



NORTH CAROLINA
Department of Transportation

B-5950 – Silas Creek Parkway over Salem Creek Bridge Replacements

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City of Winston-Salem Public Works Committee - January 17, 2024

Connecting people, products and places safely and efficiently with customer focus, accountability and environmental sensitivity to enhance the economy and vitality of North Carolina

Project Overview

- Dual bridges on Silas Creek Parkway over Salem Creek
- Bridge replacement originally identified in 2017
- Division will replace both structures with a single bridge structure
- New bridge will accommodate future Salem Creek Greenway extension under the structure
- Right-of-way is programmed for January 2026
- Let is programmed for January 2027



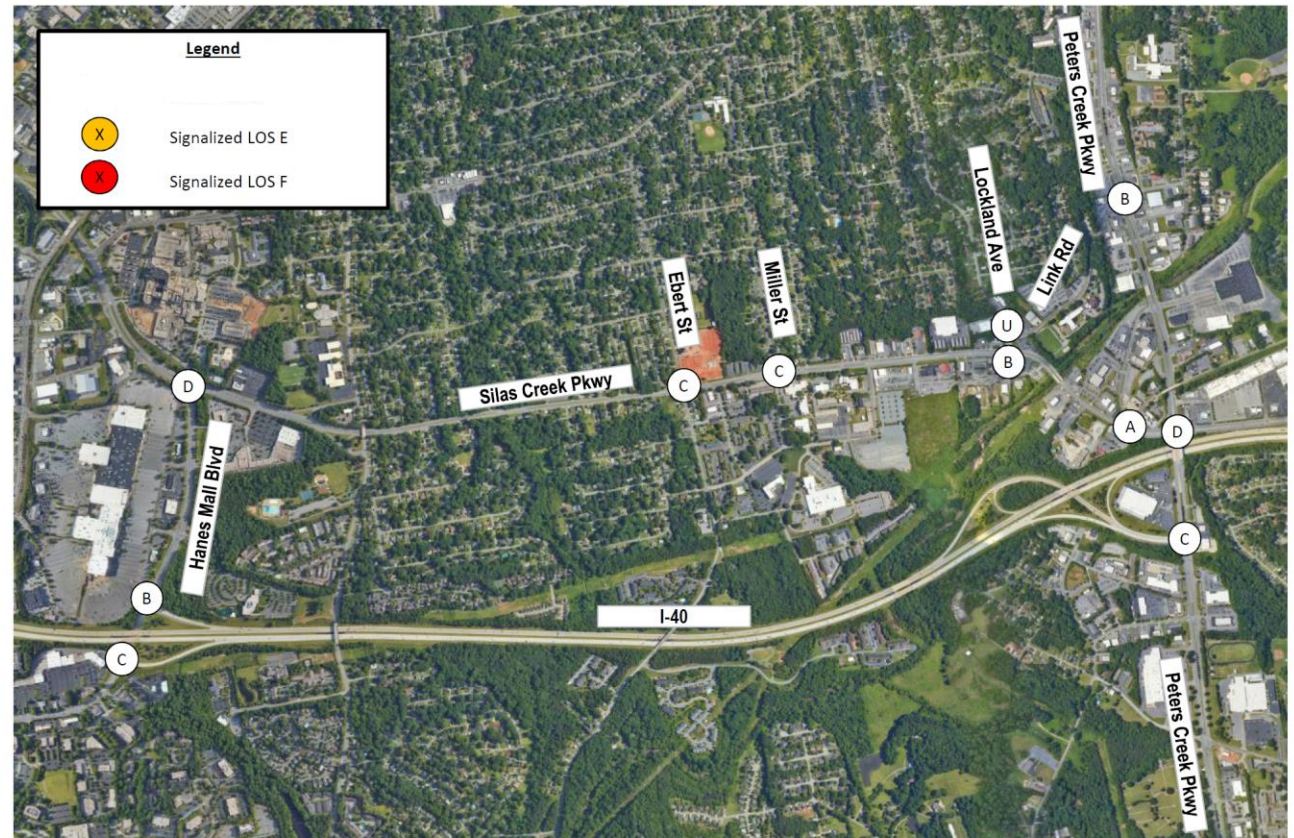
Traffic Control Considerations

- Silas Creek Parkway carries an average of 23,500 vehicles per day
- Division analyzed 2027 volumes under existing conditions
- Horizontal and vertical curves on both sides of the bridges are a challenge
- Goal to minimize right-of-way & utility impacts as much as practicable



No Build LOS PM Peak Hour
B-5950 Bridge No. 330007 and 330295 on NC 67 over Salem Creek
Winston-Salem, North Carolina

