#### INDEX OF SHEETS

- 1 COVER SHEET, INDEX OF SHEETS, LOCATION MAP INDEX OF STATE STANDARDS
- 2 SUMMARY OF QUANTITIES
- 3 TYPICAL CROSS SECTIONS
- 4-6 PAVEMENT PLAN
- 7-9 STRIPING PLAN
- 10-16 IDOT DISTRICT 1 DETAILS

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

#### **STATE STANDARDS**

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 000001-04 TEMPORARY EROSION CONTROL SYSTEMS 280001-03 **CURB RAMPS FOR SIDEWALKS** 424001-04 CLASS C AND D PATCHES 442201-02 606001-03 CONCRETE CURB AND COMBINATION CONCRETE CURB & GUTTER URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN URBAN LANE CLOSURE, MULTILANE INTERSECTION 701701-04 LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK 701801-03 OR SIDEWALK CLOSURE 702001-06 TRAFFIC CONTROL DEVICES 780001-01 TYPICAL PAVEMENT MARKINGS TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS 781001-02 886001 **DETECTOR LOOP INSTALLATIONS** TYPICAL LAYOUT FOR DETECTION LOOPS

FAU 2906 STATE STREET
US ROUTE 6 (FAP 351) TO SIBLEY BOULEVARD (FAP 397)

**LOCAL AGENCY PRESERVATION PROGRAM** 

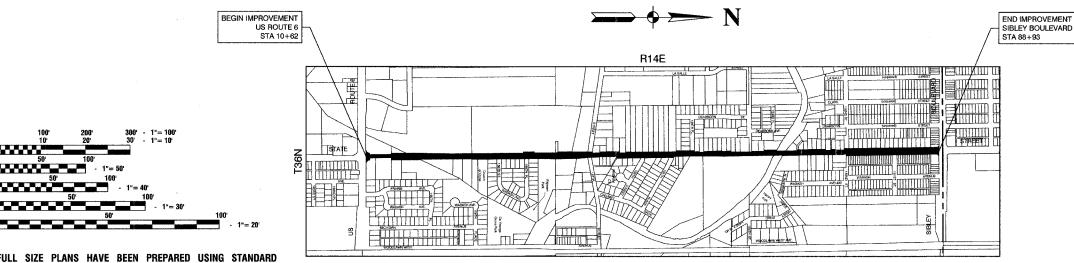
STREET RESURFACING

PROJECT: M-8003 (794)

**SECTION NO.: 07-00084-00-RS** 

JOB NO.: C 91-171-07

VILLAGE OF SOUTH HOLLAND
COOK COUNTY



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J. U. L. I. E.

AID DESIGN ENGINEER:

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1 - 800 - 892 - 0123

CONTRACT NO. 83941

#### **LOCATION MAP**

- INDICATES PROPOSED IMPROVEMENT

GROSS LENGTH = 7,831 FEET = 1.48 MILES NET LENGTH = 7,831 FEET = 1.48 MILES STATE STREET ARTERIAL

ADT=11,300 (2007)

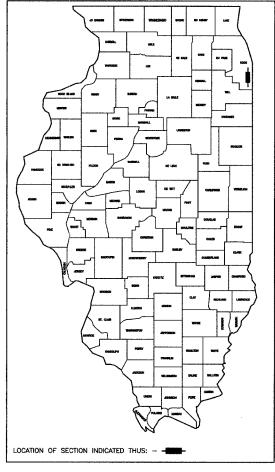
=12,000 (2030)

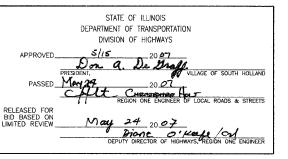
DESIGN SPEED=40 MPH

SPEED LIMIT=35 MPH

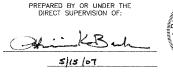
F. A. U. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO
2906	07-00084-00-RS			соок	016	001
STA.	TO STA.					
FED. 6	FED. ROAD DIST, NO.   LLING		s	FED. AID PRO	JECT	

CONTRACT #83941





## PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS





	SUMMARY OF QUANTITIES ROADWAY						
S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	CONSTRUCTION TYPE CODE		
		NITROGEN FERTILIZER NUTRIENT	DOLIND		8		
	25000400 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	8			
	25000500	Potassium Fertilizer Nutrient	POUND	8			
	25200110	SODDING, SALT TOLERANT	SQ YD	400	400		
	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	100	100		
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	5048	5048		
	40600300	AGGREGATE (PRIME COAT)	TON	100	100		
	40600895	CONSTRUCTING TEST STRIP	EACH	1	1		
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	897	897		
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	4250	4250		
	42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	40	40		
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1476	1476		
	42400800	DETECTABLE WARNINGS	SQ FT	320	320		
	44000196	HOT-MIX ASPHALT SURFACE REMOVAL, SPECIAL	SQ YD	10100	10100		
	44000196	DRIVEWAY PAVEMENT REMOVAL	SQ YD	40	40		
	44000200	SIDEWALK REMOVAL	SQ FT	1476	1476		
	44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	575	575		
	44201737	CLASS D PATCHES, TYPE I, 8 INCH	SQ YD	80	80		
	44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	300	300		
	44201741	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	375	375		
	44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	1300	1300		
	58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	2000	2000		
	60250200	CATCH BASINS TO BE ADJUSTED	EACH	23	23		
	60250500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	3	3		
	60253100	CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	2	2		
	60255500	MANHOLES TO BE ADJUSTED	EACH	69	69		
	60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	3	3		
	60258200	MANHOLES TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	2	2		
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1		
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1			
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1		
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1 .		
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	5200	5200		
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	475	475		
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	27500	27500		
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2000	2000		
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	450	450		
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	575	575		
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	1067	1067		
	X0324096	HOT IN-PLACE RECYCLING	SQ YD	49620	49620		
	X0322052	ASPHALT REJUVENATING AGENT	GALLON	4963	4963		
	X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1042	1042		
	XX005843	INCIDENTAL BITUMINOUS SURFACING	SQ YD	150	150		
	XX005923	BRIDGE DECK WEARING SURFACE REMOVAL	SQ YD	2000	2000		
Δ	Z0076600	TRAINEES	HOUR	500	500		
	XX006948	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	20	20		
	67100100	MOBILIZATION	L SUM	1	1		
		1070					

A − Y080 \* − INDICATES SPECIALTY ITEMS

F. A. U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE
2906	07-00084-00-RS		соок	016	002
STA. TO STA.					
FED. R	IDAD DIST. NO.	LUNCES	FED. ALD PR	MECT	

