



NORTH CAROLINA
Department of Transportation



Map Standards Update

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WHY??

- Consistency
- Streamline/Efficient Review Time
- New Design Elements/Concepts
- Reduce the Number of Mapping Products

Concepts vs Alternatives

- Concepts
 - an abstract idea; a general notion
- Alternatives
 - one of two or more things, courses, or propositions to be chosen

Informational Concept Boards/Maps

- Conceptual Maps
 - Preliminary Outreach Effort
 - Simple
 - Project Impacts Not Predetermined


Proposed Products

Informational Concepts: Widening / Interchange Improvements

 **I-85 Improvements** **N.C. 273 (Beatty Drive) Interchange**
 STIP Project No. I-5719/U-3608/U-5800 | Gaston County Exit 27, Bridge 350034

Initial Options


Improve Existing



RETAINED

Signalized intersections operate with acceptable level of service. Adding dual lefts and rights to the northbound ramp terminal intersection may improve operations at the location in the morning peak period. Requires least new right-of-way than other options.

Partial Cloverleaf B




RETAINED

This option would result in the good overall traffic operations. Signalized intersections operate with acceptable level of service. Create interchange ramp right-of-way needed to add loop and ramp in northwest quadrant.

➔

Diverging Diamond Interchange




RETAINED

DDI operates with less overall delay/vehicle than the other two concepts evaluated. Signalized intersections operate with acceptable level of service. Highest potential for business relocation. Water bridge needed for DDI design. Potential to impact a hazardous waste site. Greater initial confusion from driving public due to DDI design.


