

CITY OF KIRKLAND

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**DEPARTMENT OF PUBLIC WORKS
PRE-APPROVED PLANS POLICY**

Policy R-24: Rectangular Rapid Flash Beacon (RRFB) Installation Policy

RRFB Power Source Determination

Installation of an RRFB at a mid-block crossing can improve pedestrian safety and comfort. RRFBs have been proven to significantly increase vehicle yield rates at pedestrian crossings, but they can only do this when they are installed and functioning properly.

In order to maximize dependability and reduce ongoing maintenance cost the City prefers that RRFBs be installed with a direct AC power connection. There are instances where there is a need to install a RRFB but providing an AC power connection would make the location cost-prohibitive. In these cases DC (solar) powered RRFBs may be used. The following criteria shall be used when determining if a DC (solar) powered RRFB is acceptable.

Table 1: RRFB Power Source Determination

Access to Power	Solar Exposure	
	Inadequate	Adequate
≤ 50'	AC	AC
> 50'	AC	DC (solar)

NOTE:

The location of RRFBs will be determined based on its effectiveness to provide a benefit to pedestrians crossing at the crosswalk. The RRFBs will not be located based solely on optimizing access to power.

RRFB Placement and Installation

All new RRFB units installed within the City shall be double-sided.

Installations for two- or three-lane sections (one lane in each direction plus two-way left-turn lane) shall not include center unit in median island.

Installations on five-lane sections (two lanes in each direction plus two-way left-turn lane) shall require a median island with RRFB unit.

All RRFB posts shall be breakaway.

See City of Kirkland Roadway Pre-Approved Plans and contract special provisions for additional details.