

Central Park Basin

DRAINAGE IMPROVEMENT EVALUATION



City of Charleston

Overview

- **County/City/DOT Collaboration**
- **Evaluation Review**
- **Existing Conditions vs Improved**
- **Conceptual Improvements**
- **Stormwater Development Reviews**
- **Next Steps**



Collaboration

Previous

- Data Collection

Ongoing

- Maintenance/Rehabilitation
- Improvement Evaluation
- Development Reviews
- Special Protection Area Designations

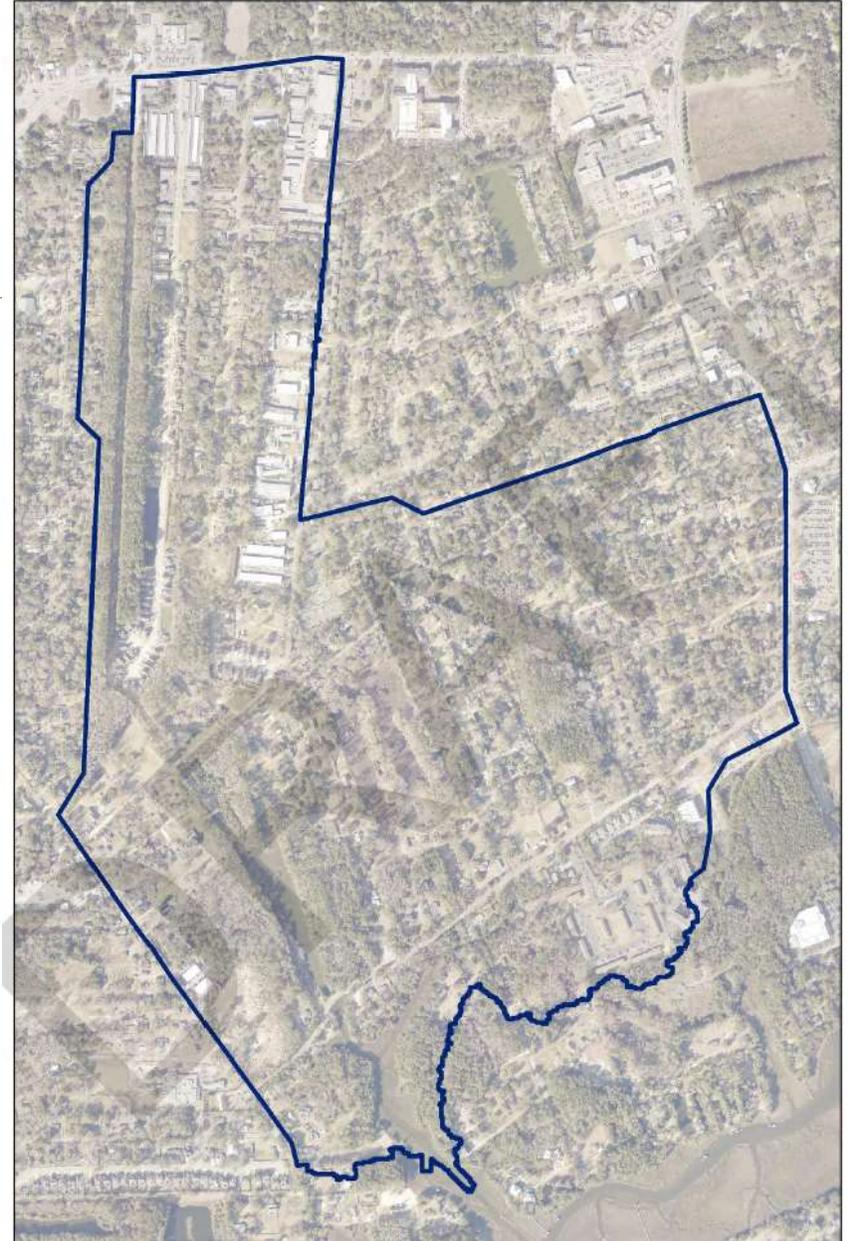
