



NORTH CAROLINA
Turnpike Authority



STIP Project Nos. R-3329 & R-2559
Federal Aid Project No. STP-NHF-74(90)



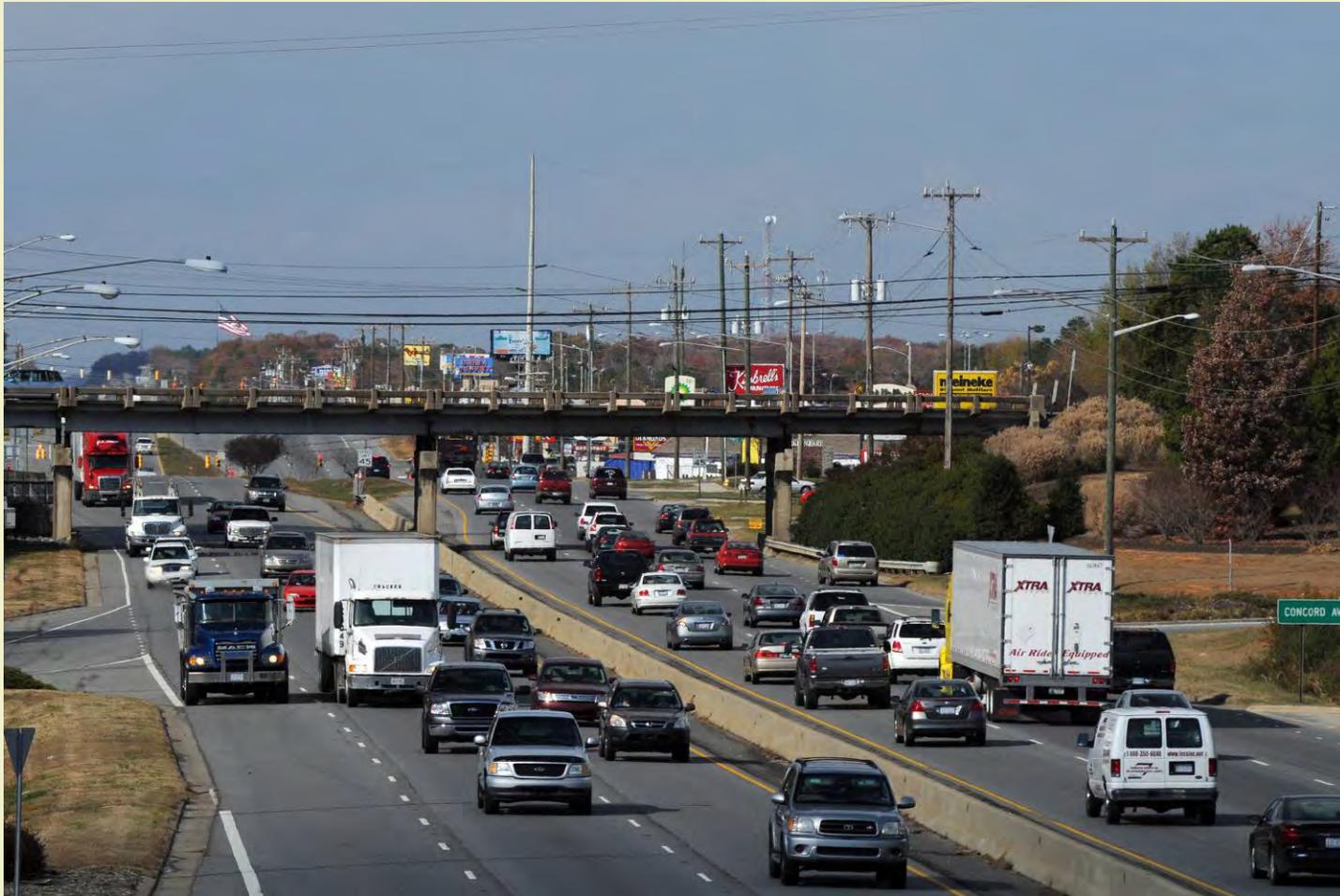
