

ATTACHMENT 1

Pedestrian Hybrid Beacon Warrant Policy

A pedestrian hybrid beacon (PHB) is used to warn and control traffic at an unsignalized location to assist pedestrians and bicyclists in crossing a roadway. The pedestrian hybrid beacon warrant policy ('policy') identifies warranting criteria to be used when evaluating the installation of a PHB. PHBs shall be used in conjunction with signs and pavement markings (Appendix A). PHBs should not be installed on roadways with speed limits greater than 45 mph.

1. Criteria

- A. Initial factors that will be considered when a PHB is requested for a certain location:
 - a. Have there been pedestrian/bicycle crashes that were potentially correctable by a PHB within the last 3 years?
 - b. Does the roadway environment support the installation of the PHB?
 - c. Does the street have adjoining sidewalks and/or pathways that will result in a logical utilization of the PHB? Are they ADA compliant?
 - d. Are sight visibility and sight distance sufficient?
 - e. Is right-of-way needed?
 - f. Are there utility conflicts?
 - g. Is the location within a coordinated signal network?
 - h. Is there significant potential for environmental or cultural issues?
 - i. Is funding of the PHB available?
 - j. Is power available at a reasonable cost?
- B. Transportation Department Staff will initiate a PHB warrant study using the PHB Warrant Analysis (Appendix B). This scoring system was developed using NCHRP Report 562 (Improving Pedestrian Safety at Unsignalized Crossings), the 2009 Manual on Uniform Traffic Control Devices, and the City of Phoenix's and Tucson's PHB/HAWK evaluation forms. A minimum of 60 points is recommended for the installation of a PHB.
- C. Should staff determine that a PHB is warranted under this policy, a Budget Adjustment Request (B.A.R.) will be submitted to Mayor and City Council as part of the next budget cycle.
- D. The City of Mesa's ability to complete approved projects under this policy is dependent upon the City having authorized funding from City Council sufficient to accomplish the project. Compliance with this policy, or approval under this policy, is not, of itself, a commitment to fund a project.

2. Approval

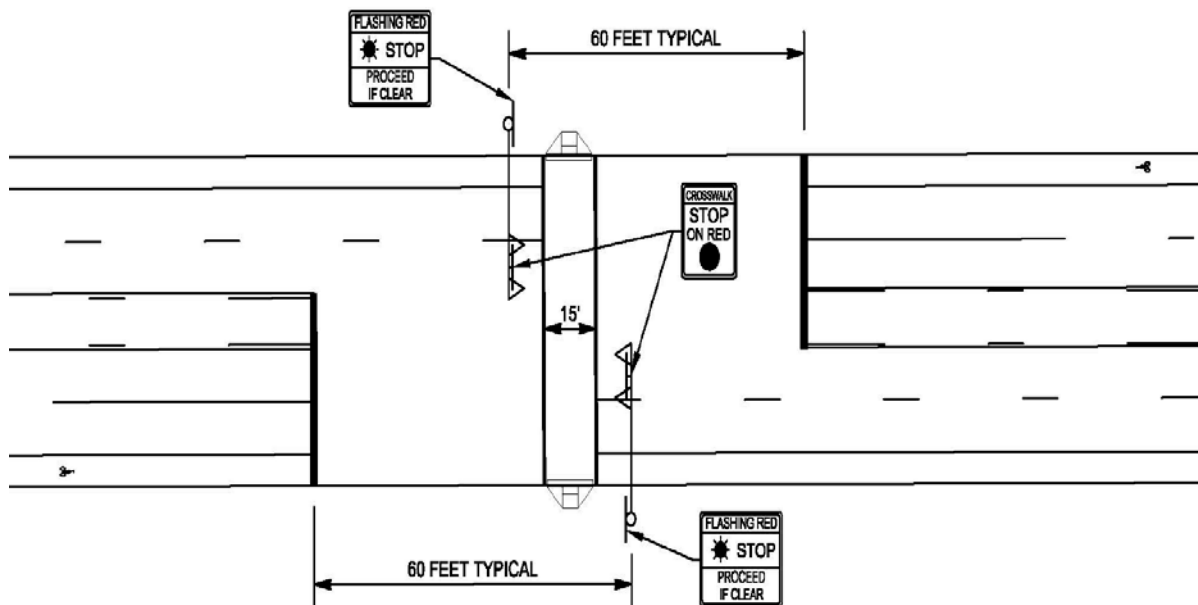
This policy shall become effective after approval by the Sustainability and Transportation Committee and City Council acceptance of the minutes.

