M.16.08

Article M.16.08 - Pedestrian Push Button:

For RRFB (Rectangular Rapid Flashing Beacon):

Delete the entire section and replace with the following:

A. General

* Size and force compliant with ADA, Section 14.2.5, Crossing Controls.
* Tamper-proof, and Vandal-proof, Weatherproof, Freeze-proof, Impact-resistant design and construction.
* Completely insulated to preclude electrical shock under any weather conditions.
* Wire entrance through the rear.
* Stainless steel mounting hardware.
* Any features in conflict with this spec and MUTCD shall be disabled.
* Accessible features shall:
* conform to the [MUTCD](https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/index.htm)
* provide the speech message “yellow lights are flashing” that shall be spoken twice
* include tactile arrow on the button
* include a locator tone
* not use vibrotactile indications or percussive indications for the audible information
	+ The vibrotactile feedback shall be disabled.

B. Audible Pushbutton Locator Tone

* Frequency: repeating tone at one (1) second intervals
* Tone duration: ≤ 0.15 seconds
* Volume:
* Minimum setting of zero
* Manually adjustable initial setting
* Automatically adjusted after initial setting. Volume increased in response to a temporary increase in ambient noise and subsequently decreased with a decrease in ambient noise.
* Maximum volume: 100 dBA which is the approximate sound pressure of a gasoline powered lawn mower nearby.
* Automatic volume adjustment independent of other APS&Ds at the intersection.
* Should not be disabled but have the capability of being disabled without affecting operation of other features.
* Silent only when RRFB yellow lights are flashing. Active all other times.

C. Tactile Arrow Pushbutton:

* Pushbutton contained in a circular assembly which fits inside the housing and is attached to the housing with 4 screws.
* The confirmation light shall flash simultaneously with the RRFB indications.
* ADA compliant: Size: ≥ 2.0” diameter, Actuation force: ≤ 5 ft-lb
* Shape: Circular, raised slightly above housing so that it may be actuated with the back of a hand
* Tamper-proof, vandal-proof, weatherproof, freeze-proof, impact-resistant design and construction.
* Tactile Arrow:
* Attached to surface of the button assembly by a tamperproof method.
* Raised slightly above surface of pushbutton, minimum 0.125”
* Size: Length ≥ 1.5”, Height ≥ 1.0”
* Color: Sharp contrast to background color of pushbutton and housing

D. Housing

* Die cast aluminum meeting requirements of ASTM B85.
* Designed to attach 9" x 12" four-hole advisory sign.
* Flat back to facilitate surface mount.
* Available hardware to either pedestal top-mount or pole side-mount on diameter range of 3½" to 15".
* Available extension bracket of a size indicated on the plan – 18” maximum.

E. Painting

* All Surfaces of the unit shall be finished with 3 coats of infrared oven-baked paint, before assembly.
* **First coat:** Primer shall be epon-oxide baking primer and shall meet and exceed 1 performance specification of FS TT‑P‑664.
* **Second coat:** Gray Enamel shall be lusterless and shall meet the requirements of FS TT‑E‑527.
* **Third coat:** The housing, all brackets, and hardware shall be YELLOW exterior-baking enamel and shall meet the requirements of FS TT-E-489. The color shall be No. 13538, Federal Standard No. 595.