04-22-2016 LETTING ITEM 152 SCHAUMBURG, FOR INDEX OF SHEETS, SEE SHEET NO. 2 705-4021 (847) TRAFFIC DATA **EXISTING ADT** = 5,350 (2014) PTOE SPEED LIMIT: P.E. 25 MPH (POSTED) AQUEEL, **DESIGN DESIGNATION MAJOR COLLECTOR ENGINEER: FAWAD** PROGRAM AID FEDERAL ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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STATE OF ILLINOIS

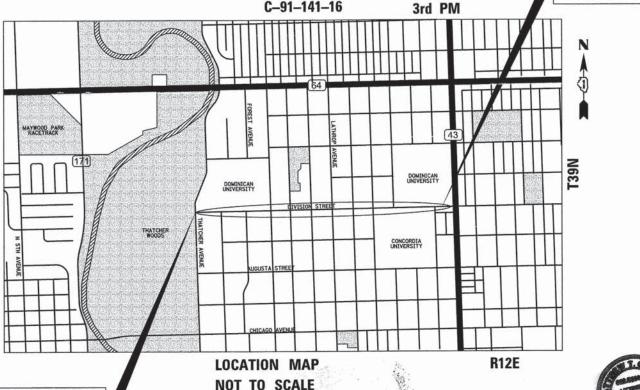
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU ROUTE 1394 (DIVISION STREET)
THATCHER AVENUE TO HARLEM AVENUE
RESURFACING
SECTION 15-00098-00-RS

PROJECT M-4003(623) VILLAGE OF RIVER FOREST

COOK COUNTY C-91-141-16 END IMPROVEMENT STA 59+33.00



GROSS LENGTH = 5,438 FT. = 1.03 MILE

NET LENGTH = 5,438 FT. = 1.03 MILE

ALINOS

Bollinger, Lach & Associates, Inc.
333 PIERCE ROAD SUITE 200 ITASCA, IL 60143
P(630) 438 6400 P(630) 438 6444 www.bollingerlach.com
LLINOIS * INDIANA * WISCONSIN

STA 4+95.00

BEGIN IMPROVEMENT

MATTHEW CESARIO
ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062.066160
MY LICENSE EXPIRES ON 11-30-17.

DATE

1-21-2016

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

VILLAGE OF RIVER FOREST

District One Engineer of Local Roads & Streets

Deputy Director of Highways, Region One Engineer

FEBRUARY 9, 2016

LOCATION OF SECTION INDICATED THUS: - -

COOK

ILLINOIS CONTRACT NO. 61C47

15-00098-00-RS

CONTRACT NO. 61C47

1-800-892-0123

OR 811

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

INDEX OF SHEETS

1 COVER SHEET
2 INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS
3-6 SUMMARY OF QUANTITIES
7-8 TYPICAL SECTIONS
9 SCHEDULE OF QUANTITIES
10 ALIGNMENT, TIES, AND BENCHMARKS
11-16 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN
17-21 ADA RAMP DETAILS

EXISTING LOOP DETECTOR PLANS (INFORMATION ONLY)

DISTRICT DETAILS

DISTRICT DETAILS

22-30

31

BD-8	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
BD-22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
BD-32	BUTT JOINT AND HMA TAPER DETAILS
TC-10	TRAFFIC CONTROL & PROTECTION FOR SIDE ROADS, INTERSECTIONS, & DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TC-22	ARTERIAL ROAD INFORMATION SIGN
TS-05	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
TS-07	DIST 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS	
001006	DECIMAL EQUIVALENTS OF AN INCH-FOOT	
280001-07	TEMPORARY EROSION CONTROL SYSTEMS	
424001-08	PERPENDICULAR CURB RAMPS FOR SIDEWALKS	
424016-02	MID-BLOCK CURB RAMPS FOR SIDEWALKS	
442201-03	CLASS C AND D PATCHES	
606001-06	CONCRETE CURB TYPE B COMBINATION CURB AND GUTTER	
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24' FROM EDGE OF PVMT	
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS	
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY	
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED	
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION	
701801-06	SIDEWALK, CORNER, OR CROSSWALK CLOSURE	
701901-05	TRAFFIC CONTROL DEVICES	
780001-05	TYPICAL PAVEMENT MARKINGS	
886001-01	DETECTOR LOOP INSTALLATION	
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS	

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016 (HEREIN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS; THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED APRIL 1, 2016; THE LATEST EDITION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS; THE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION; THE DETAILS IN THE PLANS; AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123
 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOURS
 NOTIFICATION IS REQUIRED.
- 4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH LOCAL EMERGENCY SERVICES AND THE VILLAGE OF RIVER FOREST USING THE FOLLOWING TELEPHONE NUMBERS:

POLICE DEPARTMENT: (708 366-7125

FIRE DEPARTMENT: (708 366-7629

- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL EXISTING AND PROPOSED UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS, IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
- 6. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE, AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
- 7. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS AND REFERENCE MARKERS UNTIL THE OWNER, OWNER'S REPRESENTATIVE, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- 8. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY, PRIOR TO ACCEPTANCE OF IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS, THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF IN FT FILTERS.
- 9. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE OR VILLAGE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT OR THE VILLAGE.
- 10. THE CONTRACTOR SHALL MAINTAIN EXISTING SIDE STREET ACCESS, EXISTING DRIVEWAY ACCESS AND PEDESTRIAN ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT UNLESS OTHERWISE NOTED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 11. NITROGEN FERTILIZER, POTASSIUM FERTILIZER, AND PHOSPHORUS FERTILIZER NUTRIENTS SHALL BE PLACED OVER SODDING AT THE RATE OF 60 POUNDS PER ACRE.
- 12. SAW CUTTING OF CURB AND GUTTER SHALL BE FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM BEING REMOVED.
- 13. THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS IS NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASES ON WHICH THE HOT-MIX ASPHALT MIXTURES ARE TO BE PLACED.
- 14. PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACE AND TOP OF CURB, SIDEWALKS, AND AS DIRECTED BY THE ENGINEER.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING FRESH CONCRETE FROM DAMAGE AND VANDALISM. ANY DAMAGED OR VANDALIZED CONCRETE SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- 16. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MATCHING SHALL NOT EXCEED 1-1/2" WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1" WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH, WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3" MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- 17. BUTT JOINT WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE DISTRICT DETAIL "BUTT JOINT AND BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 18. FOR CLASS D PATCHING, CONTRACTOR SHALL MILL BEFORE PATCHING AS DIRECTED BY THE ENGINEER.
- 19. ALL ELEVATIONS ARE ON THE U.S.G.S. DATUM NAVD 88.

- 20. ALL OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS FOR ADA RAMPS, PAVEMENT MARKINGS, ETC. ARE FROM THE CENTERLINE AS SHOWN ON THE PLANS.
- 21. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 22. THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE IMPROVEMENT.
- 23. SUPPLEMENTAL WATERING SHALL BE PERFORMED WHEN DIRECTED BU THE ENGINEER AT A RATE OF 10 GAL PER SQ YD FOR SODDED AREAS.
- 24. TEMPORARY INFORMATION SIGNING AND CHANGEABLE MESSAGE SIGNS SHALL BE PLACED AT PROJECT LIMITS AND INTERSECTIONS, OR AS DIRECTED BY THE ENGINEER, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- 25. ACTUAL LOCATION AND SIZE OF BASE PATCHES WILL BE DETERMINED IN THE FIELD. NO COMPENSATION WILL BE ALLOWED FOR UNUSED PATCHING QUANTITIES.
- 26.TREE ROOT PRUNING SHALL BE USED WHERE NECESSARY IN AREAS OF PROPOSED SIDEWALK AS DIRECTED BY THE ENGINEER.
- 27. CONTRACTOR SHALL USE CAUTION WHEN WORKING NEAR AND UNDER OVERHEAD UTILITY FACILITIES.

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	DRAWN -	MTC	REVISED -	
PLOT SCALE = \$SCALE\$	CHECKED -	KEK	REVISED -	
PLOT DATE = \$DATE\$	DATE -	1/25/2016	REVISED -	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005 S.N.
NO.	TIEW	DIVIT	GOANTITI	3.14.
20101200	TREE ROOT PRUNING	EACH	10	10
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	246	246
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	3	3
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	3	3
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	3	3
25100630	EROSION CONTROL BLANKET	SQ YD	246	246
25200110	SODDING, SALT TOLERANT	SQ YD	246	246
25200200	SUPPLEMENTAL WATERING	UNIT	2	2
28000510	INLET FILTERS	EACH	45	45
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	980	980
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	23027	23027
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	8	8
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	1075	1075
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	282	282

* SPECIALTY ITEM



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STATE	0	FILLINOIS
DEPARTMENT	0F	TRANSPORTATION

	DIVISION	STREE	r –	VILLAGE	OF RIVER	FOREST	F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
		CHIMANA	ADV	05 011	ANTITIES	1394	15-00098-00-RS	COOK	31	3	
		SUIVIIV	Anı	טר עט	ANTITIES				CONTRAC	T NO. 1	51C47
SCALE: N.T.S.	SHEET 1	OF	4	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

CONSTR. CODE

			1	
				5015W1
				ROADWAY
CODE		1	TOTAL	0005
NO.	ITEM	UNIT	QUANTITY	S.N.
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	2149	2149
				VV
42001300	PROTECTIVE COAT	SQ YD	1218	1218
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	8815	8815
42400800	DETECTABLE WARNINGS	SQ FT	803	803
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	25304	25304
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1074	1074
44000600	SIDEWALK REMOVAL	SQ FT	8659	8659
44201737	CLASS D PATCHES, TYPE I, 8 INCH	SQ YD	512	512
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	768	768
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	768	768
44201747	CLASS D DATCHES TYPE IV 9 INCH	SQ YD	512	F12
74201141	CLASS D PATCHES, TYPE IV, 8 INCH	30 10	312	512
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	16647	16647
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1074	1074
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3

* SPECIALTY ITEM

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B	Bollinger, Lach & Associates, Inc.	PLO
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STATE	0	FILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	DIVISION	STREET	۲ –	VILLAGE	OF RIVER	FOREST
		SUMM	AR	Y OF QU	ANTITIES	
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CONSTR. CODE

F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
1394	15-00098-00-RS	COOK	31	4
		CONTRAC	T NO. 6	51C47
	ILLINOIS FED. A	AID PROJECT		

			F	CONSTR. CODI
				ROADWAY
CODE		;	TOTAL	0005
NO.	ITEM	UNIT	QUANTITY	S.N.
67100100	MOBILIZATION	LSUM	1	1
01100100			1	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	9	9
70300100	SHORT TERM PAVEMENT MARKING	FOOT	4400	4400
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	678.8	678.8
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	15514	15514
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	3978	3978
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	190	190
10300260	TEMPORARY PAVEMENT MARKING - LINE 12	1001	130	130
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	2826	2826
78000100	78000100 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS		339.4	339.4
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	7848	7848
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2622	2622
10000400	THE MINOT EASTED TATEMENT MAINTING LINE O	1001		2022

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1394	15-00098-00-RS		COOK	31	5
F.A.U RTE.	SECTION		COUNTY	TOTAL	SHEE NO.

				CONSTR. CODE
CODE NO.	ITEM	UNIT	TOTAL	ROADWAY 0005 S.N.
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	95	95
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	1257	1257
88600600	DETECTOR LOOP REPLACEMENT	FOOT	192	192
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	33	33
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	565	565

* SPECIALTY ITEM

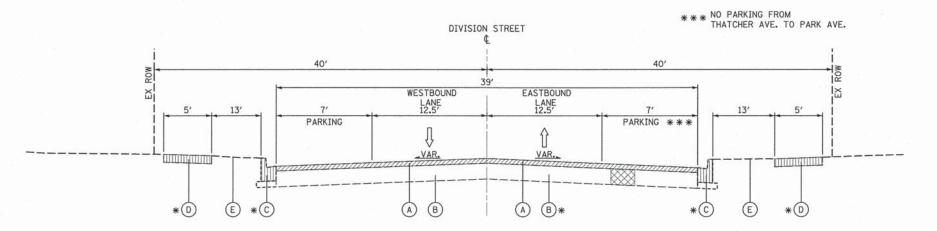
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l		DIVISION	STREET	· -	VILLAGE	OF RIVI	ER FOREST
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F.A.U RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.