Monroe Connector/Bypass

Industry Forum

February 4, 2010

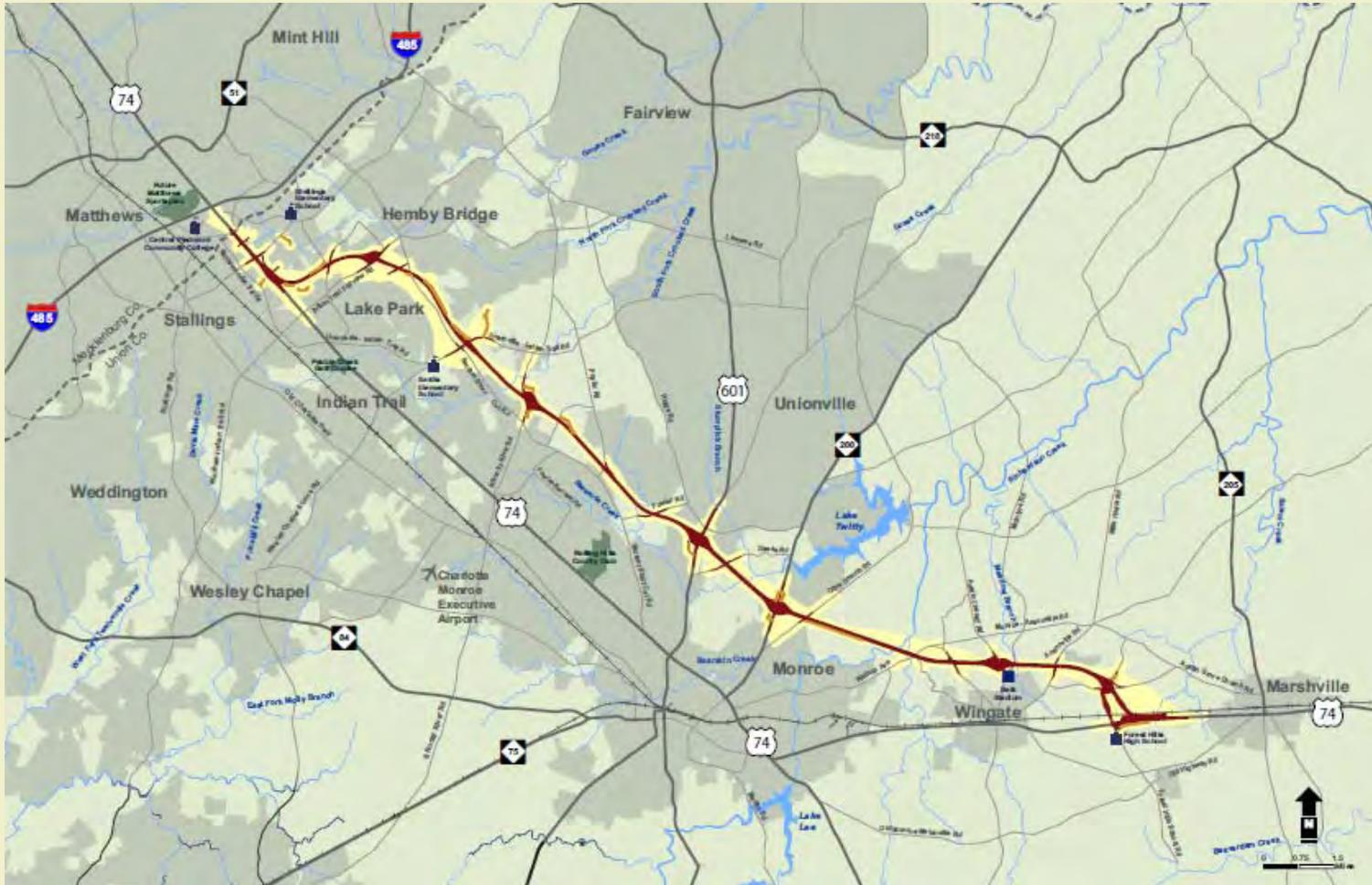


Existing US 74 Corridor



