## NOTES:

- 1. WHITE-SHEETED AND FLUORESCENT YELLOW-SHEETED TUBULAR DELINEATORS SHALL BE USED AS GUIDEMARKERS TO INDICATE ROADWAY ALIGNMENT. THEY SHALL ALWAYS MATCH THE COLOR OF THE EDGE LINE AND SHALL BE PLACED AS FOLLOWS:
- A. FREEWAYS:
  - (1) CURVES:
  - i. WHITE-SHEETED DELINEATORS SHOULD BE INSTALLED CONTINUOUSLY ALONG THE RIGHT SIDE EXCEPT WHERE FIXED LIGHTING SOURCE IS IN PLACE.
  - II. WHITE-SHEETED DELINEATORS SHOULD BE PLACED ON MAINLINE ROADWAYS AT INTERCHANGES.
  - iii. FLUORESCENT YELLOW-SHEETED DELINEATORS SHOULD BE PLACED CONTINUOUSLY ALONG THE LEFT SIDE EXCEPT WHERE A FIXED LIGHTING SOURCE IS IN PLACE.
  - (2) TANGENTS:
    - i. DELINEATORS SHOULD BE INSTALLED WHERE SHOWN ON THE PLANS WITH SPACING AT DOUBLE THAT SHOWN FOR CURVES ON THE ADVISORY SPEED VALUE CHART.
- B. NON-FREEWAYS:
  - (1) CURVES:
  - i. WHITE-SHEETED DELINEATORS SHOULD BE INSTALLED ON THE RIGHT HAND SIDE OF HORIZONTAL CURVES IN LOCATIONS AS SHOWN ON THE PLANS.
  - ii. FLUORESCENT YELLOW-SHEETED DELINEATORS SHOULD BE PLACED ON THE LEFT SIDE OF DIVIDED ROADWAYS IN LOCATIONS AS SHOWN ON THE PLANS.
  - iii. 360° WHITE-SHEETED DELINEATORS SHOULD BE PLACED ON THE LEFT SIDE OF UNDIVIDED ROADWAYS IN LOCATIONS AS SHOWN ON THE PLANS.
  - iv. DELINEATORS SHOULD BE USED ON SECTIONS OF ROADWAY NOT EDGE STRIPED.
  - (2) TANGENTS:
  - i. DELINEATORS ARE NOT REQUIRED ON TANGENT SECTIONS: HOWEVER. THEY SHOULD BE INSTALLED WHERE SHOWN ON THE PLANS WITH SPACING AT DOUBLE THAT SHOWN FOR CURVES ON THE ADVISORY SPEED VALUE CHART.
- 2. SPACING SHOULD BE IN ACCORDANCE WITH THE SPACING TABLES.
- 3. DELINEATORS SHOULD NOT BE INSTALLED WITHIN ONE QUARTER OF THE NORMAL SPACING BEFORE OR BEYOND A MILEPOST MARKER, SIGN OR OTHER REFLECTIVE MARKER THAT SHOWS ROADWAY ALIGNMENT.
- 4. WHEN A DELINEATOR FALLS WITHIN A CROSSWALK, DRIVEWAY, SIDEWALK OR PULL-OFF, ETC., IT SHALL BE MOVED IN EITHER DIRECTION A DISTANCE NOT TO EXCEED ONE QUARTER OF THE NORMAL SPACING. IF SUITABLE PLACEMENT STILL CANNOT BE OBTAINED, THE DELINEATOR SHALL BE OMITTED.
- 5. ON FREEWAYS, FLUORESCENT YELLOW-SHEETED DELINEATORS MAY BE USED TO MARK MEDIAN CROSSOVERS. POSITIONED SIMILAR TO THE LAYOUT FOR RRPM'S IN STD DRAWING M-27, WHERE SUCH IDENTIFICATION IS NECESSARY FOR MAINTENANCE, ENFORCEMENT, OR EMERGENCY PURPOSES.
- 6. ON NON-FREEWAY DIVIDED ROADWAYS, FLUORESCENT YELLOW-SHEETED DELINEATORS MAY BE PLACED AT MEDIAN OPENINGS WITH LEFT TURN LANES. THE FLUORESCENT YELLOW-SHEETED DELINEATOR AND HORIZONTAL OBJECT MARKER MAY BE MOUNTED ON A SINGLE POST WHEN THE MEDIAN WIDTH IS 4'-0" OR LESS.
- 7. DELINEATORS SHOULD NOT BE INSTALLED ON NON-FREEWAY ROADWAYS IN URBANIZED AREAS.
- 8. WHERE DELINEATORS ARE REQUIRED, THERE SHALL BE A MINIMUM OF THREE DELINEATORS CONTINUOUSLY VISIBLE. WHERE THREE DELINEATORS ARE NOT VISIBLE. ADDITIONAL DELINEATORS SHALL BE PLACED AT THE MIDPOINTS BETWEEN NORMALLY SPACED DELINEATORS UNTIL THREE BECOME CONTINUOUSLY VISIBLE.
- 9. DELINEATORS ARE NOT REQUIRED WHERE THERE ARE GUARDRAIL TABS OR BARRIER MARKERS.
- 10. FOR TRANSITION LANES REFER TO STANDARD DRAWING M-4.
- 11. REFLECTIVE DEVICES SHALL BE  $3" \times 12"$ .
- 12. REFLECTIVE SHEETING SHALL BE WHITE OR FLUORESCENT YELLOW AS REQUIRED AND SHALL CONFORM TO THE PLANS AND SECTION 1007 OF THE STANDARD SPECIFICATIONS.