Concepts Recommended for Further Study

Improve Existing




Preliminary - Subject to change

Partial Cloverleaf B



Preliminary - Subject to change

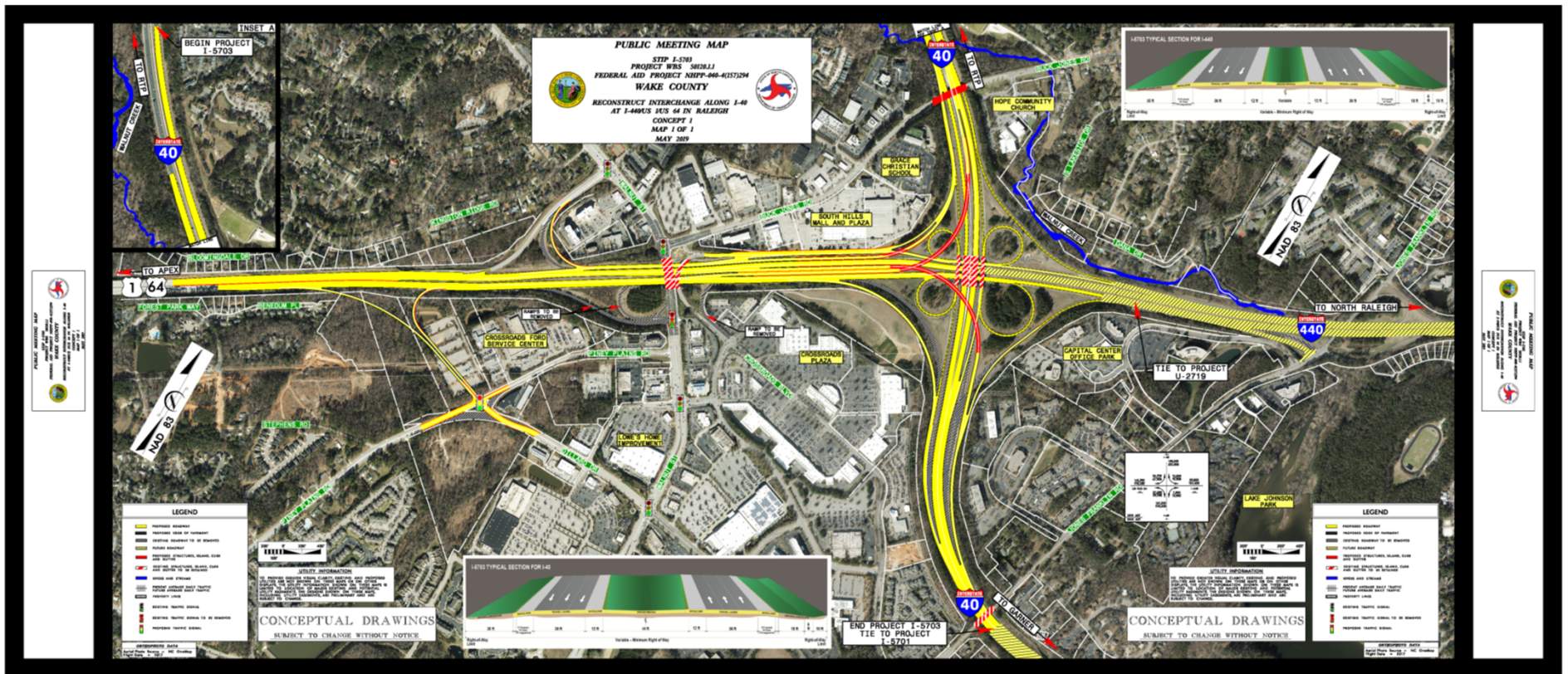
Diverging Diamond Interchange



Preliminary - Subject to change

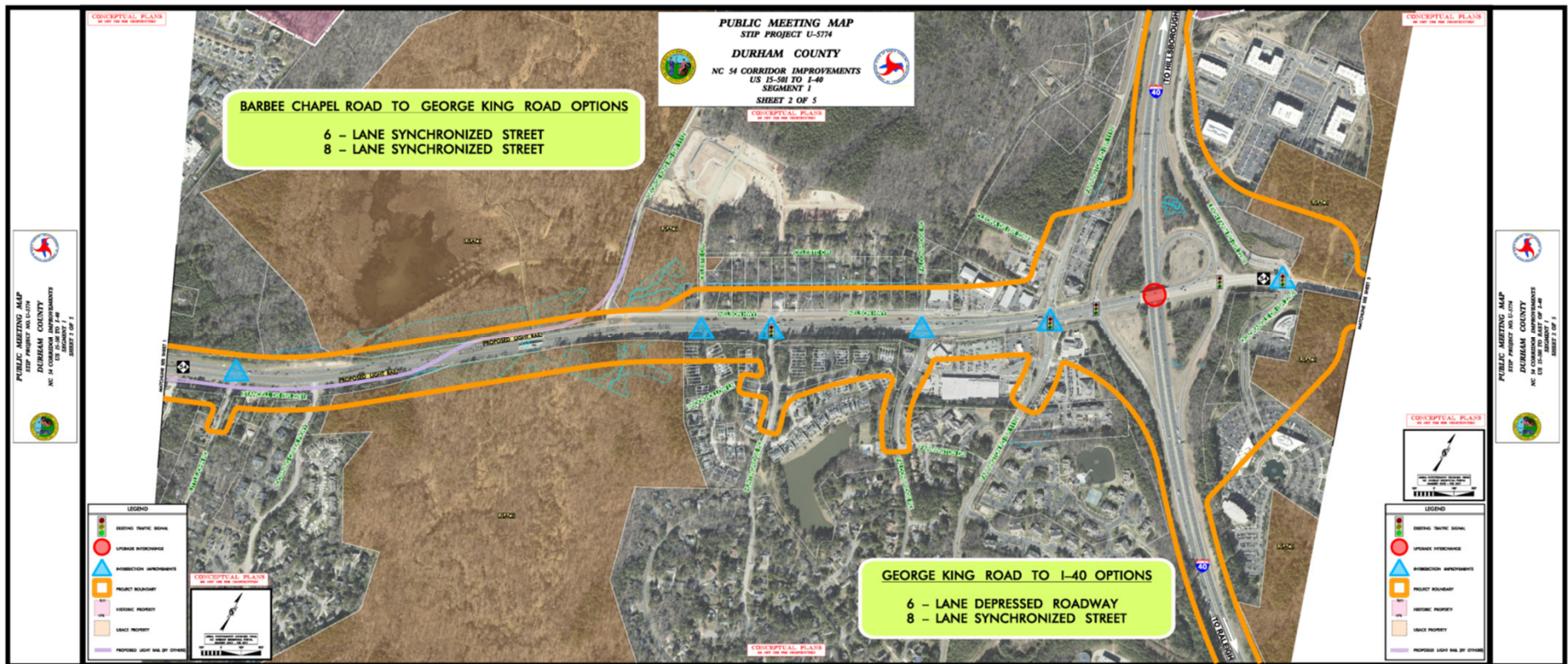
Proposed Products

Informational Concepts: Widening / Interchange Improvements



Proposed Products

Informational Concepts: Widening / Interchange Improvements



Proposed Products

Informational Concepts: Widening / Interchange Improvements

54 N.C. 54 IMPROVEMENTS
STIP Project No. U-5774
North Carolina Department of Transportation

Segment 1

U.S. 15/501 to Barbee Chapel Road Options

6-Lane Synchronized Street

- Narrower footprint
- Good level of service
- Shorter pedestrian crossings
- U-turn required
- Scatter cross street elements
- Multi-stage pedestrian crossings

