

Alternative 1

Key Features:

- Realigns and raises approximately 1100 feet of existing Rose Lane both north and south of the existing bridge on Rose Lane
- Increases the elevation of the roadway and bridge to lessen overtopping in storm events
- Requires improvements to Walnut Creek Greenway to connect to the new higher roadway

Length of Alternative: 1510 Feet

Major Structures Items/Size/Length: 586' Bridge

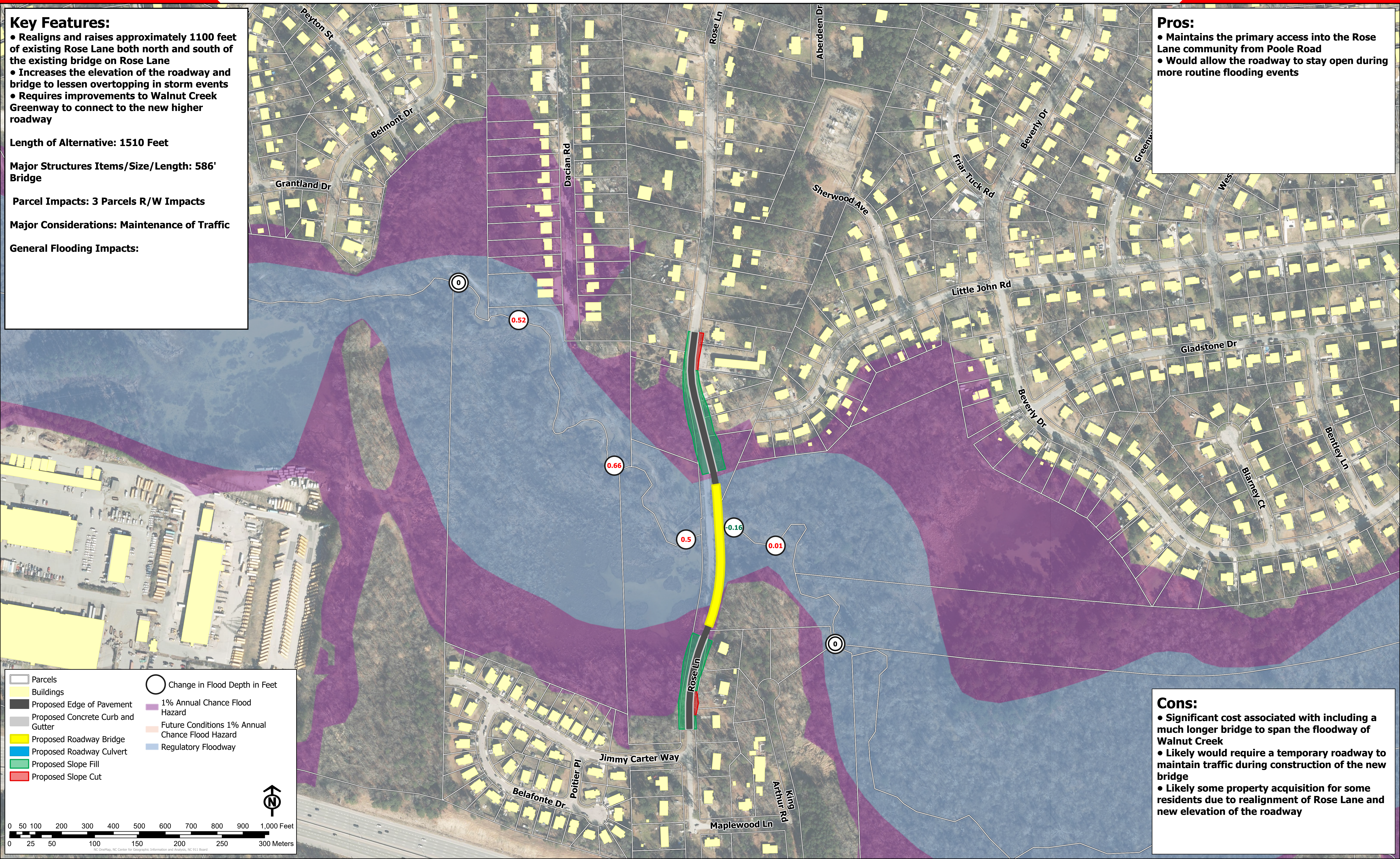
Parcel Impacts: 3 Parcels R/W Impacts

Major Considerations: Maintenance of Traffic

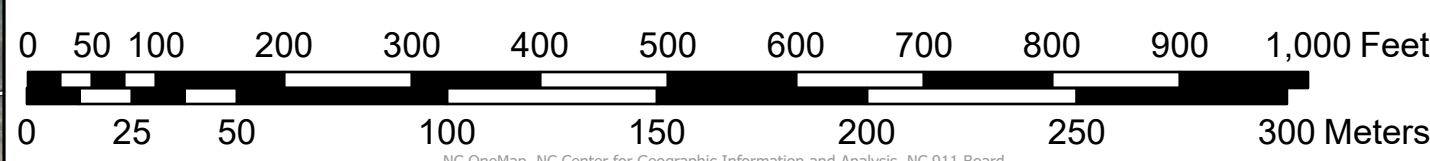
General Flooding Impacts:

Pros:

- Maintains the primary access into the Rose Lane community from Poole Road
- Would allow the roadway to stay open during more routine flooding events



- Parcels
- Buildings
- Proposed Edge of Pavement
- Proposed Concrete Curb and Gutter
- Proposed Roadway Bridge
- Proposed Roadway Culvert
- Proposed Slope Fill
- Proposed Slope Cut
- Change in Flood Depth in Feet
- 1% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Regulatory Floodway



Cons:

- Significant cost associated with including a much longer bridge to span the floodway of Walnut Creek
- Likely would require a temporary roadway to maintain traffic during construction of the new bridge
- Likely some property acquisition for some residents due to realignment of Rose Lane and new elevation of the roadway

Alternative 2

Key Features:

- Extends 900 feet from the end of Jimmy Carter Way to connect to the Wake County Bus Facility Circulatory roadway
- Requires a minor crossing of a smaller tributary to Walnut Creek
- Would likely require additional roadway upgrades and improvements to the Wake County Bus Facility Drive back to Rock Quarry Road

Length of Alternative: 875 Feet

Major Structures Items/Size/Length: Double 112' long - 10'x6' Box Culvert

Parcel Impacts: 1 Parcel (WCPSS)

