

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	21RS-2	KNOX	18	1
RTE. US 34		ILLINOIS CONTRACT NO. 68C54		

- 1. COVER SHEET & SIGNATURE
- 2-4. GENERAL NOTES
- 5-6. SUMMARY OF QUANTITIES
- 7-9. TYPICAL SECTION
- 10. SCHEDULE OF QUANTITIES
- 11. PLAN VIEW
- 12. LINE DIAGRAM
- 13-18. CADD STANDARDS

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

US 34 ROUTE FAP 313
SECTION 21RS-2
PROJECT N/A
INTERMITTENT MILLING & RESURFACING
KNOX COUNTY

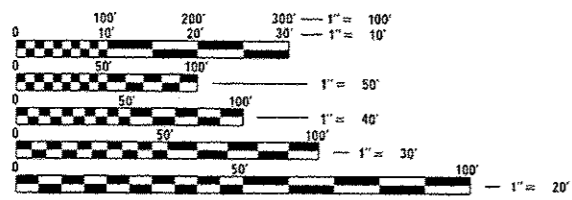
HIGHWAY STANDARDS

- 701400-08 701451-03
- 701411-09 701901-04
- 701422-07 780001-05
- 701426-07 781001-03
- 701428 701406-09

CADD STANDARDS - INCLUDED AS SHEETS 13-18.

- 406101-04
- 440001-04
- 780001-04

ADT: 14300 /2013
MU: 10.5% - 15%



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: CHRISTOPHER MAUSHARD, 309-671-3453
PROJECT MANAGER: GEORGE ELIAS, 309-671-3467
CONTRACT NO. 68C54
CATALOG NO. 035263-00D

GROSS LENGTH = 1,710 FT. = 0.324 MILE
NET LENGTH = 1,710 FT. = 0.324 MILE

D-94-035-15



LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

JOB DESCRIPTION:
INTERMITTENT MILLING
& RESURFACING ON US
34 JUST WEST OF I-74
NEAR GALESBURG

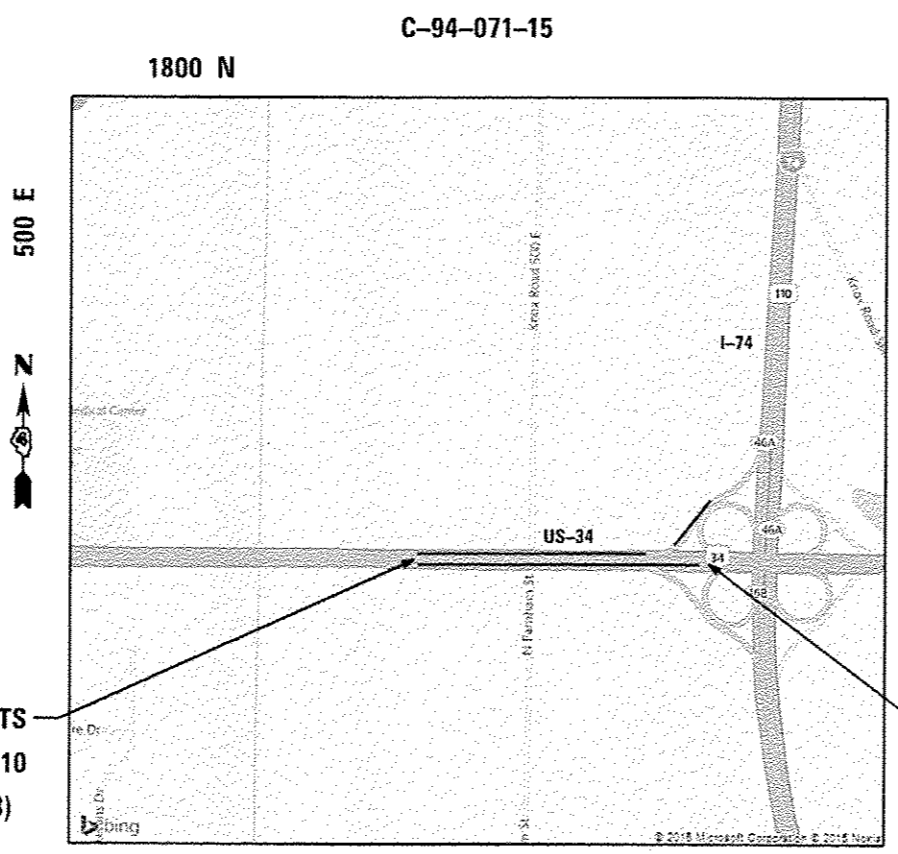
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 26, 2015
Donald A. Garnett
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 8, 2015
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

May 8, 2015
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS



COMMITMENTS

Commitments are not to be altered without the written approval of all parties to which the commitment was made. **NO COMMITMENT WERE MADE.**

PAVEMENT STATION NUMBERS & PLACEMENT

The Contractor shall provide labor and materials required to imprint pavement station numbers in the finished surface of the pavement and/or overlay. The numbers shall be approximately 3/4 inch (20 mm) wide, 5 inches (125 mm) high and 5/8 inch (15 mm) deep.