8-Lane Arterial Street

- Traditional signalized intersection
- Good level of service
- Single-stage pedestrian crossings
- Wider footprint
- Larger signal cycles and delays
- 8-Lane pedestrian crossing

54 N.C. 54 IMPROVEMENTS
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Interchange Options

CONTRAFLOW INTERCHANGE

Traffic turning right onto the ramp and onto right

Traffic turning left from N.C. 54 should also use the ramp and onto the main road. This will help traffic flow through the interchange and contribute less through the interchange prior to completing left turn.

HALF PARTIAL SYNCHRONIZED STREET HALF PARTIAL CLOVERLEAF INTERCHANGE

Signal placement at all of interchange areas before the start of the mainline of traffic and pedestrian traffic.

- Left Turn
- Right Turn
- Straight on cross street
- Signal

54 N.C. 54 IMPROVEMENTS
STIP Project No. U-5774
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Segment 3

Fayetteville Road to N.C. 55

Proposed upgrades on N.C. 54 from Fayetteville Road to N.C. 55 will focus on...

- Capacity improvements along N.C. 54, including widening, intersection modifications, and access management
- Multimodal accessibility improvements, including access to transit stops and expansion of the existing bicycle and pedestrian network
- Bus transit accommodations

Widen to 4-lanes

Proposed Products

- Public Meeting/Public Hearing Maps
 - Preliminary or Secondary Outreach Effort
 - More In Depth Design Detail

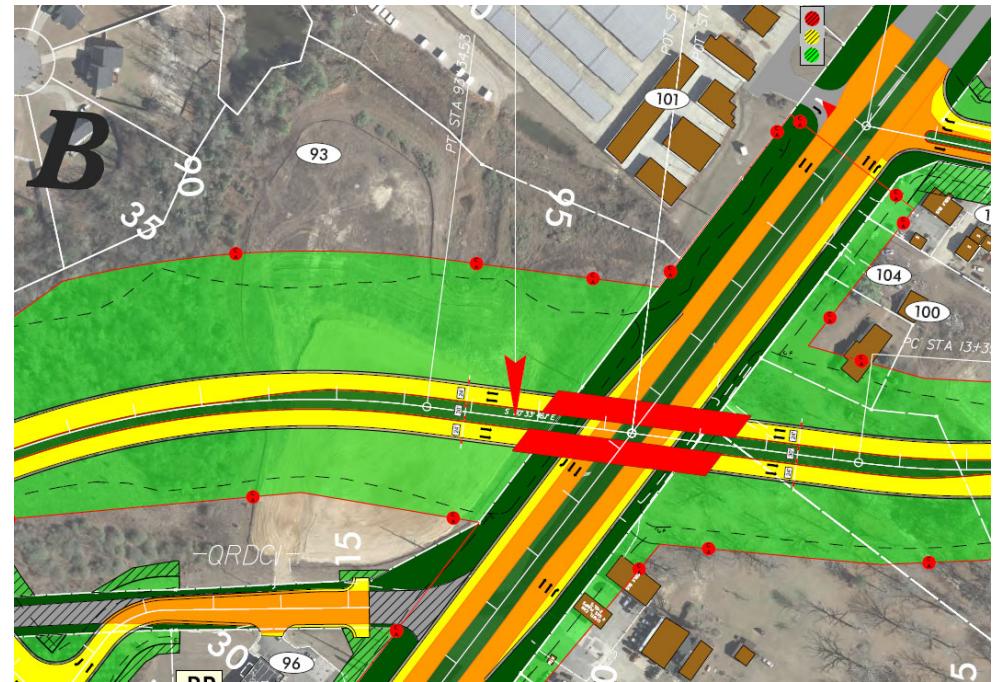
Legend

- WHAT HAS CHANGED?
 - Many of the same items
 - New or refined items
 - Special Cases

