

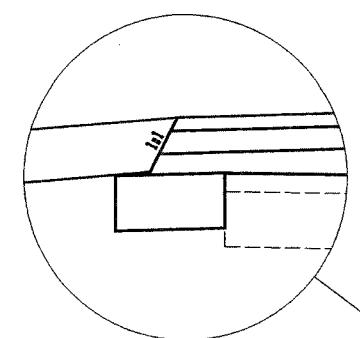
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 14 F.A.S. 209	00-00091-00-BR	MERCER	III	8
FED. ROAD DIST. NO.	ILLINOIS PROJECT			

CONTRACT NO. 89312

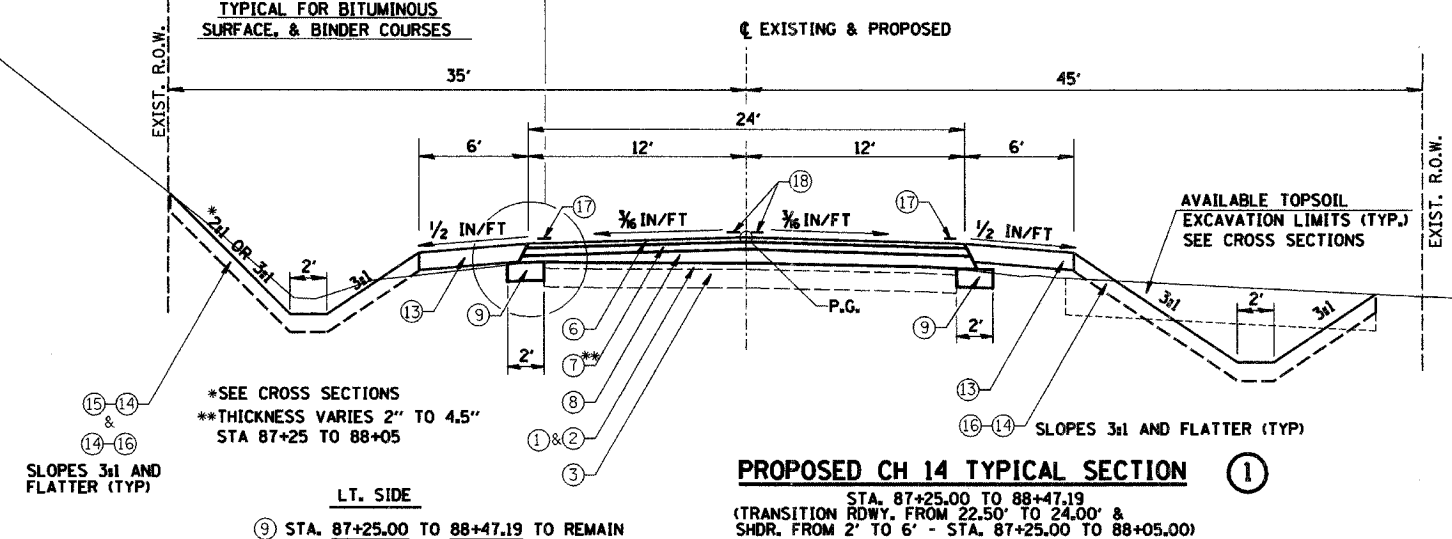
**PAVEMENT DESIGN**  
 STRUCTURAL DESIGN TRAFFIC: YEAR 2012  
 PV = 1258 SU = 83 MU = 34  
 ROAD / STREET CLASSIFICATION: CLASS III  
 PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
 P = 91.5 S = 6.0 M = 2.5  
 TRAFFIC FACTOR: TF = 0.22 DT = 3.3 (REQUIRED)  
 DT (PROVIDED): 3.33 EXISTING PAVEMENT  
 3.36 WIDENING  
 3.33 NEW PAVEMENT  
 SURFACE AND TOP BINDER = SBS PG64-22  
 BOTTOM BINDER = PG 64-22  
 SUBGRADE SUPPORT RATING: IBR = 3  
 PAVEMENT STRUCTURAL MATERIALS:  
 HOT MIX ASPHALT SURFACE COURSE:  $\alpha 1 = 0.40$   
 HOT MIX ASPHALT BINDER COURSE:  $\alpha 2 = 0.33$   
 AGGREGATE BASE COURSE:  $\alpha 3 = 0.11$

**TEMPORARY PAVEMENT DESIGN**  
 (NO SURFACE COURSE)  
 STRUCTURAL DESIGN TRAFFIC: YEAR 2002  
 PV = 1084 SU = 71 MU = 30  
 ROAD / STREET CLASSIFICATION: CLASS III  
 PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
 P = 91.5 S = 6.0 M = 2.5  
 TRAFFIC FACTOR: TF = 0.01 DT = 2.05 (REQUIRED)  
 DT (PROVIDED): 2.11 EXISTING PAVEMENT  
 2.56 WIDENING  
 2.53 NEW PAVEMENT  
 TOP BINDER = SBS PG64-22  
 BOTTOM BINDER = PG 64-22  
 SUBGRADE SUPPORT RATING: IBR = 3  
 PAVEMENT STRUCTURAL MATERIALS:  
 HOT MIX ASPHALT BINDER COURSE:  $\alpha 2 = 0.33$   
 AGGREGATE BASE COURSE:  $\alpha 3 = 0.11$

