

CITY OF ROCHESTER HILLS

POLICY ON RECTANGULAR RAPID FLASH BEACONS (RRFB)

Purpose:

A pedestrian-activated and/or bicyclist-activated rectangular rapid flashing beacon (RRFB) may be used to provide supplemental emphasis to pedestrian, school and trail warning signs at marked crosswalks across uncontrolled approaches. This document identifies the standards for their deployment and considerations for deciding to install them.

Standards and Guidance (per MUTCD Chapter 4L):

- ❖ An RRFB shall only be installed to function as a warning beacon.
- ❖ An RRFB shall only be used to supplement a post-mounted W11-2 (Pedestrian), S1-1 (School), or W11-15 (Trail) crossing warning sign with a diagonal downward arrow (W16-7P) plaque or an overhead-mounted W11-2, S1-1 or W11-15 crossing warning sign located at, or immediately adjacent to, a marked crosswalk.
- ❖ Except for crosswalks across the approach to or from a roundabout, or crosswalks across free-flow turn lanes separated by a channelizing island, an RRFB shall not be used for crosswalks across approaches controlled by YIELD signs, STOP signs, traffic control signals or pedestrian hybrid beacons.
- ❖ An RRFB unit shall not be installed independent of the crossing warning signs for the approach that the RRFB faces.
- ❖ For any approach on which RRFBs are used to supplement post-mounted signs, at least two W11-2, S1-1, or W11-15 crossing warning signs (each with an RRFB unit and a W16-7P plaque) shall be installed at the crosswalk, one on the right-hand side of the roadway and one on the left-hand side of the roadway.
- ❖ If pedestrian push button detectors (rather than passive detection) are used to actuate the RRFB indications, a PUSH BUTTON TO TURN ON WARNING LIGHTS/AWAIT GAP IN TRAFFIC (R10-25) sign shall be installed explaining the purpose and use of the pedestrian push button detector.
- ❖ An audible information device should be used with RRFBs to assist pedestrians with vision disabilities. If an audible information device is used in conjunction with an RRFB, the audible message should be a speech message that says, "Warning lights are flashing." The audible message should be spoken twice.
- ❖ The minimum duration of a predetermined period of operation of the RRFBs following each actuation should be based on the procedures for the timing of pedestrian clearance times for pedestrian signals. One consideration for lengthening the duration of the predetermined period of operation of the RRFBs is adding the perception/reaction time for pedestrians to confirm that a vehicle will yield or stop.



Policy:

- The decision to install RRFB is an exercise in engineering judgment, subject to funding constraints and weighing the anticipated risks to pedestrians and/or bicyclists at the subject crossing location.
- RRFB installations should be limited to pedestrian/bicycle crossings of City Major (arterial or collector) roadways, not City Local streets.
- Crossing locations should represent higher risk to users by way of higher vehicle speeds and/or vehicle volumes.
- Installations should be approximately spaced at least a quarter mile from other pedestrian crossings that are controlled by other active measures, such as other RRFB installations, hybrid pedestrian beacons or traffic signals.
 - Exceptions may be made for locations with high pedestrian or bicycle crossing volumes, such as schools or trails.

Issued By:

Name
Title
Date

