

# INDEX OF SHEETS

1	COVER SHEET
2A	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS
3-7A	SUMMARY OF QUANTITIES
8-16	TYPICAL SECTIONS
17-21A	SCHEDULES OF QUANTITIES
22-52	PLAN SHEETS
53-64	STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
65-66	EROSION AND SEDIMENT CONTROL DETAILS
67-97	PAVEMENT MARKING DETAILS
98-120	STRUCTURAL DETAILS
121-124	MISCELLANEOUS DETAILS
125-130	SIGN PANEL DESIGNS
131	ENHANCED MILE MARKER DETAILS
132-150	ITS DETAILS

# HIGHWAY STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
353001-04	PCC BASE COURSE WITH HMA BINDER AND SURFACE COURSES
420701-02	PAVEMENT FABRIC
442101-07	CLASS B PATCHES
442201-03	CLASS C AND D PATCHES
601001-03	SUB-SURFACE DRAINS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
630001-08	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-05	TRAFFIC BARRIER TERMINAL, TYPE 2
631026-05	TRAFFIC BARRIER TERMINAL, TYPE 5
631031-07	TRAFFIC BARRIER TERMINAL, TYPE 6
631032-04	TRAFFIC BARRIER TERMINAL, TYPE 6A
631033-03	TRAFFIC BARRIER TERMINAL, TYPE 6B
635001-01	DELINEATORS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
642001-01	SHOULDER RUMBLE STRIPS
701101-02	OFF-RD OPERATIONS, MULTILANE, 15', (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701400-03	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-05	LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-05	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-05	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
701426-03	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701456	PARTIAL EXIT RAMP CLOSURE FREEWAY/EXPRESSWAY
701601-06	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKING
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
878001-07	CONCRETE FOUNDATION DETAILS

# GENERAL NOTES

- THE STANDARDS AND REVISION NUMBERS LISTED SHALL APPLY TO THIS PROJECT.
- ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

UTILITY CO.	TYPE
•AMEREN IP	GAS & ELECTRIC
•AT&T CORPORATION	COMMUNICATIONS
•AT&T ILLINOIS	COMMUNICATIONS
•CENTERPOINT ENERGY	PIPELINE
•CHARTER COMMUNICATIONS	CABLE TV
•CITY OF COLLINSVILLE	WATER & SAN. SEW.
•CITY OF TROY	WATER & SAN. SEW.
•KINDER MORGAN	PIPELINE
•LEVEL 3 COMMUNICATIONS	COMMUNICATIONS
•SW ELECTRIC COOP., INC.	ELECTRIC
•VILLAGE OF CASEYVILLE	WATER & SAN. SEW.
•VILLAGE OF MARYVILLE	WATER & SAN. SEW.

MEMBERS OF J.U.L.I.E. (800)-892-0123 ARE INDICATED BY \*. NON J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

- THE THICKNESS OF THE HMA MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.
- "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE PLACED AT RAMP, ENTRANCES AND SIDE STREETS WHERE WORK IS BEING CONDUCTED AS DIRECTED BY THE RESIDENT ENGINEER. ALL CONSTRUCTION SIGNS SHALL BE FLUORESCENT ORANGE 48". THIS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE	POLY SURFACE	LEVEL BINDER	POLY BINDER	SHOULDERS <2.25"
AC/PG	SBS PG 76-22	PG 64-22	SBS PG 76-22	PG 64-22
RAP % (MAX)	0%	10%	10%	30%
DESIGN AIR VOIDS	4.0% @ Ndes=80	4.0% @ Ndes=90	4.0% @ Ndes=90	2.0% @ Ndes=30
MIX COMPOSITION (GRADATION MIXTURE)		IL 9.5	IL 19.0	Min Lf+ = 1.5"
FRICITION AGGREGATE	SMA	MIXTURE "C"	MIXTURE "B"	BAM

TOP LIFT SHOULDERS - DESIGN THIS MIX AT 2.0% VOIDS AND ADD ASPHALT TO REDUCE VOIDS TO 1.5%.

PLAN QUANTITIES FOR BITUMINOUS CONCRETE SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB/SQ YD/IN (59.8 KG/SQ M/25 mm THICKNESS).

- ALL AREAS DISTURBED FOR ANY REASON SHALL BE PERMANENTLY SEEDDED AS DIRECTED BY THE ENGINEER. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDDED AT THE CONTRACTOR'S EXPENSE. NUTRIENTS SHALL CONFORM TO ARTICLE 250.4, EXCEPT FERTILIZER NUTRIENTS WILL NOT BE PAID FOR SEPARATELY BUT CONSIDERED AS INCLUDED IN THE COST OF THE CLASS 2 SEEDING.

- QUANTITY FOR THE PIPE UNDERDRAIN 4" IS BASED ON THE TOTAL LENGTH OF THE PROJECT MULTIPLIED BY A FACTOR OF FOUR. PIPE UNDERDRAIN 4" SPECIAL QUANTITY IS BASED PER ARTICLE 601.04 OF THE STANDARD SPECIFICATIONS. OUTLETTED AT 50' SPACING AND A LENGTH OF 20' PER OUTLET. RAMP QUANTITIES ARE MULTIPLIED BY A FACTOR OF TWO.

