NORTH CAROLINA
Turnpike Authority

Maintenance Rating Program

Triangle Expressway

May 2025

2025 First Quarter Report

CONSULTANT CERTIFICATION OF COMPLETION

May 5, 2025

Alan Shapiro, P.E.
Deputy Chief Engineer
North Carolina Turnpike Authority
2501 Aerial Center Parkway, Suite 200
Morrisville, NC 27699

NCTA Triangle Expressway Roadway Maintenance Performance Rating Program; Q1, 2025 Rating

This is to certify that I, Adam Gosselin, PE, am an authorized official representative of the company Mott MacDonald I&E, LLC, a subconsultant to HNTB North Carolina, P.C. Collaboratively; we are working as the NCTA Roadway and Facility Maintenance Performance Rating Program Consultants.

I know of my own personal knowledge, and do hereby certify, that the work of the contract described above has been independently performed in accordance with, and in conformity to, the *NCTA Roadway and Facility Maintenance Performance Standards v.7.1*.

Sincerely,

Mott MacDonald I&E, LLC

Adam Gosselin, PE
Principal for Mott MacDonald
PE #038213

930 Main Campus drive, Suite 200
Raleigh, NC 27606

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1.0 Executive Summary

The North Carolina Turnpike Authority (NCTA) Maintenance Rating Program (MRP) is a maintenance evaluation program for roadway features and toll facilities on the NCTA system. This report presents results from the 2025 First Quarter Assessment of the Triangle Expressway.

The overall 2025 first quarter maintenance rating of the Triangle Expressway was **96.0**, above the NCTA target rating of 90. As shown in ***Table 1***, all five elements assessed achieved a rating greater than the target rating of 85.

Table 1: MRP Element Results for the 2025 First Quarter Assessment

Element	MRP Rating	Target Rating
Road Surface	100.0	85.0
Unpaved Shoulders and Ditches	100.0	85.0
Drainage	95.6	85.0
Roadside	99.1	85.0
Traffic Control Devices	89.5	85.0
Overall MRP Performance Rating	**96.0**	**90.0**

This report also provides a rolling rating of the latest four quarterly inspections of the Triangle Expressway. As presented in ***Table 2***, the rolling maintenance rating of the Triangle Expressway was **96.0**.

Table 2: MRP Rolling Element Results

Element	Q2 2024 Rating	Q3 2024 Rating	Q4 2024 Rating	Q1 2025 Rating	Rolling Rating
Road Surface	98.9	100.0	98.0	100.0	99.0
Unpaved Shoulders and Ditches	98.8	100.0	100.0	100.0	98.8
Drainage	93.9	92.5	97.0	95.6	95.8
Roadside	94.4	96.7	96.9	99.1	95.5
Traffic Control Devices	93.3	87.8	92.2	89.5	92.6
Overall MRP Performance Rating	**95.7**	**94.6**	**96.2**	**96.0**	**96.0**

In addition, the report provides findings of the Green Level Historic District signs inspection. This quarter, two signs were inspected. One of the signs was in good physical condition, while the other has been struck and is down. The landscaped area around the two signs was maintained in accordance with NCTA MRP standards.

2.0 Introduction

The NCTA MRP is a comprehensive planning, measuring, and managing process that provides a means for communicating to managers, stakeholders, and customers the impacts of policy and budget decisions on program service delivery.

Using outcome-based performance measures and the service level scale (0 through 100), the inspection results are rated against established threshold criteria. The program analysis is accomplished using sampling procedures that capture the level of service being provided for individual assets. The evaluation procedure is based on the establishment of threshold conditions that quantify the maximum defect allowed on assets. Over time, the results can be charted to identify work needs and subsequent necessary actions.

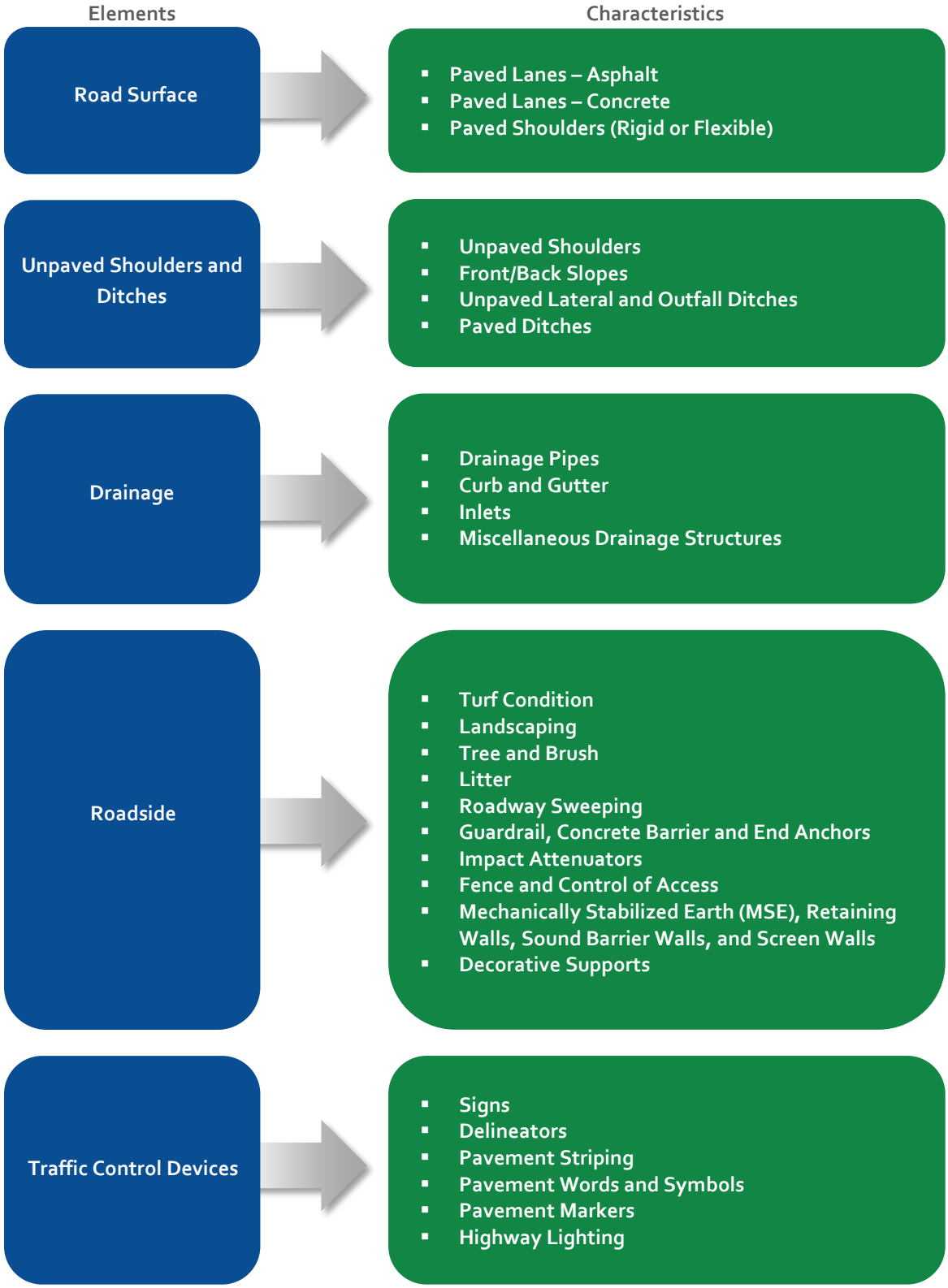
The NCTA performance standards, threshold criteria, and maintenance rating program were developed through a collaborative effort by NCTA managers, NCDOT maintenance staff, and consultants.

Using field survey information, a maintenance matrix can be developed to show the ties between maintenance activities and the characteristics of various roadway features. The purpose of this evaluation is to provide information that can be used to schedule and prioritize routine maintenance activities and provide uniform maintenance conditions that meet established objectives.