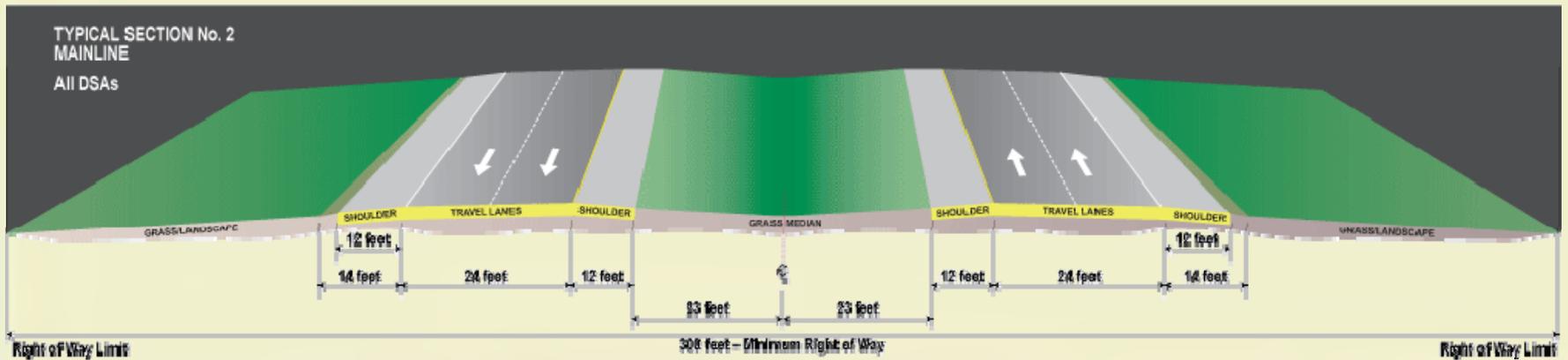
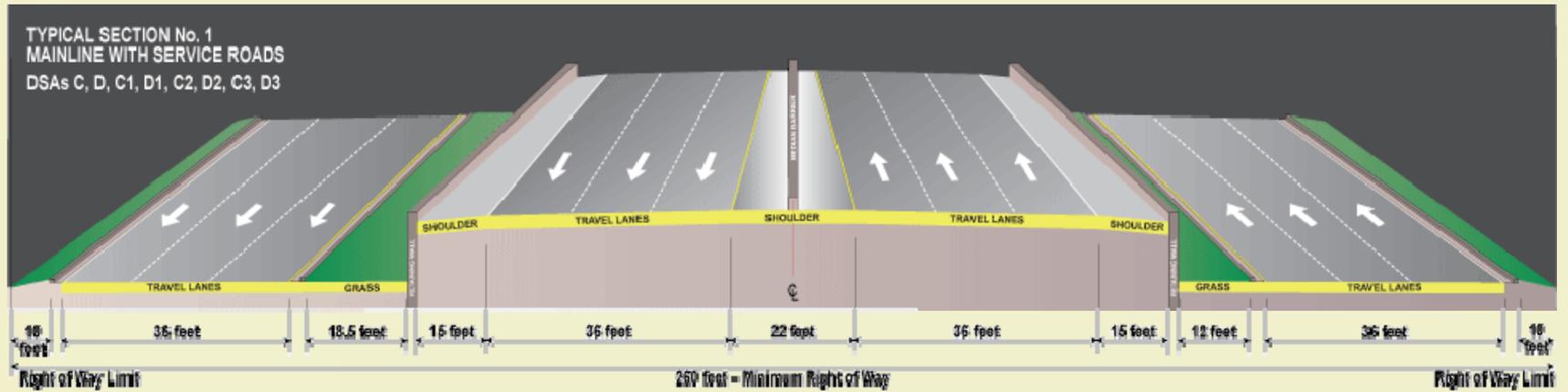
Monroe Connector/Bypass

Preferred Alternative “D”