3. Amendments and Deviations

The City Manager, or designee, can, in writing, approve amendments and deviations from this policy.

Appendix A

PHB Signs and Pavement Markings



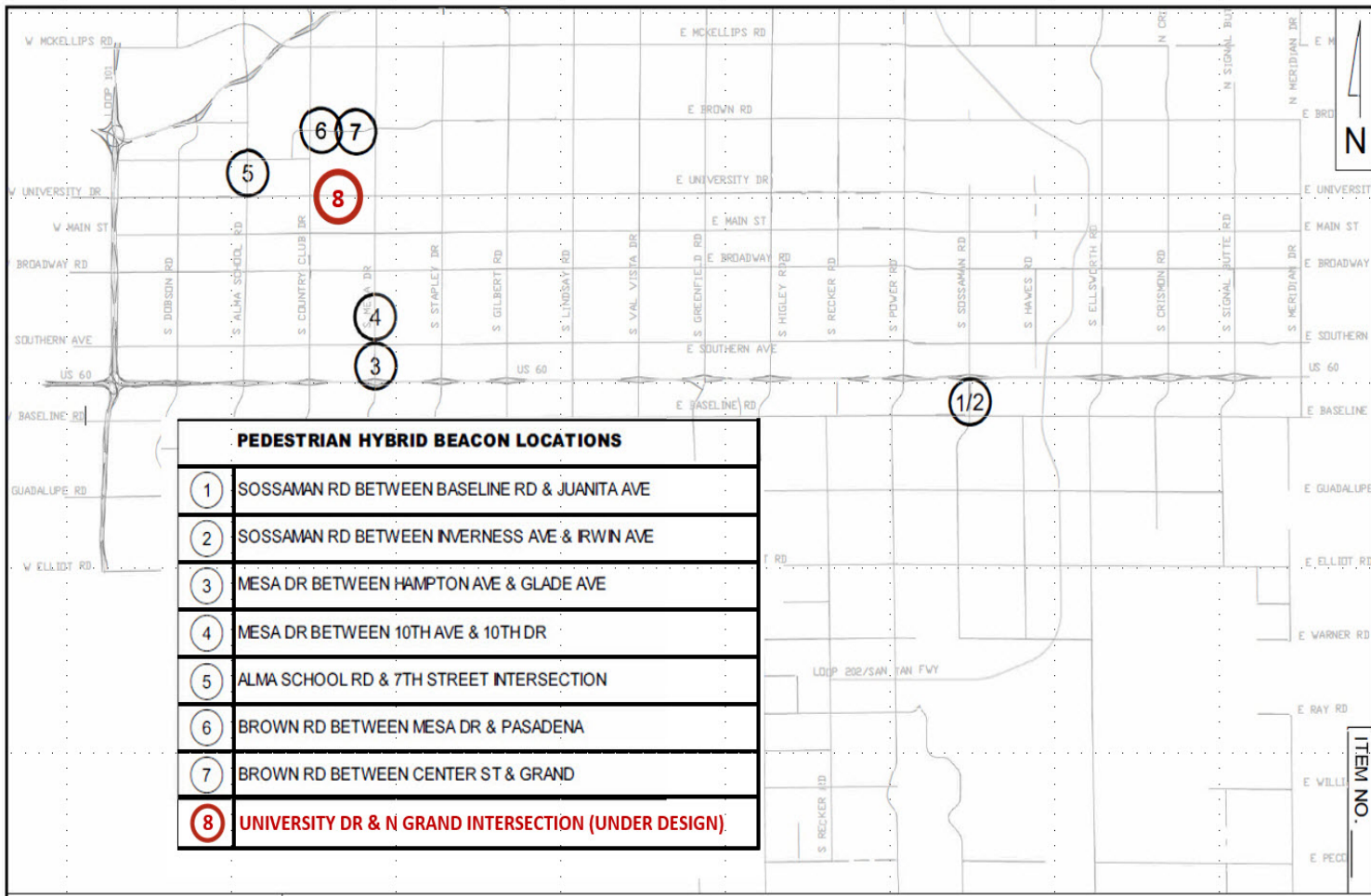
Appendix B

PHB Warrant Analysis

Point Assignments		Point Structure	
		Range	Points
1	Average peak hour pedestrian/bicycle activity within 500 feet of proposed PHB location, or half the distance to the nearest signal (whichever is less):	≤5: 0 points 6-15: 5 points 16-29: 15 points 30+: 25 points	
2	Roadway traffic volume (ADT, in vehicles per day):	<5,000: 0 points 5,000-9,999: 5 points 10,000-14,999: 15 points 15,000+: 25 points	
3	Proximity to nearest signalized or STOP controlled intersection or enhanced crossing (in feet):	≤500: -10 points 501-750: 0 points 751-1000: 10 points >1000: 15 points	
4	Proximity to a pedestrian activity generator (senior center, medical facility, community center, school, park, shopping center, etc.)	>1500: 0 points 1001-1500: 5 points 501-1000: 10 points ≤500: 15 points	
5	Posted speed limit (in miles per hour):	25: 0 points 30: 3 points 35: 6 points 40: 9 points 45: 12 points	
6	Roadway number of vehicle travel lanes:	≤2: 0 points 3 lanes: 1 point 4 lanes: 2 points 5 lanes: 4 points 6 lanes: 6 points 7 lanes: 8 points	
TOTAL POINTS:			60 min 100 max

ATTACHMENT 2

Pedestrian Hybrid Beacon Locations



ATTACHMENT 3

PHB Warrant Analysis

