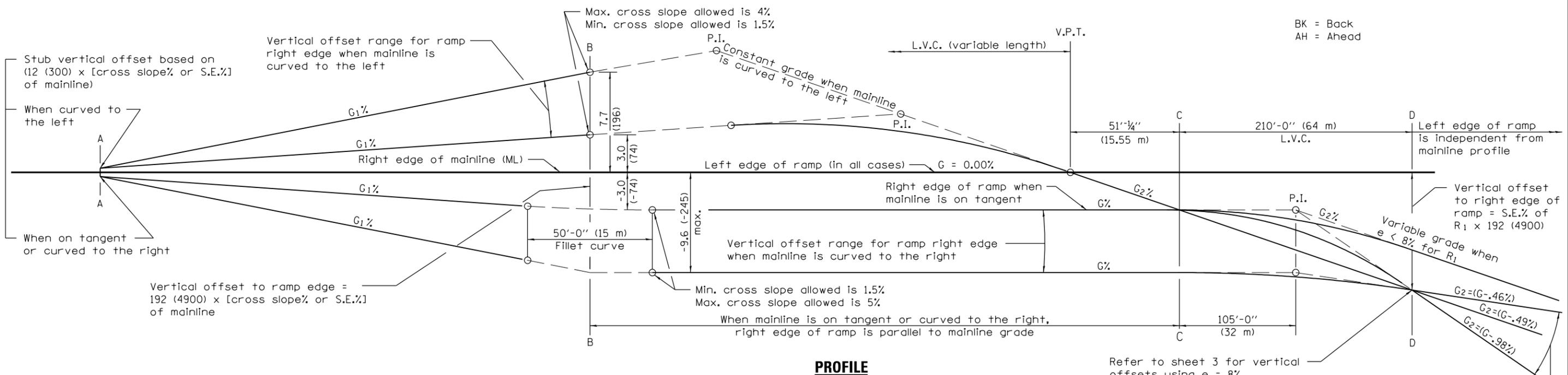


**PLAN**



**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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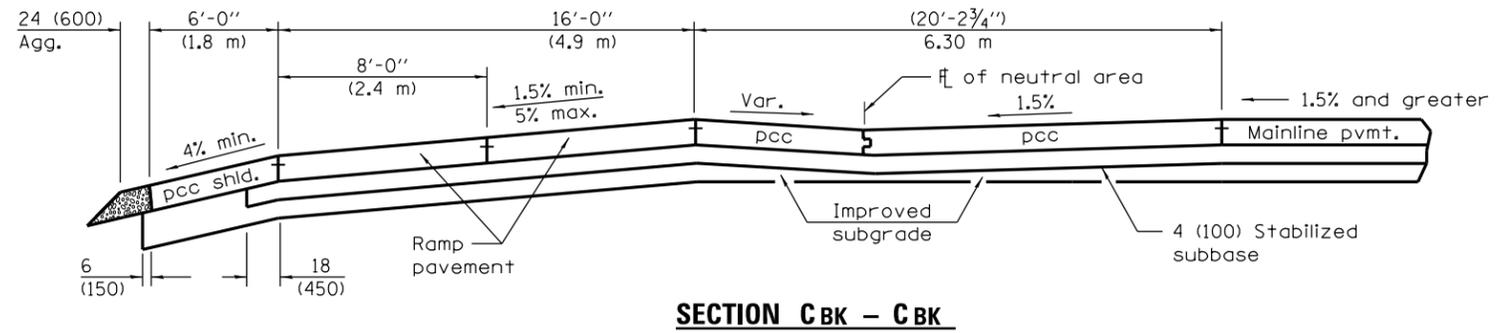