3.0 MRP Procedure

Per the *NCTA Roadway and Facility Maintenance Performance Standards V7*, roadway assets or characteristics on NCTA facilities have been grouped into elements. These elements and corresponding characteristics are shown in ***Figure 1:***

Figure 1: Maintenance Elements and Characteristics



A weighting system has been established to identify the importance of each element and characteristic. This system consists of two weighting factors: one that accounts for the importance of individual characteristics within a given maintenance element (1-9), and one that accounts for the importance of the maintenance elements to the total rating (by % of score). This two-factor system reveals deficiencies among characteristics and elements.

The program analysis is accomplished using statistically valid, random sampling procedures that capture the level of service for individual characteristics, with a 95% confidence level in sampling. The sample characteristics selected are evaluated during quarterly inspections, which are performed during the months of February, May, August, and November to account for dynamic changes in assets during the various seasons. The evaluation process is completed using electronic data collection tablets and is based on established threshold conditions described in the NCTA Roadway and Facility Maintenance Standards V7. Those characteristics that meet or exceed the threshold are coded as PASSING; those that do not meet the threshold are coded as NOT PASSING.

When the evaluation process is completed, the number of PASSING samples and total sample are multiplied by the weighted values (1-9) to determine the actual and possible rating points for characteristics and elements. MRP ratings for elements and characteristics are then calculated as the ratio of the actual rating points to possible rating points. The MRP ratings represent the maintenance level of service currently being provided, as they define the percent of characteristics and elements that meet the maintenance condition standard. For instance, an MRP rating of 83 signifies that 83 percent of the inspected elements/characteristics met the standard.

The overall MRP rating is determined by calculating the sum of the elements' ratings multiplied by the following weighted factors:

Road Surface =	**25%**
Unpaved Shoulders =	**13%**
Drainage =	**15%**
Roadside =	**17%**
Traffic Control Devices =	**30%**
Total	**100%**

The NCTA's overall target rating is 90, with elements scoring 85 or higher, and characteristics 80 or higher. In addition to quarterly ratings, the cumulative rolling annual rating is calculated each quarter. This rating is obtained by adding the ratings of the latest four quarterly inspections to compensate for the likelihood of uneven sample sizes.

4.0 Triangle Expressway Description

The Triangle Expressway extends for approximately 37 miles from the interchange of I-40 and Toll NC-885 in Durham to an easterly connection with I-40 / I-42 near Garner. It includes a one-mile segment on Toll NC-540 extending north from the Toll NC-540 / Toll NC-885 interchange to the NC-54 interchange. The Triangle Expressway consists of twelve interchanges and twenty-two all-electronic toll collection zones. The newest section from N.C. 55 Bypass to I-40/I-42 near Garner opened to traffic and started toll collection on September 25, 2024. This section includes interchanges at Holly Springs Road, Bells Lake Road, U.S. 401, Old Stage Road, and N.C. 50 before connecting with I-40 and I-42. While the newly opened extension is now open to traffic, this report will only summarize the data for the pre-existing roadway. (***Figure 2***).

Figure 2: Triangle Expressway Map

5.0 Triangle Expressway Asset Inventory Update

Through normal day-to-day maintenance activities and the construction of special projects, roadside assets are continuously being added or modified on the roadway. NCTA coordinates closely with NCDOT Division 5 Maintenance and conducts routine field visits to maintain an accurate asset inventory and ensure the validity of the MRP survey.

Prior to this quarter assets on Toll NC 540 exit ramps to and from NC-55 Bypass were removed from the inventory due to the Complete 540 construction project. ***Table 3*** presents the updated number of assets that are currently available for inspections.

Table 3: Asset Inventory

Assets	Total Inventory	2025 Eligible Inventory
Barriers	801	616
Curb and Gutter	428	391
Decorative Supports	305	298
Drainage	1179	1127
Misc. Drainage	218	202
Fences	508	483
Highway Lighting	435	430
Impact Attenuators	48	46
Inlets	1129	1075
Linear Segments	795	755
Plant Beds	266	257
Paved Ditches	2	2
Pavement Symbols	652	591
Signs	1224	1168
Tree and Brush	603	567
Turf	1074	1011
Walls	88	84

6.0 MRP First Quarter Assessment

6.1 Quarterly Results

The overall 2025 First quarter maintenance rating of the Triangle Expressway was 96.0, above NCTA's target overall rating of 90. All elements assessed achieved quarter ratings above the target rating of 85 established for element groups.

It is important to note that these results are only representative of the first quarter sample, one of the four surveys to provide an intermediate snapshot of seasonal conditions. Therefore, they are not a statistically valid representation of the assets; only the total of all four quarterly inspections, reported as the rolling rating, provides a 95% confidence level in statistical sampling. The first quarter MRP performance ratings for elements and characteristics are presented in ***Table 4*** and ***Table 5***, respectively.

Table 4: MRP Element Results for Q1 2025

Element	MRP Rating
Road Surface	100.0
Unpaved Shoulders and Ditches	100.0
Drainage	95.6
Roadside	99.1
Traffic Control Devices	89.5
Overall MRP Performance Rating	**96.0**

Table 5: MRP Characteristics Results for Q1 2025

Road Surface	Sample Passed	Sample Total	Weighted Values	Actual Pts	Available Pts	Q1 Rating
Paved Lanes Asphalt	10	10	9	90	90	100
Paved Lanes Concrete	28	28	9	252	252	100
Paved Shoulder	38	38	5	190	190	100
Element Total				**532**	**532**	**100.0**
Unpaved Shoulders and Ditches	**Sample Passed**	**Sample Total**	**Weighted Values**	**Actual Pts**	**Available Pts**	**Q1 Rating**
Unpaved Shoulder	38	38	9	342	342	100
Front/Back Slopes	38	38	6	228	228	100
Lateral and Outfall Ditches, Unpaved	38	38	6	228	228	100
Ditches, Paved	0	0	5	0	0	N/A
Element Total				**798**	**798**	**100.0**
Drainage	**Sample Passed**	**Sample Total**	**Weighted Values**	**Actual Pts**	**Available Pts**	**Q1 Rating**
Drainage Pipes	33	34	7	231	238	97
Curb and Gutter	28	31	6	168	186	90
Inlets	34	34	7	238	238	100
Misc. Drainage Structure	21	23	4	84	92	91
Element Total				**721**	**754**	**95.6**
Roadside	**Sample Passed**	**Sample Total**	**Weighted Values**	**Actual Pts**	**Available Pts**	**Q1 Rating**
Turf Condition	32	33	7	224	231	97
Landscaping	25	25	4	100	100	100
Trees and Brush	31	31	4	124	124	100
Litter	38	38	4	152	152	100
Roadway Sweeping	38	38	5	190	190	100
Guardrail, Concrete Barrier, and End Anchors	32	32	9	288	288	100
Impact Attenuators	9	10	9	81	90	90
Fence, Control Access	30	30	7	210	210	100
Retaining Walls and Sound Barrier Walls	14	14	5	70	70	100
Decorative Supports	28	28	5	140	140	100
Graffiti and Stain Removal	44	44	4	176	176	100
Element Total				**1755**	**1771**	**99.1**
Traffic Control Devices	**Sample Passed**	**Sample Total**	**Weighted Values**	**Actual Pts**	**Available Pts**	**Q1 Rating**
Signs	33	34	7	231	238	97
Delineators	38	38	3	114	114	100
Pavement Striping/Marking	37	38	8	296	304	97
Words and Symbols	44	54	7	308	378	81
Pavement Markers	35	38	9	315	342	92
Highway Lighting	34	44	6	204	264	77
Element Total				**1468**	**1640**	**89.5**

Additionally, ***Appendix A*** includes maps that present the location of all assets assessed during the first quarter. ***Appendix B*** includes a list of the individual assets that did not achieve their target ratings.

6.2 Quarterly Analysis and Recommendations

Elements

During the first quarter, all elements exceeded NCTA's quarter score threshold criteria of 85.