Figure 4



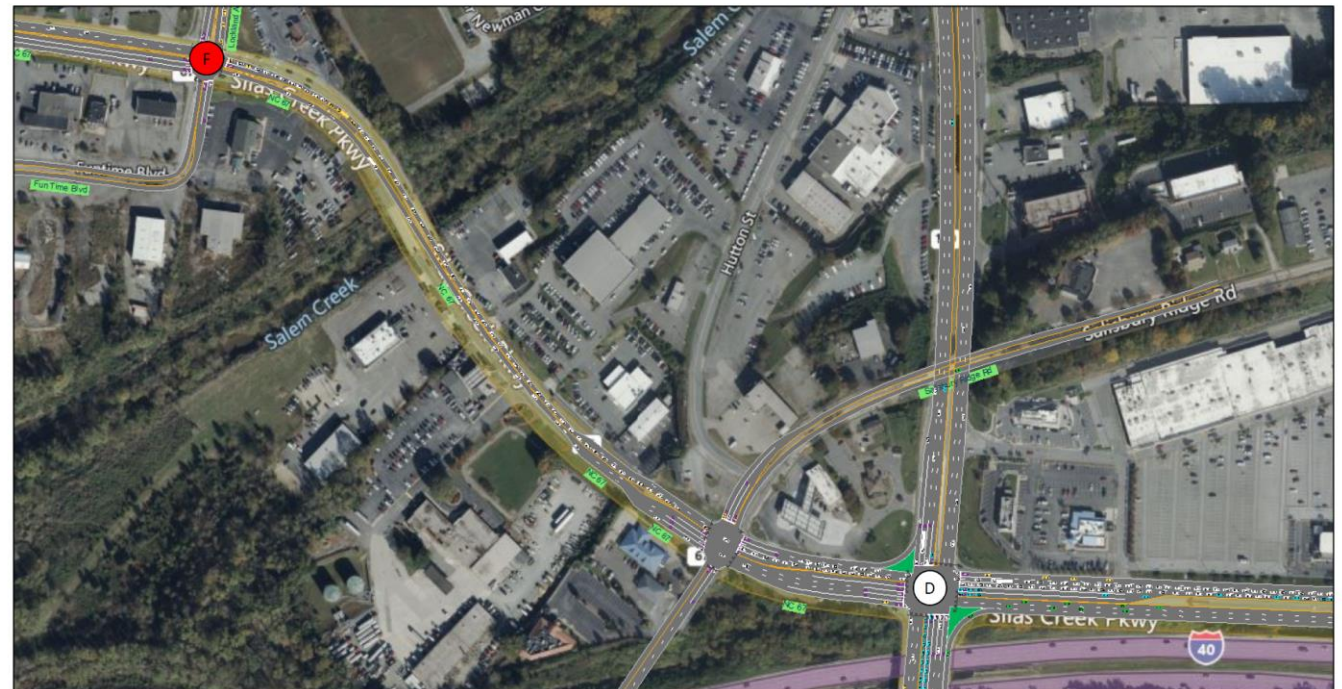
Traffic Control Considerations – Staged Construction

- Division analyzed staged construction
 - Reduce Silas Creek Parkway to one lane in each direction
 - Shift traffic onto one existing bridge while constructing part of the new bridge
 - Shift traffic onto the constructed portion of the new bridge and complete the new structure
- Closing the WB direction is nearly impossible to adequately tie back into the Lockland Avenue intersection
- Extensive queuing of traffic
- Approximately 2 to 2.5 years of construction



Alternative 2B
B-5950 Bridge No. 330007 and 330295 on NC 67 over Salem Creek
Winston-Salem, North Carolina