DRAFT LEGEND	PLOTS
BUILDINGS	OPAQUE
EXISTING RIGHT OF WAY	OPAQUE
PROPOSED RIGHT OF WAY	TRANSLUCENT
PROPOSED EASEMENTS (DRAINAGE, CONSTRUCTION, AND UTILITY)	TRANSLUCENT
EXISTING ROADWAY	OPAQUE
EXISTING ROADWAY TO BE REMOVED	OPAQUE
EXISTING ROADWAY TO BE RESURFACED	OPAQUE
PROPOSED ROADWAY	OPAQUE
TEMPORARY ROADWAY /DETOURS	OPAQUE
FUTURE ROADWAY	OPAQUE
PROPOSED STRUCTURES, ISLAND, SIDEWALK, CURB AND GUTTER	OPAQUE
EXISTING STRUCTURES, ISLAND, SIDEWALK, CURB AND GUTTER TO BE RETAINED	OPAQUE
EXISTING STRUCTURES, ISLAND, CURB AND GUTTER TO BE REMOVED	OPAQUE
LAKES, RIVER, STREAMS AND PONDS	OPAQUE
RAILROAD RIGHT OF WAY	TRANSLUCENT
EXISTING UTILITY EASEMENT	TRANSLUCENT
CEMETERIES	TRANSLUCENT
WETLANDS	OPAQUE
PROPOSED SIDEPATH/GREENWAY	OPAQUE
HISTORIC PROPERTY BOUNDARY	TRANSLUCENT
PARKS	TRANSLUCENT
PROPOSED CONTROL OF ACCESS	
PROPOSED PARTIAL CONTROL OF ACCESS	
PROPOSED LIMITED CONTROL OF ACCESS	
EXISTING CONTROL OF ACCESS	
PRESENT ADT	
FUTURE ADT	
PROPERTY LINES	
CITY AND TOWN LINES	
COUNTY LINES	
POTENTIAL NOISE ABATEMENT AREA	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAFFIC SIGNAL	
PROPOSED EXPRESS LANE	TRANSLUCENT
EXPRESS LANE ENTRY POINT	
EXPRESS LANE EXIT POINT	
PROPOSED TOLL GANTRY	
[SPEC]AL CASES	
TRANSMISSION TOWER	
FERC BOUNDARY	

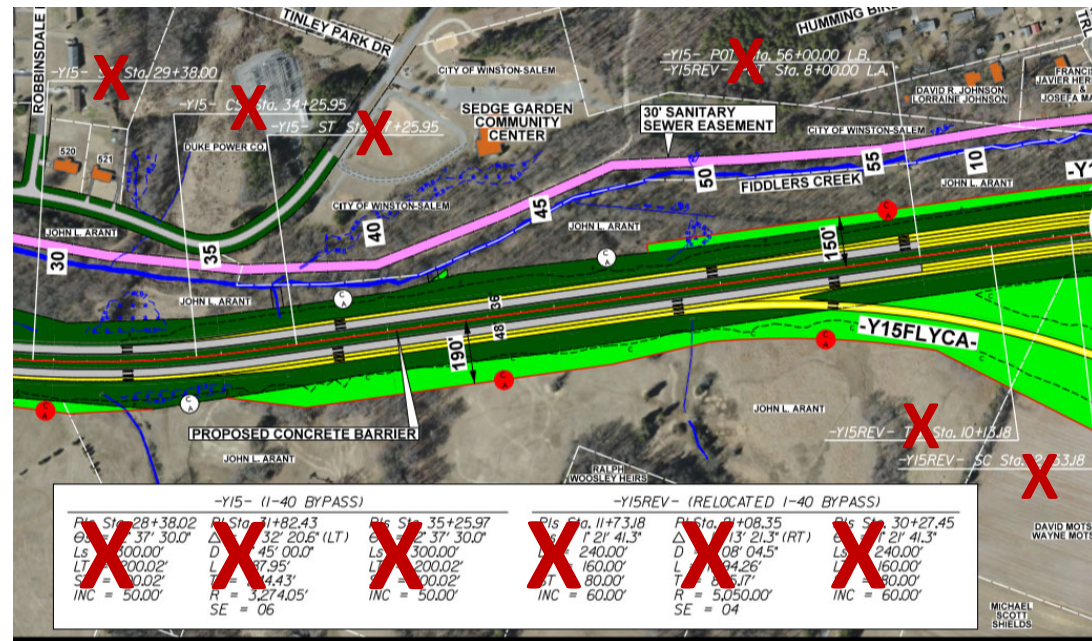
Opaque vs. Translucent

- Pavement, structures and existing right of way are still opaque
- Proposed right of way and easements, major utility easements, Railroad Right of Way, etc. are translucent



