

High Speed Detection (≥ 40 mph)

Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired in series for TS1 Controllers
Wired separately for TS2, 170, and 2070L Controllers

Volume Density Operation

High Speed Detection (≥ 40 mph) - "Stretch" Operation

Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series
L2 = 6ft X 6ft
Wired in series

"Stretch" Operation

Low Speed Detection (≤ 35 mph)

L = 6ft X 6ft
Wired in series

Low Speed Detection (≤ 35 mph) - Quadrupole Loop

L = 6ft X 40ft
Quadrupole loop, wired separately

Left Turn Lane Detection

L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

Left Turn Lane Detection - Queue Loop

L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

Queue Loop Detection

Right Turn Lane Detection

L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately

Shared Lane/
Wide Radius Turn

Right Turn Lane Detection - Standard Turn

Standard Turn

Right Turn Lane Detection - Wide Radius Turn

Wide Radius Turn

Right Turn Lane Detection - Channelized Turn

Channelized Turn

Side Street Detection

L = 6ft X 40ft
Quadrupole loop
Wired to separate detectors/channels

Presence Loop Placement at Stop Lines

Locate loop slightly behind leading edge of stop line

Inductive Loop

Note:
Loop may be located in advance of stop line under any of the following conditions:
1) stop line is greater than 15' from edge of intersecting roadway
2) loop detects a permissive or protected/permissive left turn
3) for an exclusive right turn lane

Recommended Number of Turns

Single 6' X 6' loop (when wired separately):

Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns
6' X 15' Loops:
Lead-in < 150', use 2 turns
Lead-in > 150', use 3 turns

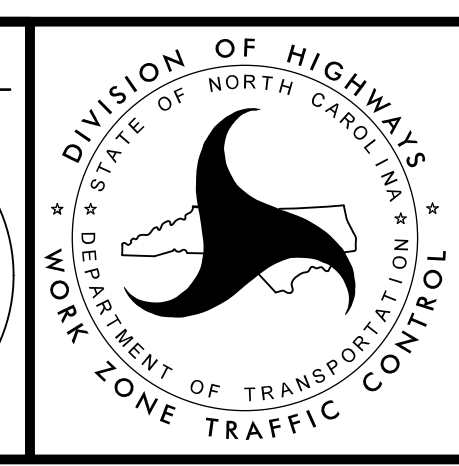
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	Typical Signal Loop Locations	
	PLAN DATE: January 2015 PREPARED BY: PLA SCALE: N/A	REVIEWED BY: JPG REVIEWED BY: [Signature] DATE: 3/30/2015

APPROVED: Steve Miller
 DATE: 9/25/2015

SEAL



SEPI
 ENGINEERING & CONSTRUCTION
 1025 Wade Avenue
 Raleigh, NC 27605
 Tel: 919-789-9977
 Fax: 919-789-9591
 License: C-2197

SIGNAL LOOP TYPICAL