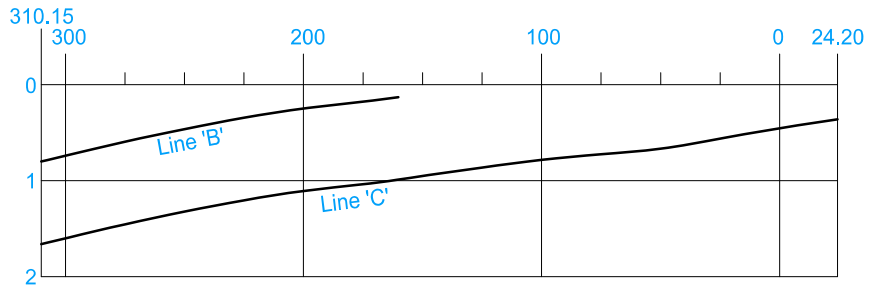
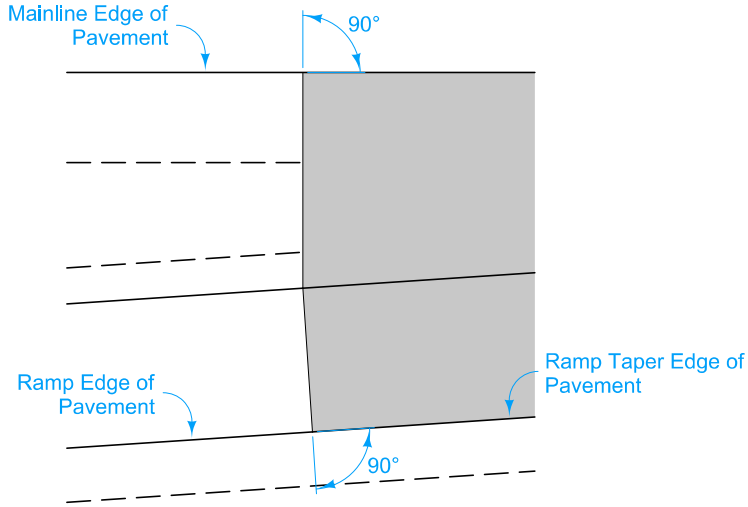


Pt. 'G' to Pt. 'J'
$\Delta = 8^{\circ} 51' 20.88''$
$T = 164.23'$
$L = 327.73'$
$E = 6.73'$
$R = 2000.00'$



NOTE: The algebraic difference between ramp profile grade at point (F) and relative profile grade of mainline at point (H) is 0.62%

TABLE OF SHOULDER TRANSITION LENGTHS WITH 6' SHOULDER ON RAMP			
$W_0$	Shoulder Width beyond Edge of Mainline Pavement		
	8'	10'	12'
12'	NA	100'	150'



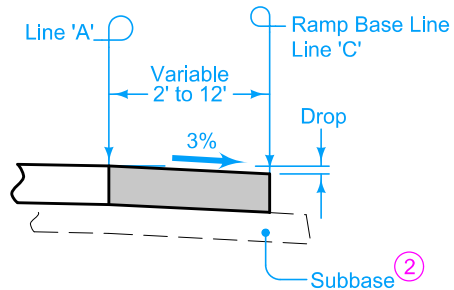
DETAIL A

Construct ramp exit pavement the same thickness as mainline pavement.

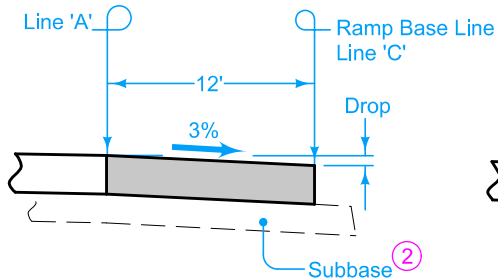
For joint detail, see PV-101.

- ① For header construction detail at the end of taper, see Typical 7101 or Typical 7102.
- ② Construct subbase for ramp exit pavement the same thickness as mainline subbase.

