



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

February 05, 2018

MEMORANDUM TO: Greg S. Davis
Division 8 Project Development

FROM: Jaevan Evans
Triad Planning and Forecasting Group
Transportation Planning Division

SUBJECT: Traffic Forecast for STIP Project R-5824
NC 690 – SR 2013 to SR 2020
Moore County

Please find attached the 2017 / 2040 traffic forecast for project R-5824. This traffic forecast was prepared according to your request dated August 28, 2017.

This project is located within the Triangle Rural Planning Organization area.

This forecast includes No-Build/Build scenarios for 2017 and 2040 because the road improvements are not expected to change travel demand. 'Build' is defined as "widen NC 690 for intersection improvement at SR 2013 (White Rock Rd), SR 2082 (Johnson Grove Rd), SR 2014 (McLauchlin Rd), SR 2021 (Morrison Bridge Rd), SR 2018 (McPherson Rd) and SR 2020 (Wright Rd); and widen (symmetrically) the roadway from for a 2-foot paved shoulder on both side of NC 690 from the US 1 Bypass to the Cumberland County line."

Interpolation:

To estimate AADT for intermediate years, straight-line interpolation of traffic volumes may be used between 2017 and 2040. Extrapolation for two years beyond 2040 may also be used if needed.

Certain Assumptions were made during the development of this forecast.

Fiscal Constraint:

For projects located within a RPO area, forecasts are fiscally constrained to the STIP. This means that only projects scheduled in the STIP are considered constructed and open to traffic in the future year. There are no other projects in the STIP which affect travel demand on NC 690.

Development Activity:

There are currently no specific plans for any substantial development within the forecast area.

Forecast Methodology:

The 2017 traffic volume and traffic factor estimates are based upon current counts and historic AADT trends projected to 2017.

The 2040 traffic volume forecast is based upon annual growth rates derived from travel demand predictions of the Moore County Model and historic AADT trends.