The pavement station numbers shall be installed as specified herein:

Interval – 200 feet (English stationing) or 100 meters (metric stationing)

Bottom of Numbers – 6 inches (150 mm) from the inside edge of the pavement marking

Location:

– 2, 3, & 5 Lane Pavements – right edge of pavement in direction of increasing stations

– Multi-Lane Divided Roadways – outside edge of pavement in both directions

– Ramps – along baseline edge of pavement

Position – stations shall be placed so they can be read from the adjacent shoulder

Format – English (Metric) pavement stations shall use this format *XXX (XX + X00)*,

where X represents the pavement station

This work will not be paid for separately, but will be included in the cost of the associated pavement and/or overlay pay items.

FILE NAME : US34el-74.dgn Default	USER NAME : aubreyga	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE : 200.0000' / in.	DRAWN - _____	REVISED - _____			313	21RS-2	KNOX	18	2
	PLOT DATE : 3/27/2015	CHECKED - _____	REVISED - _____			RTE. US 34	CONTRACT NO. 68C54		ILLINOIS FED. AID PROJECT	
	DATE - _____	REVISED - _____		SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____	TO STA. _____			

ENVIRONMENTAL REVIEWS

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

The required environmental resource documentation shall include the following:

- * BDE Form 2289 (Cultural and Natural Resources Review of Borrow Areas)
- * BDE Form 2290 (Waste/Use Area Review)
- * A location map showing the size limits and location of the use area
- * Color photographs depicting the use area
- * Borrow Area Entry Agreement form * D4 PI0101

Prior to any waste materials being removed from the construction site the required environmental resource surveys shall be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

Please note that a minimum of four weeks shall be allowed for the District to obtain the required waste site environmental clearances and six weeks for the required borrow site environmental clearances.

FILE NAME : US3161-74.dgn Default	USER NAME : aubruggs	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE * 200.0000' / in.	DRAWN - _____	REVISED - _____			313	21RS-2	KNOX	18	3
	PLOT DATE * 3/27/2015	CHECKED - _____	REVISED - _____			RTE. US 34		CONTRACT NO. 68C54		ILLINOIS FED. AID PROJECT
		DATE - _____	REVISED - _____	SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____						

The following mixture requirements are applicable to this project:

Mixture use(s):	Surface Course 2.5" (placed in two 1.25" lifts)
AC/PG:	SBS OR SBR 76-22
Design Air Voids:	4.0% N = 50
Mixture Composition: (Mixture Gradation)	IL 9.5
Friction Aggregate:	Mix D
Quality Management Program:	QCQA

BUTT JOINT CUTTING TIME RESTRICTION

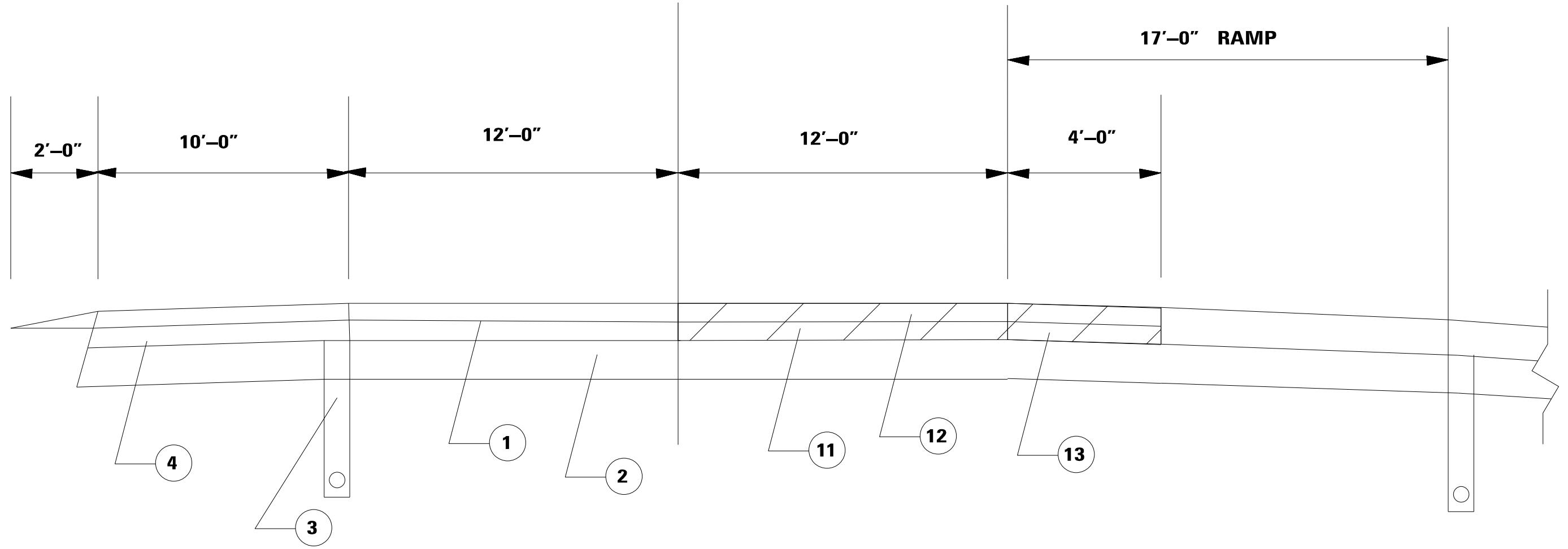
Butt joints shall not be milled more than three (3) days prior to placement of the HMA surface course.

PAVING SURFACE COURSE

Continuous paving operations on the main roadway shall be maintained at all times during the construction of the hot-mix asphalt surface. No interruptions for side roads, entrances, turn lanes, etc. will be allowed.

