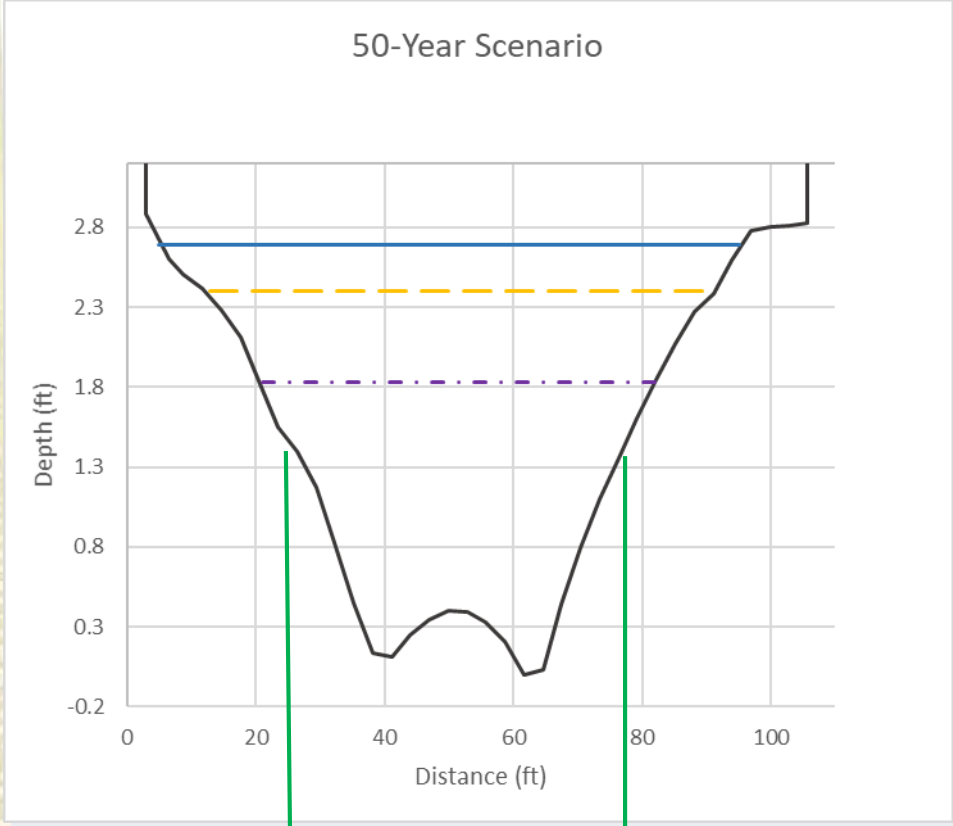

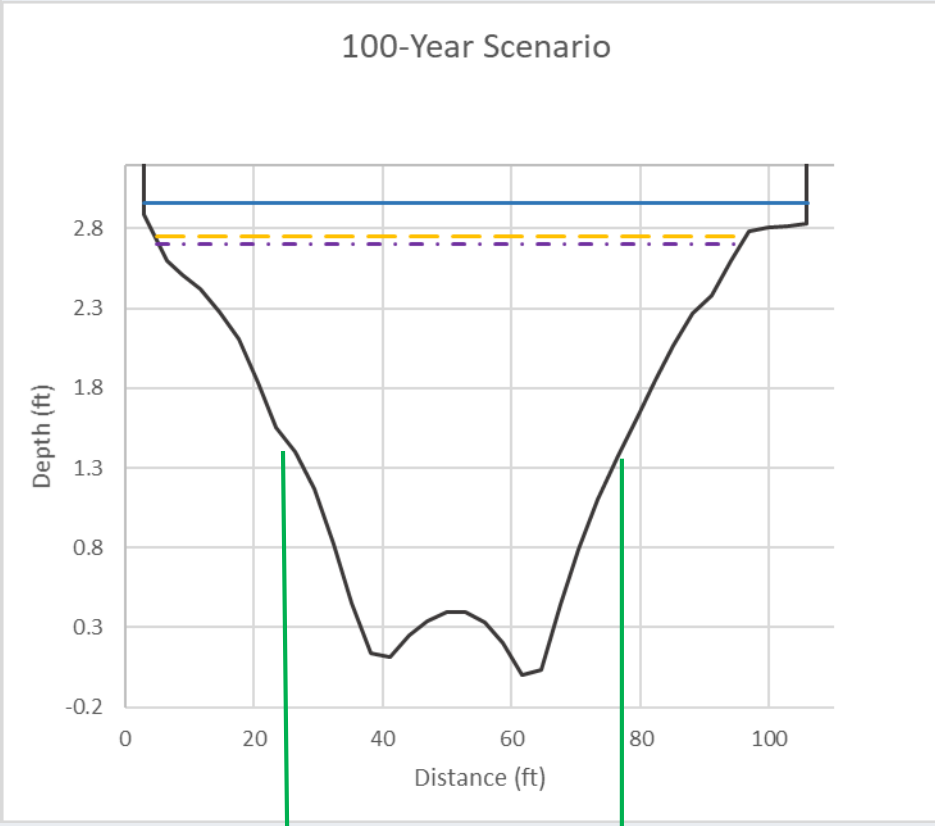

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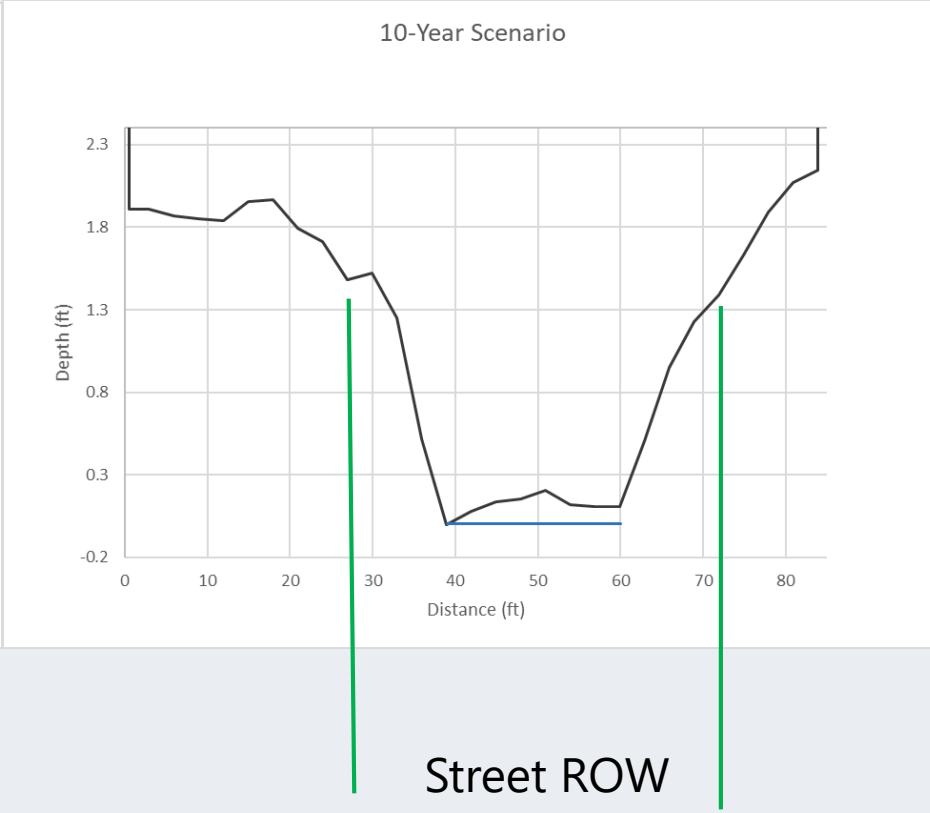

