

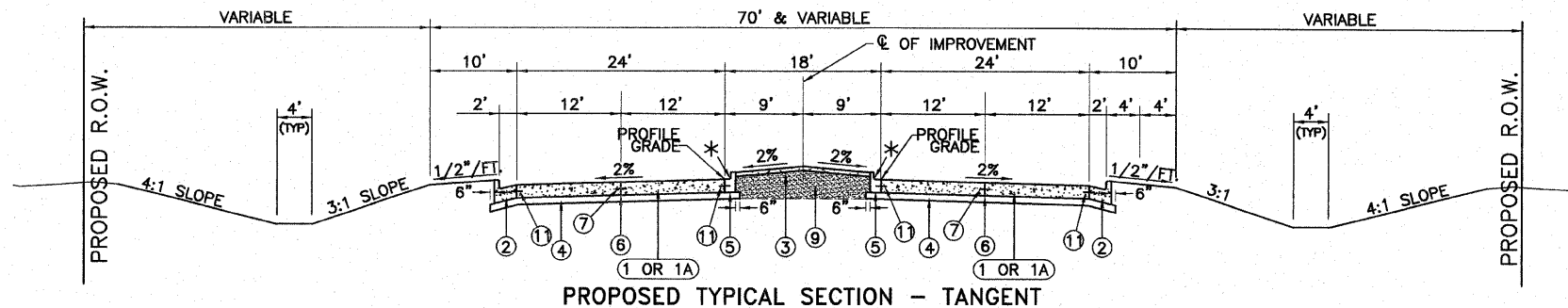
**STRUCTURAL DESIGN DATA**

**INDIANA AVENUE EXTENSION**

PAVEMENT TYPE: RIGID, NON-REINFORCED JOINTED  
 CLASS OF STREET: CLASS I  
 DESIGN PERIOD: 20 YEARS  
 TRAFFIC DATA: 2007 ADT = 9,200  
 2017 ADT = 11,700 (SDT)  
 2027 ADT = 14,200  
 STRUCTURAL DESIGN TRAFFIC: 80% P.V. = 9,360  
 10% S.U. = 1,170  
 10% M.U. = 1,170  
 TRAFFIC FACTOR : 8.856 (80,000 LB. TRUCK DESIGN)  
 SHOULDER TYPE: TIED CURB AND GUTTER  
 SUBGRADE SUPPORT RATING: POOR (ASSUMED)  
 OVERLOADS: N/A (T.F. > 2.0)  
 DESIGN SPECIFIED: SLAB THICKNESS - 9"  
 JOINT SPACING - 15'  
 DOWEL BARS - 1.5" DIAMETER  
 SUBBASE - GRANULAR, 4"