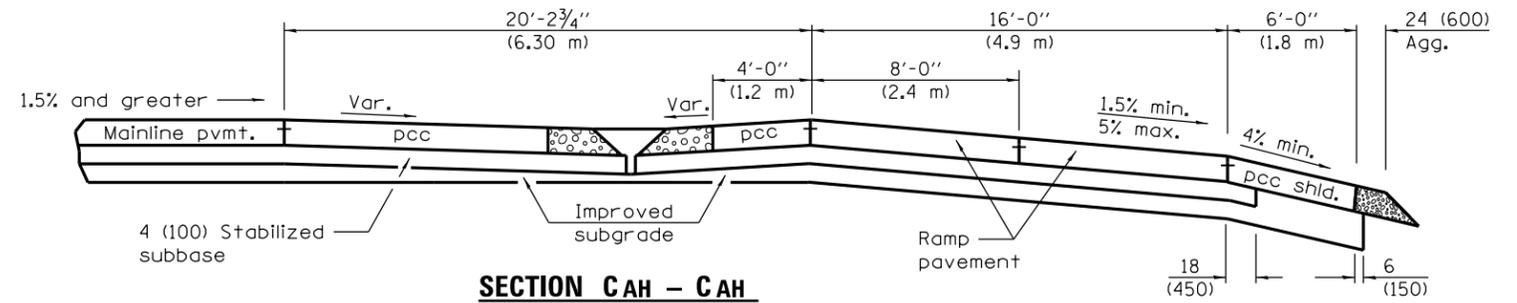
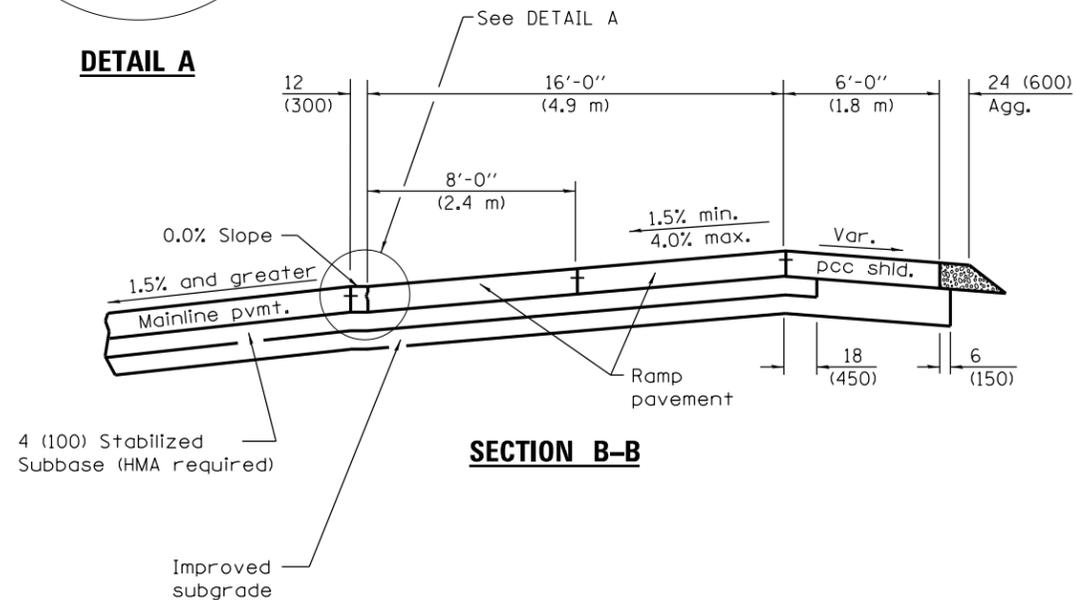
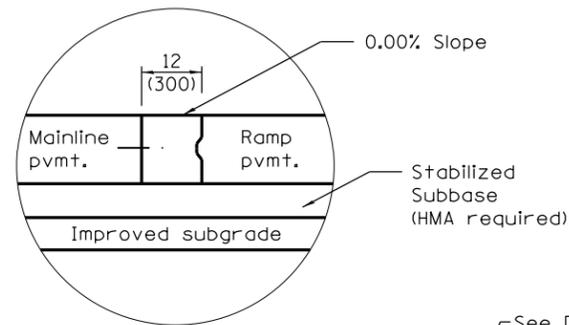
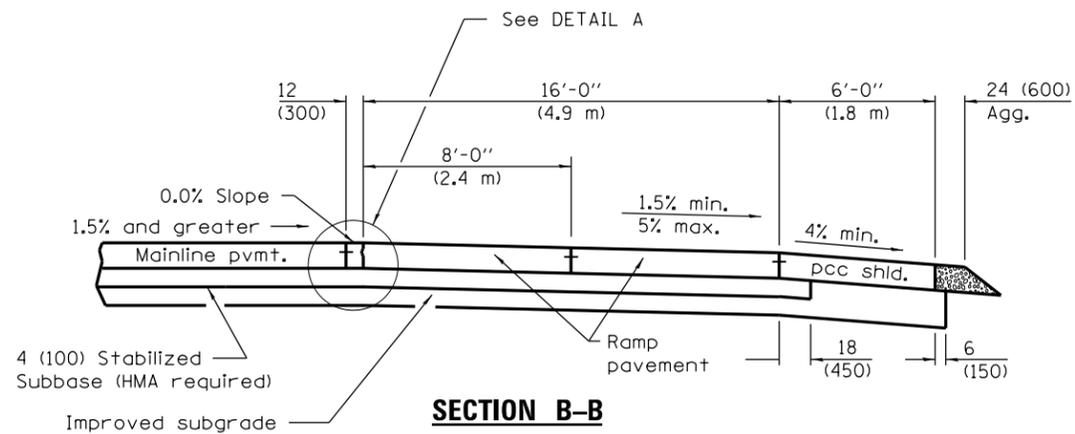
ISSUED 1-1-97