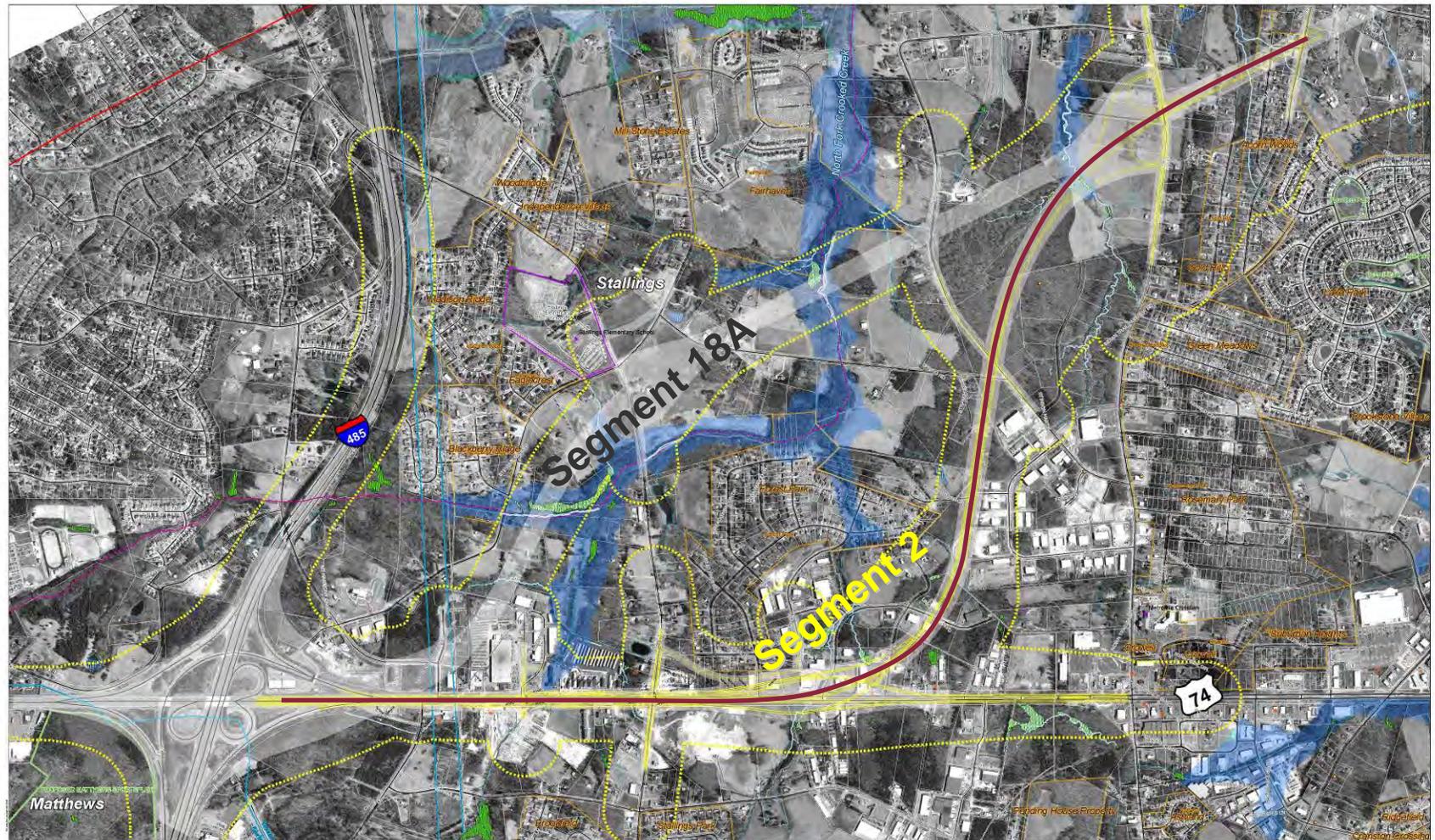


Monroe Connector/Bypass

Typical Sections

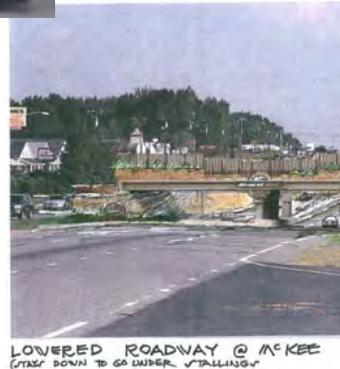


Segment 2 Improves US 74

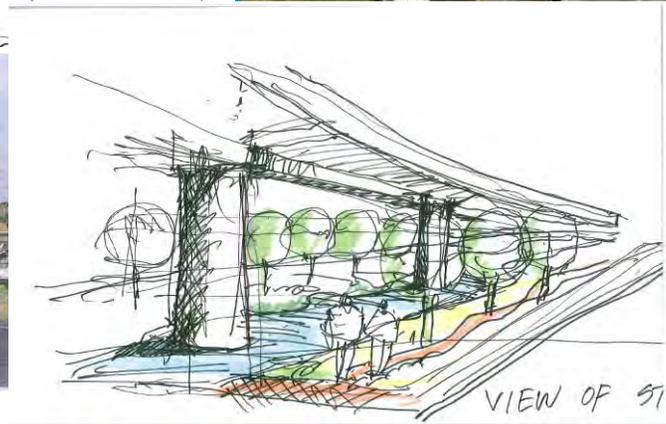


Segment 2 Design Considerations

Context Sensitivity is Critical!



