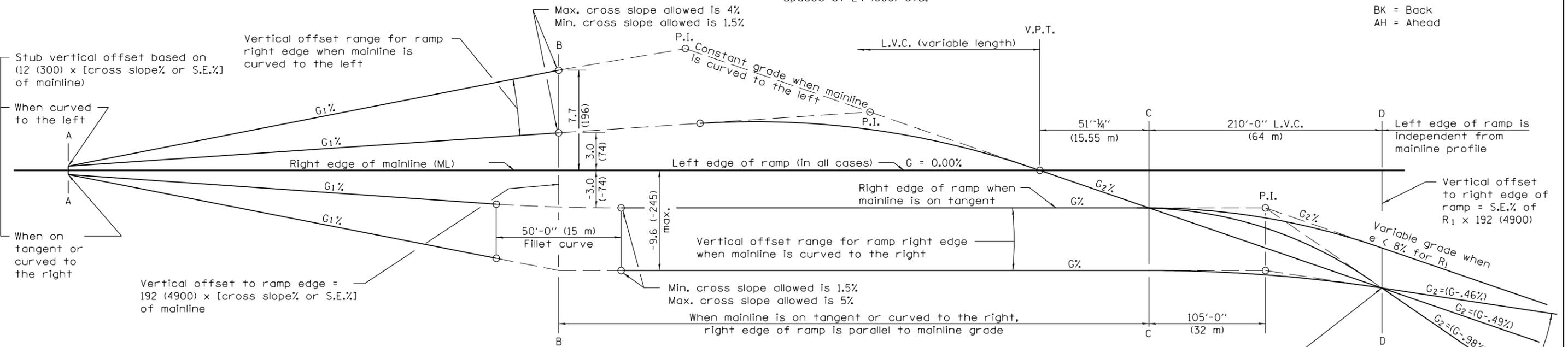


**PLAN**



**PROFILE**

Range of initial ramp grades when mainline is curved to the right and e = 8% for R1

See Sheet 3 for GENERAL NOTES

Illinois Department of Transportation

PASSED January 1, 2017