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 CRC MAINLINE PAVEMENT)

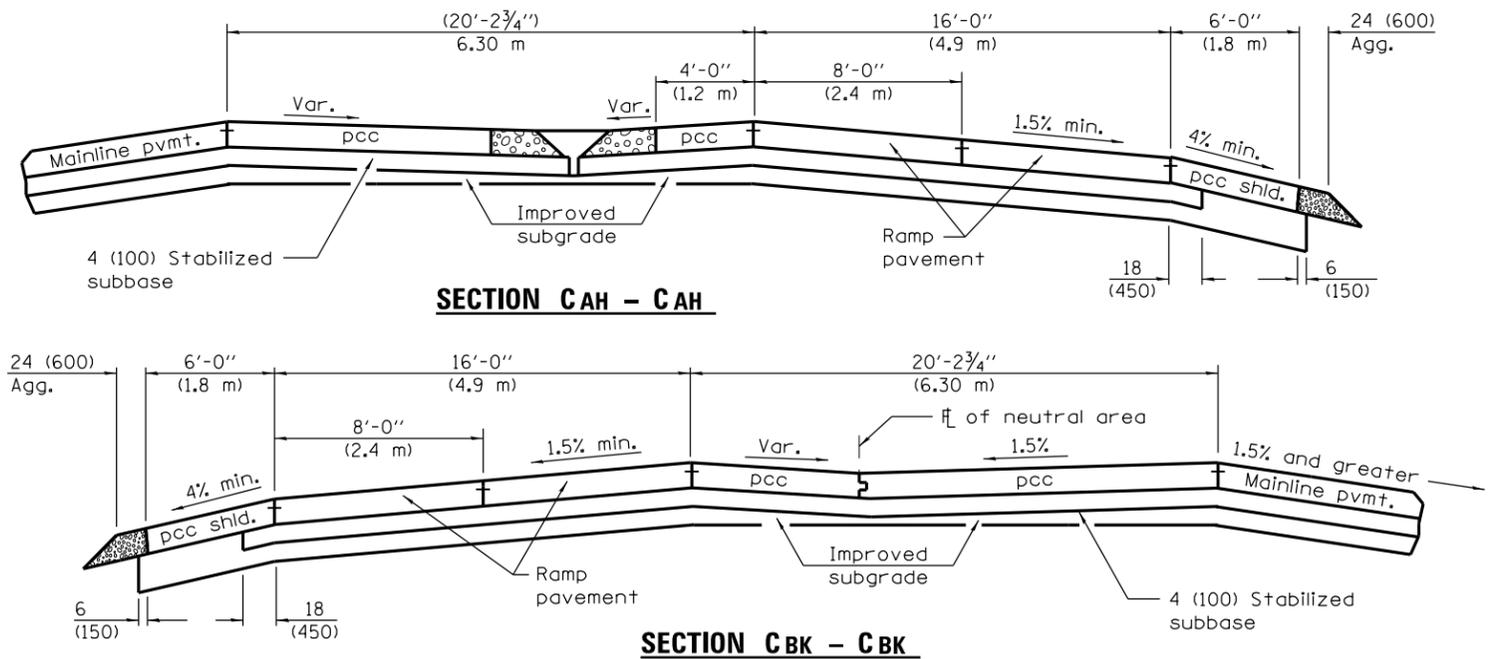
(Sheet 1 of 3)

