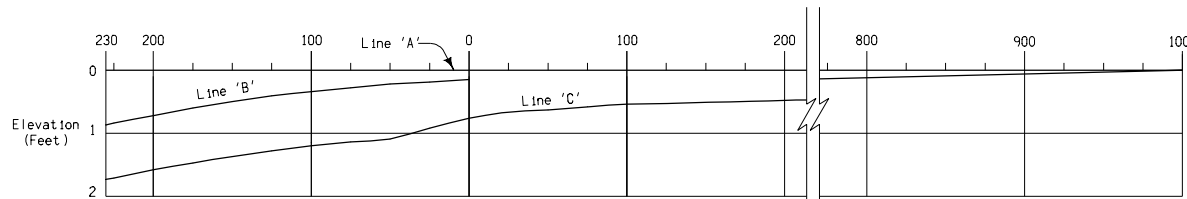


Ramp entrance pavement shall be the same thickness as mainline pavement.  
 Ramp entrance pavement shown by shaded area is 1884 square yards.  
 Special shaping of area between lines A and B may be required to assure proper drainage.



NOTE: The algebraic difference between profile grade for Ramp Base Line at (F) and relative profile grade of Mainline at (H) is 0.54%.

PROFILE

- ① For header construction details at the beginning of taper, refer to the appropriate Typical 7101 or 7102.
- ② Ramp exit subbase shall be the same thickness as mainline subbase.
- ③ The ramp pavement cross slope between (J) and (F) is determined by superelevation rotated about Line C. Refer to Standard Road Plan RP-3 and plans for superelevation transition requirements.

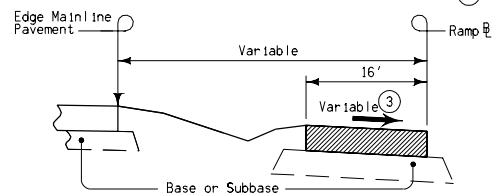
TABLE OF OFFSETS AND DROPS FOR 16' RAMP TAPER

Distance From Point (E) Along Line 'A' (Ft.)	230	225	200	175	150	125	100	75	50	25	0	25	50	75	100	200	300	400	500	600	700	800	900	1000	
From Line 'A' To Line 'B'	Constant 4.0% Slope																								
Offset (Ft.)	21.76	21.09	17.94	15.10	12.57	10.36	8.47	6.88	5.61	4.65	4.0														
Slope (%)	Constant 16.0' Offset																								
Drop (Ft.)	0.87	0.84	0.72	0.60	0.50	0.41	0.34	0.28	0.22	0.19	0.15														
From Line 'B' To Line 'C'	Constant 3.0% Slope																								
Offset (Ft.)	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	4.60	3.78														
Slope (%)	Constant 3.0% Slope																								
Drop (Ft.)	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.73	0.60														
From Line 'A' To Line 'C'	Constant 3.0% Slope																								
Offset (Ft.)	1.73	1.71	1.58	1.47	1.37	1.28	1.20	1.14	1.09	0.92	0.76	19.5	19.0	18.5	18.0	16.0	14.0	12.0	10.0	8.0	6.0	4.0	2.0	0.0	
Slope (%)	Constant 3.0% Slope																								
Drop (Ft.)	1.73	1.71	1.58	1.47	1.37	1.28	1.20	1.14	1.09	0.92	0.76	0.67	0.63	0.58	0.54	0.48	0.42	0.36	0.30	0.24	0.18	0.12	0.06	0.0	
Distance From Point (G) Along Line 'C' (Ft.)	228.66	223.74	198.66	173.70	148.77	123.87	99.00	74.15	49.31	24.49	0.00														

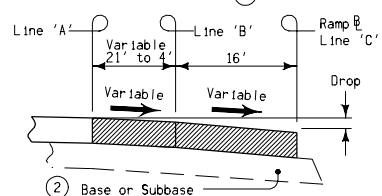
For jointing layout, see Standard Road Plan RV-10.

This design is based on 60 mph design speed at e max = 6%.

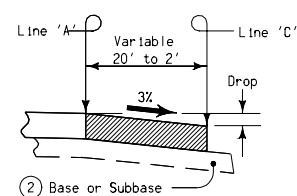
For location equivalent stations, see Tabulation [101-15].  
 Equate Point 'G' (Ramp Stationing) to Point 'E' (Mainline Stationing).



SECTION A-A



SECTION B-B



SECTION C-C

Iowa Department of Transportation  
 Highway Division

**STANDARD ROAD PLAN RV-5**

REVISION: Change Detail Sheet 550-5 to Standard Road Plan RV-10. REVISION NO. 4

REVISION DATE 04-19-05

*William J. Allen*  
 APPROVED BY DESIGN METHODS ENGINEER

**ACCELERATION TAPER FOR 16' ENTRANCE RAMP**