

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 592 (IL 157)
SECTION 117,118RS-1
SMART RESURFACING
ST. CLAIR COUNTY

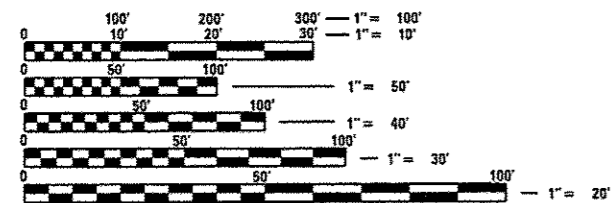
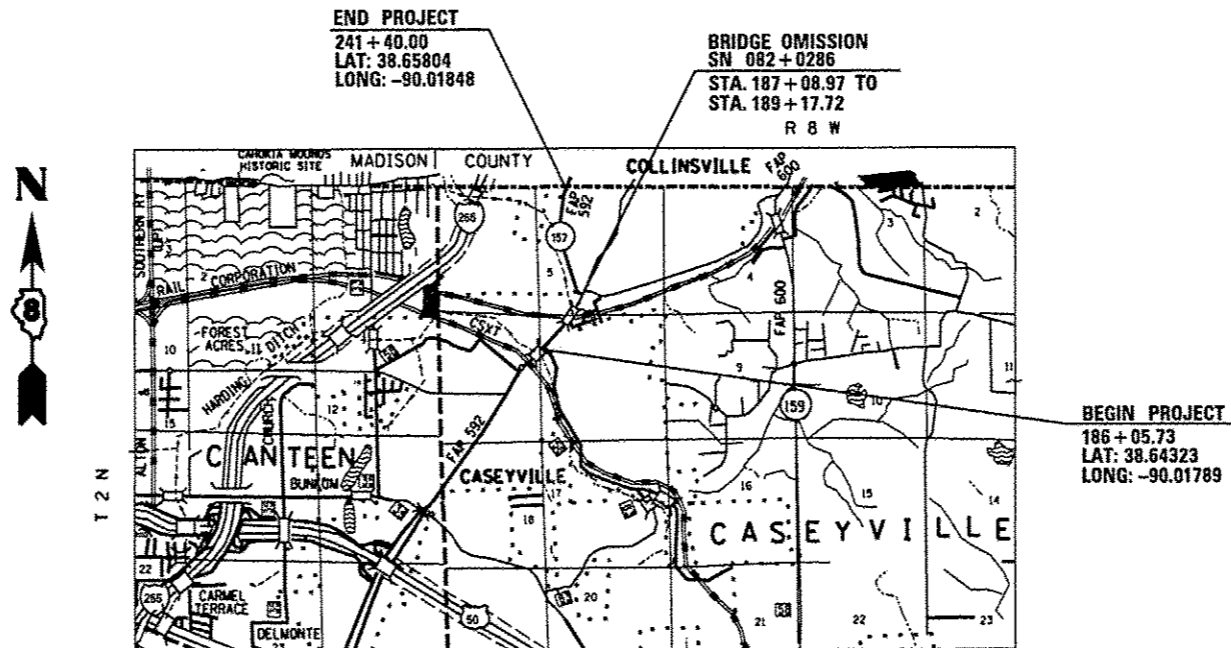
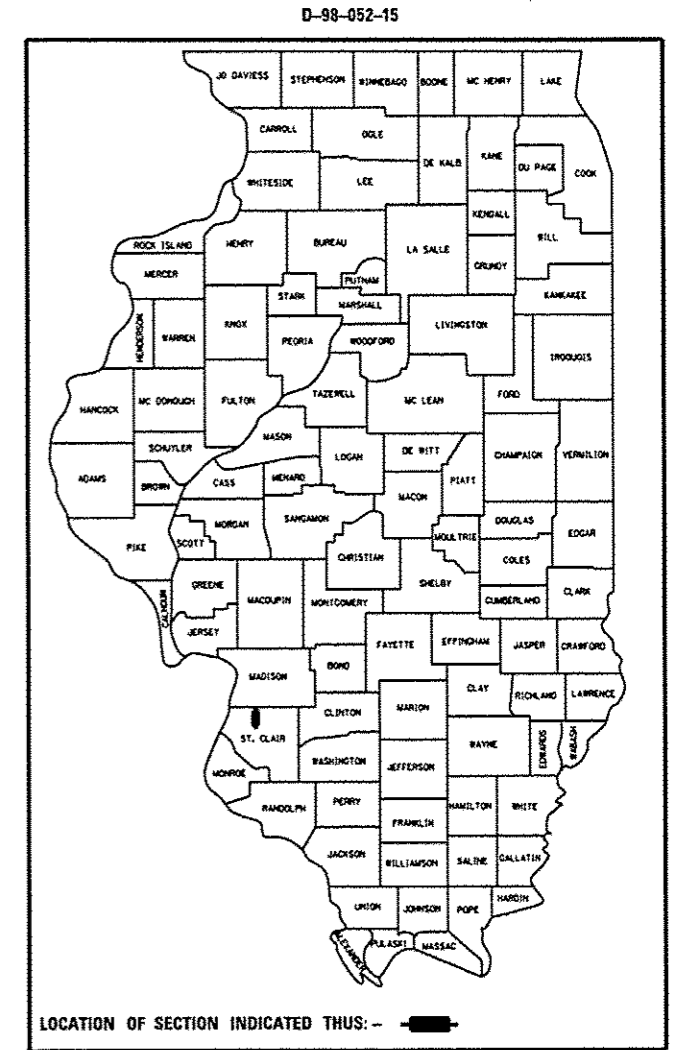
C-98-045-15