WSEL Existing

WSEL –Buffalo Speedway

WSEL - Proposed

HT&J, LLC

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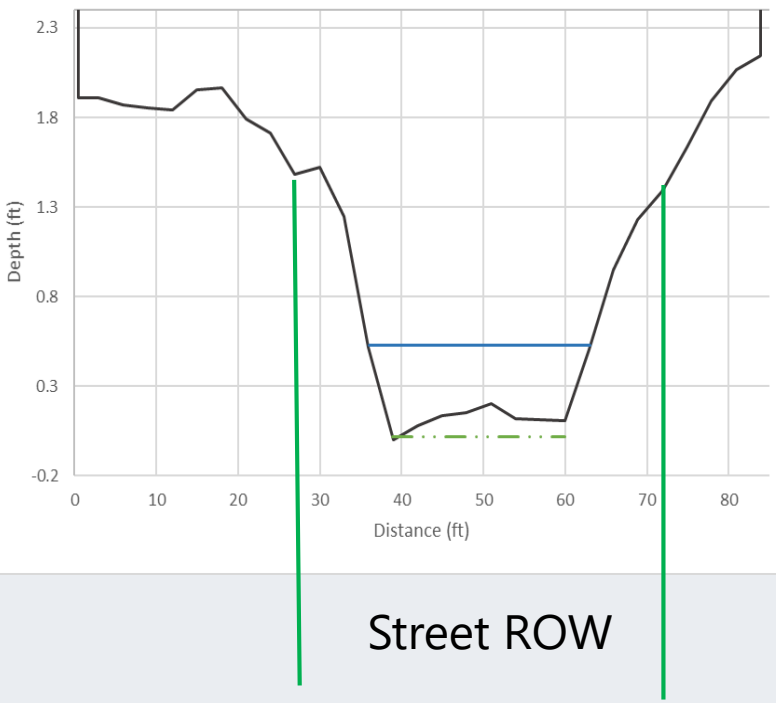