**LEGEND**

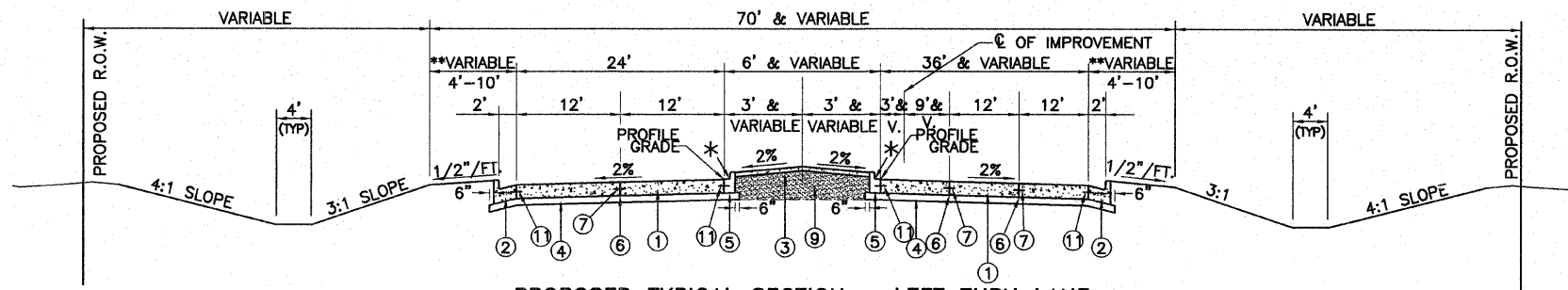
- ① PORTLAND CEMENT CONCRETE PAVEMENT 9" (SPECIAL), PAVEMENT SHALL BE JOINTED PER STANDARD 420101 AND 420106 15' JOINT SPACING, 1-1/2" DIAMETER DOWEL BARS AT ALL TRANSVERSE JOINTS
- ①A FROM STA. 108+46.17 TO STA. 109+25 ALL PAVEMENT SHALL BE 10" THICK PORTLAND CEMENT CONCRETE PAVEMENT 10" (SPECIAL), PAVEMENT SHALL BE JOINTED PER STANDARD 420101 AND 420106 15' JOINT SPACING, 1-1/2" DIAMETER DOWEL BARS AT ALL TRANSVERSE JOINTS
- ①B FROM STA. 123+31.29 TO STA. 123+57.36 RIGHT  
 FROM STA. 123+46.28 TO STA. 123+57.36 LEFT  
 FROM STA. 126+80.36 TO STA. 126+88.57 RIGHT  
 FROM STA. 126+80.36 TO STA. 127+03.52 LEFT  
 BRIDGE APPROACH PAVEMENT CONNECTOR (PCC) (SEE HIGHWAY STANDARD 420401)
- ② COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- ③ CONCRETE MEDIAN SURFACE, 4"
- ④ SUB-BASE GRANULAR MATERIAL TYPE A (4")
- ⑤ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12
- ⑥ SAWED OR KEYED LONGITUDINAL JOINT
- ⑦ #6 TIE BARS 30" LONG @ 30" CENTERS
- ⑧ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.06
- ⑨ SUB-BASE GRANULAR MATERIAL, TYPE C
- ⑩ NOT USED
- ⑪ #6 TIE BARS 24" LONG @ 24" CENTERS
- \* REVERSE GUTTER PAN SLOPE
- \*\* STA. 110+60 TO STA. 116+00 = 10'  
 STA. 116+00 TO STA. 117+00 = TRANSITION 10' TO 4'  
 STA. 117+00 TO STA. 119+00 = 4'
- ⑫ BRIDGE APPROACH PAVEMENT PER HIGHWAY STANDARD 420401
- ⑬ CURB ON BRIDGE APPROACH PAVEMENT TO MATCH CROSS-SECTION OF TYPE B CURB
- ⑭ CONCRETE MEDIAN (SPECIAL) (SEE DETAIL)
- ⑮ EXISTING EMBANKMENT
- ⑯ SAWED JOINT PER DETAIL B OR OPTIONAL LONGITUDINAL CONSTRUCTION JOINT (SEE HIGHWAY STANDARD 420401)



**PROPOSED TYPICAL SECTION - TANGENT**

INDIANA AVENUE  
(NO SCALE)

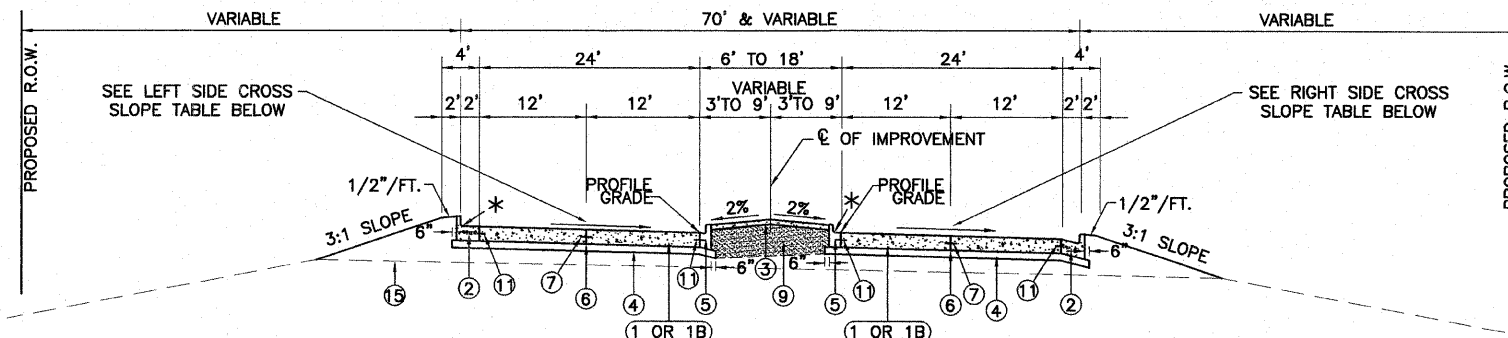
STA. 108+46.17 TO STA. 110+60



**PROPOSED TYPICAL SECTION - LEFT TURN LANE**

INDIANA AVENUE  
(NO SCALE)