LOWERED ROADWAY @ MCKEE
(STAY DOWN TO GO UNDER VTRAILING)





Monroe Connector/Bypass

Aesthetic Concepts



REGIONAL ARCHITECTURE THEME

Monroe Connector/Bypass



Aesthetic Concepts



Monroe Connector/Bypass

Aesthetic Guidelines – Design Details

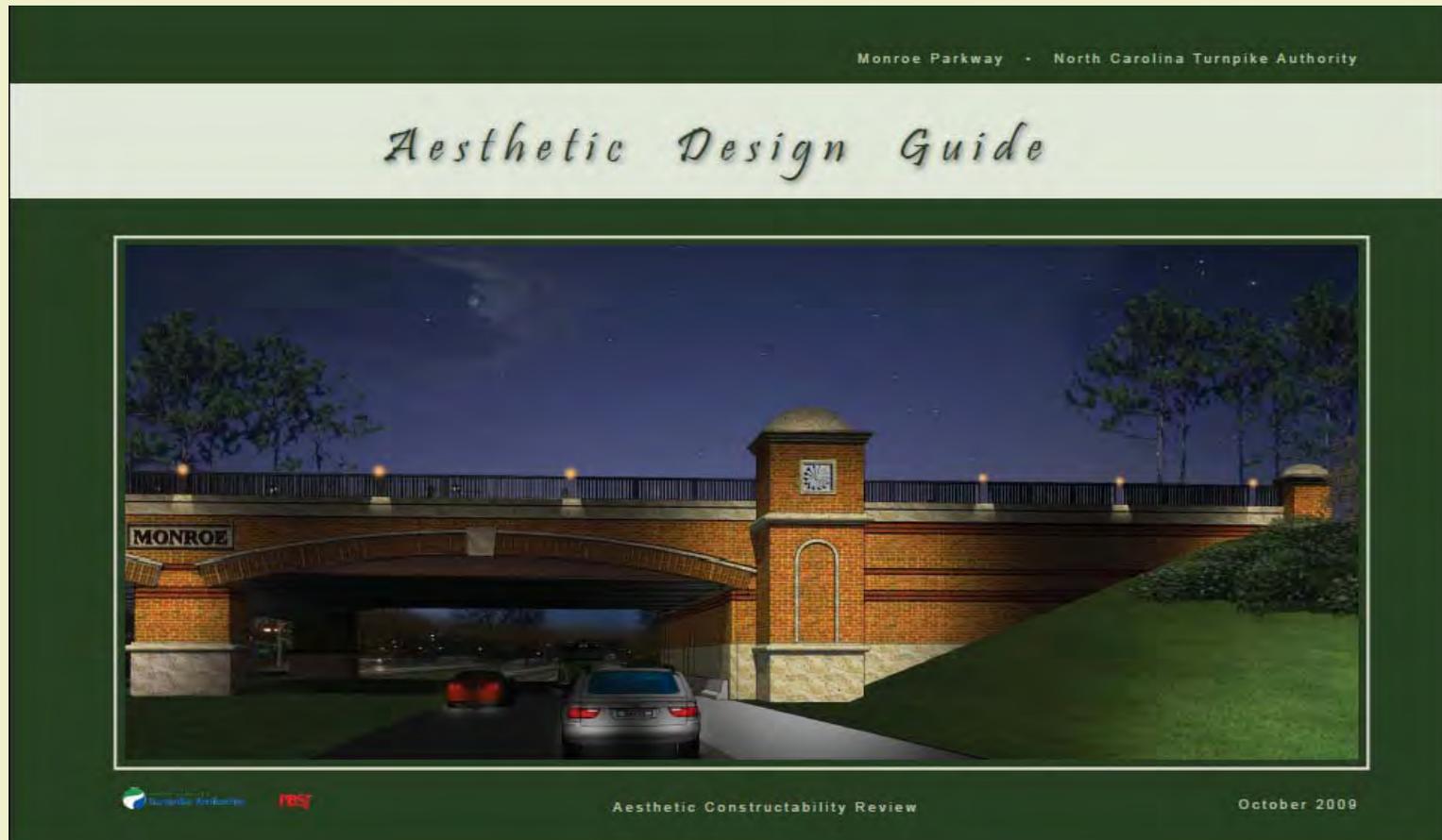
Industry Constructability Review

- Focus on construction methods & cost (2% or <)
- Examples:
 - Eliminate texture on barrier – allows slip forming
 - Connection details (i.e. Arches on bridges)
 - Minimization of details under bridges
 - Allow more vertical steps in the noise barriers to match topography