EXISTING TYPICAL SECTION - DIVISION STREET

THATCHER AVENUE TO BONNIE BRAE STA. 4+95 TO STA. 55+40 HOT-MIX ASPHALT SURFACE REMOVAL, 2"

CLASS D PATCHES (AS DIRECTED BY THE ENGINEER)

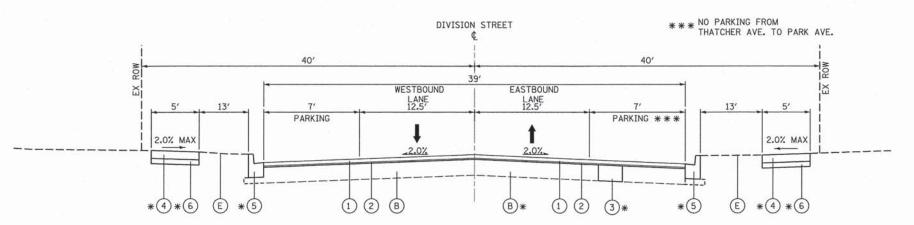
COMBINATION CURB AND GUTTER REMOVAL SIDEWALK REMOVAL
(AS DIRECTED BY THE ENGINEER)

EXISTING LEGEND

- (A) EX. HOT-MIX ASPHALT SURFACE COURSE, 2" (R)
- *(B) EX. AGGREGATE BASE COURSE, 8"
- *(C) EX. COMB. CONCRETE CURB & GUTTER, TY B-6.12
- *(D) EX. P.C.C. SIDEWALK
- (E) EX. TOPSOIL

ITEMS WITH (R) ARE TO BE REMOVED AS SHOWN ON THE TYPICAL SECTIONS AND/OR ON THE PLAN SHEETS.

* ITEM TO BE REMOVED AND REPLACED IN KIND AT LOCATIONS IN THE FIELD DIRECTED BY THE ENGINEER.



PROPOSED TYPICAL SECTION - DIVISION STREET

THATCHER AVENUE TO BONNIE BRAE STA. 4+95 TO STA. 55+40

PROPOSED LEGEND

- 1) PR. HMA SURFACE COURSE, MIX "D", N50, 1 1/2"
- 2) PR. LEVELING BINDER (MACHINE METHOD), N50, 3/4"
- *(3) CLASS D PATCHES
- *(4) PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
- *5 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- *(6) AGGREGATE BASE COURSE, TY B 4"
- * ITEM TO BE REMOVED AND REPLACED IN KIND AT LOCATIONS IN THE FIELD DIRECTED BY THE ENGINEER.

	HOT	T-MIX ASPHALT MIXTURE REQUIREMENTS	
	MIXTURE	TYPE	AIR VOIDS @ Ndes
PAVEMENT	RESURFACING		
нот-міх	ASPHALT SURFACE	COURSE, MIX "D", N50 (IL 9.5 mm); 1 1/2"	4% @ 50 GY
LEVELING	BINDER (MACHINE	METHOD), N50 (IL 9.5 mm), 3/4"	4% № 50 GY
PAVEMENT	PATCHING		
CLASS D	PATCHES, HOT-MIX	(ASPHALT BINDER (IL 19 mm), N50; 7"	4% @ 70 GY

NOTES:

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL MILL ROADWAY PAVEMENT PRIOR TO PAVEMENT PATCHING.

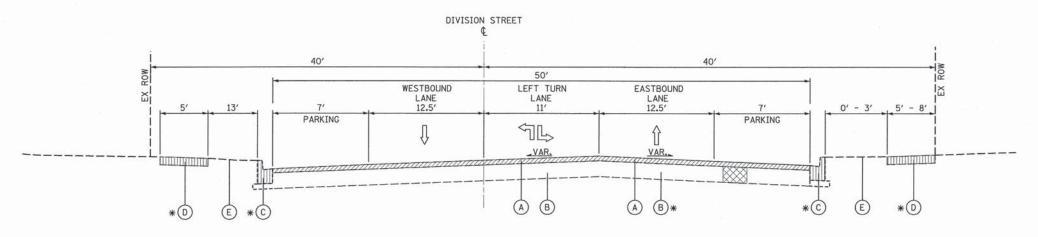
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STATE	OF	ILLINOIS
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	DIVISION			VILLAGE AL SECTI	OF RIVER	FOREST	
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	ILLINOIS FED.	CONTRAC	T NO. 6	51C47
1394	15-00098-00-RS	соок	31	7
F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEE NO.



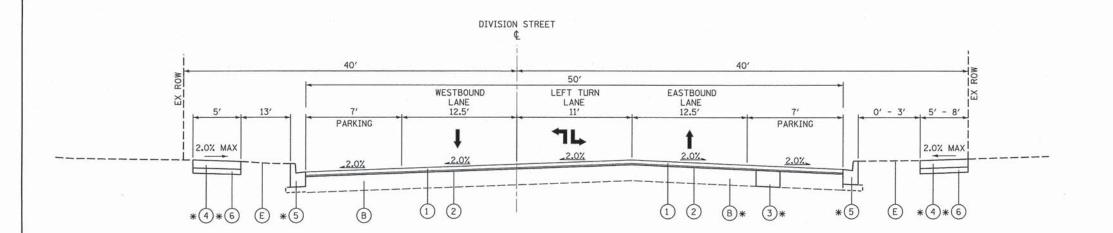
HOT-MIX ASPHALT SURFACE REMOVAL, 2"

EXISTING TYPICAL SECTION - DIVISION STREET

BONNIE BRAE TO HARLEM AVENUE STA. 55+40 TO STA. 59+33

CLASS D PATCHES (AS DIRECTED BY THE ENGINEER)

COMBINATION CURB AND GUTTER REMOVAL SIDEWALK REMOVAL (AS DIRECTED BY THE ENGINEER)



PROPOSED TYPICAL SECTION - DIVISION STREET

BONNIE BRAE TO HARLEM AVENUE STA. 55+40 TO STA. 59+33

EXISTING LEGEND

- A EX. HOT-MIX ASPHALT SURFACE COURSE, 2" (R)
- *(B) EX. AGGREGATE BASE COURSE, 8"
- *(C) EX. COMB. CONCRETE CURB & GUTTER, TY B-6.12
- *(D) EX. P.C.C. SIDEWALK
- (E) EX. TOPSOIL

ITEMS WITH (R) ARE TO BE REMOVED AS SHOWN ON THE TYPICAL SECTIONS AND/OR ON THE PLAN SHEETS.

* ITEM TO BE REMOVED AND REPLACED IN KIND AT LOCATIONS IN THE FIELD DIRECTED BY THE ENGINEER.

PROPOSED LEGEND

- 1) PR. HMA SURFACE COURSE, MIX "D", N50, 1 1/2"
- 2) PR. LEVELING BINDER (MACHINE METHOD), N50, 3/4"
- *(3) CLASS D PATCHES
- *(4) PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- AGGREGATE BASE COURSE, TY B 4"
- * ITEM TO BE REMOVED AND REPLACED IN KIND AT LOCATIONS IN THE FIELD DIRECTED BY THE ENGINEER.

Bollinger, Lach & Associates, Inc.

ITASCA, ILLINOIS

USER NAME = \$USER\$	DESIGNED -	MTC	REVISED -
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PLOT SCALE = \$SCALE\$	CHECKED -	KEK	REVISED -
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	DIVISION	STREET	۲ –	VILLAGE	OF RIV	ER FOREST
		TY	PIC	AL SECT	ONS	
SCALE: N.T.S.	SHEET	2 OF	2	SHEETS	STA.	TO STA.

A.U TE.	SECTION	COUNTY	TOTAL	SHEET NO.
394	15-00098-00-RS	COOK	31	8
		CONTRAC	CT NO. 6	51C47
	ILLINOIS FED.	AID PROJECT	-1-1-1	

NO.	STATION	OFFSET	QUANTITY (EACH)
1	5+36.09	19.50 LT	1
2	5+36.67	19.50 RT	1
3	9+78.43	23.81 RT	1
4	10+08.63	19.50 LT	1
5	10+23.4	22.56 RT	1
6	15+06.08	23.15 RT	1
7	15+48.98	23.32 RT	1
8	20+23.72	23.85 RT	1
9	20+26.87	25.32 LT	1
10	20+64.46	23.33 LT	1
11	20+64.47	23.31 RT	1
12	24+65.61	26.85 LT	1
13	24+66.04	25.06 RT	1
14	25+07.05	23.36 RT	1
15	25+09.69	22.94 LT	1
16	29+06.74	24.44 RT	1
17	29+06.87	27.30 LT	1
18	29+46.77	24.89 RT	1
19	29+47.87	25.07 LT	1
20	33+22.64	19.50 RT	1
21	33+23.07	19.50 LT	1
22	33+47.05	24.29 RT	1
23	33+90.04	25.86 RT	1
24	34+17.01	19.50 RT	1
25	34+18.02	19.50 LT	1
26	37+71.38	19.50 RT	1
27	37+91.41	26.12 LT	1
28	37+92.87	26.08 RT	1
29	38+29.15	25.33 RT	1
30	38+30.6	27.31 LT	1
31	38+54.85	19.50 RT	1
32	42+02.83	19.50 LT	1
33	42+30.55	22.65 RT	1
34	42+71.49	24.98 RT	1
35	42+71.91	28.52 LT	1
36	46+39.81	19.50 RT	1
37	46+41.82	19.50 RT	1
38	48+11.88	19.50 RT	1
39	48+12.49	19.50 LT	1
40	55+37.01	19.50 LT	1
41	55+60.92	26.48 RT	1
42	56+00.39	32.53 RT	1
43	56+23.47	19.50 LT	1
44	59+73.69	29.11 RT	1
45	59+73.01	19.50 LT	1
		TOTAL	45

STATION	OFFSET	QUANTITY
6+98.87	15.85 RT	1
10+02.02	37.6 RT	1
11+51.54	2.29 LT	1
14+96.75	7.86 RT	1
15+30.42	25.22 RT	1
15+95.71	2.10 RT	1
20+08.06	2.29 RT	1
20+44.79	31.16 RT	1
20+46.89	26.51 LT	1
20+88.73	2.70 RT	1
24+83.29	31.51 RT	1
24+89.58	39.42 RT	1
24+81.20	42.29 LT	1
29+23.47	38.96 LT	1
29+27.05	34.57 RT	1
33+71.80	27.35 LT	1
33+72.67	38.71 RT	1
33+96.29	11.77 RT	1
34+02.88	7.02 RT	1
38+05.31	34.98 RT	1
38+14.58	41.70 RT	1
38+14.75	26.40 LT	1
42+20.36	3.99 RT	1
42+46.69	34.80 RT	1
42+54.01	38.72 RT	1
42+56.40	27.55 LT	1
42+95.24	4.22 RT	1
46+98.81	29.73 LT	1
55+74.84	34.72 RT	1
55+83.78	37.763 RT	1
55+83.03	24.27 RT	1
56+15.30	3.26 RT	1
56+54.19	2.02 RT	1
	TOTAL	33

LOCATION STATION-STATION	OFFSET	HMA SURFACE REMOVAL BUTT JOINT (SQ YD)	HMA SURFACE REMOVAL 2" (SQ YD)
4+95 - 10+00	LT / RT	27	2262
10+00 - 15+00	LT / RT	7	2208
15+00 - 20+00	LT / RT	12	2243
20+00 - 25+00	LT / RT	53	2461
25+00 - 30+00	LT / RT	28	2352
30+00 - 35+00	LT / RT	30	2343
35+00 - 40+00	LT / RT	28	2330
40+00 - 45+00	LT / RT	29	2330
45+00 - 50+00	LT / RT	15	2253
50+00 - 55+00	LT / RT	0	2167
55+00 - 60+00	LT / RT	53	2355
	TOTAL	282	25304

LOCATION STATION-STATION	OFFSET	HMA SURFACE COURSE MIX "D" N50 (TON)	LEVELING BINDER (MACHINE METHOD) N50 (TON)	BITUMINOUS MATERIALS (TACK COAT) (POUND)
4+95 - 10+00	LT / RT	192	96	2060
10+00 - 15+00	LT / RT	186	93	1994
15+00 - 20+00	LT / RT	189	95	2030
20+00 - 25+00	LT / RT	211	106	2263
25+00 - 30+00	LT / RT	200	100	2142
30+00 - 35+00	LT / RT	199	100	2136
35+00 - 40+00	LT / RT	198	99	2122
40+00 - 45+00	LT / RT	198	99	2124
45+00 - 50+00	LT / RT	191	95	2041
50+00 - 55+00	LT / RT	182	92	1950
55+00 - 60+00	LT / RT	203	100	2165
	TOTAL	2149	1075	23027

