| Highway – Stormwa (Version 3.00; Released A | ugust 2021) | North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS | | | | | | | | Constant of the second | | |
|---|---|---|---|--|--|--|--|--|---|------------------------|---|--|
| WBS Element: | 45798.1.1 | TIP/Proj No: | B-5845 | | County(ies): | Cleveland | | | Р | age 1 | of 2 | |
| | | | | General Project Information | | | _ | | | <u></u> | | |
| WBS Element: | | 45798.1.1 | | TIP Number: | B-5845 | | Project | Type: | Bridge Replacement | Date: | 11/30/2021 | |
| NCDOT Contact: | - | Steve Rackley, PE | | | | Contractor / Desig | ner: | TGS Engine | eers (David B. Petty, PE) | | | |
| | Address | Bridge Maintenanc | e | | | | Address: | 706 Hillsbo | rough Street | | | |
| | | 1710 E. Marion St. | | | | | | Suite 200 | | | | |
| | | Shelby, NC 28151 | | | | | | Raleigh NC | , 27603 | | | |
| | Phone | : <mark>980-552-4216</mark> | | | | | Phone: | 919-773-88 | 87 ext. 104 | | | |
| | Emai | srackley@ncdot.go | v | | | | Email: | dpetty@tgsengineers.com | | | | |
| City/Town: | | | S | helby | | County(ies): | Cleve | land | | | | |
| River Basin(s): | | Broa | ad | | | CAMA County? | N | 0 | | | | |
| Wetlands within Pro | ject Limits? | Yes | | | | | | | | | | |
| | | | | | Project Desc | ription | | | | | | |
| Project Length (lin. | niles or feet): | 0.369 miles Surrounding Land Use: Woods, Low Density Residential, City Reservoir an | | | | | | oir and Water Treatment Fac | cility, City Park | | | |
| | | Proposed Project | | | | Existing Site | | | | | | |
| Project Built-Upon A | vrea (ac.) | 1.6 ac. | | | | 1.2 ac. | | | | | | |
| Typical Cross Section Description: | | Two 12' paved trav shoulders behind g | el lanes with 5 Juardrail. | ' paved shoulders to | face of guardrail | and 3' grassed | Two 11' pave | d travel lane | s with 1' paved shoulder and | d 6' grassed sho | ulders. | |
| Annual Avg Daily Tr | affic (veh/hr/day): | Design/Future | : | 7800 | Year | 2040 | Existing: | | 6800 | Yea | ar: 2020 | |
| General Proje (Description of Mir Quality I | ect Narrative: imization of Water mpacts) | NCDOT STIP B-58 by 37' wide (63' Pr proposed grade wil The proposed bridg approach slab in th stream and at the le Proposed bridge to Existing pipes are t | 145 involves the estressed Con Il be about 1' al ge will have no e north west qu owest velocitie be constructe to be retained al be constructe to be retained al be constructe to be retained al be constructe to be retained al constructe to be retained constructe construct | e replacement of Brid crete Modified Bulb ⁻ bove existing ground direct discharge into uadrant, where it will is as practicable. id and existing bridge and extended where | dge #220025 over Tee) two-span br I within the vicinit to the water. Storr be diffused with to be removed to practicable to mi | er Buffalo Creek on S idge to replace existi y of the bridge and ro nwater runoff from th riprap pad at the prop using temporary work nimize in-stream wor | IR 2033 (Oak (ng 225' long b) ughly matching the proposed bri bosed pipe out pads. k. | Grove Rd.) ir y 28' wide (rd g existing gro idge is to floo let. All propo | n Cleveland County, NC eas einforced concrete deck on I bound outside of the bridge. w to a traffic bearing grated i bosed stormwater runoff is dis | t of Shelby. Pro | posed 230' long an bridge. The of the bridge away from the | |