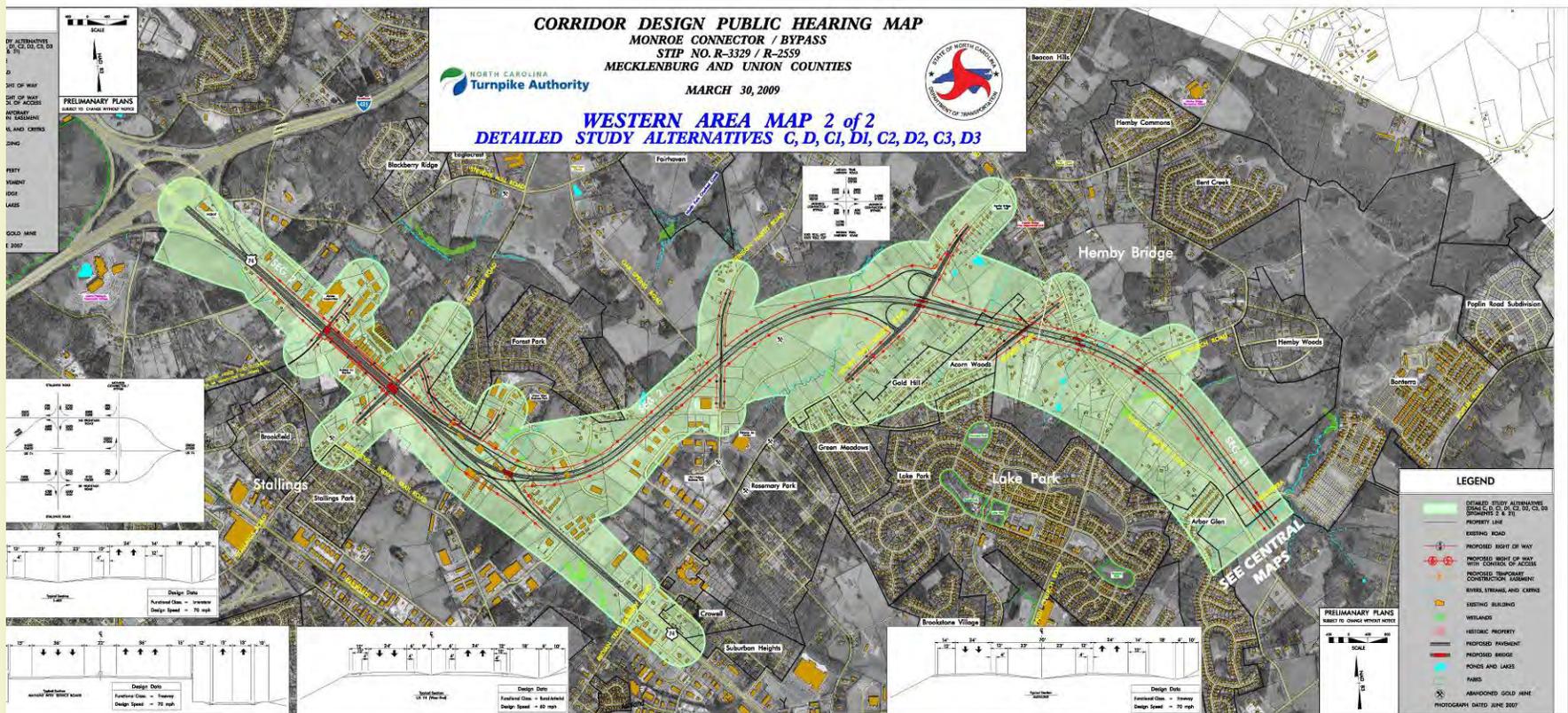
Provide a single design that all can bid and eliminate the design from the scoring