CONTRACT #83941

#### **GENERAL NOTES:**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL
   JULLILE." AT (800) 892-0123 AT (312) 744-7000 FOR FIELD
   LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES.
   (48 HOUR NOTIFICATION IS REQUIRED).
- UTILITIES INDICATED ON THE PLANS ARE PROVIDED FOR THE CONTRACTORS USE AND ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF THE ADVERTISEMENT FOR BIOS. THE OWNER AND ENGINEER DO NOT GUARANTEE THE ACCURACY OF UTILITIES INFORMATION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- SCHEDULES INCLUDED IN THE PLANS HAVE BEEN PREPARED FROM FIELD NOTES. EXACT LOCATIONS FOR PATCHING SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
- 6. THE NOMINAL THICKNESS OF BITUMINOUS MIXTURE STATED IN THE SPECIFICATIONS IS THE NOMINAL THICKNESS. DEVATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS SURFACE IS PLACED.

ILLINOIS DEPARTMENT OF TRANSPORTATION

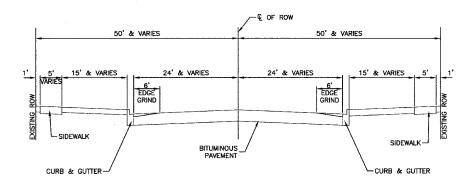
REVISIONS NAME STATE STREET STREET RESURFACING SUMMARY OF QUANTITIES DATE

SCALE: VERT. NA DRAWN BY PS/RG
HORIZ. NA DRECKED BY PKB

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARKAVENUE SOUTH HOLAND, LIMINOS SOUTS
FAX (708) SS1-800
LUMGE DESIGN FROM REGISTRATION NO. THOUSTER. 06186-QUAN-01

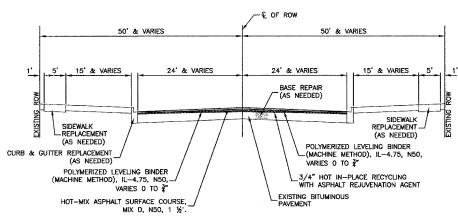
F. A. U. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO		
2906	070008400-RS		COOK	016	003		
STA.	STA. TO STA.						
FED. R	DAD DIST. HO. ELERIOIS FED. AID PROJECT						

CONTRACT #83941



#### EXISTING TYPICAL SECTION

VILLAGE OF SOUTH HOLLAND STATE STREET US ROUTE 6 TO SIBLEY BLVD



#### PROPOSED TYPICAL SECTION

VILLAGE OF SOUTH HOLLAND STATE STREET US ROUTE 6 TO SIBLEY BLVD

#### HOT-MIX ASPHALT MIXTURE REQUIREMENTS

ПЕМ	AC TYPE	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50 (IL-9.5 mm), 1 1/2"	PG 64-22	4% Ø 50 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 VARIES 0" to 3/4"	SBS/SBR PG 76-28/-22	4% Ø 50 GYR
DRIVEWAYS		
HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50 (IL-9.5 mm), 2"	PG 64-22	4% @ 50 GYR
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm), PE-6", CE-8"	PG 64-22*	4% @ 50 GYR
PATCHING		
CLASS D PATCHES, TYPE I, II, III, 8" (HMA BINDER IL-19 mm)	PG 64-22/58-22*	4% @ 70 GYR
HMA REPLACEMENT OVER PATCHES (BINDER IL-19 mm)	PG 64-22/58-22*	4% @ 70 GYR

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.
2. \*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