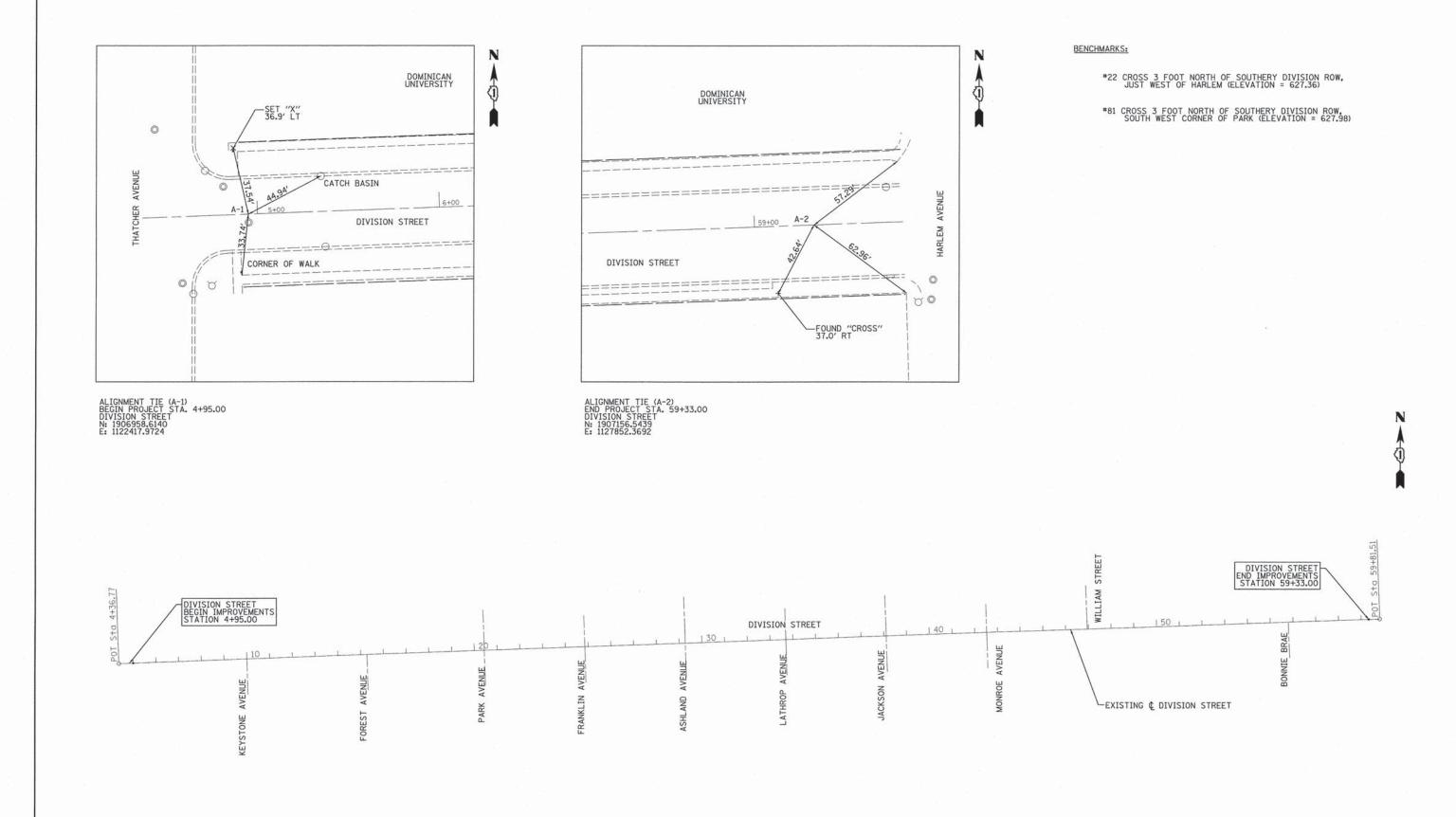
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Bollinger, Lach & Associates, Inc.	
ITASCA, ILLINOIS	l

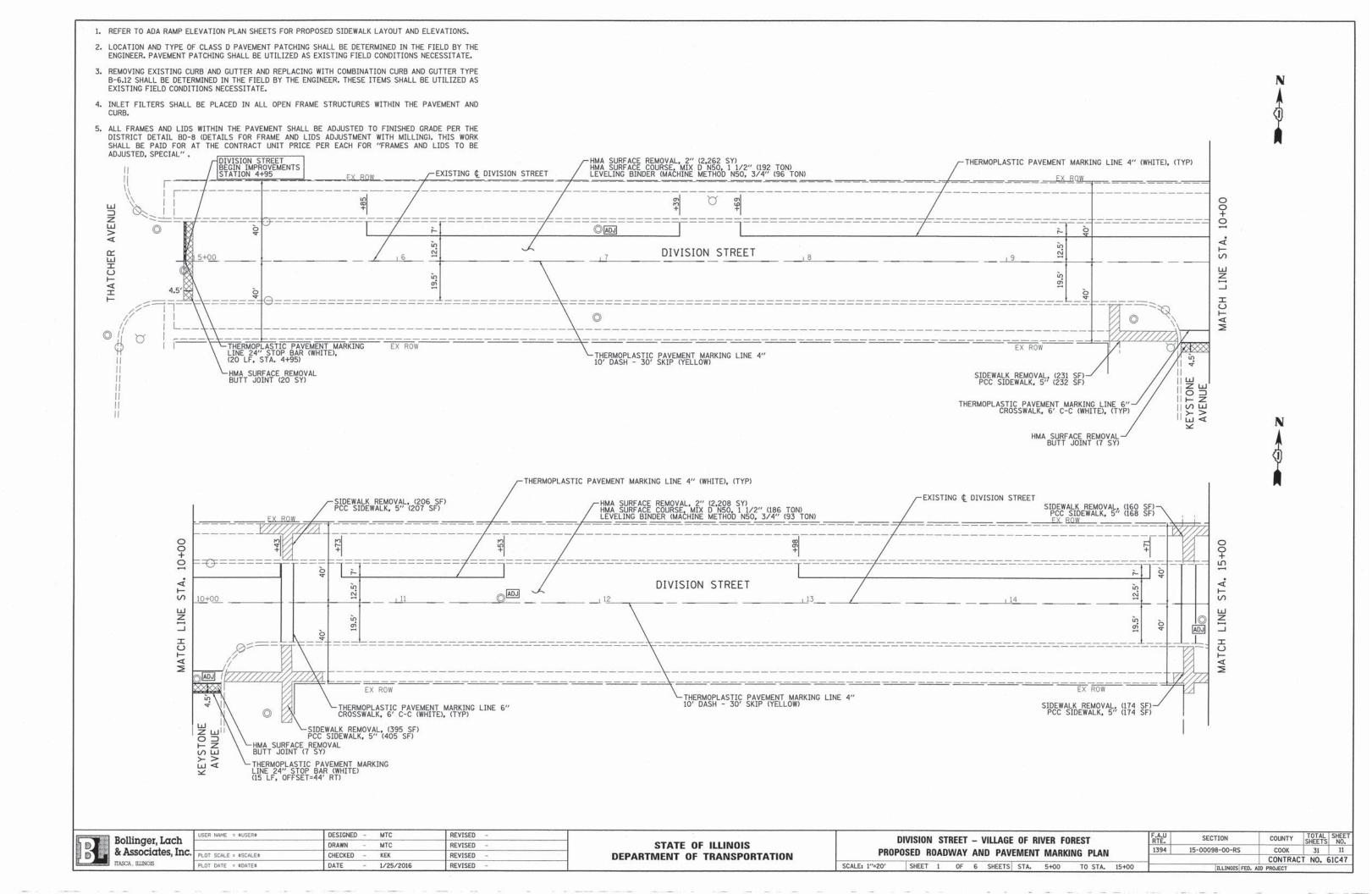
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PLOT DATE = \$DATE\$	DATE -	1/25/2016	REVISED -

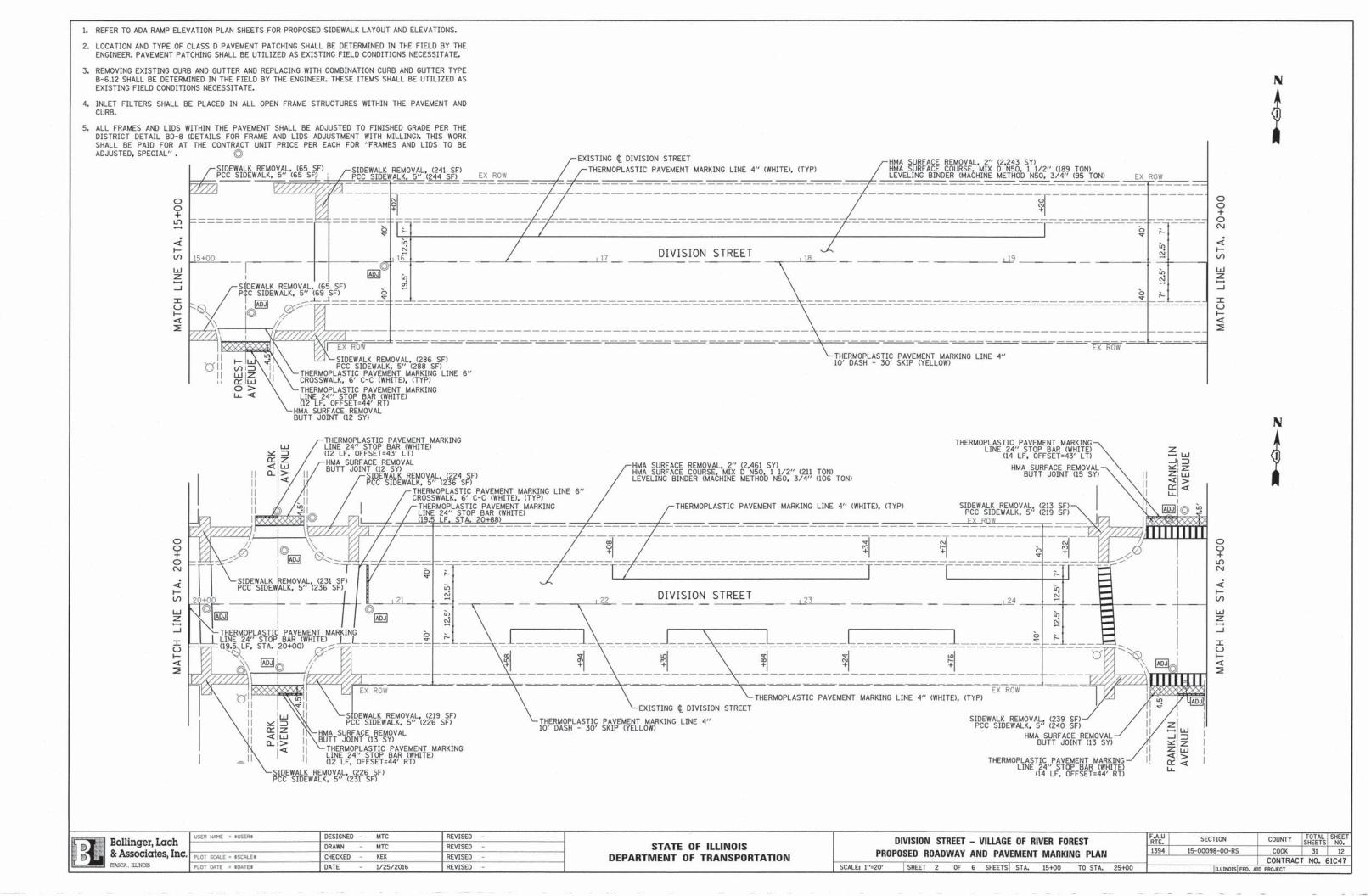
STATI	E OI	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