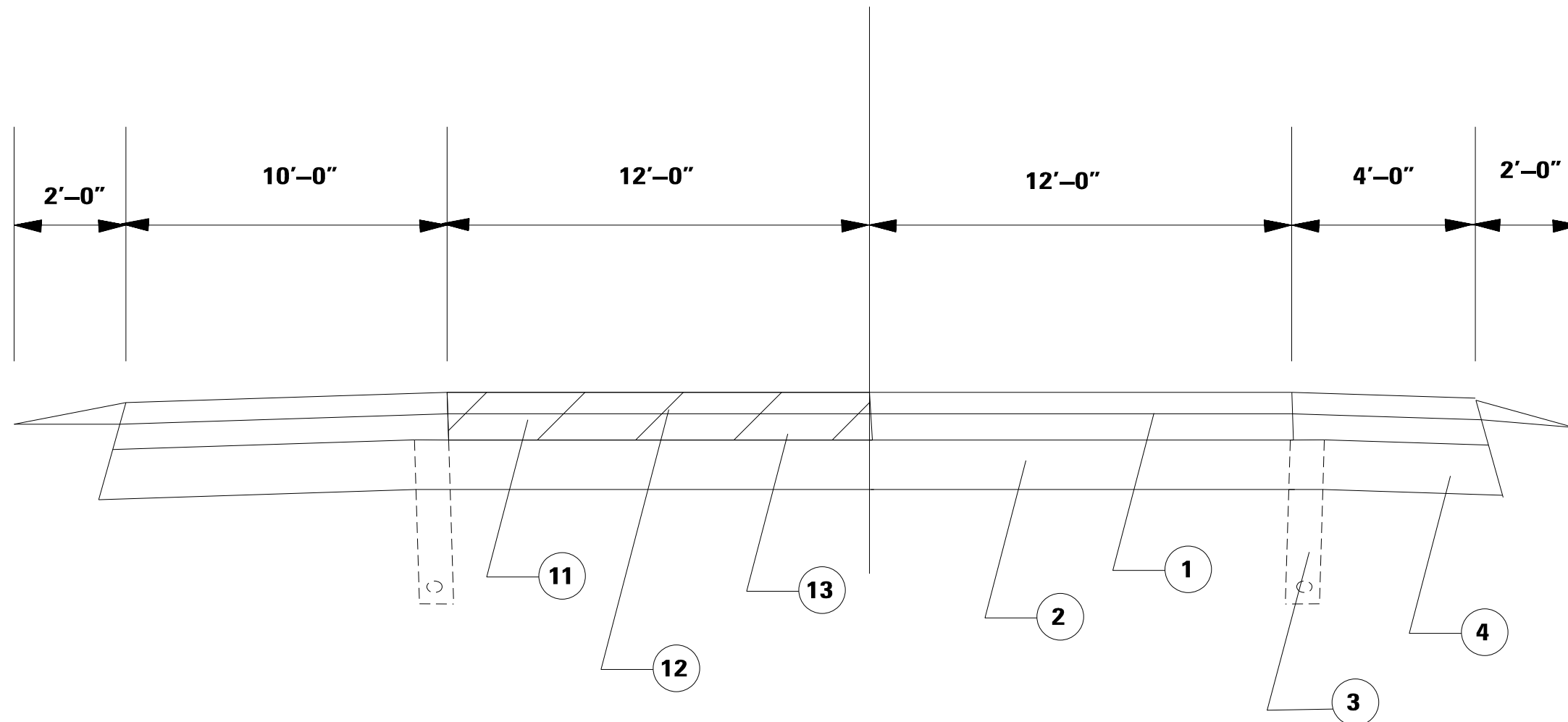
FILE NAME : US34el-74.dgn	USER NAME : aubrey*	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE : 200.0000' / in.	DRAWN - _____	REVISED - _____			313	21RS-2	KNOX	18	4	
Default	PLOT DATE : 3/27/2019	CHECKED - _____	REVISED - _____			RTE. US 34	CONTRACT NO. 68C54				
		DATE - _____	REVISED - _____			ILLINOIS FED. AID PROJECT					
SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____											

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				0005	
				KNOX	
				100% STATE	
40600285	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	POUND	2993	2993	
40600982	HOT - MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	362	362	
40600990	TEMPORARY RAMP	SO YD	56	56	
40603335	HOT - MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	631	631	
44000159	HOT - MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	4434	4434	
67100100	MOBILIZATION	L SUM	1	1	
70100315	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	EACH	1	1	
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	3	3	
70100820	TRAFFIC CONTROL AND PROTECTION, STANDARD 701451	L SUM	1	1	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1608	1608	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2350	2350	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	631	631	
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	380	380	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	536	536	
14					