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	117,118RS-1	ST. CLAIR	12	1
		ILLINOIS	CONTRACT NO. 76H95	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA

2015 ADT = 10600 (ACTUAL)
2016 ADT = 10700 (ESTIMATED)
2036 ADT = 12200 (ESTIMATED)
SU = 4.5%
MU = 1.5%



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

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: HERVE GELIN
PROJECT MANAGER: CECIL DOWNING

CONTRACT NO. 76H95

GROSS LENGTH = 5534 FT. = 1.048 MILE
NET LENGTH = 5325 FT. = 1.008 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *Feb 10, 2016*

Jeffrey Z. Kamars
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

March 13, 2016
Maurice M. Addis, PE
ENGINEER OF DESIGN AND ENVIRONMENT

March 13, 2016
Omer Osman, PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

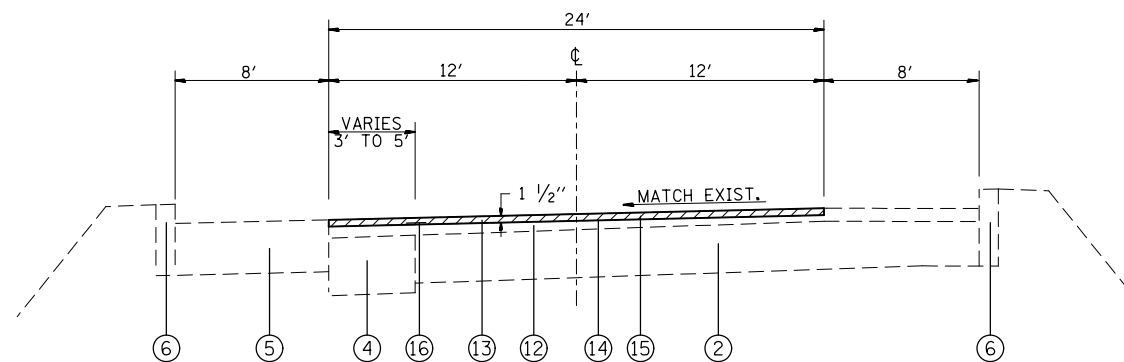
SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				ROADWAY 0005	100% STATE
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	7652	7652	
40600990	TEMPORARY RAMP	SO YD	69	69	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1459	1459	
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SO YD	17363	17363	
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	10122	10122	
67100100	MOBILIZATION	LSUM	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	1	
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	LSUM	1	1	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	1	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	798	798	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	266	266	
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	47	47	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	18977	18977	
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	165	165	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				ROADWAY 0005	100% STATE
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	187	187	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	68	68	
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	47	47	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	18977	18977	
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	165	165	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	187	187	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	68	68	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	97	97	
78300100	PAVEMENT MARKING REMOVAL	SO FT	6805	6805	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	47	47	
* 80300100	LOCATING UNDERGROUND CABLE	FOOT	120	120	
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1439	1439	

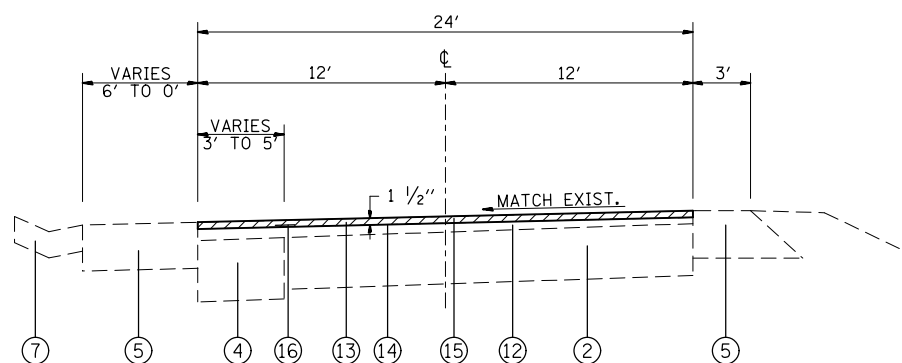
12

* SPECIALTY ITEM



TYPICAL SECTION IL 157

STA. 186+05.73 TO STA. 187+08.97



TYPICAL SECTION IL 157

STA. 189+17.72 TO STA. 190+53.00

▨ - HMA SURFACE REMOVAL 1 1/2"