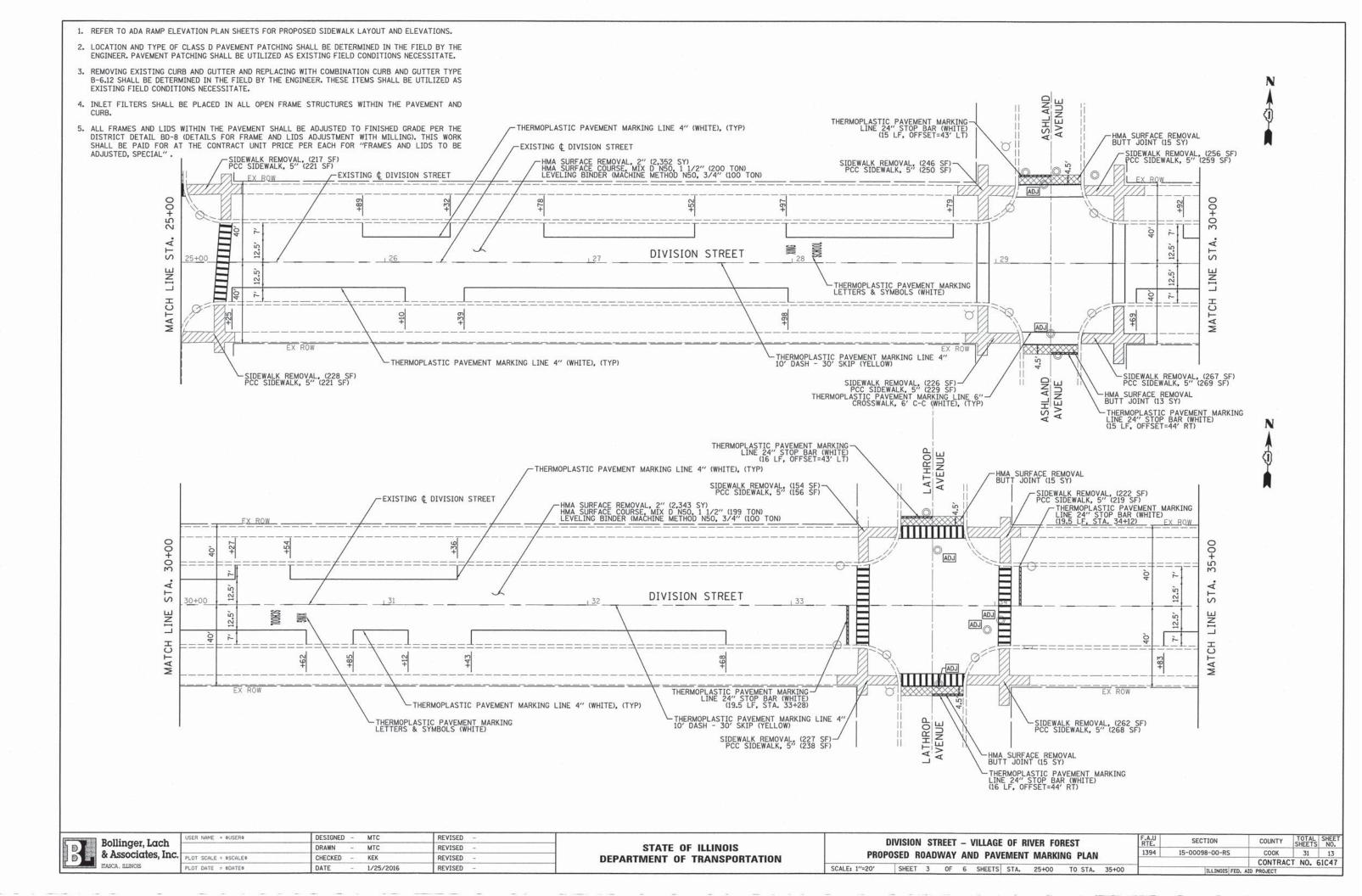
	DIVISION S	TREET -	VILLAGE	OF RIVER	FOREST	F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
1	SCHEDULE OF QUANTITIES					1394	15-00098-00-RS	соок	31	9
		OHEDOL	. 01 40	ANTITIES				CONTRAC	CT NO. 6	51C47
SCALE: N.T.S.	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

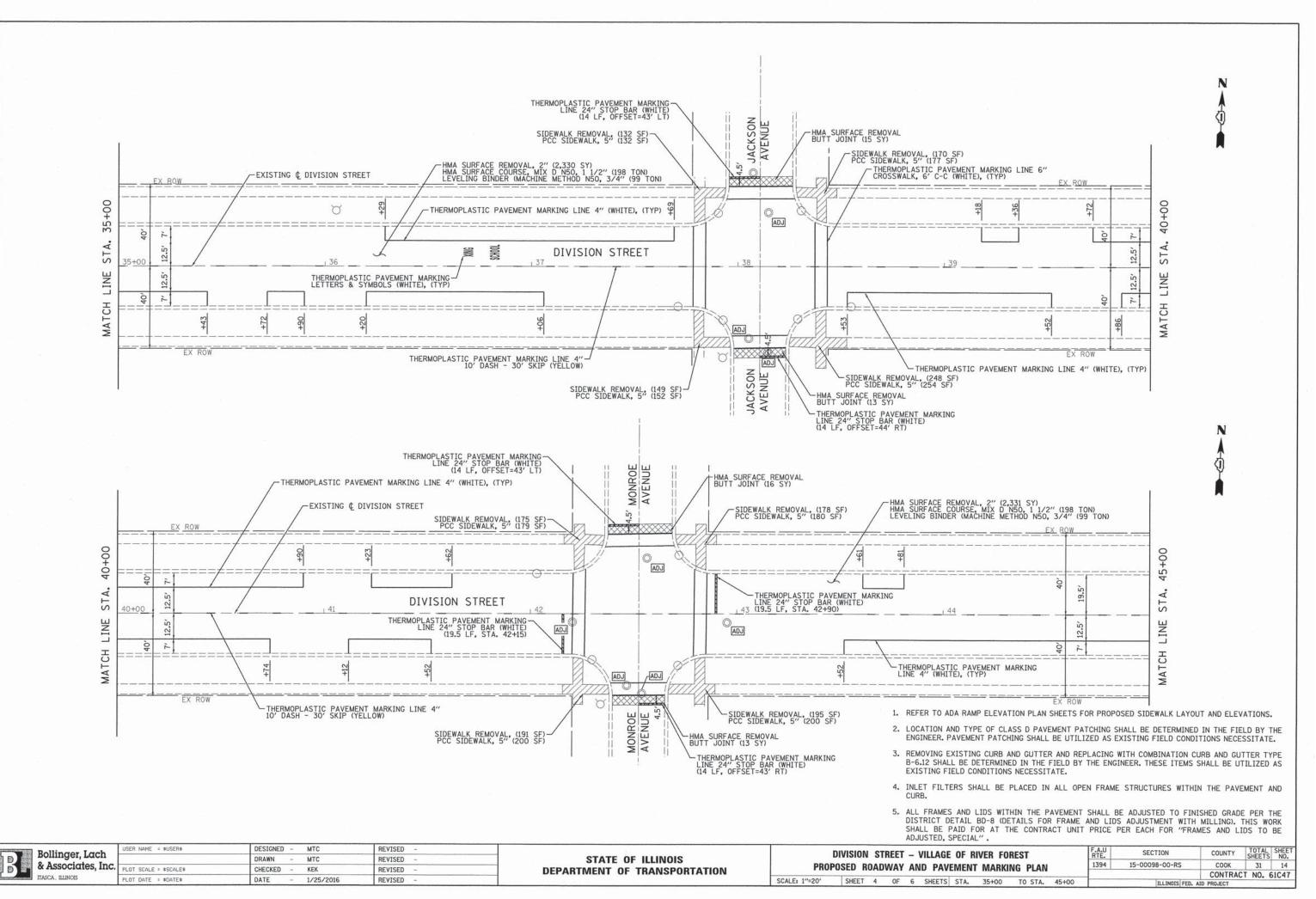


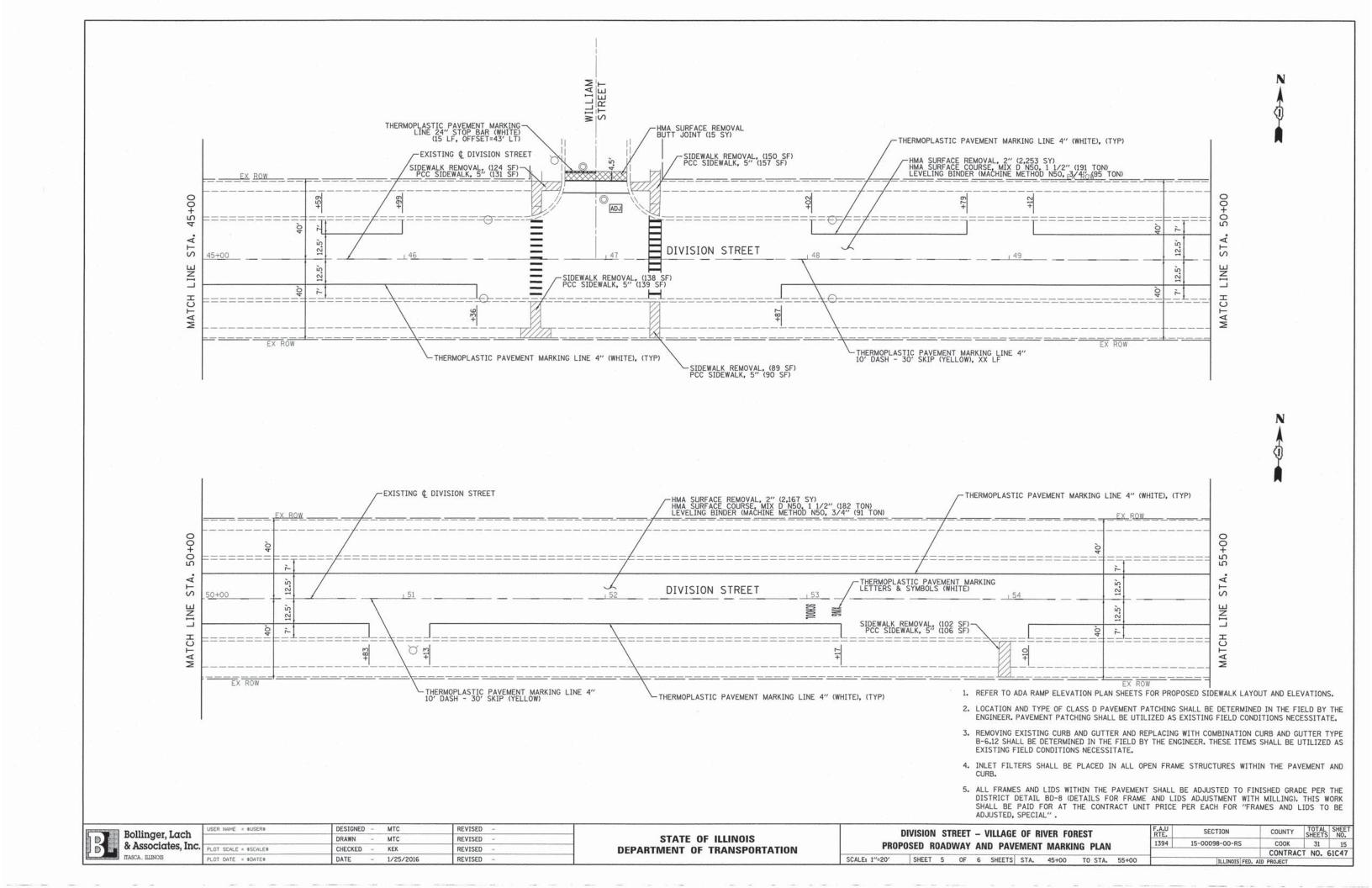
Bollinger, Lach	USER NAME = \$USER\$	DESIGNED -	MTC	REVISED -	CTATE OF HUMOIC	1	DIVISION S	TREET -	VILLAGI	OF RIVER	FOREST	F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
& Associates, Inc.		DRAWN -	MIC	REVISED -	STATE OF ILLINOIS	***	ALICNI	AENIT TI	CIAN 9	BENCHMAR	ave	1394	15-00098-00-RS	COOK	31	10
& Associates, inc.	PLOT SCALE = \$SCALE\$	CHECKED -	KEK	REVISED -	DEPARTMENT OF TRANSPORTATION		ALIGNI	VIENT, III	3, AND	BENUTIVIAN	ing.			CONTRAC	CT NO. 61	1C47
ITASCA, ILLINOIS	PLOT DATE = \$DATE\$	DATE -	1/25/2016	REVISED -		SCALE: 1"=200"	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED.			.011

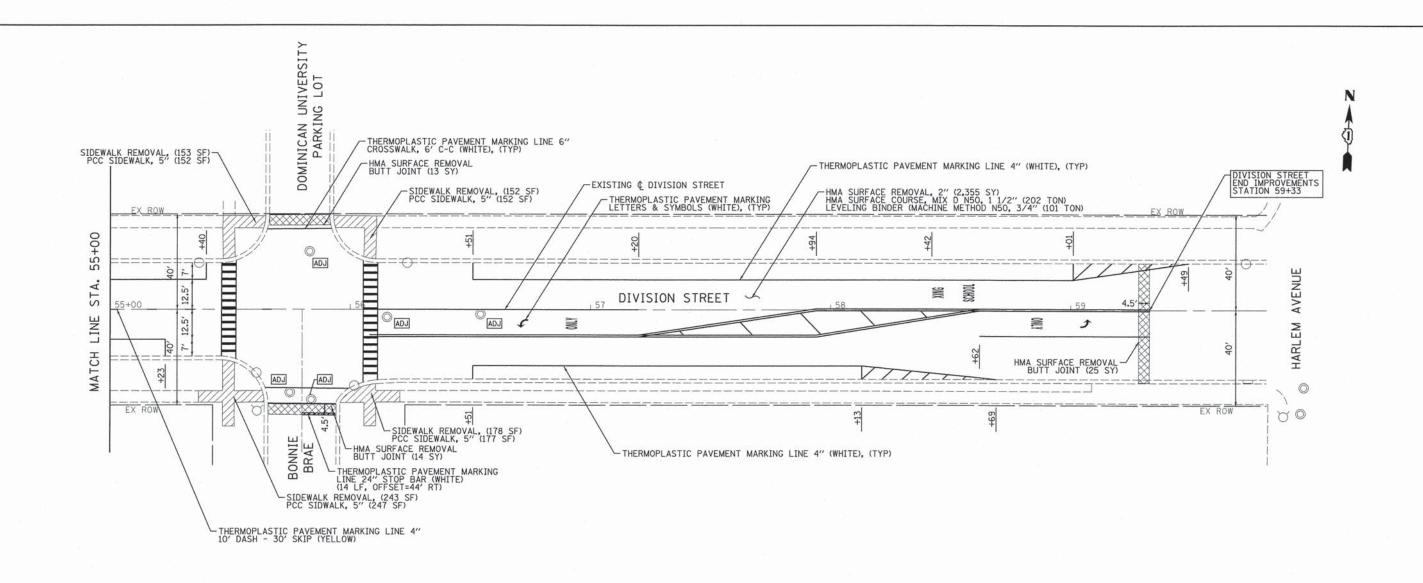












- 1. REFER TO ADA RAMP ELEVATION PLAN SHEETS FOR PROPOSED SIDEWALK LAYOUT AND ELEVATIONS.
- LOCATION AND TYPE OF CLASS D PAVEMENT PATCHING SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. PAVEMENT PATCHING SHALL BE UTILIZED AS EXISTING FIELD CONDITIONS NECESSITATE.
- 3. REMOVING EXISTING CURB AND GUTTER AND REPLACING WITH COMBINATION CURB AND GUTTER TYPE B-6.12 SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THESE ITEMS SHALL BE UTILIZED AS EXISTING FIELD CONDITIONS NECESSITATE.
- 4. INLET FILTERS SHALL BE PLACED IN ALL OPEN FRAME STRUCTURES WITHIN THE PAVEMENT AND CURB.
- 5. ALL FRAMES AND LIDS WITHIN THE PAVEMENT SHALL BE ADJUSTED TO FINISHED GRADE PER THE DISTRICT DETAIL BD-8 (DETAILS FOR FRAME AND LIDS ADJUSTMENT WITH MILLING). THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL".

