STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87N-0238-01	2009	43	59

The control equipment shall be designed in such a manner that the normal dwell condition shall be an "All Red" signal display. Upon receipt of a detector actuation from one approach, the signals facing that approach shall cycle to a green indication for a minimum period (Minimum Green). Subsequent detector actuations from the same direction shall result in additional green time being allocated to that movement (Unit Extension). In the event that an actuation exists for the direction of travel not having the right of way, a Maximum Green time setting shall provide a preset time limit for the direction having the right of way.

The control equipment shall provide for two different clearance sequences depending upon both the immediately preceding operation of the system and the required subsequent action.

If the green indication has been displayed to one approach to the zone, no vehicle actuation exists on the opposite approach and another actuation occurs during the yellow display to the approach just serviced, the display shall proceed to an all red display for a period of time (Red Revert) to prevent the display of green – yellow – green indications to the motorist.

If the right of way is to be transferred to the opposite approach, an all red indication shall be provided so that opposing traffic does not meet within the one way zone.

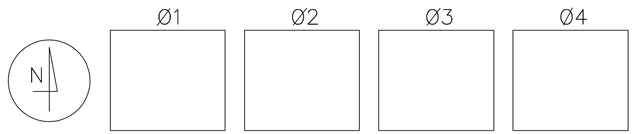
Response to a vehicle actuation from either end of the zone shall be immediate if all timings have expired. In the event that all time settings have not expired at the point at which a vehicle actuation occurs, the system shall continue to provide the appropriate clearance interval timings before acting upon an actuation input.

Vehicle actuations received from the detector at the opposite end of the zone from that which last received a green indication shall have preference over additional actuations received from the end which last had the right of way in the event that any clearance interval timings have not expired when the actuation(s) occurs. If all timings have expired, response shall be on a first come, first served basis.

All time settings shall be user adjustable and shall be accomplished from the equipment front panel by way of a keyboard and menu screen format. All applicable portions of the KDOT Standard Specifications for vehicle actuated equipment shall apply except that a standard NEMA conflict monitor shall be acceptable.

Detector loops, or equivalent approved by the Engineer, shall be used for actuation of the signals. On asphalt roadways, the loops may be sawed into the road. Loops of this type shall be 6' by 6' and shall have three turns of wire (see detail). Commercially made loop mats may also be used. On concrete pavement, only the loop mats may be used unless the pavement is to be removed after the loops are no longer in use. Other types of detection may be used if approved prior to installation by the Engineer. The loops shall be centered in the lane of traffic and located 100' behind the stop line. See TE732.

SIGNAL PHASING AND TIMING



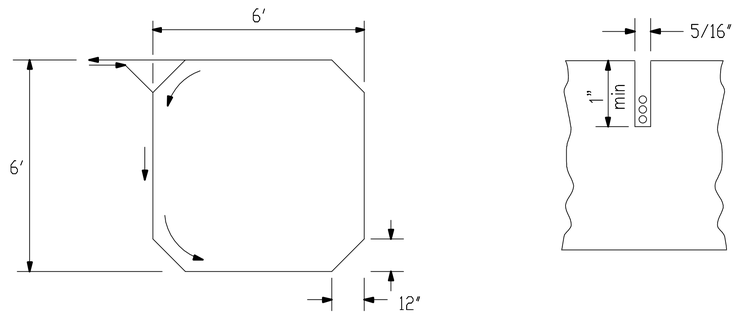
PHASE	MINIMUM GREEN	MAXIMUM GREEN	YELLOW	ALL RED

All times in seconds.
Normal Dwell shall be "All Red".
Unit Extension shall be 3.0 seconds.
Red Revert shall be 5.0 seconds.

Detector shall be set to operate in the locking mode.

MICROWAVE DETECTION SYSTEMS FOR TEMPORARY TRAFFIC SIGNALS SHALL NOT BE USED IN URBAN AREAS.

LOOP DETECTOR DETAIL



Slots in pavement for loops to be cut 5/16" wide with 1" minimum depth. Fill slots with type SS-1H emulsified asphalt (asphalt pavement) or an approved elastic epoxy sealant (concrete pavement) to within 1/8" of pavement surface. Other than a "Western Union" type splice or approved connector at their junction, feeder cable and loop wire shall be of continuous run with no splices. The loop and the feeder cable connection shall be twisted 2 turns per foot.

Note: See TE733 for additional information.

NO.	DATE	REVISIONS	BY	APP'D
3				
2	8-8-07	ADDED NOTES	M.B.	A.A.A.
1	11-19-03	CHANGED BORDER	B.H.	S.A.B.

KANSAS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNALS
ONE-LANE OPERATION
(TYPICAL INSTALLATION)

TE734 9/1/00

FHWA APPROVAL 8-8-07		APP'D Anthony A. Alrobaire	
DESIGNED L.E.R.	DETAILED B.A.H.	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.

Plotted By : $$USERNAME$$ $$$KDOTGRP$$$$6th Floor
Plot File : $$$$$$$$$$$$$$DGNSPEC$$$$$$$$$$$$$$$$$$
Plot Date : $$$$$$SYTIME$$$$$$

SM11:temp-1492