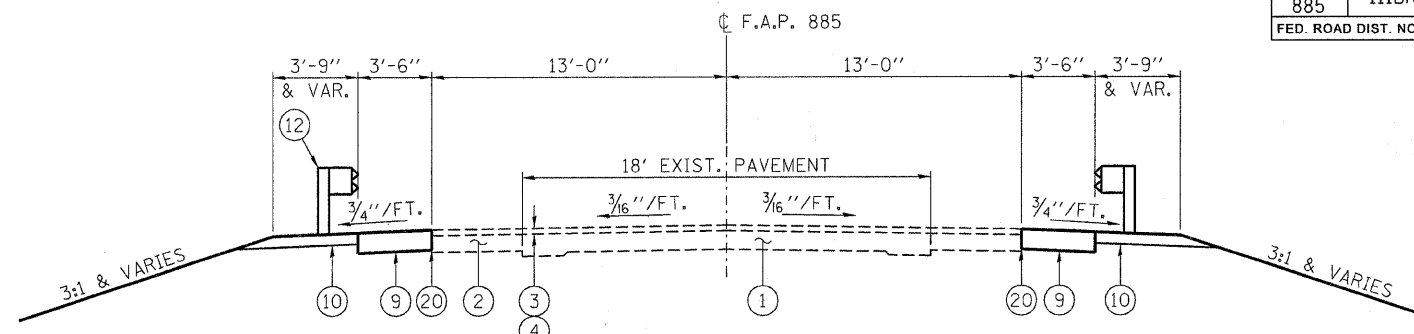
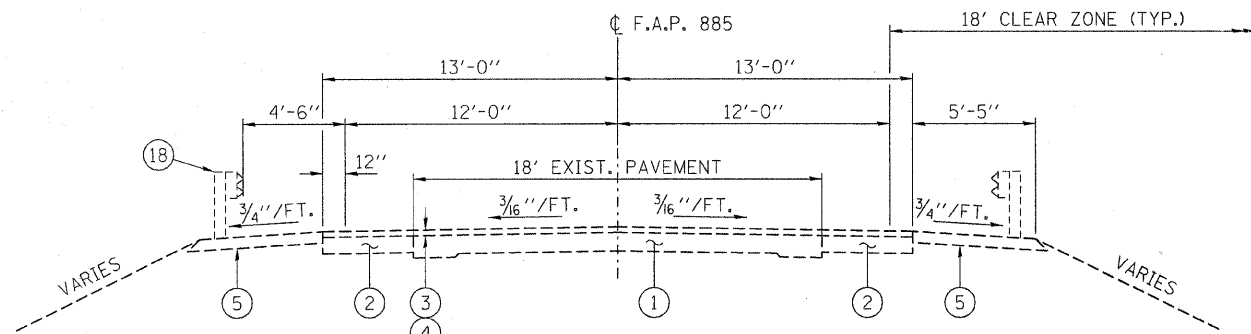
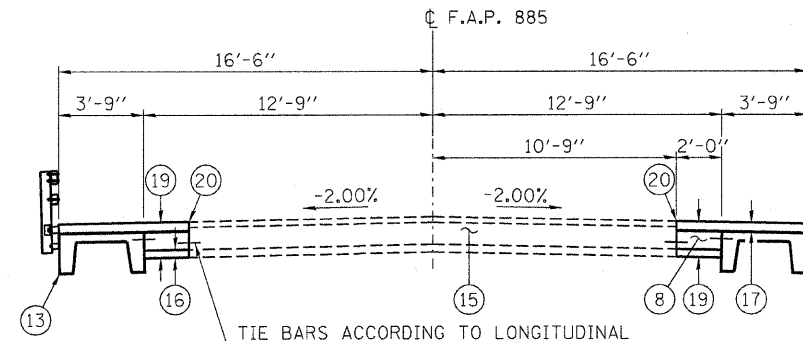
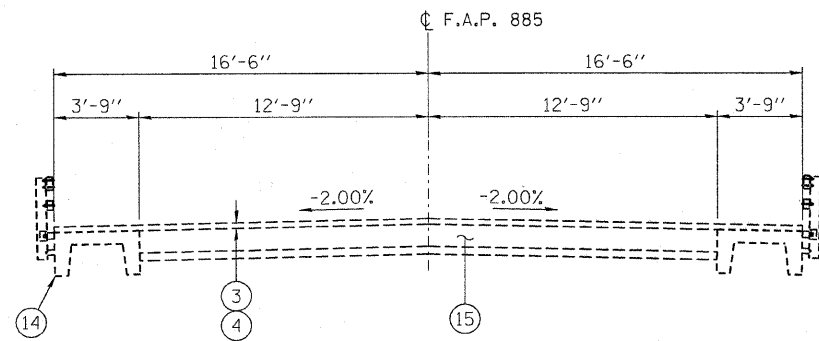


