STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

DESIGN DESIGNATION: OTHER PRINCIPAL ARTERIAL PROPOSED SPEED LIMIT: 35 M.P.H. TO 45 M.P.H. 2007 ADT = 39,300

HIGHWAY PLANS

FAU 1350 / ILL 72 (TOUHY AVENUE / HIGGINS ROAD) **SECTION: 2008–063 RS WOLF ROAD TO US 12 / 45 (MANNHEIM ROAD)** & AT WILLOW CREEK **RESURFACING (3P); BRIDGE REPAIR**

MAINE TOWNSHIP R. 11 E. **PROJECT BEGINS** 72 TOUHY AVENUE PROJECT ENDS STA. 136 + 50PROJECT ENDS STA. 67 + 66CREEK

GROSS LENGTH OF PROJECT = 9.620 FEET = 1.822 MILES

NET LENGTH OF PROJECT = 9,620 FEET = 1.822 MILES

DISTRICT ONE - PLAN PREP ENGINEER: KEN ENG (847) 705-4247

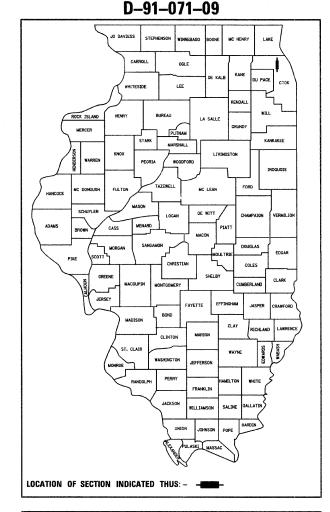
CONTRACT NO. 60F40

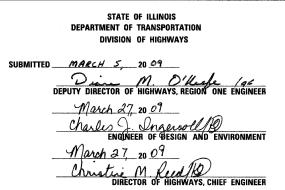
THRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS - PLANNERS - SURVEYORS 211 W. WACKER DRIVE CHICAGO, IL. 60606

2008-063 RS

FED. ROAD DIST. NO. 1 ILLINOIS CONTRACT NO. 60F40

COOK 42 1





Birinder S. Sachdeva BIRINDER S. SACHDEVA, P.E. EXPIRES: 11-30-2009

March 5,2009 DATE

N. Saula BHADRESH N. SHAH, S.E., P.E.

EXPIRES: 11-30-2010

MARCH 05, 2009

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CITY OF DES PLAINES AND THE **VILLAGE OF ROSEMONT**

PROJECT IS LOCATED IN THE

FOR INDEX OF SHEETS, SEE SHEET NO. 2

 \circ

 \circ

 \bigcirc

0

COOK COUNTY C-91-071-09

STATION EQUATION STA. 132 + 35.3 TOUHY AVE. STA. 9 + 24.5 HIGGINS RD.

STA. 101 + 21

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. JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS 1-800-892-0123 OR 811

INDEX OF SHEETS 2 INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES SUMMARY OF QUANTITIES 3 TYPICAL SECTIONS ALIGNMENT PLAN 8 - 11 ROADWAY PLANS SUGGESTED MAINTENANCE OF TRAFFIC - STAGE I AND STAGE II 12 - 13 14 - 17 PAVEMENT MARKING PLANS DETECTOR LOOP REPLACEMENT PLANS 18 - 21 BRIDGE PLANS - IL. RTE. 72 over WILLOW CREEK **GENERAL PLAN & ELEVATION** 22 23 DECK CROSS SECTION 24 DECK PLAN JOINT RECONSTRUCTION AT NORTH & SOUTH ABUTMENTS 25 26 JOINT RECONSTRUCTION DETAILS AT NORTH & SOUTH ABUTMENTS 27 MEDIAN RECONSTRUCTION 28 SUBSTRUCTURE CONCRETE REPAIRS 29 BAR SPLICER ASSEMBLY DETAILS PREFORMED JOINT STRIP SEAL 30 31 CONSTRUCTION STAGING DISTRICT 1 - DETAIL STANDARDS 32 DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING 33 PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT 34 CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT BUTT JOINT AND HMA TAPER DETAILS TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS 36 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) 37 38 DISTRICT ONE TYPICAL PAVEMENT MARKINGS 39 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING ARTERIAL ROAD INFORMATION SIGN DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201 - <i>03</i>	CLASS C AND D PATCHES
604001 - 03	FRAME AND LIDS, TYPE 1
604051 <i>-03</i>	FRAME AND LIDS, TYPE 11
604091 <i>-02</i>	FRAME AND LIDS, TYPE 24
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
606306- <i>03</i>	CORRUGATED PC CONCRETE MEDIANS
701601 - 06	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701 -00	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901 - 01	TRAFFIC CONTROL DEVICES
704001 - <i>05</i>	TEMPORARY CONCRETE BARRIER
780001 - 02	TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- 2. 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND CONDITIONS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF DES PLAINES AND THE VILLAGE OF
- 4. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- 7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS
 BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 9. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1 / 2

 INCHES (40 MM) WHERE THE SPEED LIMIT IS 40 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL

 FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- 10. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
- 11. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE TYPE III SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS.
- 12. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- 13. THE CONTRACTOR SHALL CONTACT MR. WALTER CZARNY, THE AREA TRAFFIC FIELD ENGINEER, AT (773) 685-4342 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 14. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 15. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT AND OMISSION LIMITS.
- 16. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 17. PAY ITEM 55039700 STORM SEWERS TO BE CLEANED SHALL ONLY BE UTILIZED TO CLEAN STORM SEWER LATERAL PIPES BETWEEN INLETS OR CATCH BASINS AND MAIN SEWERS.

NOTE: BOXED ITEMS ARE INCLUDED IN THE COST OF THE WORK INVOLVED.

FILE NAME = D160F40-sht-gennote.dgn PLOT DATE = 3/6/2009



IC.	DESIGNED	-	G.F.L.	REVISED	-
S	DRAWN	-	B.K.	REVISED	
	CHECKED	-	M.P.	REVISED	
274	DATE	-	MARCH 13, 2009	REVISED	-

Γ	INDEX OF SE	HEETS, LIST OF S	STATE STA	NDARDS AND	GENERAL NOTES	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	IL. RTE. 72 (TOUHY AVE. / HIGGINS RD.)				1350	2008-063 RS	СООК	42	2	
L		·		,	''1			CONTRACT	NO. 6	0F40
L	SCALE: NONE	SHEET NO. 1 OF	1 SHEETS	STA. VARIOUS	TO STA. VARIOUS	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		

	SUMMARY OF QUANTITIES ODE NO ITEM UNIT		URBAN		RUCTION CODE
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	1000	SFTY-2A
20200100	EARTH EXCAVATION	CU YD	52		52
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	20	20	
20400800	FURNISHED EXCAVATION	CU YD	20	20	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	564	564	
21400100	GRADING AND SHAPING DITCHES	F00T	100	100	
25000210	SEEDING, CLASS 2A	ACRE	0.12	0.12	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	11	11	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	11	11	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	11	11	
25100630	EROSION CONTROL BLANKET	SQ YD	564	564	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	51	51	
40600300	AGGREGATE (PRIME COAT)	TON	256	256	·
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	50	50	
40600895	CONSTRUCTING TEST STRIP	EACH	2	2	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	570	570	
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	363	363	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	33		33
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	6,244	6,208	36
42001300	PROTECTIVE COAT	SQ YD	3,442	2,958	48.
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	290	290	
44000086	HOT-MIX ASPHALT SURFACE REMOVAL COMPLETE	SQ YD	347		347
44000100	PAVEMENT REMOVAL	SQ YD	185		185
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	63,352	63,352	
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	360		360
44000300	CURB REMOVAL	FOOT	1,360	530	830
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	92	92	
44000600	SIDEWALK REMOVAL	SQ FT	290	290	
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	7,986	7,986	
44002020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	2,433	1,188	1,245
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	2,163	2,163	1,243
44003100	MEDIAN REMOVAL	SQ FT	676	676	
44003510	MEDIAN REMOVAL PARTIAL DEPTH	SQ FT	1,000	1,000	
44201749	CLASS D PATCHES, TYPE I, 9 INCH	SQ YD	50	50	
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	860	860	
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	70	70	
44201759	CLASS D PATCHES, TYPE IV. 9 INCH	SQ YD			-
44201765	CLASS D PATCHES, TYPE II, 10 INCH		160	160	
50102400	CONCRETE REMOVAL	SQ YD	590	590	47.7
1		CU YD	47.7		47,7
50300255	CONCRETE SUPERSTRUCTURE	CU YD	48.6		48.4
50300260	BRIDGE DECK GROOVING PROTECTIVE COAT	SQ YD	330		330
50800205	REINFORCEMENT BARS, EPOXY COATED	SQ YD	484		484
50800205	BAR SPLICERS	POUND	8,020		8,020
1		EACH	68		68
52000110	PREFORMED JOINT STRIP SEAL	FOOT	140		140
55039700	STORM SEWERS TO BE CLEANED	FOOT	2,478	2,478	ľ
60251740	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 24 FRAME AND GRATE	EACH	22	22	1
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	2	2	1

	SUMMARY OF QUANTITIES		URBAN	TYPE	RUCTION
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	1000	SFTY-2A
60254100	CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 11 FRAME AND GRATE	EACH	1	1	
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	2	
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	25	25	
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	35	35	
60404950	FRAMES AND GRATES, TYPE 24	EACH	2	2	
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	2	2	
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	2	2	
60619121	CONCRETE MEDIAN, TYPE SB-6	SQ FT	1,660		1,660
60619200	CONCRETE MEDIAN, TYPE SB-6.06	SQ FT	1,672	1,672	
60621911	CONCRETE MEDIAN, TYPE SM-2.06	SQ FT	314	314	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	4	2
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1		1
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1	•
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1 1	1	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	25,000	24,199	801
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1,201	1,201	001
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1	-	11 004
70300240		FOOT	48,212	36,408	11,804
i	TEMPORARY PAVEMENT MARKING - LINE 6"		4,012	4,012	ŀ
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	1,320	1,320	
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	326	326	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	540	540	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4,300	4,300	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	350		350
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1,201	1,201	
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	36,408	35,832	576
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	4,012	4,012	
78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	F00T	1,320	1,320	
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	326	326	
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	520	520	
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	706	706	
78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	4		4
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	680	680	
88600600	DETECTOR LOOP REPLACEMENT	FOOT	840	840	
X0322185	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	311		311
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52	
X0322879	GRADING AND SHAPING FORESLOPES	SQ YD	170	170	
X0325303	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	232		232
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	11		11
X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	39	39	
X0712400	TEMPORARY PAVEMENT	SQ YD	185		185
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2,661	2,661	
Z0006204	BRIDGE DECK HYDRO-SCARIFICATION 1/2"	SQ YD	311		311
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	12		12
	•		1		1
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	82	82	

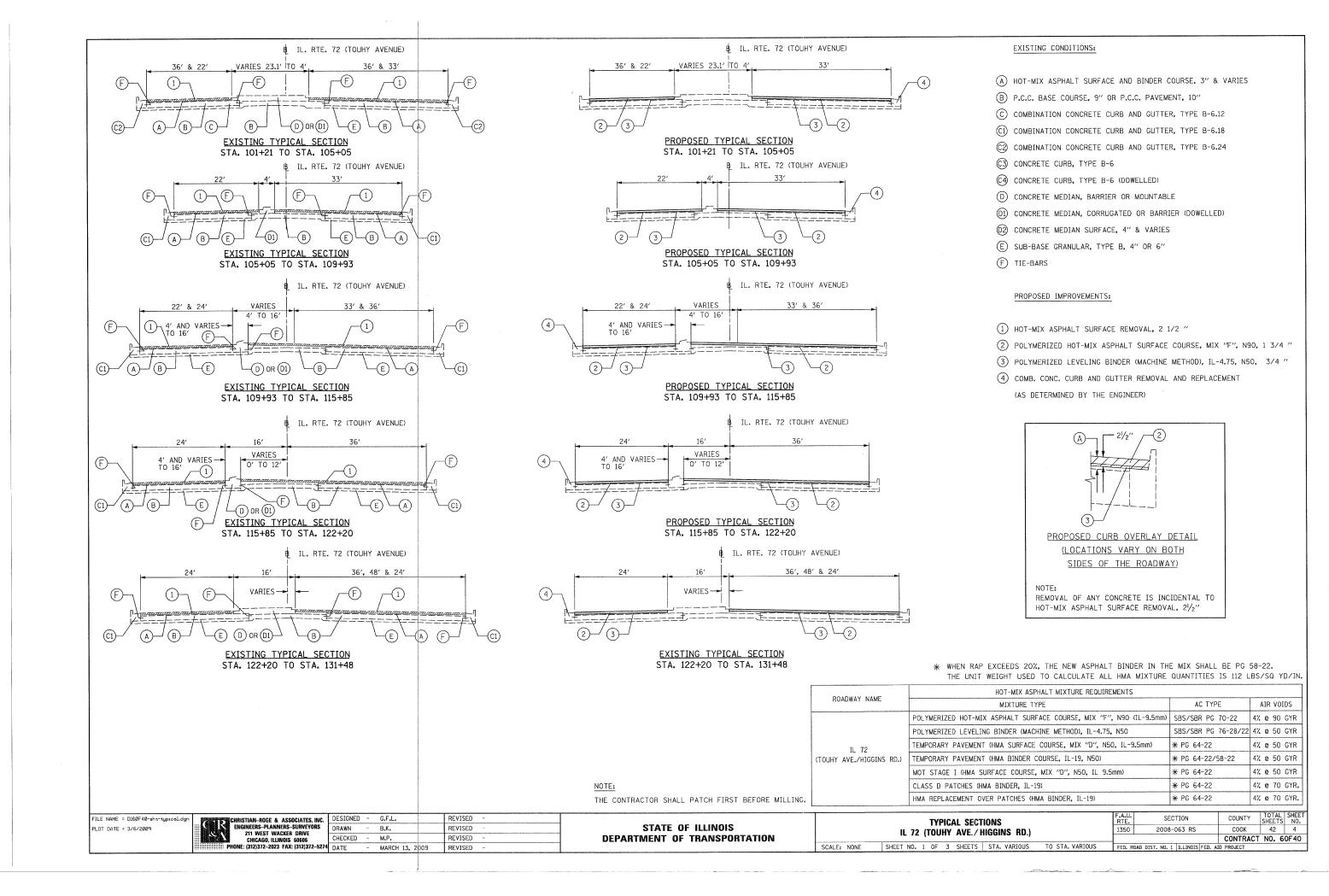
FILE NAME = D16ØF4Ø-sht-S0Q.dgn

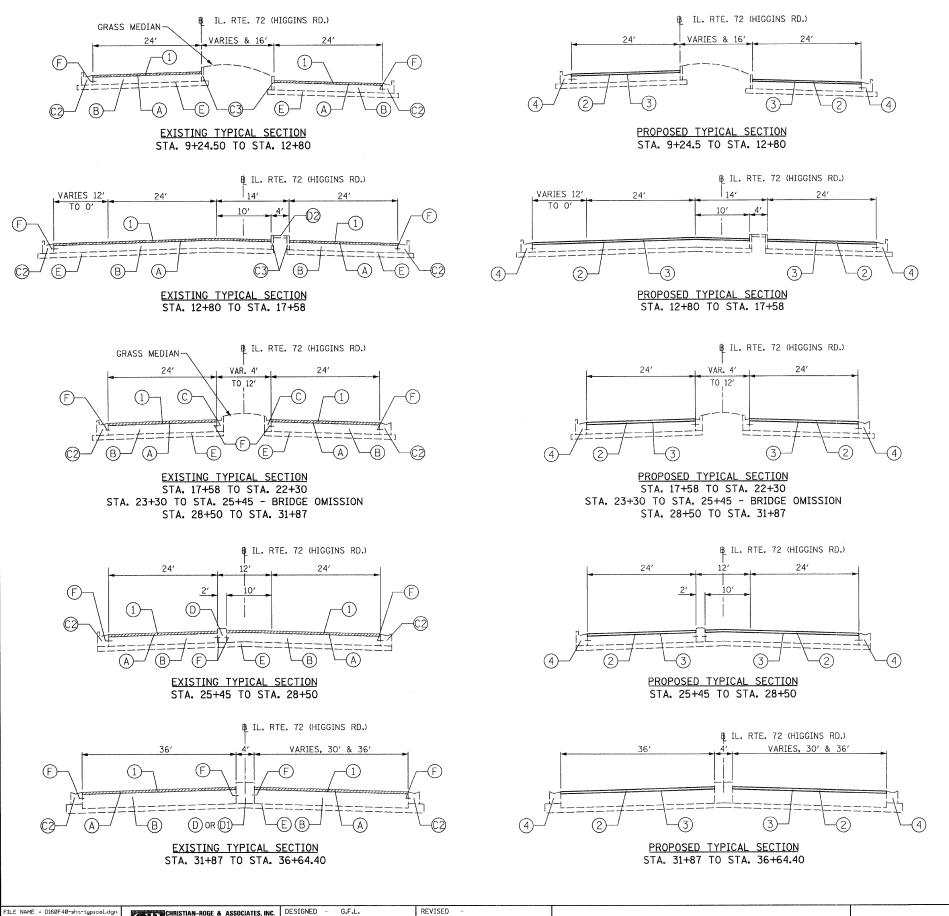
PLOT DATE = 3/6/2009

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* SPECIALTY ITEM

-	SUMMARY OF QUANTITIES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	IL. RTE. 72 (TOUHY AVE. / HIGGINS RD.)	1350	2008-063 RS	COOK CONTRACT	42	3
	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. VARIOUS TO STA. VARIOUS FED. ROAD DIST. NO. 1 [ILLINOIS] FED. 7					0F40
_						





REVISED

REVISED

REVISED

PLOT DATE = 3/6/2009

DRAWN

CHECKED - M.P.