Horizontal Design Information

- Curve Data, control stations, bearings, begin/end construction???
- Show only the alignment, tick marks and 500' station labels



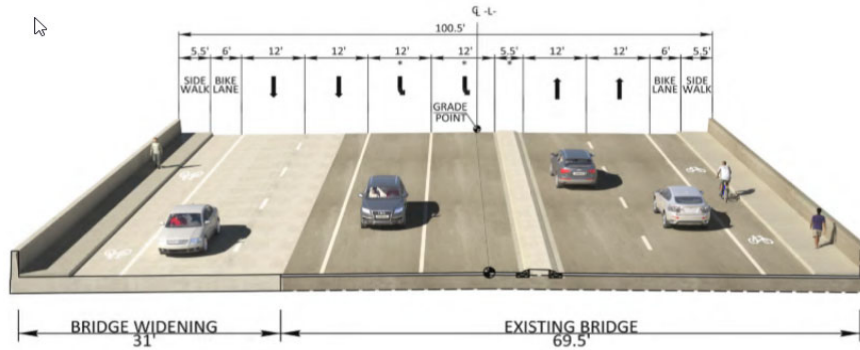
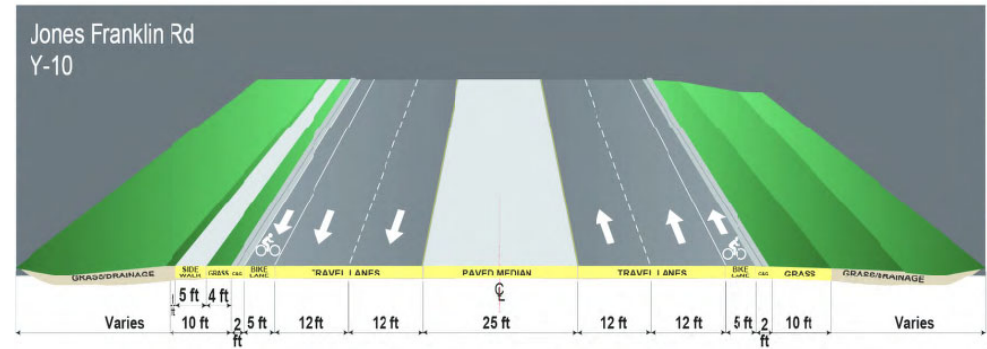
Street Names & Landmarks

- Street names have the appearance of actual street signs
- Landmarks help to orient the public to the area (subdivisions, schools, hospitals, local places of interest).



3D Typical Sections

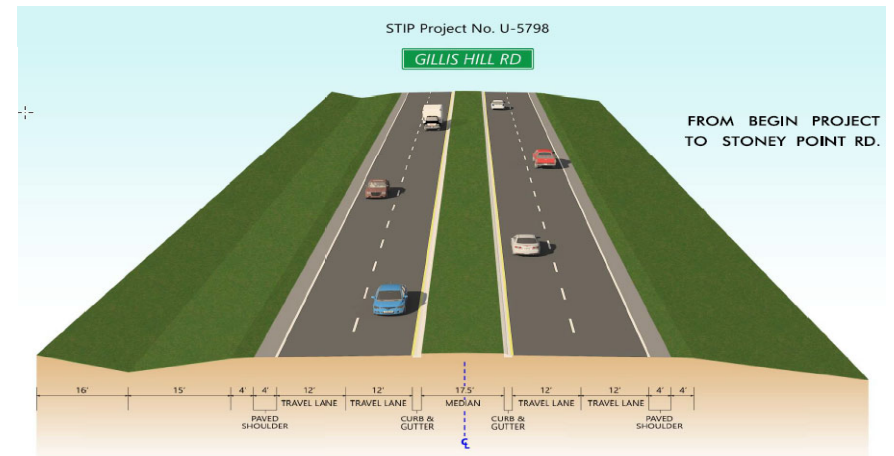
- Provides a different perspective
- Easier to digest by the public
- Ability of firms to generate?