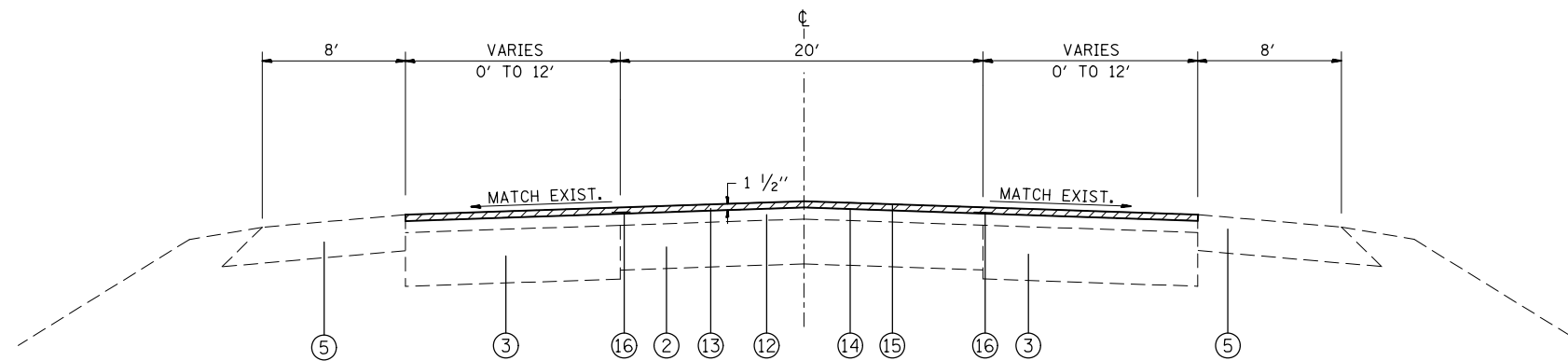
LEGEND

- ① EXISTING 9"-6"-9" CONCRETE PAVEMENT
- ② EXISTING CONCRETE PAVEMENT
- ③ EXISTING HMA BASE COURSE WIDENING, 9"
- ④ EXISTING HMA BASE COURSE WIDENING, 10"
- ⑤ EXISTING HMA SHOULDERS 8"
- ⑥ EXISTING CONCRETE CURB, TYPE B
- ⑦ EXISTING CONCRETE CURB, TYPE A
- ⑧ EXISTING CONCRETE CURB AND GUTTER, TYPE B-12
- ⑨ EXISTING CONCRETE CURB AND GUTTER, TYPE B-24
- ⑩ EXISTING CONCRETE MEDIAN, TYPE C-4
- ⑪ EXISTING CONCRETE MEDIAN SURFACE 4"
- ⑫ EXISTING HMA RESURFACING, ± 3 3/4"
- ⑬ PROPOSED HMA SURFACE REMOVAL, 1 1/2"
- ⑭ PROPOSED BITUMINOUS MATERIALS (TACK COAT)
- ⑮ PROPOSED HMA SURFACE COURSE, 1 1/2"
- ⑯ PROPOSED STRIP REFLECTIVE CRACK CONTROL

MIX CHART

MIXTURE USE	SURFACE
AC/PG	PG 64-22
RAP % (MAX)	SEE SPECIAL PROVISION
DESIGN AIR VOIDS	4.0% @ Ndes= 70
MIX COMPOSITION (GRADATION)	IL 9.5
FRICTION AGG	MIXTURE "D"
QUALITY MGMT PROGRAM	QCP

PLAN QUANTITIES FOR BITUMINOUS CONCRETE SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB/SQ YD/IN.



TYPICAL SECTION IL 157

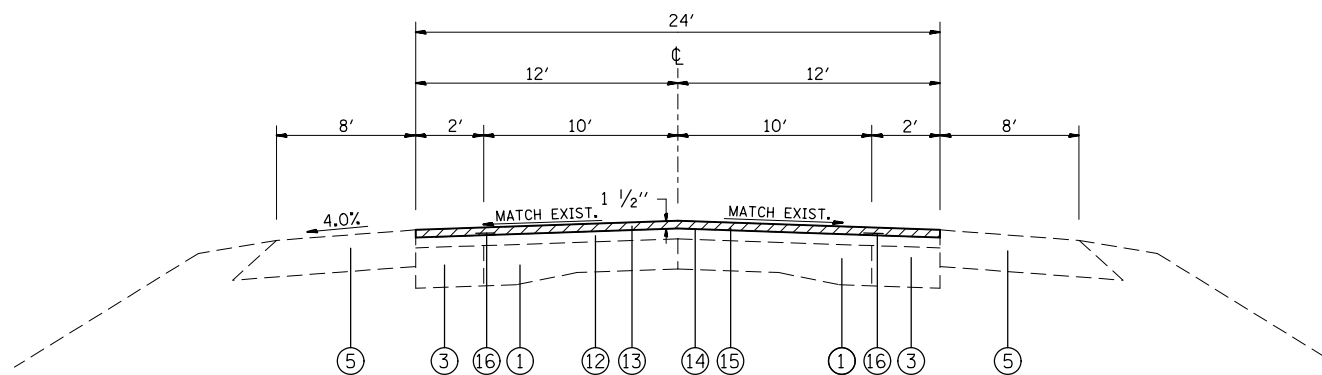
STA. 197+54.00 TO STA. 204+56.00

▨ - HMA SURFACE REMOVAL 1 1/2"

LEGEND

- ① EXISTING 9'-6"-9" CONCRETE PAVEMENT
- ② EXISTING CONCRETE PAVEMENT
- ③ EXISTING HMA BASE COURSE WIDENING, 9"
- ④ EXISTING HMA BASE COURSE WIDENING, 10"
- ⑤ EXISTING HMA SHOULDERS 8"
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- ⑯ PROPOSED STRIP REFLECTIVE CRACK CONTROL