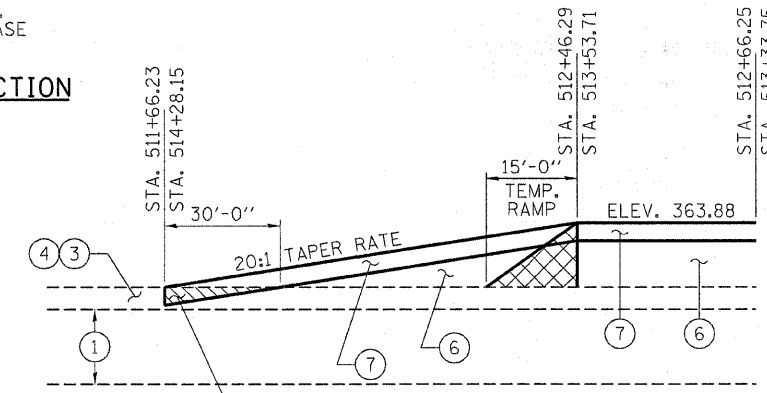
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 885	111BR-1	JOHNSON	94	10
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 78030	



NOTE:
 AGGREGATE SHOULDERS ARE TO BE PLACED ONLY IN AREAS WHERE TRAFFIC BARRIER TERMINAL, TYPE 6A & TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT) ARE TO BE INSTALLED.



TIE BARS ACCORDING TO LONGITUDINAL CONSTRUCTION JOINT DETAIL ON STD. 420001. COST INCLUDED WITH PCC BASE COURSE 13" (TYP.)



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:	IL 19.0
(GRADATION MIXTURE):	
FRICTION AGGREGATE:	NONE
MIXTURE WEIGHTS:	112 LBS \ SY \ INCH THICKNESS

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

MIXTURE REQUIREMENTS	
LOCATION(S):	IL RTE 146 LEVELING BINDER
MIXTURE USE(S):	LEVEL BINDER (MACHINE METHOD), N90
AC/PG:	PG 64-22
RAP % (MAX):	10%
DESIGN AIR VOIDS:	4% @ Ndes 90
MIXTURE COMPOSITION:	IL 9.5 OR IL 12.5
(GRADATION MIXTURE):	
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 LEVELING BINDER (MACHINE METHOD), N90
 - ⑦ HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N90 (1 1/2") THICKNESS
 - ⑧ PCC BASE COURSE 13"
 - ⑨ HMA BASE COURSE WIDENING 10 3/4"
 - ⑩ AGGREGATE SHOULDERS TYPE A 6"
 - ⑪ TEMPORARY PAVEMENT MARKINGS
 - ⑫ TRAFFIC BARRIER TERMINAL, TYPE 6A
 - ⑬ PROPOSED PRECAST SLAB
 - ⑭ EXISTING PRECAST SLAB
 - ⑮ EXISTING BRIDGE APPROACH PAVEMENT
 - ⑯ SUB-BASE GRANULAR MATERIAL TYPE A 4" (COST INCLUDED WITH PCC BASE COURSE 13")
 - ⑰ CONCRETE WEARING SURFACE, 5"
 - ⑱ EXISTING GUARDRAIL
 - ⑲ BRIDGE APPROACH PAVEMENT REMOVAL
 - ⑳ SAWCUT (COST INCLUDED IN H.M.A. BINDER COURSE)

PAVEMENT DESIGN (MECHANISTIC)

DESIGN PERIOD	5 YEARS	LOADING HS 20-44 (80,000 LBS)
STRUCTURAL DESIGN TRAFFIC (SDT)	= 2011	(1750)
PV =	1557	SU = 140 MU = 52
ROAD/STREET CLASSIFICATION: CLASS III		
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE		
P =	50%	S = 50% MU = 50%
TRAFFIC FACTOR	ACTUAL TF	0.09 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 BELL POND
 F.A.P. ROUTE 885 / SECTION 111BR-1
 JOHNSON COUNTY
 STATION 513+00
 STRUCTURE NO. 044-0022