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APPROVED January 1, 2017

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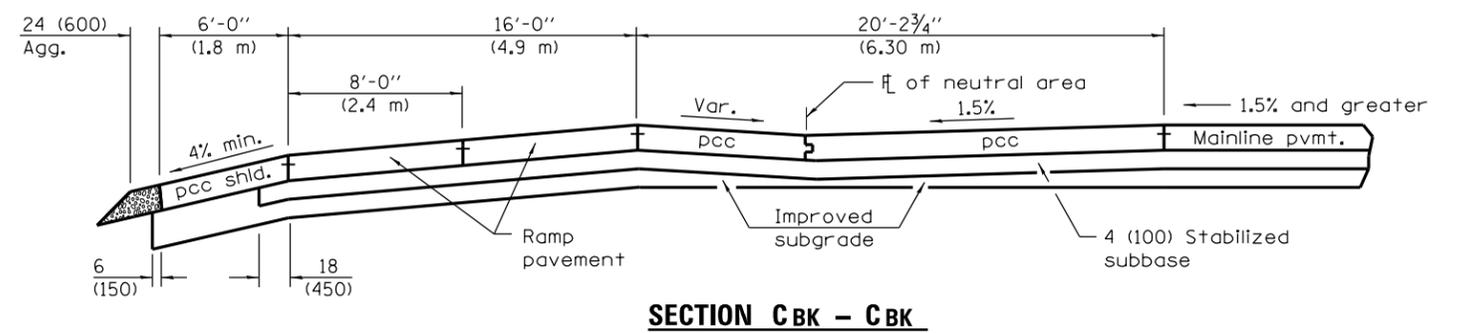
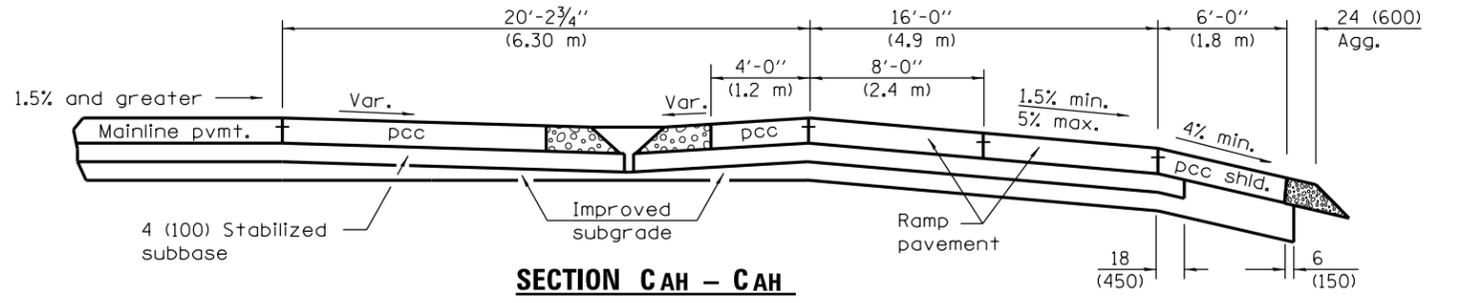
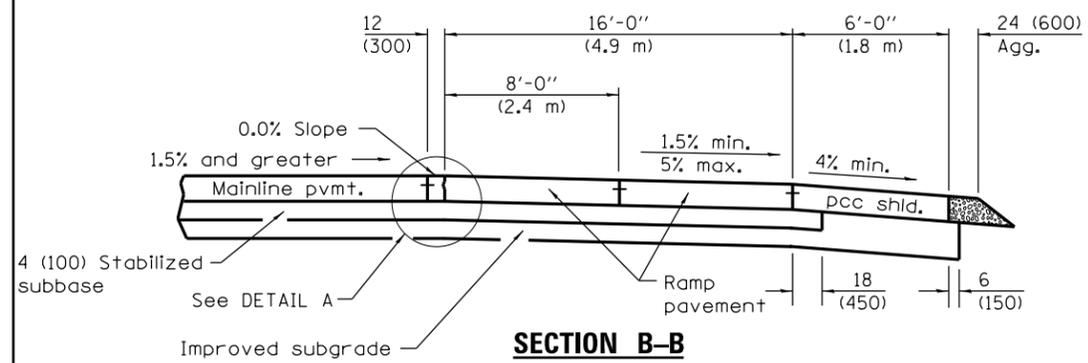
ISSUED 1-1-97