Criteria		Point Structure								
		Range	Points							
			Alma School & 7th St	Brown Rd & Grand	Brown Rd & Pasadena	Mesa Dr North	Mesa Dr South	Sossaman North	Sossaman South	University Dr & Grand
1	Average peak hour pedestrian/bicycle activity within 500 feet of proposed PHB location, or half the distance to the nearest signal (whichever is less):	≤5: 0 points 6-15: 5 points 16-29: 15 points 30+: 25 points	15	0	15	0	0	5	5	5
2	Proximity to nearest signalized or STOP controlled intersection or enhanced crossing (in feet):	≤500: - 10 points 501-750: 0 points 751-1000: 10 points >1000: 15 points	10	15	10	15	15	0	0	15
3	Posted speed limit (in miles per hour):	25: 0 points 30: 3 points 35: 6 points 40: 9 points 45: 12 points	9	9	9	9	9	12	12	9
4	Roadway traffic volume (ADT, in vehicles per day):	<5,000: 0 points 5,000-9,999: 5 points 10,000-14,999: 15 points 15,000+: 25 points	25	25	25	25	25	25	25	25
5	Roadway number of vehicle travel lanes curb to curb (if there is a raised median, count only the lanes up to the median curb):	≤2: 0 points 3 lanes: 1 point 4 lanes: 2 points 5 lanes: 4 points 6 lanes: 6 points 7 lanes: 8 points	8	4	4	4	4	4	4	4
6	Proximity to a pedestrian activity generator (medical facility, community center, school, park, shopping center, etc.)?	≤500: 15 points 501-1000: 10 points 1001-1500: 5 points >1500: 0 points	5	0	15	15	10	15	15	0
TOTAL POINTS:			72	53	78	68	63	61	61	58