Major Considerations: Coordination with Wake County Schools

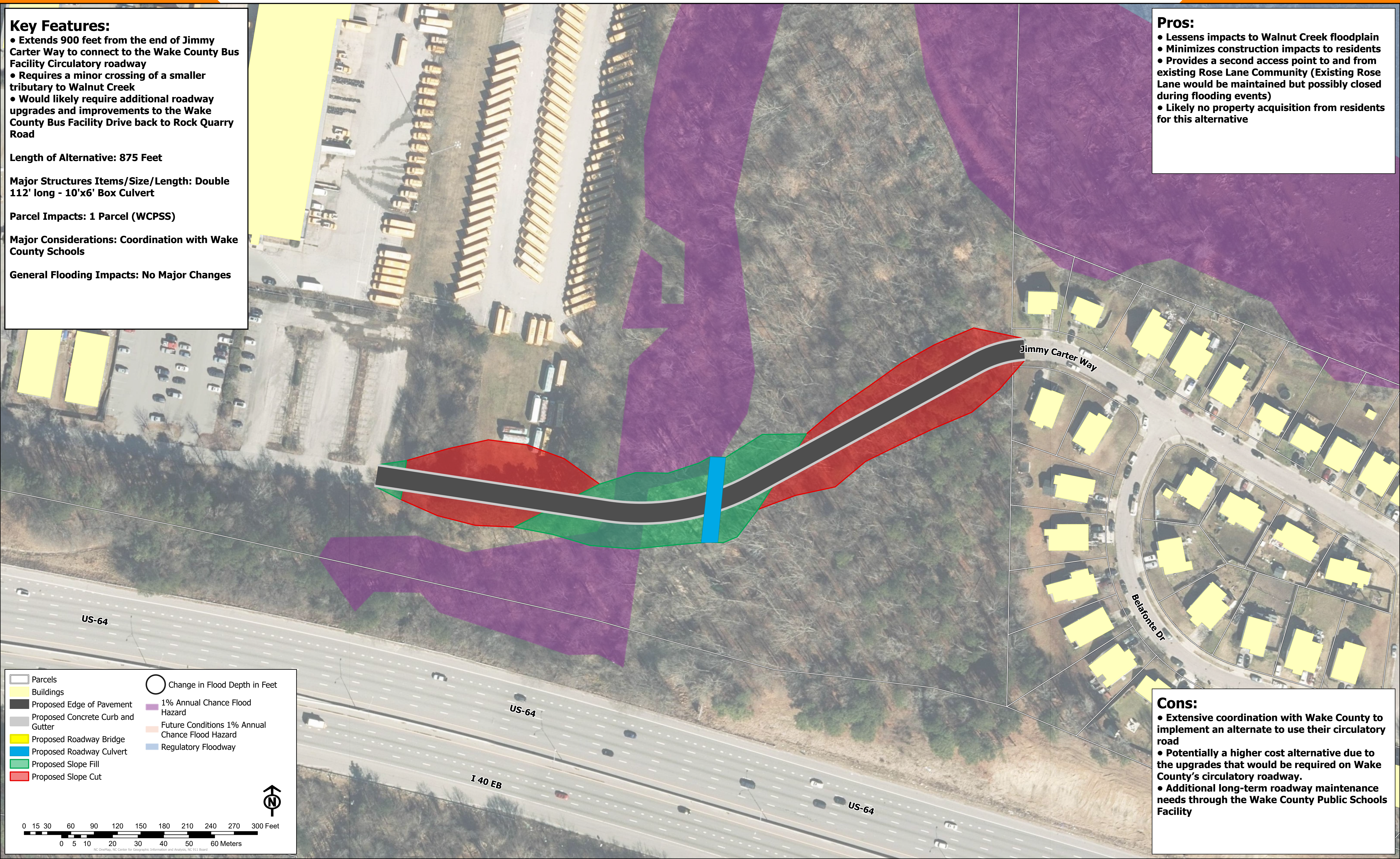
General Flooding Impacts: No Major Changes

Pros:

- Lessens impacts to Walnut Creek floodplain
- Minimizes construction impacts to residents
- Provides a second access point to and from existing Rose Lane Community (Existing Rose Lane would be maintained but possibly closed during flooding events)
- Likely no property acquisition from residents for this alternative

Cons:

- Extensive coordination with Wake County to implement an alternate to use their circulatory road
- Potentially a higher cost alternative due to the upgrades that would be required on Wake County's circulatory roadway.
- Additional long-term roadway maintenance needs through the Wake County Public Schools Facility

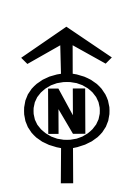


Parcels	Change in Flood Depth in Feet
Buildings	1% Annual Chance Flood Hazard
Proposed Edge of Pavement	Future Conditions 1% Annual Chance Flood Hazard
Proposed Concrete Curb and Gutter	Regulatory Floodway
Proposed Roadway Bridge	
Proposed Roadway Culvert	
Proposed Slope Fill	
Proposed Slope Cut	

0 15 30 60 90 120 150 180 210 240 270 300 Feet

0 5 10 20 30 40 50 60 Meters

NC OneMap, NC Center for Geographic Information and Analysis, NC 913 Board



Alternative 3

Key Features:

- Extends 3500 feet from the end of Maplewood Lane to connect to Woodmeadow Parkway paralleling I-40
- Would stay on higher ground south of the Walnut Creek Floodway
- Would connect to the Neighborhoods of Walnut Creek subdivision