ILLINOIS DEPARTMENT OF TRANSPORTATION STATE STREET STREET RESURFACING TYPICAL CROSS SECTIONS

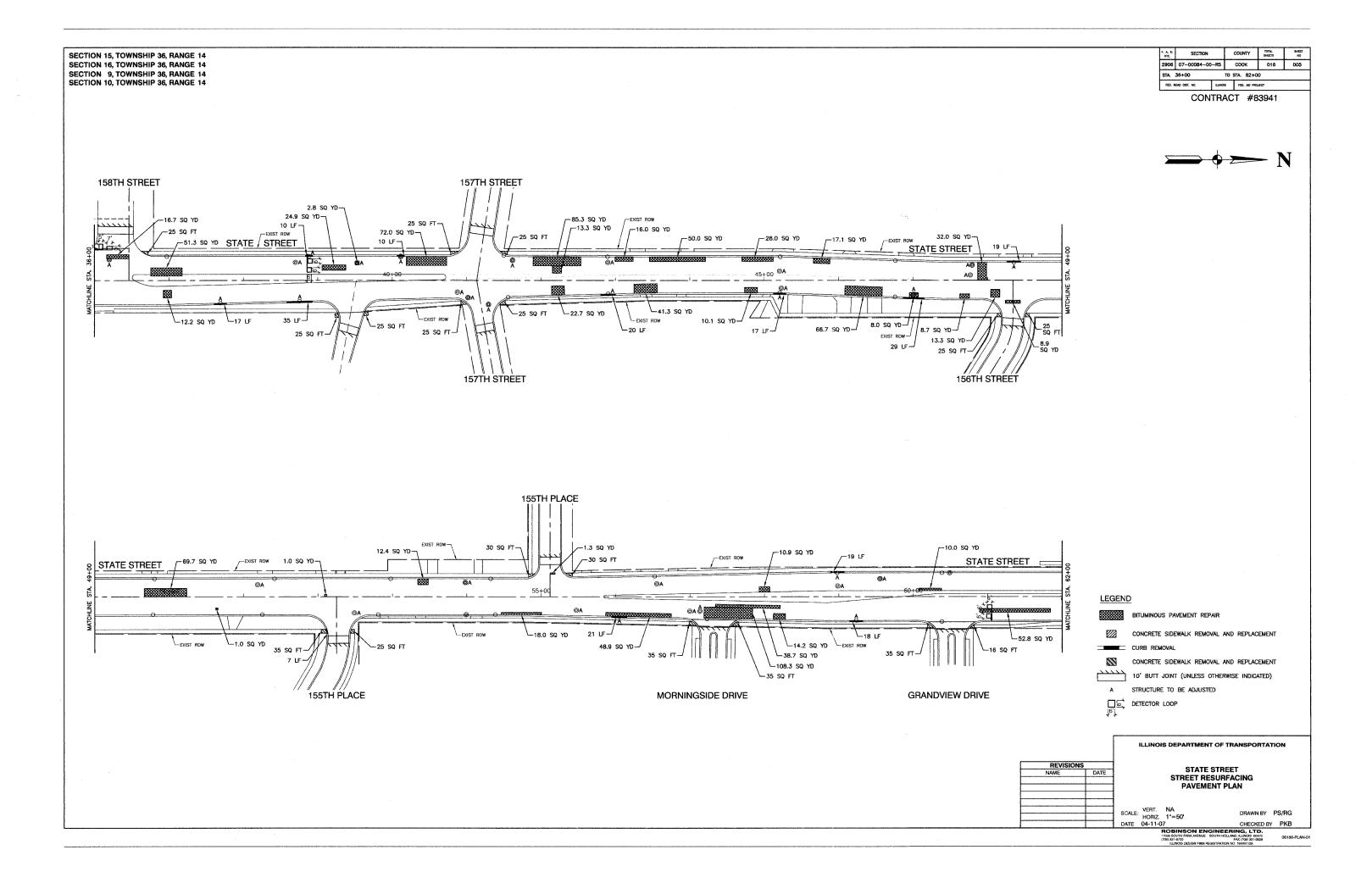
SCALE: VERT. NA HORIZ. NA DATE 04-16-07

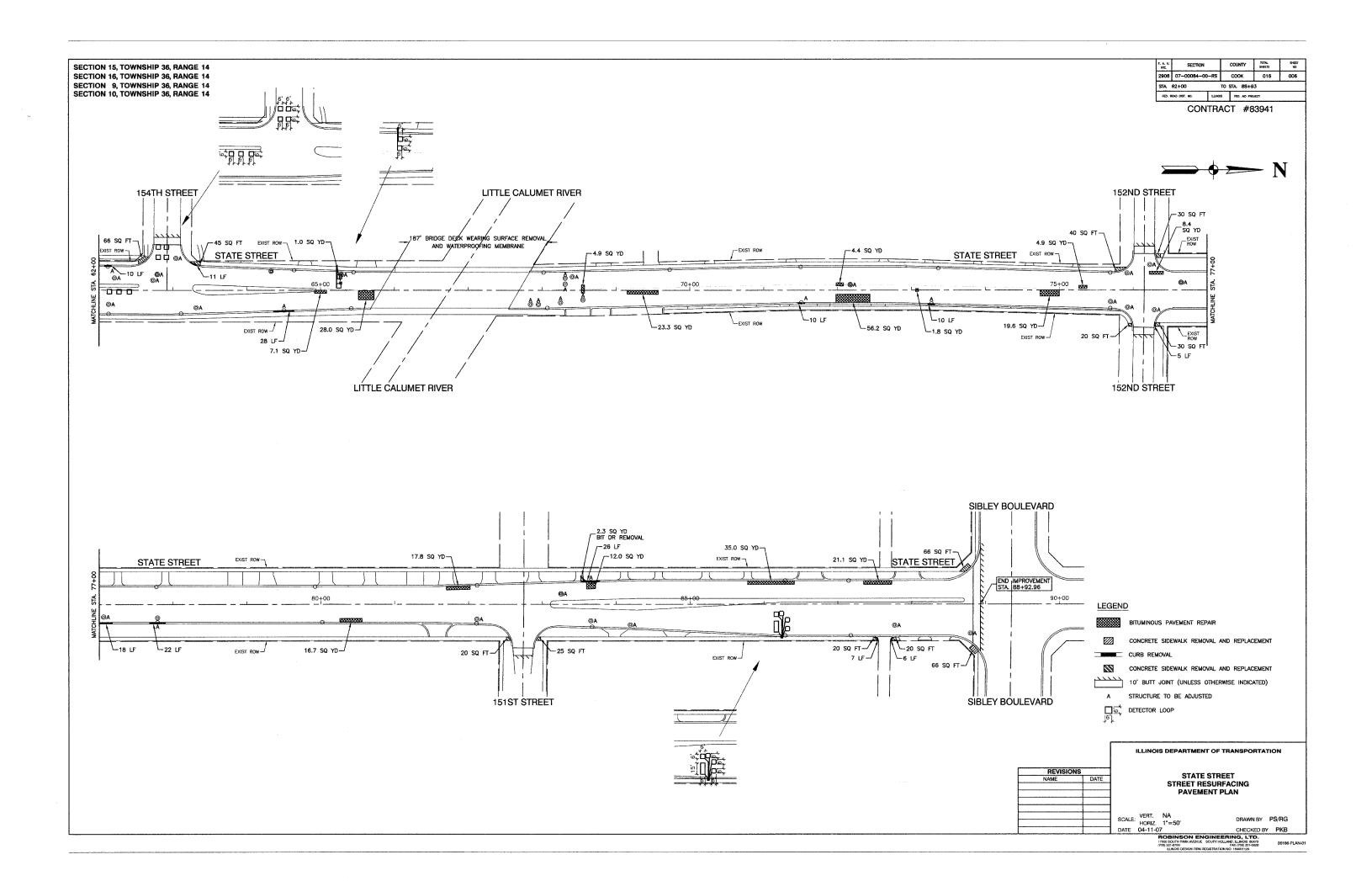
REVISIONS

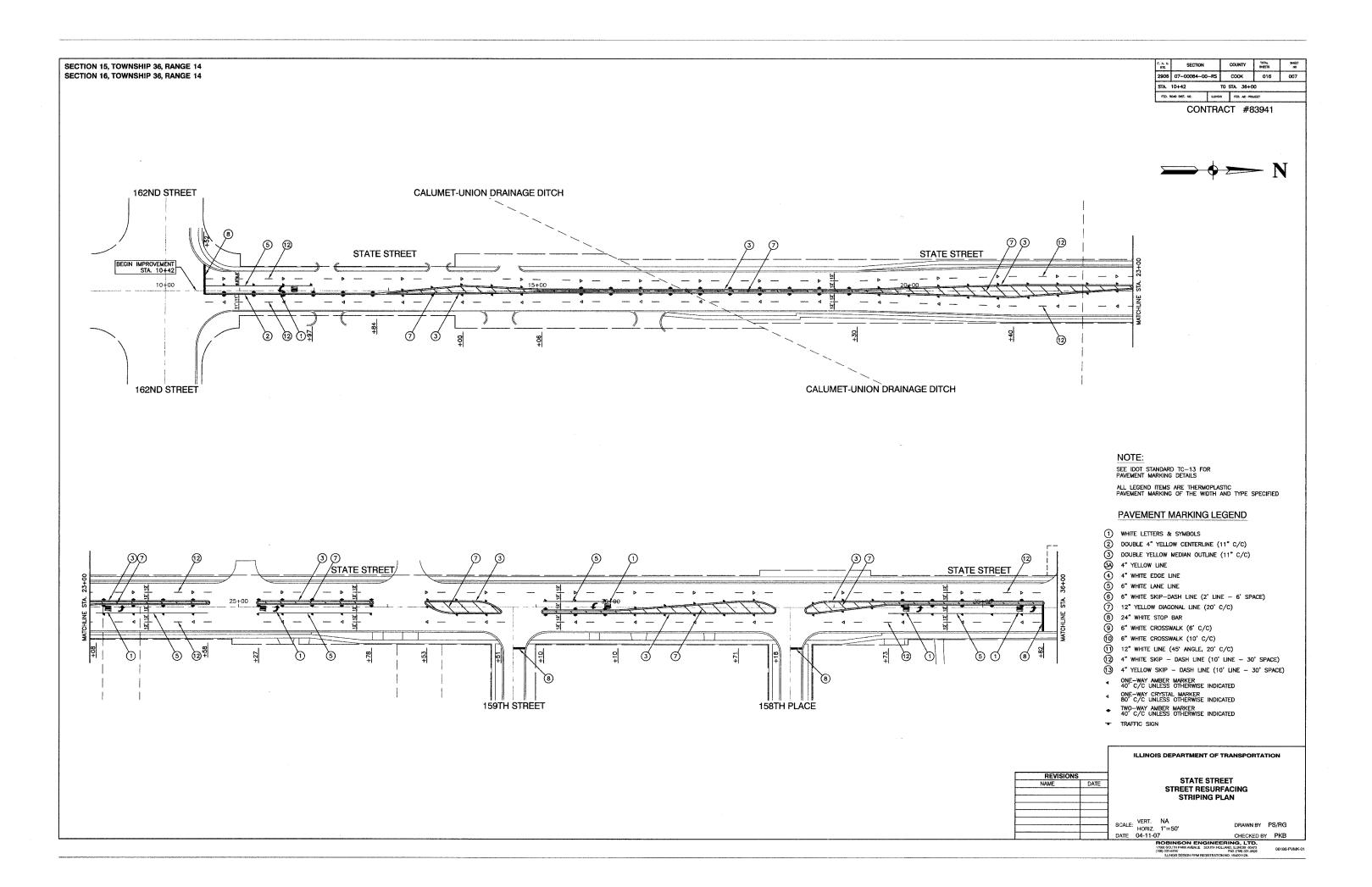
DATE

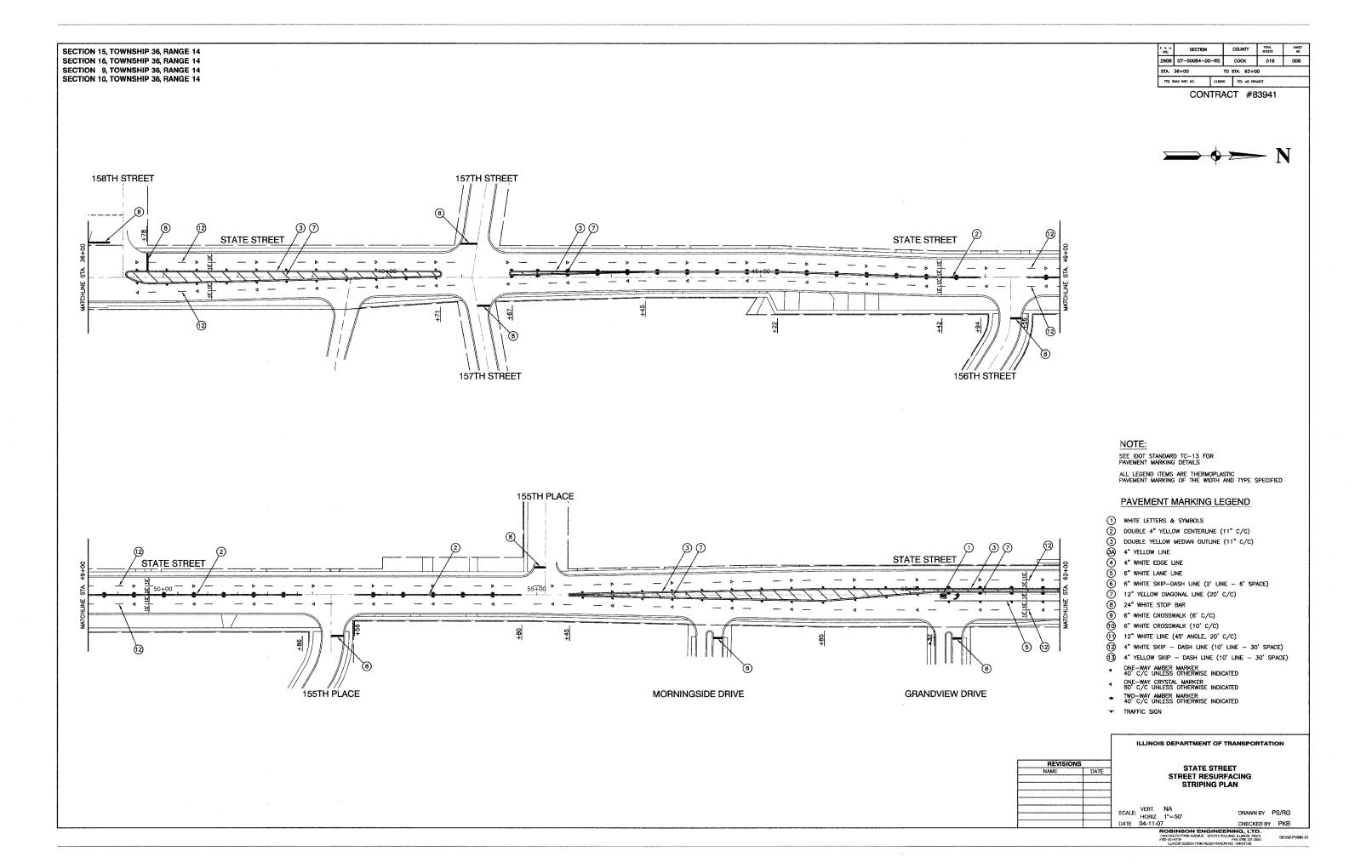
DRAWN BY PS/RG CHECKED BY PKB

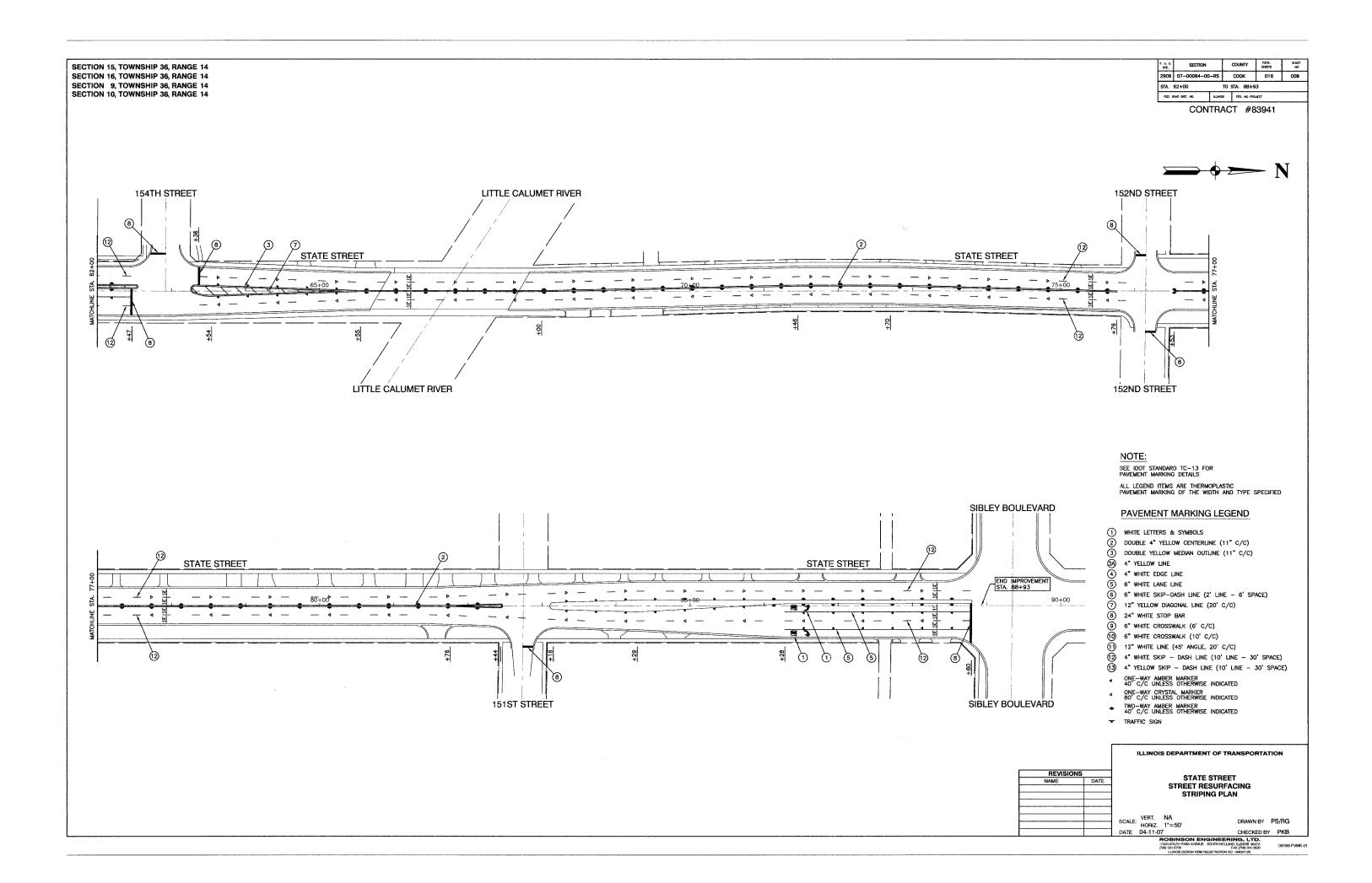
F. A. U. SECTION COUNTY TOTAL SHEETS NO 2906 07-00084-00-RS COOK 016 004 SECTION 15, TOWNSHIP 36, RANGE 14 SECTION 16, TOWNSHIP 36, RANGE 14 FED. ROAD DIST. NO. | ELINOIS | FED. ALD PROJECT CONTRACT #83941 162ND STREET CALUMET-UNION DRAINAGE DITCH MILL 6' EDGE GRIND
HEAT SCARIFYING W/ ASPHALT MODIFIER AND RESURFACE
