



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

November 15, 2002

MEMORANDUM

To: Division Operation Engineers
Area Traffic Engineers

From: G. A. Fuller, PE *G.A. Fuller*
Traffic Management and Signal Systems Engineer

Subject: Revised Guidelines

Attached is a final copy of "Guidelines for Interfacing Red Light Traffic Control Photographic System Equipment with Traffic Signal Control Equipment on the State Highway System". Revisions to this document have been made to address cases where accommodations to our designs of the detection systems at signalized intersections may be necessary. This revision, dated November 15, 2002, replaces the previous Guidelines, dated May 24, 2000. Your staff should apply these guidelines to the application of these systems and include the appropriate language in the associated municipal agreements.

If you need additional information feel free to call me at (919)733-8021 .

GAF/MID:

Attachment

cc: J. D. Goins, PE
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**GUIDELINES FOR INTERFACING RED LIGHT TRAFFIC
CONTROL PHOTOGRAPHIC SYSTEM EQUIPMENT WITH
TRAFFIC SIGNAL CONTROL EQUIPMENT
ON THE STATE HIGHWAY SYSTEM**

November 15, 2002

1. Red light traffic control photographic system equipment shall be electrically isolated from the traffic signal control equipment. Sensing of red indications shall be done with an approved electrically-isolated method at the signal circuit field terminals inside of the controller cabinet. Examples of approved means for sensing are those utilizing "donut" current transformers or Hall-effect devices. Physical or electrical connections to traffic signal control circuits are not allowed unless specifically approved by the Department. This includes load switch driver control circuits (24Vdc), load switch signal circuits (120Vac), and detection circuits.
2. The red light traffic control photographic system equipment shall not affect the operation of the traffic signal control equipment.
3. The red light traffic control photographic system equipment shall have its own electrical service. The service shall not be supplied from the controller cabinet.
4. All changes in the traffic signal vehicle detection configuration shall be approved by the Department. Changes shall be documented in a revised signal plan approved and sealed by a Professional Engineer registered in North Carolina. Ongoing maintenance of additional or special detection devices, including additional loops, shall be the responsibility of the municipality.
5. When a red light traffic control photographic system is removed from an intersection, any modifications to accommodate the installation of the red light traffic control photographic system shall be removed and the traffic signal shall be restored to its original condition.

If you need additional information, please contact G. A. Fuller, PE at (919)733-8021.