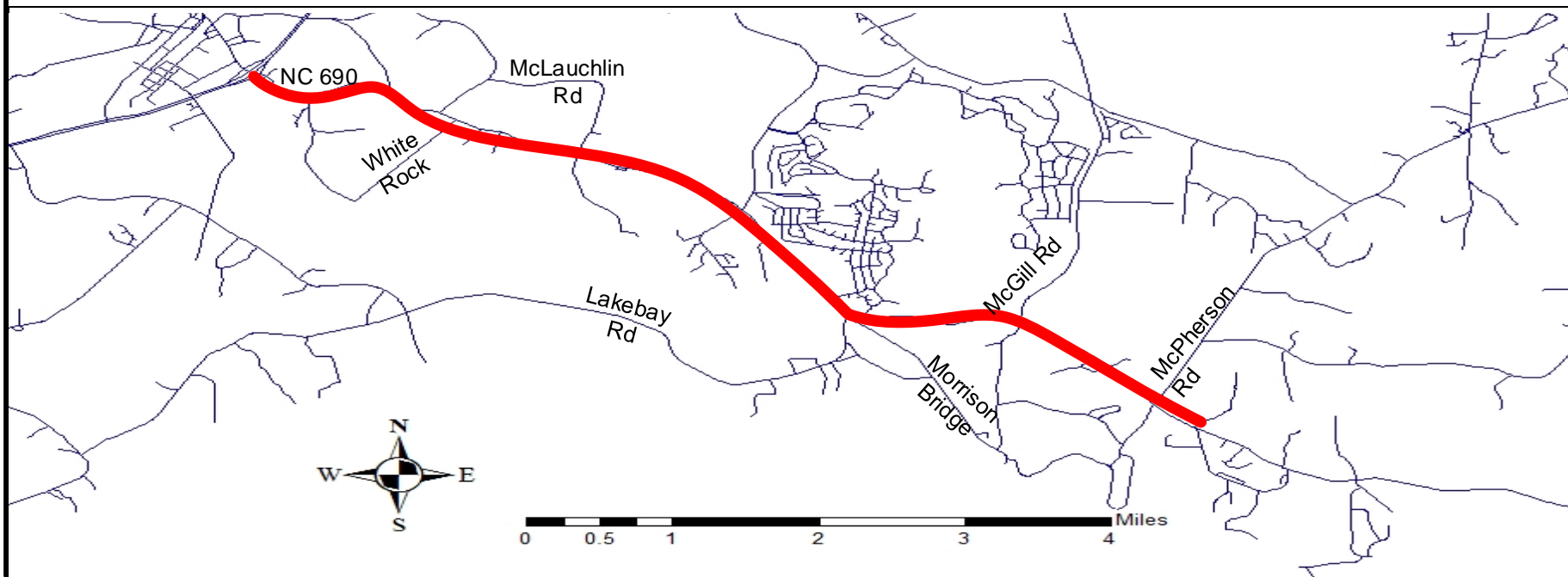
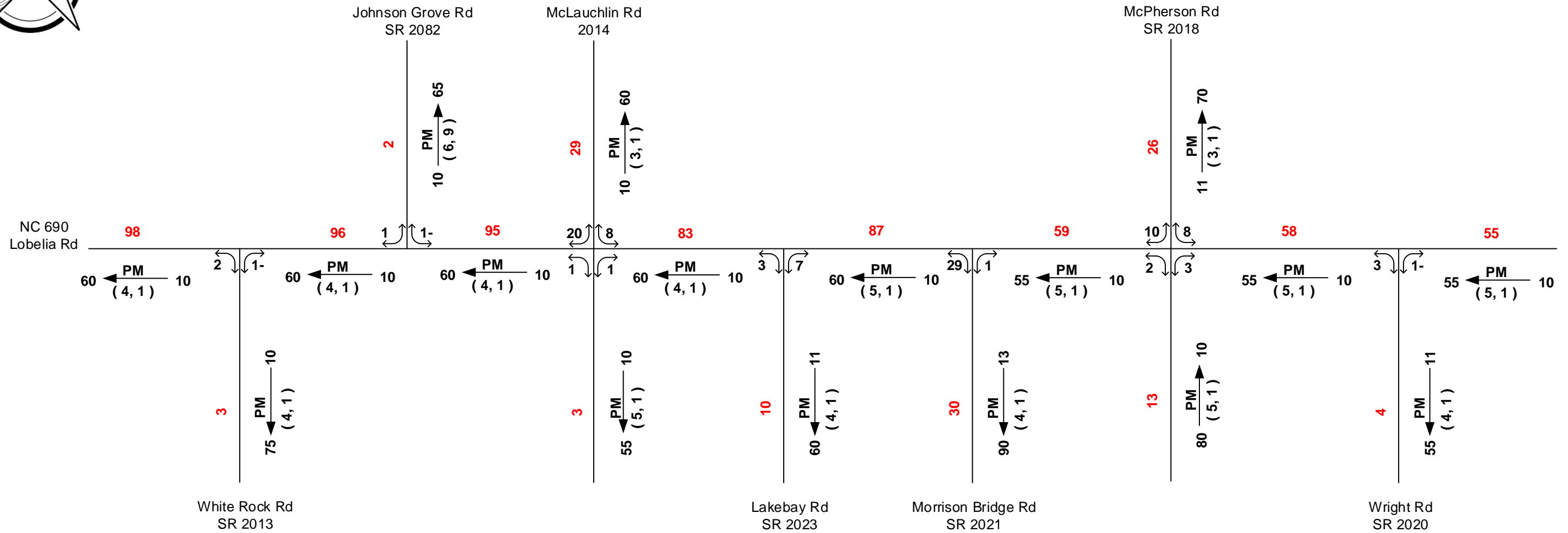
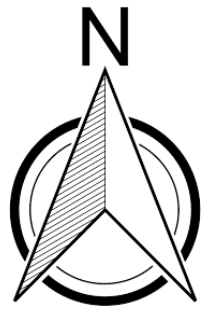
If it is determined that any of these assumptions have become inconsistent with the project and surrounding area activity, please request an updated forecast at this location.