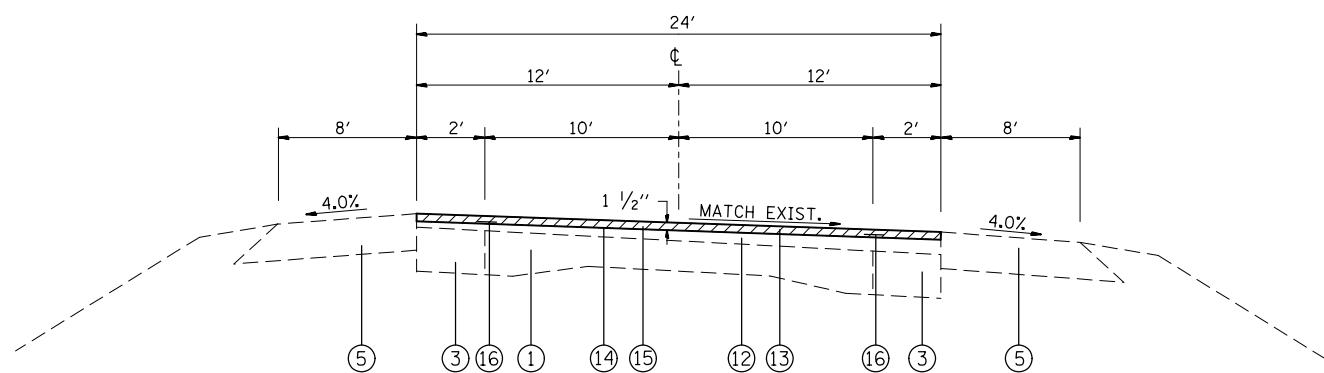
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 76H95				
	PLOT DATE = 2/10/2016	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



TYPICAL SECTION IL 157

STA. 204+56.00 TO STA. 220+68.00
 STA. 230+93.00 TO STA. 241+40.00

▨ - HMA SURFACE REMOVAL 1 1/2"



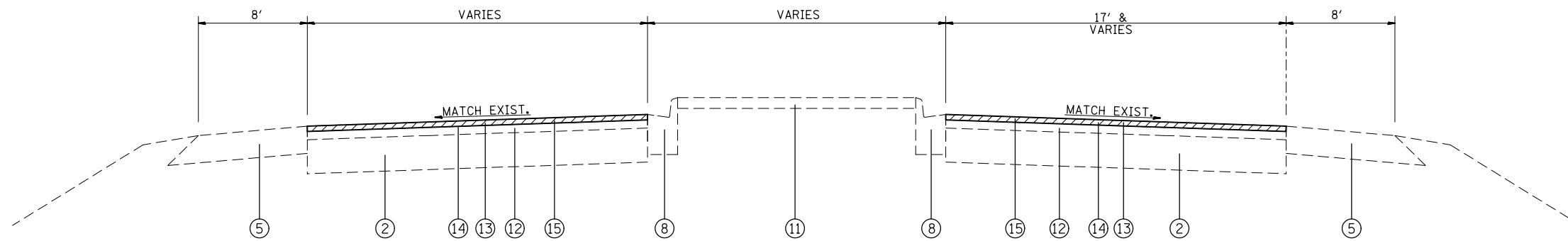
TYPICAL SECTION IL 157

STA. 220+68.00 TO STA. 230+93.00

LEGEND

- ① EXISTING 9"-6"-9" CONCRETE PAVEMENT
- ② EXISTING CONCRETE PAVEMENT
- ③ EXISTING HMA BASE COURSE WIDENING, 9"
- ④ EXISTING HMA BASE COURSE WIDENING, 10"
- ⑤ EXISTING HMA SHOULDERS 8"
- ⑥ EXISTING CONCRETE CURB, TYPE B
- ⑦ EXISTING CONCRETE CURB, TYPE A
- ⑧ EXISTING CONCRETE CURB AND GUTTER, TYPE B-12
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- ⑫ EXISTING HMA RESURFACING, ± 3 3/4"
- ⑬ PROPOSED HMA SURFACE REMOVAL, 1 1/2"
- ⑭ PROPOSED BITUMINOUS MATERIALS (TACK COAT)
- ⑮ PROPOSED HMA SURFACE COURSE, 1 1/2"
- ⑯ PROPOSED STRIP REFLECTIVE CRACK CONTROL

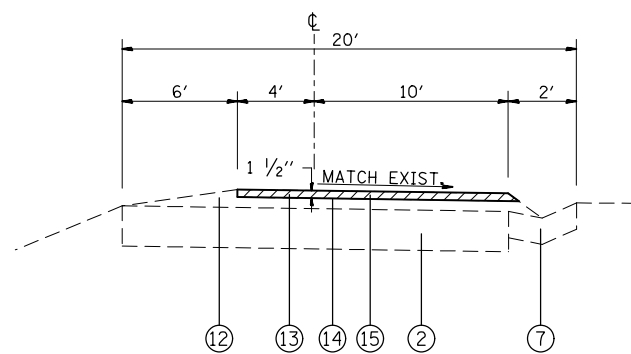
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	PLOT DATE = 2/10/2016	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				