Road Surface (100.0) experienced a 2.0-point increase from the previous quarter's rating. Paved Lanes Concrete (100.0) quarter rating increased by 4 points. All characteristics within this element continued scoring above 90 for last four quarters.

Unpaved Shoulders and Ditches (100.0) elemental rating was on par with the previous quarter's rating. All characteristics within this element continued scoring above 90.

Drainage (95.6) rating decreased by 1.4 points from the previous quarter rating. Inlets (100) rating continued showing great improvement with an increase of 6 points from last quarter.

Roadside (99.1) rating increased by 2.2 points from the previous quarter rating. Fence, Control Access (100) was the most improved characteristic with a score increase of 10.0 points from the previous quarter's rating.

Traffic Control Devices (89.5) experienced a decrease in rating of 2.7 points from the previous quarter. Highway Lighting (77) decreased by 2 points in rating and will require attention with an element characteristic score below target of 80. Word and Symbols (81) improved with a increase in rating of 7 points.

Recommendations to improve specific critical characteristic ratings are provided in the following sections.

Characteristics

This quarter, all but one element characteristic, Highway Lighting (77), exceeded NCTA's quarter score threshold criteria of 80. A description of the characteristic's conditions and future work planning recommendations are provided below. Pictures of applicable characteristic failures are included in ***Appendix B***.

Highway Lighting (77 rating – 34 of the 44 assets passed): Each of the highway lights that did not pass inspection were not functioning properly (out at night).

To maintain/improve the condition ratings, it is recommended that highway lighting be regularly inspected for functionality after dark, and maintenance completed as planned in the capital budget. Solar and battery powered backup may help cover temporary down time between repairs.

Maintenance Program:

1) Perform night patrol once a month and identify any outages. A monthly "Lighting Outage Report" shall be submitted by the maintenance provider to the NCTA by the 30th of each month. All bulb outages must be replaced within 48 hours.
2) Perform cleaning of glassware at the same time as any routine maintenance function or diagnostic action is performed.
3) Replace any light poles damaged by traffic within 5 days or within 14 days if any foundations needed pouring.

Maintenance and Evaluation Standards: Highway and Sign Lighting do not meet the maintenance standards when any of the following criteria is observed:

1) Any electrical inspection plate, access panel cover, exposed electrical wire or pull box cover are not properly secured in place.
2) The luminaries are not functioning during nighttime observation. (N)
3) Any pole is damaged, leaning or missing.
4) Rodent screen protection is not in place, where applicable.

7.0 Annual Results

The 2025 annual rolling maintenance rating of the Triangle Expressway was **96.0**, exceeding NCTA's target overall rating of 90. All elements exceeded NCTA's rolling rating threshold criteria of 85. Twenty-seven of the twenty-eight characteristic ratings met or exceeded the target rating of 80.

The 2025 results are presented in ***Exhibit 1*** and ***Table 6***. These results are a collection of the four quarterly inspections conducted in the last year.

