S.P. 4811-34

WHEREAS, for reasons of safety it is necessary to warn and control traffic when vehicles haul materials across trunk highways at construction project sites, and

WHEREAS, there is a need for investigation into the development of electro-mechanical devices for such control of traffic, and

WHEREAS, there is a need to control traffic at the intersection of T.H. 169 and T.H. 23 east of the City of Milaca, and the intersecion of T.H. 169 and Mille Lacs County State Aid Highway 9 and a Milaca Township Road north of the City of Milaca.

NOW, THEREFORE, pursuant to authority vested in me as provided in Minnesota Statutes Chapter 169.06, subdivision 2, I do hereby authorize the use of electro-mechanical flagging devices having the characteristics herein described which may differ from the Manual on Uniform Traffic Control Devices for Streets and Highways in the State of Minnesota.

Physical Features:

- 1. The electro-mechanical flagging device must be portable.
- The device may simulate the appearance of a human flagman. 2.
- 3. The device must have the following electro-mechanical features:
 - a.) Two (2) lamps with yellow or amber colored lenses mounted one to each side of a simulated flagman's head at least eight (8) feet above the roadway surface;
 - b.) Two (2) lamps with red colored lenses mounted adjacent to the yellow lamps;
 - c.) A pivoted gate arm having a lamp with a red colored lens mounted on the end;
 - d.) Background boards, painted dull black, shall be mounted behind the amber and red lamps positioned on each side of the simulated flagman's head;
 - The gate arm shall be covered with orange and white e.) reflectorized sheeting in accordance with Minnesota Standard Specification 3352, Standard No. 1. Stripes are to slope downward toward the side on which traffic is to pass;
 - f.) A standard thirty (30) inch Stop Sign mounted at the center of the gate arm;
 - The bottom of the Stop Sign shall not be less than four g.) (4) feet above the roadway surface when the gate arm is in the horizontal position;
 - When the gate arm is in the vertical position, the Stop h.) Sign shall be substantially obscured from view by approaching traffic.

Operating Features:

When being used the device will be operated in the following manner:

- When in the operating position the device shall be a.) completely visible to the traffic intended to be halted from both directions of travel.
- b.) When the gate arm is in the vertical position, the yellow lamp will flash simultaneously.
- c.) When the gate arm is lowered to the horizontal to halt the flow of traffic, the yellow lamps will be turned off and the red lamps will flash simultaneously until such time as the arm is returned to the upright position.
- d.) The travel time of the arm between the vertical and horizontal positions is to be approximately eight (8) seconds.
- When the gate arm returns to the vertical position, the e.) red lamps will be turned off and the vellow lamps will be turned on.

Commissioner of Transportation

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STATE OF MINNESOTA DEPARTMENT OF STATE filed AUG 3 0 1985 Joans anderson throw

Secretary of State

Dated this <u>30 ^H</u> day of August, 1985.