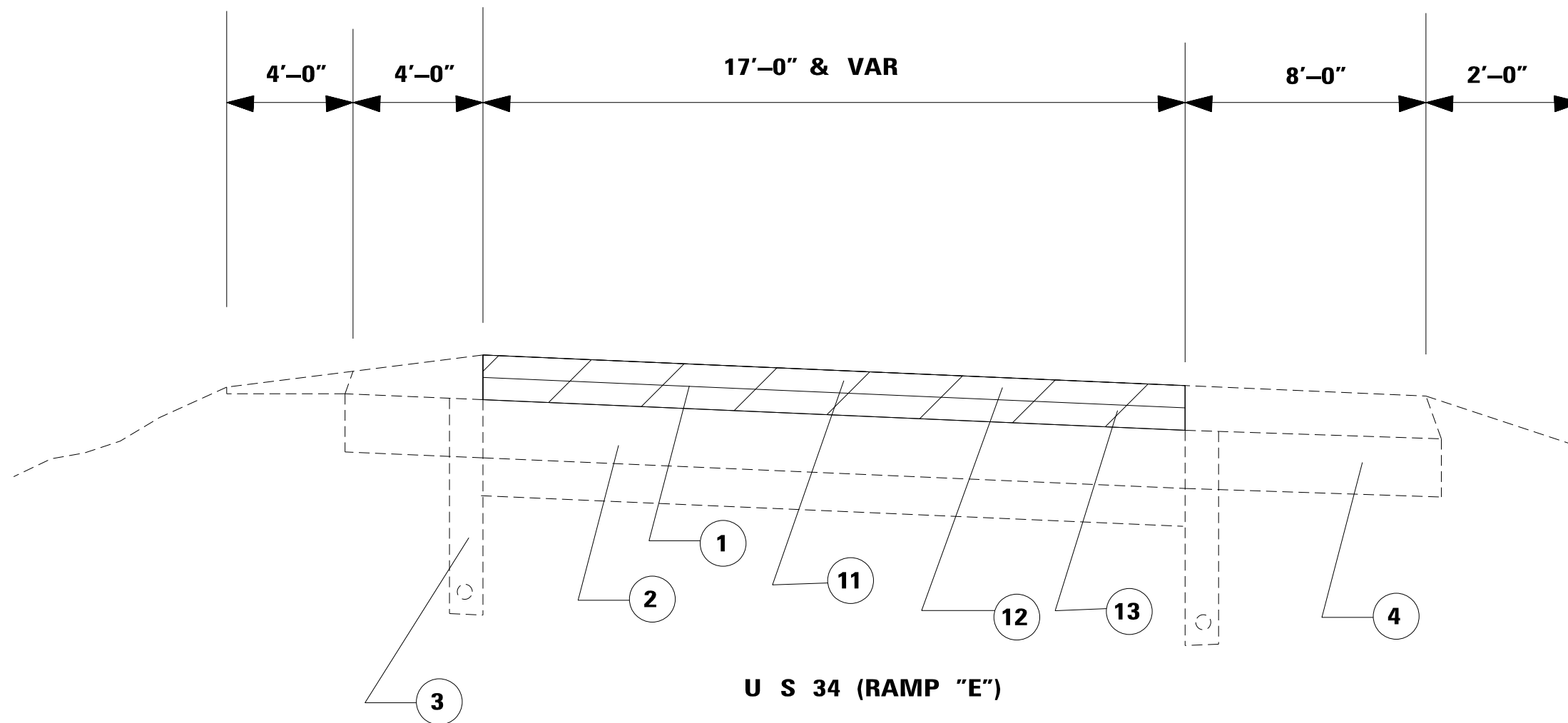
**U S 34 (EAST BOUND)
STA 607+10 TO 616+00**

- ① EXIST. HMA OVERLAY
- ② EXIST. HMA BASE COURSE
- ③ EXIST. UNDERDRAIN
- ④ EXIST. SHOULDERS
- ⑪ PROP. HMA SURFACE COURSE REMOVAL 2 1/2'
- ⑫ PROP. HMA SURFACE COURSE 1 1/4" (FIRST LIFT)
- ⑬ PROP. HMA SURFACE COURSE 1 1/4" (SECOND LIFT)



**U S 34 (WEST BOUND)
STA 607+10 TO 613+10**

- 1** EXIST. HMA OVERLAY
- 2** EXIST. HMA BASE COURSE
- 3** EXIST. UNDERDRAIN
- 4** EXIST. SHOULDERS
- 11** PROP. HMA SURFACE COURSE REMOVAL 2½'
- 12** PROP. HMA SURFACE COURSE 1¼" (FIRST LIFT)
- 13** PROP. HMA SURFACE COURSE 1¼" (SECOND LIFT)



**U S 34 (RAMP "E")
STA 616+40 TO 619+40**

- ① EXIST. HMA OVERLAY
- ② EXIST. HMA BASE COURSE
- ③ EXIST. UNDERDRAIN
- ④ EXIST. SHOULDERS
- ⑪ PROP. HMA SURFACE COURSE REMOVAL 2 1/2'
- ⑫ PROP. HMA SURFACE COURSE 1 1/4" (FIRST LIFT)
- ⑬ PROP. HMA SURFACE COURSE 1 1/4" (SECOND LIFT)

LOCATIONS			LENGTH	AVRG WIDTH	AREA	POLYMER BIT. MAT (PR CT)	*HOT - MIX ASPHALT SURF CSE MIX "D" N50	HOT - MIX ASPHALT SURF REMOVAL 2 1/2"	MATERIAL TRANSFER DEVICE
STATION	TO	STATION	FT	FT	SQ YD	POUND	TON	SQ YD	TON
WEST BOUND									
607+10	TO	613+10	600	12	800	540	114	800	114
RAMP "E"									
616+40	TO	623+10	670	17	1,266	854	180	1,266	180
EAST BOUND									
607+10	TO	624+20	1,710	12	2,280	1,539	325	2,280	325
612+80	TO	614+80	200	4	89	60	13	89	13
TOTALS						2,993	631	4,434	631