Figure 9



Traffic Control Considerations – Staged Construction



Figure 10

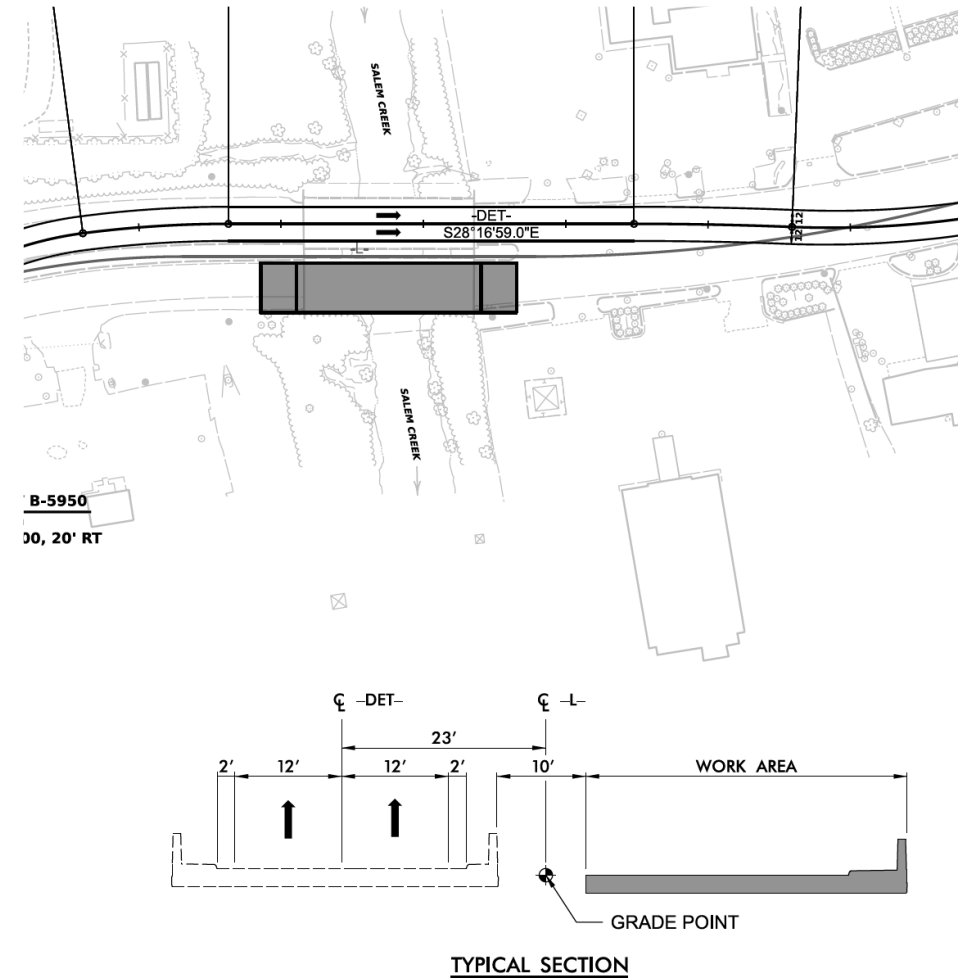
- Division also analyzed detouring one direction with staged construction
 - Shifting the WB direction at the Lockland Avenue intersection is still an issue
 - Extensive queuing of traffic and delays
 - Construction duration still approximately 2 to 2.5 years

Alternative 1B WB Detour LOS PM Peak Hour
B-5950 Bridge No. 330007 and 330295 on NC 67 over Salem Creek
Winston-Salem, North Carolina



Traffic Control Considerations – Staged Construction

- Staged construction produces poor level of service within the impact area
- Limits access to businesses within the project limits
- Requires additional right-of-way and utility relocations
- Lane shift and tie-in concerns
- Approximately 2 to 2.5 years of construction



Traffic Control Considerations – Complete Closure



Figure 15

Alternative 3 Full Closure Alternative LOS PM Peak Hour
 B-5950 Bridge No. 330007 and 330295 on NC 67 over Salem Creek
 Winston-Salem, North Carolina

- Division analyzed complete closure
 - Builds off our experience with the Salem Parkway project
 - Signed detour route would be I-40 to Hanes Mall Boulevard
 - Access up to the project limits accommodated on both east and west ends
- Approximately 1 year of construction with contractual incentives