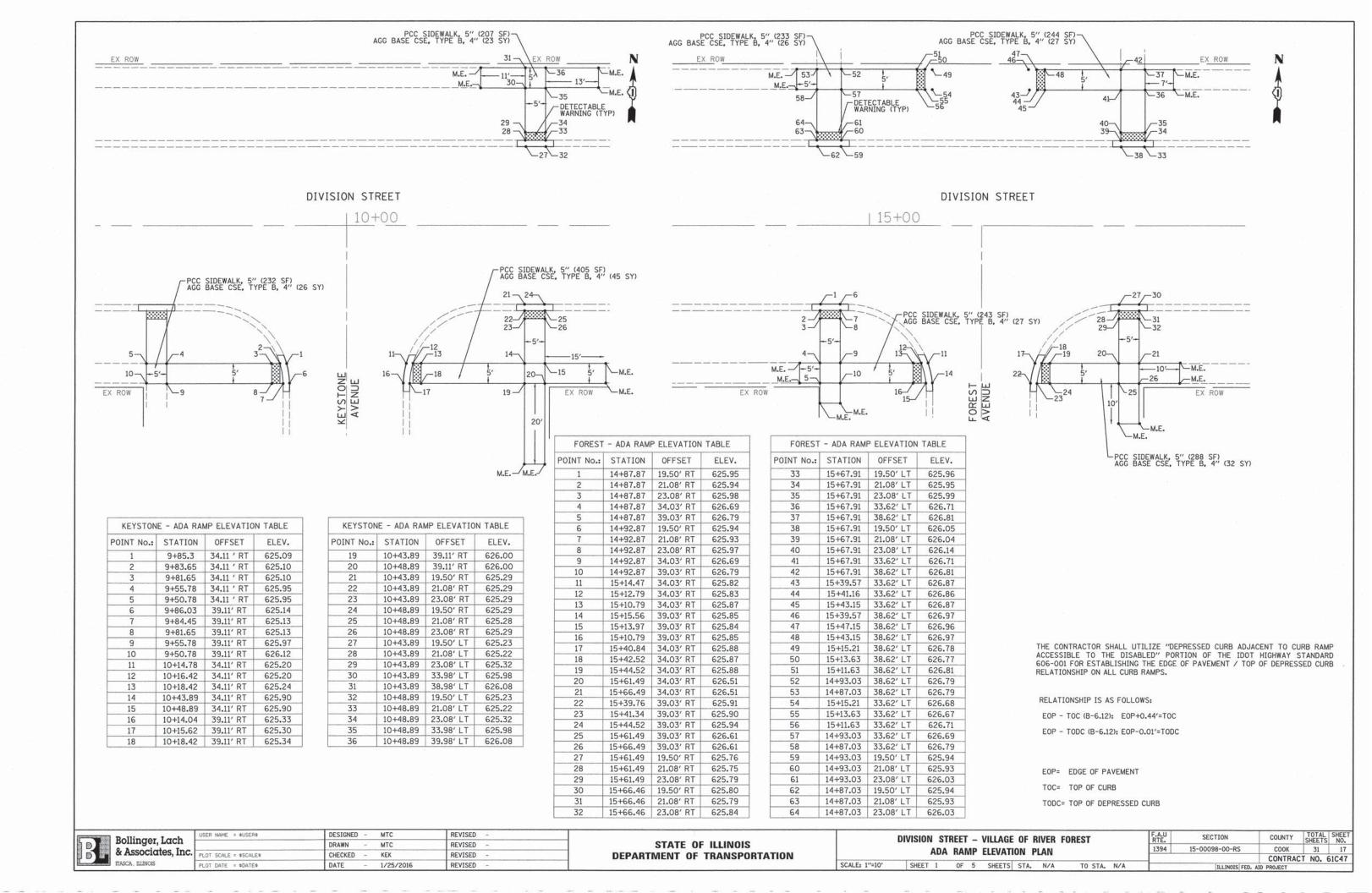
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1	D	& Associates, Inc.	PLI
		ITASCA, ILLINOIS	PLO

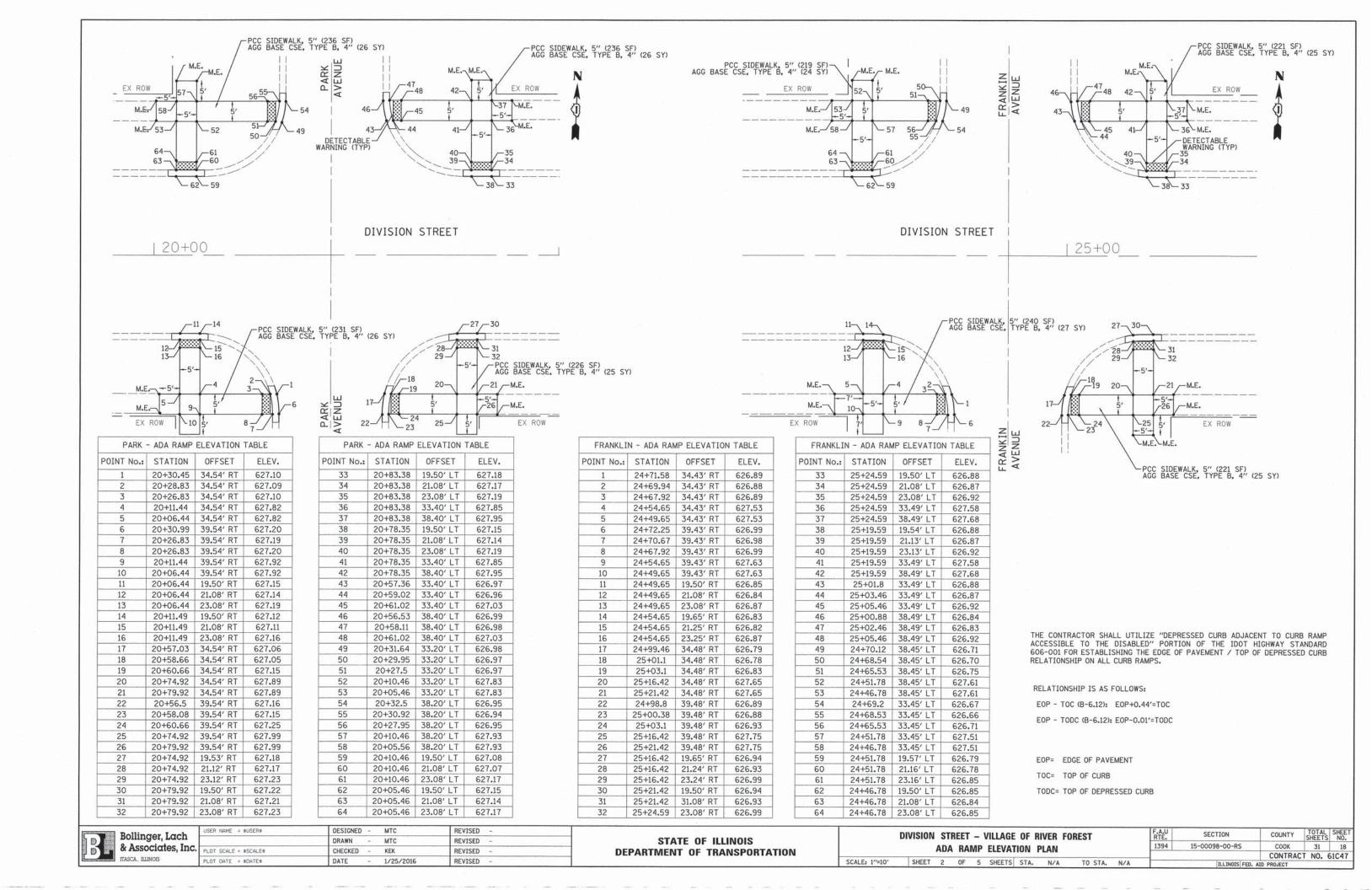
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PLOT DATE = \$DATE\$	DATE -	1/25/2016	REVISED -	

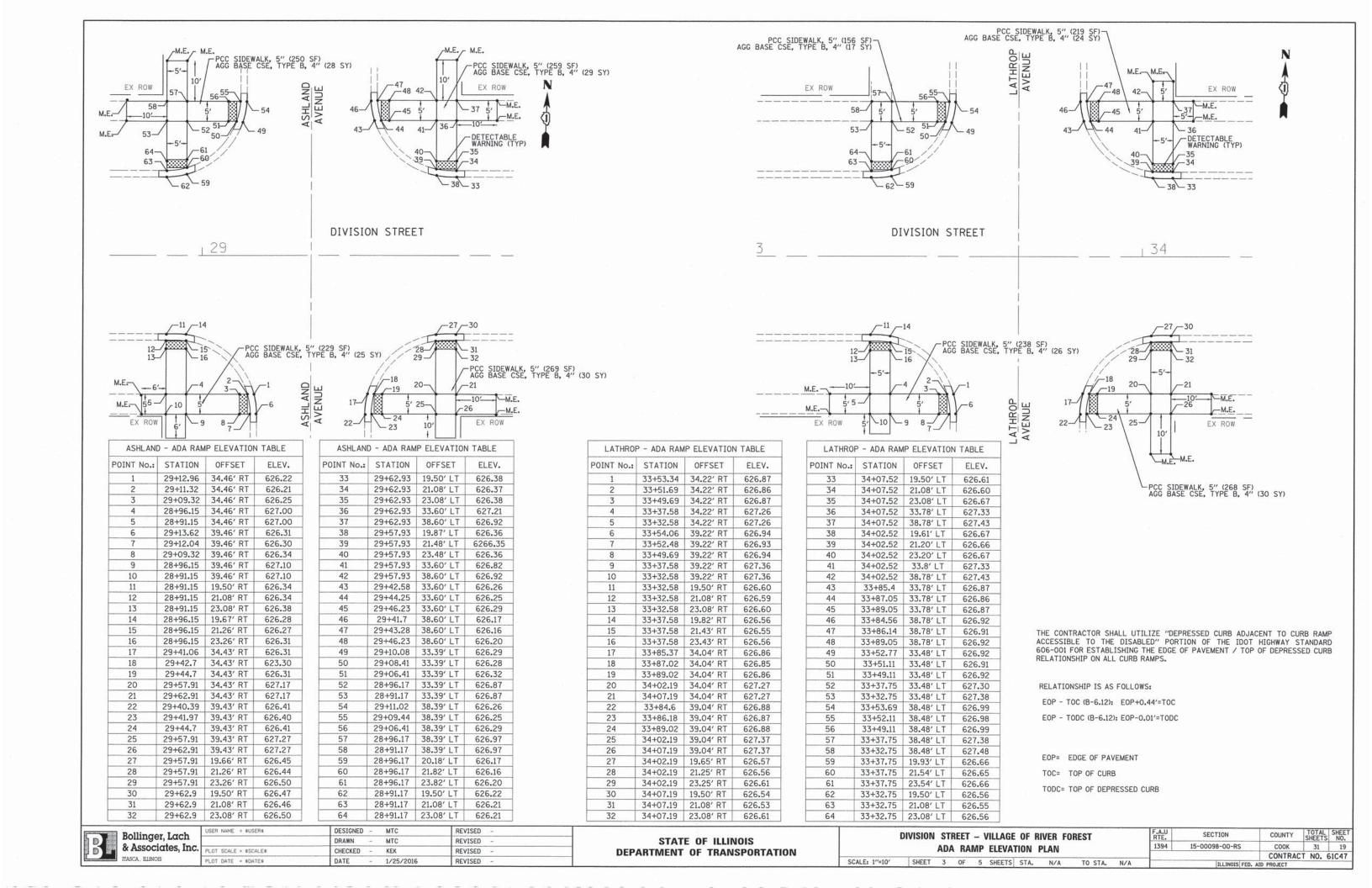
STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