DATE	REVISIONS
1-1-17	Added longitudinal sawed joint to middle of ramp pavement.
1-1-15	Corrected divergence angle at taper. Based profile off of e-max instead of R1.

**EXIT RAMP TERMINAL**  
(JOINTED PCC RAMP PAVEMENT  
ADJACENT TO JOINTED PCC MAINLINE PAVEMENT)

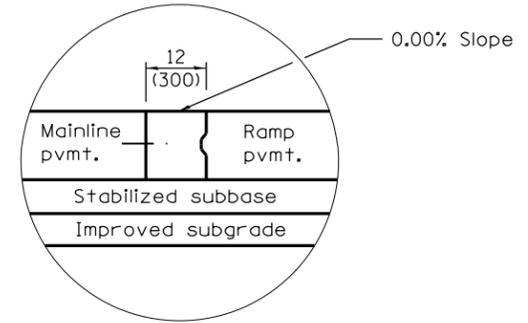
(Sheet 1 of 3)

**STANDARD 420301-07**

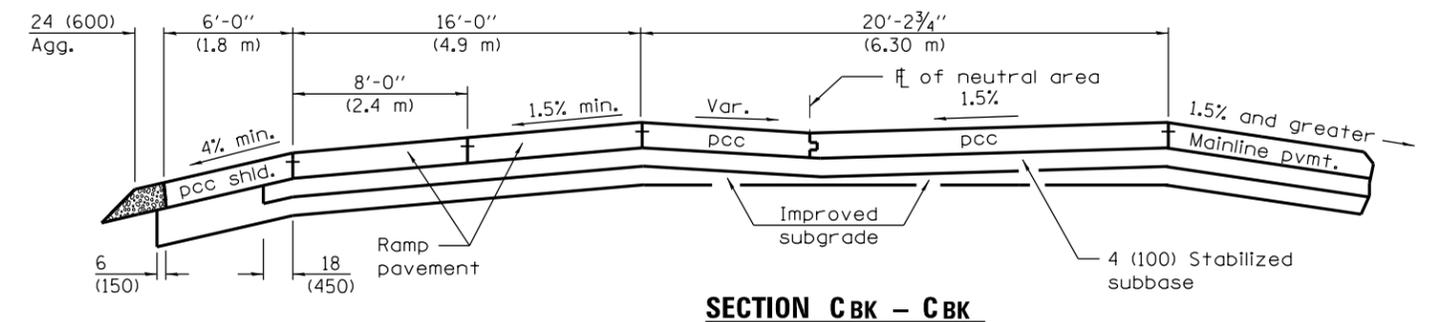
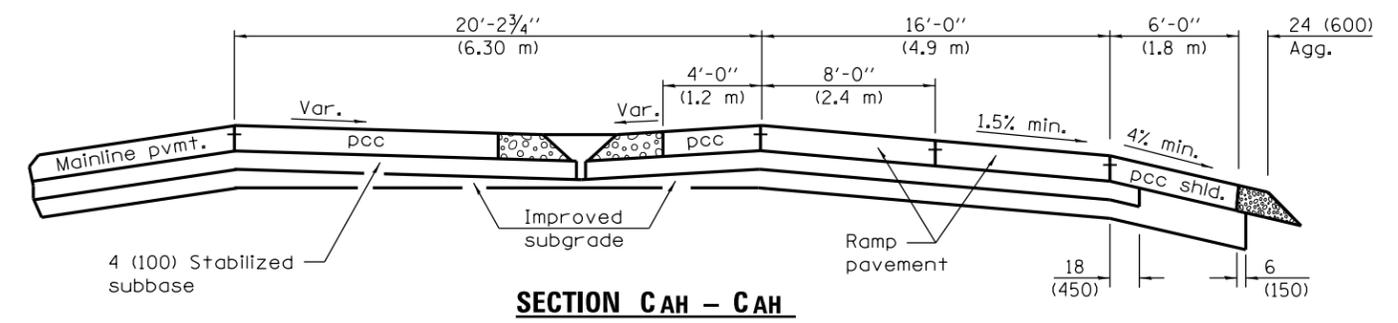
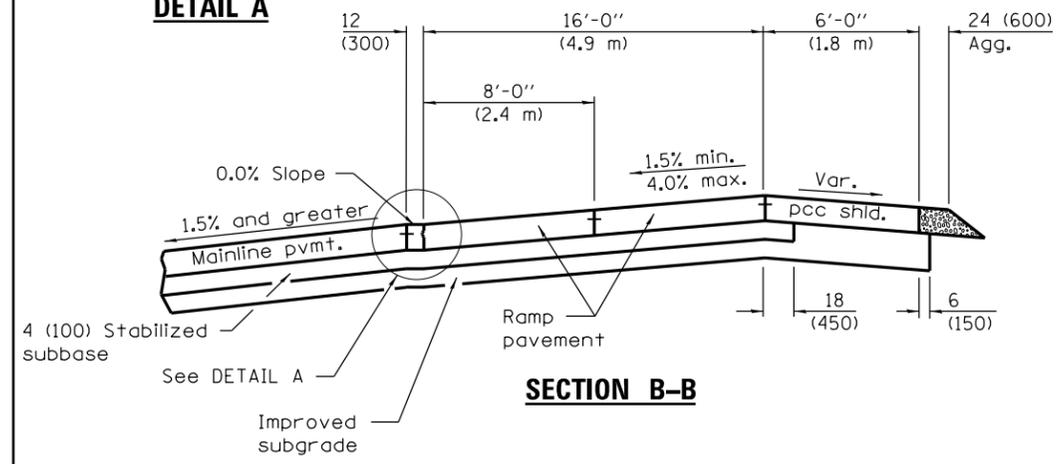