Future

- Improvement Design/Construction



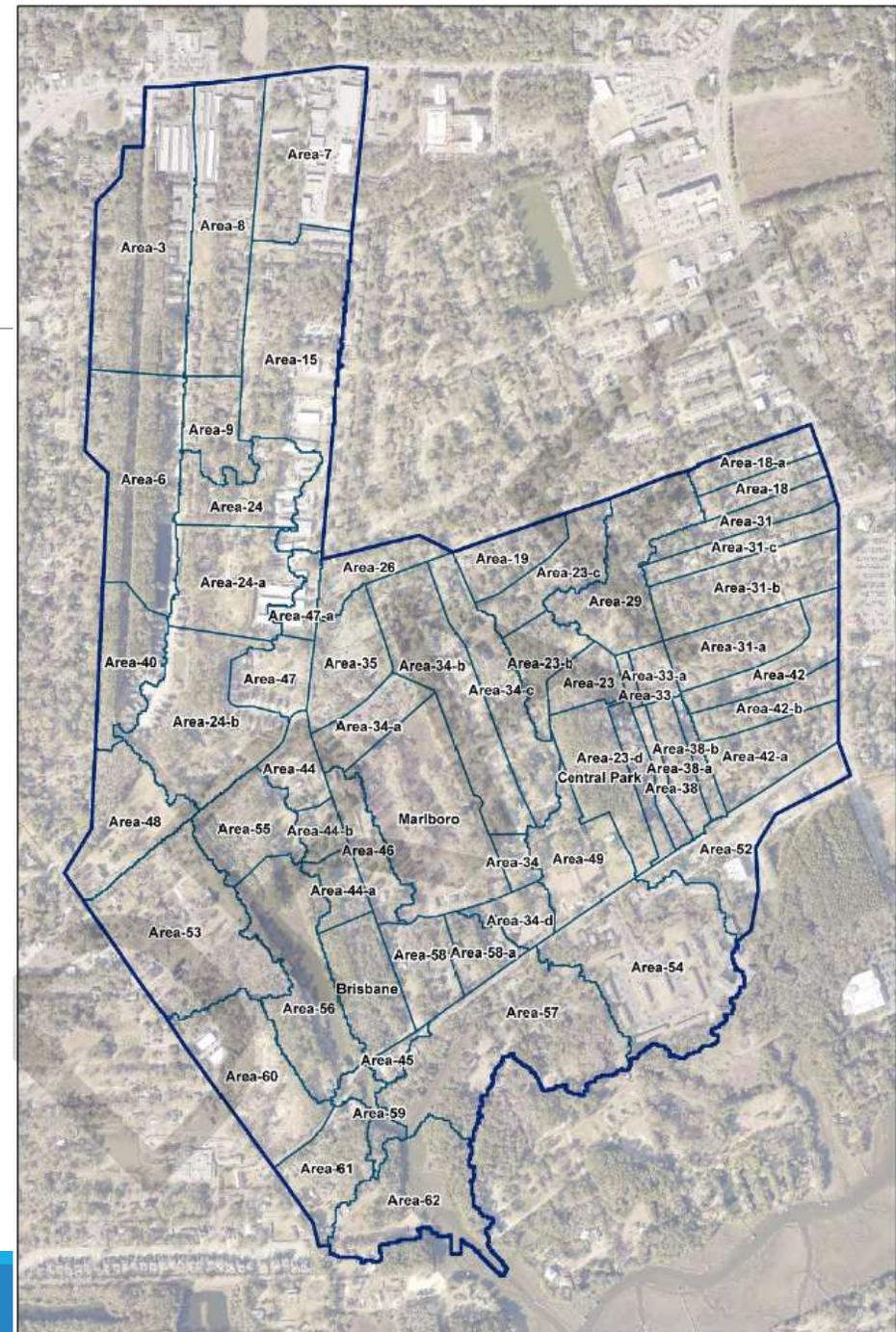
Area Boundary

- **500 Acre Area**
- **Mix of City/County/SCDOT**



Model Building

- Data Collection
 - Soils
 - Land Use
 - Survey/Field Reviews
 - Planned Developments
- Resident Discussions
 - Flooding Reports/Photos
 - Local Issues
- Storm Surge Scenarios



Flood Duration

- Impacts of Flooding
 - Maximum Depth
 - Duration of Flooding
 - Frequency of Flooding