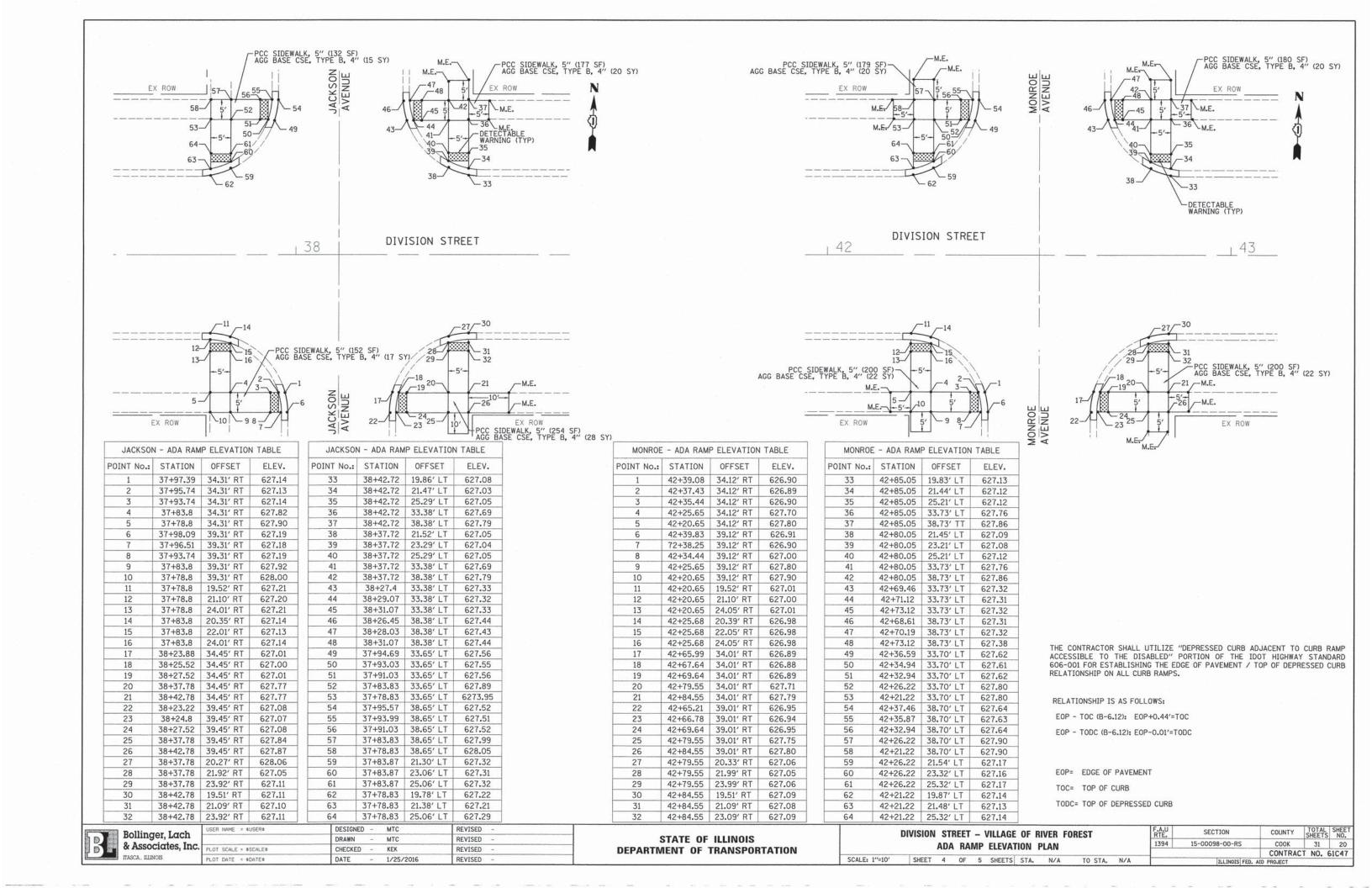
	DIVISION	ST	REET	-	VILLAGE	OF R	IVER FO	REST		F.A.U RTE.
PROF	OSED R	OAD	WAY	A۱	ID PAV	EMENT	MARKI	NG PLAN		1394
SCALE: 1"=20'	SHEET	6	OF	6	SHEETS	STA.	55+00	TO STA.	60+00	-

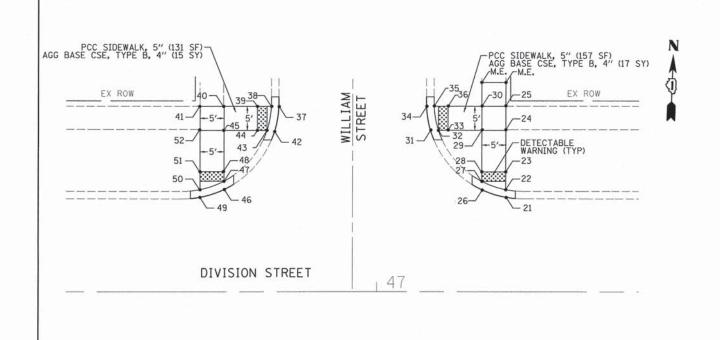
	ILLINOIS	FED. AIC	PROJECT		
			CONTRACT	NO. (51C47
1394	15-00098-00-R	5	COOK	31	16
F.A.U RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.

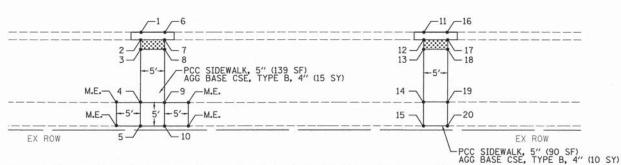












POINT No.:	STATION	OFFSET	ELEV.
1	46+62.8	19.50' RT	626.94
2	46+62.8	21.08' RT	626.93
3	46+62.8	23.08' RT	626.97
4	46+62.8	34.14' RT	627.85
5	46+62.8	39.14' RT	627.93
6	46+67.8	19.50' RT	626.98
7	46+67.8	21.08' RT	626.97
8	46+67.8	23.08' RT	627.01
9	46+67.8	34.14' RT	627.89
10	46+67.8	39.14' RT	627.97
11	47+21.76	19.50' RT	627.36
12	47+21.76	21.08' RT	627.35
13	47+21.76	23.08' RT	627.39
14	47+21.76	34.14' RT	627.90
15	47+21.76	39.14' RT	627.98
16	47+26.76	19.50' RT	627.41
17	47+26.76	21.08' RT	627.40
18	47+26.76	23.08' RT	627.44
19	47+26.76	34.14' RT	627.84
20	47+26.76	39.14' RT	627.92
21	47+26.87	19.81' LT	627.08
22	47+26.87	21.42' LT	627.07
23	47+26.87	25.14' LT	627.15
24	47+26.87	33.85' LT	627.85
25	47+26.87	38.85' LT	627.93
26	47+21.87	21.41' LT	627.26
27	47+21.87	23.17' LT	627.25
28	47+21.87	25.17' LT	627.25
29	47+21.87	33.85' LT	627.77

POINT No.:	STATION	OFFSET	ELEV.
30	47+21.87	38.85' LT	627.85
31	47+11.16	33.85' LT	627.33
32	47+12.82	33.85' LT	627.32
33	47+14.82	33.85' LT	627.36
34	47+10.33	38.85' LT	627.41
35	47+11.92	38.85' LT	627.40
36	47+14.82	38.85' LT	627.43
37	46+79.59	38.85' LT	627.43
38	46+78.02	38.85' LT	627.42
39	46+75.11	38.85' LT	627.48
40	46+68.17	38.85' LT	627.71
41	46+63.17	38.85' LT	627.78
42	46+78.77	38.85' LT	627.38
43	46+77.11	38.85' LT	627.37
44	46+75.11	38.85' LT	627.41
45	46+68.17	38.85' LT	627.66
46	46+68.17	21.46' LT	627.18
47	46+68.17	23.23' LT	627.17
48	46+68.17	25.23' LT	627.21
49	46+63.17	19.83' LT	627.14
50	46+63.17	21.44' LT	627.13
51	46+63.17	25.23' LT	627.21
52	46+63.17	33.85' LT	627.71

BONNIE BR	RAE - ADA R.	AMP ELEVATI	ON TABLE
POINT NO .:	STATION	OFFSET	ELEV.
1	55+64.97	33.93' RT	626.58
2	55+63.33	33.93' RT	626.57
3	55+61.33	33.93' RT	626.58
4	55+51.86	33.93' RT	627.30
5	55+46.86	33.93' RT	627.30
6	55+64.78	39.93' RT	627.68
7	55+64.19	39.93' RT	626.67
8	55+61.33	39.93' RT	626.68
9	55+51.86	39.93' RT	627.40
10	55+46.86	39.93' RT	627.40
11	55+46.86	19.53' RT	626.51
12	55+46.86	21.12' RT	626.50
13	55+46.86	24.15' RT	626.50
14	55+51.86	20.48' RT	626.49
15	55+51.86	22.13' RT	626.48
16	55+51.86	24.15' RT	626.50
17	55+94.17	38.82' RT	626.59
18	55+95.89	38.82' RT	626.59
19	55+98.3	38.82' RT	626.59
20	56+05.69	38.82' RT	626.73
21	56+05.69	43.82' RT	626.95
22	56+05.69	48.82' RT	627.18
23	56+10.69	29.51' RT	626.66
24	56+10.69	31.10′ RT	626.65
25	56+10.69	33.95′ RT	626.71
26	56+15.69	33.95′ RT	626,96
27	56+20.69	33.95′ RT	627,21
28	56+20.69	38.82' RT	627.31

29

30

41

48

49

52

53

56

SCALE: 1"=10"

56+15.69 38.82' RT

56+10.69 38.82' RT

56+10.66 48.82' RT 627.28

55+66.3 39.29' LT 627.12 55+64.72 39.29' LT 627.11 55+61.95 39.29' LT 627.12

55+51.99 39.29' LT 627.51

55+46.99 39.29' LT 627.58 55+65.59 34.29' LT 627.08

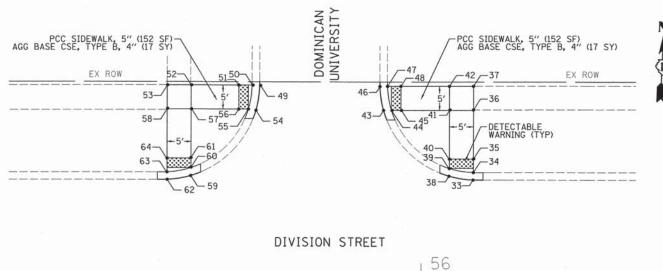
55+63.95 34.29' LT 627.07

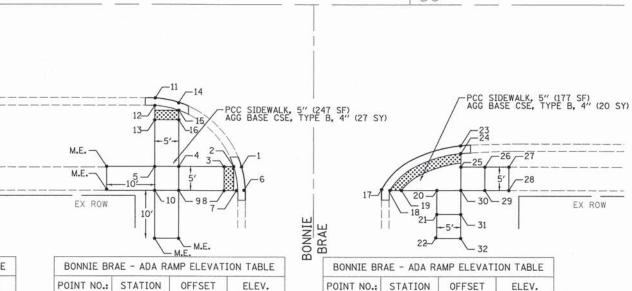
56+10.67 43.82' RT

627.06

626.81

627.05





	56+10.86	19.50' LT	626.74	61 55+51.99 24.00′ LT 626.75
	56+10.86	21.08' LT	626.73	62 55+46.99 19.51' LT 626.66
	56+10.86	23.08' LT	626.74	63 55+46.99 21.10' LT 626.65
	56+10.86	23.94' LT	627.48	64 55+46.99 24.00' LT 626.65
	56+10.86	39.10' LT	627.58	
	56+05.86	20.29' LT	626.81	
	56+05.86	21.94' LT	626.80	
	56+05.86	23.94' LT	626.81	THE CONTRACTOR SHALL UTILIZE "DEPRESSED CURB ADJACENT TO CURB RAMP
	56+05.86	34.10′ LT	627.38	ACCESSIBLE TO THE DISABLED" PORTION OF THE IDOT HIGHWAY STANDARD
	56+05.86	39.10' LT	627.48	606-001 FOR ESTABLISHING THE EDGE OF PAVEMENT / TOP OF DEPRESSED CURB RELATIONSHIP ON ALL CURB RAMPS.
	55+92.12	34.10' LT	627.02	RELATIONSHIP ON ALL COND NAMES.
	55+93.76	34.10' LT	627.01	
	55+95.73	34.10' LT	627.02	RELATIONSHIP IS AS FOLLOWS:
-	55+91.36	39.10' LT	627.12	EOP - TOC (B-6.12): EOP+0.44'=TOC
	55+92.94	39.10' LT	627.11	EUP - 100 (B-6.12): EUP+0.44 = 100
	55+95.73	39.10' LT	627.12	EOP - TODC (B-6.12): EOP-0.01'=TODC
		7777 -		

