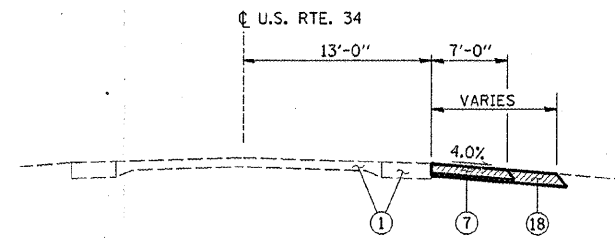


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 313	(7BY)BR	HENDERSON	68	5
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



PROPOSED TYPICAL SECTION

STA 293+81.71 TO STA 297+00.00
STA 304+95.00 TO STA 309+83.00

PAVEMENT DESIGN DATA (MAINLINE)

DESIGN PERIOD: 20 YEARS
STRUCTURAL DESIGN TRAFFIC (S.D.T.) = 6620 YEAR 2011
P.V. = 79.0% S.U. = 3.0% M.U. = 18%
CLASS II ROAD
PERCENT OF S.D.T. IN DESIGN LANE P = 50 S = 50 M = 50
MINIMUM SOIL SUPPORT: IBR = 3.0
80,000 POUND TRUCK DESIGN LOADING
TRAFFIC FACTOR: T.F. = 0.845
STRUCTURAL NUMBER: Dt = 4.1
PAVEMENT STRUCTURE:
SURFACE COURSE: HOT-MIX ASPHALT $\sigma_1 = 0.40$
BASE COURSE: HOT-MIX ASPHALT BASE $\sigma_2 = 0.40$
SUBBASE: NONE

PAVEMENT DESIGN DATA (RUNAROUND)

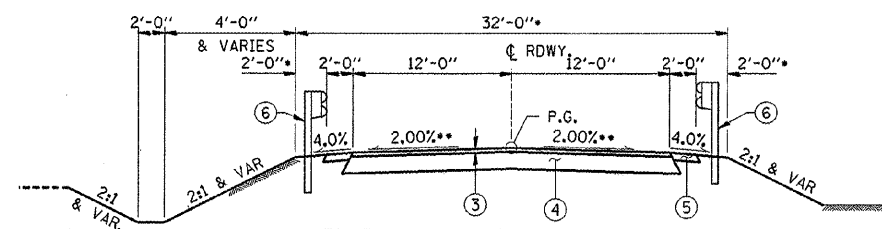
DESIGN PERIOD: 1 YEAR
STRUCTURAL DESIGN TRAFFIC (S.D.T.) = 6620 YEAR 2011
P.V. = 79.0% S.U. = 3.0% M.U. = 18%
CLASS II ROAD
PERCENT OF S.D.T. IN DESIGN LANE P = 50 S = 50 M = 50
MINIMUM SOIL SUPPORT: IBR = 3.0
80,000 POUND TRUCK DESIGN LOADING
TRAFFIC FACTOR: T.F. = 0.06
STRUCTURAL NUMBER: Dt = 2.7
PAVEMENT STRUCTURE:
SURFACE COURSE: HOT-MIX ASPHALT $\sigma_1 = 0.40$
BASE COURSE: HOT-MIX ASPHALT BASE $\sigma_2 = 0.40$
SUBBASE: NONE

LEGEND

- ① EXISTING 18" PCC PAVEMENT WITH HMA WIDENING AND SURFACE
- ② GUARDRAIL AGGREGATE (EROSION CONTROL)
- ③ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (2" THICKNESS)
- ④ HOT-MIX ASPHALT BASE COURSE (8")
- ⑤ AGGREGATE SHOULDER TYPE B (6")
- ⑥ STEEL PLATE BEAM GUARDRAIL TYPE A
- ⑦ AGGREGATE SHOULDER TYPE B (8")
- ⑧ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (1.5" THICKNESS MIN.)
- ⑨ LEVELING BINDER (MACHINE METHOD), N70 (0.75" THICKNESS MIN.)
- ⑩ HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N70 (VARIABLE DEPTH)
- ⑪ EXISTING GROUND LINE
- ⑫ HOT-MIX ASPHALT SHOULDERS, 8"
- ⑬ PAINT PAVEMENT MARKING LINE 4"
- ⑭ TOPSOIL FURNISH AND PLACE, 4"
- ⑮ EXISTING HOT-MIX ASPHALT BASE COURSE WIDENING
- ⑯ HOT-MIX ASPHALT BASE COURSE WIDENING, 9" (6'-6" WIDTH)
- ⑰ HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- ⑱ DETOUR ROADWAY REMOVAL
- ⑲ PAVEMENT REMOVAL
- ⑳ GEOTECHNICAL FABRIC FOR EROSION CONTROL
- ㉑ STRIP REFLECTIVE CRACK CONTROL TREATMENT SYSTEM A
- ㉒ AGGREGATE BASE COURSE, TYPE A
- ㉓ HOT-MIX ASPHALT BASE COURSE (9" THICKNESS)
- ㉔ BITUMINOUS MATERIALS (PRIME COAT)

NOTES

- 1) PLACE STRIP REFLECTIVE CRACK CONTROL ALONG JOINT OF EXISTING PAVEMENT & NEW HMA BASE COURSE WIDENING.