TYPICAL SECTION

STA. 300+22.00 TO STA. 230+93.00

▨ - HMA SURFACE REMOVAL 1 1/2"



**TYPICAL SECTION
CASEYVILLE RD**

STA. 6+08.00 TO STA. 9+70.00

LEGEND

- ① EXISTING 9"-6"-9" CONCRETE PAVEMENT
- ② EXISTING HMA BASE COURSE WIDENING, 9"
- ③ EXISTING HMA BASE COURSE WIDENING, 10"
- ④ EXISTING HMA SHOULDERS 8"
- ⑤ EXISTING CONCRETE CURB, TYPE B
- ⑥ EXISTING CONCRETE CURB, TYPE A
- ⑦ EXISTING CONCRETE CURB AND GUTTER, TYPE B-12
- ⑧ EXISTING CONCRETE CURB AND GUTTER, TYPE B-24
- ⑨ EXISTING CONCRETE MEDIAN, TYPE C-4
- ⑩ EXISTING CONCRETE MEDIAN SURFACE 4"
- ⑪ EXISTING HMA RESURFACING, ± 3 3/4"
- ⑫ PROPOSED HMA SURFACE REMOVAL, 1 1/2"
- ⑬ PROPOSED BITUMINOUS MATERIALS (TACK COAT)
- ⑭ PROPOSED HMA SURFACE COURSE, 1 1/2"
- ⑮ PROPOSED STRIP REFLECTIVE CRACK CONTROL

FILE NAME =	USER NAME = DintelmanJN	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICALS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		CONTRACT NO. 76H95			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 2/10/2016	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	

RESURFACING SCHEDULE

LOCATION			HMA SURFACE REMOVAL, 1.5"	STRIP REFLECTIVE CRACK CONTROL	BITUMINOUS MATERIALS (TACK COAT)	HMA SURFACE COURSE 1.5"
STA TO STA			SQ YD	FOOT	POUNDS	TON
186+06	TO	187+09	274.67	103.00	123.60	23.07
189+18	TO	191+53	626.67	235.00	282.00	52.64
191+53	TO	193+43	1224.44	190.00	389.50	102.85
193+43	TO	194+40	36.40	194.00	16.38	3.06
194+40	TO	195+93	615.00	306.00	276.75	51.66
195+93	TO	201+23	2591.11	1060.00	1166.00	217.65
201+23	TO	204+95	992.00	744.00	446.40	83.33
204+95	TO	241+40	9720.00	7290.00	4374.00	816.48
300+22	TO	230+93	720.00		324.00	60.48
CASEYVILLE RD						
6+08	TO	9+70	563.11		253.40	47.30
TOTALS						
			17363	10122	7652	1459

TEMP. RAMP SCHEDULE

LOCATION			TEMPORARY RAMP
STA TO STA			SQ YD
186+06	TO	186+11	13.33
187+04	TO	187+09	13.33
189+18	TO	189+23	13.33
241+35	TO	241+40	13.33
CASEYVILLE ROAD			
6+08	TO	6+13	7.78
9+65	TO	9+70	7.78
TOTAL			69

PAVEMENT MARKING SCHEDULE

LOCATION			THERMOPLASTIC PAVEMENT MARKING							RAISED REFLECTIVE PAVEMENT MARKERS	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	
			4"				8"	12"	24"					LETTERS AND SYMBOLS
			SOLID WHITE	SOLID YELLOW	WHITE SKIP DASH	SKIP-DASH YELLOW CENTERLINE	SOLID WHITE	YELLOW CROSS HATCH	SOLID WHITE STOP BARS					
STA.	TO	STA.	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	EACH	EACH	FOOT	SQ FT	
186+06	TO	187+09	206	206								14	5	
189+18	TO	191+53	270	270								33	11	
191+53	TO	193+43	380	380								27	9	
193+43	TO	194+40	194	194								14	5	
194+40	TO	195+93	306	306								21	7	
195+93	TO	196+55	68									9	3	
196+55	TO	198+55	600	400						30		28	9	
198+55	TO	201+05	600	1200	84			92		12		35	12	
201+05	TO	204+05	600	1200				95	46.8	8		42	14	
204+05	TO	215+93	2376	1188		297				15	15	166	55	
215+93	TO	231+88	3190			399				20	20	223	74	
231+88	TO	240+56	1736	868		217				11	11	122	41	
240+56	TO	241+56	200	200						1	1	14	5	
300+22	TO	230+93	195	285				165				33		
CASEYVILLE RD														
6+08	TO	9+70	362									51	17	
SUB TOTAL			11283	6697	84	913	165	187	68	47	97	47	798	266
TOTAL			18977				165	187	68	47	97	47	798	266

