

STRUCTURAL PAVEMENT DESIGN FOR MAINLINE

STRUCTURAL DESIGN TRAFFIC:	YEAR 2020
PV= 125,272	SU= 10,930 MU= 31,949
ROAD/STREET CLASSIFICATION:	CLASS 1
PV= 8%	SU= 37% MU= 37%
TRAFFIC FACTOR:	ACTUAL TF= 264.46 AC TYPE= N/A
	MINIMUM TF= 12.39
AC GRADE:	BINDER= SURFACE=
SUBGRADE SUPPORT RATING:	
SSR= 2.00 (STA. to STA.)	
SSR= 2.00 (STA. to STA.)	

BITUMINOUS MIXTURE REQUIREMENT

ITEM	AC TYPE	VOIDS	RAP %
BITUMINOUS STABILIZED SUB-BASE, 4"	PG 58-22	2% @ 30 Gyr	50
BITUMINOUS STABILIZED SUB-BASE, 6"	PG 58-22	3% @ 50 Gyr	25
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	PG 64-22	4% @ 70 Gyr	10
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	SBS/SBR PG 76-28	2.5% @ 50 Gyr	0
TEMPORARY PAVEMENT (INTERSTATE)			
POLYMERIZED BIT. CONC. BINDER COURSE, SUPERPAVE, IL-19.0, N105, 14"	SBS PG 76-22	4% @ 105 Gyr	0

THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURES IS 112 LBS/SOYD/IN

PROPOSED LEGEND:

- ① CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 14" AND PAVEMENT REINFORCEMENT 14"
- ③ BITUMINOUS STABILIZED SUB-BASE, 6"
- ⑤ SUB-BASE GRANULAR MATERIAL, TYPE B 24"
- ⑥ GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ⑨ BITUMINOUS MATERIALS (PRIME COAT)
- ⑮ PORTLAND CEMENT CONCRETE SHOULDERS 14"
- ⑱ CONCRETE MEDIAN SURFACE, 6" (SPECIAL)
- ⑳ CONCRETE BARRIER, DOUBLE FACE, 32" HEIGHT
- ㉑ CONCRETE BARRIER, SINGLE FACE, 32" HEIGHT
- ㉒ BARRIER BASE
- ㉔ BARRIER WALL MARKERS, TYPE C (80' C-C)
- ㉗ COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24
- ㉘ COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.48 (MODIFIED)
- ㉙ PIPE UNDERDRAINS 6"
- ㉚ RETAINING WALL
- ㉛ SAND BACKFILL
- ㉜ TOPSOIL FURNISH AND PLACE / SEEDING (SEE LANDSCAPING PLANS FOR DETAILS)
- ㉝ LONGITUDINAL SAWED OR CONSTRUCTION JOINT. FOR LONGITUDINAL SAWED JOINT, POUR IN PLACE NO. 6 DEFORMED EPOXY TIE BARS 30" LONG AT 30" C-C. FOR LONGITUDINAL CONSTRUCTION JOINT, DRILL AND GROUT NO. 8 DEFORMED EPOXY TIE BARS 24" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF CONTINUOUSLY REINFORCED PCC PAVEMENT 14")
- ㉞ LONGITUDINAL CONSTRUCTION JOINT. DRILL AND GROUT NO. 6 DEFORMED EPOXY TIE BARS 24" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF THE APPLICABLE COMB CONC CURB AND GUTTER TYPE)
- ㉟ LONGITUDINAL CONSTRUCTION JOINT. DRILL AND GROUT NO. 8 DEFORMED EPOXY TIE BARS 30" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF THE APPLICABLE PCC SHOULDER TYPE)

NOTES:

- SEE ROADWAY DETAILS FOR VARIABLE HEIGHT OF THE DOUBLE FACE BARRIER WALL AND FOR THE TYING OF THE BARRIER BASE TO THE PCC SHOULDER AND FOR THE LIMITS OF CONSTRUCTION OF THE SUB-BASE GRANULAR MATERIAL UNDER THE DOUBLE FACE BARRIER WALL.
- SHOULDER RUMBLE STRIPS SHALL BE CONSTRUCTED IN THE PROPOSED AND EXISTING SHOULDERS OF THE LOCAL AND EXPRESS LANES ACCORDING TO IDOT STANDARD 642001.
- TYPICAL SECTIONS NEED TO BE VERIFIED WITH THE ROADWAY PLANS AS THEY ARE A REPRESENTATION OF THE PLANS. THEY DO NOT SHOW ALL CONFIGURATIONS, JUST THE MOST PREDOMINANT.

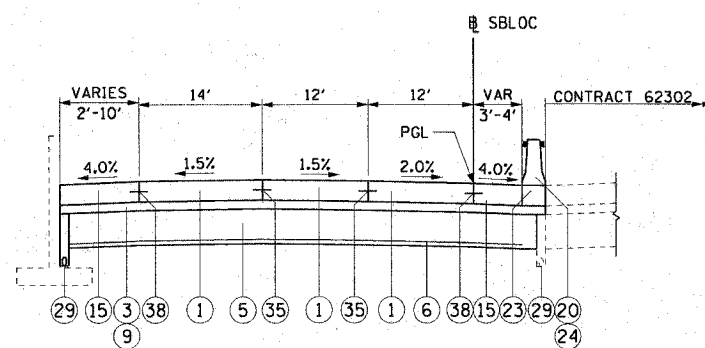
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
GARFIELD BLVD TO 31ST STREET (SB LOCAL LANES)

**PROPOSED TYPICAL SECTIONS
SOUTHBOUND LOCAL LANES**

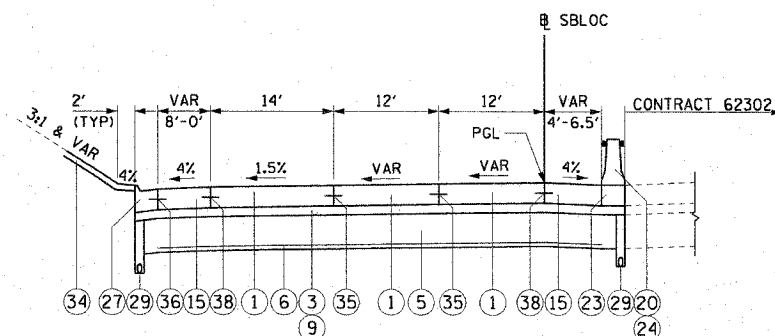
SCALE: H1"=10' V1"=5'
DATE: June 9, 2006
DRAWN BY: NJH
CHECKED BY: RMG