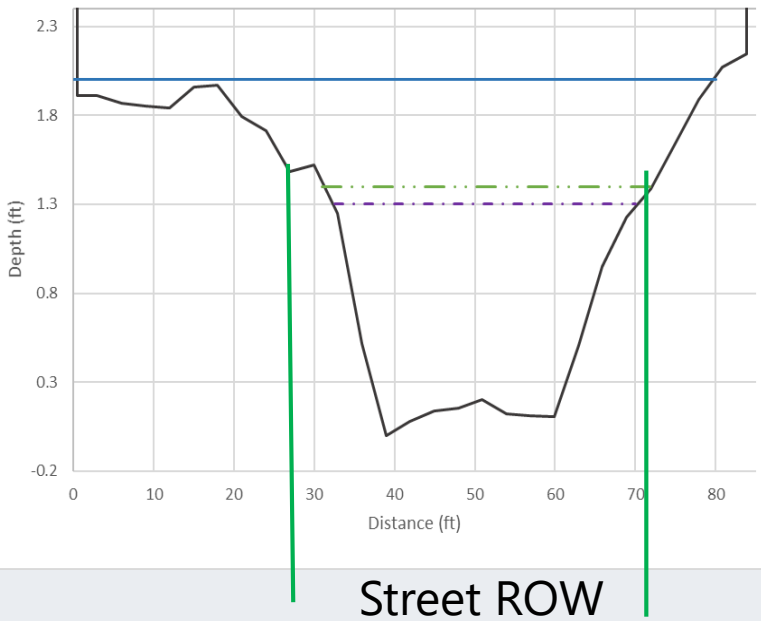

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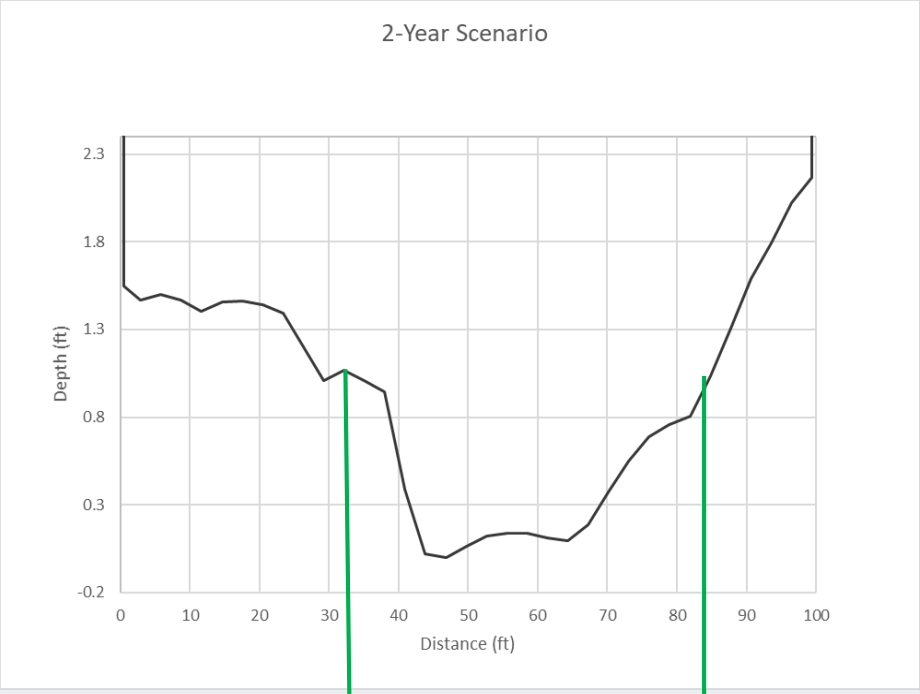