*NOTE: MIRROR CENTER TURN LANES AND RAISED ISLAND ON NORTH END OF BRIDGE

PROPOSED SANDY RIDGE ROAD – TYPICAL SECTIONS

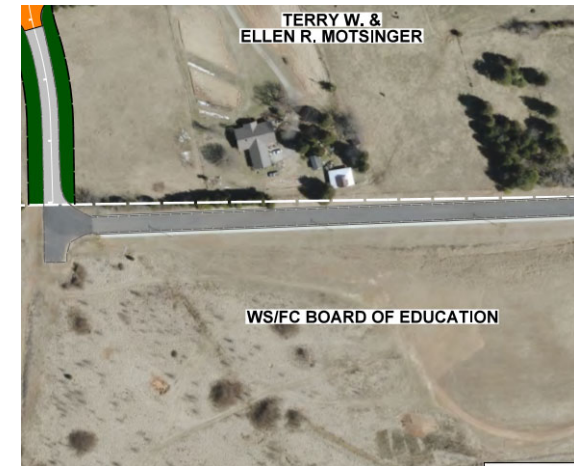
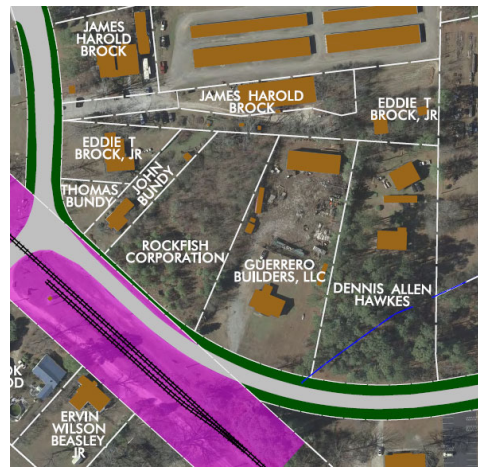
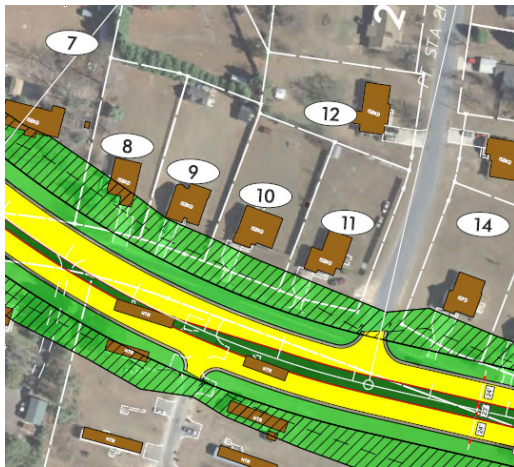
INCLUSION OF THE SIDEWALKS IS CONTINGENT UPON MUNICIPAL AGREEMENT



Guides/Best Practices

PROPERTY OWNER NAMES ARE SHOWN

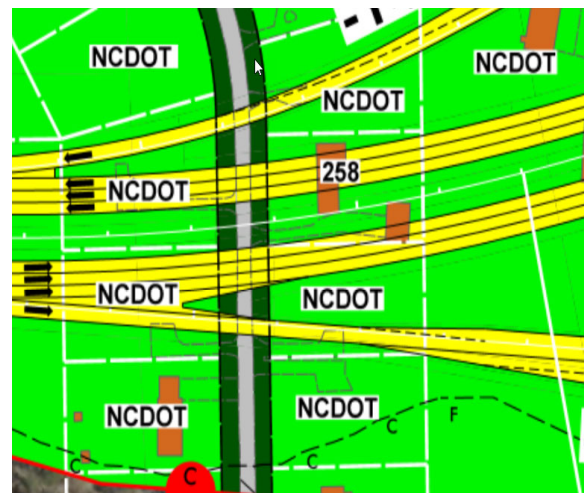
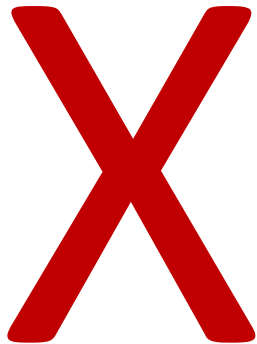
NOTE: OPTIONS ARE WHITE LETTERS ON PHOTOGRAPHY, BLACK LETTERS INSIDE A WHITE BACKGROUND, OR PARCEL NUMBERS WITH A TABLE WITH THE PROPERTY OWNER NAMES /CROSS REFERENCED OR A COMBINATION OF BOTH.



Guides/Best Practices

LANE LINES SHOWN

BEST PRACTICE – SHOW LANE LINES ONLY WHERE THERE ARE LANE ARROWS OR USE THE PAVEMENT MARKING PLANS LINE STYLES THROUGHOUT THE MAP.



Outcomes/Benefits

Public Perception

- Transparency
- More Public Buy-in

Saves Staff Time (Consultant and DOT)

Minimizes confusion

Questions?

Thank You!

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