- W/ 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, AND HOT-MIX ASPHALT SURFACE COURSE, 25 SQ FT-187' BRIDGE DECK WEARING SURFACE REMOVAL.
AND WATERPROOFING MEMBRANE MIX D, N50, 1 1/2" 10 LF 7 -EXIST ROW -8.0 SQ YD -11.1 SQ YD 25 SQ FT---15 SQ FT -65.3 SQ YD \_\_35.0 SQ YD -EXIST ROW \_\_13.3 SQ YD 25 SQ FT-\_\_26.9 SQ YD ,—10 LF 30.0 SQ YD \_-14.2 SQ YD STATE | STREET \_9 LF STATE STREET BEGIN IMPROVEMENT STA. 10+42 5 FT BUTT JOINT--38 LF €\\_\_10 LF 6.5 FT BUTT JOINT \_2.8 SQ YD 10 LF 4.4 SQ YD -24.4 SQ YD \_16 LF 190 SQ FT EXIST ROW 46.2 SQ YD -16.0 SQ YD -25 SQ FT CALUMET-UNION DRAINAGE DITCH 162ND STREET 16.0 SQ YD-\_-19 LF 25 SQ FT-13.9 SQ YD-21.3 SQ YD--EXIST ROW 17.3 SQ YD--44.4 SQ YD -25 SQ FT 20 SQ FT-40 SQ FT--EXIST ROW -42.2 SQ YD EXIST ROW-\_\_20 SQ FT \_17.3 SQ YD -22.3 SQ YD \_\_10.7 SQ YD STATE STREET -44.4 SQ YD STATE STREET 8.0 SQ YD-**LEGEND** 16 LF — ØØØ ØA ⊚A 13.2 SQ YD-BITUMINOUS PAVEMENT REPAIR CONCRETE SIDEWALK REMOVAL AND REPLACEMENT Lg LF 1-9.3 SQ YD EXIST ROW \_20 SQ FT EXIST ROW 40 SQ FT-/ 5.3 SQ YD\_ BIT DR REMOVAL 20 SQ FT-10 LF CONCRETE SIDEWALK REMOVAL AND REPLACEMENT 10 LF-10' BUTT JOINT (UNLESS OTHERWISE INDICATED) 159TH STREET 158TH PLACE DETECTOR LOOP ILLINOIS DEPARTMENT OF TRANSPORTATION REVISIONS STATE STREET STREET RESURFACING SCALE: VERT. NA HORIZ. 1"=50' DATE 04-16-07

