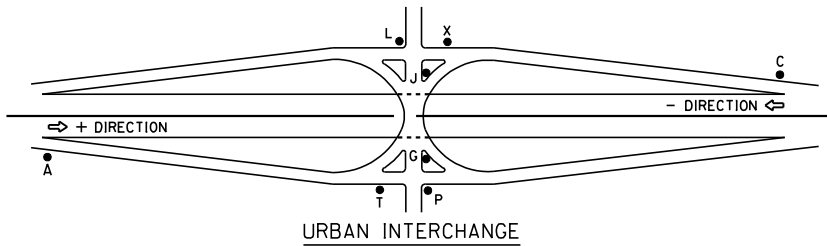
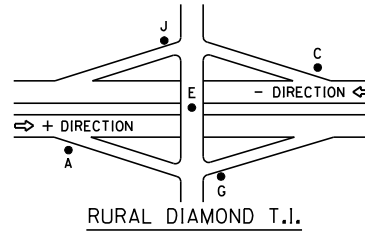


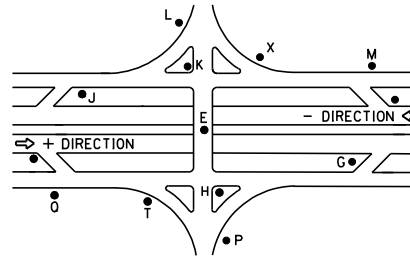
NO	DESCRIPTION OF REVISIONS	MADE BY	DATE
1	RE-ISSUE	L. LOPEZ	2/02
2	REVISED NOTE *1	L. LOPEZ	9/06
3			
4			



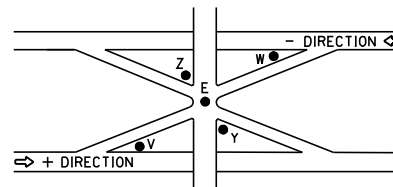
URBAN INTERCHANGE



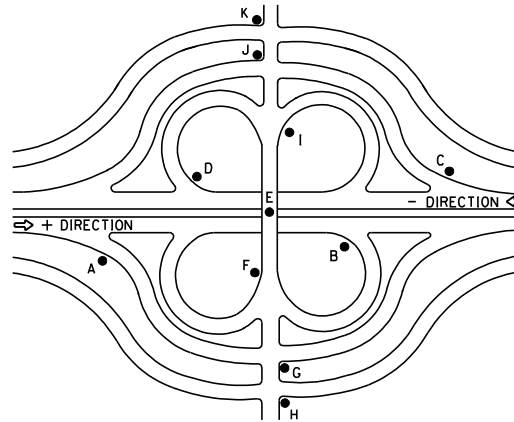
RURAL DIAMOND T.I.



URBAN DIAMOND T.I.



HOV RAMP



CLOVERLEAF T.I.
PLACEMENT DETAILS

NOT TO SCALE

NOTES:

- M9-10(1) AND M9-10(2) OFF-MAINLINE REFERENCE MARKERS, (SEE STD DWG M-30), SHALL BE USED FOR LOCATING DEVICES OR EVENTS OCCURRING ON AUXILIARY ROADS WHICH CONNECT WITH OR ARE ADJACENT TO MAINLINE ROADWAYS.
- NUMERAL PLATES SHALL COINCIDE WITH THE INTERCHANGE EXIT NUMBER, WHICH GENERALLY MATCHES THE ROADWAY MILEPOST. FOR INTERCHANGES WITH NO EXIT NUMBER, CONTACT TRAFFIC ENGINEERING.
- TYPE M9-10(2) REFERENCE MARKERS SHALL BE USED WHEN DUPLICATE DESIGNATIONS WOULD OTHERWISE EXIST.
- ALL OFF-MAINLINE REFERENCE MARKERS SHALL BE LOCATED AS CLOSE AS PRACTICABLE TO THE BEGINNING POINT OF THE ROAD BEING IDENTIFIED AND PLACED SO THAT THEY CAN BE READ FROM EITHER DIRECTION OF APPROACHING TRAFFIC.
- WHERE A DELINEATOR AND OFF-MAINLINE MARKER ARE BOTH TO BE LOCATED AT A SINGLE LOCATION, THE DELINEATOR SHALL BE OMITTED.
- OFF-RAMP, LOOP-RAMP AND CROSSROAD LOOP MARKERS SHALL BE LOCATED AT THE RIGHT SIDE OF THE RAMP OR LOOP, DIRECTLY ACROSS FROM THE GORE POINT, AND SHALL BE ORIENTED PERPENDICULAR TO THE ROADWAY.
- ON-RAMP MARKERS SHALL BE PLACED SO THAT THEY CAN BE READ FROM EITHER DIRECTION ON THE CROSSROAD AND WHERE POSSIBLE, THE ADJACENT OFF-RAMP. WHERE THE OFF-RAMP DIVERTS FROM THE FRONTAGE ROAD, THE MARKER SHALL BE LOCATED ON THE LEFT SIDE OF THE RAMP DIRECTLY ACROSS FROM THE GORE POINT.
- SLIP TYPE OFF-RAMPS, WHICH HAVE LITTLE OR NO LENGTH FROM THE MAINLINE TO WHERE THEY MERGE WITH A FRONTAGE ROAD, SHALL NOT HAVE A REFERENCE MARKER BUT WILL BE RECOGNIZED BY AN "M" OR "O" MARKER PLACED AT THE MERGE POINT OF THE ADJACENT FRONTAGE ROAD. THIS WILL SERVE THE BEGINNING OF THE COMBINATION RAMP/FRONTAGE ROAD TO ITS INTERSECTION WITH THE CROSSROAD.
- SLIP TYPE ON-RAMPS MAY BE IDENTIFIED WITH EITHER THE MAINLINE MILEPOST OR THE FRONTAGE ROAD MARKER FROM WHICH IT BRANCHES BUT SHALL HAVE NO MARKER OF ITS OWN.
- SITUATIONS NOT COVERED BY THESE STANDARDS SHALL BE AS PRESCRIBED BY TRAFFIC ENGINEERING GROUP.
- MARKERS SHALL NOT BE INSTALLED AT THE CENTER POINT OF THE CROSSROAD (DESIGNATED BY "E"). A LIST OF THESE "E" DESIGNATIONS WILL BE FURNISHED TO EACH DISTRICT.