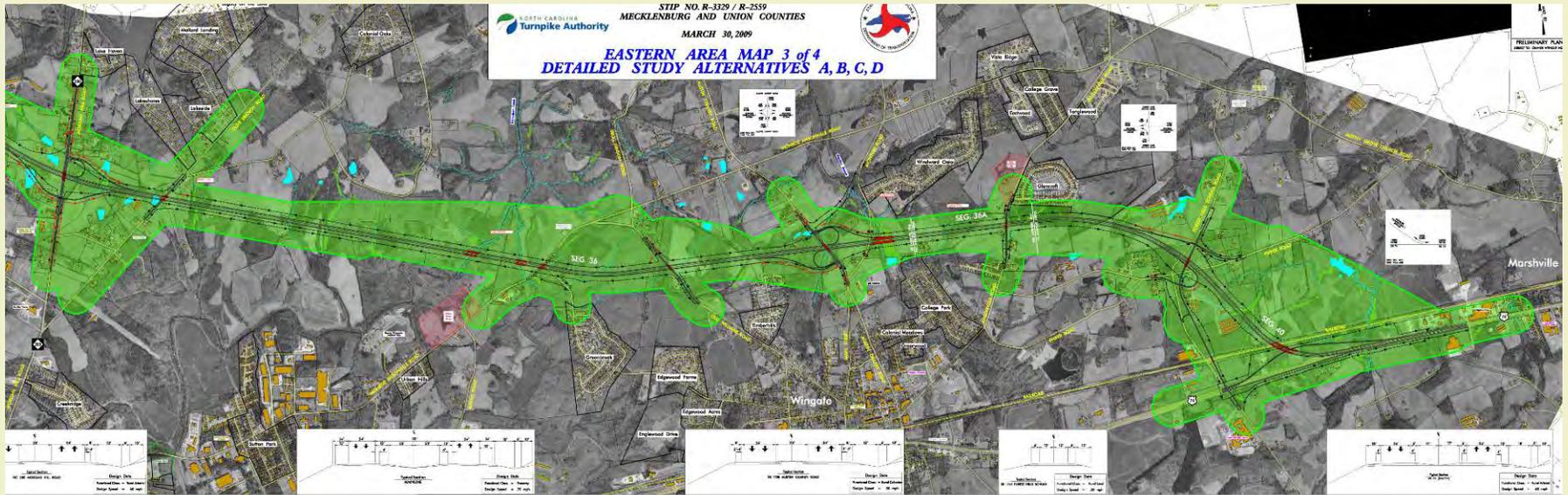
Aesthetic Guidelines – Design Details



Western Area

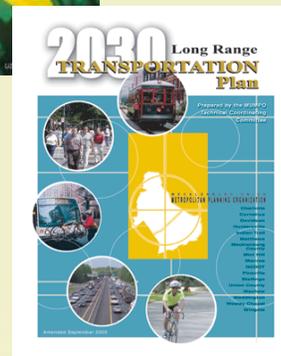


Eastern Area



Current Status - *Environmental*

- Completing NEPA studies
 - Final EIS – February/March 2010
 - Record of Decision (ROD) – June 2010
- Addressing federally-protected species issues
 - Mussel - Carolina Heelsplitter
 - Plants - Schweinitz's Sunflower, Michaux's Sumac, Smooth Coneflower
- Demonstrating regional air quality conformity
 - Metrolina Region
 - May 2010



Current Status - *Design*

- Refining functional designs
- Evaluating locations for service roads
- Preparing signing strip map
- Value Engineering/Practical Design Review

Current Status - *Preconstruction*

- Risk assessment process underway
- Identifying utility conflicts
- Conducting geotechnical investigations
- Surveying
- Developing alternate bidding process for pavement design
- Initiating Design-Build RFP development
- Most R/W acquired east of US 601