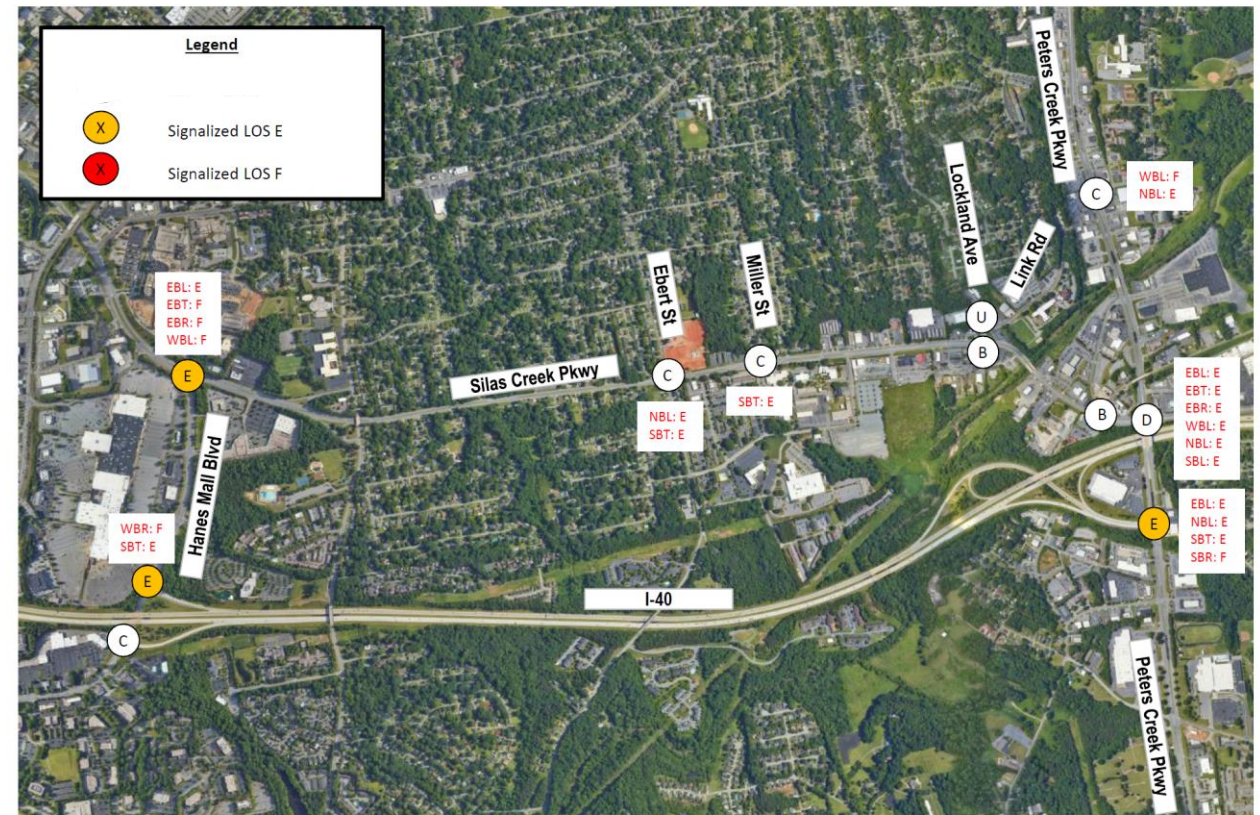
Traffic Control Considerations – Complete Closure



Figure 17

- Preliminary Mitigation Measures identified:
 - Signal timing adjustments
 - Restriping lanes and changing signal phasing at Silas Creek Parkway & Hanes Mall Boulevard and Silas Creek Parkway & Peters Creek Parkway
 - Restriping NB to thru, shared thru/right and right turn lanes at Hanes Mall Boulevard & I-40 East Ramp
 - Extending the WB left turn lane at Silas Creek Parkway & Buchanan Street
- Impacts can be further modeled for additional mitigation measures

Alternative 3 Full Closure with Mitigations LOS PM Peak Hour
B-5950 Bridge No. 330007 and 330295 on NC 67 over Salem Creek
 Winston-Salem, North Carolina



Traffic Control Considerations – Complete Closure



Figure 4 Dewberry

Figure 17

No Build LOS PM Peak Hour
B-5950 Bridge No. 330007 and 330295 on NC 67 over Salem Creek
Winston-Salem, North Carolina



Alternative 3 Full Closure with Mitigations LOS PM Peak Hour
B-5950 Bridge No. 330007 and 330295 on NC 67 over Salem Creek
Winston-Salem, North Carolina



Traffic Control Considerations



Figure 9

Alternative 1A EB Detour LOS PM Peak Hour
B-5950 Bridge No. 330007 and 330295 on NC 67 over Salem Creek
Winston-Salem, North Carolina



Figure 17

Alternative 3 Full Closure with Mitigations LOS PM Peak Hour
B-5950 Bridge No. 330007 and 330295 on NC 67 over Salem Creek
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Traffic Control Considerations



Figure 10 Dewberry

Alternative 1B WB Detour LOS PM Peak Hour
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Figure 17

Alternative 3 Full Closure with Mitigations LOS PM Peak Hour
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Next Steps

- Dewberry to proceed with design based on full closure including mitigation measures
- Identify utility conflicts and design relocations
- Public Outreach
 - Targeted meetings with businesses within project limits and institutions within impact area (Forsyth Tech, Novant Forsyth Medical Center, etc.)
 - Develop expanded outreach to prepare the public for construction
- Coordinate with City sidewalk project (EB-5722) to close gap and incorporate proposed greenway extension in the final design
- Right-of-way January 2026
- Let January 2027



Contact Us

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Thank you!