Figure 17 – Flood depth and duration mitigation along Wambaw Avenue

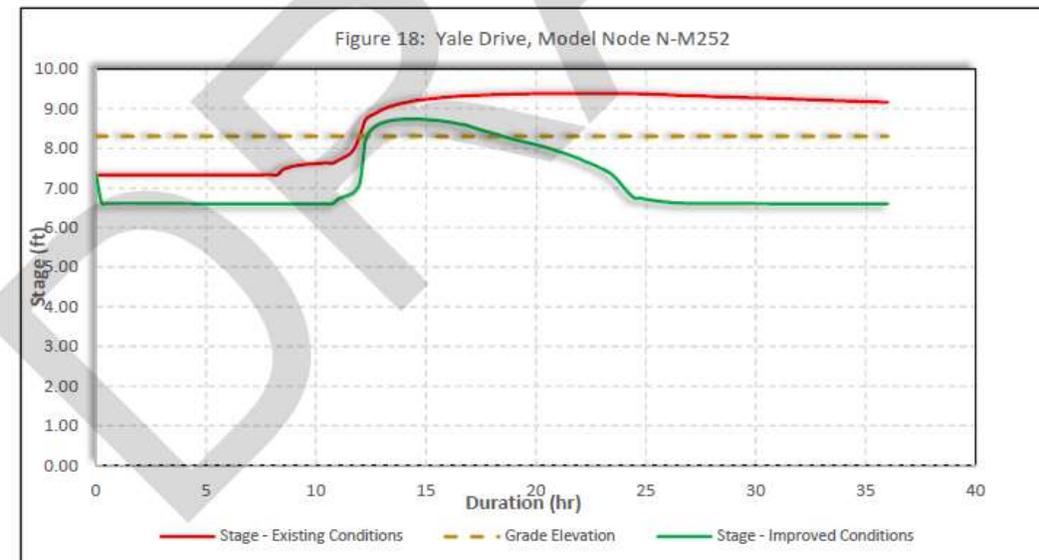
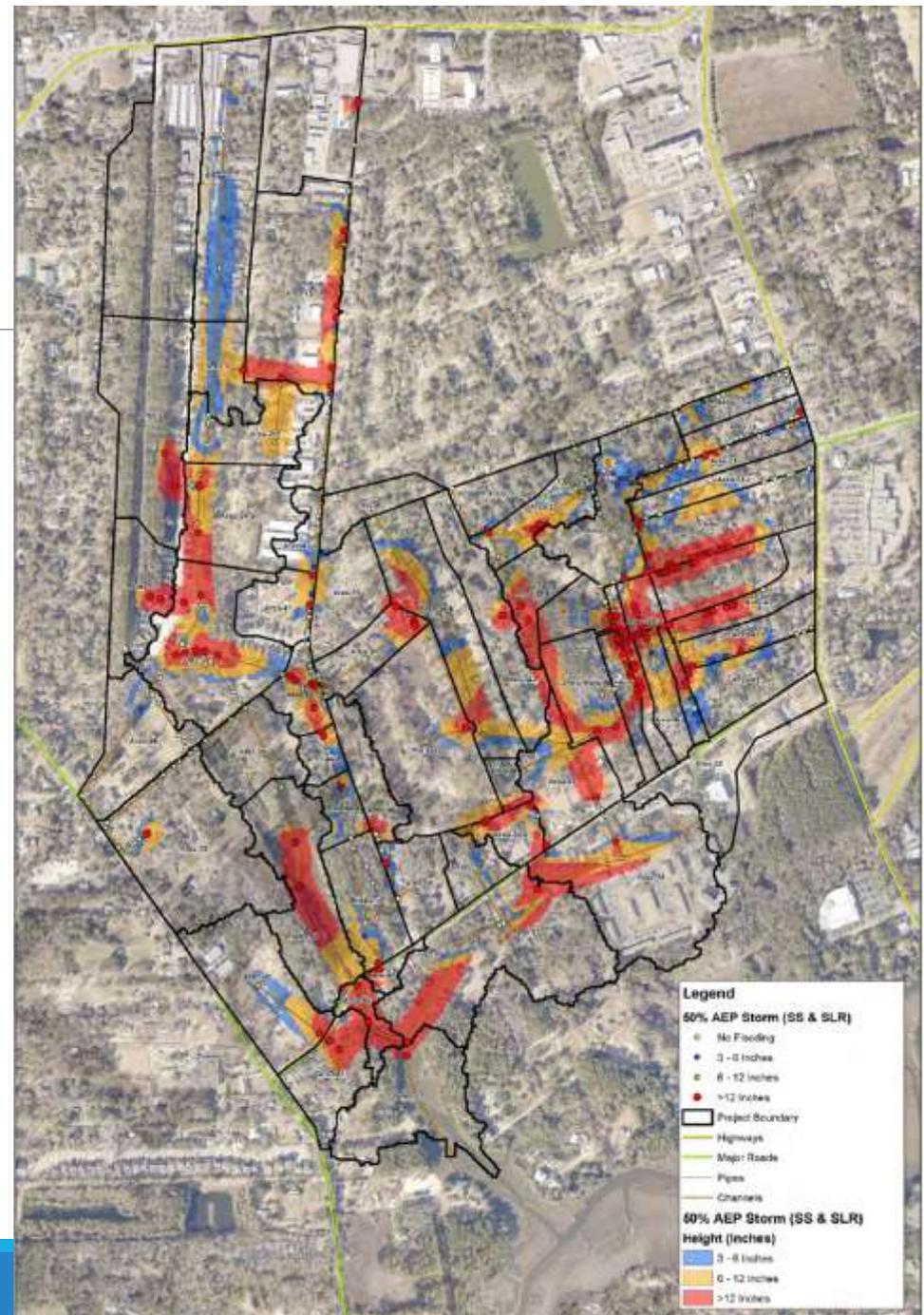