CURVE SPACING CRITERIA FOR FIELD PERSONNEL (SEE NOTES)					
ADVISORY SPEED VALUE (MPH)	DELINEATOR SPACING IN CURVE (FT)-S	CHEVRON SPACING IN CURVE (FT)-S			
15	35	40			
20	40	80			
25	50	80			
30	55	80			
35	60	120			
40	70	120			
45	75	160			
50	85	160			
55	100	160			
60	110	200			
65-75	130	200			

### NOTES:

- 1. APPROACH AND DEPARTURE DELINEATION ON HORIZONTAL CURVES SHOULD BE SPACED AT TWICE THE CURVE SPACING SHOWN ABOVE USING 3 DELINEATORS OR 1 CHEVRON.
- 2. USE WHEN RADIUS AND DEGREE OF CURVATURE ARE NOT KNOWN.
- 3. DELINEATOR SPACING SHALL NOT BE LESS THAN 20 FEET.
- 4. THE ADVISORY SPEED VALUE SHALL BE THE LOWEST SPEED POSTED (ADVISORY OR REGULATORY) OR APPLICABLE TO EACH FEATURE OR LENGTH OF ROADWAY IN THE TRAVEL DIRECTION UNDER CONSIDERATION.

OTHER SPACINGS (FT)				
ACCELERATION LANES	DECELERATION LANES	TRUCK ESCAPE RAMP		
100	100	50		

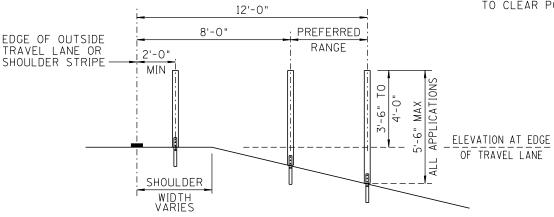
CURVE F	CURVE RADIUS-BASED SPACING RECOMMENDATIONS (SEE NOTES)					
DEGREE OF CURVE	RADIUS (FT)	DELINEATOR SPACING IN CURVE (FT)-S	CHEVRON SPACING IN CURVE (FT)-S			
1	5730	225	400			
2	2865	160	280			
3	1910	130	200			
4	1433	110	200			
5	1146	100	160			
6	955	90	160			
7	819	85	160			
8	716	75	160			
9	637	75	120			
10	573	70	120			
11	521	65	120			
12	478	60	120			
13	441	60	120			
14	409	55	80			
15	382	55	80			
16	358	55	80			
19	302	50	80			
23	249	40	80			
29	198	35	40			
38	151	30	40			
57	101	20	40			

## NOTES:

- 1. APPROACH AND DEPARTURE DELINEATION ON HORIZONTAL CURVES SHOULD BE SPACED AT TWICE THE CURVE SPACING SHOWN ABOVE USING 3 DELINEATORS OR 1 CHEVRON.
- 2. USE WHEN RADIUS OR DEGREE OF CURVATURE IS KNOWN.
- 3. DELINEATOR SPACING SHALL NOT BE LESS THAN 20 FEET.

## OFFSET NOTES:

- 1. INSTALL IN PREFERRED 8 FT. TO 12 FT. OFFSET RANGE UNLESS TERRAIN OR SIDE SLOPE FORCES CLOSER INSTALLATION.
- 2. MINIMUM OFFSET IS 2 FT. FROM SHOULDER STRIPE (OR EDGE OF OUTSIDE LANE IF NO STRIPE).
- 3. INSTALL ALL DELINEATORS WITHIN EACH RUN AT SAME OFFSET UNLESS TAPERED TO MEET GUARDRAIL OR TO CLEAR POINT OBSTRUCTIONS.



# DELINEATOR OFFSET

NOT TO SCALE

ARIZONA DEPARTMENT OF TRANSPORTATION 7/09 INTERMODAL TRANSPORTATION DIVISION
TRAFFIC SIGNING & MARKING DRAWING NO. STANDARD DRAWINGS M-26 ROADWAY DELINEATOR PLACEMENT 1 OF 2