* TWO LIFTS 1 1/4" EACH

LOCATION			**BIT SURF REMOVAL BUTT-JOINT	TEMP RAMPS
STATION	TO	STATION	SQ YD	SQ YD
WEST BOUND				
607+10	TO	613+10	107	16
RAMP "E"				
616+40	TO	623+10	113	19
EAST BOUND				
607+10	TO	624+20	107	16
612+80	TO	614+80	36	5
TOTALS			362	56

** SAW CUT AND CLEAN UP PAVEMENT

COST INCLUDED IN BUTT-JOINT

LOCATIONS			***SHORT-TERM PAVEMENT MARKING	WORK ZONE PVT. MRK. REMOVAL
STATION	TO	STATION	FT	SQ FT
WEST BOUND				
607+10	TO	613+10	180	60
RAMP "E"				
616+40	TO	623+10	402	134
EAST BOUND				
607+10	TO	624+20	1,026	342
TOTALS			1,608	536

*** THREE APPLICATIONS

LOCATION			& TEMP PVT MARKING LINE 4"	& TEMP PVT MARKING LINE 6"	& TEMP PVT MARKING LINE 8"
STATION	TO	STATION	FT	FT	FT
WEST BOUND					
607+10	TO	613+10	210	350	0
RAMP "E"					
616+40	TO	623+10	1,210	0	130
EAST BOUND					
607+10	TO	611+10	400	100	0
611+10	TO	614+30	0	283	0
614+30	TO	616+80	0	63	250
616+80	TO	624+20	740	185	0
TOTALS			2,350	631	380

LOCATION			RAISED REF PVT MRKRS REMOVAL
STATION	TO	STATION	EACH
WEST BOUND			
607+10	TO	613+10	8
RAMP "E"			
616+40	TO	623+10	0
EAST BOUND			
607+10	TO	624+20	21
612+80	TO	614+80	0
TOTALS			29

