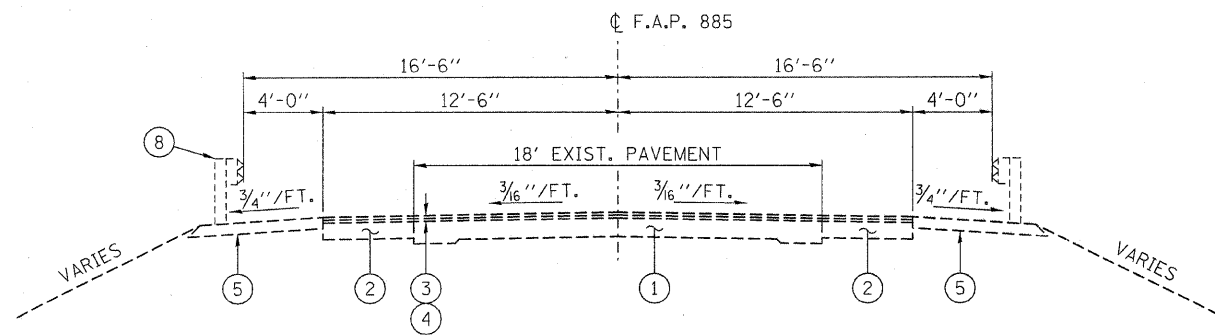
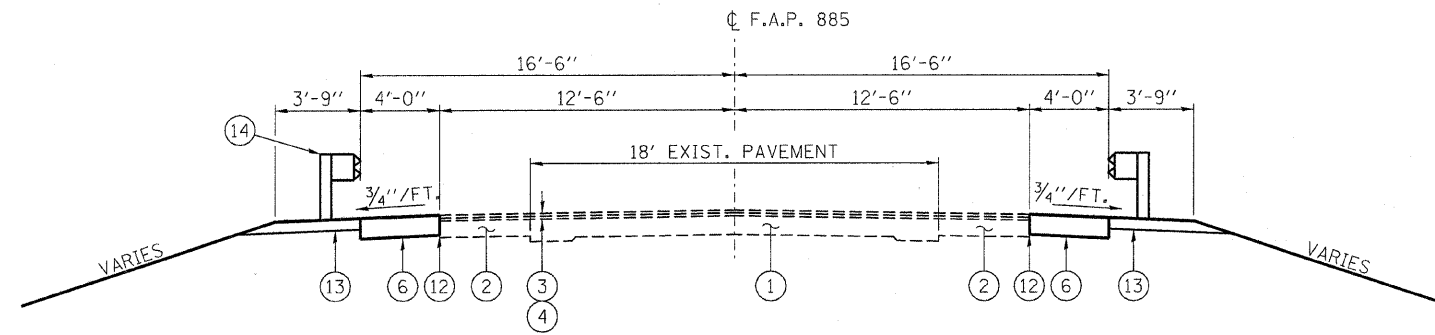


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 885	107BR-1	JOHNSON	94	9
FED. ROAD DIST. NO.	ILLINOIS CONTRACT NO. 78030			



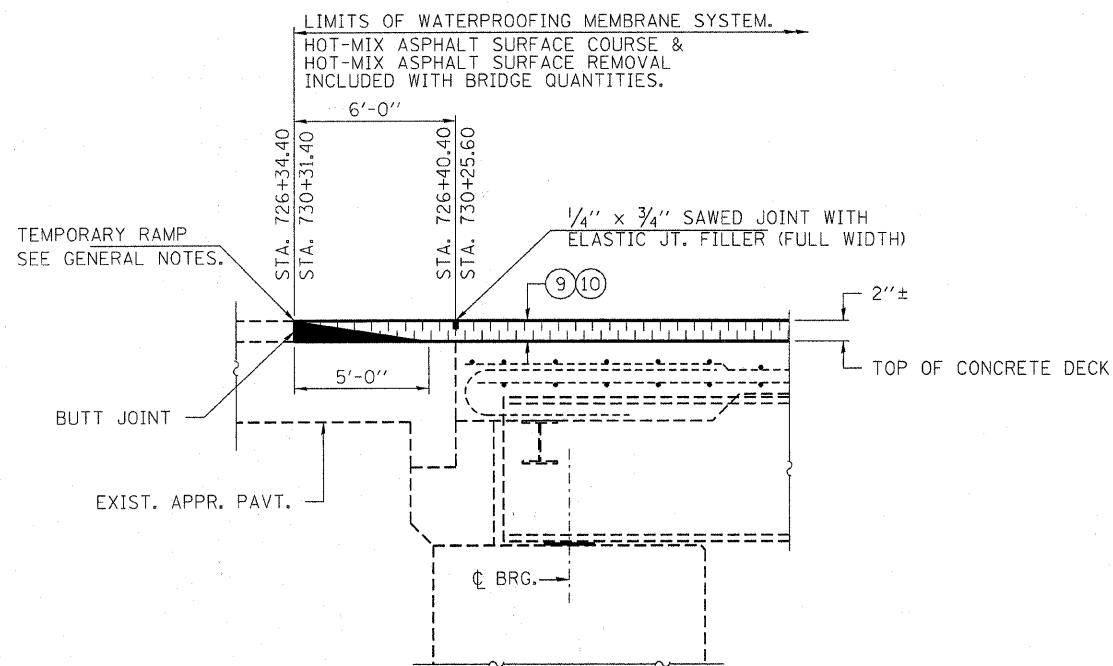
**EXISTING TYPICAL CROSS SECTION**

SEC. 107BR-1 / SN 044-0014  
 STA. 724+75.00 TO STA. 726+00.00 BK.  
 STA. 726+11.90 AH. TO STA. 726+40.40  
 STA. 730+25.60 TO STA. 731+75.00