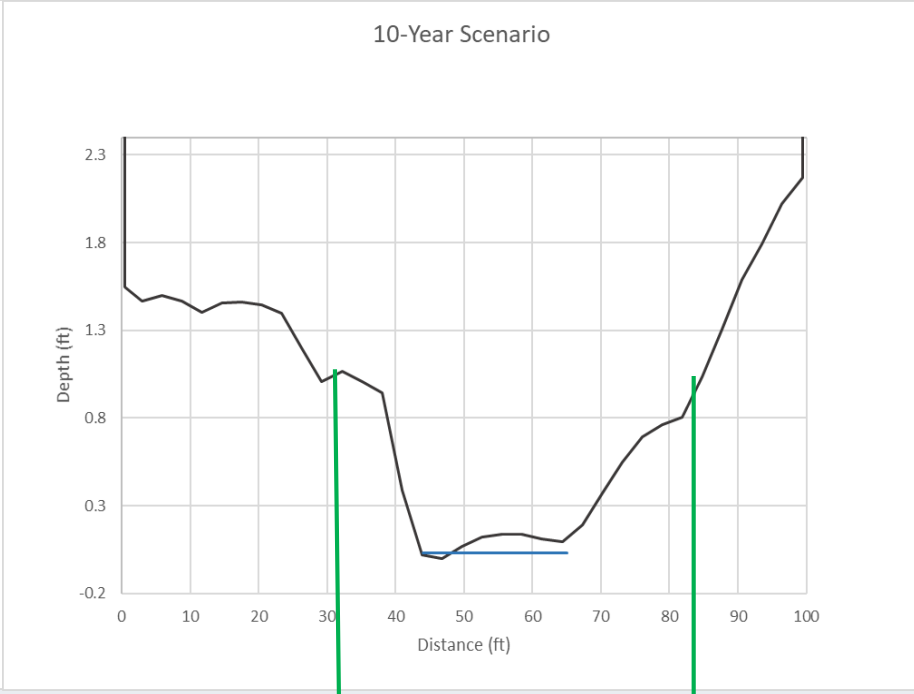

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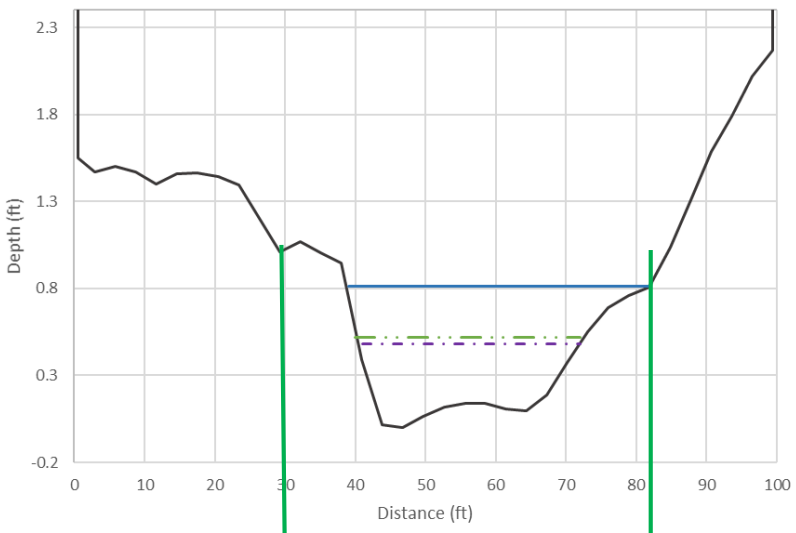