Figure 18 – Flood depth and duration mitigation along Yale Drive

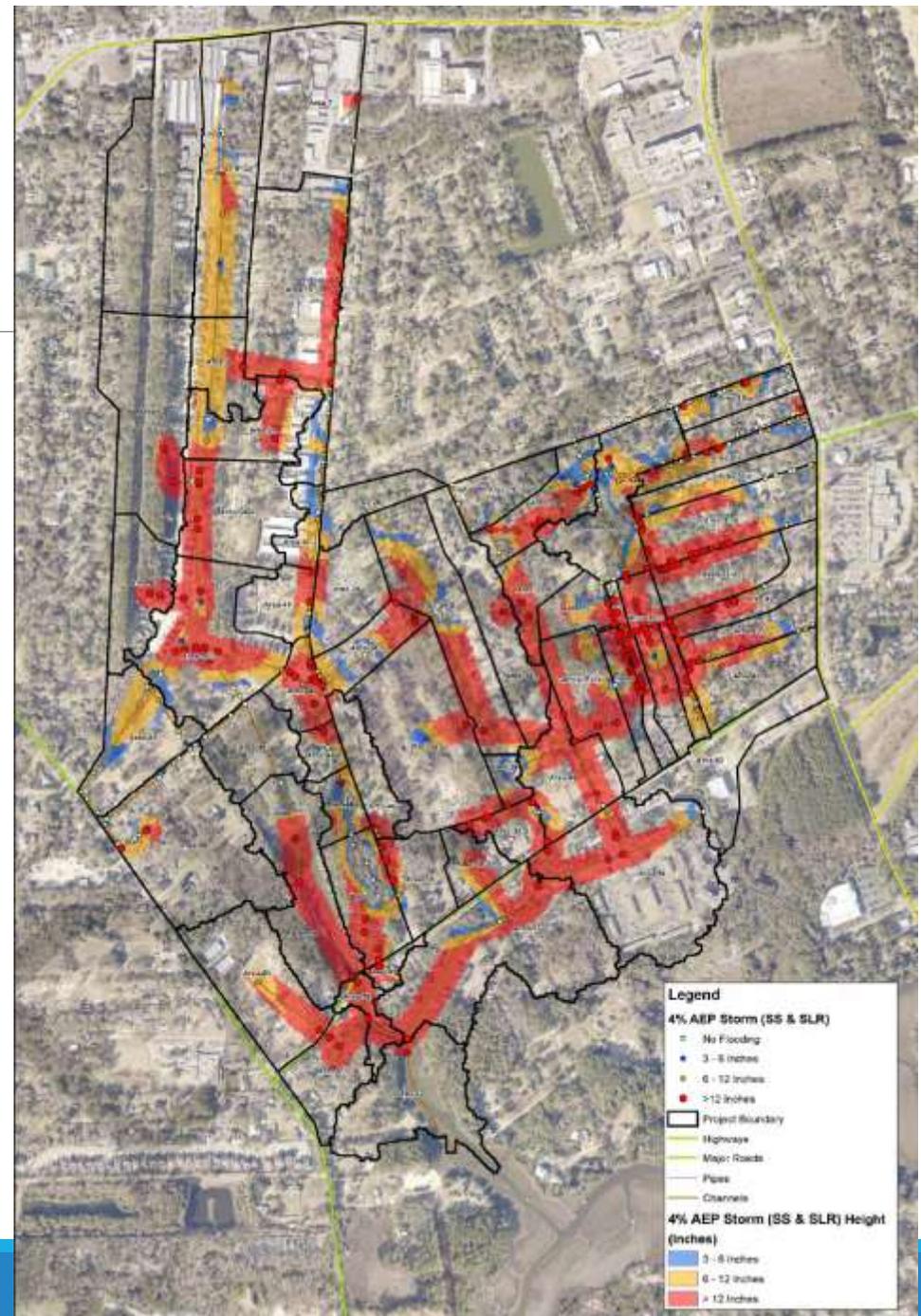
Existing Conditions

- 50% AEP Storm with Surge/SLR



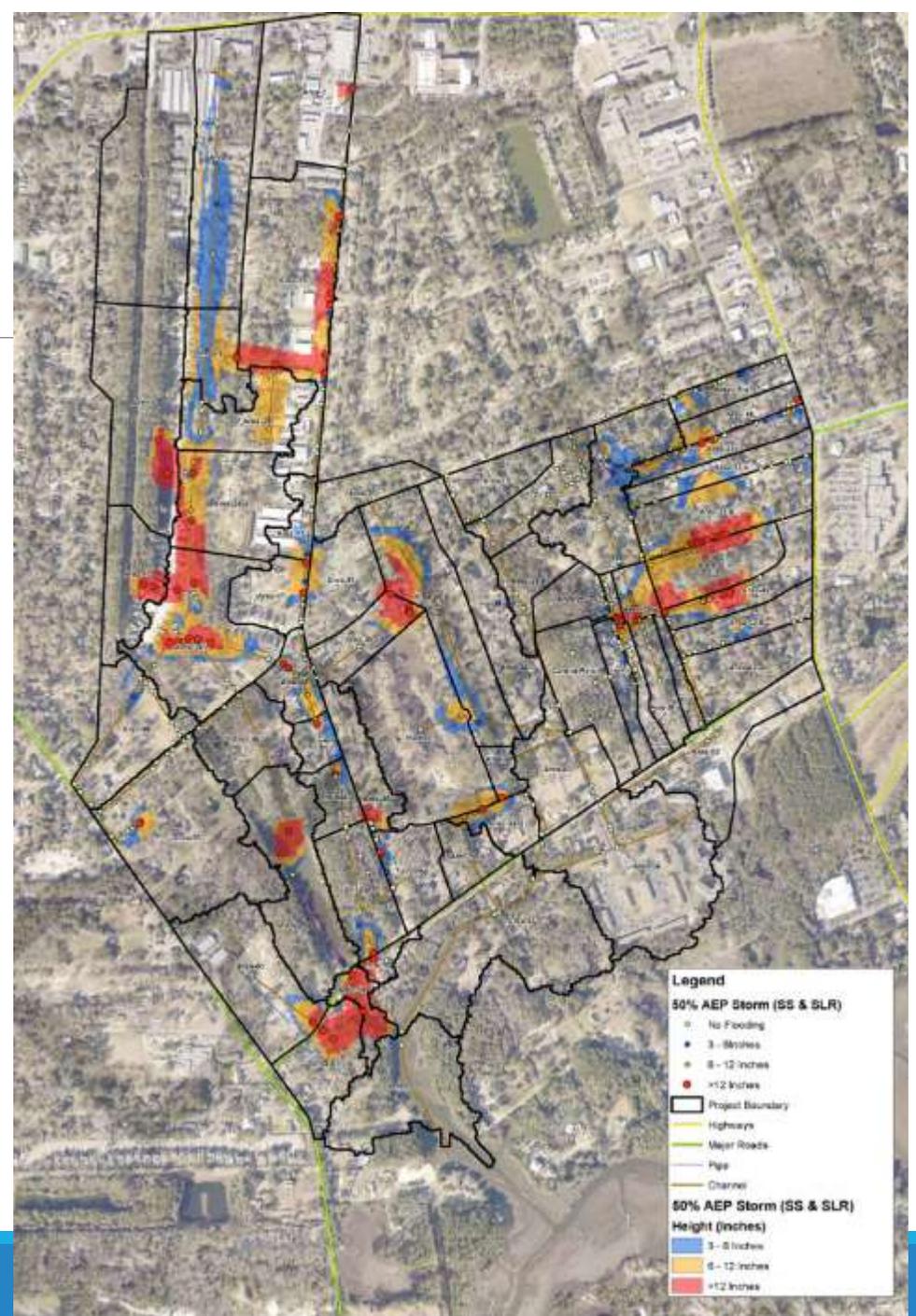
Existing Conditions