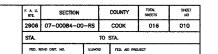




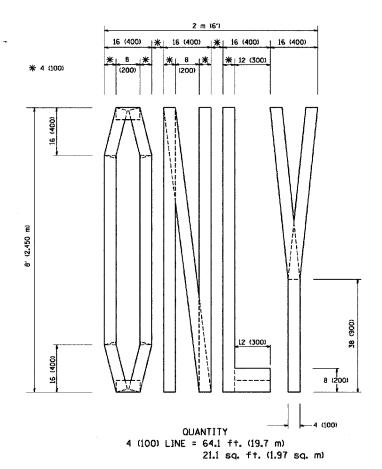


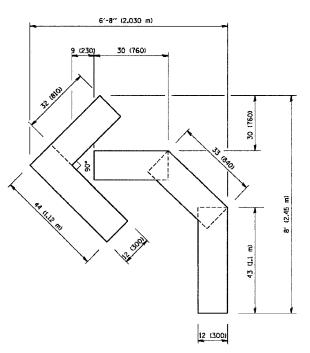




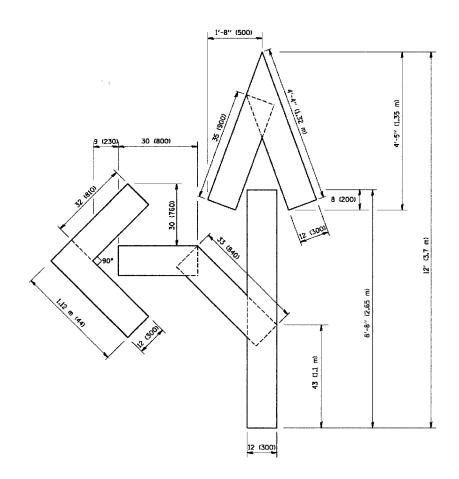


CONTRACT #83941





QUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



QUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

REVISIO	NS
NAME	DATE
T. RAMMACHER	09/18/9
J. OBERLE	06/01/9
T. RAMMACHER	06/05/9
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/9
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

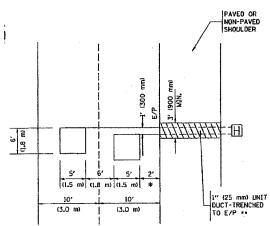
PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE

DRAWN BY CADD CHECKED BY TC-16

#### LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.



\* = (500 mm)

\* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

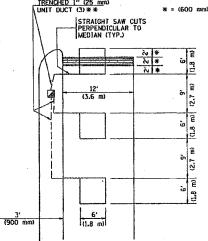
## LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOINTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.

TRENCHED 1" 125 mmn
UNIT DUCT (3) \*\*

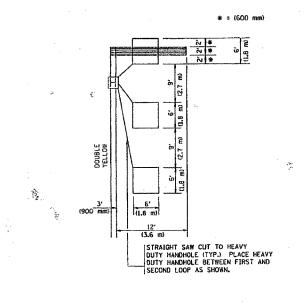
STRAIGHT SAW CUTS
PERPENDICULAR TO
MEDIAN (TYP.)



\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

## LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



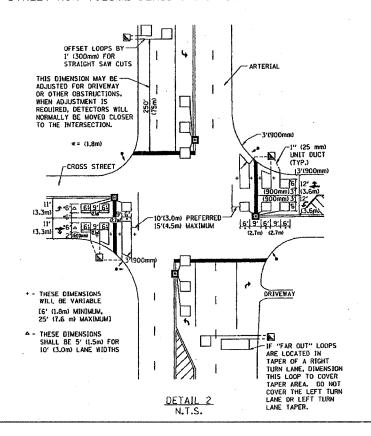
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

### ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)

- ARTERIAL CALLING LOOP IN \*\* = (1.5m) CROSS STREET DEPENDING ON DRIVE CALLING LOOPS [TYP.-12' (3.6m) LANES] 12' 12' 12' 12' 12' LOOPS ARE SAW-CUT TO THE EDGE OF PAVEMENT. 1" (25 mm) UNIT P50<sup>1</sup>(75m) TTYP.-ALL LEGS-VOLUME DENSITY ("FAR OUT" DETECTION) DUCT IS RUN BETWEEN EDGE OF PAVEMENT STRAIGHT SAW DRIVEWAY CUTS TO HEAVY-DUTY HANDHOLE-IN PAVEMENT AND HANDHOLE.

(TYP. FOR LOOPS
THAT TERMINATE IOFF SET LOOPS BY 1' (300mm) FOR STRAIGHT SAW CUTS. (TYP.) IN HANDHOLES OUTSIDE PAVEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



**CONTRACT #83941** 

#### NOTES:

VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF <u>ALL</u> DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE\_ THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (I.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

#### NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

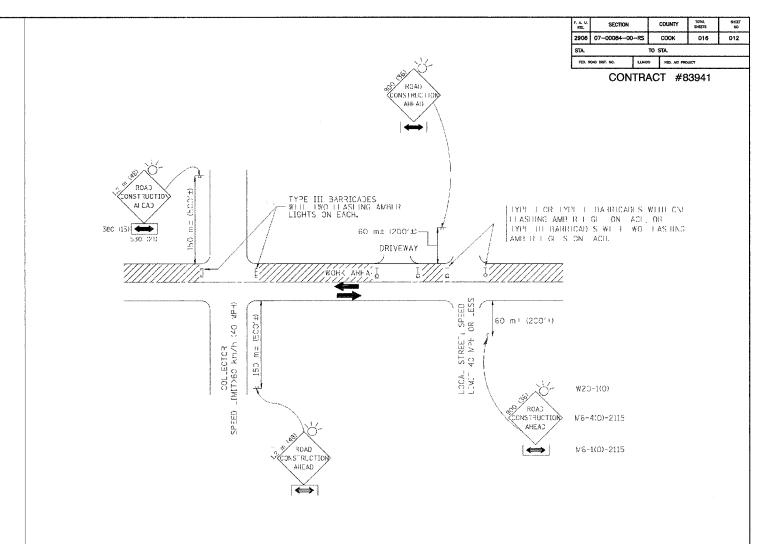
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.I. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

ILLINOIS DEPARTMENT OF TRANSPORTATION

REVISIONS

NAME
DATE
DISTRICT 1
DETECTOR LOOP
INSTALLATION DETAILS
FOR ROADWAY RESURFACING

SCALE: NONE
DATE 10/18/2002
DATE 10/18/2002
DESIGNED BY R.X.F.



#### RAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

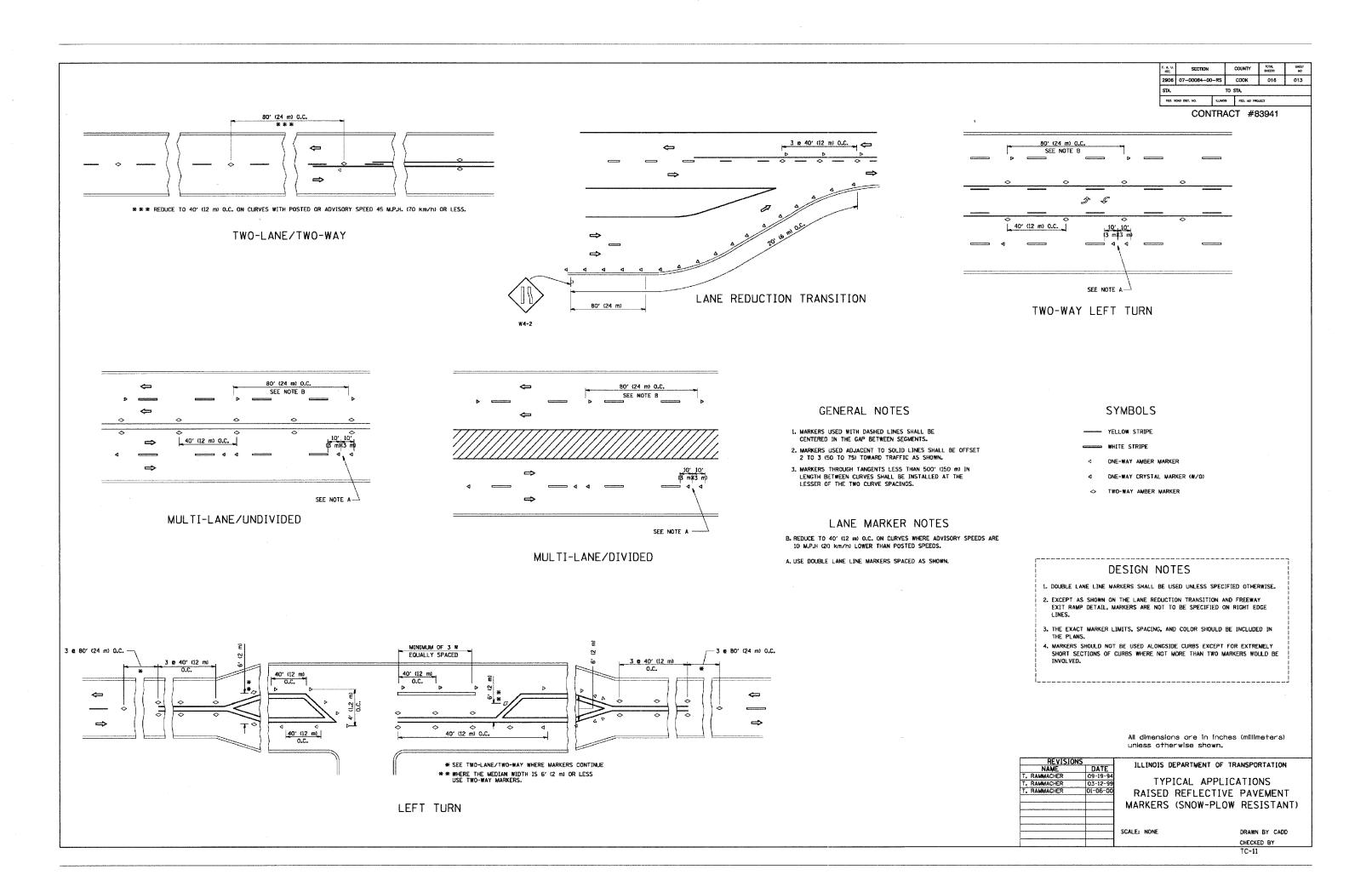
#### NO ES:

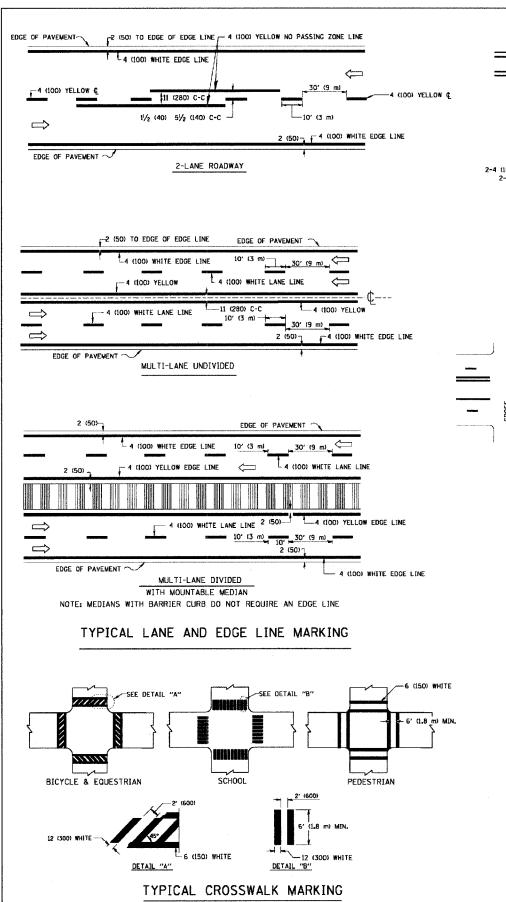
- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SLDE ROAD WITH A SIZED LIME OF GC Km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- c) ONE ROAD CONSTRUCTION AHEAD SECN 900×900 (36×36) WITH A FLASHER AND FLAG MCUNIED ON IF APPROXIMATELY GO m (2007) IN ADVANCE OF THE MAIN ROUTE.
- b) HE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCATION WITH TYPE ... TYPE IT ON TYPE IT BARRICADES, 1/3 OF HE CROSS SEC ION OF THE CLOSED FOR ION.
- 2. STDE ROAD WITH A SPEED FINET GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- C) DNE ROAD CONSTRUCTION AHEAD SEGN 1.2 m x 1.2 m (48x48) WILL A FLASHER VOUNTED ON THE APPROXIMATELY 15D m (500) IN ADVANCE OF THE MAIN ROUTE.
- b) FE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY B OCKING WITH TYPE TIT BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN HE SIDE HOAD LLES BE WEEN THE BEGINNING OF THE MAINLINE STONING AND THE WORK ZONE, A SINGLE HEADED ARROW (MB-1) SHALL BE USED IN LIFE, OF THE DOUB E HEADED ARROW (MB-4).