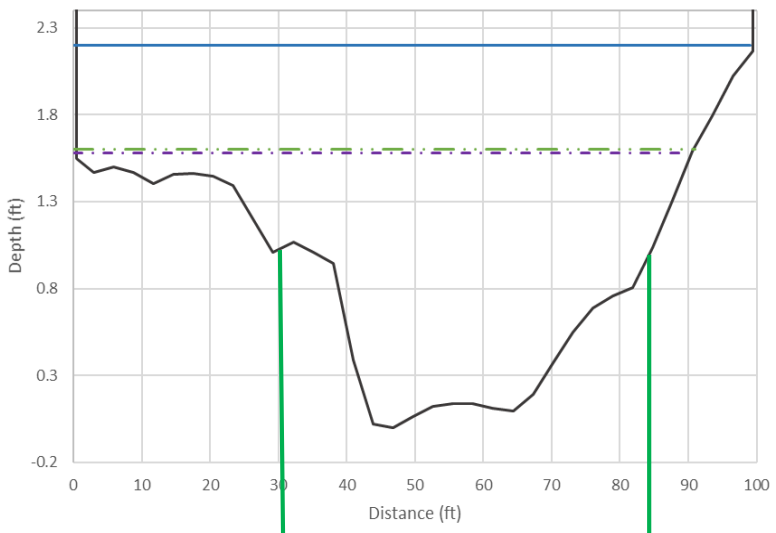

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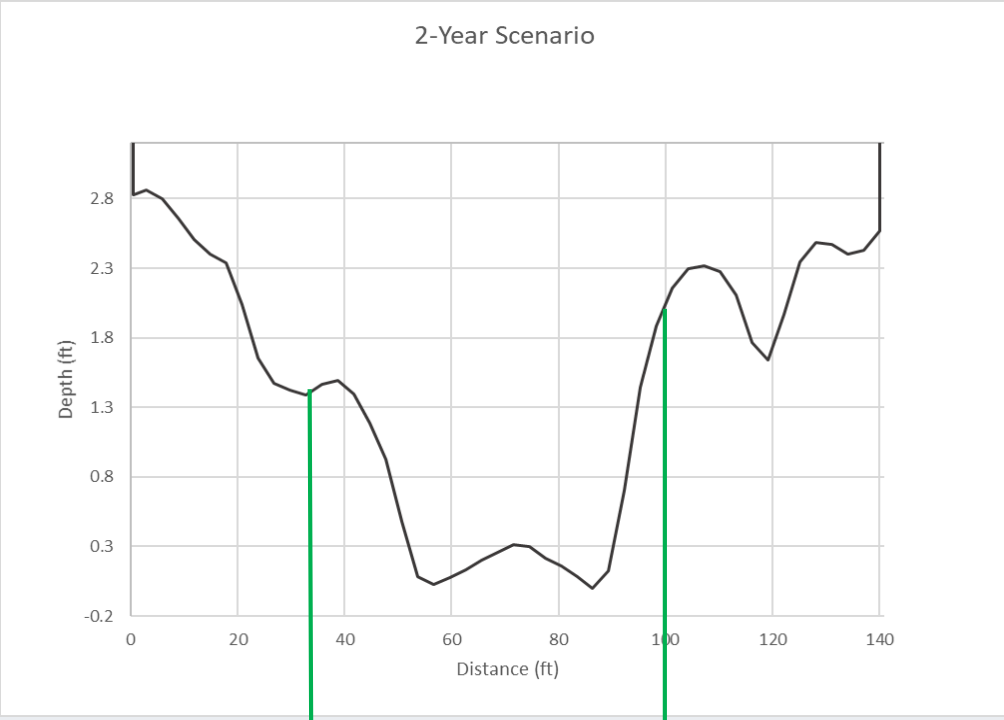

