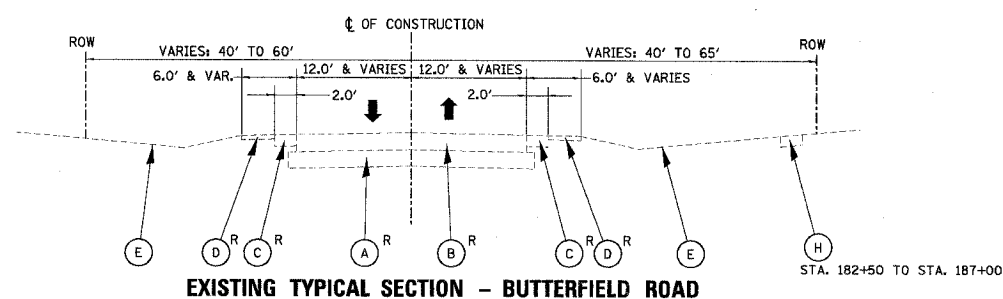
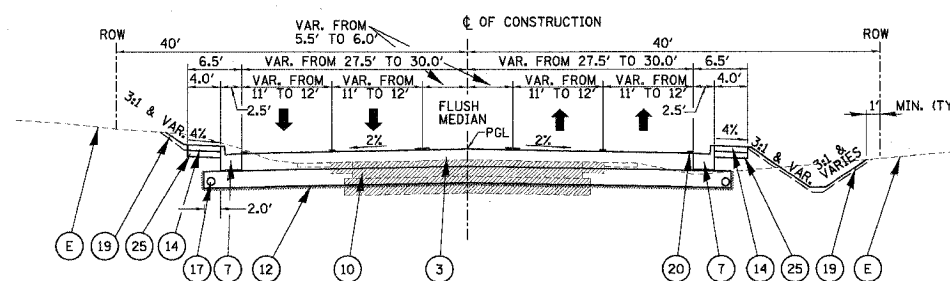


FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	7
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



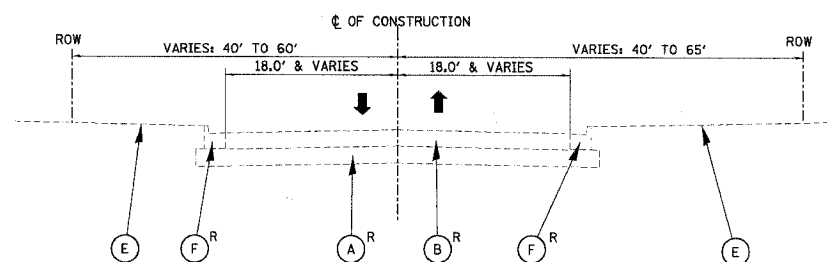
**EXISTING TYPICAL SECTION - BUTTERFIELD ROAD**

STA. 121+66.00 TO STA. 123+00  
 STA. 126+50 TO STA. 144+00  
 STA. 157+00 TO STA. 161+50  
 STA. 164+00 TO STA. 176+00  
 STA. 182+50 TO STA. 187+00



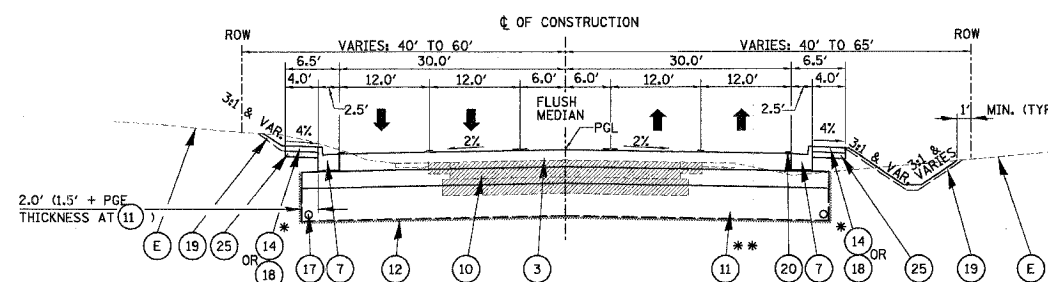
**PROPOSED TYPICAL RECONSTRUCTION SECTION - BUTTERFIELD ROAD**

STA. 121+66.00 TO STA. 122+79  
 (TRANSITION FROM 11' WIDE LANES TO 12' WIDE LANES)