Exhibit 1: MRP Element Results for 2025

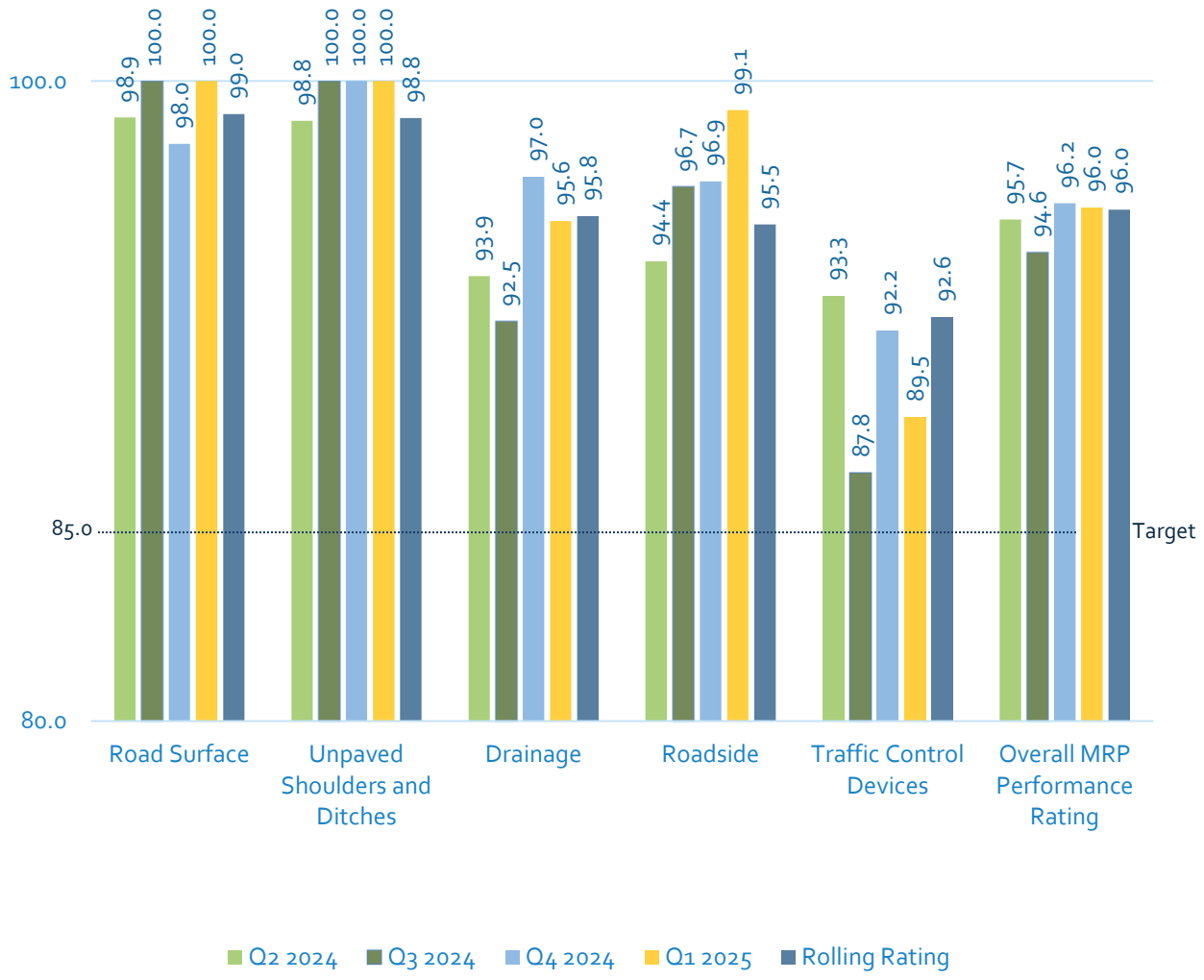


Table 6: MRP Rolling Element Results

Road Surface	Q2 2024 Rating	Q3 2024 Rating	Q4 2024 Rating	Q1 2025 Rating	Rolling Rating
Paved Lanes Asphalt	95	100	100	100	98
Paved Lanes Concrete	100	100	96	100	99
Paved Shoulder	100	100	100	100	99
Element Total	**98.9**	**100.0**	**98.0**	**100.0**	**99.0**
Unpaved Shoulders and Ditches	**Q2 2024 Rating**	**Q3 2024 Rating**	**Q4 2024 Rating**	**Q1 2025 Rating**	**Rolling Rating**
Unpaved Shoulder	98	100	100	100	98
Front/Back Slopes	100	100	100	100	99
Lateral and Outfall Ditches, Unpaved	98	100	100	100	99
Ditches, Paved	100	100	100	N/A	100
Element Total	**98.8**	**100.0**	**100.0**	**100.0**	**98.8**
Drainage	**Q2 2024 Rating**	**Q3 2024 Rating**	**Q4 2024 Rating**	**Q1 2025 Rating**	**Rolling Rating**
Drainage Pipes	92	98	100	97	96
Curb and Gutter	96	97	100	90	97
Inlets	97	85	94	100	98
Misc. Drainage Structure	88	88	91	91	89
Element Total	**93.9**	**92.5**	**97.0**	**95.6**	**95.8**
Roadside	**Q2 2024 Rating**	**Q3 2024 Rating**	**Q4 2024 Rating**	**Q1 2025 Rating**	**Rolling Rating**
Turf Condition	90	91	97	97	92
Landscaping	96	100	92	100	95
Trees and Brush	94	100	94	100	97
Litter	100	100	100	100	99
Roadway Sweeping	100	100	100	100	99
Guardrail, Concrete Barrier, and End Anchors	90	100	100	100	95
Impact Attenuators	100	90	89	90	95
Fence, Control Access	91	88	90	100	92
Retaining Walls and Sound Barrier Walls	78	100	100	100	86
Decorative Supports	100	100	100	100	100
Graffiti and Stain Removal	100	100	100	100	100
Element Total	**94.4**	**96.7**	**96.9**	**99.1**	**95.5**
Traffic Control Devices	**Q2 2024 Rating**	**Q3 2024 Rating**	**Q4 2024 Rating**	**Q1 2025 Rating**	**Rolling Rating**
Signs	98	89	97	97	96
Delineators	96	100	100	100	97
Pavement Striping/Marking	96	97	100	97	98
Words and Symbols	88	89	74	81	85
Pavement Markers	95	97	100	92	96
Highway Lighting	83	65	79	77	82
Element Total	**93.3**	**87.8**	**92.2**	**89.5**	**92.6**

7.1 Green Level Historic District Signs

Green Level Historic District signs and surrounding landscaped areas were installed as part of the Triangle Expressway construction project. Currently, NCDOT is maintaining the Green Level Historic District Signs and the Town of Cary is providing maintenance to the landscaped areas surrounding these signs.

As part of each quarterly inspection, an assessment team visits the two remaining Green Level Historic District signs to conduct a visual inspection of each sign and ensure they are in good standing. One of the two signs included in the inspection inventory was found to be in good condition, while the other has been stuck, damaged and in need of repair. ***Figure 4*** shows the two signs assessed.

Figure 4: Green Level West Historic District Signs, Landscape Areas

8.0 Conclusion

This report presents the 2025 first quarter assessment of the Triangle Expressway. The NCTA's target ratings are 90 for the rolling rating, 90 for the overall quarter rating, 85 for elements, and 80 for characteristics. The First quarter 2025 overall rating was **96.0** and the rolling rating was **96.0** , both ratings met the target rating of 90.

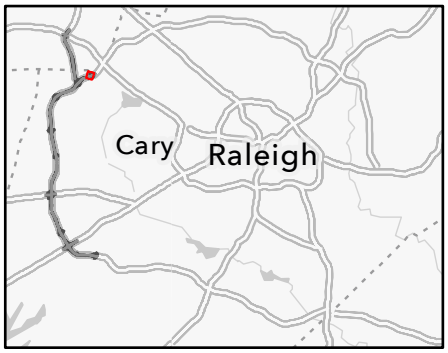
All element ratings were above the target ratings for the quarter and rolling assessment. During the First quarter assessment, all but one characteristic met or exceeded the target rating of 80. The characteristic that received a quarter score less than 80 was Highway Lighting (77). To maintain/improve the condition ratings, it is recommended that highway lighting be routinely inspected for functionality after dark along with routine maintenance being completed as planned in the capital budget.

This quarter, one of the two Green Level Historic District signs inspected was found to be in good condition, and the other will need to be repaired. The landscaped areas surrounding the signs were found to be well maintained.

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

- Failing Asset
- Passing Asset



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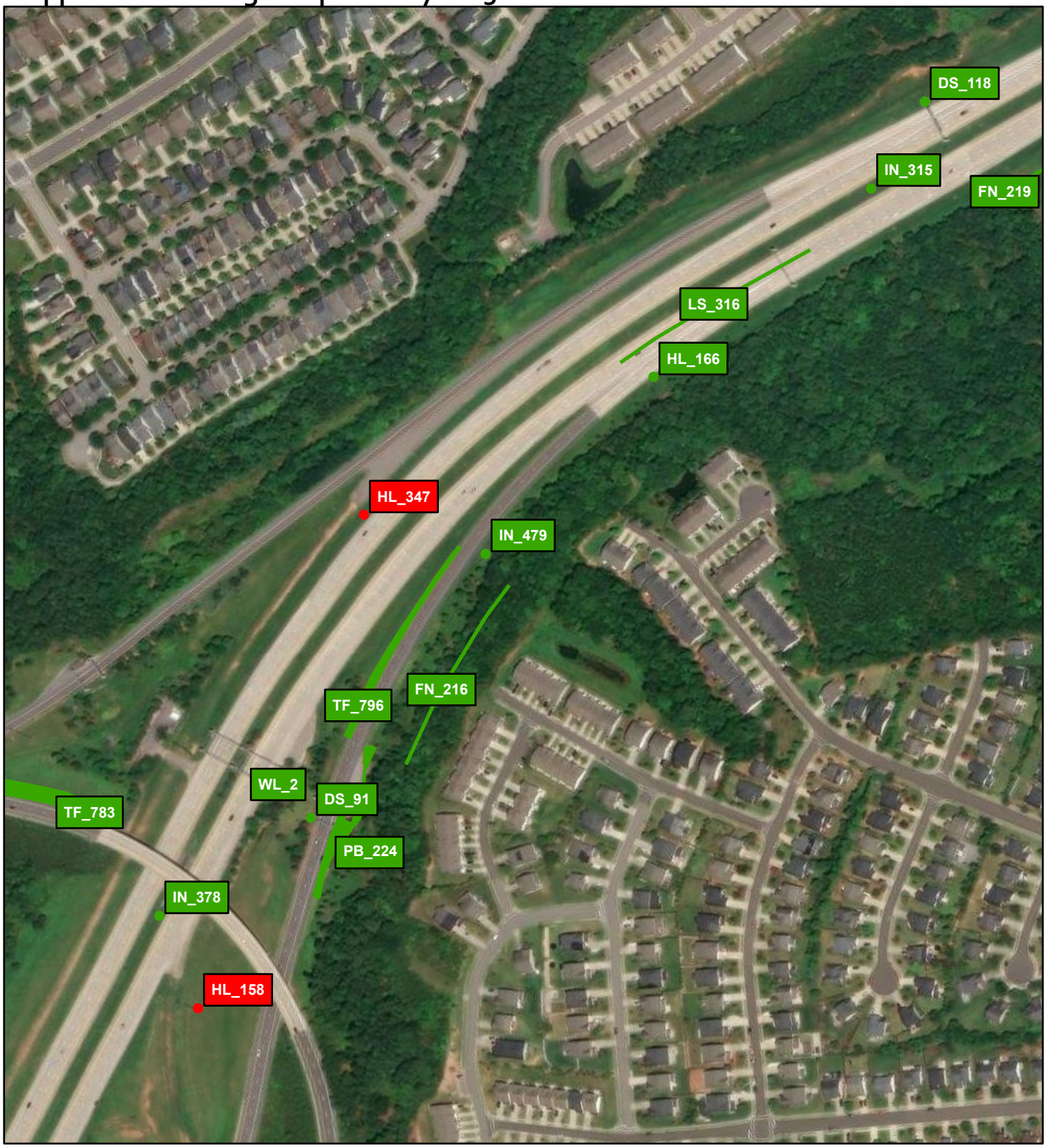

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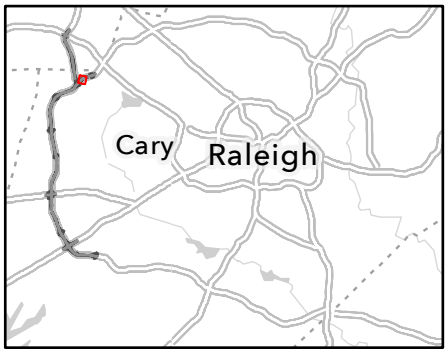