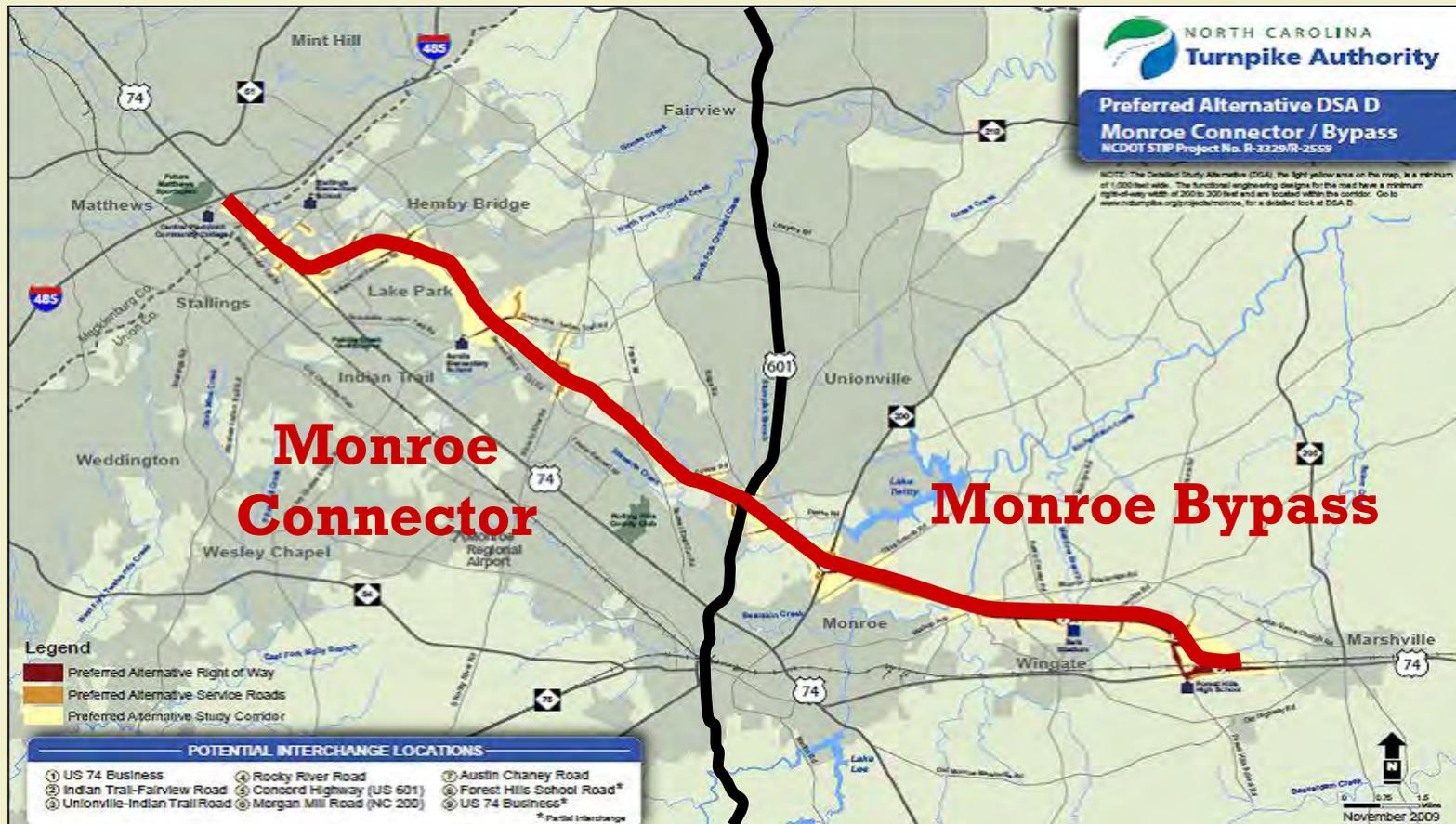
Discussion Issues

Schedule Considerations

- **TIFIA Unsecured**
- **Other Financing Risks**
 - Interest Rates & Spreads
 - Final T & R
 - BAB Expiration?
 - Bond Insurance
- **Environmental Risks**
 - AQ
 - Heelsplitter
 - ROD
- **Capital Costs**

**See
Schedule
Handout**

Contract Structure



Contract Structure

Revisiting One DB Contract versus Two

Considerations

- Pavement Bidding Concept
- Aesthetic Treatments
- Permit Considerations
- Early Opening of Bypass Section has Little Value
- Economy of Scale
- Every \$ Matters
- Competition
- Industry Opportunity
- Agency Administration

Contract Provisions

- “Use Any Design Standard”
 - Alternate Pavement Bidding
-
-

- Highest Value Fixed Price?
 - Right of Way Acquisition?
 - Separate ITS Contract?
-
-

- Toll Integration by Others
- Landscaping by Others

Anticipated Completion Dates

- Bypass
 - Substantial Completion = 12/2013
(Open to Traffic)
 - Final Completion = 6/2014
- Connector
 - Substantial Completion = 12/2014
(Open to Traffic)
 - Final Completion = 6/2015