**EXISTING TYPICAL SECTION - BUTTERFIELD ROAD**

STA. 123+00 TO STA. 126+50  
 STA. 144+00 TO STA. 157+00  
 STA. 161+50 TO STA. 164+00  
 STA. 187+00 TO STA. 193+50  
 (GENERALLY WHERE CHANNELIZATION EXISTS)



**PROPOSED TYPICAL RECONSTRUCTION SECTION - BUTTERFIELD ROAD**

STA. 122+79 TO STA. 167+50  
 STA. 175+15.70 TO STA. 184+25  
 STA. 188+50 TO STA. 191+65.31

**STRUCTURAL DESIGN TRAFFIC: YEAR 2025**  
 PV = 27500 SU = 1485 MU = 963

**ROAD/STREET CLASSIFICATION: I**

**PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:**  
 PV = 32% SU = 45% MU = 45%

**TRAFFIC FACTOR: ACTUAL TF = 8.7 AC TYPE SBS/SBR PG 70-22**  
 MINIMUM TF = 6.0

**SUBGRADE SUPPORT RATING: POOR**

- \* BITUMINOUS SHOULDER LIMITS:  
 STA. 121+66 TO STA. 149+19 (L.T.)  
 STA. 121+66 TO STA. 124+77 (RT.)  
 STA. 125+28 TO STA. 149+30 (RT.)  
 STA. 149+95 TO STA. 162+66 (L.T.)  
 STA. 163+50 TO STA. 179+09 (RT.)  
 STA. 179+97 TO STA. 185+75 (L.T.)  
 STA. 185+92 TO STA. 186+70 (L.T.)  
 STA. 187+12 TO STA. 196+17 (L.T.)  
 STA. 196+87 TO STA. 200+04 (L.T.)
- \*\* PGES LIMITS:  
 STA. 153+00 TO STA. 159+00  
 STA. 161+00 TO STA. 162+50  
 STA. 183+50 TO STA. 198+00  
 ESTIMATED QUANTITY WAS  
 BASED ON ROADWAY SOILS  
 INVESTIGATION; ACTUAL LOCATION  
 AND DEPTH OF UNDERCUTS  
 WILL BE DETERMINED IN THE FIELD  
 BY THE ENGINEER. PROPOSED  
 EXCAVATION TO SUBGRADE  
 ELEVATION WILL BE PAID AS  
 EARTH EXCAVATION.

**BITUMINOUS MIX REQUIREMENTS**

PAY ITEM	AC TYPE	VOIDS	MAX RAP %
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	PG 64-22	4% @ 70 GYR.	10
POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90	SBS/SBR PG 70-22	4% @ 90 GYR.	0
<b>BITUMINOUS CONCRETE PAVEMENT (FULL DEPTH), SUPERPAVE 12"</b>			
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70; 2"	PG 64-22	4% @ 70 GYR.	10
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70; 10"	PG 64-22	4% @ 70 GYR.	15
<b>BITUMINOUS CONCRETE PAVEMENT (FULL DEPTH), SUPERPAVE 12 1/2"</b>			
POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"	SBS/SBR PG 70-22	4% @ 90 GYR.	0
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"	SBS/SBR PG 76-28	2.5% @ 50 GYR.	0
POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"	SBS/SBR PG 70-22	4% @ 90 GYR.	0
<b>BITUMINOUS SHOULDER (FULL DEPTH), SUPERPAVE 12 1/2"</b>			
POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"	SBS/SBR PG 70-22	4% @ 90 GYR.	0
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"	SBS/SBR PG 76-28	2.5% @ 50 GYR.	0
POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"	SBS/SBR PG 70-22	4% @ 90 GYR.	0
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70	PG 64-22	4% @ 70 GYR.	15
<b>TEMPORARY PAVEMENT</b>			
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50; 1-3/4"	PG 64-22	4% @ 50 GYR.	15
BITUMINOUS BASE COURSE, SUPERPAVE; 6-1/4"	PG 58-22	2% @ 50 GYR.	50
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50 (BITUMINOUS DRIVEWAYS AND MAILBOX TURNOUTS)	PG 64-22	4% @ 50 GYR.	15
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	SBS/SBR PG 76-28	2.5% @ 50 GYR.	0
CLASS D PATCHES, TYPE I - IV, 12" IL-19MM	PG 64-22	4% @ 70 GYR.	15