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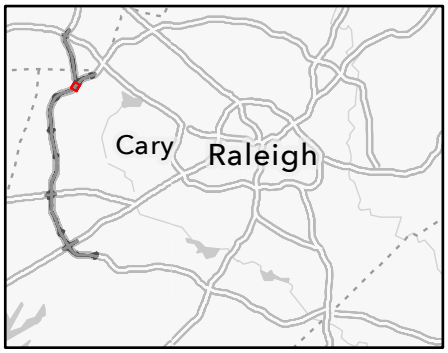

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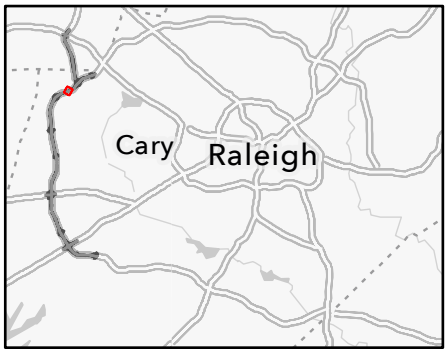

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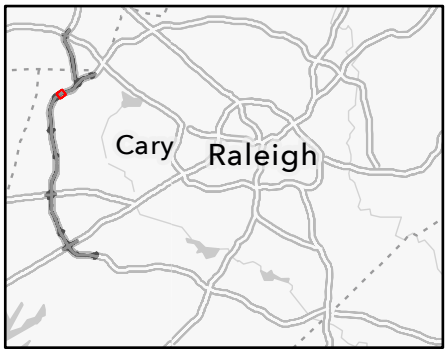

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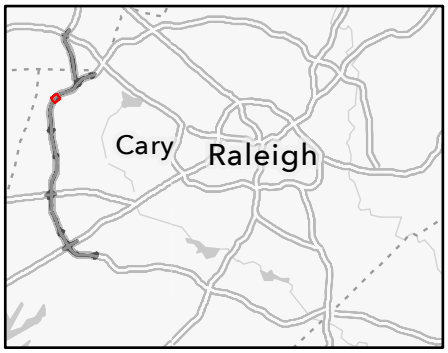

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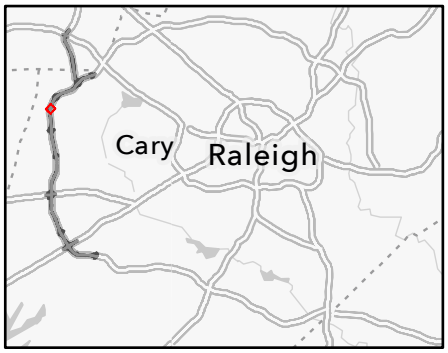

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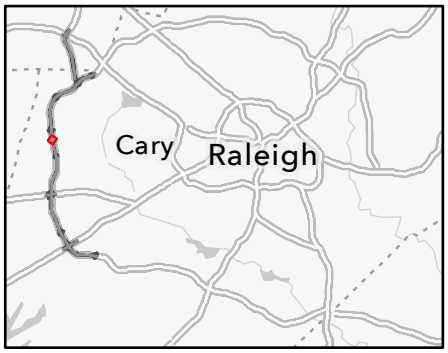

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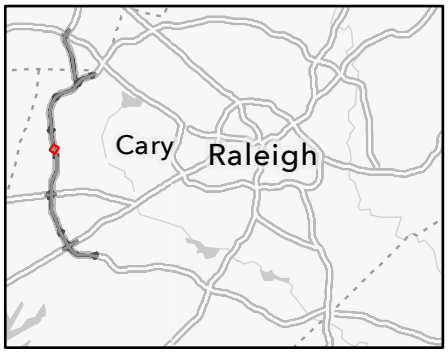

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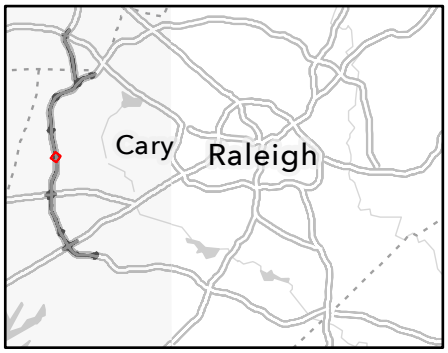

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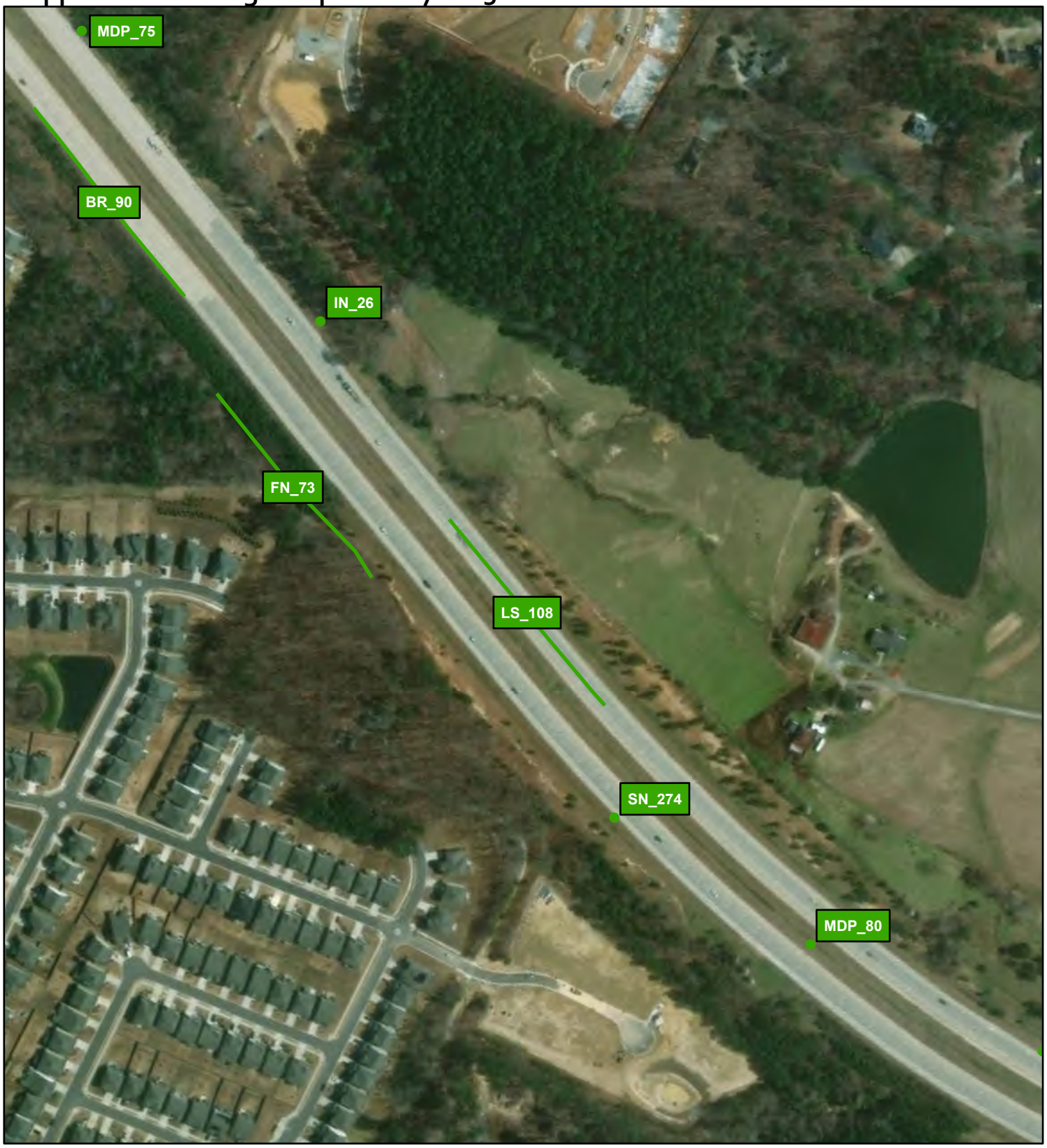