If we can be of any further assistance on this project please do not hesitate to contact me at 919-707-0966 or by email: jfevans2@ncdot.gov.

cc: *Final distribution for your records via e-mail. Diagrams as PDF attachment*

Brenda Moore, PE, Roadway Design Branch
Michael Orr, Transportation Planning Division
James Dunlop, PE, Congestion Management
Clark Morrison, PhD, PE, Pavement Management
Keith Dixon, Transportation Planning Division
trafficforecastinggissupport@ncdot.gov

File Copy: R-5824 Moore County



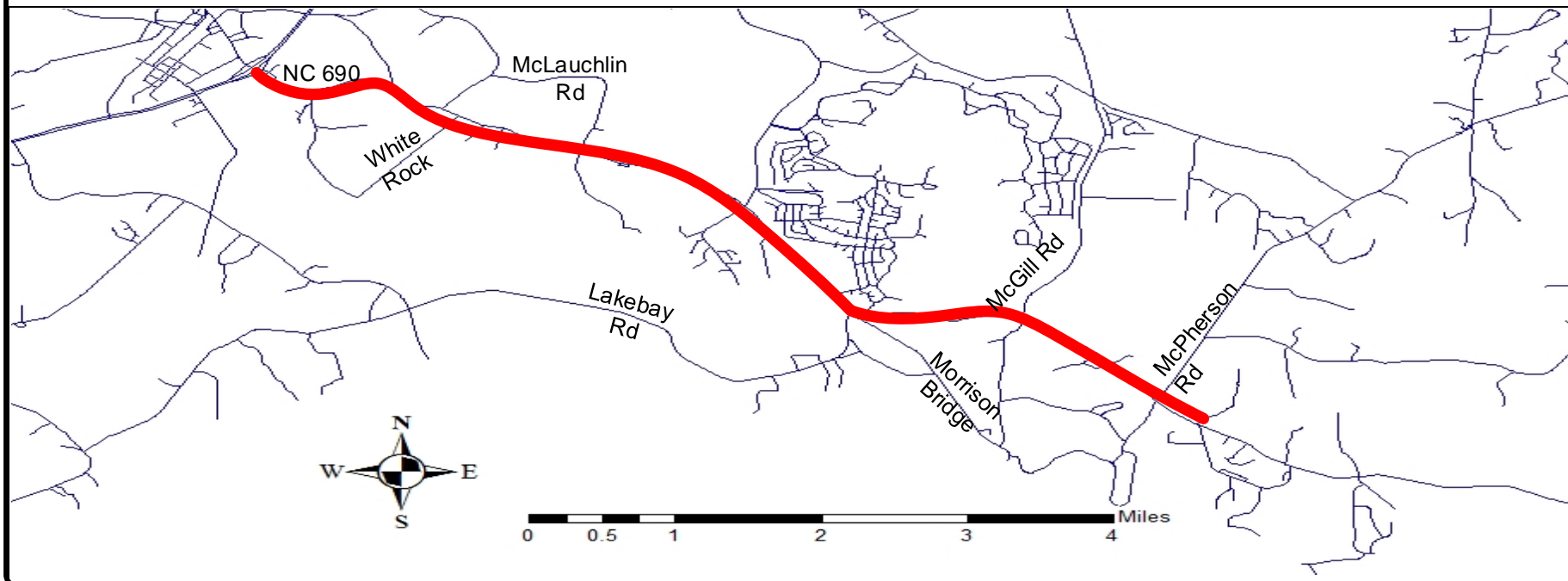
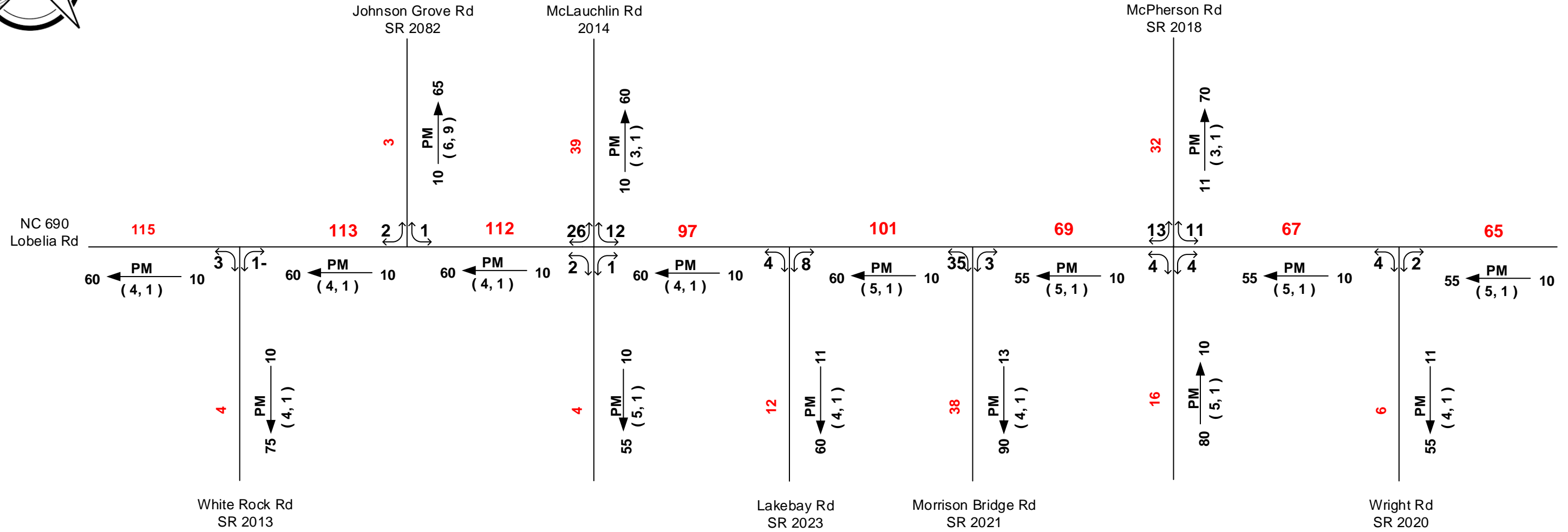
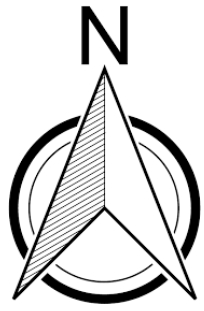
2017 BASE YEAR

AVERAGE ANNUAL DAILY TRAFFIC

LEGEND

- ### No. of Vehicles Per Day (VPD) in 100s
- 1- Less than 50 VPD
- x Movement Prohibited
- Proposed Roadway
- K Design Hour Factor (%)
- PM PM Peak Period
- D Peak Hour Directional Split
- Indicates Direction of D
- (d, t) Duals, TT-STs (%)

TIP: R-5824		WBS: 47096.1.1	
COUNTY: Moore		DIVISION: 8	
DATE: 02-05-2018			
FORECASTOR: Jaevan Evans			
LOCATION: Lobelia Rd from White Rock Rd to Wright Rd			
PROJECT: Widen NC 690 for intersection improvement at White Rock Rd, Johnson Grove Rd, McLauchlin Rd, Morrison Bridge Rd, McPherson Rd and Wright Rd			



2040 FUTURE YEAR

AVERAGE ANNUAL DAILY TRAFFIC

LEGEND

- ### No. of Vehicles Per Day (VPD) in 100s
- 1- Less than 50 VPD
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