MOBILIZATION	L SUM
JOB SITE	1
TOTAL	1

TRAF CONT & PROT STD 701422	EACH
JOB SITE	1
TOTAL	1

TRAF CONT & PROT STD 701411	EACH
JOB SITE	3
TOTAL	3

TRAF CONT & PROT STD 701451	L. SUM
JOB SITE	1
TOTAL	1

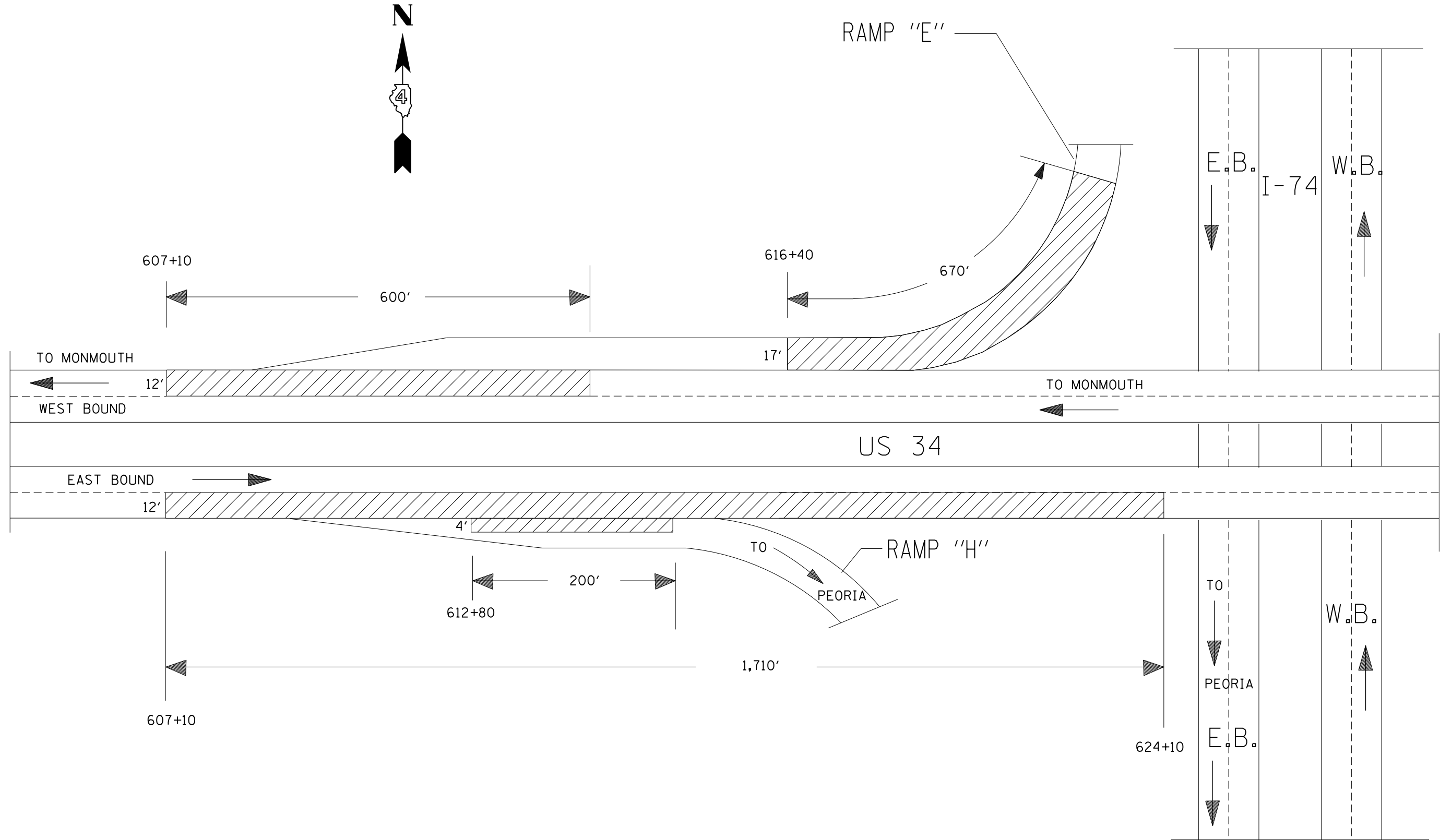
****SPEED DISPLAY TRAILER	CAL MO
JOB SITE	1
TOTAL	1

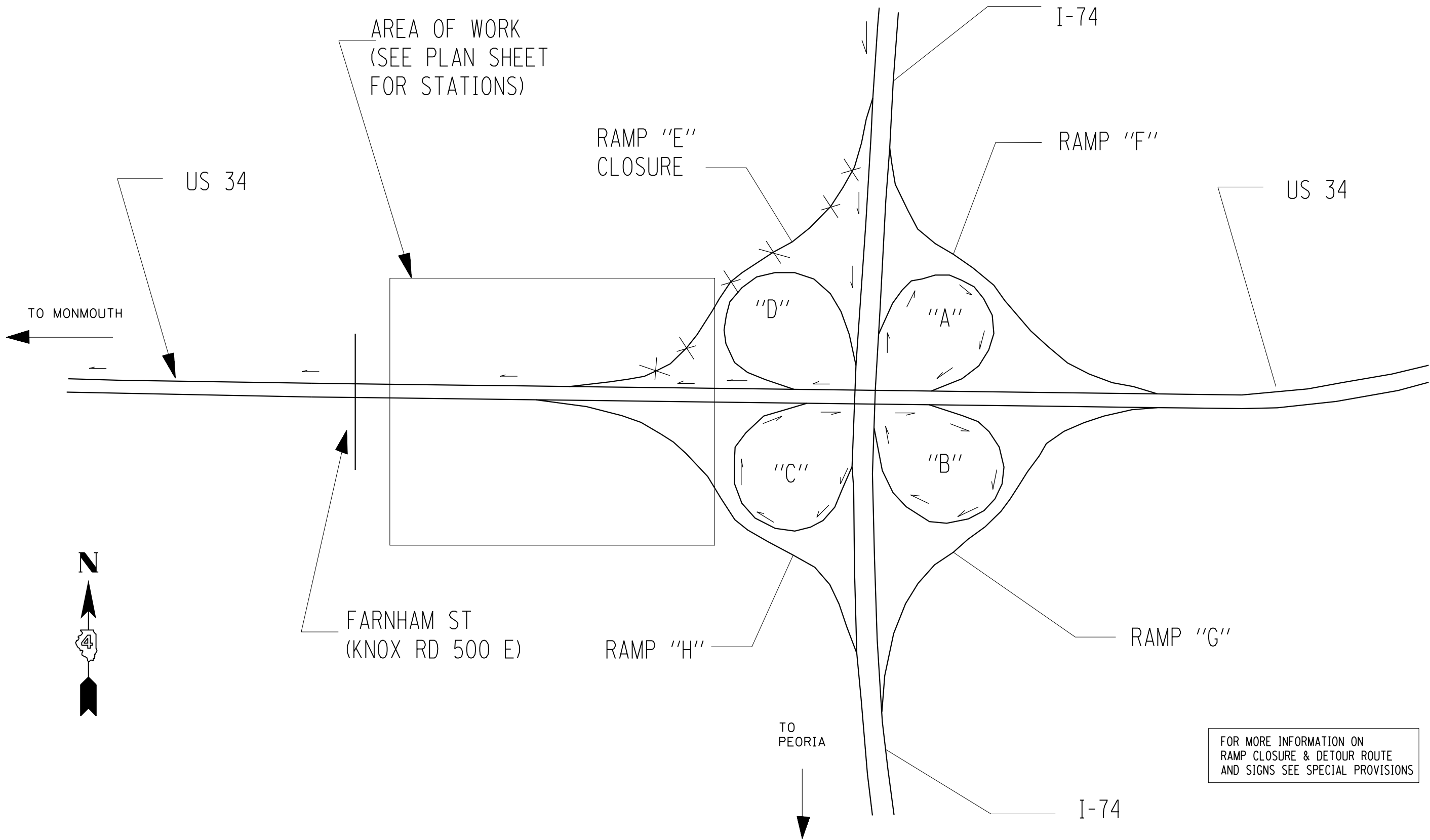
**** use 2 trailers for 15 days each for the total of 1 cal month