MARCH 13, 2009

211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
CHECKE
PHONE: (312)372–2023 FAX: (312)372–5274
DATE

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS:

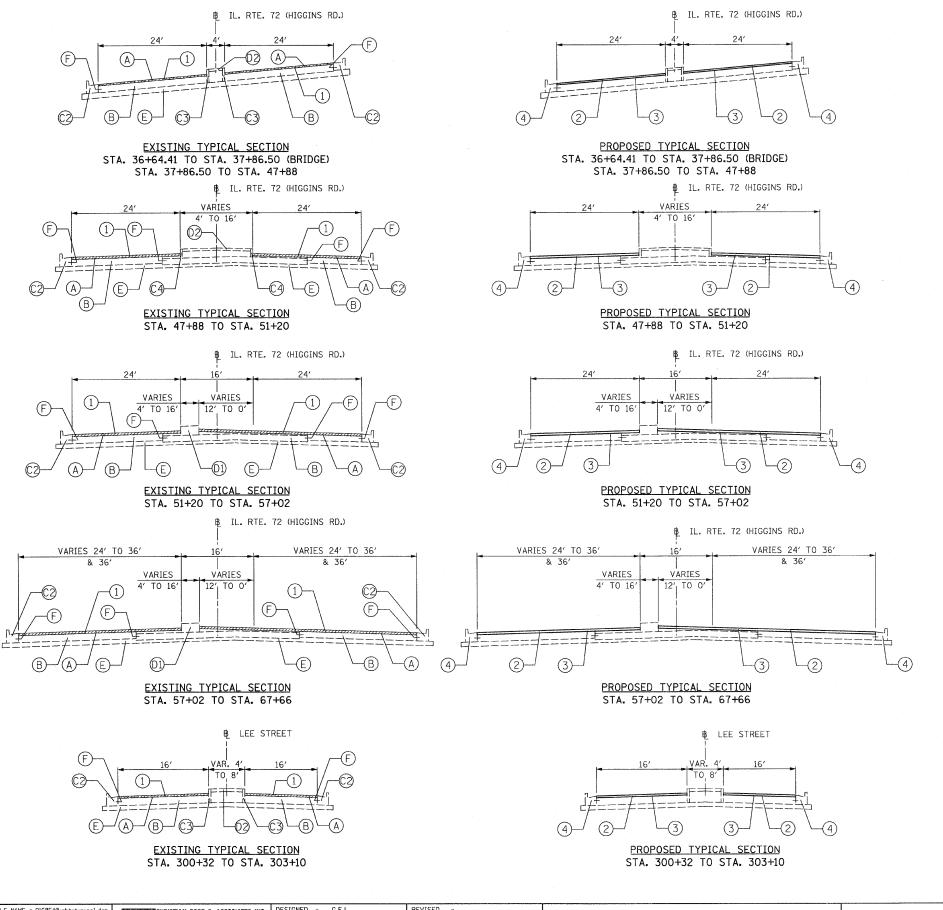
- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 3" & VARIES
- (B) P.C.C. BASE COURSE, 9" OR P.C.C. PAVEMENT, 10"
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (C1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- © COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ©3 CONCRETE CURB, TYPE B-6
- C4) CONCRETE CURB, TYPE B-6 (DOWELLED)
- (D) CONCRETE MEDIAN, BARRIER OR MOUNTABLE
- (D1) CONCRETE MEDIAN, CORRUGATED OR BARRIER (DOWELLED)
- (D2) CONCRETE MEDIAN SURFACE, 4" & VARIES
- E SUB-BASE GRANULAR, TYPE B, 4" OR 6"
- (F) TIE-BARS

PROPOSED IMPROVEMENTS:

1 HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2 "

(AS DETERMINED BY THE ENGINEER)

- (2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4 "
- (3) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4 "
- 4 COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT



EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 3" & VARIES
- (B) P.C.C. BASE COURSE, 9" OR P.C.C. PAVEMENT, 10"
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (C1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- © COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (3) CONCRETE CURB, TYPE B-6
- C4 CONCRETE CURB, TYPE B-6 (DOWELLED)
- D CONCRETE MEDIAN, BARRIER OR MOUNTABLE
- (D1) CONCRETE MEDIAN, CORRUGATED OR BARRIER (DOWELLED)
- (D2) CONCRETE MEDIAN SURFACE, 4" & VARIES
- (E) SUB-BASE GRANULAR, TYPE B, 4" OR 6"
- F TIE-BARS

PROPOSED IMPROVEMENTS:

- 1 HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2 "
- (2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4 "
- 3) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4 "

COUNTY

COOK

CONTRACT NO. 60F40

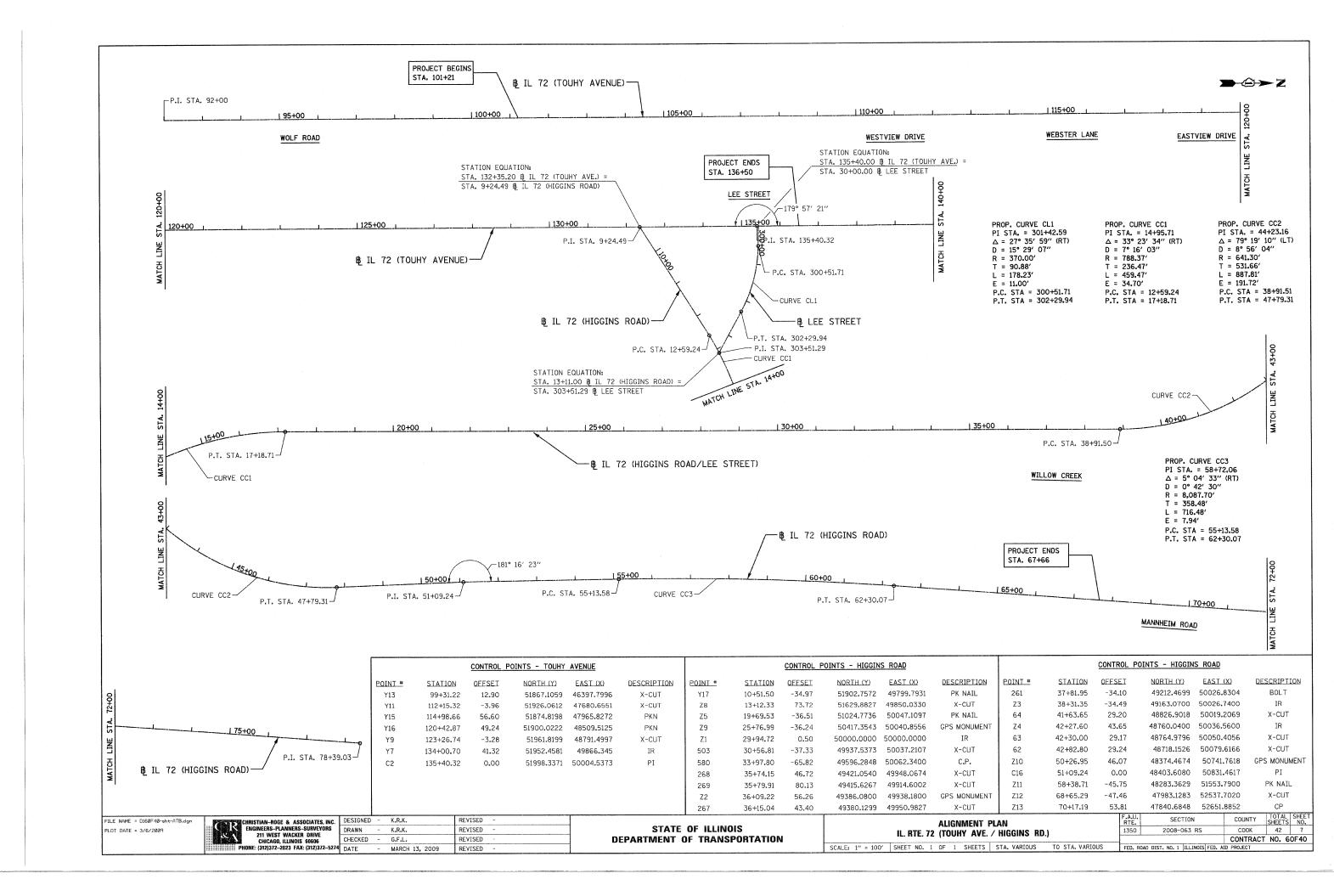
4 COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DETERMINED BY THE ENGINEER)

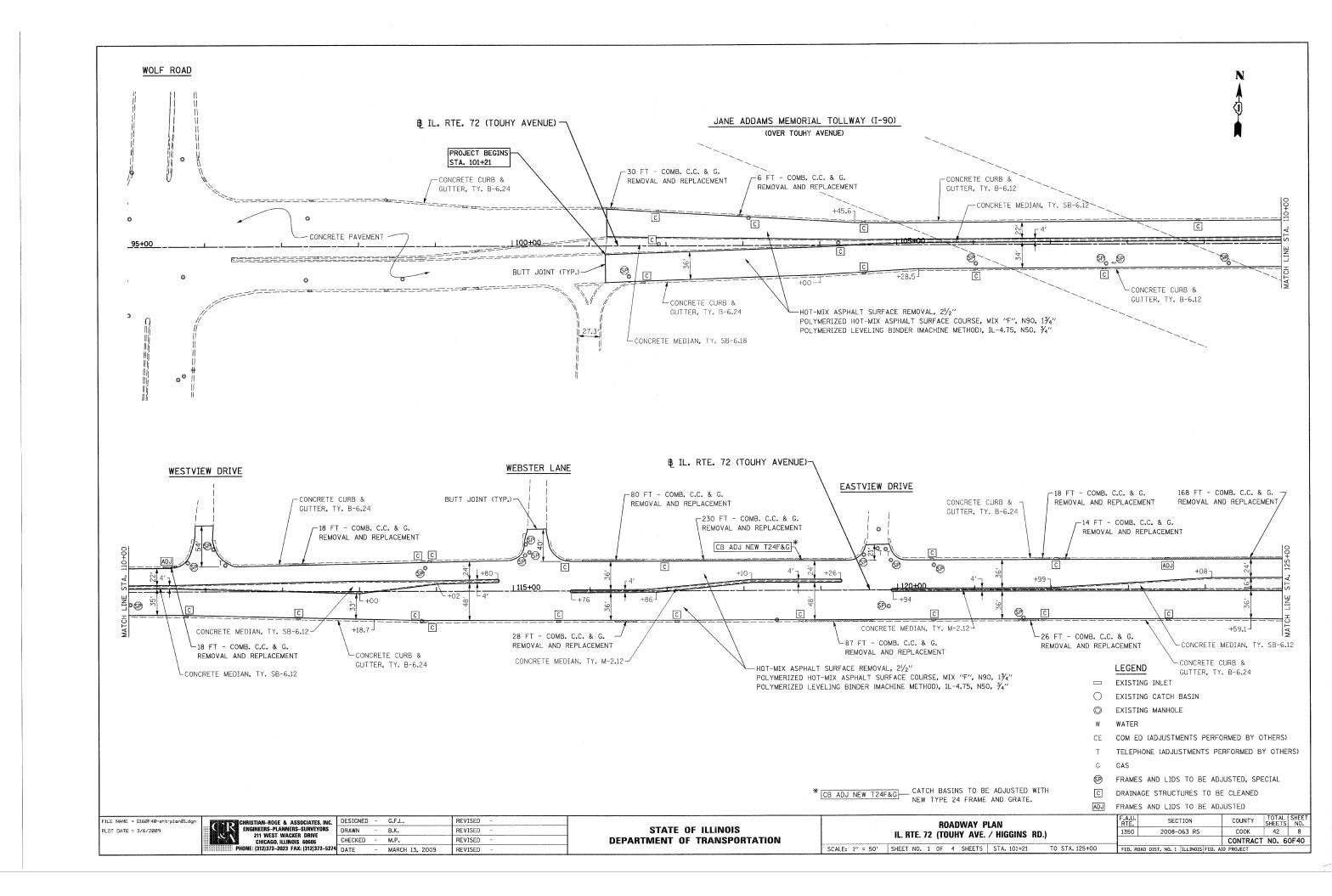
FILE NAME = D160F40-sht-typical.dg

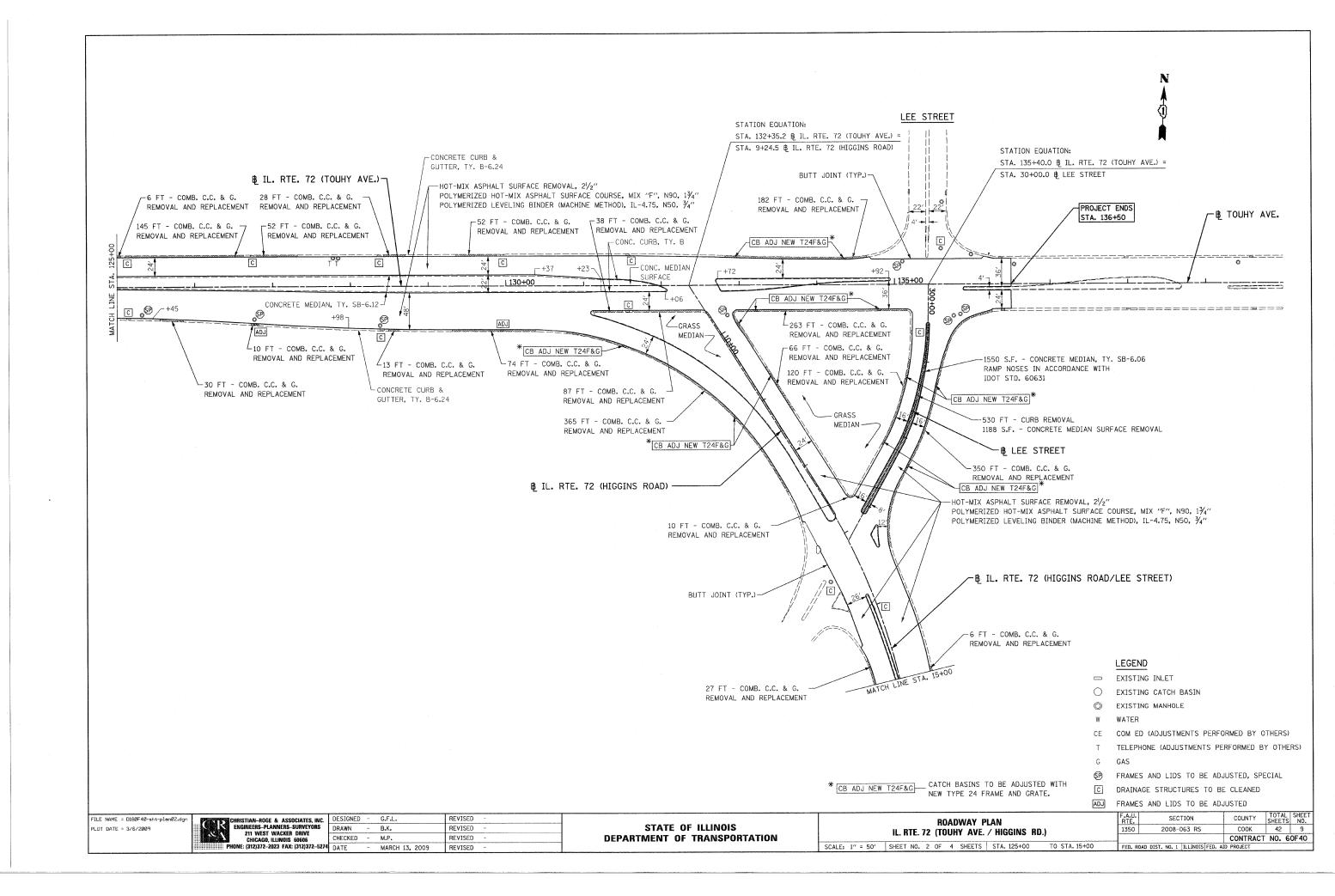


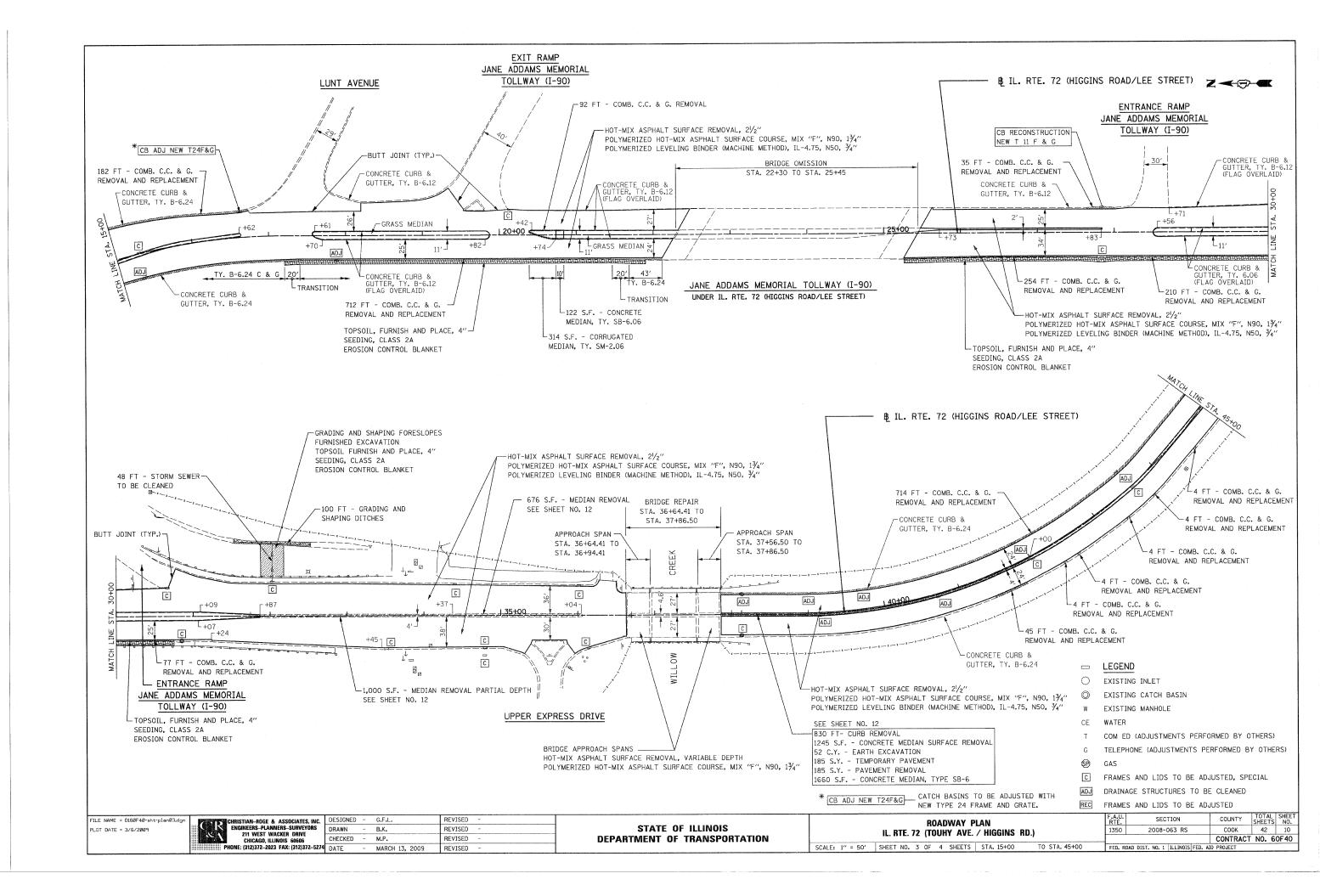
REVISED DESIGNED - G.F.L. DRAWN REVISED IE: (312)372-2023 FAX: (312)372-5274 DATE MARCH 13, 2009 REVISED