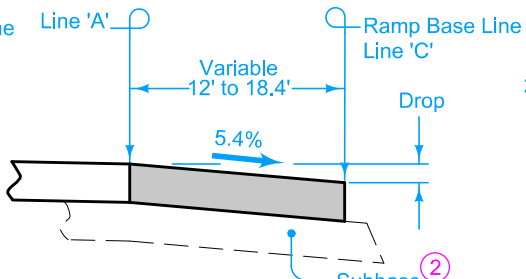
TABLE OF OFFSETS AND DROPS FOR 16' RAMP TAPER																	
DISTANCE FROM POINT (E) ALONG LINE 'A' (Ft.)		310.15	300	275	250	225	204	200	175	160.15	150	125	100	75	50	25	0
From Line 'A' To Line 'B'	OFFSET (Ft.)	20.00	18.45	14.84	11.56	8.60	6.30	5.95	3.61	2.37							
	SLOPE (%)	Constant 4.0% Slope								4.11	4.92	5.40					
	DROP (Ft.)	0.80	0.74	0.59	0.46	0.34	0.25	0.24	0.18	0.13							
From Line 'B' To Line 'C'	OFFSET (Ft.)	Constant 16' Offset															
	SLOPE (%)	Constant 5.4% Slope															
	DROP (Ft.)	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86							
From Line 'A' To Line 'C'	OFFSET (Ft.)										17.63	15.91	14.50	13.41	12.63	12.16	12.00
	SLOPE (%)										5.40	5.40	5.40	5.40	5.40	4.59	3.78
	DROP (Ft.)	1.66	1.60	1.45	1.32	1.20	1.11	1.10	1.04	0.99	0.95	0.86	0.78	0.72	0.68	0.56	0.45
DISTANCE FROM POINT (G) ALONG LINE 'C' (Ft.)		309.13	298.73	273.67	248.66	223.68	202.73	198.74	173.83	159.04	150.14	125.08	100.04	75.02	50.01	25.00	0.00



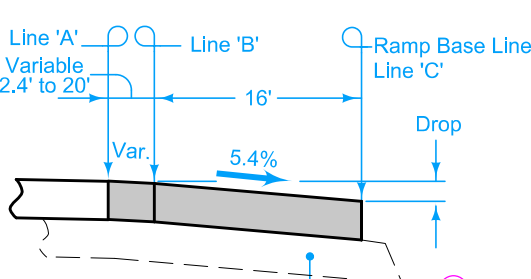
SECTION A-A



SECTION B-B



SECTION C-C



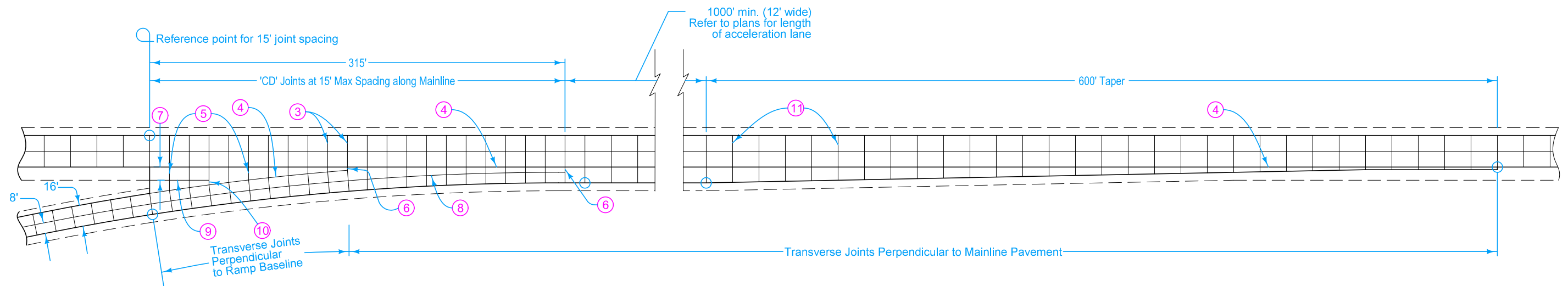
SECTION D-D

IOWA DOT  
ROAD DESIGN DETAIL


REVISIONS: Removed KT joint option.

REVISION	
4	10-21-25
533-02	
SHEET 1 of 2	

PARALLEL ACCELERATION TAPER  
FOR 16' RAMP  
(60 MPH DESIGN SPEED)



- ③ 'CD ' Joints at 15' spacing.
- ④ 'BT-2' Joint.
- ⑤ 'C' Joint.
- ⑥ 'B' Joint. 2' minimum, 4' maximum.
- ⑦ 10' minimum or equal to mainline shoulder width.
- ⑧ 'L-2' Joint.
- ⑨ 'C' Joint parallel to mainline pavement.
- ⑩ 'B' or 'C' Joint. 2' minimum, 4' maximum.
- ⑪ 'CD ' Joints at 17' spacing.

 IOWA   DOT	REVISION	
	4	10-21-25
	533-02	
ROAD DESIGN DETAIL	SHEET 2 of 2	
REVISIONS:      Removed KT joint option.		
PARALLEL ACCELERATION TAPER FOR 16' RAMP (60 MPH DESIGN SPEED)		