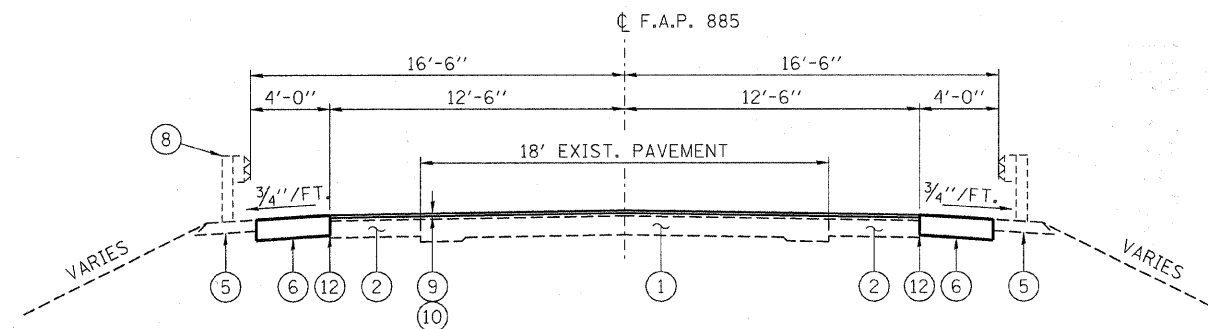


**PROPOSED TYPICAL CROSS SECTION**

SEC. 107BR-1 / SN 044-0014  
 STA. 724+75.00 TO STA. 726+00.00 BK.  
 STA. 726+11.90 AH. TO STA. 726+34.40  
 STA. 730+31.60 TO STA. 731+75.00



**SECTION AT BENTS 1 & 7**



**PROPOSED TYPICAL CROSS SECTION**

SEC. 107BR-1 / SN 044-0014  
 STA. 726+34.40 TO STA. 726+40.40  
 STA. 730+25.60 AH. TO STA. 730+31.60

MIXTURE REQUIREMENTS	
LOCATION(S):	IL RTE 146 WIDENING
MIXTURE USE(S):	HOT-MIX ASPHALT BASE COURSE
AC/PG:	PG 64-22
RAP % (MAX):	10%
DESIGN AIR VOIDS:	4% @ Ndes 90
MIXTURE COMPOSITION: (GRADATION MIXTURE):	IL 19.0
FRICTION AGGREGATE:	NONE
MIXTURE WEIGHTS:	112 LBS \ SY \ INCH THICKNESS

MIXTURE REQUIREMENTS	
LOCATION(S):	IL RTE 146 BRIDGE SURFACING
MIXTURE USE(S):	HOT-MIX ASPHALT SURFACE COURSE
AC/PG:	PG 64-22
RAP % (MAX):	10%
DESIGN AIR VOIDS:	4% @ Ndes 90
MIXTURE COMPOSITION: (GRADATION MIXTURE):	IL 9.5 OR IL 12.5
FRICTION AGGREGATE:	MIXTURE C
MIXTURE WEIGHTS:	112 LBS \ SY \ INCH THICKNESS

**LEGEND**

- ① EXISTING CONCRETE PAVEMENT
- ② EXISTING BASE COURSE WIDENING 9"
- ③ EXISTING H.M.A. BINDER COURSE 1.5" MIN.
- ④ EXISTING H.M.A. SURFACE COURSE 1.5"
- ⑤ EXISTING AGGREGATE SHOULDERS TYPE A, 6"
- ⑥ H.M.A. BASE COURSE WIDENING 10 3/4"
- ⑦ TEMPORARY PAVEMENT MARKINGS
- ⑧ EXISTING GUARDRAIL
- ⑨ HOT-MIX ASPHALT SURFACE REMOVAL
- ⑩ HOT-MIX ASPHALT SURFACE COURSE 1 1/2" & WATERPROOFING MEMBRANE SYSTEM
- ⑪ TEMPORARY RAMP
- ⑫ SAWCUT (COST INCLUDED IN H.M.A. BINDER COURSE)
- ⑬ AGGREGATE SHOULDERS, TYPE A 6"
- ⑭ TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)

PAVEMENT DESIGN (MECHANISTIC)

DESIGN PERIOD	5 YEARS	LOADING HS 20-44 (80,000 LBS)
STRUCTURAL DESIGN TRAFFIC (SDT) =	2011	( 2678.9 )
PV =	2170	SU = 188 MU = 321
ROAD/STREET CLASSIFICATION:	CLASS II	
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE	P = 50% S = 50% MU = 50%	
TRAFFIC FACTOR	ACTUAL TF	0.36 AC TYPE 64-22
	MINIMUM TF	0.95
PG GRADE: BINDER =	64-22	SURFACE = 64-22
SUBGRADE SUPPORT RATING		
SSR =	POOR (STA.	TO STA )
SSR =	POOR (STA.	TO STA )

**HAMPTON, LENZINI & RENWICK, INC.**  
 CIVIL & STRUCTURAL ENGINEERS  
 LAND SURVEYORS

**HLR**

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

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-52-0007-1 DATE: 04/21/08  
 DESIGNED: L.F.S. CHECKED: S.W.M. DRAWN: D.T.M.

**TYPICAL CROSS SECTIONS**  
 IL. ROUTE 146 OVER CACHE RIVER  
 F.A.P. ROUTE 885 / SECTION 107BR-1  
 JOHNSON COUNTY  
 STATION 727+23  
 STRUCTURE NO. 044-0014