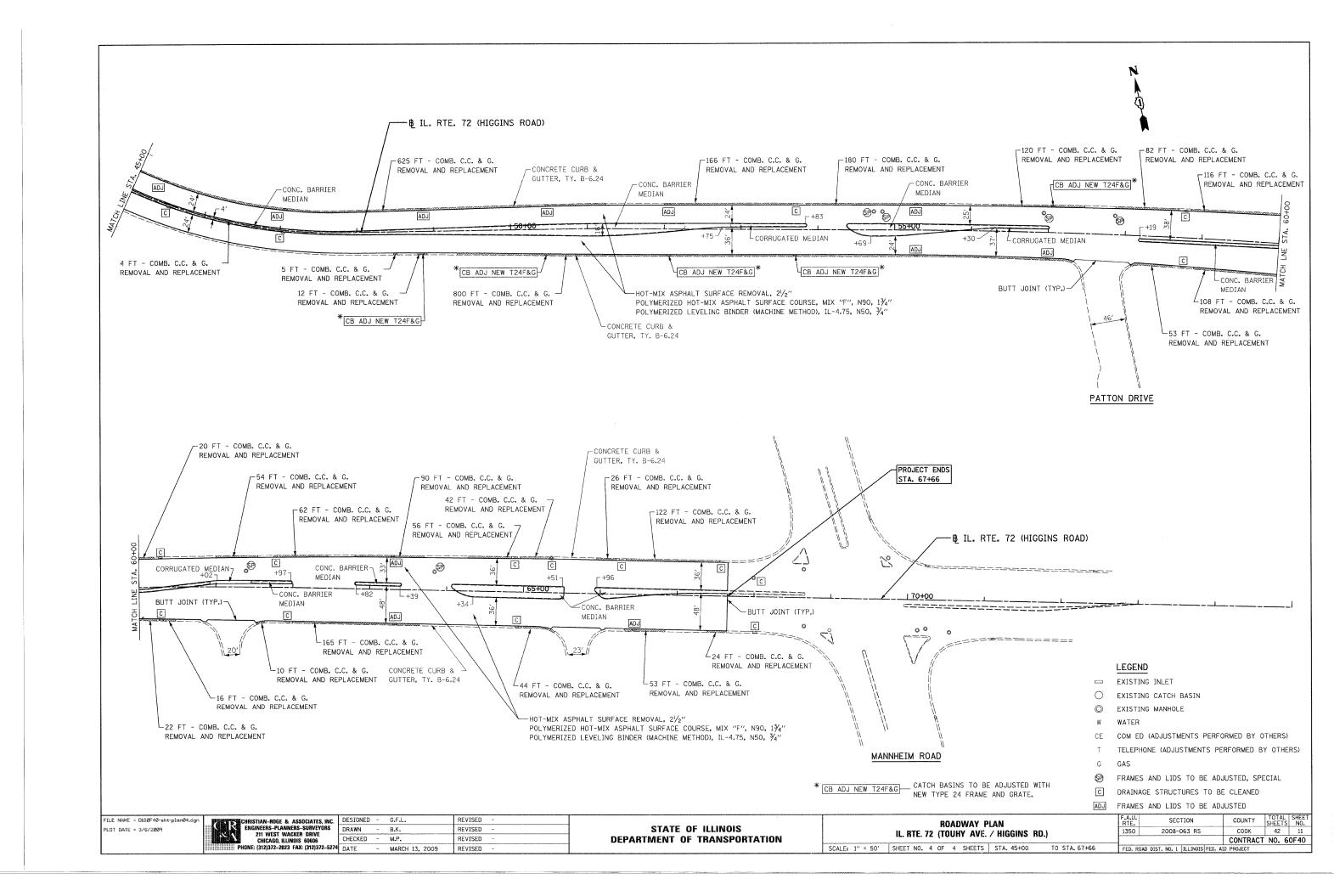
TYPICAL SECTIONS	F.A.U. RTE.	SECTION
IL 72 (TOUHY AVE./HIGGINS RD.)	1350	2008-063 RS
LE: NONE SHEET NO. 3 OF 3 SHEETS STA. VARIOUS TO STA. VARIOUS	FED. ROAD	DIST. NO. 1 ILLINOI