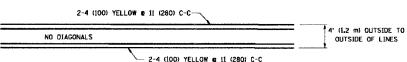
#### B. TOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRATTIC CONTROL DEVICES (STD. 70350), STD. 703606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIBE ROAD LANE CLOSURI.
- C. ADVANCE WARNING SIGNS ARE TO BE OWITTED ON DRIVEWAY UNLESS
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS STALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

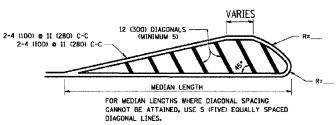
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T. RAMMACHER 09/08/94	T TRAFFIC CONTR	JE AND THU ECITIAN				
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A. HOLSEH 10/15/96	_	NI-RSECTIONS, AND				
T. RAMMACHER 01/06/00	l nei	LV-WAYS				
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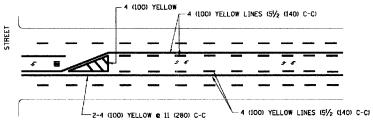


#### 4' (1.2 m) WIDE MEDIANS ONLY

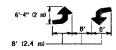


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) T0 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

#### MEDIANS OVER 4' (1.2 m) WIDE

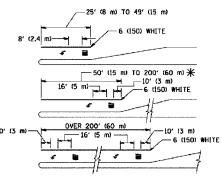


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING



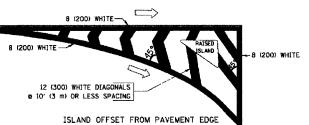
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.

THE AREA = 15.6 SO. FT. (1.5 m<sup>2</sup>) (1.7 AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

\* TURN LANES IN EXCESS OF 400" (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

#### TYPICAL TURN LANE MARKING



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F. A. U. RPE.			TOTAL SHEETS	SHEET NO		

CONTRACT #83941

8 (200) WHITE	2 (50)
RAISED ISLAND	Ī
ISLAND AT PAVEMENT EDGE	2 (50)

#### TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 2 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>e</b> 4 (100)	SOLID SOLID	YELLOW YELLOW	51/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 p 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 81/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
·	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 m 6 (150) 12 (300) m 45° 12 (300) m 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 ml IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 m 4 (100) WITH 12 (300) DIAGONALS m 45° NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	II (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED WEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIACONALS & 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (5 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (0YER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "M":3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X":54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) <b>e</b> 45°	SOLID	WHITE - RICHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h)) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))

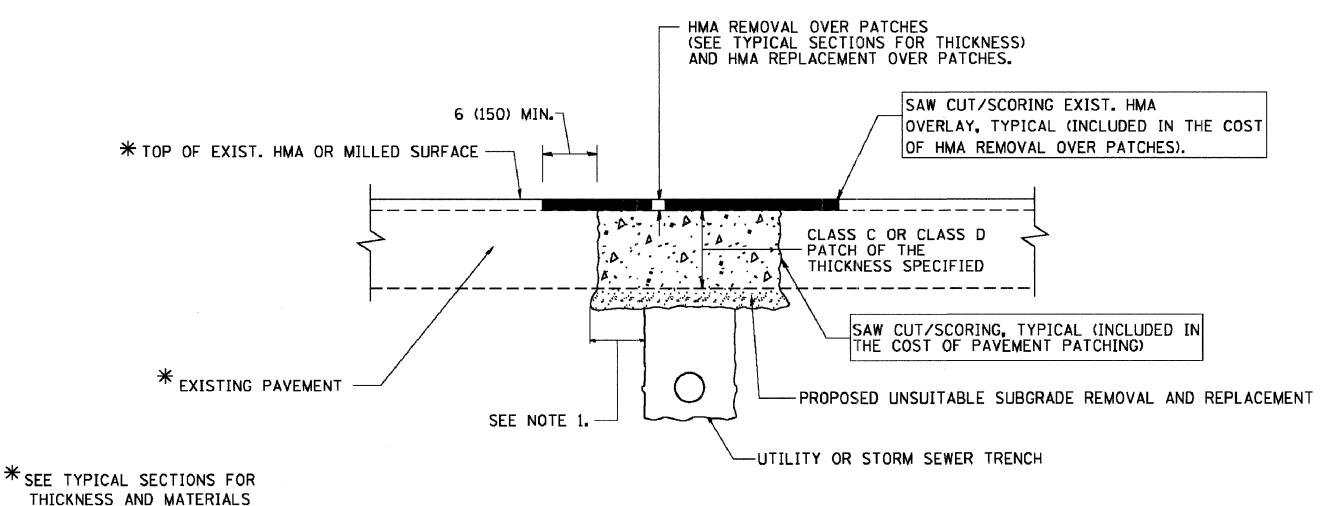
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters)

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION		
NAME	DATE	ILLINOIS DEF	ARTMENT OF TRANSFORTATION	
EVERS	03-19-90			
T. RAMMACHER	10-27-94	DΙ	STRICT ONE	
ALEX HOUSEH	10-09-96			
ALEX HOUSEH	10-17-96	TYPI	CAL PAVEMENT	
T. RAMMACHER	01-06-00		MARKINGS	
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CONTRACT #83941



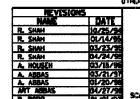
#### NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

#### SEQUENCE OF CONSTRUCTION

- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE FULL DEPTH PATCHES
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

ALL DEMENSIONS ARE IN ENCHES INVELLINETERS) UNLESS OTHERWISE SHOWN.



ILLINOIS DEPARTMENT OF TRANSPORTATION

PAYEMENT PATCHING FOR HMA SURFACED PAYEMENT

SCALE: VERT. N

DRAWN BY

O-ECKED BY BD400-04 (BD-22)

REVISION DATE: 01/01/07