- ① EXISTING BITUMINOUS OVERLAY (VARIES 0" TO 6")
- ② EXISTING A3 SURFACE 2"
- ③ EXISTING AGGREGATE BASE 16"
- ④ EXISTING AGGREGATE SURFACE 8"
- ⑤ EXISTING PAVEMENT REMOVAL
- ⑥ HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (2")
- ⑦ HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (4 1/2")
- ⑧ HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (VARIABLE DEPTH)
- ⑨ HOT-MIX ASPHALT BASE COURSE WIDENING, 6"
- ⑩ HOT-MIX ASPHALT BASE COURSE, 4"
- ⑪ HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 6 1/2"
- ⑫ SUB-BASE GRANULAR MATERIAL, TYPE B (9 1/2")
- ⑬ AGGREGATE SHOULDERS, TYPE A (6")
- ⑭ TOP SOIL (4")
- ⑮ SEEDING, CLASS 3 W/ EROSION CONTROL BLANKET
- ⑯ SEEDING, CLASS 2A
- ⑰ 4" SOLID WHITE EDGE LINE
- ⑱ 4" SOLID YELLOW DOUBLE CENTERLINE
- ⑲ AGGREGATE SURFACE COURSE, TYPE A (8")



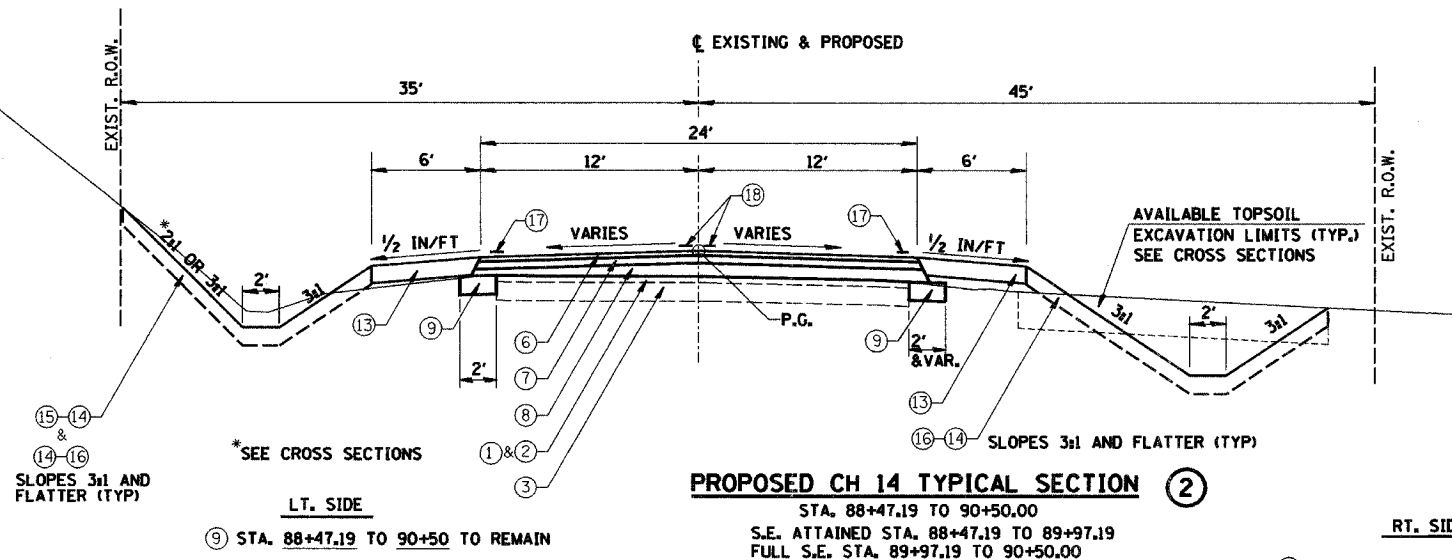
TYPICAL FOR BITUMINOUS SURFACE & BINDER COURSES



PROPOSED CH 14 TYPICAL SECTION ①

**BITUMINOUS MIXTURE REQUIREMENTS**

LOCATION	CH 14	CH 14	162ND AVE	162ND AVE
MIX USE	BINDER	SURFACE	BINDER	SURFACE
AC/PG	PG 64-22	PG 64-22	PG 64-22	PG 64-22
RAP %	25	15	25	15
DESIGN VOIDS	4.0 @ N=50	4.0 @ N=50	4.0 @ N=50	4.0 @ N=50
MIXTURE COMPOSITION (GRAD. MIXTURE)	IL-19.0	IL-9.5 OR IL-12.5	IL-19.0	IL-9.5 OR IL-12.5
FRICTION	N/A	MIX C	N/A	MIX C



PROPOSED CH 14 TYPICAL SECTION ②

**PROPOSED TYPICAL SECTIONS**

Date: \_\_\_\_\_  
 Revisions: \_\_\_\_\_  
 Designed: SMK  
 Drawn: MEC  
 Checked: SMK  
 Approved: SMK

F.A.S. 209 (C.H. 14) OVER KEATING CREEK  
 NEW BOSTON ROAD  
 SECTION 00-00091-00-BR  
 MERCER COUNTY

Prepared by: **URS** 345 East Ash Avenue  
 Decatur, IL 62526

URS Job No.  
 21-00001253.01