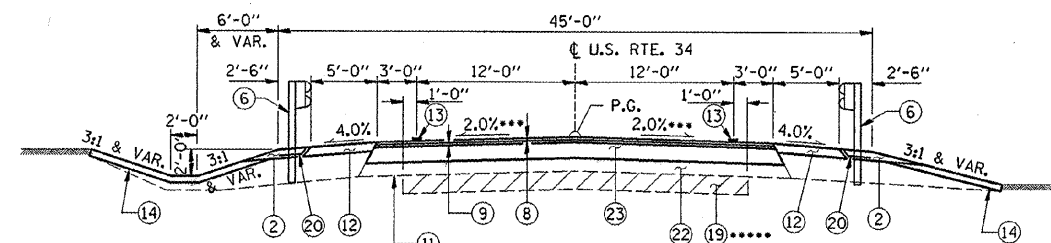


MATCH EXISTING ADJACENT PAVEMENT CROSS SLOPE (2%) FROM STA. 93+81.82 TO STA. 96+26.00

- TYPICAL SECTION WITHOUT GUARDRAIL HAS A 28'-0" ROADWAY WIDTH. ADDITIONAL 2'-0" EMBANKMENT WIDTH WILL NOT BE CONSTRUCTED.
- SUPERELEVATED SECTION HAS SAME WIDTHS AND MATERIALS.

**RUNAROUND DETOUR
PROPOSED TYPICAL SECTION**

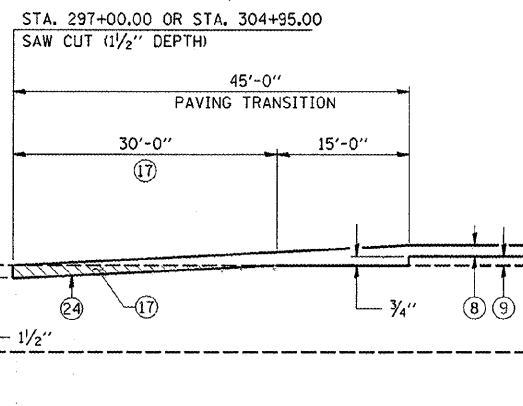
STA 93+81.82 TO STA 110+00.00



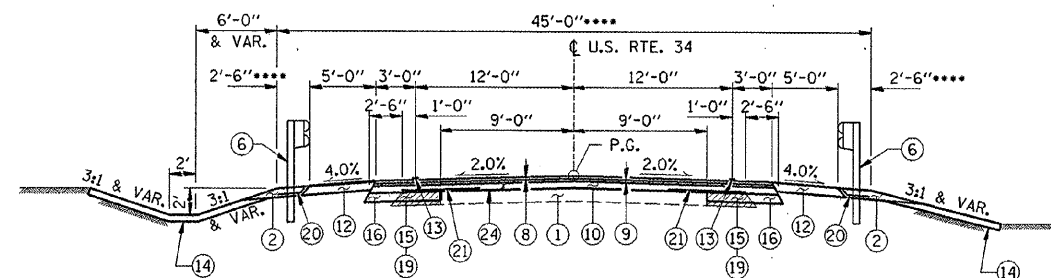
- SUPERELEVATED SECTION HAS SAME WIDTHS AND MATERIALS. ALGEBRAIC DIFFERENCE BETWEEN S.E. AND HIGH SIDE SHOULDER SLOPE \leq 8.0%. LOW SIDE SHOULDER SLOPE IS S.E. SLOPE OR 4.0%, WHICHEVER IS GREATER.
- PAVEMENT REMOVAL STA. 300+10.00 TO STA. 300+85.50 AND STA. 301+88.50 TO STA. 302+60.00

PROPOSED TYPICAL SECTION

STA 299+60.00 TO STA 300+30.20
STA 302+17.50 TO STA 303+35.00



PROPOSED PAVING TRANSITION



- TYPICAL SECTION WITHOUT GUARDRAIL HAS A 40'-0" ROADWAY WIDTH. ADDITIONAL 2'-6" EMBANKMENT WIDTH WILL NOT BE CONSTRUCTED.

PROPOSED TYPICAL SECTION

STA 297+00.00 TO 299+60.00
STA 303+35.00 TO 304+95.00

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS

HLR

3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-44-0001-X DATE: 08/07/07
DESIGNED: W.D.G. CHECKED: L.P.S. DRAWN: W.J.S.

TYPICAL CROSS SECTIONS & DETAILS

U.S. 34 OVER P.D. CREEK
F.A.P. 313 / SECTION (7BY)BR
HENDERSON COUNTY
STRUCTURE NO. 036-0052 / STATION 301+23