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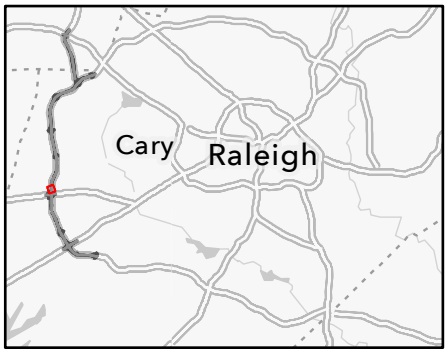

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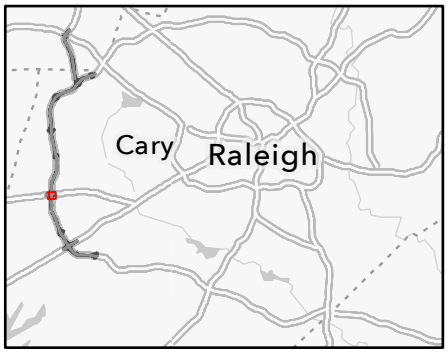

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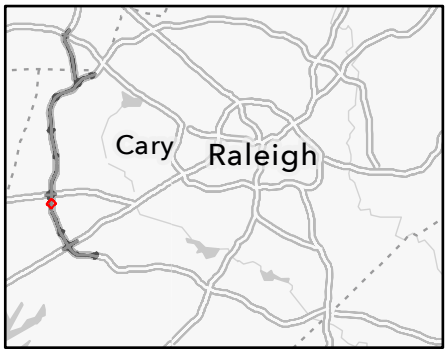


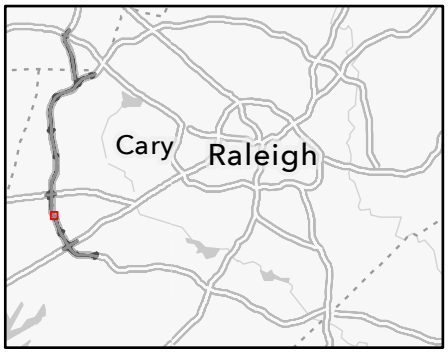
NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

Failing Asset

Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

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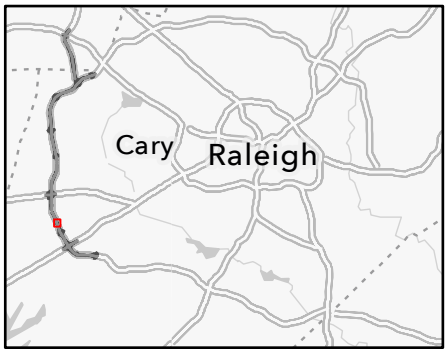
Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

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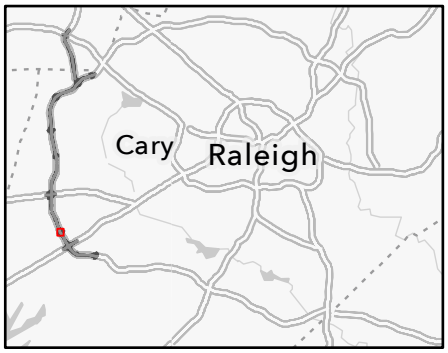
Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

Failing Asset

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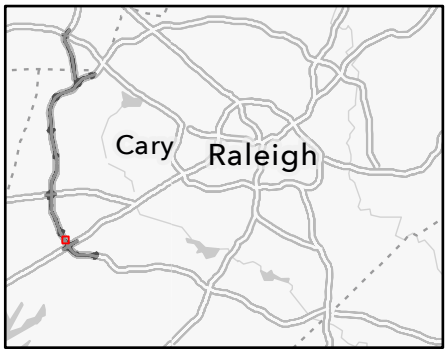

NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

- Failing Asset
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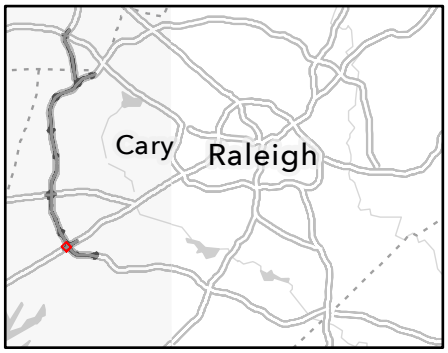
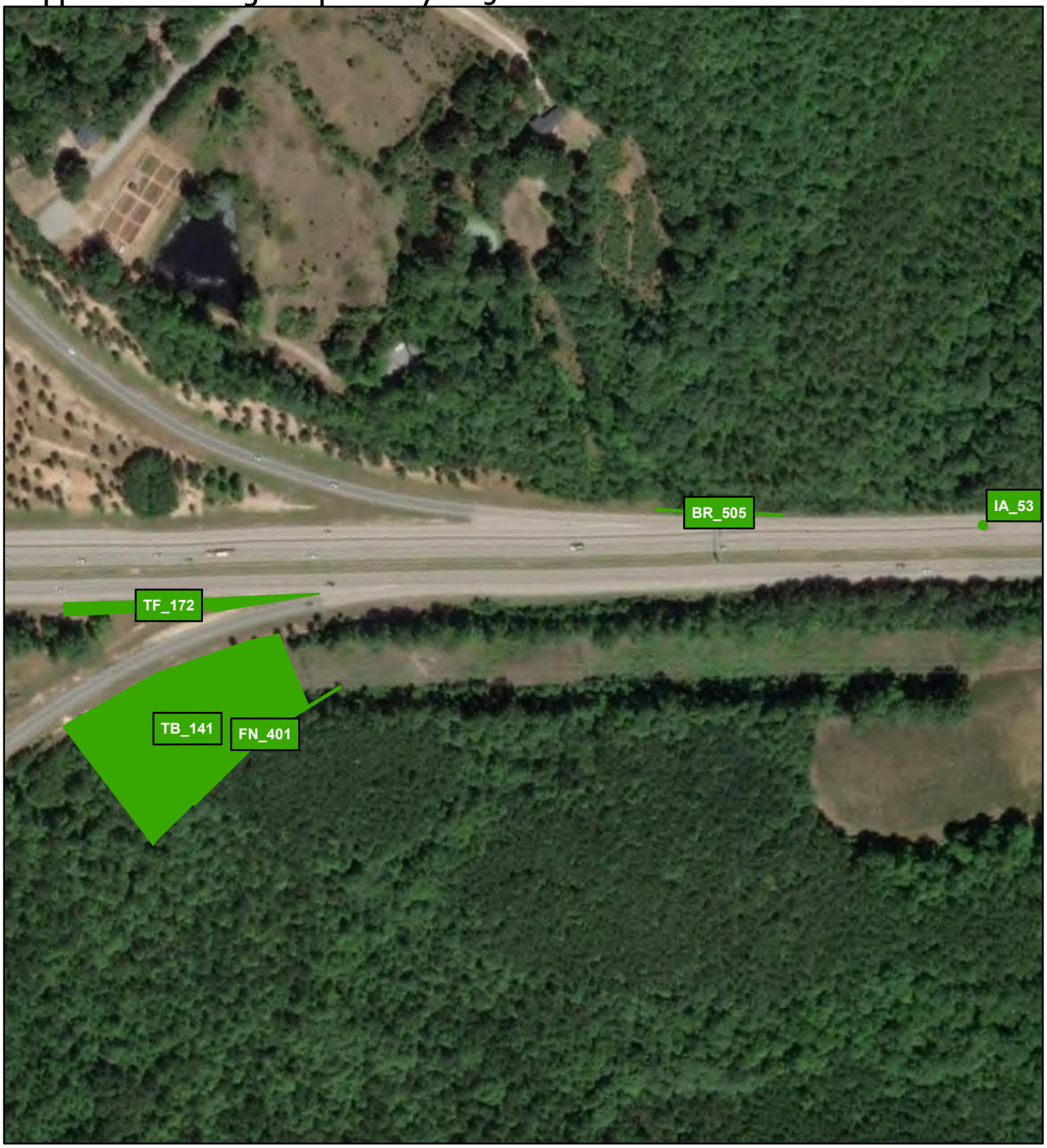


NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations



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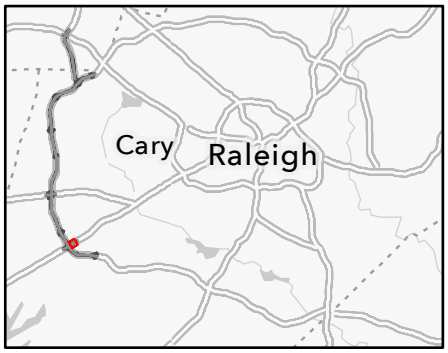
Failing Asset

Passing Asset



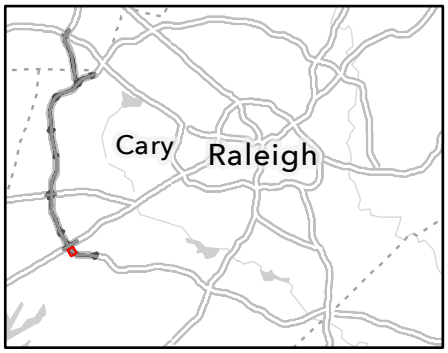
NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

Failing Asset

Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

- Failing Asset
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NORTH CAROLINA Turnpike Authority

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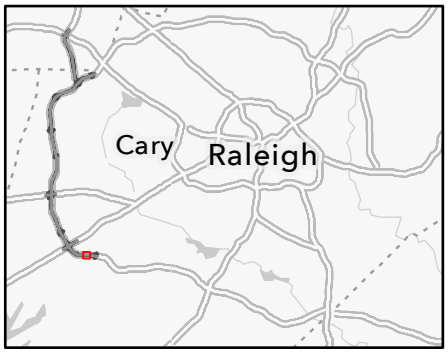
Failing Asset

Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

Failing Asset

Passing Asset

NORTH CAROLINA Turnpike Authority

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Failing Asset

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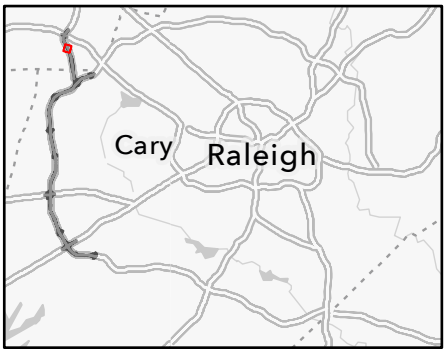
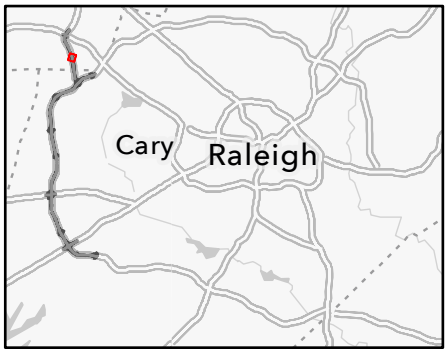


NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

- Failing Asset
- Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

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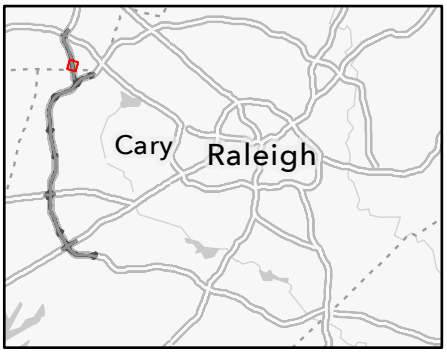
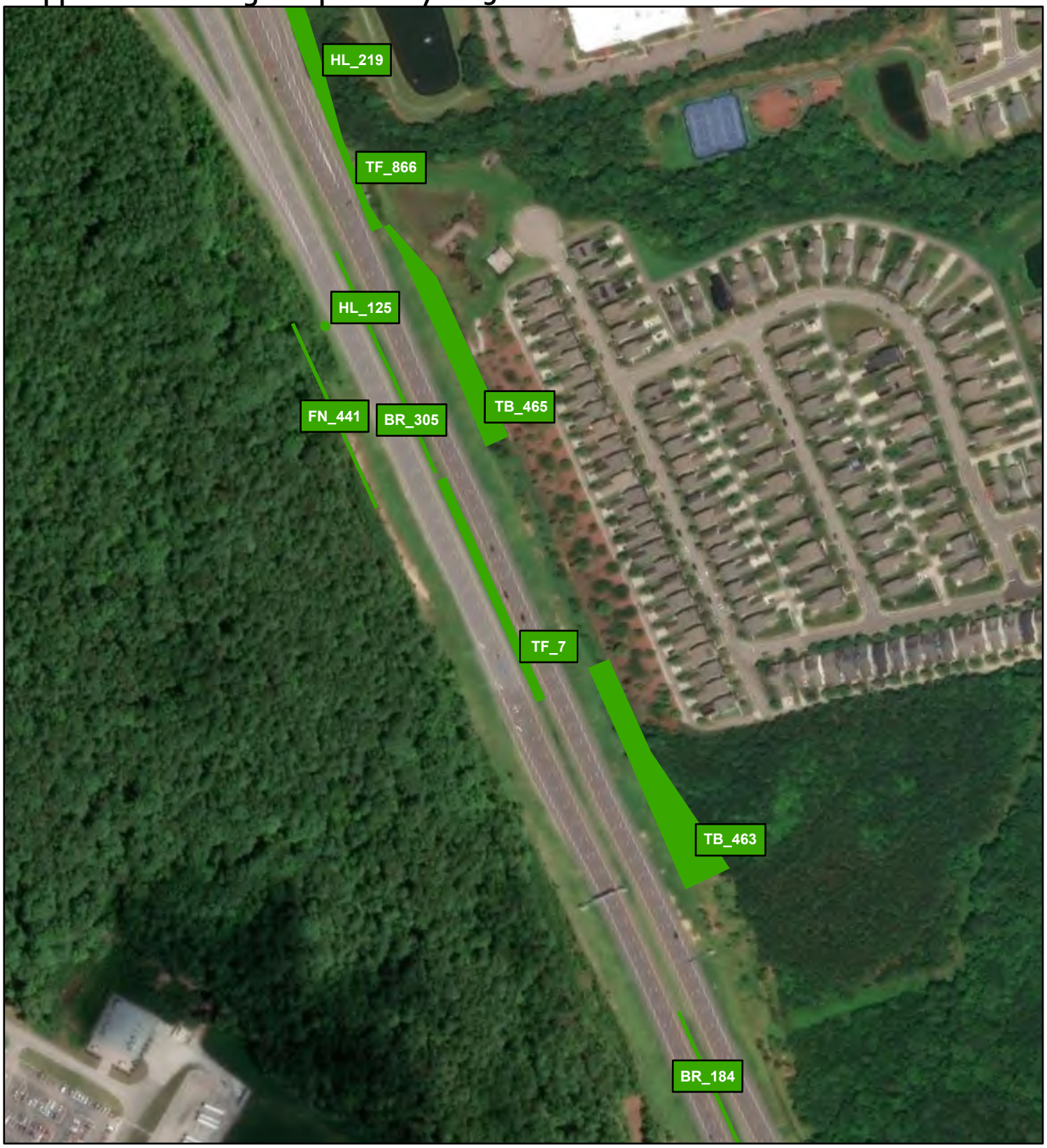