TEMPORARY PAVEMENT MARKING SCHEDULE

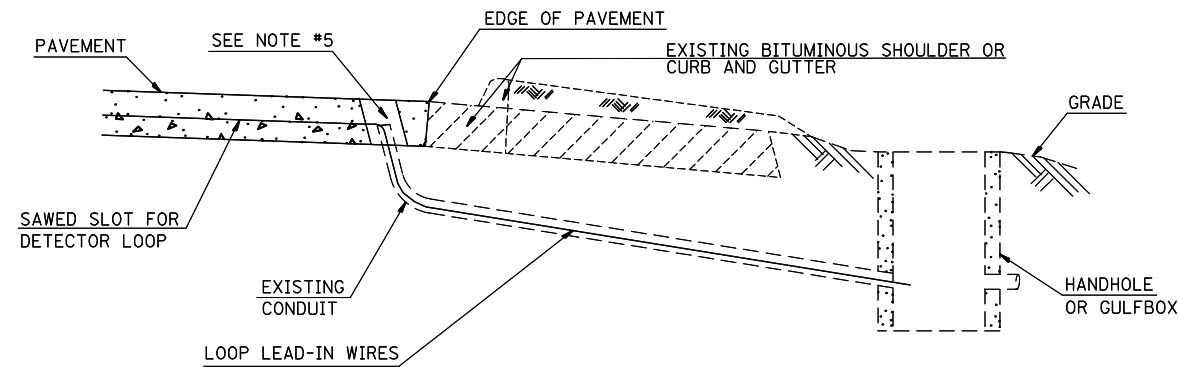
LOCATION			TEMPORARY PAVEMENT MARKING							LETTERS AND SYMBOLS	PAVEMENT MARKING REMOVAL		
			4"				8"	12"	24"				
			SOLID WHITE	SOLID YELLOW	WHITE SKIP DASH	SKIP-DASH YELLOW CENTERLINE	SOLID WHITE	YELLOW CROSS HATCH	SOLID WHITE STOP BARS				
STA.	TO	STA.	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	SQ FT		
186+06	TO	187+09	206	206								137	
189+18	TO	191+53	270	270								180	
191+53	TO	193+43	380	380								253	
193+43	TO	194+40	194	194								129	
194+40	TO	195+93	306	306								204	
195+93	TO	196+55	68								22	67	
196+55	TO	198+55	600	400								333	
198+55	TO	201+05	600	1200	84			92				720	
201+05	TO	204+05	600	1200				95	46.8			742	
204+05	TO	215+93	2376	1188		297						1,287	
215+93	TO	231+88	3190			399						1,196	
231+88	TO	240+56	1736	868		217						940	
240+56	TO	241+56	200	200								133	
300+22	TO	230+93	195	285				165			33	336	
CASEYVILLE RD													
6+08	TO	9+70	362								13	147	
SUB TOTAL			11283	6697	84	913	165	187	68	47		6805	
TOTAL			18977				165	187	68	47			6805

NOTES:

SEE TABLE "DETECTOR LOOP REQUIREMENTS AND CALCULATIONS"
FOR LOOP SIZE AND CALCULATED NUMBER OF TURNS.

SEE "DETAIL A" FOR INSTALLING DETECTOR LOOP WIRES
IN EXISTING CONDUITS.

SCHEDULE OF QUANTITIES			TOTAL QUANTITIES	IL 157 & CASEYVILLE RD.
CODE NO.	ITEM	UNIT		
80300100	LOCATING UNDERGROUND CABLE	FOOT	120	120
88600600	DETECTOR LOOP REPLACEMENT	FOOT	1439	1439




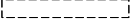

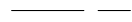
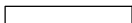
DETAIL A
(NO SCALE)

INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUIT

1. DRILL OUT PAVEMENT SEALANT AND CLEAN EXISTING CONDUIT.
2. REMOVE EXISTING DETECTOR LOOP WIRES TO HANDHOLE OR GULFBOX.
3. INSTALL NEW LOOP LEAD-IN WIRES IN EXISTING CONDUIT.
4. SPLICE NEW DETECTOR LOOP WIRES TO EXISTING LOOP LEAD-IN CABLE IN HANDHOLE OR GULFBOX.
5. FILL HOLE WITH APPROVED SEALER. PREVENT SEALER FROM ENTERING INTO CONDUIT.
6. LOCATING UNDERGROUND CABLE WILL BE PAID FOR SEPARATELY.

NOT A PAY ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP REPLACEMENT"