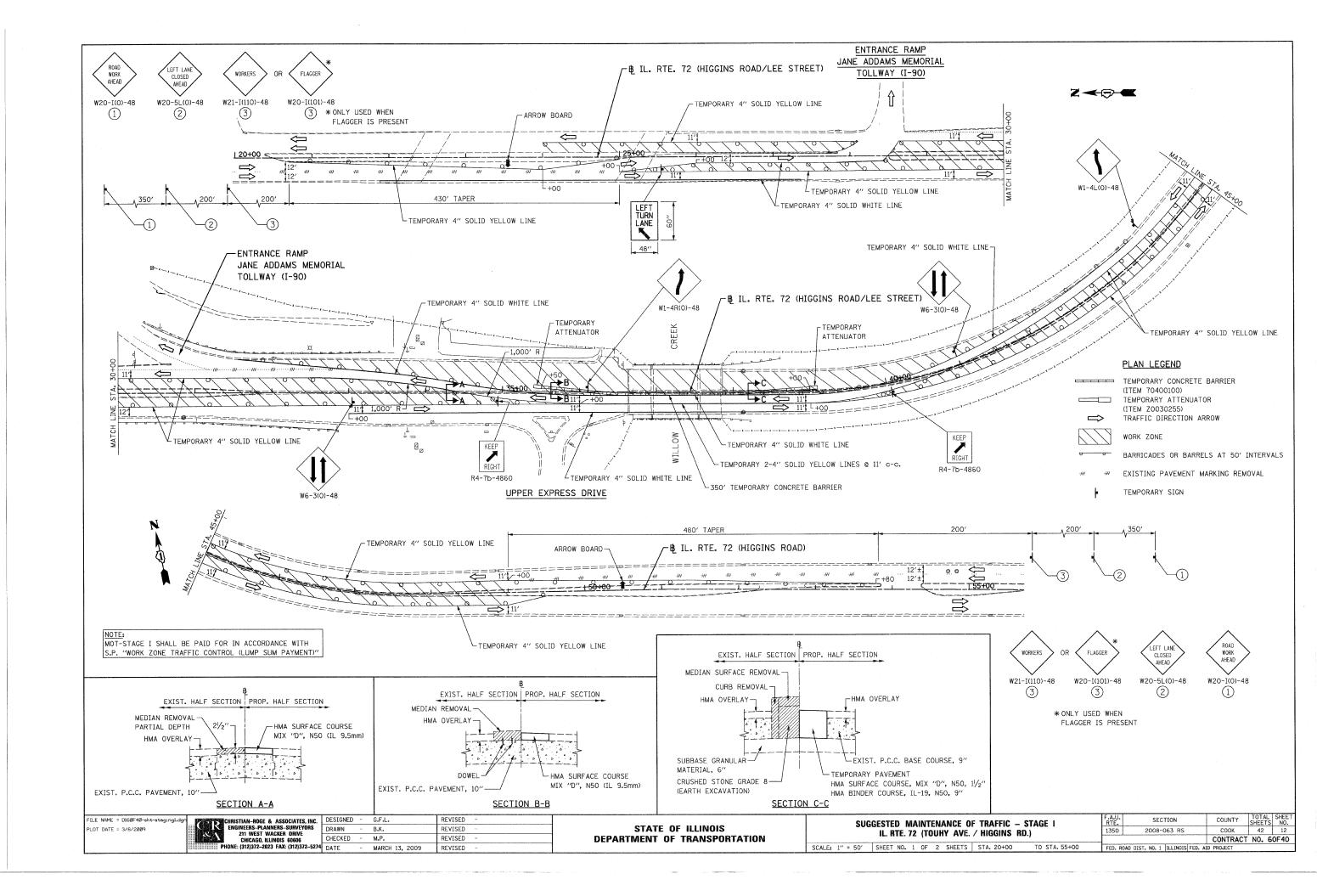


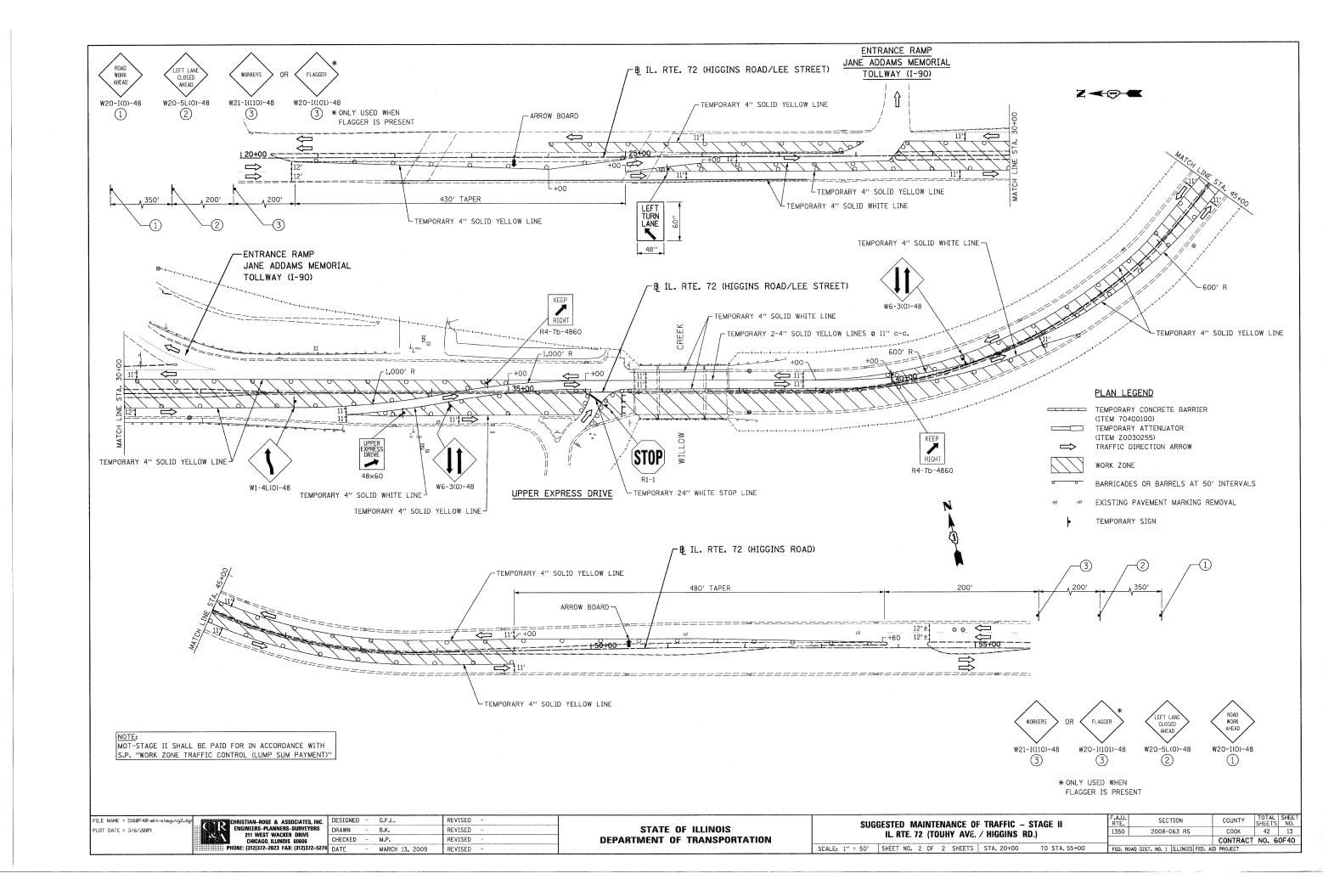


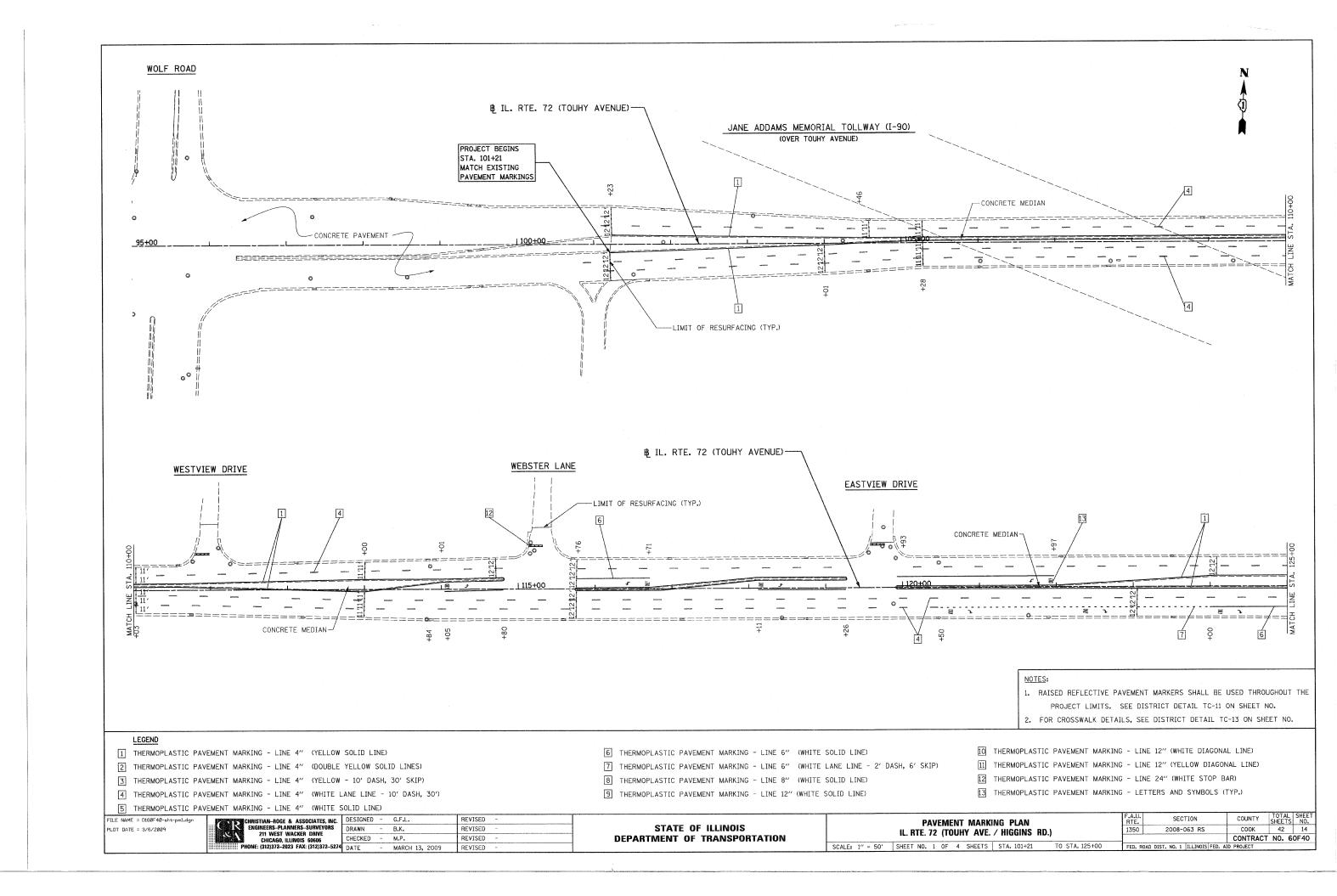


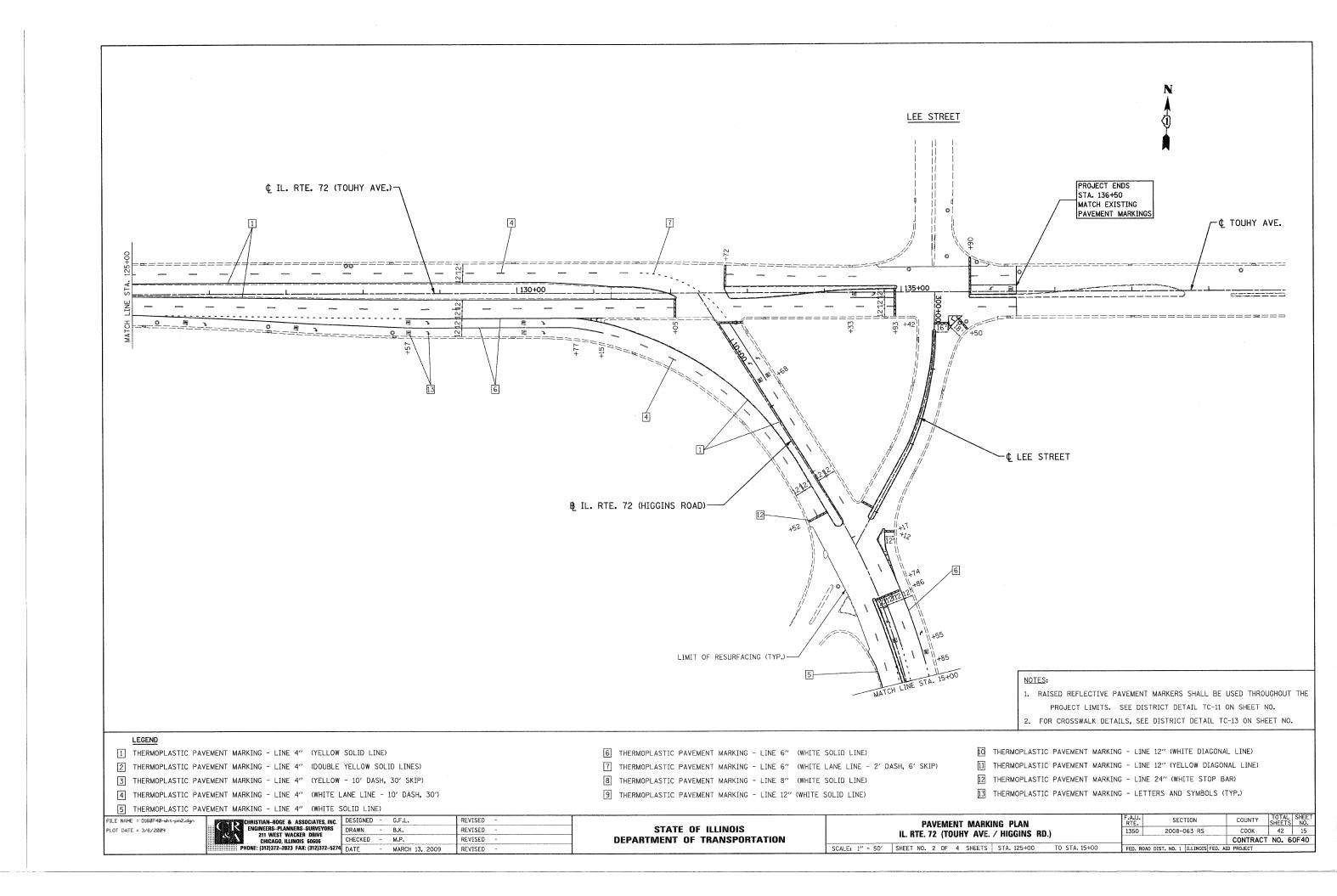


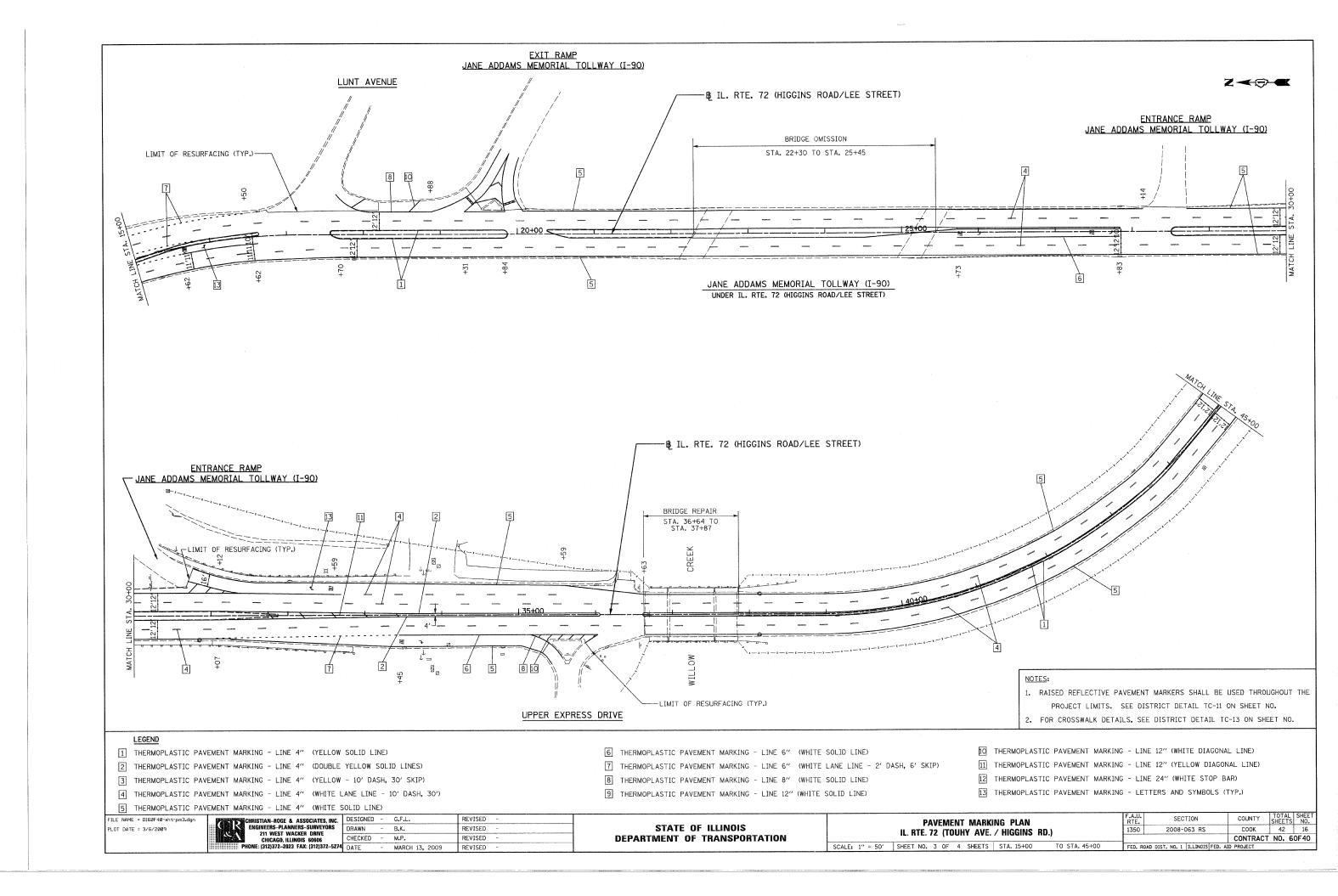


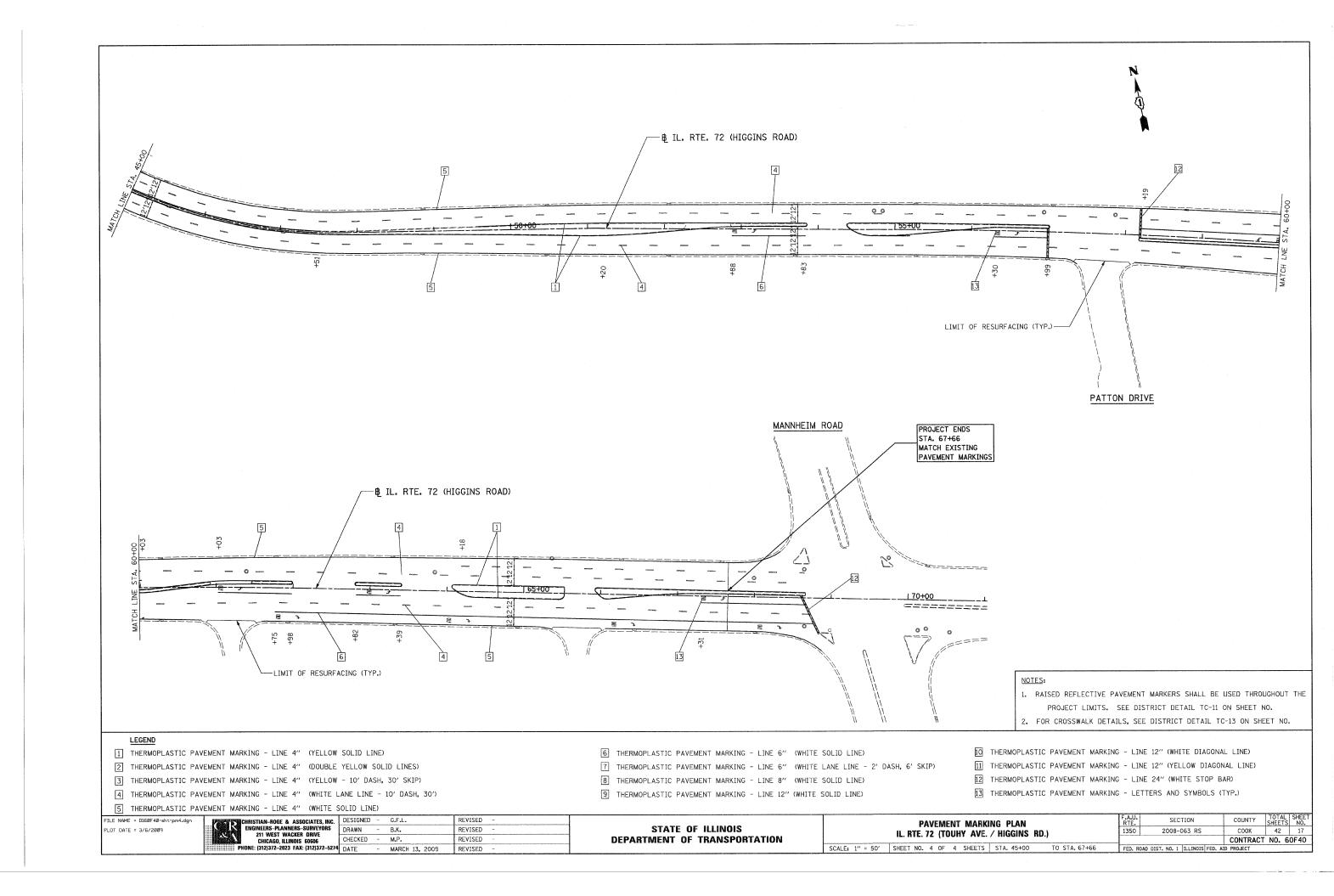


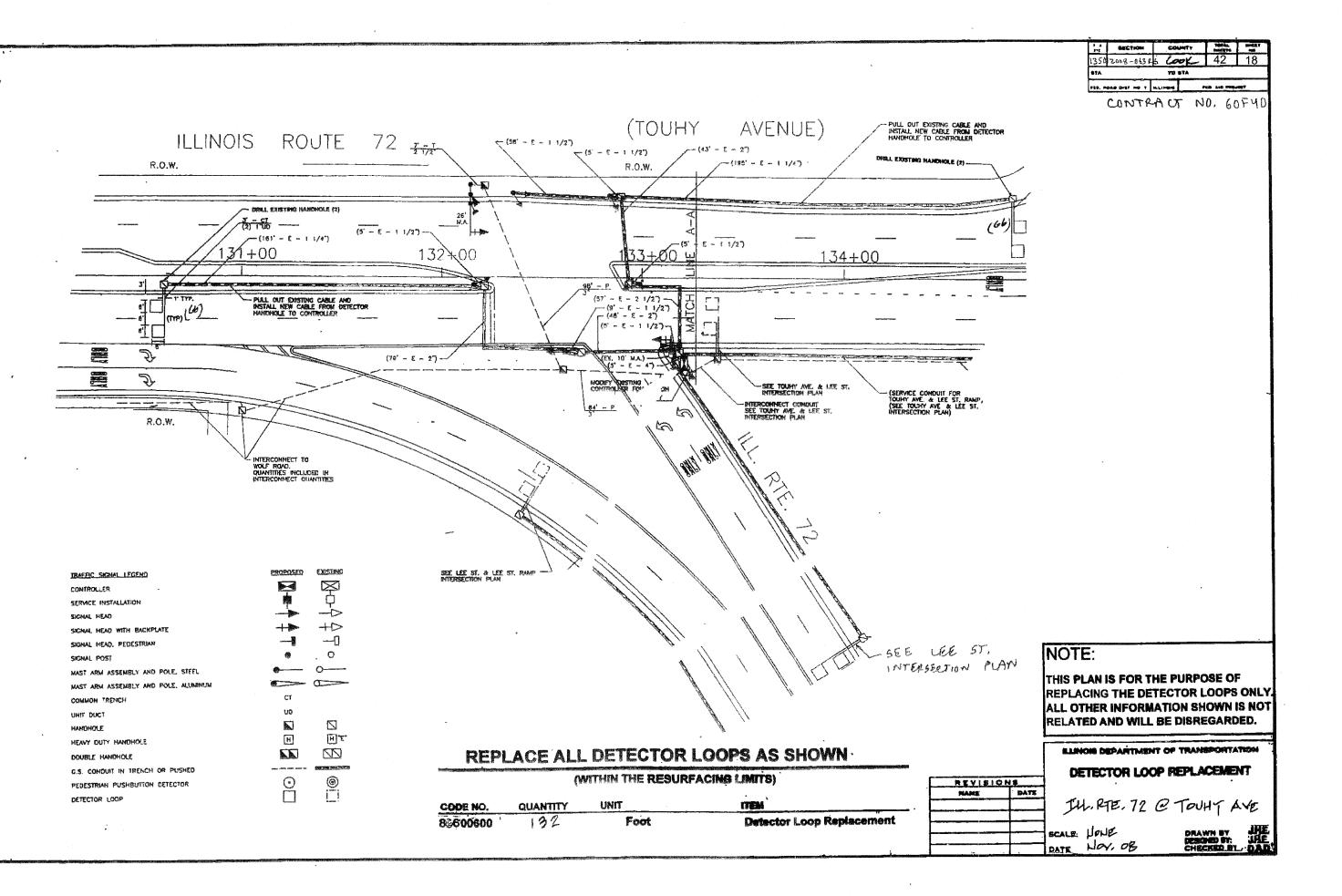


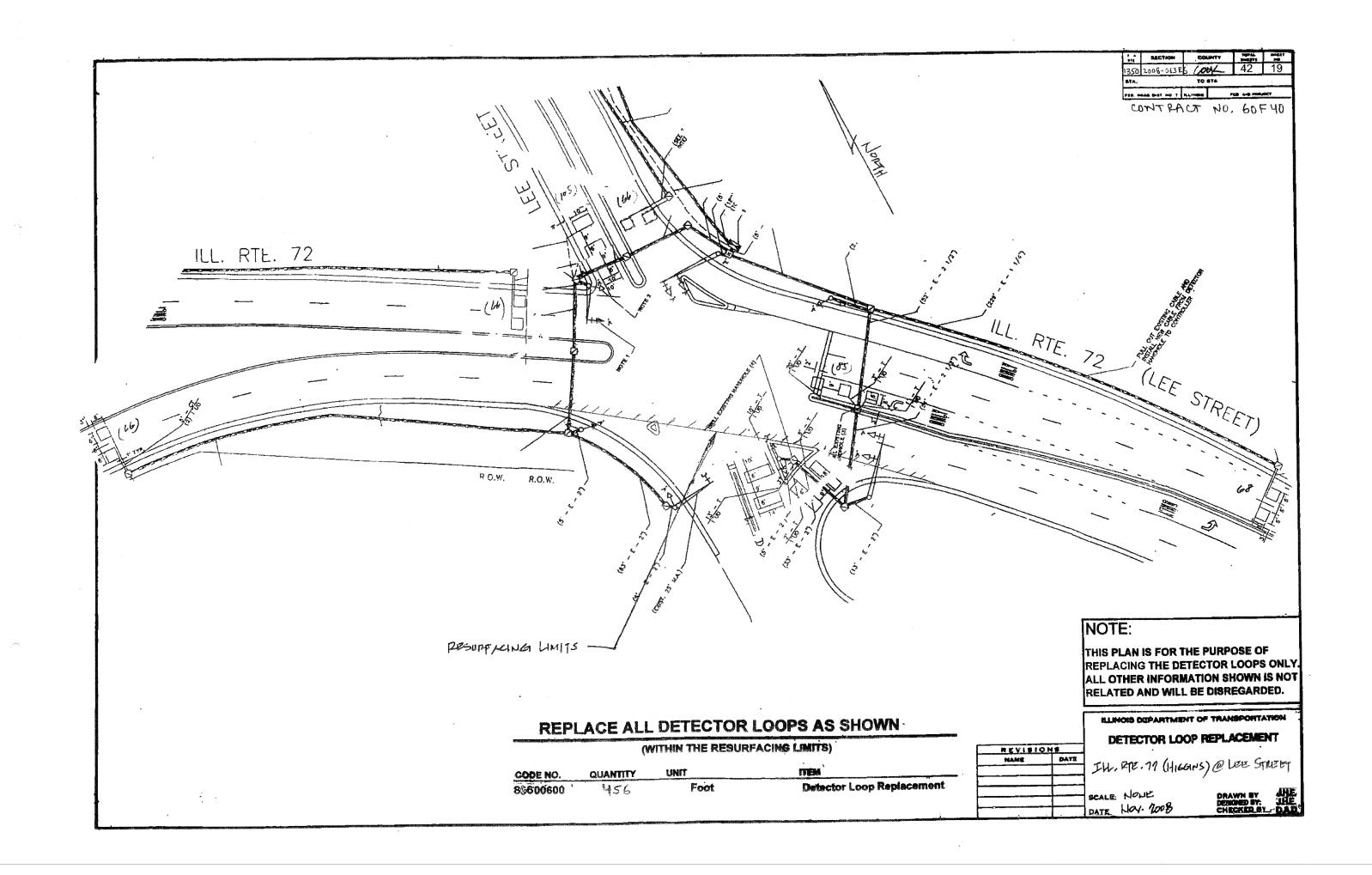