NORTH CAROLINA Turnpike Authority

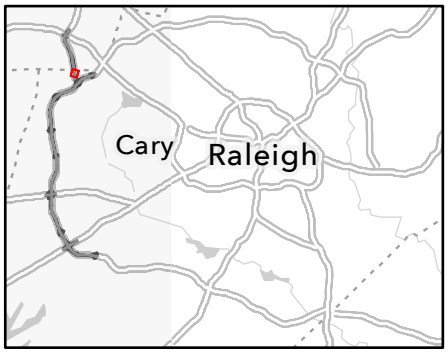
Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations



Legend

Failing Asset

Passing Asset

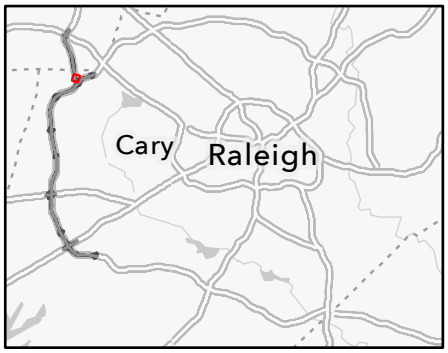


NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

- Failing Asset
- Passing Asset



NORTH CAROLINA Turnpike Authority

Appendix A: Triangle Expressway 2025 First Quarter Asset Assessment Locations

Legend

Failing Asset

Passing Asset

NORTH CAROLINA Turnpike Authority

Appendix B

Triangle Expressway 2025 First Quarter Table Results of Assets Failing MRP

Provided below are a series of tables outlining the existing failures that occurred throughout the facility. Assets are defined by an Inventory ID, which is a unique identifier given to each individual asset. The components that make up the Inventory ID are an asset specific prefix along with a number, such as LS_1. The Inventory ID and GIS Reference Page number correspond to the provided map packets and allow for quick location of particular asset failures. Photos of failures were provided when applicable.

*ORA – Outside Recorded Area

All assets and their respective prefixes are listed below:

Guardrail, Concrete Barrier, and End Anchors (BR)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Curb and Gutter (CG)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Shoulder Berm Gutter	CG_180	Settlement		**A17**
2	Shoulder Berm Gutter	CG_206	Settlement		**A23**
3	Other	CG_322	Settlement		**A9**

Decorative Supports (DS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Drainage Pipes (DP)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Lateral Pipe	DP_1100	Obstruction		A3

Misc. Drainage Structure (MDP)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Shoulder Drain	MDP_42	Rodent Screen		**A11**
2	Shoulder Drain	MDP_200	Rodent Screen		**A17**

Fence and Control of Access (FN)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Graffiti (GR)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Highway Lighting (HL)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	High Mast	HL_46	Functional Damage (Out at Night)	No Photo Provided	**A6**
2	High Mast	HL_48	Functional Damage (Out at Night)	No Photo Provided	**A6**
3	High Mast	HL_137	Functional Damage (Out at Night)	No Photo Provided	**A3**
4	Single Roadway	HL_150	Functional Damage (Out at Night)	No Photo Provided	**A5**
5	High Mast	HL_158	Functional Damage (Out at Night)	No Photo Provided	**A2**
6	High Mast	HL_232	Functional Damage (Out at Night)	No Photo Provided	**A3**
7	Double Roadway	HL_249	Functional Damage (Out at Night)	No Photo Provided	**A22**
8	Single Roadway	HL_253	Functional Damage (Out at Night)	No Photo Provided	**A22**
9	Single Roadway	HL_347	Functional Damage (Out at Night)	No Photo Provided	**A2**
10	Underpass Lighting	HL_360	Functional Damage (Out at Night)	No Photo Provided	**A17**

Impact Attenuators (IA)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Gating Attenuator	IA_18	Functional Damage (End Missing)		**A8**

Inlets (IN)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Landscaping (PB)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Paved Lanes – Asphalt (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Paved Lanes – Concrete (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Paved Shoulders (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Unpaved Shoulders (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Front/Back Slopes (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Unpaved Lateral and Outfall Ditches (LS)

#	Material Type	Objec t ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Litter (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Roadway Sweeping (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Pavement Striping (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Pavement - Asphalt	LS_18	Striping – Line Visibility (Nighttime Reflectivity)	No Photo Provided	**A26**

Pavement Markers (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Concrete (Non-Ramp)	LS_160	Striping – Reflective Markers (Nighttime Reflectivity)	No Photo Provided	**A13**
2	Concrete (Non-Ramp)	LS_162	Striping – Reflective Markers (Nighttime Reflectivity)	No Photo Provided	**A14**
3	Concrete (Non-Ramp)	LS_611	Striping – Reflective Markers (Nighttime Reflectivity)	No Photo Provided	***ORA**

Delineators (LS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

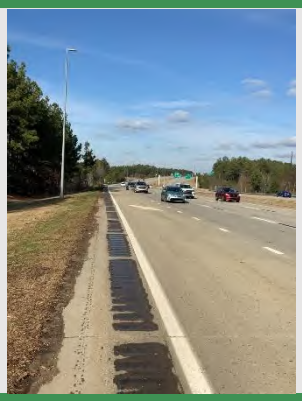
This asset did not produce any failures.

Paved Ditches (PD)

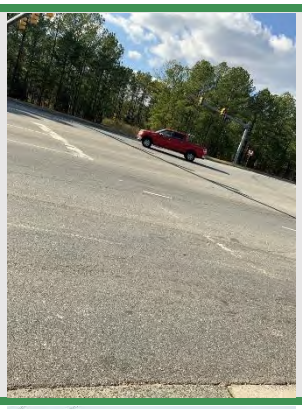
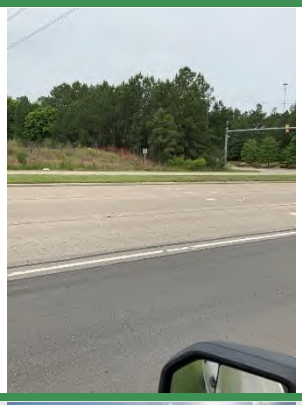
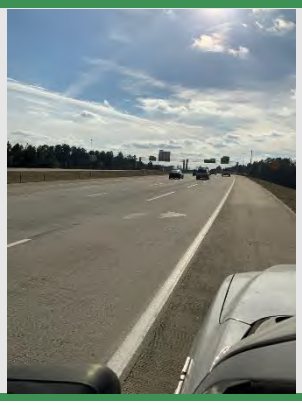
#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Pavement Words and Symbols (PS)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Stop Bar	PS_18	Daytime Assessment (Faded/Low Visibility)		**A13**
2	Merge Left	PS_28	Daytime Assessment (Faded/Low Visibility)		***ORA**
3	Merge Left	PS_29	Daytime Assessment (Faded/Low Visibility)	No Photo Provided	***ORA**
4	Right Turn	PS_418	Nighttime Reflectivity	No Photo Provided	**A1**
5	Left Turn	PS_421	Daytime Assessment / Nighttime Reflectivity		**A1**

Pavement Words and Symbols (PS)

6	Stop Bar	PS_430	Nighttime Reflectivity		**A1**
7	Thru Lane	PS_442	Daytime Assessment / Nighttime Reflectivity		**A6**
8	Right Turn Only	PS_507	Daytime Assessment / Nighttime Reflectivity		**A6**
9	Merge Left	PS_539	Daytime Assessment / Nighttime Reflectivity	No Photo Provided	**A34**
10	Right Turn	PS_598	Daytime Assessment / Nighttime Reflectivity	No Photo Provided	**A27**

Signs (SN)

#	Sign Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Merge	SN_1226	Nighttime Reflectivity	No Photo Provided	**A30**

Tree and Brush (TB)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.

Turf Condition (TF)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page
1	Turf	TF_388	Bare Ground		**A22**

MSE/Retaining Walls, Sound Barrier Walls, and Screen Walls (WL)

#	Material Type	Object ID	Failure Type	Photo	GIS Reference Page

This asset did not produce any failures.