*****CHANGEABLE MESSAGE SIGN	CAL DA
JOB SITE	15
TOTAL	15

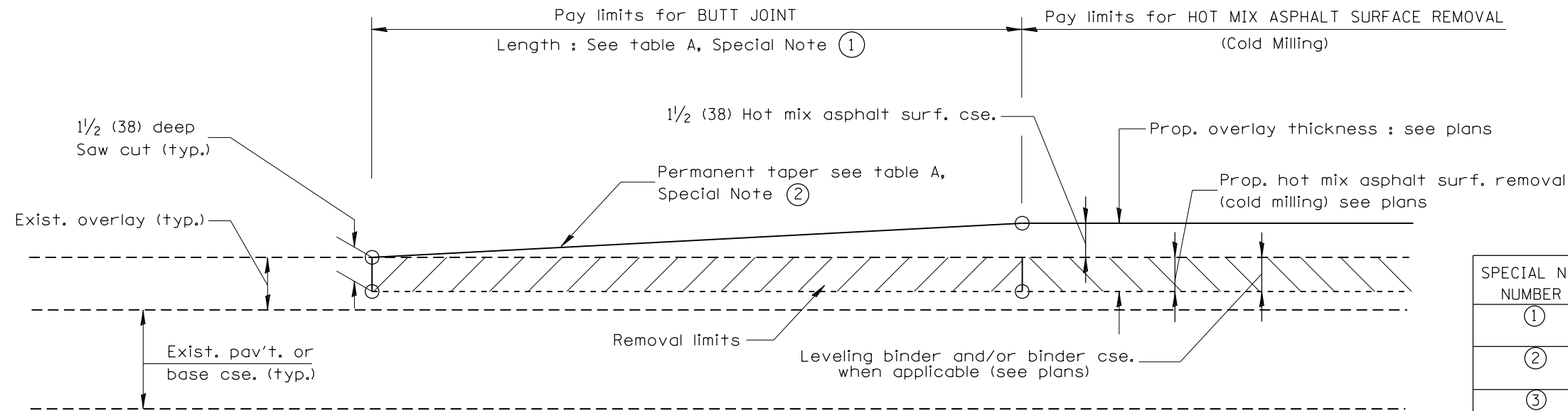
***** use 3 signs 5 days each for the total of 15 calender days

TRAF CONT & PROT (SPECIAL)	L. SUM
JOB SITE	1
TOTAL	1





DESIGNER NOTES:
 1. Include District Special Provision for Butt Joints & for Hot Mix Asphalt Removal (Cold Milling).
 2. The butt joints pay item includes the saw cut & temporary ramp. Payment for the Butt Joint applies whether or not the project features Hot Mix Asphalt Removal (Cold Milling).



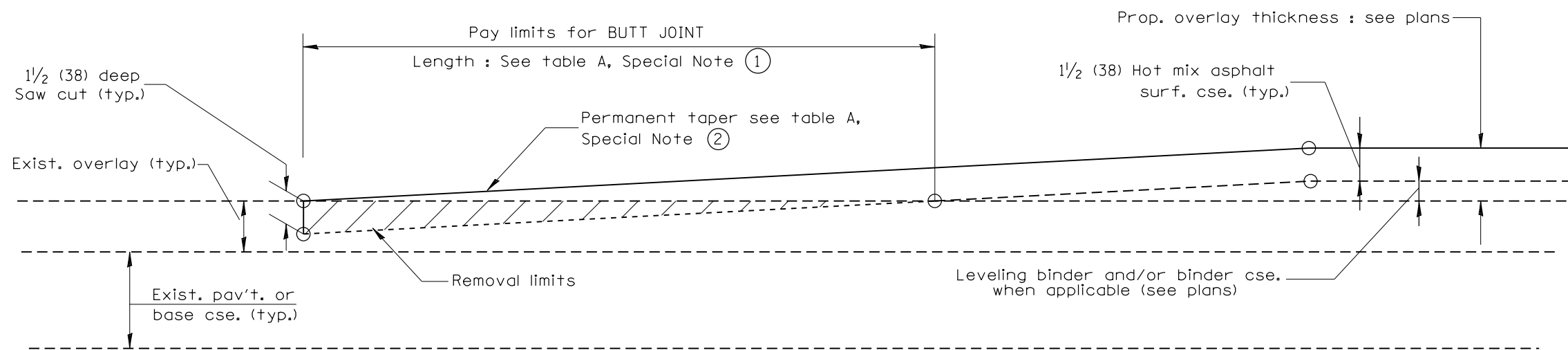
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
(LENGTHS AND TAPER RATES)

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
①	LENGTH OF BUTT JOINT	60'(18.0 m)	30'(9.0 m)
②	PERMANENT TAPER RATE	1:480	1:240
③	TEMPORARY RAMP TAPER RATE	1:80	1:40
④	TEMPORARY RAMP LENGTH	10'(3.0 m)	5'(1.5 m)
⑤	LENGTH OF BUTT JOINT	10'(3.0 m)	10'(3.0 m)

GENERAL NOTES

- The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
- The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
- The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.



CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

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

01-01-97	BENUM, C-23.01, NEW REVISION BOX	J.P.
04-01-97	CORRECTION TO DEPTH	M.A.
09-15-05	REVISED DESIGNER NOTE	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