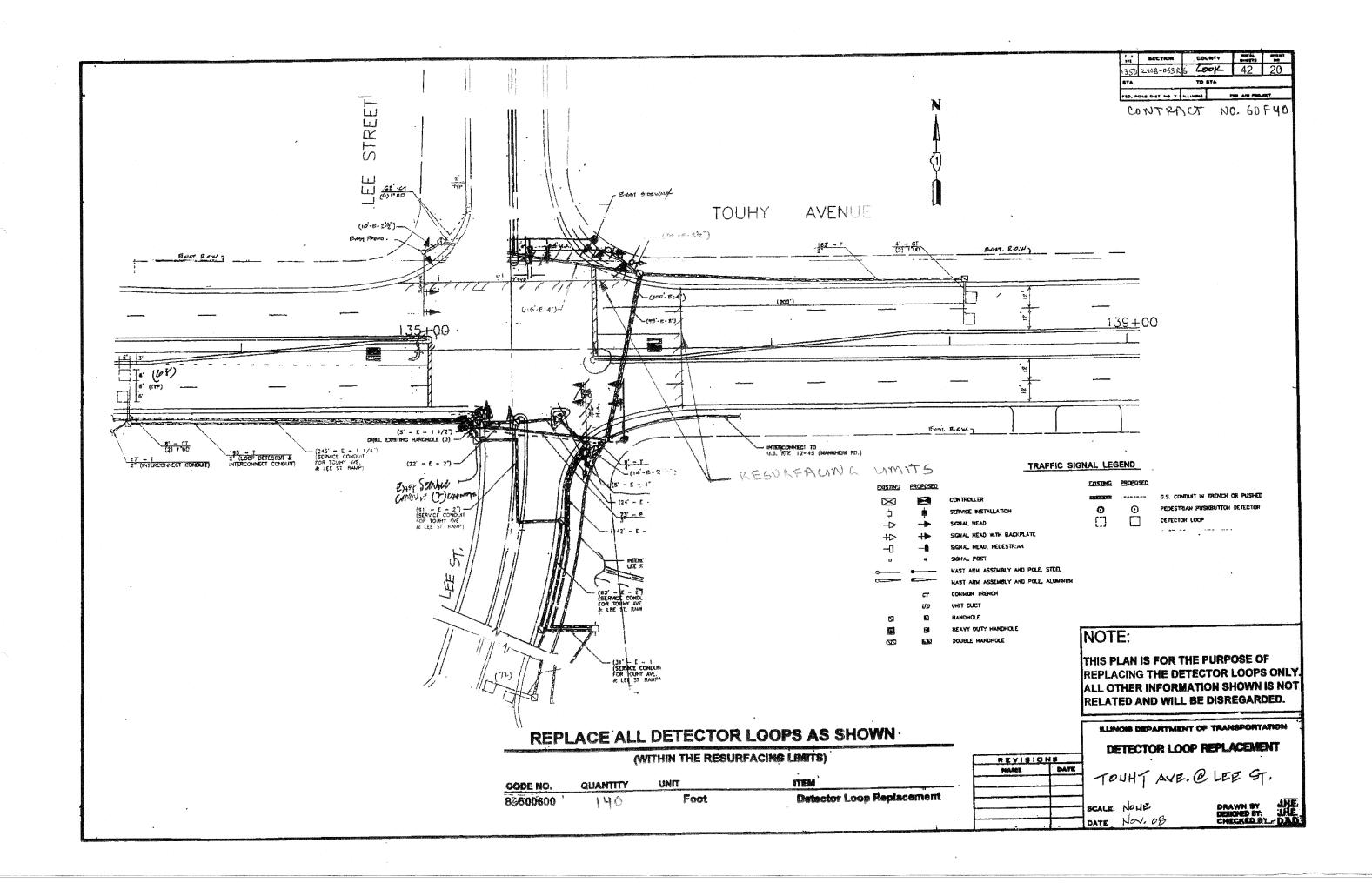


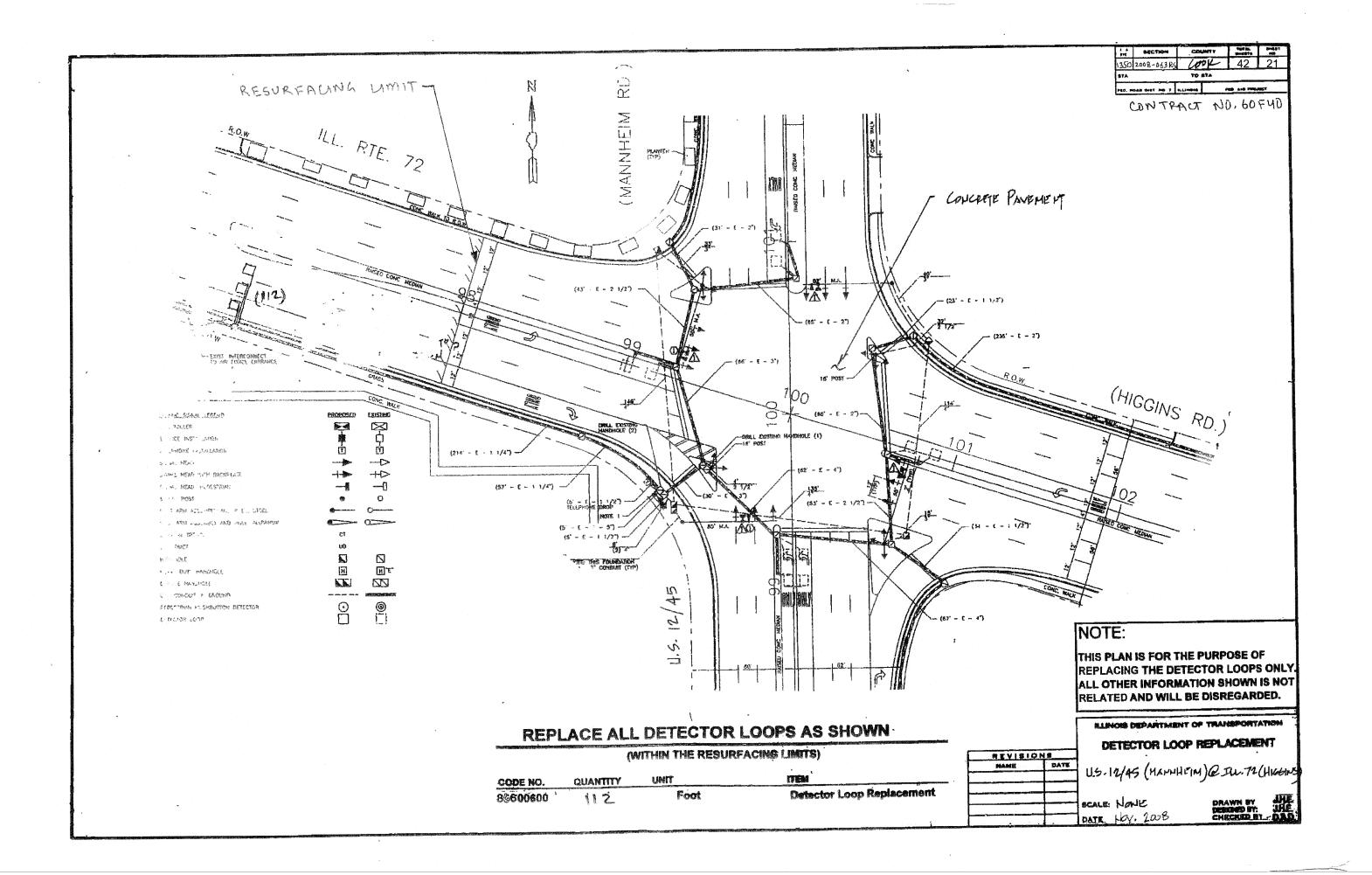


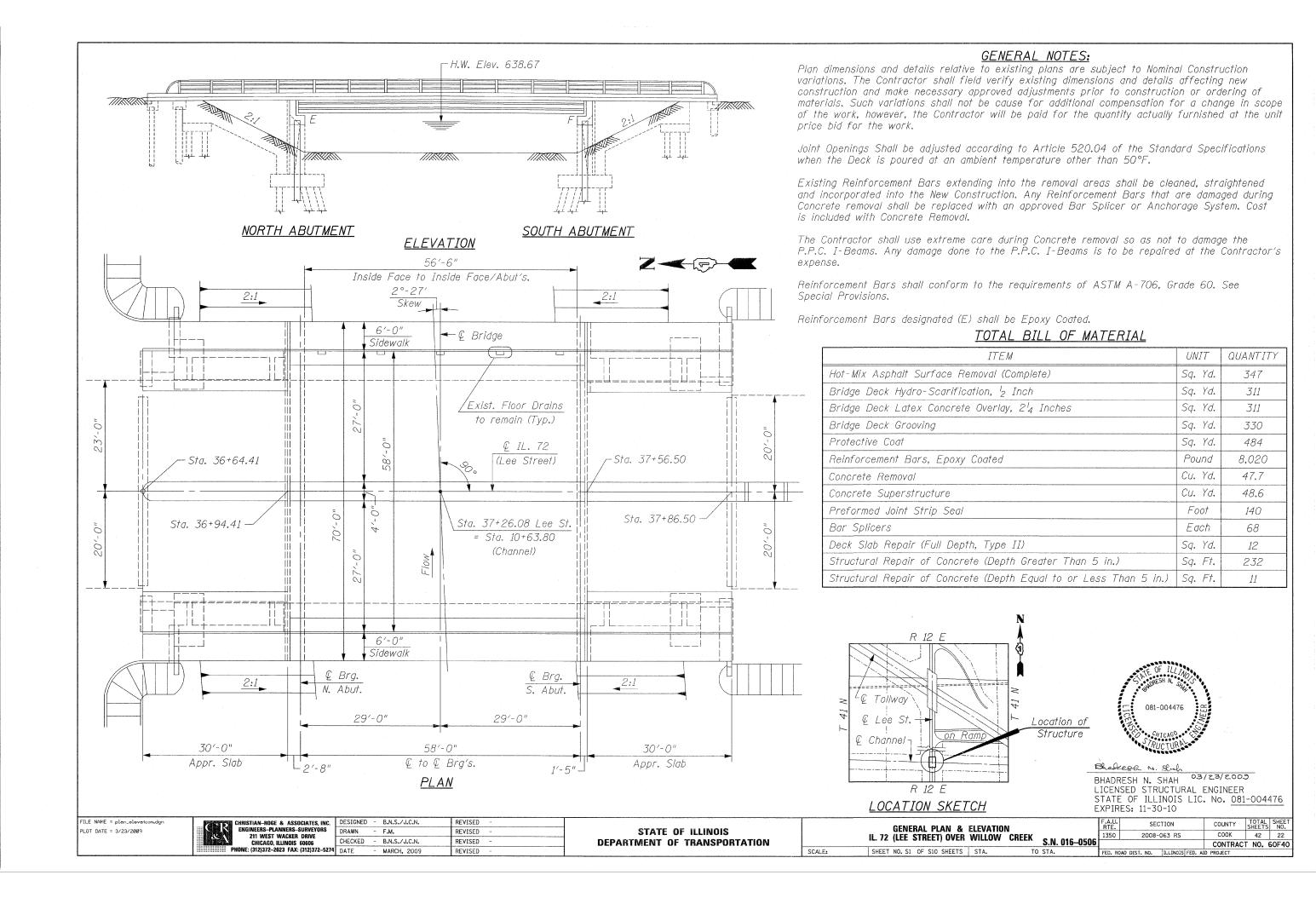


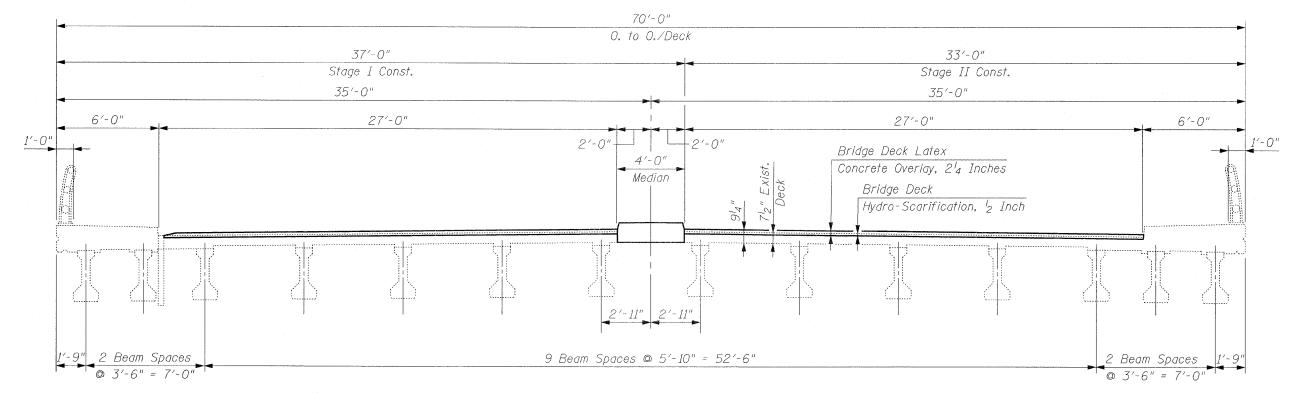




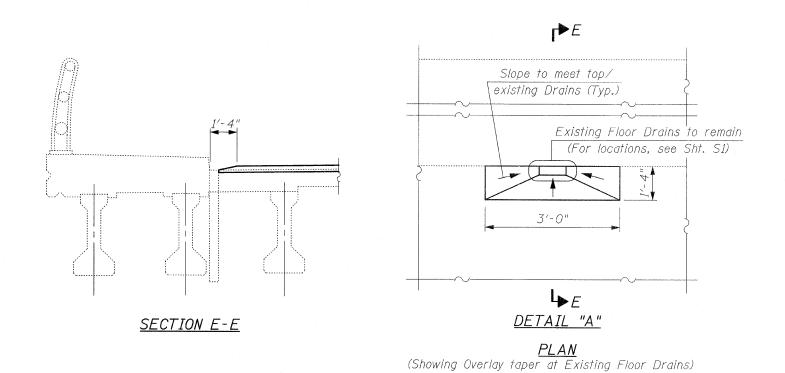








DECK CROSS SECTION (Looking South)



FILE NAME = deck_cross_section.dgn PLOT DATE = 3/23/2009 CHRISTIAN-ROGE & ASSOCIATES, INC.

ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLNOIS 60606

PHONE: (312)372-2023 FAX: (312)372-5274

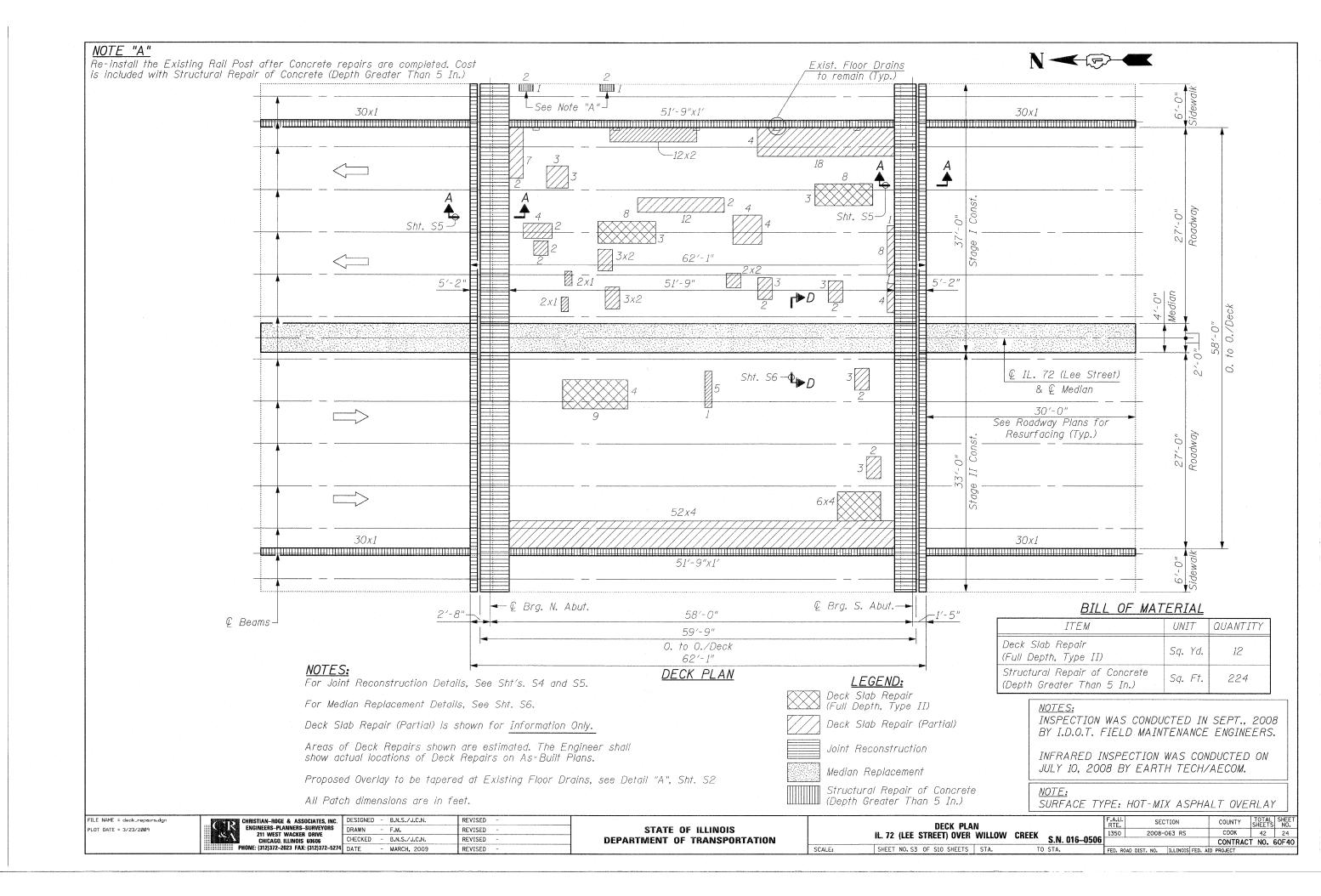
PHONE: (312)372-2023 FAX: (312)372-5274

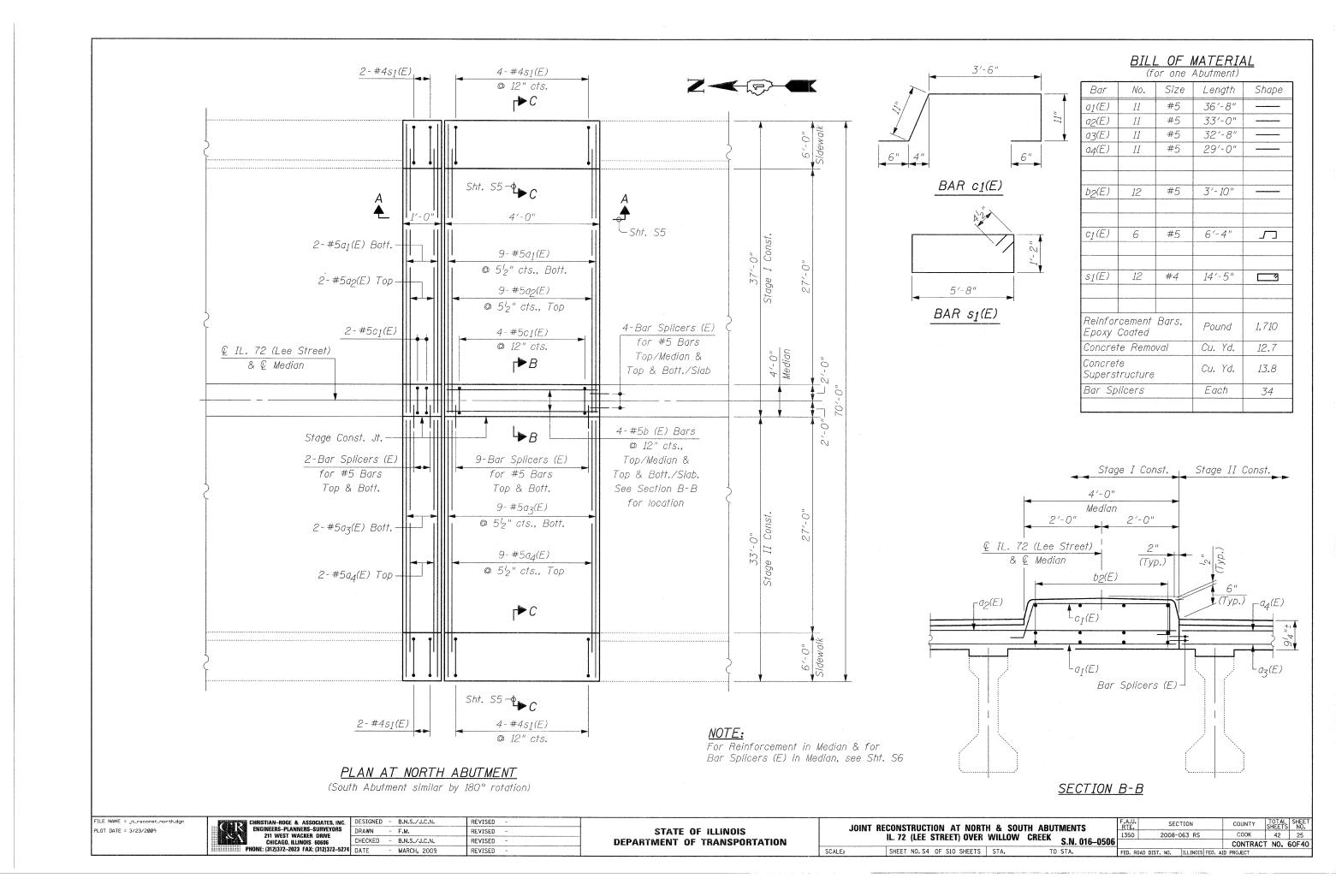
NC. DESIGNED - B.N.S./J.C.N. REVISED
DRAWN - F.M. REVISED
CHECKED - B.N.S./J.C.N. REVISED
DATE - MARCH, 2009 REVISED -

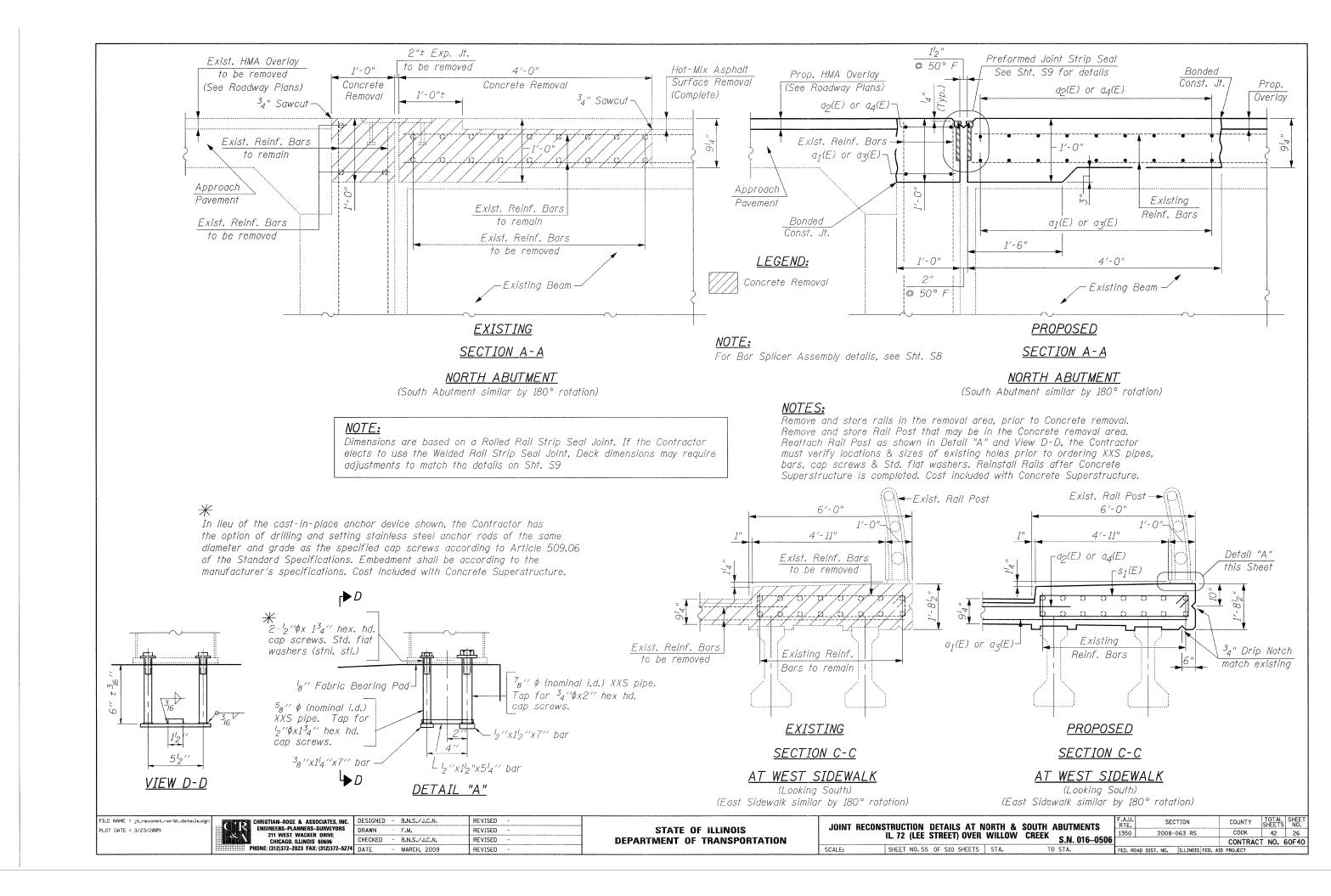
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

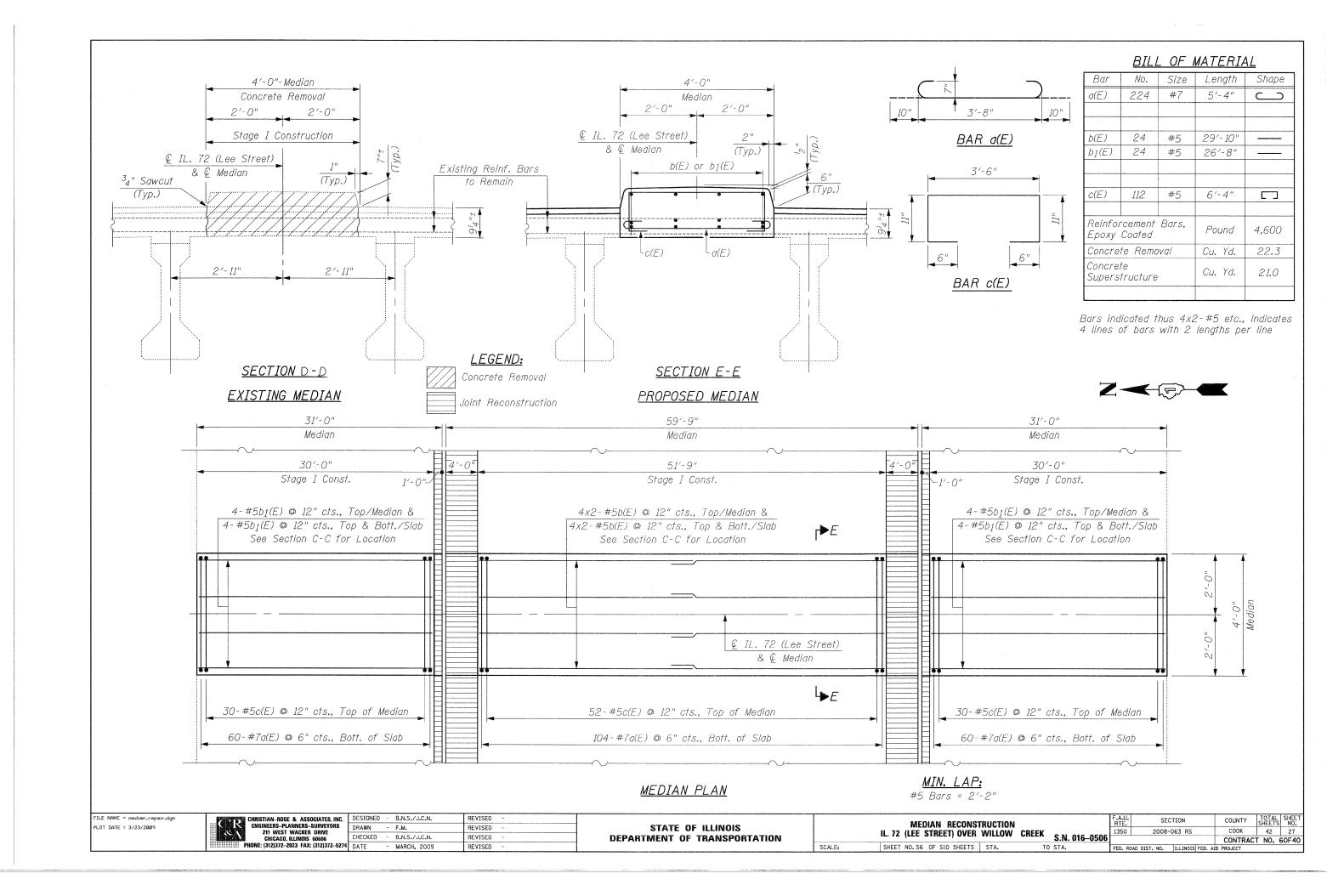
DECK CROSS SECTION
IL. 72 (LEE STREET) OVER WILLOW CREEK
S.N. 016-0506
SHEET NO. S2 OF S10 SHEETS STA. TO STA.

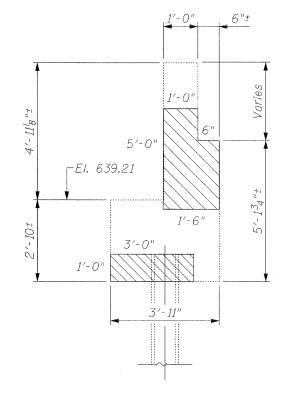
SCALE:











EXISTING

END VIEW

NORTH ABUTMENT East Side

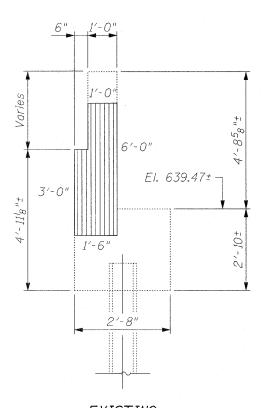
LEGEND:



Structural Repair of Concrete ☐ (Depth Equal to or Less Than 5 In.)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	11



EXISTING

END VIEW

<u>SOUTH ABUTMENT</u> East Side

LEGEND:

Structural Repair of Concrete (Depth Greater Than 5 In.)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Greater Than 5 In.)	Sq. Ft.	8

FIELD NOTE:

INSPECTION WAS CONDUCTED IN SEPT., 2008 BY I.D.O.T. FIELD MAINTENANCE ENGINEERS

FILE NAME = substructure_repair.dgn PLOT DATE = 3/23/2009

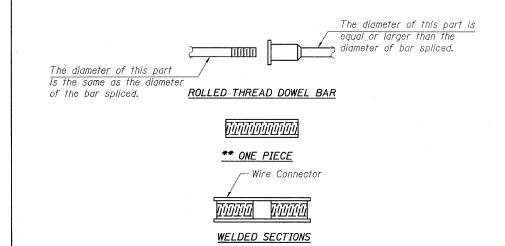
REVISED REVISED REVISED REVISED - MARCH, 2009

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE CONCRETE REPAIRS IL 72 (LEE STREET) OVER WILLOW CREEK S.N. 016-0506 SHEET NO. S7 OF S10 SHEETS STA. TO STA.

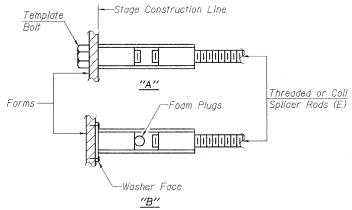
SCALE:

COUNTY TOTAL SHEETS NO.
COOK 42 28 SECTION 2008-063 RS CONTRACT NO. 60F40



BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" :Set bar splicer assembly by means of a template bolt. "B" :Set bar splicer assembly by nailing to wood forms or cementing to steel forms. (E): Indicates epoxy coating.

Approach slab

Abutment hatch block

Threaded or Coil

Loop Couplers (E)

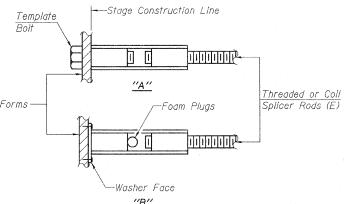
SCALE:

6'-0"

Threaded or Coil

Splicer Rods (E)

Reinforcement bars



Stage Construction Line Stage I Construction Stage II Construction Threaded or Coil Threaded or Coil Reinforcement Reinforcement Splicer Rods (E) Loop Couplers (E) Bars Bars

NOTES Bar splicer assemblies shall be of an approved type and shall develop in tension at least

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval

shall be based on certified test results from an approved testing laboratory that the proposed

BAR SPLICER ASSEMBLIES

kips - tension

14.7

23.0

33.1

45.1

58.9

75.0

95.0

117.4

Strength Requirements

Min. Capacity | Min. Pull-Out Strength

kips - tension

7.9

12.3

17.4

23.8

31.3

39.6

50.3

61.8

Bar splicer assemblies shall be epoxy coated according to the requirements for

Minimum *Pull-out Strength = $0.66 \times fy \times A_t$

 A_t = Tensile stress area of lapped reinforcement bars.

Splicer Rod or

Dowel Bar Length

1'-8'

2'-0"

2'-7"

3'-5"

4'-6'

5'-9'

7'-3"

9'-0"

Where fy = Yield strength of lapped reinforcement bars in ksi.

125 percent of the yield strength of the lapped reinforcement bars.

bar splicer assembly satisfies the following requirements:

(Tension in kips)

* = 28 day concrete

Bar Size to

be Spliced

#4

#5

#6

#7

#8

#9

#10

#11

Minimum Capacity (Tension in kips) = 1.25 x fy x A_t

STANDARD

reinforcement bars.

Bar Size	No. Assemblies Required	Location
#5	34	North Abutment
#5	34	South Abutment

BAR SPLICER ASSEMBLY DETAILS STRUCTURE NO. 016-0506

Bridge Deck Approach Slab Threaded or Coil Threaded or Coil Reinforcement Splicer Rods (E) Bars Loop Couplers (E) 4'-0" 6'-0"

FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar Min. Capacity = 23.0 kips - tension Min. Pull-out Strength = 12.3 kips - tension No. Required = -

Min.	Capacity	= 23.0	kins -	tension	- to Beat model and the
	Pull-out				

FOR STUB ABUTMENTS

BSD-1 10-1-08

FILE NAME = bar_splicer.dgr PLOT DATE = 3/23/2009

 CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS-PLANNERS-SURVEYORS	
211 WEST WACKER DRIVE	H
CHICAGO, ILLINOIS 60606	l
PHONE: (312)372-2023 FAX: (312)372-5274	Ī