Length of Alternative: 3370 Feet

Major Structures Items/Size/Length: No Major Structures

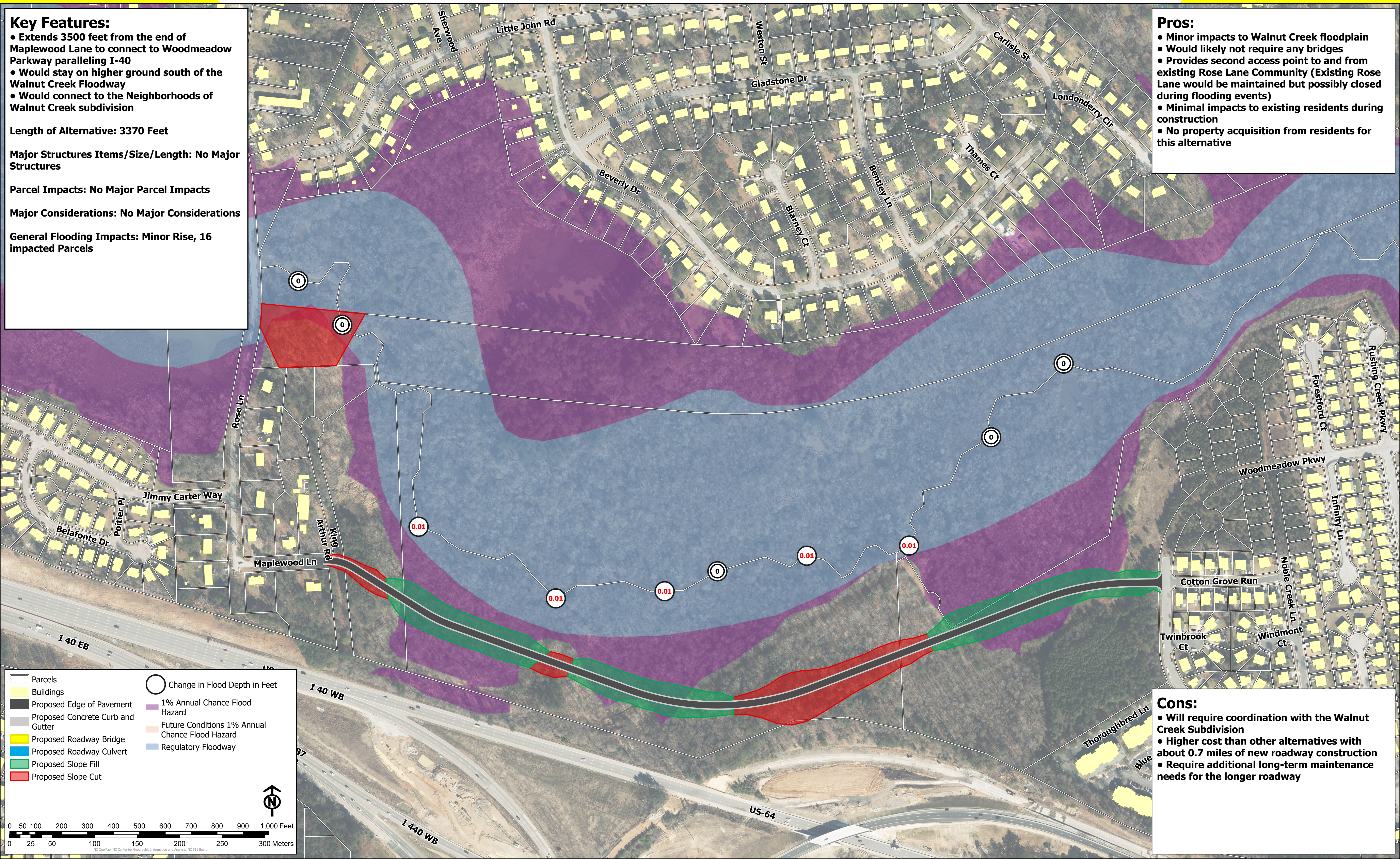
Parcel Impacts: No Major Parcel Impacts

Major Considerations: No Major Considerations

General Flooding Impacts: Minor Rise, 16 impacted Parcels

Pros:

- Minor impacts to Walnut Creek floodplain
- Would likely not require any bridges
- Provides second access point to and from existing Rose Lane Community (Existing Rose Lane would be maintained but possibly closed during flooding events)
- Minimal impacts to existing residents during construction
- No property acquisition from residents for this alternative



	Parcels		Change in Flood Depth in Feet
	Buildings		1% Annual Chance Flood Hazard
	Proposed Edge of Pavement		Future Conditions 1% Annual Chance Flood Hazard
	Proposed Concrete Curb and Gutter		Regulatory Floodway
	Proposed Roadway Bridge		
	Proposed Roadway Culvert		
	Proposed Slope Fill		
	Proposed Slope Cut		

Cons:

- Will require coordination with the Walnut Creek Subdivision
- Higher cost than other alternatives with about 0.7 miles of new roadway construction
- Require additional long-term maintenance needs for the longer roadway

Alternative 4

Key Features:

- Extends 3900 feet from the end of Rose Lane to connect to Woodmeadow Parkway paralleling I-40
- Would stay on higher ground south of the Walnut Creek Floodway
- Would connect to the Neighborhoods of Walnut Creek subdivision

Length of Alternative: 3924 Feet

Major Structures Items/Size/Length: No Major Structures

Parcel Impacts: 1 Parcel Impacted, possible take

Major Considerations: Coordination with City of Raleigh Sanitary Sewer Outfall, Coordination with NCDOT on proximity to Control of Access

General Flooding Impacts: Minor Rise, 17 impacted Parcels

Pros:

- Minor impacts to Walnut Creek floodplain
- Would likely not require any bridges
- Provides second access point to and from existing Rose Lane Community (Existing Rose Lane would be maintained but possibly closed during flooding events)
- Minimal impacts to existing residents during construction
- No property acquisition from residents for this alternative

	Parcels		Change in Flood Depth in Feet
	Buildings		1% Annual Chance Flood Hazard
	Proposed Edge of Pavement		Future Conditions 1% Annual Chance Flood Hazard
	Proposed Concrete Curb and Gutter		Regulatory Floodway
	Proposed Roadway Bridge		
	Proposed Roadway Culvert		
	Proposed Slope Fill		
	Proposed Slope Cut		

