

SECTION 00990 - TRAFFIC SIGNALS

(Follow all instructions. If there are no instructions above a subsection, paragraph, sentence, or bullet, then include them in the project but make necessary modifications to only include project specific specifications. Delete specifications that do not apply to the project.)

(Use the following paragraph when subsection .42 and subsection .90 audible pedestrian signals are NOT included in the project.)

Comply with Section 00990 of the Standard Specifications.

(Use the following lead-in paragraph and when subsection .42 or subsection .90 when audible pedestrian signals are required.—Check with Signal Designer before using.)

Comply with Section 00990 of the Standard Specifications modified as follows:

(Use the following subsection .42 when audible pedestrian signals are required. Check with Signal Designer before using.)

00990.42 Indication Equipment - Add the following to the end of this subsection:

(h) Audible Pedestrian Signal (APS) - Provide a unique APS sound coincidental with the WALK indication. The APS system shall include a solid state electronic board, power supply, enclosure, loudspeaker, and mounting hardware necessary for fulfilling the intended use and the applicable portions of Standard Specification for Microcomputer Signal Controller.

(1) General - Provide an actuated delay time button that is adjustable in one-second increments throughout the range of 0 to 15 seconds.

The APS unit shall have a sound inhibit circuit capable of control by an external device.

(2) Electrical Requirements - The APS unit shall operate on 95 to 130 VAC, 60Hz, ≤ 3 W.

Provide a power protection circuit consisting of both fuse and transient protection.

Provide an optically isolated circuit allowing delayed actuation of the audible signal.

(3) Environmental Requirements - The APS unit shall function properly throughout an ambient air temperature range of -35 °F to +165 °F.

(4) Outputs - Provide voice message, including automatic repeat capability for messages up to 20 seconds in length.

The audible signal shall be self-adjusting based on ambient noise during the WALK period.

The volume level at a distance of 3 feet from the APS enclosure shall be 66 dB typical, with a maximum of 90 dB.

The minimum volume level shall be adjustable proportionally from 66 dB to 90 dB without dismantling the APS unit housing.

Provide two switch-selectable electronic sounds according to the following:

Parameter	Sound No. 1	Sound No. 2
Sound type	"Peep-peep"	"Cuckoo"
Method	Electronic var. frequency tone	Electronic var. frequency tone
Period	1.0 sec. \pm 20%	1.5 sec. \pm 20%
Duration	0.2 sec. \pm 20%	0.6 sec. \pm 20%
Frequency Base	2800 Hz \pm 20%	1100 Hz \pm 20%
Frequency Deviation	- 800 Hz \pm 20%	+120 Hz \pm 20%

(Use the following subsection .90 when Section 00963 is included for standard mast arm pole drilled foundations or standard strain pole drilled foundations. Delete the pole foundation type that does not apply. Remove the parentheses.)

00990.90 Payment - Add the following paragraph before the paragraph that begins "No separate or additional...":

Standard mast arm pole foundations (and standard strain pole foundations) will be paid for according to 00963.90.