NOTE:  
 FOR DESIGN AND ESTIMATION PURPOSES, ALL BITUMINOUS CONCRETE  
 PAVEMENT QUANTITIES WERE CALCULATED USING 112 LB/SQ YD  
 PER INCH THICKNESS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**FAU 2647 - BUTTERFIELD ROAD**  
**BUTTERFIELD ROAD**  
**TYPICAL SECTIONS**  
**STA. 121+66.00 TO STA. 200+35.50**  
 SCALE: NONE DRAWN BY: BLL,ELA  
 DATE: 12/22/2005 CHECKED BY: BLL

**EXISTING LEGEND**

- (A) EXISTING AGGREGATE BASE
- (B) EXISTING BITUMINOUS PAVEMENT
- (C) EXISTING BITUMINOUS SHOULDER
- (D) EXISTING GRAVEL SHOULDER
- (E) EXISTING GROUND LINE
- (F) EXISTING CONCRETE CURB & GUTTER
- (G) EXISTING CONCRETE PAVEMENT REMOVAL
- (H) EXISTING SIDEWALK
- (J) EXISTING MEDIAN SURFACE

--- R = REMOVAL

**PROPOSED LEGEND**

- (1) POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
- (2) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12 1/2"  
 - POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"  
 - POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"  
 - POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"
- (3) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12"  
 - BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 2"  
 - BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (4) AGGREGATE BACKFILL
- (5) POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- (6) COMBINATION CONC. CURB & GUTTER, TY B-6.12
- (7) COMBINATION CONC. CURB & GUTTER, TY B-6.24
- (8) COMBINATION CONC. CURB & GUTTER, TY M-4.12
- (9) COMBINATION CONC. CURB & GUTTER, TY M-4.24
- (10) AGGREGATE SUBGRADE 12"
- (11) POROUS GRANULAR EMBANKMENT SUBGRADE, UNDERCUTTING (PAID AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL)
- (12) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (13) STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL)
- (14) BITUMINOUS SHOULDERS  
 - (PAID AS BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 1 1/2")  
 - (PAID AS BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 2 1/2")
- (15) AGGREGATE SHOULDER, TYPE A 6"
- (16) BITUMINOUS SURFACE REMOVAL 2 1/2" (VARIES: 2 1/2" TO 3")
- (17) PIPE UNDERDRAINS 4" (MODIFIED)
- (18) PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL OVER 4" AGGREGATE BASE COURSE TYPE A (SPECIAL) (INCLUDED IN SIDEWALK COST)
- (19) SODDING FERTILIZER NUTRIENTS FURNISHING AND PLACING TOPSOIL, 4"
- (20) PAVEMENT MARKINGS
- (21) LANDSCAPED MEDIAN
- (22) RETAINING WALL (SPECIAL)
- (23) CONCRETE MEDIAN SURFACE 4 INCH
- (24) BITUMINOUS SHOULDER (FULL DEPTH), SUPERPAVE 12 1/2"  
 - BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1 3/4"  
 - POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"  
 - POLYMERIZED BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (25) AGGREGATE BASE COURSE TYPE A (SPECIAL); 4"