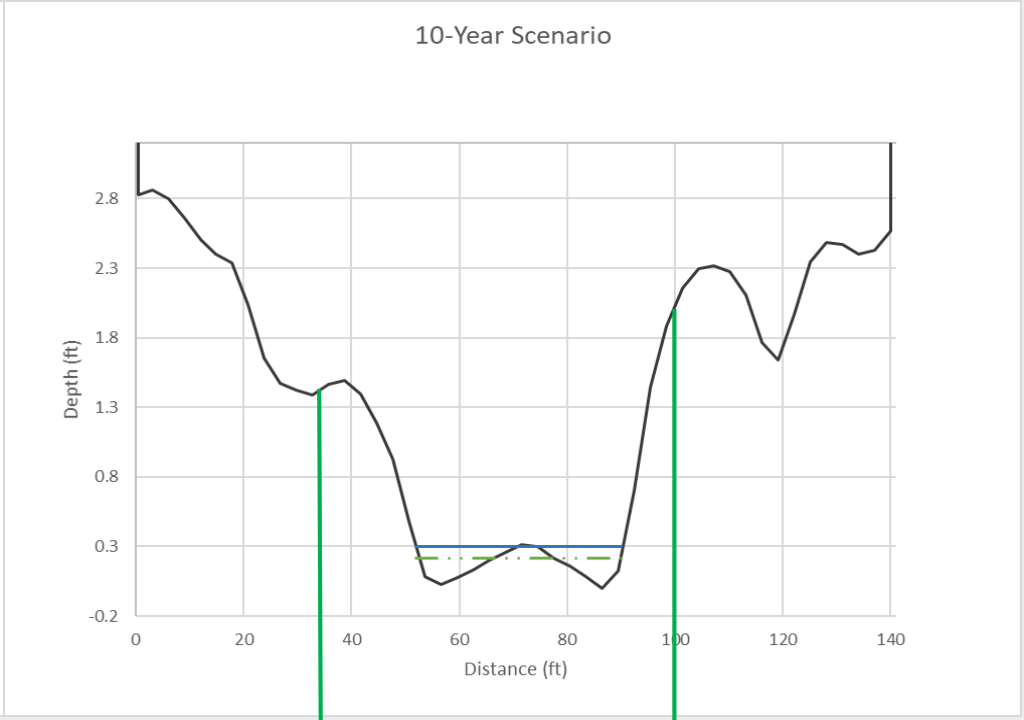

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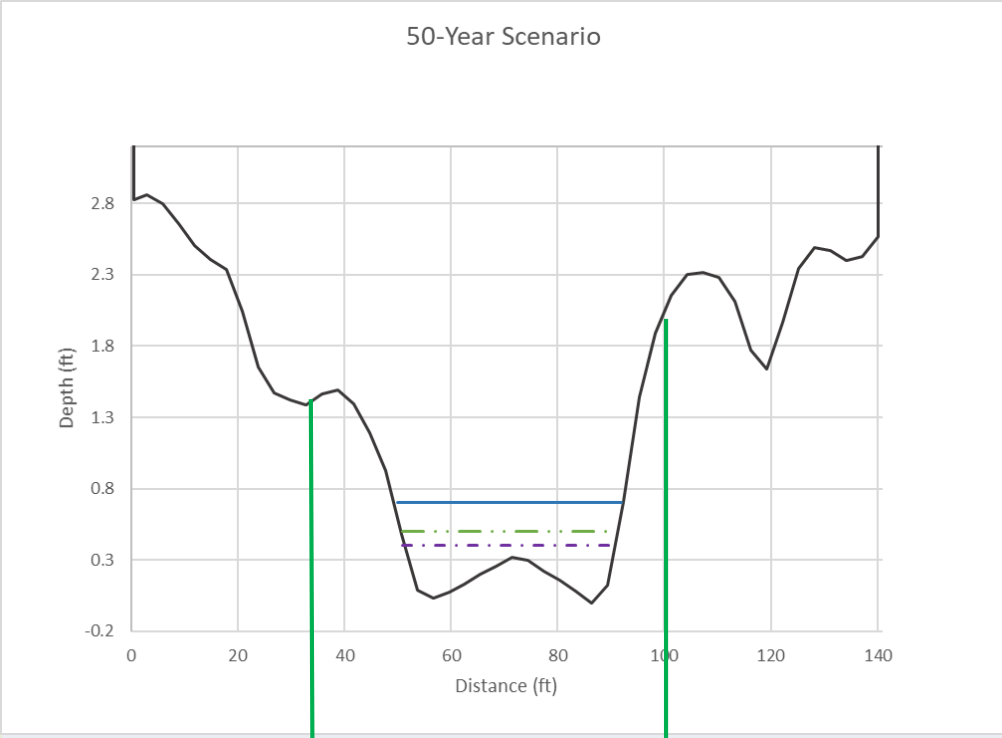