- 4% AEP Storm with Surge/SLR



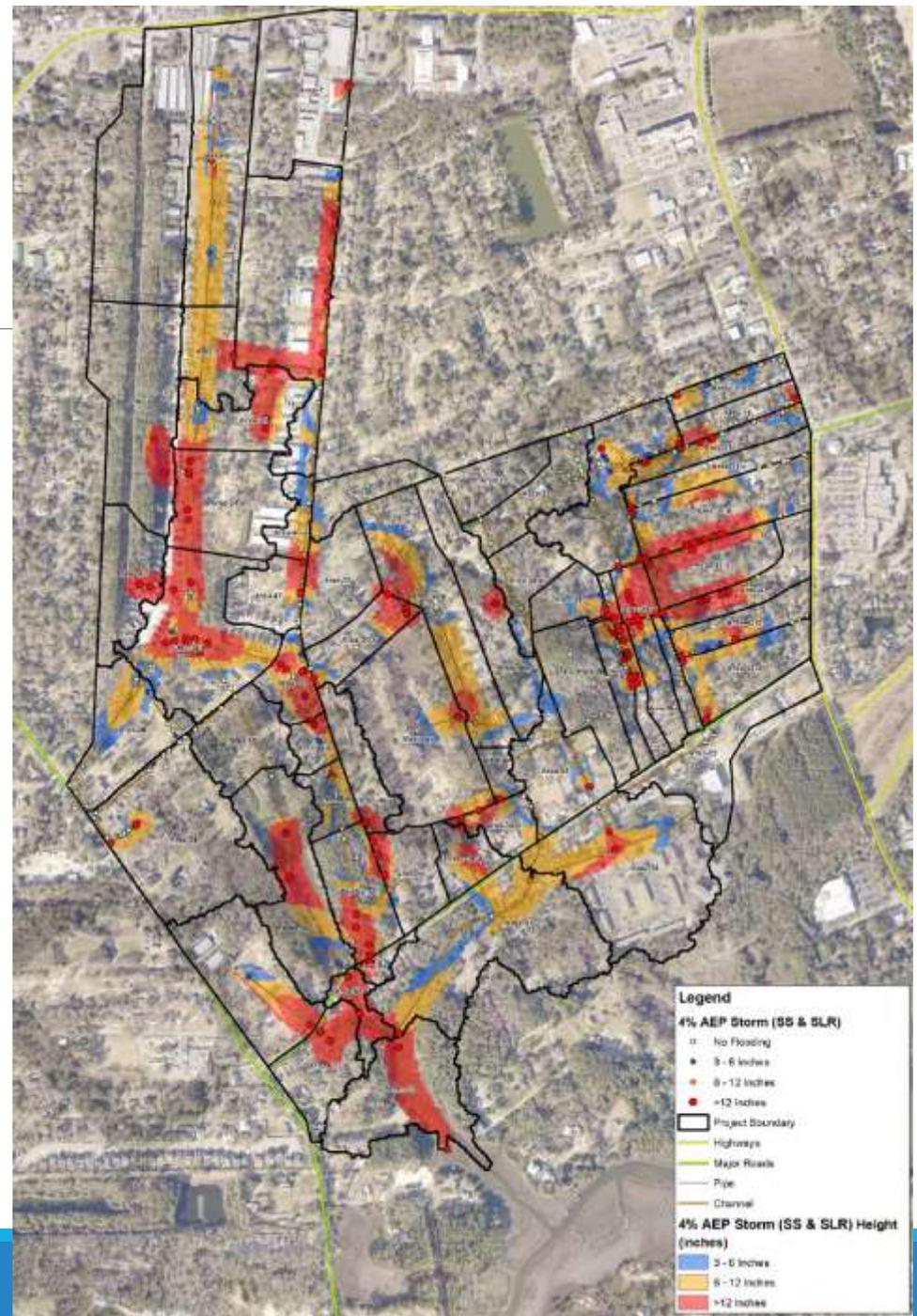
Improved Conditions

- 50% AEP Storm with Surge/SLR



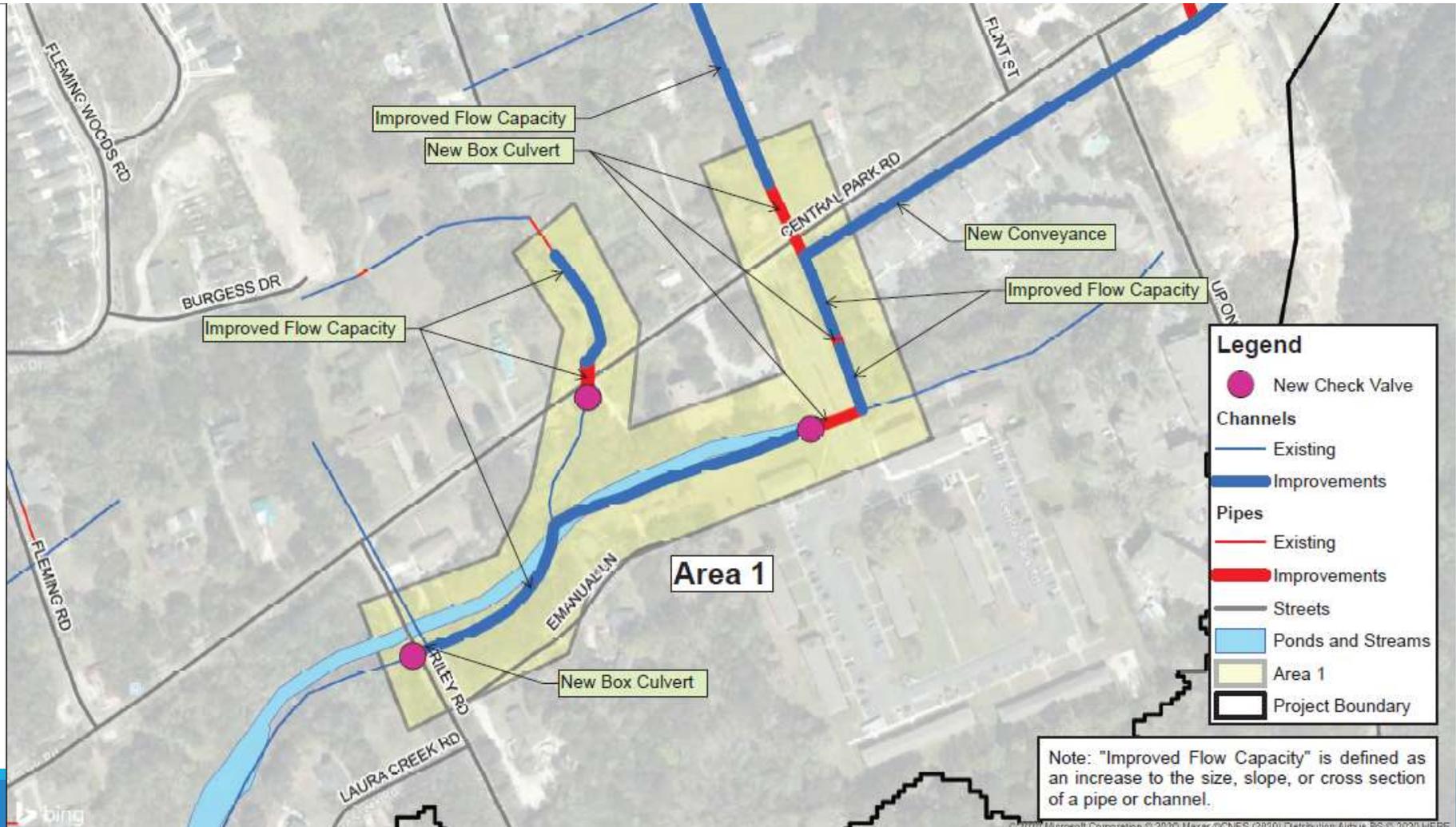
Improved Conditions

- 4% AEP Storm with Surge/SLR