DETECTOR LOOP REPLACEMENT LEGEND

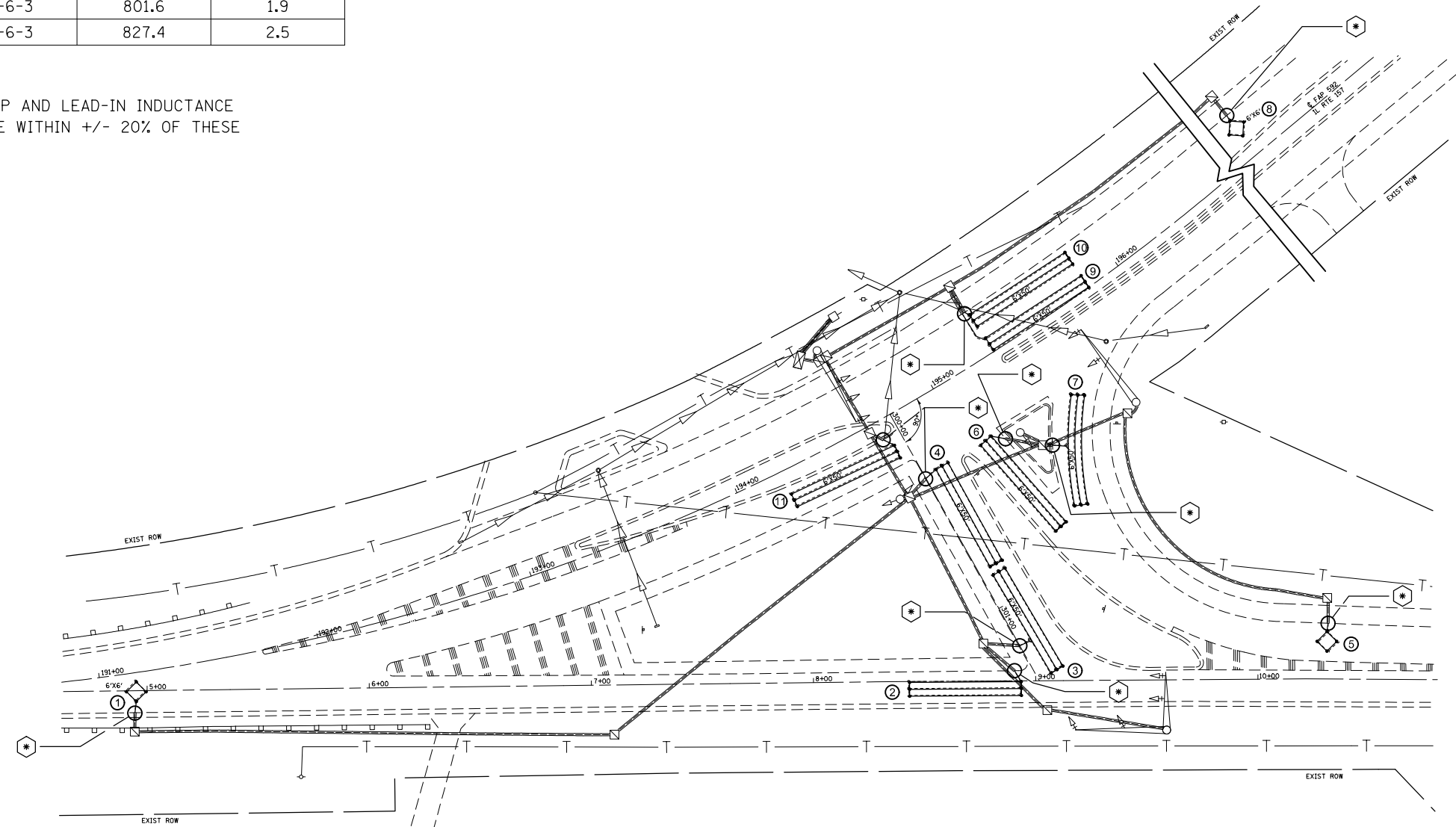
-  EX. HANDHOLE
-  EX. DETECTOR LOOP
-  EX. TRAFFIC SIGNAL CONTROLLER
-  EXISTING CONDUIT
-  PROPOSED DETECTOR LOOP

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μ H)	CALCULATED RESISTANCE OHMS (Ω)
1. NB CCO	2	6 x 6	6	365.0	2.9
2. NB-CH 51 CD	OLA	6 x 50(Q)	3-6-3	829.3	2.6
3. EB A CD	OLB	6 x 50(Q)	3-6-3	829.6	2.6
4. EB B CD	9	6 x 50(Q)	3-6-3	811.1	2.2
5. WB CCO	4	6 x 6	6	335.2	2.2
6. WB A CD	4	6 x 50(Q)	3-6-3	827.4	3.0
7. WB B CD	4	6 x 50(Q)	3-6-3	849.6	3.0
8. SB CCO	6	6 x 6	6	355.0	2.6
9. SB LT CD	1	6 x 50(Q)	3-6-3	846.3	3.0
10. SB CD	6	6 x 50(Q)	3-6-3	801.6	1.9
11. NB CD	2	6 x 50(Q)	3-6-3	827.4	2.5

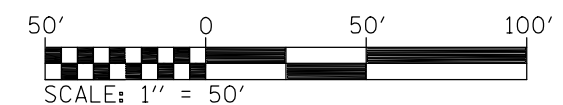
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

Q=QUADRAPOLE

* =SEE DETAIL "A"