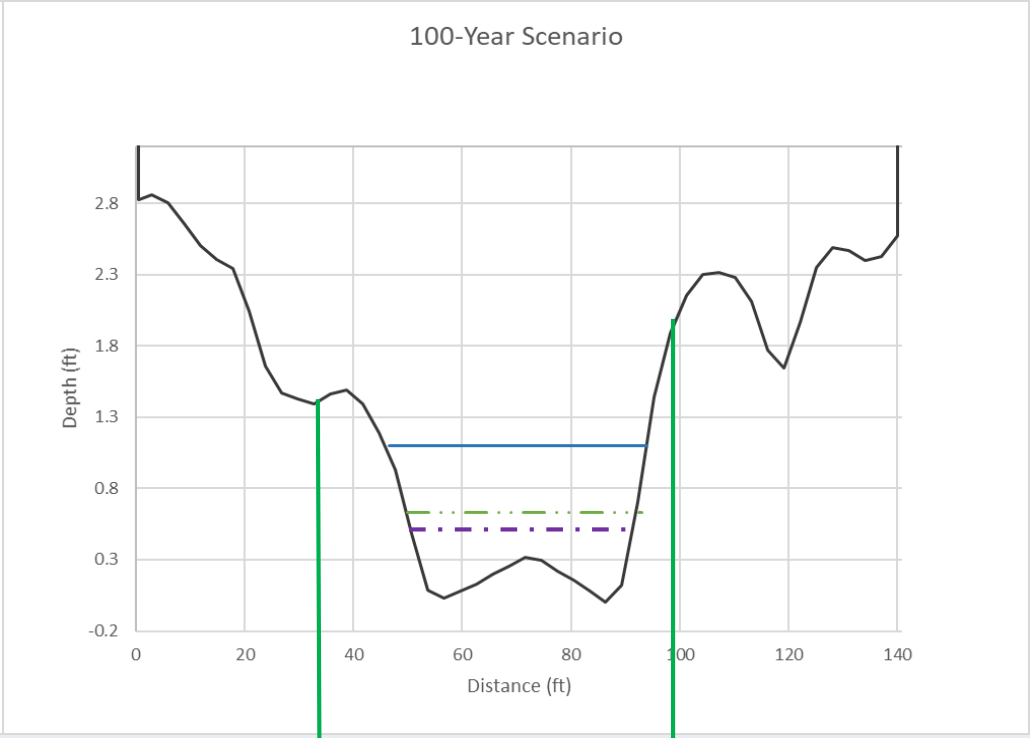

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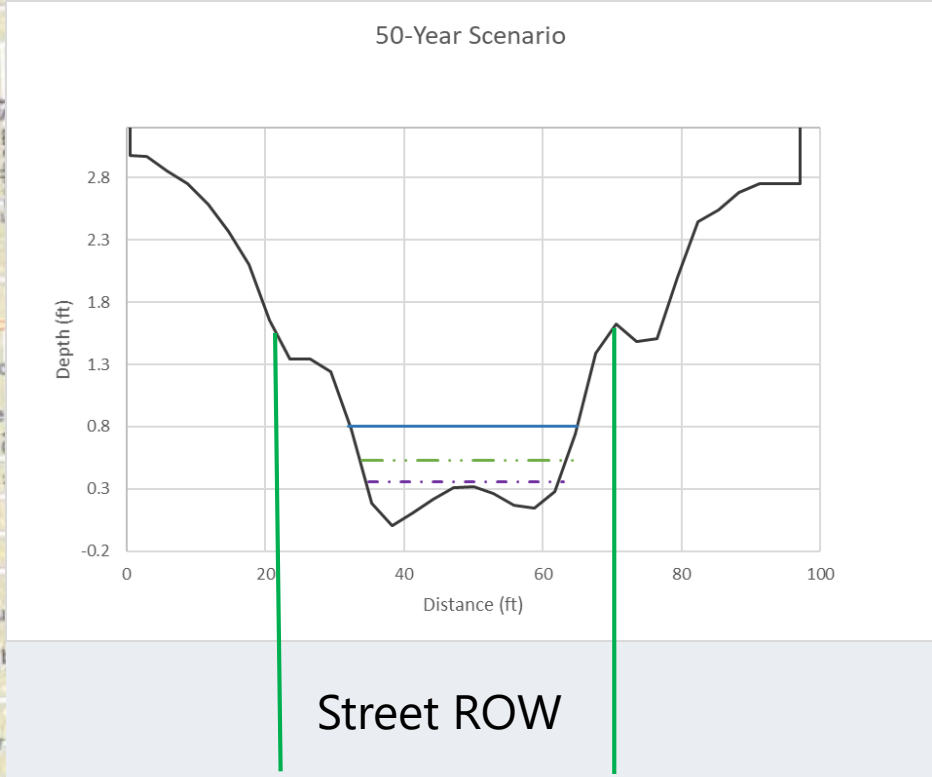
HT&J, LLC

