New system detects, warns overheight trucks on I-85





TOP LEFT: Trucks are directed to use the right lane for height detection.

CENTER LEFT: A closeup of the sensor

ABOVE AND RIGHT: Overheight trucks are detected by sensors located on poles between mile markers 106 and 102 at the state line on Interstate 85.

BELOW LEFT: Flashing lights alert vehicles that are too tall for upcoming bridges.

BELOW: The clearance of one bridge in the area is less than 15 feet.



PHOTOGRAPHS BY ROB THOMPSON/SCDOT



By Bob Kudelka

CDOT has installed the state's first detection and warning system aimed at reducing dangerous and costly overheight truck collisions with bridges.

The system, which is similar to systems in place on I-95 in North Carolina, consists of sensors that can detect loads that are close in height to the existing bridge clearances.

"I would like to thank everyone who played a role in getting the system designed and installed," said Tony Fallaw, Director of Traffic Engineering.

Fallaw thanked Wayne Feaster and JT Egan for creating the signs and Dan Campbell and Charlie Shirley for their work on the electrical components.

This new system was recently installed along I-85 in Cherokee County. It covers the portion of I-85 from SC 5/198 - Exit 102 to US 29 - Exit 106, which is just south of the North Carolina State line. The detour route runs along SC 5 and US 29 and is approximately 5¹/₂ miles in length.

Last fall, one of the bridges along this stretch of I-85 with less clearance than the current standard of 17 1/2 feet was struck and badly damaged by an oversized load.

SCDOT installed the new system in an effort to prevent a repeat occurrence until the bridge clearances can be increased as part of an upcoming interstate rehabilitation project. Once the rehabilitation project is completed, the detection/warning system of signs can be relocated elsewhere in the state.

Here's how it works:

An advance notice warning sign alerts trucks of the upcoming detector station. When triggered, the detectors activate a system of flashing beacons mounted on a second sign, located down the road from the first sign. This sign displays instructions for the driver to exit the interstate and follow the posted detour route when the beacons are flashing. A Highway Advisory Radio (HAR) also provides additional detour information over a designated AM channel (1680 northbound and 1610 southbound).