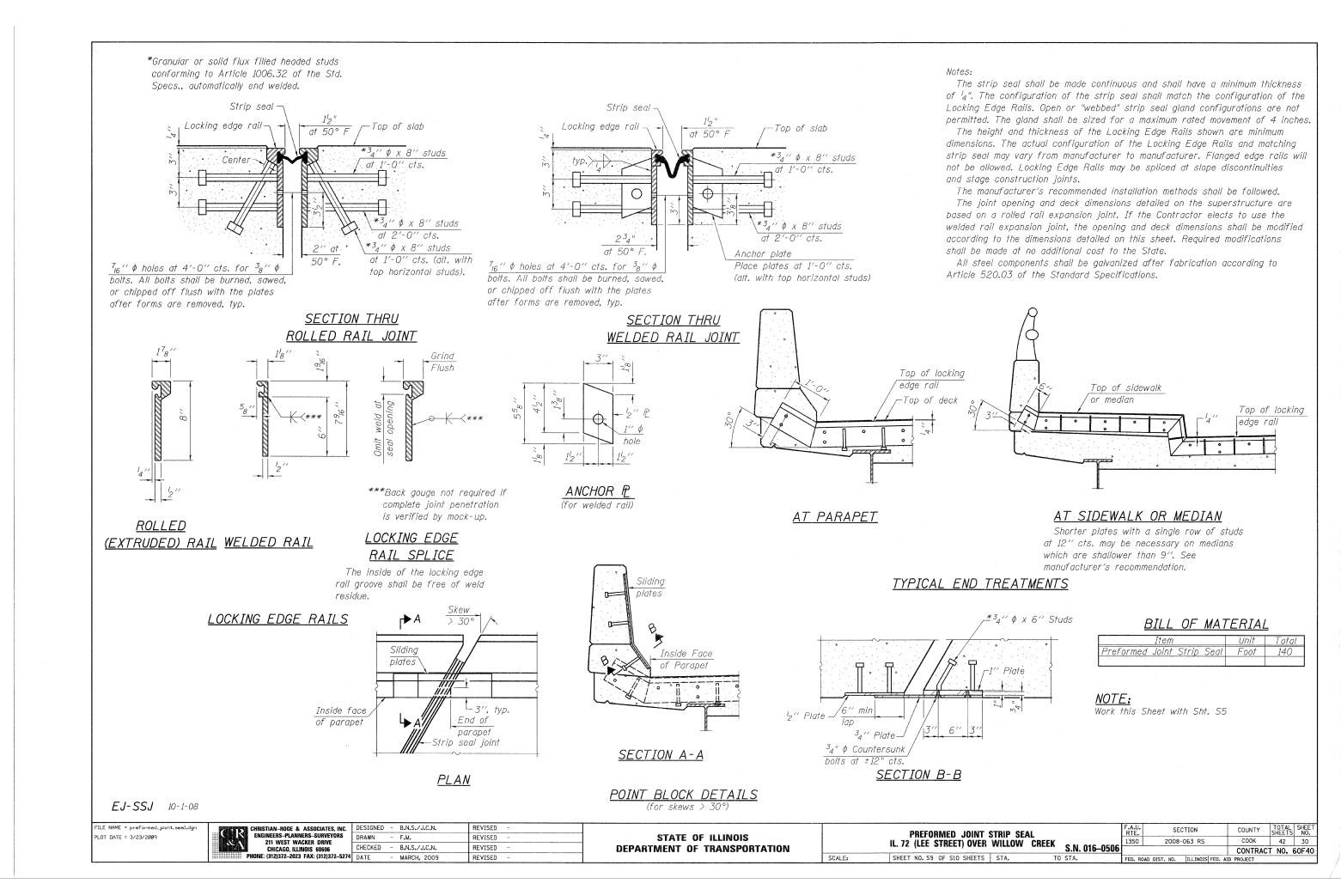
C.	DESIGNED	-	B.N.S./J.C.N.	REVISED	
•	DRAWN	-	F.M.	REVISED	
	CHECKED	-	B.N.S./J.C.N.	REVISED	res .
274	DATE	-	MARCH, 2009	REVISED	

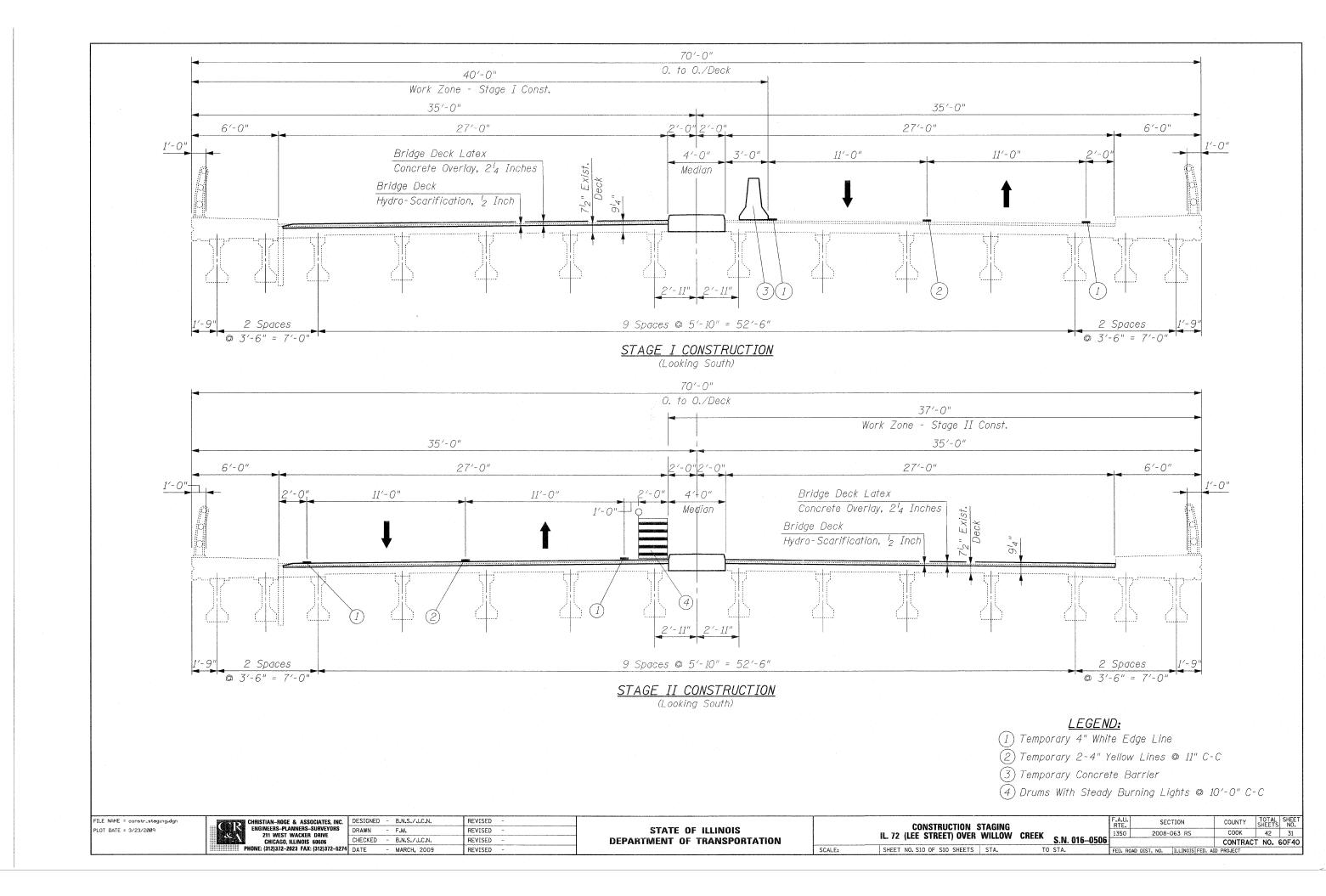
STATE OF ILLINOIS

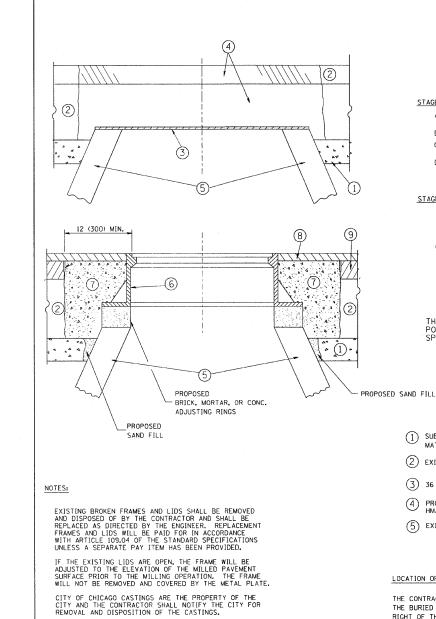
BAR SPLICER ASSEMBLY DETAILS IL. 72 (LEE STREET) OVER WILLOW CREEK S.N. 016-0506 SHEET NO. S8 OF S10 SHEETS STA. TO STA.

- [FED. RO	AD DIST. NO. ILLINOIS FED. A	ID PROJECT		
ij			CONTRAC	T NO.	60F40
.[1350	2008-063 RS	соок	42	29
	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.

DEPARTMENT OF TRANSPORTATION







THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM $1^{\prime}\!\!/_2$ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE LEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

- 1 SUB-BASE GRANULAR MATERIAL
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 7 CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 3 36 (900) DIAMETER METAL PLATE
- 8 PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX (5) EXISTING STRUCTURE

9 PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED. SPECIAL"

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

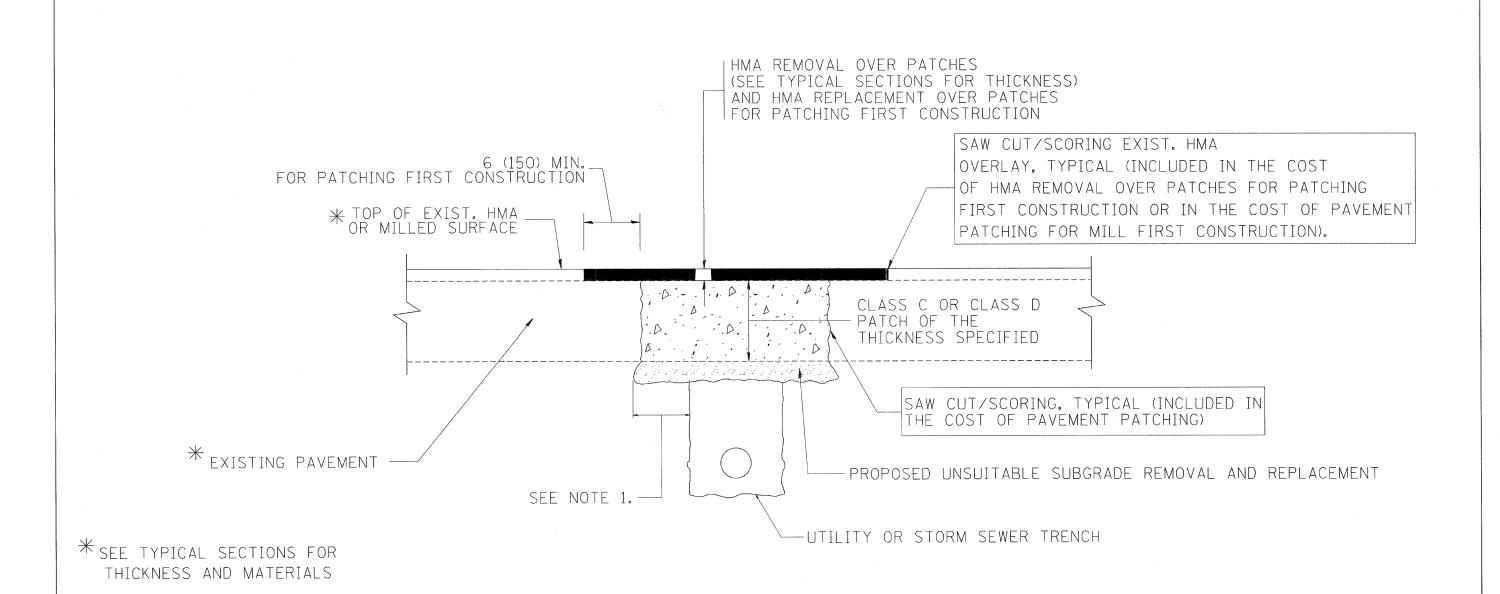
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

DESIGNED -R. SHAH REVISED - R. SHAH 03-10-95 FILE NAME = USER NAME = gaglianobt REVISED - A. ABBAS 03-21-97 W:\diststd\22x34\bd08.dgn DRAWN REVISED - R. WIEDEMAN 05-14-04 PLOT SCALE = 50,0000 ' / IN. CHECKED PLOT DATE = 1/4/2008 DATE 10-25-94 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TOTAL SHEE SHEETS NO. SECTION F.A.U. RTE. COUNTY DETAILS FOR 2008-063 RS COOK 42 32 FRAMES AND LIDS ADJUSTMENT WITH MILLING BD600-03 (BD-8) CONTRACT NO. 60F40 SHEET NO. 1 OF 1 SHEETS STA. SCALE: NONE TO STA.



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 (PATCHING FIRST)

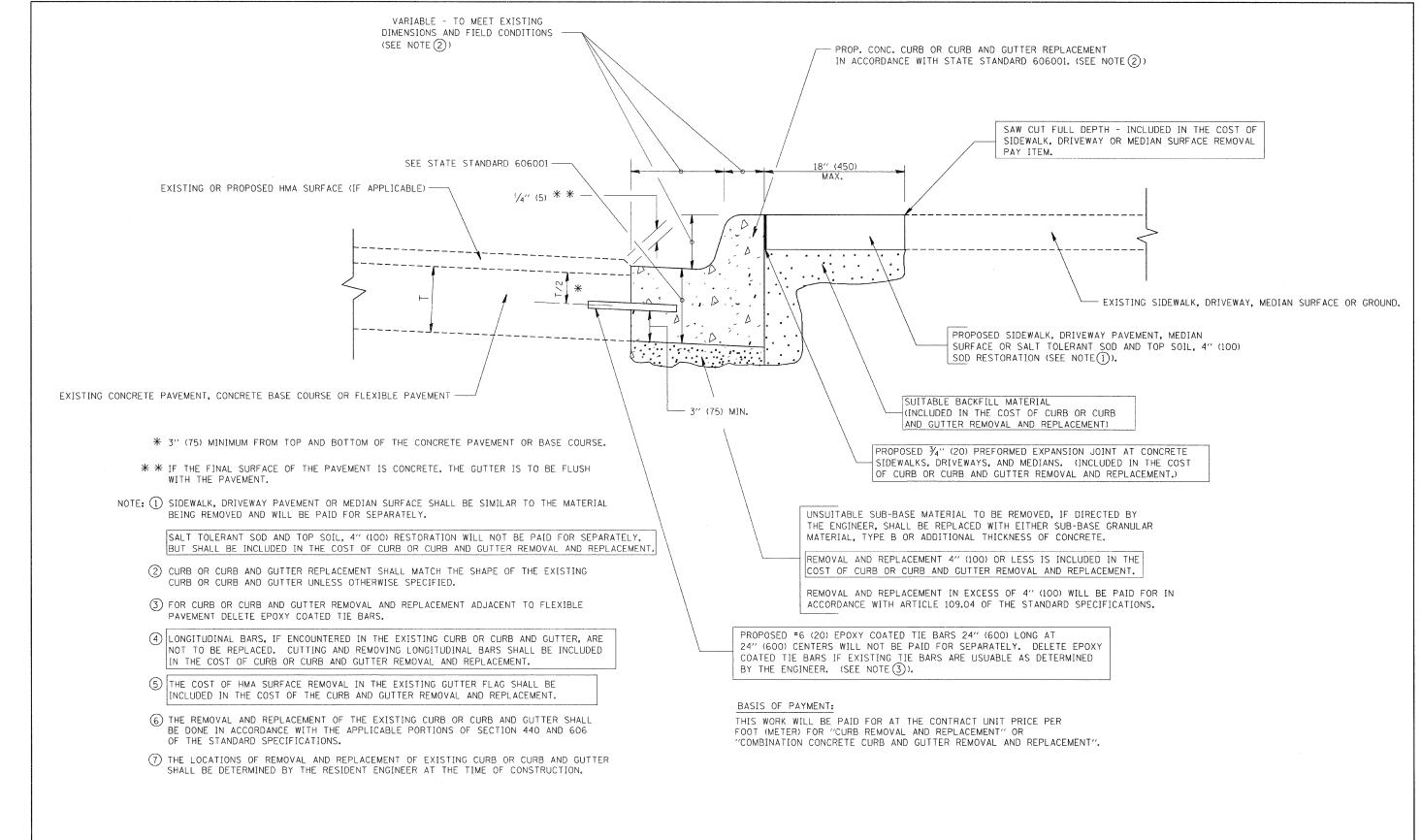
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

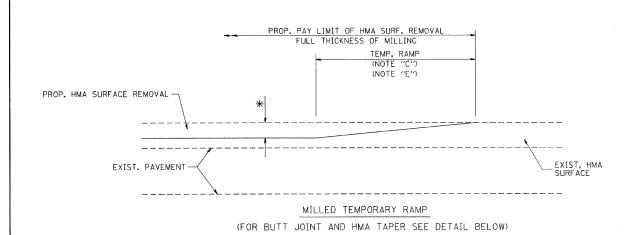
FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	FAU. SECTION	COUNTY TOTAL SHEET SHEETS NO.
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS	HMA SURFACED PAVEMENT	1350 2008-063 RS	COOK 42 33
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION		BD400-04 (BD-22)	CONTRACT NO. 60F40
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	NID PROJECT



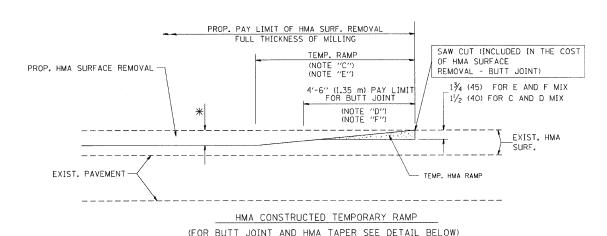
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96		CURB OR CURB AND GUTTER	FAU. SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		1350 2008-063 RS	COOK 42 34
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT	BD600-06 (BD-24)	CONTRACT NO. 60F40
	PLOT DATE = 1/4/2008	DATE - 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	. AID PROJECT

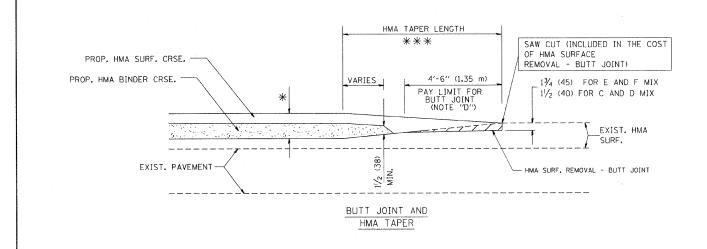


OPTION 1



OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

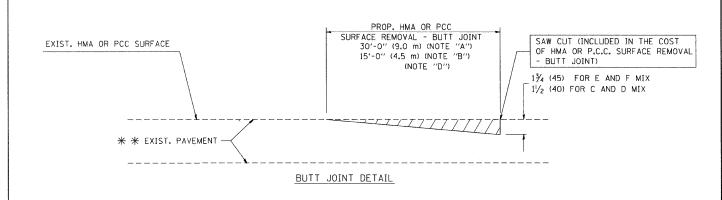
File NAME = USER NAME = goglianobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94

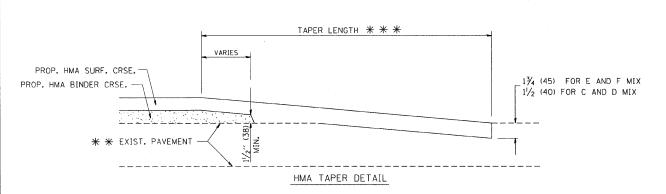
Wikdistatd/22x34\bd32.dgn
PLOT SCALE = 50.0000 // IN. CHECKED - REVISED - A. ABBAS 03-21-97