57

58

59

60

55+51.99 34.29' LT

55+46.99 34.29' LT

55+51.99 | 20.35' LT

55+51.99 22.00' LT

627.41

627.46

626.75

626.75

EOP=	EDGE OF PAVEMENT
TOC=	TOP OF CURB

TODC= TOP OF DEPRESSED CURB

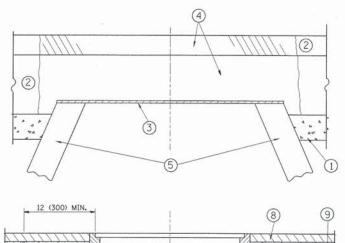
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D)	Bollinger, Lach		DRAWN	-
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	ITASCA, ILLINOIS	PLOT DATE = \$DATE\$	DATE	-

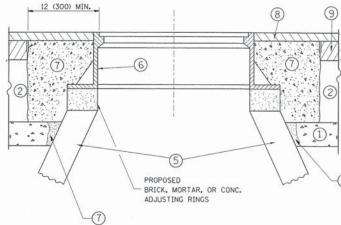
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2.	PLOT SCALE = \$SCALE\$	CHECKED - KEK	REVISED -	
	PLOT DATE = \$DATE\$	DATE - 1/25/2016	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

55+61.95	34.29′ L	T 627.08				
DIVI	SION STR	EET – VILLAG	E OF RIVER F	OREST	F.A.U RTE.	SE
Į.	DA RAMP	ELEVATION	PLAN DETAILS	S	1394	15-000
1"=10"	HEET 5	OF 5 SHEETS	STA N/A	TO STA NIZA		

		ILLINOIS FED. A	ID PROJECT		
_			CONTRAC	T NO. 6	51C47
	1394	15-00098-00-RS	COOK	31	21
	F.A.U RTE.	SECTION	TOTAL	SHEET NO.	





NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

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 11/2 (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 PP-1*
 CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING
 BASE COURSE OR THE BINDER COURSE.
- * UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- (6) FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT

(5) EXISTING STRUCTURE

- 7 CLASS PP-1* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- 8 PROPOSED HMA SURFACE COURSE
- 4 PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 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:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

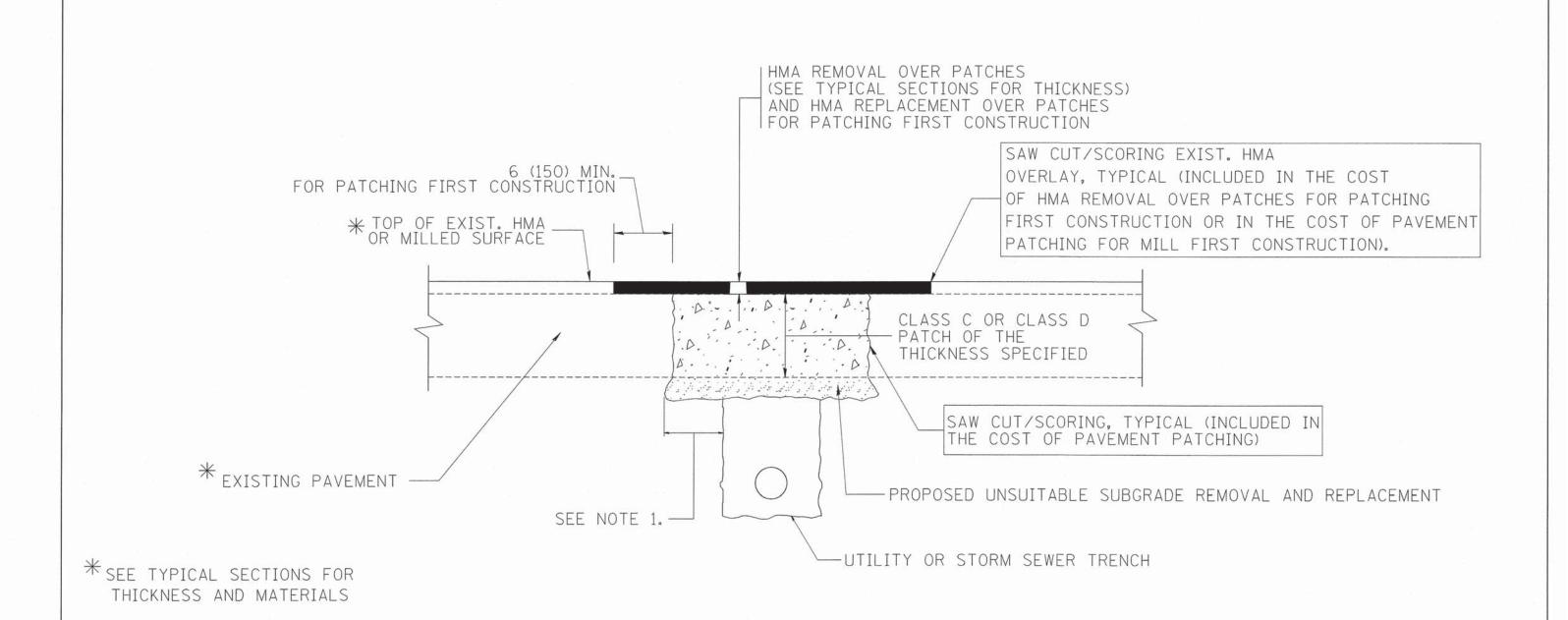
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = U	ISER NAME = bauerdl	DESIGNED - R. SHAH	REVISED	- R. WIEDEMAN 05-14-04
c:\pw_work\pwidot\bauerdl\d0108315\bd08.dgn	1/2	DRAWN -	REVISED	- R. BORO 01-01-07
PI	LOT SCALE = 1968.5000 '/ m	CHECKED -	REVISED	- R. BORO 03-09-11
P	LOT DATE = 12/6/2011	DATE - 10-25-94	REVISED	- R. BORO 12-06-11

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	DETAILS FOR	F.A.U. RTE.		
	FRAMES AND LIDS ADJUSTMENT	WITH MILLING	1394	1
_				BD600-
	SHEET NO. 1 OF 1 SHEETS ST	TA. TO STA.	FED. RO	AD DIST.



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)

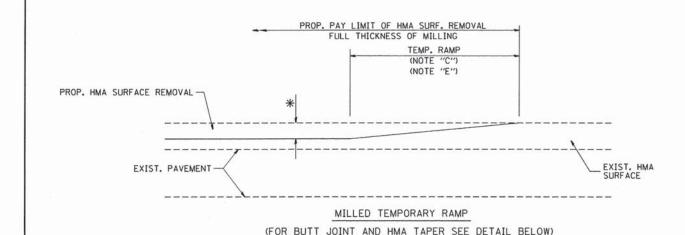
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

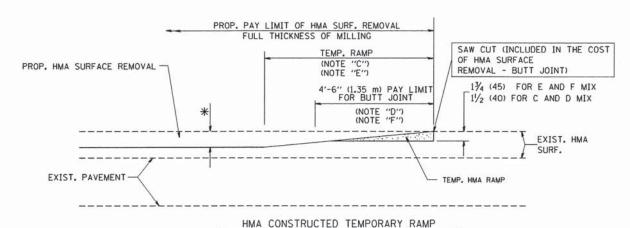
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98			DAVEMENT DATCHING FOR		F.A.U.	SECTION	COUNTY	TOTAL SHEET
c:\projects\diststd22x34\bd22	2.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		PAVEMENT PATCHING FOR		1394	15-00098-00-RS	соок	31 23
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT			F	BD400-04 (BD-22)		T NO. 61C47
	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. ROA		AID PROJECT	1 10. 61047



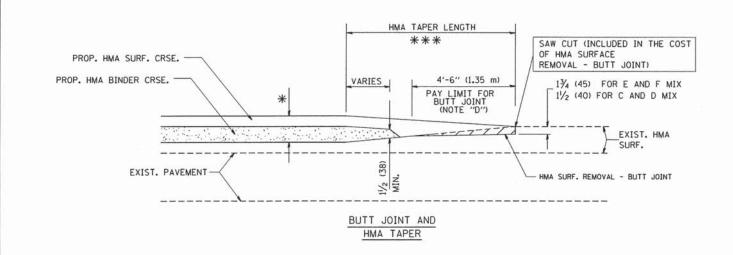
OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

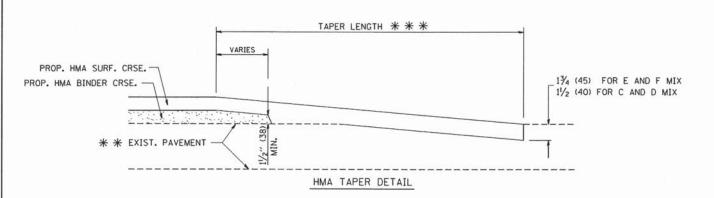
PROP. HMA OR PCC

SURFACE REMOVAL - BUTT JOINT
30'-0" (9.0 m) (NOTE "A")
15'-0" (4.5 m) (NOTE "B")

(NOTE "D")

** * EXIST. PAVEMENT

BUTT JOINT DETAIL



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.

BASIS OF PAYMENT:

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

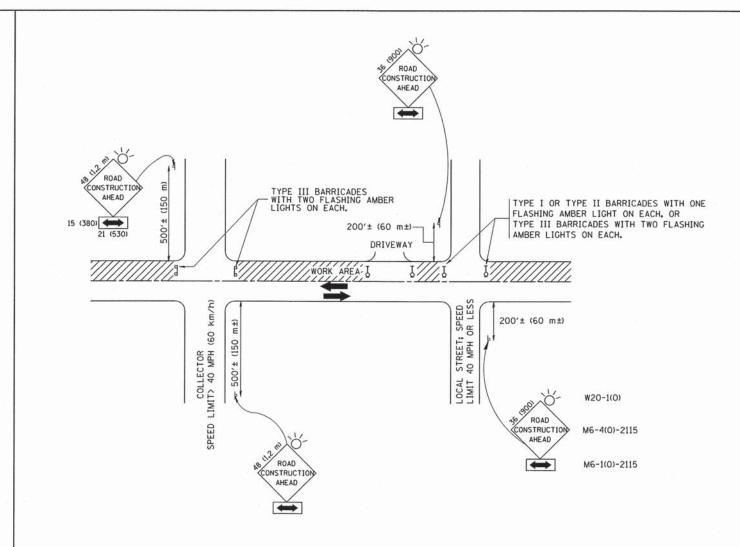
SCALE: NONE

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
W:\distatd\22x34\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT J	JOINT AND		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
UNA TAI	PER DETAILS		1394	15-00098-00-RS	COOK	31	24
nivia TAI	PER DETAILS		В	CONTRACT NO. 61C47			
SHEET NO. 1 OF 1 SH	HEFTS STA	TO STA	FFO DOAD	DICT NO 1 THE THOSE FEE	HD DDG FOX		



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. 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:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) 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 x 48 (1.2 m x 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 (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

SCALE: NONE

- 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.

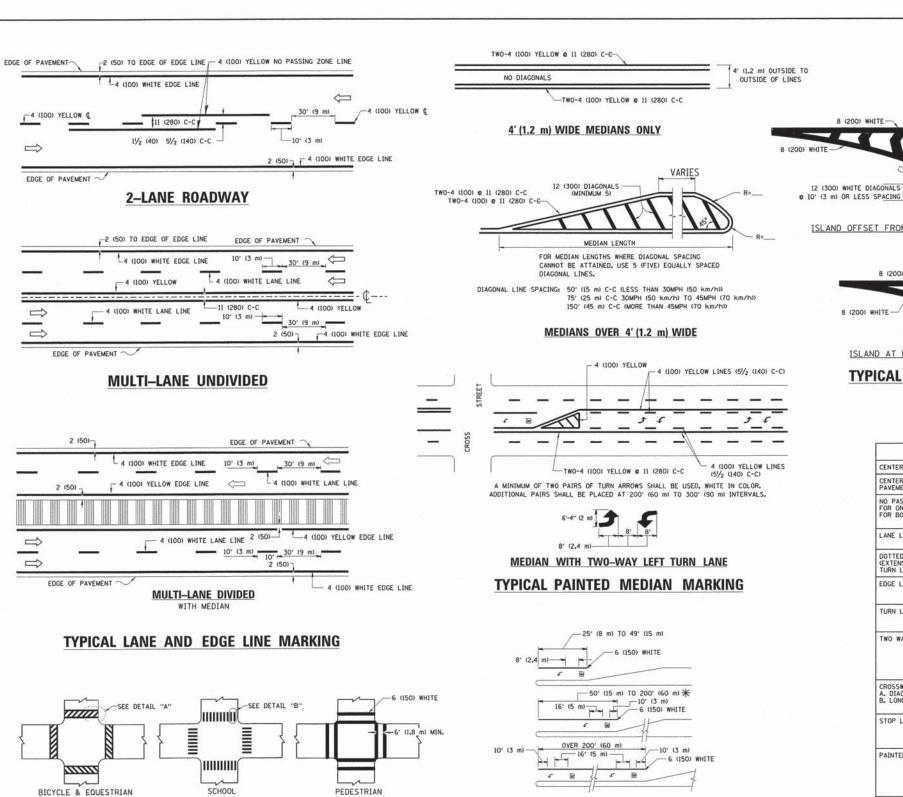
COOK

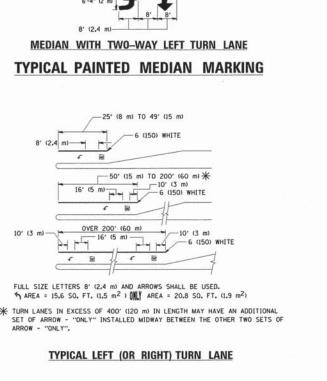
CONTRACT NO. 61C47

FILE NAME =	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
:\diststd\22x34\tc10.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE	OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FO	F.AU. RTE.	SECTION 15-00098-00-RS	
SIDE ROADS, INTERSECTIONS, AND DRIVEN	IAYS		TC-10
SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED.