| Highway Stormwater Persent (Version 3.00; Released August 2021) | Tighway | | | | | | | | | | |
|---|----------------------------------|-----------------|--|-------------------------|------------|--|------------|---|------|--|--|
| WBS Element: 45798.1.1 | TIP/Proj No.: | B-5845 | County(ies): | Cleveland | | | Page | 2 | of 2 | | |
| | | | General Project | Information | | | | | | | |
| | | | Waterbody In | formation | | | | | | | |
| Surface Water Body (1): | | Buffalo | Creek | NCDWR Stream In | idex No.: | | 9-53-(5) | | | | |
| NCDWR Surface Water Classification for Water Body | | | Primary Classification: Supplemental Classification: | Class C | | | | | - | | |
| Other Stream Classification: None | | | | | | | | | | | |
| Impairments: | Nor | ne | | | | | | | | | |
| Aquatic T&E Species? | No | Comments: | | | | i | | 1 | | | |
| NRTR Stream ID: | SA | - | | | r | Buffer Rules in Effect: | | | N/A | | |
| Project Includes Bridge Spanning Water | r Body? | Yes | Deck Drains Discharge Over Bu | uffer? | No | Dissipator Pads Provided | in Buffer? | | No | | |
| Deck Drains Discharge Over Water Bod (If ves. provide justification in the | y? General Proiect Na | No arrative) | (If yes, provide justification in | the General Project | Narrative) | (If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative) | | | | | |
| | , | , | | | | | | | | | |
| Surface Water Body (2): | | | NCDWR Stream Index No.: | | | | | | | | |
| NCDWR Surface Water Classification fo | r Water Body | | Primary Classification: | Primary Classification: | | | | | | | |
| Other Stream Classification: | | | | | | | | | _ | | |
| Impairments: | | O a marta | | | | | | | | | |
| | | Comments | | | | Duffen Dules in Effect | | | | | |
| NRIR Stream ID: | - De de 2 | | Daak Draine Diacharge Over Buffer? | | | Discinctor Dada Provided in Puffer? | | | | | |
| Project includes Bridge Spanning Water | r Bouy r | | Ueck Drains Discharge Over Buffer? | | Narrative) | (If yes, describe in the General Project Narrative: if no justify in the | | | | | |
| (If yes, provide justification in the | y r General Project Na | arrative) | | | | General Project Narrative) | | | | | |
| | | | | | | | | | | | |
| Surface Water Body (3): | | | NCDWR Stream Index No.: | | | | | | | | |
| NCDWR Surface Water Classification for Water Body | | | Primary Classification: Supplemental Classification: | | | | | | | | |
| | | | | | | | | | | | |
| Other Stream Classification: | | | | | | | | _ | | | |
| Impairments: | | | | | | | | | | | |
| Aquatic T&E Species? | | Comments: | | | | | | | | | |
| NRTR Stream ID: | | | | | | Buffer Rules in Effect: | | | | | |
| Project Includes Bridge Spanning Water | r Body? | | Deck Drains Discharge Over Buffer? | | | Dissipator Pads Provided | in Buffer? | | | | |
| Deck Drains Discharge Over Water Body? | | | (If yes, provide justification in the General Project Narrative) | | | (IT yes, describe in the General Project Narrative; If no, justify in the | | | | | |
| (If yes, provide justification in the | | | | | | | | | | | |









| PROJECT REFERENCE NO |) . | SHEET NO. | | | | | |
|--|-----------------------------|------------|--|--|--|--|--|
| B-5845 | | 5 | | | | | |
| R/W SHEET N | 10. | | | | | | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER | | | | | | |
| INCOMPLE do not use for | TE PLANS R/W ACQUISITION | | | | | | |
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| DOCUMENT NOT CONSIDERED FINAL | | | | | | | |
| UNLESS ALL SIGNA | IURE | SCOMPLETED | | | | | |
| TGS ENGINEERS 804–C N. LAFAYETTE ST SHELBY, NC 28150 PH (704) 476–0003 CORP. LICENSE NO.: C–0275 | | | | | | | |



| PROJECT REFERENCE NO | D. SHEET NO |) . | | | | | |
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| B-5845 | 5 | | | | | | |
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| TGS ENGINEERS 804–C N. LAFAYETTE ST SHELBY, NC 28150 PH (704) 476–0003 COPP LICENSE NO C-0275 | | | | | | | |