**STANDARD 420306-09**



BK = Back  
AH = Ahead

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



See Sheet 3 for GENERAL NOTES

**WHEN MAINLINE IS CURVED TO THE LEFT**

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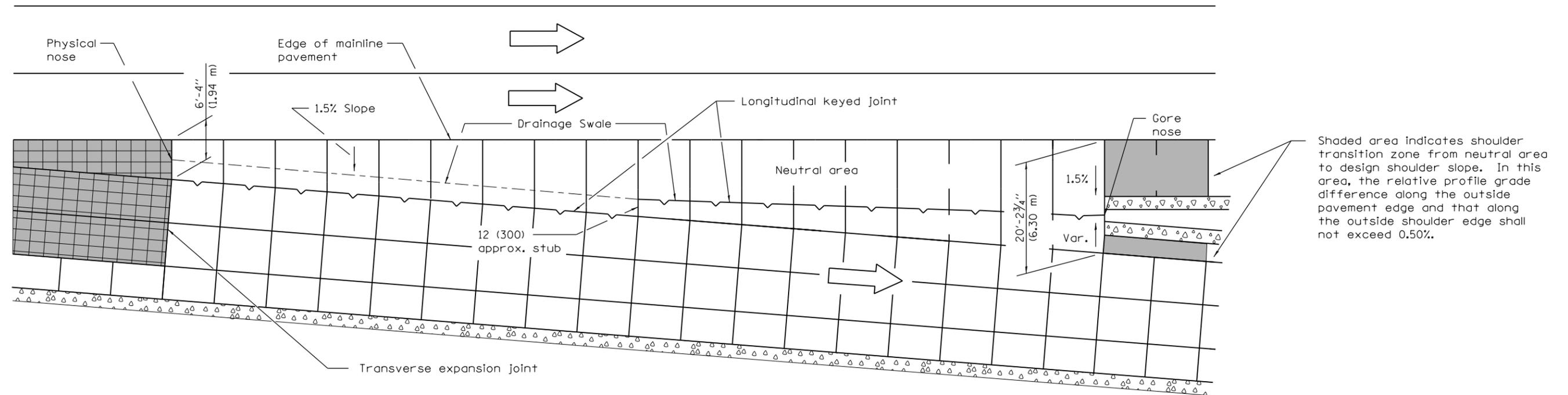
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ISSUED 1-1-97

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

(Sheet 2 of 3)

**STANDARD 420306-09**



Shaded area indicates shoulder transition zone from neutral area to design shoulder slope. In this area, the relative profile grade difference along the outside pavement edge and that along the outside shoulder edge shall not exceed 0.50%.

**DETAILS FOR DRAINAGE IN NEUTRAL AREA**

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

**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.

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

(Sheet 3 of 3)

**STANDARD 420306-09**

Illinois Department of Transportation

PASSED January 1, 2017  
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ISSUED 1-1-97