- THIS SECTION CONTAINS TWO STATION EQUATIONS: PT STA. 690+77.40 BK= STA. 696+68.33 AH STA. 856+00.00 BK= STA. 1382+94.00 AH

- THE WEIGH STATION WITHIN THE LIMITS OF THIS PROJECT SHALL REMAIN OPEN DURING THE DURATION OF THIS CONTRACT. USE TRAFFIC CONTROL AND PROTECTION STANDARD 701411.

- SHOULDER WIDENING FOR THE TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT) SHALL BE INCLUDED IN THE UNIT PRICE OF THE TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT) AND CONSTRUCTED ACCORDING TO STANDARD 630301.

- ALL TEMPORARY PAVEMENT MARKING WILL BE PLACED IN SUCH A MANNER SO AS NOT TO INTERFERE WITH THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

- MIXTURES FOR CRACKS, JOINTS AND FLANGWAYS AS SPECIFIED IN ARTICLE 406 OF THE STANDARD SPECIFICATIONS SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

- MULCH, UNLESS OTHERWISE PERMITTED BY THE ENGINEER, SHALL CONFORM TO METHOD 2, PROCEDURE 2 AS SPECIFIED IN ARTICLE 251.03.

- THE WEIGH IN MOTION SLAB SHALL NOT BE RESURFACED, NOR DISTURBED IN ANYWAY. SEE PLAN SHEET FOR ADDITIONAL DETAILS.

- CHANGEABLE MESSAGE SIGNS TO BE INSTALLED (2 WEEKS) PRIOR TO CONSTRUCTION.

- TWO WEEKS PRIOR TO PROJECT START-UP CHANGEABLE MESSAGE SIGNS SHALL BE PLACED AT THE FOLLOWING LOCATIONS AS DIRECTED BY THE ENGINEER:

I-55/70 EB WEST OF I-255  
 I-55 SB NORTH OF 3-I  
 I-70 WB EAST OF 3-I  
 I-270 EB WEST OF 3-I  
 I-255 NB SOUTH OF I-55/70  
 I-255 SB NORTH OF I-55/70  
 IL 157 NB SOUTH OF I-55/70  
 IL 157 SB NORTH OF I-55/70  
 IL 159 NB SOUTH OF I-55/70  
 IL 159 SB NORTH OF I-55/70  
 IL 162 EB WEST OF I-55/70  
 IL 162 WB EAST OF I-55/70  
 US 40 WB EAST OF I-55/70

THE CONTRACTOR SHALL MODIFY THE MESSAGE ON EACH SIGN AS DIRECTED BY THE ENGINEER, AS NEEDED.

THE CONTRACTOR SHALL BE AWARE THAT THE MESSAGE BOARDS MAY REQUIRE RELOCATION THROUGHOUT THE DURATION OF PROJECT WITH NO ADDITIONAL COMPENSATION BEING ALLOWED FOR THE RELOCATION.

- THE CONTRACTOR SHALL BE AWARE THAT THE EXISTING CONCRETE PATCHES SHALL BE MILLED AS PART OF THE PROPOSED HMA SURFACE REMOVAL AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE MILLING OF THE CONCRETE.

- FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.

- THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH THE PROVISIONS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER PERMIT AND IMPLEMENT THE EROSION CONTROL PLAN INCLUDED IN THESE PLANS AND SPECIFIED HEREIN. AS SPECIFIED IN ARTICLE 107.23, THE ENGINEER MUST GIVE PRIOR APPROVAL BEFORE DISTURBANCE OF ANY AREA CAN BEGIN.

- THE DISTRICT EIGHT BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 10 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS.

- THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY 3/4 INCHES WIDE, 5 INCHES HIGH AND 5/8 INCHES DEEP.

- THE CONTRACTOR AND THE ENGINEER SHALL BE AWARE THAT NO SURVEY WAS PERFORMED FOR THIS PROJECT. THE STATIONING AND TOPO SHOWN IN THE PLANS WAS CREATED USING MICROFILM AND FIELD MEASUREMENTS MADE BY DESIGN PERSONNEL. BOTH SHALL BE CONSIDERED APPROXIMATE.

- LOCATING UNDERGROUND CABLE HAS BEEN INCLUDED IN THESE PLANS FOR LOCATING ALL STATE FACILITIES ON STATE ROW SUCH AS HIGHWAY LIGHTING, ITS SYSTEMS, TRAFFIC COUNTERS, ETC.

- THE LENGTHS OF GUARDRAIL REMOVAL SPECIFIED INCLUDES THE ENTIRE RUN OF GUARDRAIL INCLUDING TRAFFIC BARRIER TERMINALS, ETC.

- THE ENGINEER SHALL SURVEY ALL GORE AREAS TO DETERMINE DRAINAGE PATTERNS. THE PROPOSED HMA SURFACING, SHALL BE PLACED TO PROVIDE FOR POSITIVE DRAINAGE AS DIRECTED BY THE ENGINEER.

- ALL MILLED AREAS SHALL BE RESURFACED WITH THE APPROPRIATE LEVEL BINDER OR BINDER COURSE PRIOR TO OPENING LANES TO TRAFFIC.

# COMMITMENTS

NONE

# PERTINENT INFORMATION

FAI 70  
 SECTION 60-9-I  
 MADISON COUNTY  
 CONTRACT NO. 76D07  
 REPLACES A PORTION OF FAI 70 (EB & WB LANES) UNDER IL 159  
 WITH CLASS A PATCH, TYPE IV, 14 INCH  
 ALL WORK TO BE COMPLETED BY 11/16/09