| | | | WETI | LAND AND S | URFACE | WATER I | MPACTS SI | UMMARY | | | | | |
|-------|----------------------------|---|--------|-----------------|----------|------------|-------------|----------|-----------------------|----------|-----------|---------|----------|
| | | | | WETLAND IMPACTS | | | | | SURFACE WATER IMPACTS | | | | |
| | | | | Hand | | | | | Existing | Existing | | | |
| | | | | Permanent | Temp. | Excavation | Mechanized | Clearing | Permanent | Temp. | Channel | Channel | Natural |
| Site | Station | Structure | NRTR | Fill In | Fill In | in | Clearing | in | SW | SW | Impacts | Impacts | Stream |
| No. | (From/To) | Size / Type | Map ID | Wetlands | Wetlands | Wetlands | in Wetlands | Wetlands | impacts | impacts | Permanent | Temp. | Design |
| | | | | (ac) | (ac) | (ac) | (ac) | (ac) | (ac) | (ac) | (ft) | (ft) | (ft) |
| 1A | -L- 12+50 to 13+07 RT | Roadway Clearing | WB | | | | < 0.01 | | | | | | |
| 1A | -L- 12+87 to 13+87 RT | Roadway Fill | WB | 0.02 | | | | | | | | | |
| | | | | | | | | | | | | | |
| 1A | -L- 13+95 to 14+24 RT | Roadway Fill / 24" RCP | SC | | | | | | < 0.01 | < 0.01 | 30 | 11 | |
| | | | | | | | | | | | | | |
| 1B | -L- 16+29 to 17+33 RT | Channel Change / Roadway Fill | SB | | | | | | < 0.01 | < 0.01 | 138 | 10 | |
| 1C | -L- 17+74 to 19+05 LT | Bank Stabilization/Erosion Control (36" RCPs) | SB | | | | | | < 0.01 | < 0.01 | 11 | 21 | |
| 1D | -L- 19+57 to 20+40 RT | Roadway Fill / 36" CAAP | SB | | | | | | < 0.01 | < 0.01 | 124 | 18 | |
| 1D | -L- 20+67 to 21+43 RT | 48" Pipe | SB | | | | | | < 0.01 | < 0.01 | 37 | 42 | |
| | | | | | | | | | | | | | |
| 2 | -L- 22+11 to 22+98 LT & RT | Temporary Workpads | SA | | | | | | | 0.07 | | 47 | |
| 2 | -L- 22+67 to 22+98 LT | Bank Stabilization | SA | | | | | | < 0.01 | | 62 | | |
| | | | | | | | | | | | | | |
| 2 | -L- 23+10 to 23+20 LT | Bridge | SE | | | | | | | < 0.01 | | 8 | |
| | | | | | | | | | | | | | |
| 3 | -L- 22+61 to 26+23 RT | Roadway Fill | SD | | | | | | 0.02 | | 315 | | |
| | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | |
| TOTAL | S*: | | | 0.02 | | | < 0.01 | | 0.05 | 0.08 | 717 | 157 | 0 |
| | | | | | | | 1 | I | | | 1 | | <u> </u> |

*Rounded totals are sum of actual impacts

NOTES:

1. Site 2 Temporary Workpads Channel Impacts are in addition to the 62 LF Permanent Impacts due to Bank Stabilization.

2. <0.01 acres of Permanent SW impacts for bridge interior bent at -L- 22+56.

Revised 2018 Feb

| NC DEPARTMENT OF TRANSPORTATIO | | | | | | | | | |
|--------------------------------|----------------------|----|----|--|--|--|--|--|--|
| | DIVISION OF HIGHWAYS | | | | | | | | |
| 12/20/2021 | | | | | | | | | |
| | Cleveland County | | | | | | | | |
| | B-5845 | | | | | | | | |
| 45798.1.1 | | | | | | | | | |
| HEET | 10 | OF | 10 | | | | | | |
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