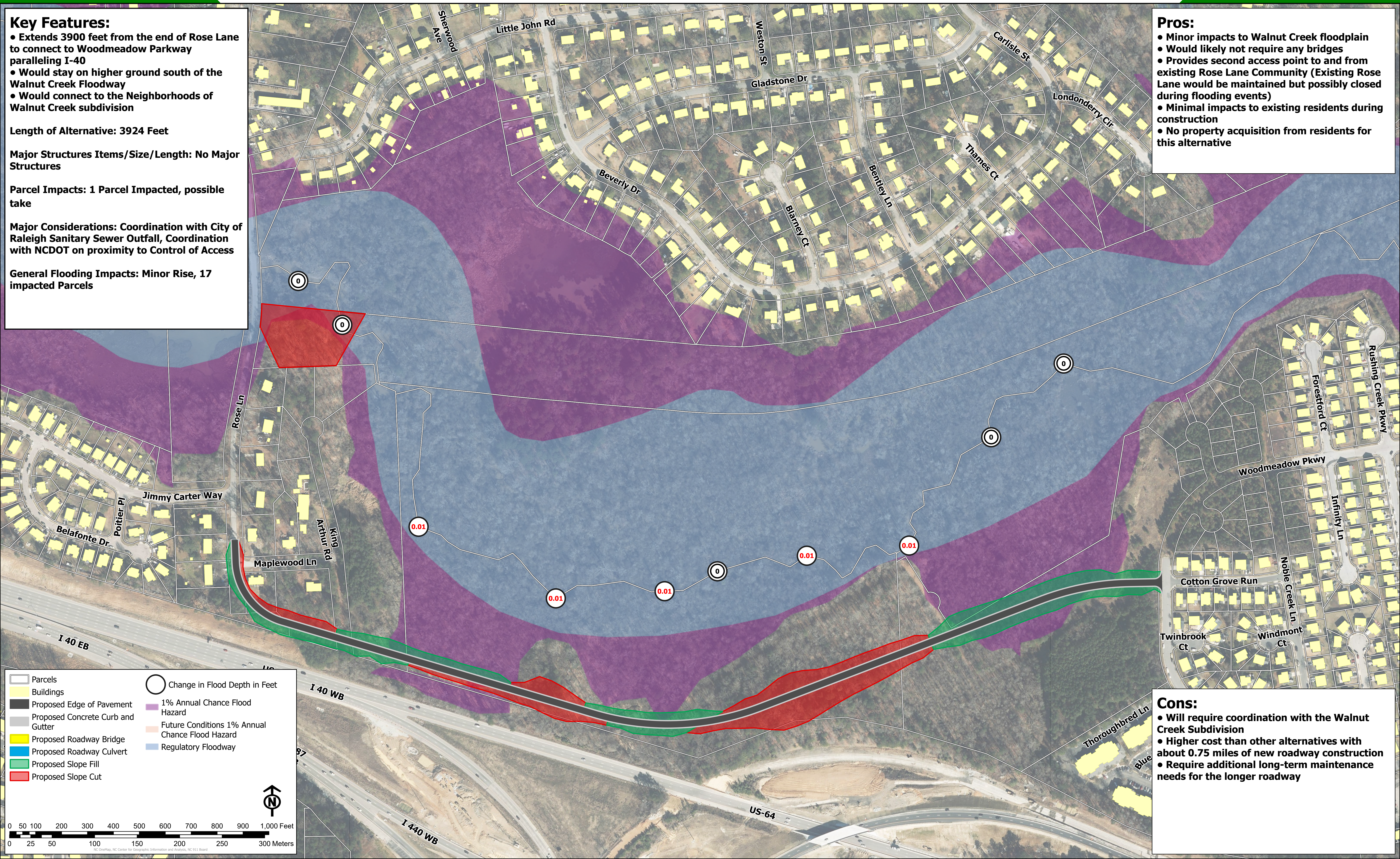
0 50 100 200 300 400 500 600 700 800 900 1,000 Feet

0 25 50 100 150 200 250 300 Meters

NC OneMap, NC Center for Geographic Information and Analysis, NC 913 Board

Cons:

- Will require coordination with the Walnut Creek Subdivision
- Higher cost than other alternatives with about 0.75 miles of new roadway construction
- Require additional long-term maintenance needs for the longer roadway



Alternative 5

Key Features:

- Extends 2000 feet from the end of Jimmy Carter Way to connect to Belmont Drive with a new bridge over Walnut Creek
- Takes advantage of a high point in the existing floodplain for the new roadway extension.
- Crosses Walnut Creek at a natural constriction in the existing floodplain allowing the bridge to be shorter

Length of Alternative: 2143 Feet

Major Structures Items/Size/Length: 253' Bridge, Double 97' long - 10'x8' Box Culvert

Parcel Impacts: 1 Parcel (WCPSS)

Major Considerations: Coordination with Wake County Schools, Coordination with Duke Energy

General Flooding Impacts: Minor Rise, but no Impacted parcels

Pros:

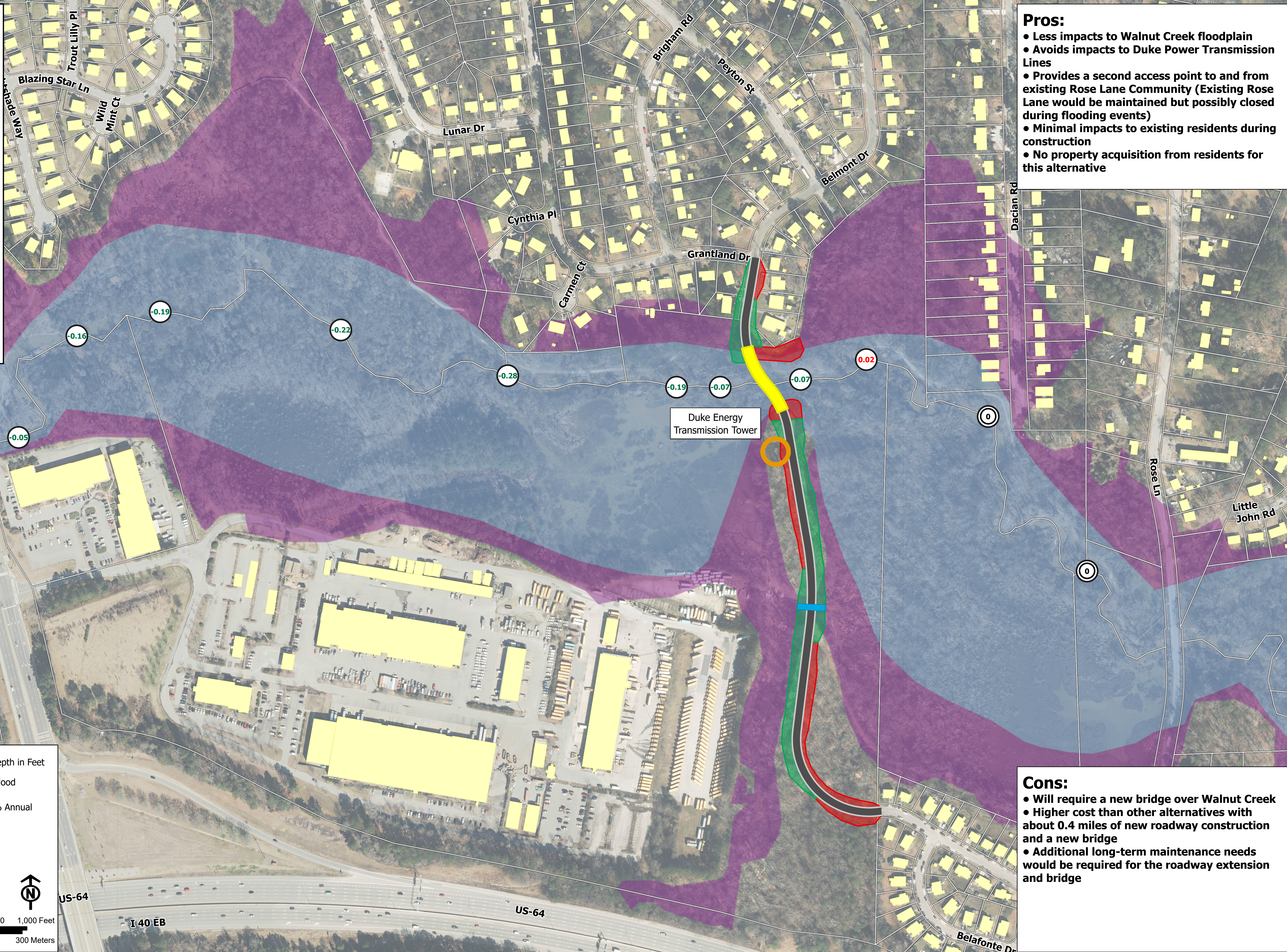
- Less impacts to Walnut Creek floodplain
- Avoids impacts to Duke Power Transmission Lines
- Provides a second access point to and from existing Rose Lane Community (Existing Rose Lane would be maintained but possibly closed during flooding events)
- Minimal impacts to existing residents during construction
- No property acquisition from residents for this alternative

	Parcels		Change in Flood Depth in Feet
	Buildings		1% Annual Chance Flood Hazard
	Feature Points		Future Conditions 1% Annual Chance Flood Hazard
	Proposed Edge of Pavement		Regulatory Floodway
	Proposed Concrete Curb and Gutter		
	Proposed Roadway Bridge		
	Proposed Roadway Culvert		
	Proposed Slope Fill		
	Proposed Slope Cut		

0 50 100 200 300 400 500 600 700 800 900 1,000 Feet

0 25 50 100 150 200 250 300 Meters

NC OneMap, NC Center for Geographic Information and Analysis, NC 911 Board



Cons:

- Will require a new bridge over Walnut Creek
- Higher cost than other alternatives with about 0.4 miles of new roadway construction and a new bridge
- Additional long-term maintenance needs would be required for the roadway extension and bridge