PLOT DATE = 1/4/2008 DATE - 06-13-90 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| RTE | SECTION | COUNTY | SHEET | SHE





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

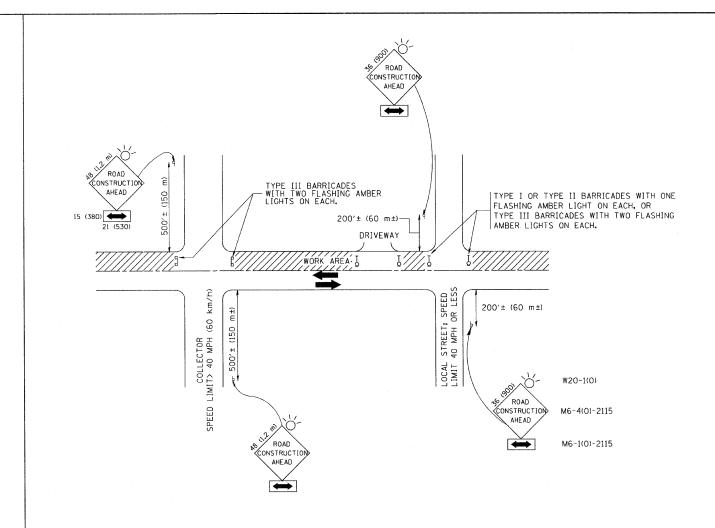
NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- * * * * 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN,



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

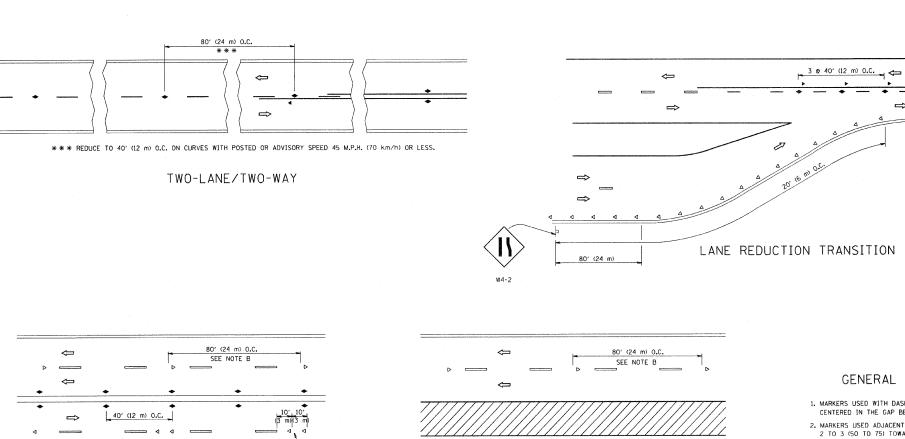
- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- 0) ONE ROAD CONSTRUCTION AHEAD SIGN 36×36 (900×900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
 BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF
 THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 48 × 48 (1.2 m × 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 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 SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED	-	LHA	REVISED	-	J. OBERLE 10-18-9	15
W:\diststd\22x34\tc10.dgn		DRAWN	-		REVISED		A. HOUSEH 03-06-	96
_	PLOT SCALE = 50.000 '/ IN.	CHECKED	-		REVISED	-	A. HOUSEH 10-15-9	36
	PLOT DATE = 1/4/2008	DATE	-	06-89	REVISED	-T.	RAMMACHER 01-06	3-00

	TRAFFIC CONTR	OL AND P	ROTECTIO	N FOR	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				1350	2008-063 RS	COOK	42	36	
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS						TC-10	CONTRACT	NO. 60	F40
SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		



MULTI-LANE/DIVIDED

GENERAL NOTES

- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

--- YELLOW STRIPE

SEE NOTE A-

TWO-WAY LEFT TURN

SEE NOTE B

40' (12 m) O.C.

f f

- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)

DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

l_____

MINIMUM OF 3 W EQUALLY SPACED ___ 3 @ 80' (24 m) O.C. 3 @ 40' (12 m) \Rightarrow \Rightarrow * SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE * * WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

 \Rightarrow

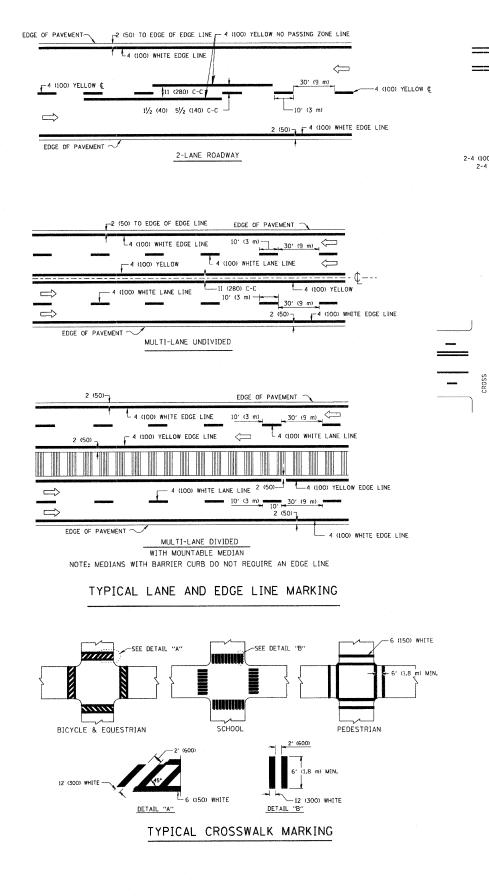
MULTI-LANE/UNDIVIDED

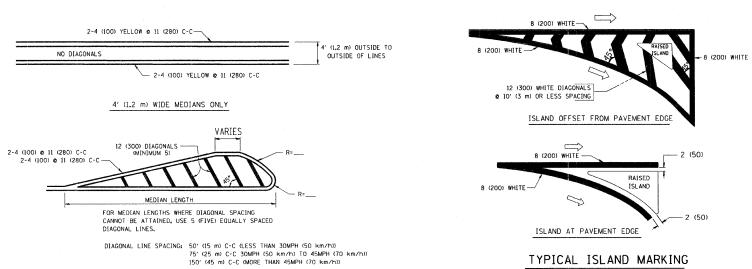
LEFT TURN

All dimensions are in inches (millimeters)

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.U. SECTION	COUNTY TOTAL SHEET SHEETS NO.
W:\diststd\22x34\to11.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	1350 2008-063 RS	COOK 42 37
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION		TC-11	CONTRACT NO. 60F40
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST, NO. 1 ILLINOIS FI	ED. AID PROJECT

SEE NOTE A





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 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 e 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (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 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (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 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 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: "R"=3.6 SO. FT. (0.33 m²) EACH "X"=54.0 SO. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) & 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) T0 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) unless otherwise shown.

COUNTY TOTAL SHEETS NO. COOK 42 38

CONTRACT NO. 60F40

COUNTY

TYPICAL TURN LANE MARKING

TYPICAL LEFT (OR RIGHT) TURN LANE

FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²) \ref{MLY} AREA = 20.8 SO. FT. (1.9 m²)

* 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".

MEDIANS OVER 4' (1.2 m) WIDE

-2-4 (100) YELLOW 6 11 (280) C-C

MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

-25' (8 m) TO 49' (15 m)

OVER 200' (60 m)

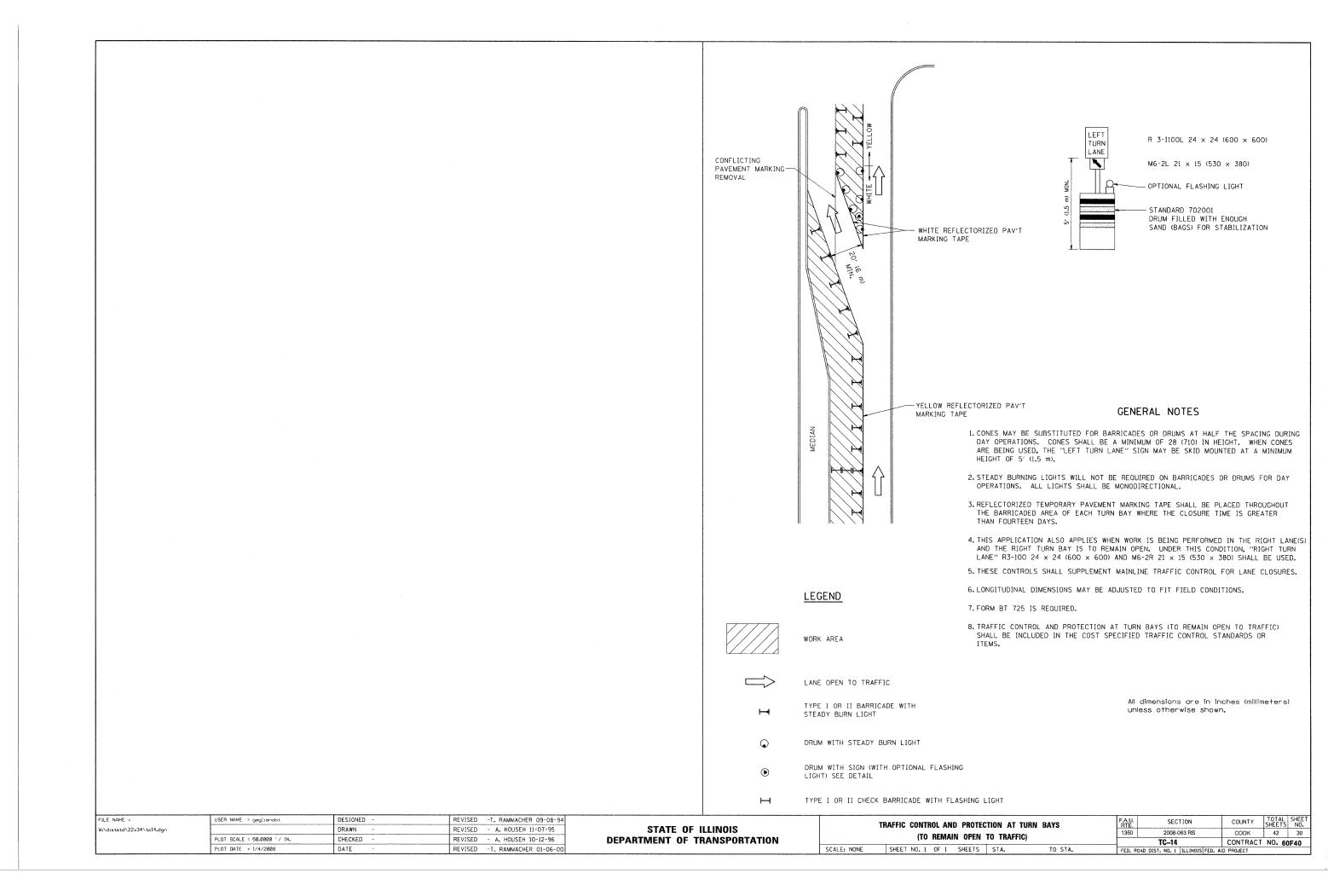
___ 50' (15 m) TO 200' (60 m) ** 16' (5 m) 10' (3 m) HITE

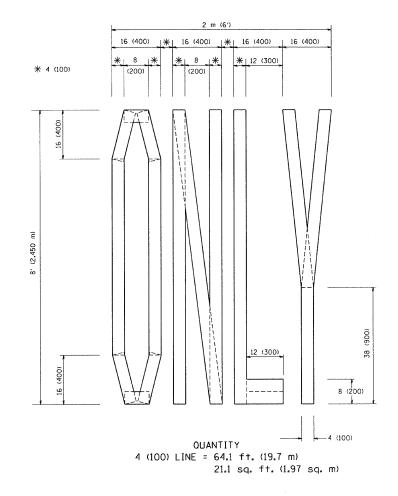
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

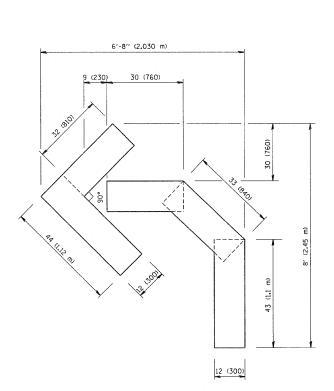
-4 (100) YELLOW LINES (51/2 (140) C-C)

4 (100) YELLOW LINES (51/2 (140) C-C)

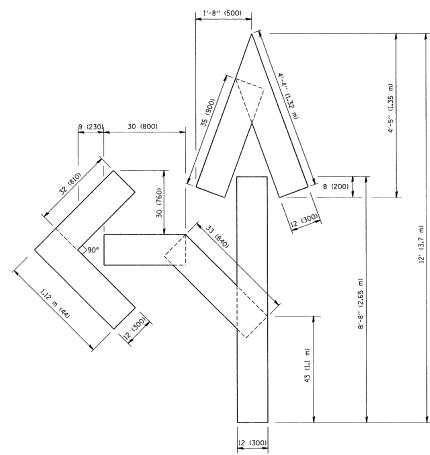
FILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE	F.A.U. RTE.	SECTION
W:\diststd\22x34\tc13.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96	STATE OF ILLINOIS	TYPICAL PAVEMENT MARKINGS	1350	2008-063 RS
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96	DEPARTMENT OF TRANSPORTATION	ITPICAL PAVEMENT MARNINGS		TC-13
·.	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FE







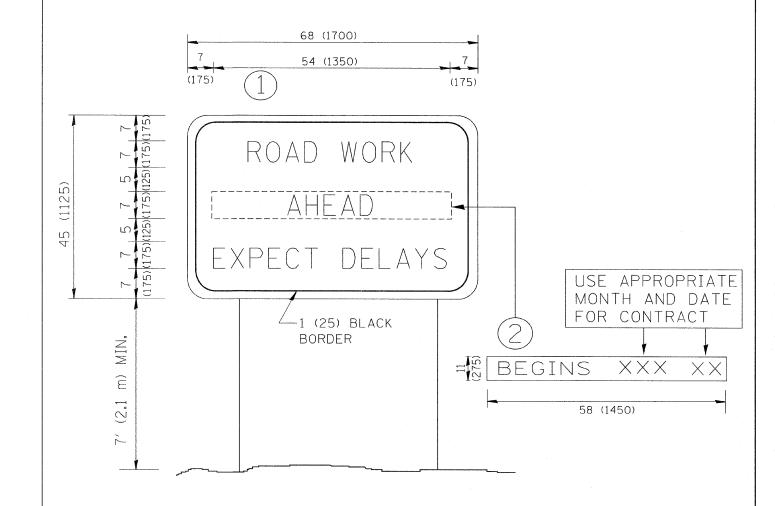
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



OUANTITY 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.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96			PAVEMENT MARKING LETTERS AND SYMBOL	S	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
W:\diststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS	FOR TRAFFIC STAGING			1350	2008-063 RS	соок	42 40
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION				TC-16	CONTRACT	T NO. 60F40	
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED.	AID PROJECT	

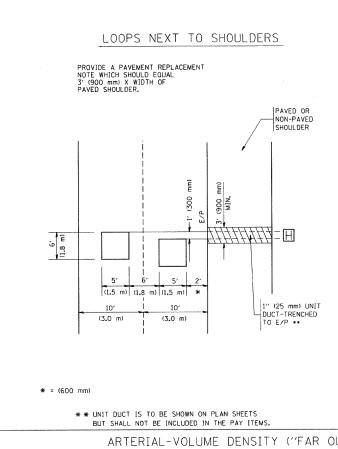


NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

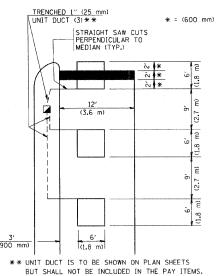
FILE NAME =	USER NAME = gægljanobt	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD	F.A.U.	SECTION	COUNTY TOTAL SHEET
W:\distatd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS	INFORMATION SIGN	1350	2008-063 RS	COOK 42 41
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	THE CHARACTER COLUMN		TC-22	CONTRACT NO. 60F40
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FE	D. AID PROJECT



<u>LEFT TURN LANES WITH MEDIANS</u> 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 MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.

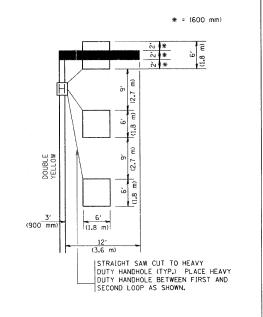


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

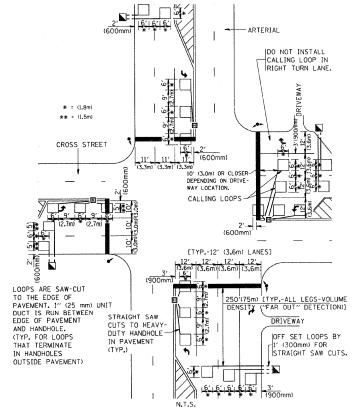
(PROTECTED / PERMITTED LEFT TURN PHASING)

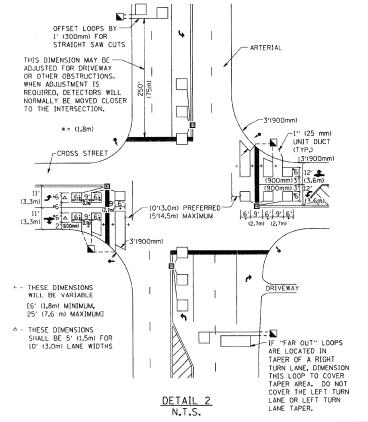


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

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





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. <u>EACH</u> ONE OF THESE TYPE OF LOOPS REQUIRES A <u>SEPARATE</u> TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A <u>SEPARATE</u> 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 1.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.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

COUNTY

COOK

42

CONTRACT NO. 60F40

	· · · · · · · · · · · · · · · · · · ·		
FILE NAME :	USER NAME = gaglianobt	DESIGNED -	REVISED -
W:\diststd\22x34\ts07.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

1	DISTRICT 1 - DETECTOR LOOP INSTALLATION		SECTION	
١	DETAILS FOR ROADWAY RESURFACING		1350	2008-063 RS
	DEIAILS FUN HUADVVAT NESUNTACING	TS-07		
ı	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. R	DAD DIST, NO. 1 ILLINOI	