STA. 110+60 TO STA. 114+04.60  
 STA. 114+04.60 TO STA. 119+00 (REVERSE IMAGE)



**PROPOSED TYPICAL SECTION - SUPERELEVATION**

INDIANA AVENUE  
(NO SCALE)

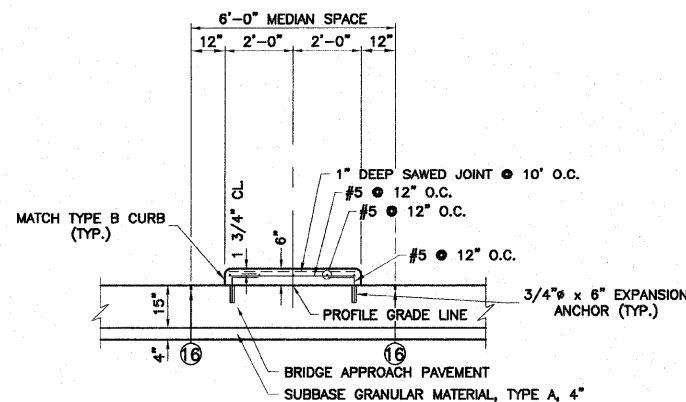
STA. 119+00 TO STA. 123+57.22  
 STA. 126+80.36 TO STA. 135+00

**RIGHT SIDE CROSS SLOPE TABLE**

LOCATION	CROSS SLOPE
119+00 TO 122+50	2%
122+50 TO 123+00	TRANSITION
123+00 TO 127+00	3/16"/FT.
127+00 TO 127+50	TRANSITION
127+50 TO 134+75	2%
134+75 TO 135+00	INSIDE LANE TRANSITION
135+00	INSIDE LANE = 3/16"/FT. OUTSIDE LANE = 2%

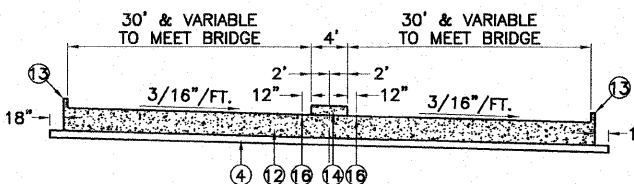
**LEFT SIDE CROSS SLOPE TABLE**

LOCATION	CROSS SLOPE
119+00 TO 121+00	TRANSITION TO S.E.
121+00 TO 133+00	S.E. = 3/16"/FT.
133+00 TO 134+75	TRANSITION TO 3/16"/FT.
134+75 TO 135+00	INSIDE LANE = 3/16"/FT.
134+75 TO 135+00	OUTSIDE LANE TRANSITION
135+00	INSIDE LANE = 3/16"/FT. OUTSIDE LANE = 2%



**DETAIL - CONCRETE MEDIAN (SPECIAL)**

NOT TO SCALE



**TYPICAL SECTION - BRIDGE APPROACH PAVEMENT**

INDIANA AVENUE  
(NO SCALE)

STA. 123+57.22 TO STA. 123+87.66  
 STA. 126+50.73 TO STA. 126+80.36

NOTE: REINFORCEMENT NOT SHOWN. SEE HIGHWAY STANDARD 420401.

REVISIONS


**Sheppard Morgan & Schwaab, Inc.**  
 CONSULTING ENGINEERS LAND SURVEYORS  
 215 Market Street  
 P.O. BOX E  
 Alton, Illinois 62012  
 618/677-8700

**SMS ENGINEERS**

CITY OF ALTON, ILLINOIS  
 SECTION 06 - 00208 - 02 - RP  
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY  
 TYPICAL SECTIONS

DWG. NO.  
 PH # TYPICAL SECTIONS 1.DWG.  
 REF. BK. INDIANA AVE.  
 JOB NO. 406365.1  
 DESN. BY: DEG  
 DWN. BY: CAD  
 CHK. BY: DEG  
 DATE: OCTOBER, 2006  
 SCALE: NO SCALE  
 SHEET 5 OF 61