BK = Back  
AH = Ahead

**WHEN MAINLINE IS ON TANGENT OR CURVED TO THE RIGHT**



**DETAIL A**



See Sheet 3 for GENERAL NOTES

**WHEN MAINLINE IS CURVED TO THE LEFT**

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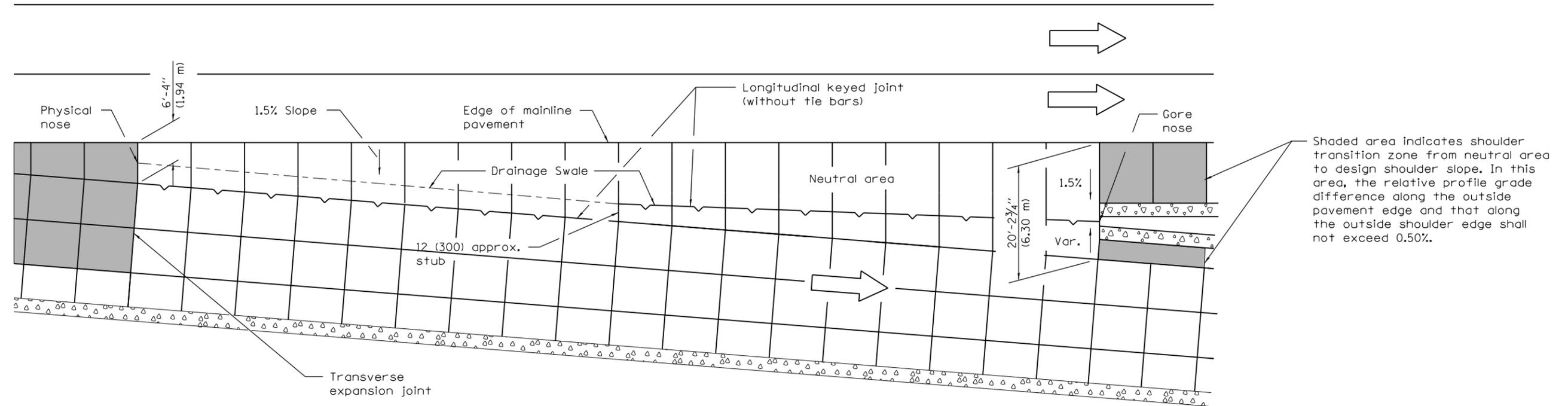
APPROVED January 1, 2017  
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ISSUED 1-1-97

**EXIT RAMP TERMINAL**  
 (JOINTED PCC RAMP PAVEMENT  
 ADJACENT TO JOINTED PCC MAINLINE PAVEMENT)

(Sheet 2 of 3)

**STANDARD 420301-07**



**DETAILS FOR DRAINAGE IN NEUTRAL AREA**

**GENERAL NOTES**

The initial ramp grade (G<sub>2</sub>) is based on the line generated through the PI that is 105' (32 m) past Section C-C and the point created by the vertical offset at Section D-D.

See plans for actual grades.

All pavement joints shall be detailed as shown on Standards 420001 and 483001.

See Standard 483001 for ramp shoulder details.

In the neutral area, provide a swale and flush inlet to enhance drainage.

When using grades expressed in %, the grade values shall be divided by 100 to obtain vertical offsets.

Where an exit ramp terminal is proposed adjacent to a mainline horizontal curve, construct the edge of the terminal by using offset widths, and for the terminal segment downstream from Section C-C to R<sub>1</sub>, construct the ramp as a 141' (43 m) tangent section.

All dimensions are in inches (millimeters) unless otherwise shown.

Vertical offsets in inches for right edge of ramp, when e = 8%			
Sections	Mainline on Tangent	Mainline Curved Right	Mainline Curved Left
A	- 0.18	S.E. % ML x 12	S.E. % ML x 12 (2)
B	- 3.0	S.E. % ML x 192	S.E. % ML x 192 (2)
C	- 3.0	S.E. % ML x 192	- 3.0
D	- 15.4	- 15.4	- 15.4

① Vertical offsets in mm for right edge of ramp, when e = 8%			
Sections	Mainline on Tangent	Mainline Curved Right	Mainline Curved Left
A	- 5	S.E.% ML x 300	S.E.% ML x 300 (2)
B	- 74	S.E.% ML x 4900	S.E.% ML x 4900 (2)
C	- 74	S.E. % ML x 4900	- 74
D	- 392	- 392	- 392

- ① Vertical offset values are calculated and based on the right edge of mainline pavement at 0.0 % grade.
- ② The vertical offsets of these points are above the mainline pavement and lie on an upgrade in relationship to the mainline grade.
- ③ S.E.=Superelevation Rate

**EXIT RAMP TERMINAL**

(JOINTED PCC RAMP PAVEMENT  
ADJACENT TO JOINTED PCC MAINLINE PAVEMENT)

(Sheet 3 of 3)

**STANDARD 420301-07**

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ISSUED 1-1-17