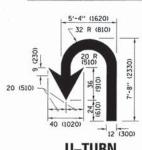




TYPICAL TURN LANE MARKING

40 (1020) 64 (1620)

COMBINATION LEFT AND U-TURN



- 2 (50)

RAISED

ISLAND

D(FT)

345

425

500

665

750

SPEED LIMIT

30

35

40

50

55

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

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 UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 Q 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 MEDIANS IN YELLOW
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 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE 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	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 CROSSMALK, 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.
CORE 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 (REQUIRED FOR SHOULDERS ≥ 8")	12 (300) e 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) TO 45MPH (70 km/h) 150' (45 m) C-C (0VER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

SCALE: NONE

8 (200) WHITE

12 (300) WHITE DIAGONALS

8 (200) WHITE-

ISLAND OFFSET FROM PAVEMENT EDGE

8 (200) WHITE -

ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

All dimensions are in inches (millimeters)

FILE NAME =	USER NAME = liszekrf	DESIGNED - EVERS	KEAIZED	-T.	RAMMACHER 10-27-94	1
pw:\\IL@84EBIDINTEG.:111:no1s.gov:PWIDOT\Do	numents/IDOT Offices/District 1/Projects/Dist	**************************************	REVISED	-	C. JUCIUS 09-09-09	
l),	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED	-	C. JUCIUS 07-01-13	
Default	PLOT DATE = 12/21/2015	DATE - 03-19-90	REVISED		C. JUCIUS 12-21-15	ı

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

-6 (150) WHITE

THE ROAD WHICH IT CROSSES

DETAIL "A"

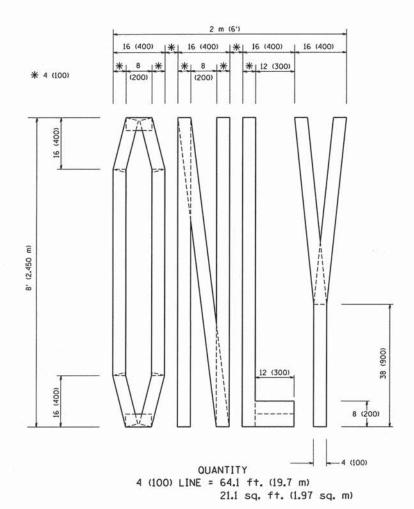
2' (600)

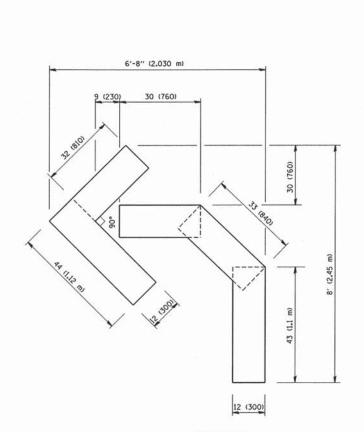
DETAIL "B"

-12 (300) WHITE

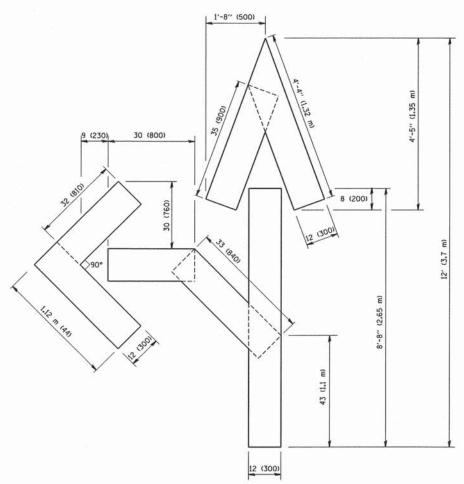
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE TYPICAL PAVEMENT MARKINGS					F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
					1394	15-00098-00-RS	COOK	31	26
						TC-13	CONTRACT NO. 61C47		
SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FEE	. AID PROJECT		1





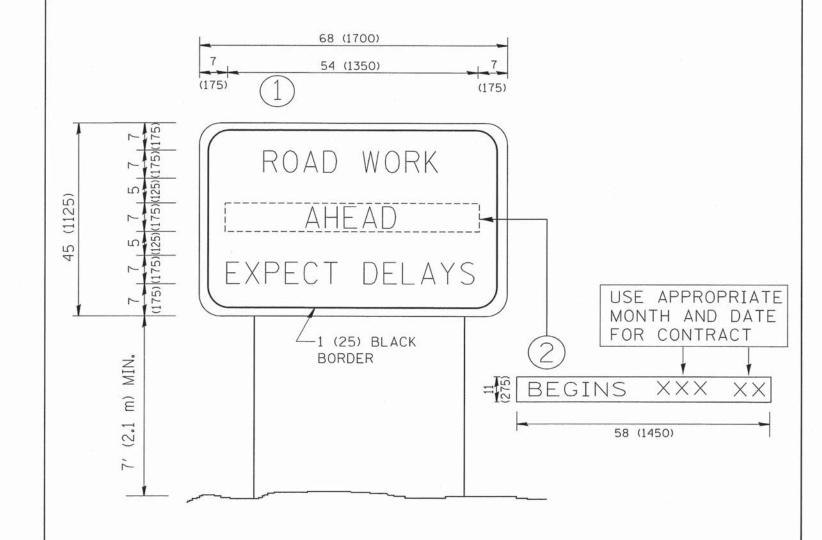
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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.

	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 FE	D. AID PROJECT
1	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION	(1.51) 310 110 110 (1.51)		TC-16	CONTRACT NO. 61C47
W:\diststd\22x34\tcl6.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	97 STATE OF ILLINOIS		FOR TRAFFIC STAGING		COOK 31 27
FILE NAME =	USER NAME = goglionobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96			PAVEMENT MARKING LETTERS AND SYMBOLS		COUNTY TOTAL SHEET



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.

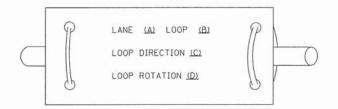
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

	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		DIS FED. AID PROJECT	
1		CATE	DELUCED 0 HIGHE 01 71 07		COLLE MONE	CUEEN 110 1 00 1 0 00000 1 00					1 NO. 61C4/
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION INFORMATION SIGN		INFORMATION SIGN			TC-22	CONTRAC	T NO STORT
W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS			1394	15-00098-00-RS	COOK	31 28	
		DD 1981	DELUCED D LUDG to 11 or	CTATE OF HUMOIC			AKIEKIAL KUAD			KIE.	
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD			F.A.U.	SECTION	COUNTY	TOTAL SHEL

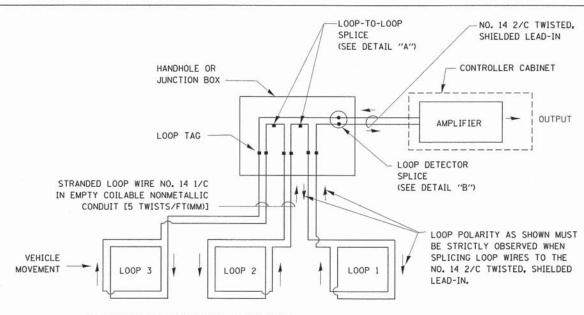
LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

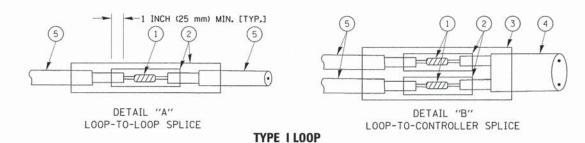


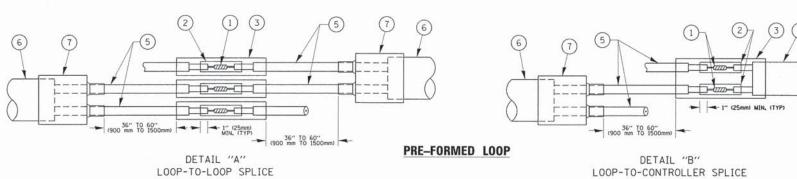
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
 THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.





LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.

- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = footemj	DESIGNED -	DAD	REVISED - DAG 1-1-14				DICT	DICT ON	-		F.A.U.	SECTION	COUNTY	TOTAL	SHEET
c:\pw_work\pwidot\footemj\d0108315\ta05.e	dgn	DRAWN -	BCK	REVISED -	STATE OF ILLINOIS				RICT ON			1394	15-00098-00-RS	соок	31	29
PL	PLOT SCALE = 50.0000 1/ in. CHECKED - DAD		ECKED - DAD REVISED -		DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS					AILS	TS-05	CONTRACT	I NO 6	1047	
	PLOT DATE = 1/13/2014	DATE -	10-28-09	REVISED -		SCALE: NONE	SHEET NO. 2	OF 7	SHEETS	STA.	TO STA.	FED. ROAD I	DIST. NO. 1 ILLINOIS FED.	AID PROJECT	140.	1041

LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT

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

PAVED OR
NON-PAVED
SHOULDER

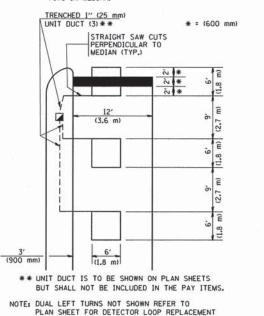
PAVED OR
NON-PAVED
SHOULDER

1'' (25 mm) UNIT
DUCT-TRENCHED
TO E/P **

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

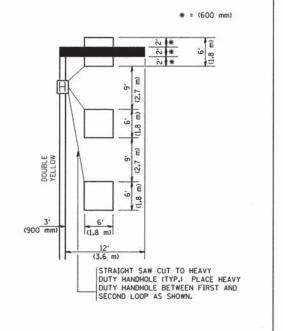
(PROTECTED / PERMITTED LEFT TURN PHASING)

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



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

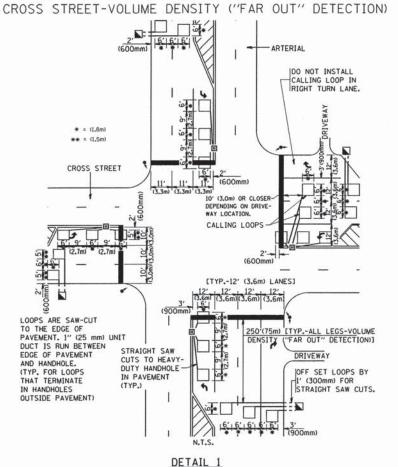
SCALE: NONE

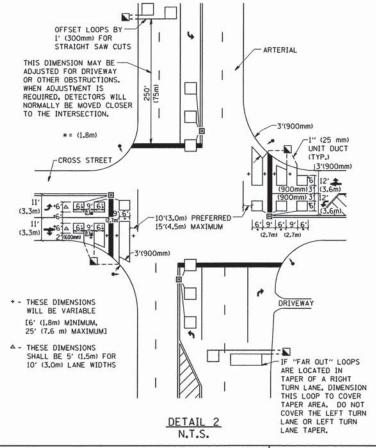
* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

* = (600 mm)

ARTERIAL-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, SHIFLDED.
- * 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 ALL 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 $\underline{\text{ALL}}$ 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.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME =	USER NAME = geglienobt	DESIGNED -	REVISED -	
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	PLOT SCALE = 50.0000 1/ IN.	CHECKED - R.K.F.	REVISED -	
	PLOT DATE = 1/4/2008	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION				F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEE NO.	
DETAILS FOR ROADWAY RESURFACING			1394	15-00098-00-RS	COOK	31	30		
DETAILS FOR RUADWAY RESURFACING				TS-07		CONTRACT NO. 61C47			
	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST, NO. 1 ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