WSEL = Water Surface Elevation

No WSEL line means the WSEL is below the street elevation



WSEL Existing

WSEL –Buffalo Speedway

WSEL – Proposed

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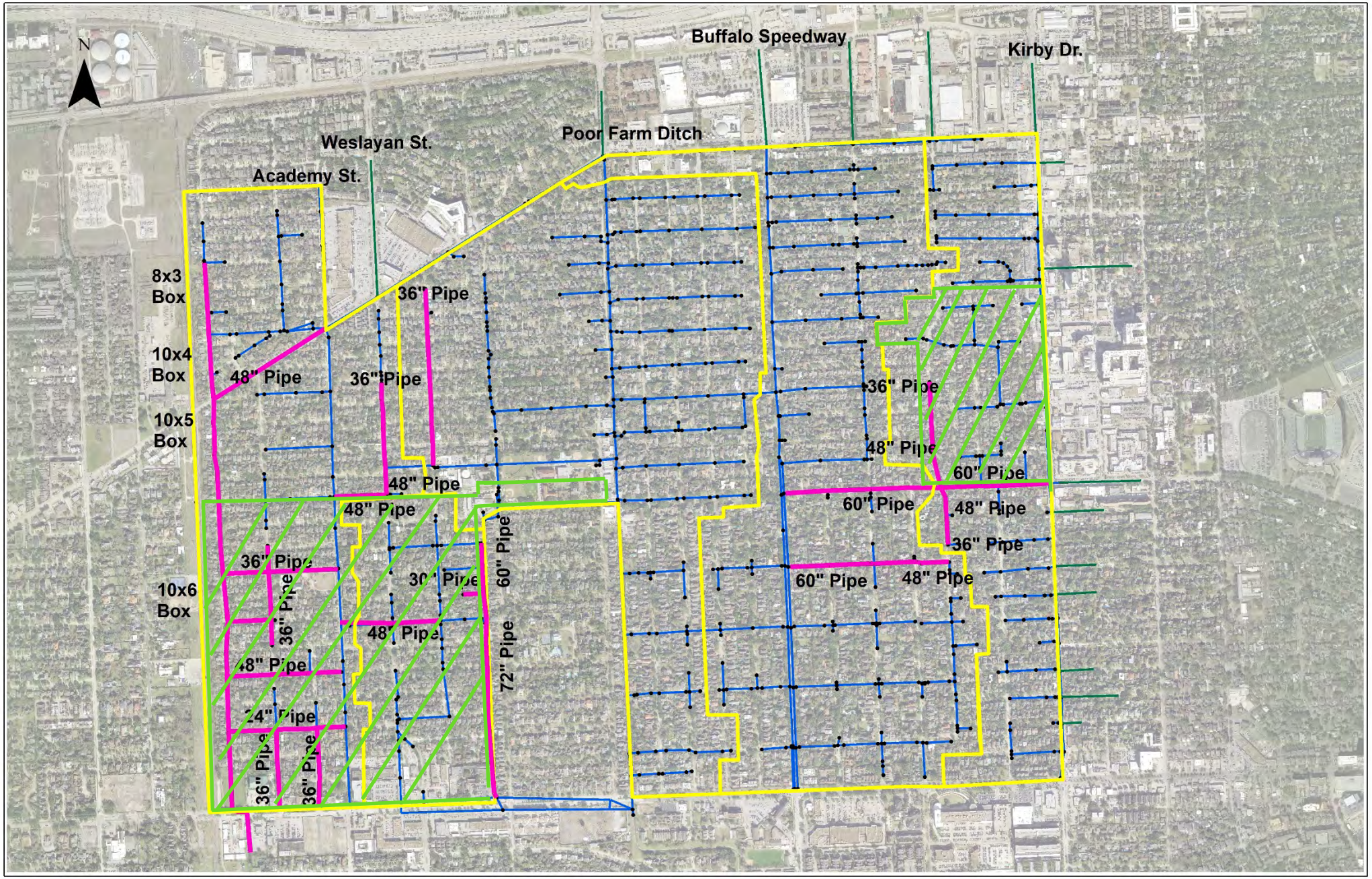

Estimate

$60M*

Priority Areas 1-3P

Est. Cost = $21M

New Proposed Pipes

Est. Cost = $39M

** Cost is in today's dollars*

Conclusion

- Proposed storm Sewer Improvements provide nearly 50-year Level-of-Service (LOS)
- Estimated Cost Of Proposed Improvements
  - Estimated cost of road and associated drainage improvements, **$21M.** Priority Area 1-3 of Infrastructure Program
    - *These roadways will need replacement in the next five years, if not sooner.*
  - Estimated cost of the proposed drainage improvements, total **$39M.**
  - **TOTAL EST. COST OF IMPROVEMENTS = $60 Million***

(*shown in today's dollars)

Questions & Answers

Thank You

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