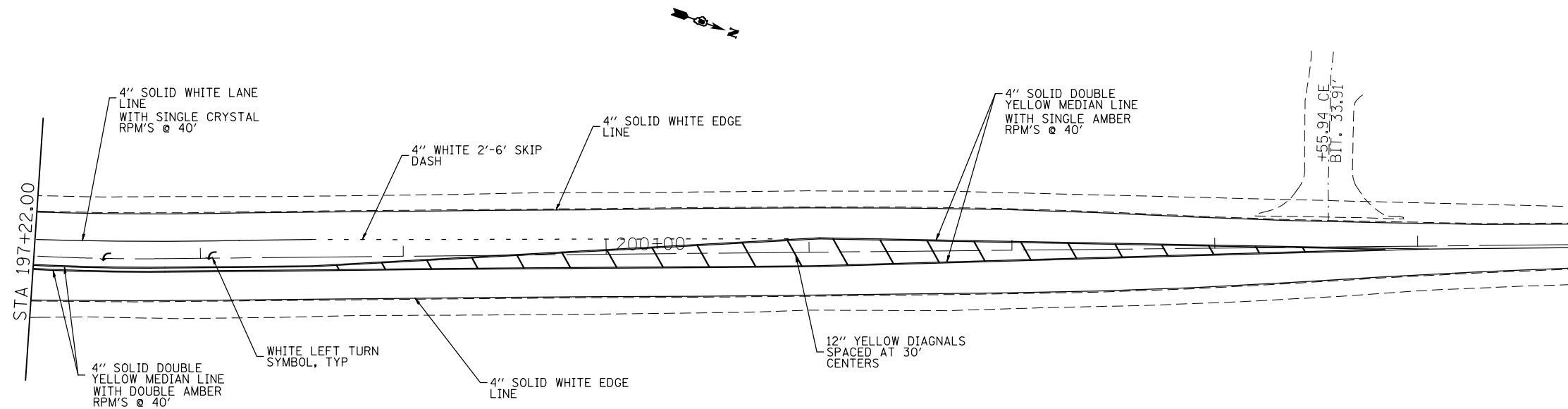


IL 157 & CASEYVILLE RD.



FILE NAME =	USER NAME = DintelmanJN	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT IL 157 & E. CASEYVILLE RD.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL084EBIDINTEG.illinois.gov\PWIDOT\Documents\IDOT Offices\District 8\Projects\D876H95\DRAWING\DATA\EA0\Sheets\D876H95-sht-ts.dgn	PLOT SCALE = 64.5383 ' / in.	CHECKED -	REVISED -			592	117,118RS-1	ST. CLAIR	12	10	
	PLOT DATE = 2/10/2016	DATE -	REVISED -			CONTRACT NO. 76H95					
						FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

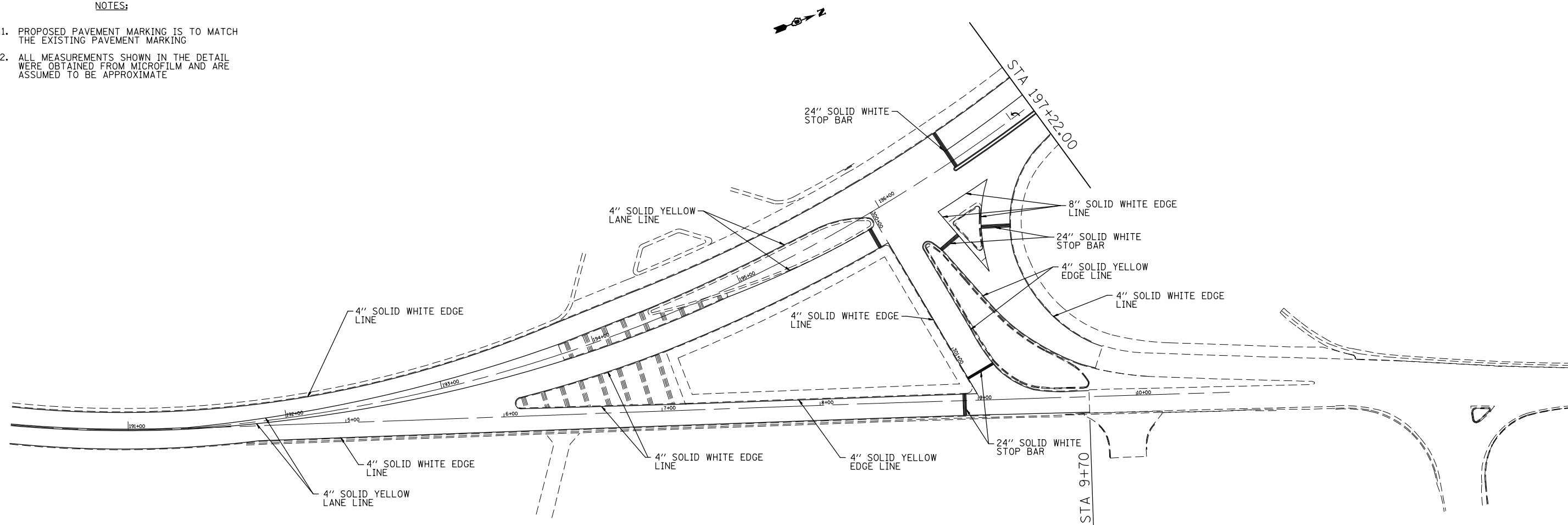
SCALE: SHEET NO. 2 OF 4 SHEETS STA. TO STA.



(NOT TO SCALE)

NOTES:

1. PROPOSED PAVEMENT MARKING IS TO MATCH THE EXISTING PAVEMENT MARKING
2. ALL MEASUREMENTS SHOWN IN THE DETAIL WERE OBTAINED FROM MICROFILM AND ARE ASSUMED TO BE APPROXIMATE



(NOT TO SCALE)

FILE NAME =	USER NAME = DintelmanJN	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 8\Projects\0875\Drawings\6A0\Sheets\0875-sht-plan.dwg		CHECKED -	REVISED -		592	117,118RS-1	ST. CLAIR	12	11				
Default	PLOT SCALE = 100.0000' / in.	DATE -	REVISED -		CONTRACT NO. 76H95				ILLINOIS FED. AID PROJECT				
	PLOT DATE = 2/10/2016				SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		