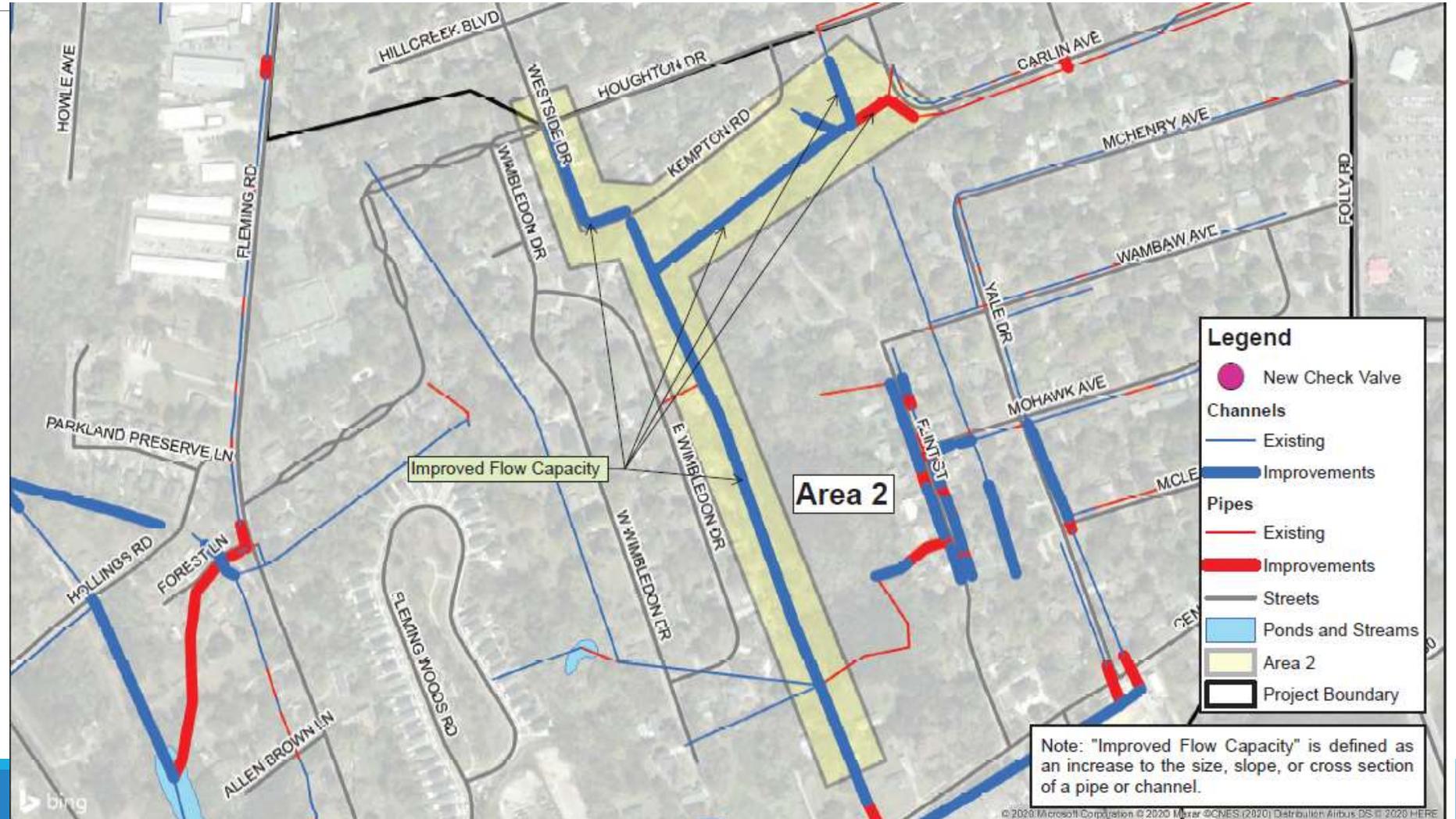
Improvements

- Area 1



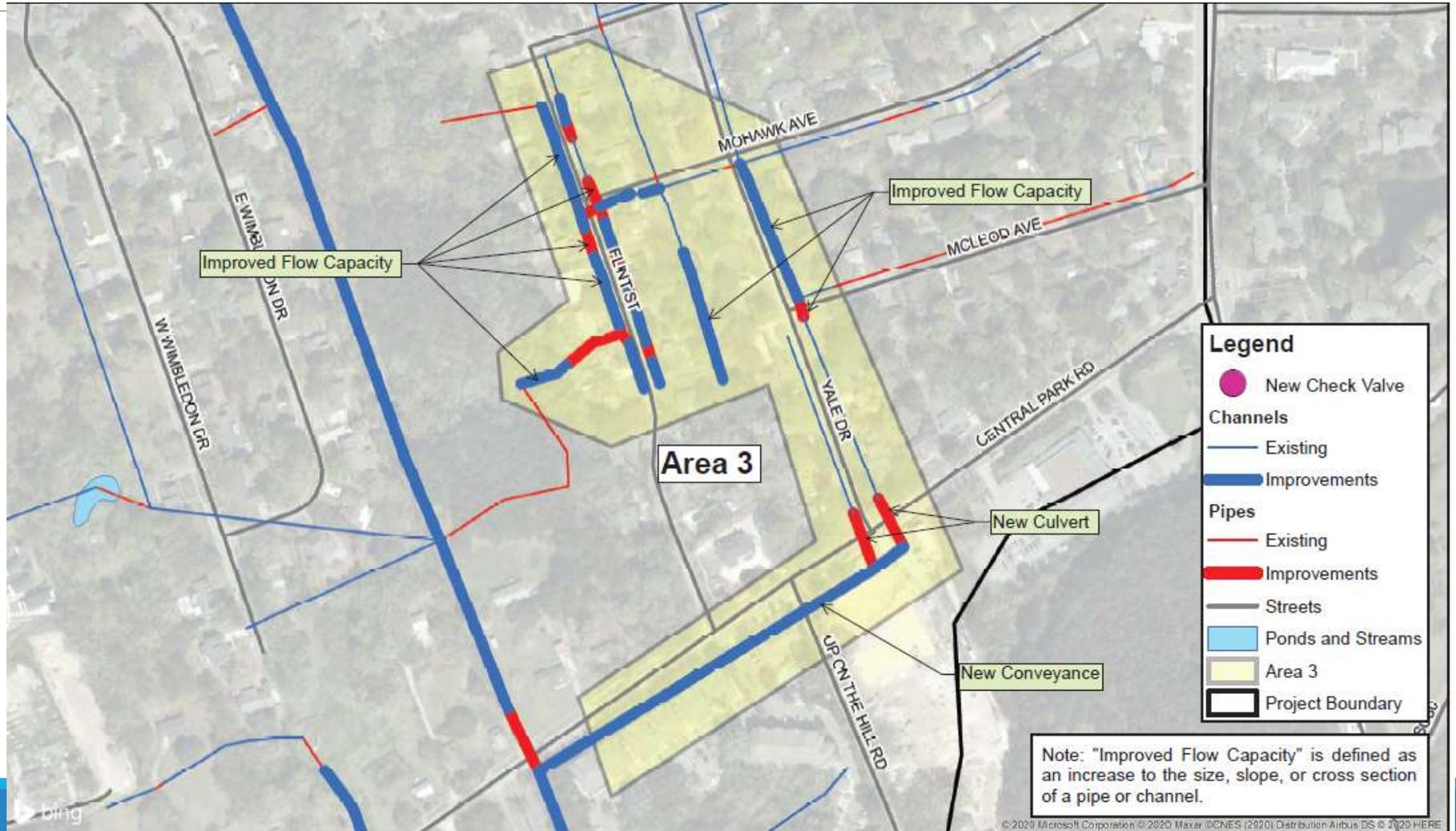
Improvements

- Area 2



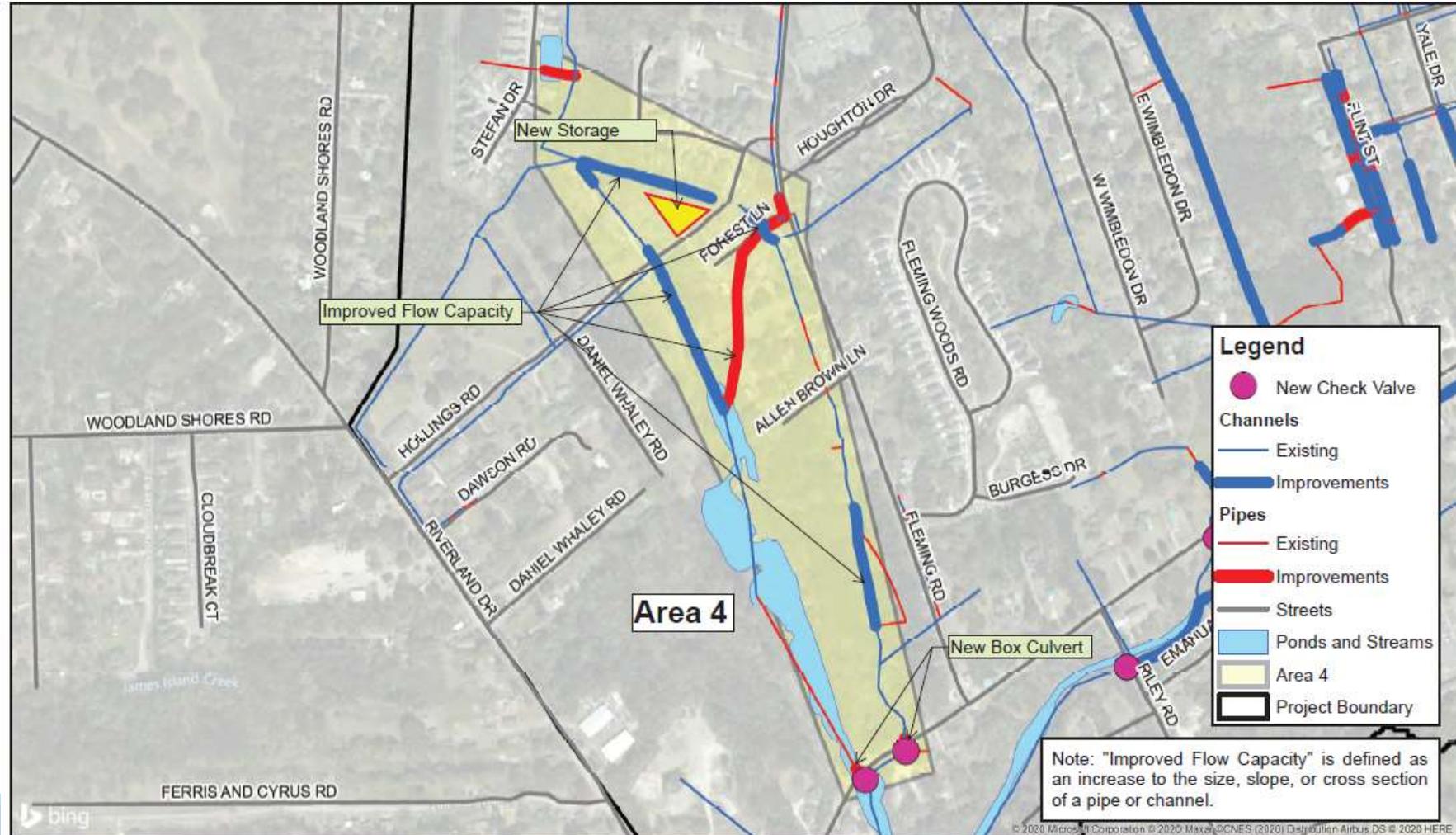
Improvements

- Area 3



Improvements

- Area 4



Development Reviews

- Regional Approaches to SW Standards
- Flood Potential
- Detention Time
- Easement Needs
- Special Protection Area Designation for the Basin



Next Steps (Funding Dependent)

In the Next Year

- Initial Design of Selected Improvements
- Project Coordination Between City/County/DOT

1 to 2 Years

- Construction Plans/Documents
- Final Permitting

2 to 5 Years

- Construction of Improvements



Thank You

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