DEFINITIONS:

** POSITIVE; IS IN THE DIRECTION OF INCREASING MILEPOST NUMBER.
NEGATIVE; IS IN THE DIRECTION OF DECREASING MILEPOST NUMBER.

- A = OFF-RAMP FROM ROADWAY CARRYING TRAFFIC IN PLUS DIRECTION.
- B = OFF-LOOP FROM ROADWAY CARRYING TRAFFIC IN PLUS DIRECTION.
- C = OFF-RAMP FROM ROADWAY CARRYING TRAFFIC IN MINUS DIRECTION.
- D = OFF-LOOP FROM ROADWAY CARRYING TRAFFIC IN MINUS DIRECTION.
- E = CENTER POINT OF X-ROAD AT INTERCHANGE OR GRADE SEPERATION.
- F = ON-LOOP FROM X-ROAD TO ROADWAY CARRYING TRAFFIC IN PLUS DIRECTION.
- G = ON-RAMP FROM ROADWAY CARRYING TRAFFIC IN PLUS DIRECTION.
- H = REFERENCE POINT ON PLUS SIDE FRONTAGE ROAD WHERE IT MEETS THE X-ROAD.
- I = ON-LOOP FROM X-ROAD TO ROADWAY CARRYING TRAFFIC IN MINUS DIRECTION.
- J = ON-RAMP FROM ROADWAY CARRYING TRAFFIC IN MINUS DIRECTION.
- K = REFERENCE POINT ON MINUS SIDE FRONTAGE ROAD WHERE IT MEETS THE X-ROAD.
- L = CONNECTOR FROM X-ROAD TO FRONTAGE ROAD OR RAMP IN MINUS DIRECTION.
- M = INTERMEDIATE POINT ON MINUS SIDE OF FRONTAGE ROAD DENOTING A MERGE.
- P = CONNECTOR FROM X-ROAD TO FRONTAGE ROAD OR RAMP IN PLUS DIRECTION.
- O = INTERMEDIATE POINT ON PLUS SIDE OF FRONTAGE ROAD DENOTING A MERGE.
- R = REST AREA (FACILITIES AND PARKING AREA) ON PLUS SIDE OF ROADWAY.
- S = REST AREA (FACILITIES AND PARKING AREA) ON MINUS SIDE OF ROADWAY.
- T = CONNECTOR FROM FRONTAGE ROAD OR RAMP TO X-ROAD IN PLUS DIRECTION.
- V = HOV OFF-RAMP FROM ROADWAY CARRYING TRAFFIC IN PLUS DIRECTION.
- W = HOV OFF-RAMP FROM ROADWAY CARRYING TRAFFIC IN MINUS DIRECTION.
- X = CONNECTOR FROM FRONTAGE ROAD OR RAMP TO X-ROAD IN MINUS DIRECTION.
- Y = HOV ON-RAMP TO ROADWAY CARRYING TRAFFIC IN PLUS DIRECTION.
- Z = HOV ON-RAMP TO ROADWAY CARRYING TRAFFIC IN MINUS DIRECTION.

DESIGN APPROVED	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION STANDARD DRAWINGS	REV. 9/06
APPROVED FOR DISTRICT	OFF-MAINLINE REFERENCE MARKER LOCATION DETAIL	DRAWING NO. M-29

SIGNATURE
ON FILE