PRTYP-1



① TYPICAL SECTION
SB LOCAL LANES

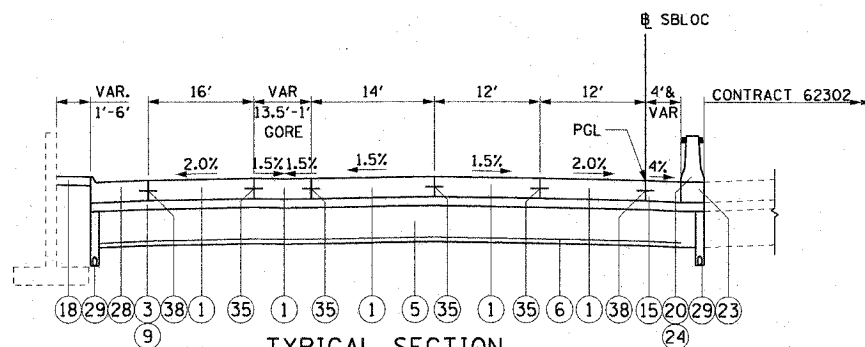
STA 3474+50.00 TO STA 3486+88.69



④ TYPICAL SECTION
SB LOCAL LANES

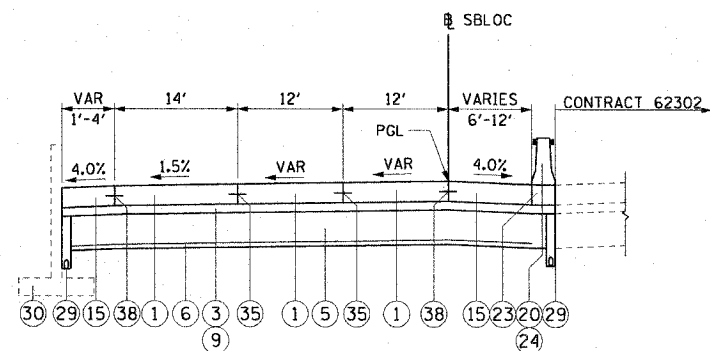
STA 3493+29.44 TO STA 3501+55.67

SUPERELEVATION TRANSITION: STA 3496+39.30 TO STA 3497+97.30
FULL SUPERELEVATION: STA 3497+97.30 TO STA 3504+82.40 (1.5% LT)



② TYPICAL SECTION
SB LOCAL LANES

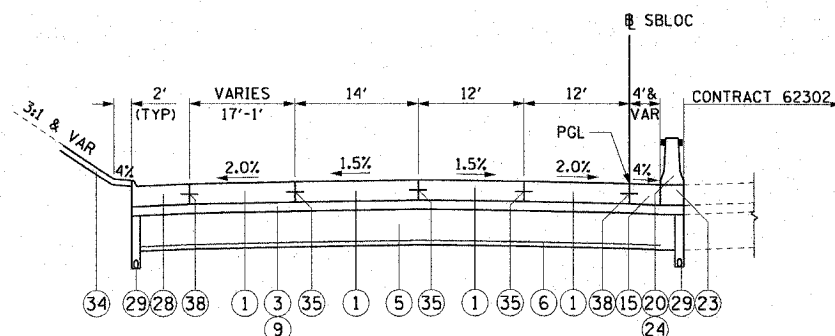
STA 3486+88.69 TO STA 3490+10.93



⑤ TYPICAL SECTION
SB LOCAL LANES

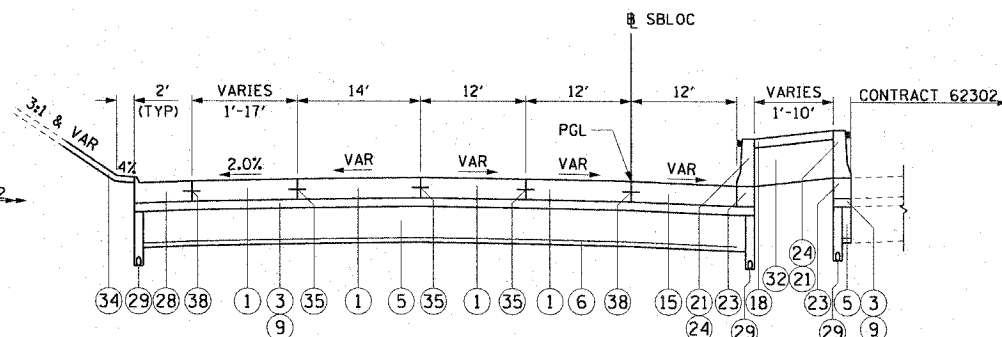
STA 3501+55.67 TO STA 3505+08.48

FULL SUPERELEVATION: STA 3497+97.30 TO STA 3504+82.40 (1.5% LT)



③ TYPICAL SECTION
SB LOCAL LANES

STA 3490+10.93 TO STA 3493+29.44



⑥ TYPICAL SECTION
SB LOCAL LANES

STA 3505+08.48 TO STA 3513+58.35

SUPERELEVATION TRANSITION: STA 3504+82.40 TO STA 3506+40.40
SUPERELEVATION TRANSITION: STA 3510+72.54 TO STA 3512+28.54
FULL SUPERELEVATION: STA 3512+28.54 TO STA 3515+89.45 (2.8% RT)