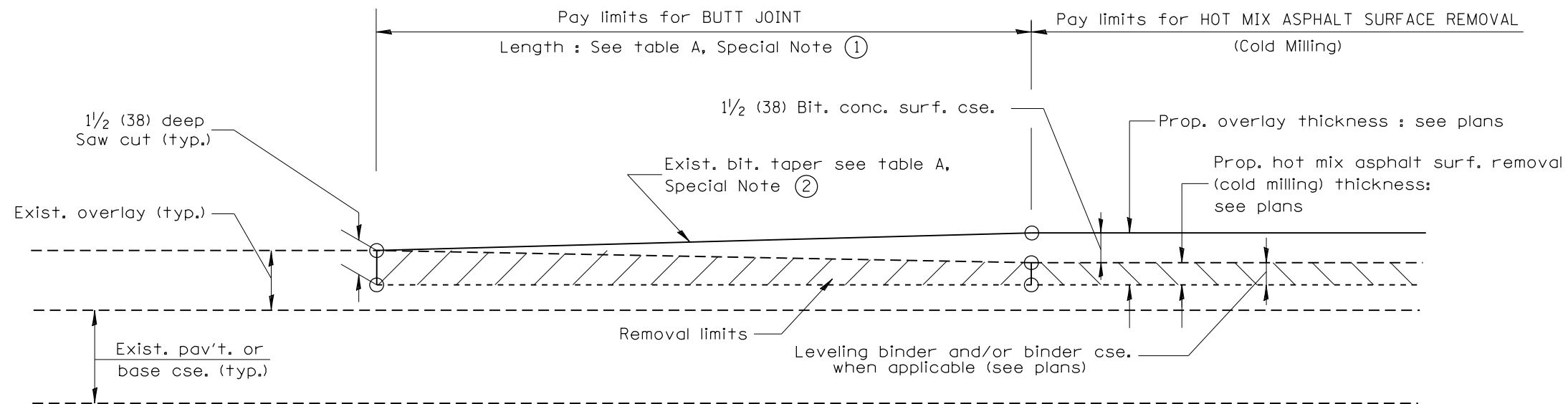
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

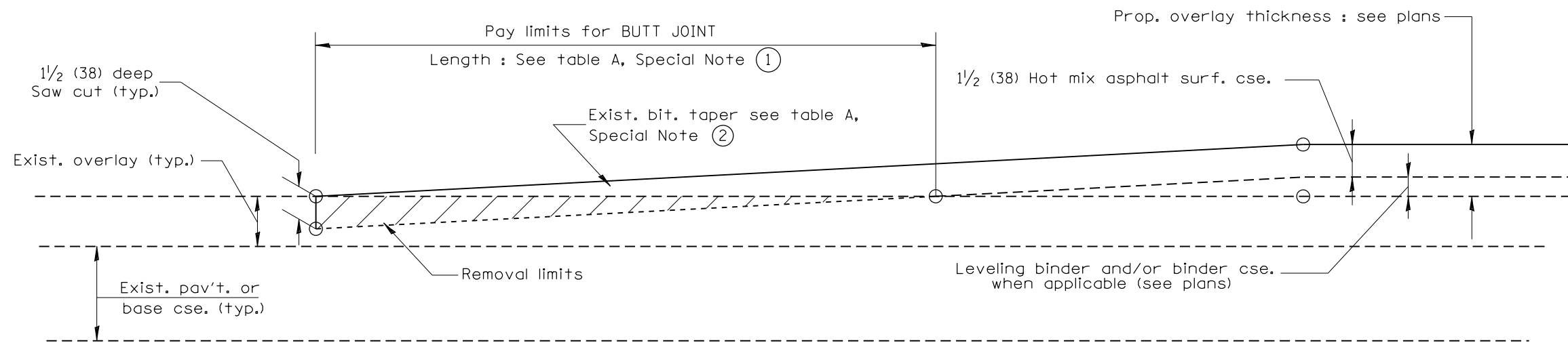
NOT TO SCALE

SHI, J OF 3
CADD STD, 406101-04

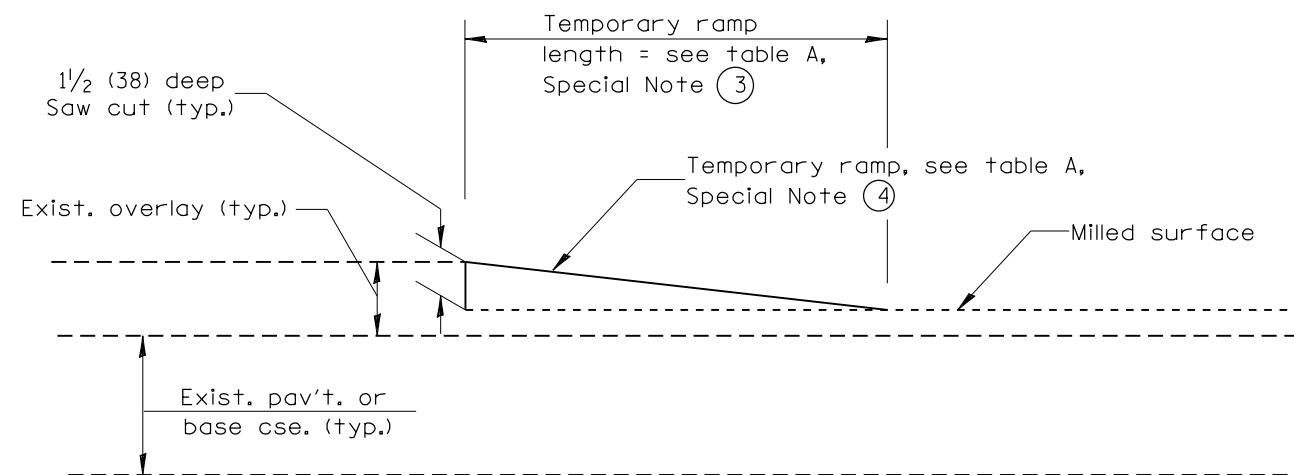
F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	21R5-2	KNOX	18	13
RTE. US 34		CONTRACT NO. 68C54		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



CASE 3 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



CASE 4 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

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

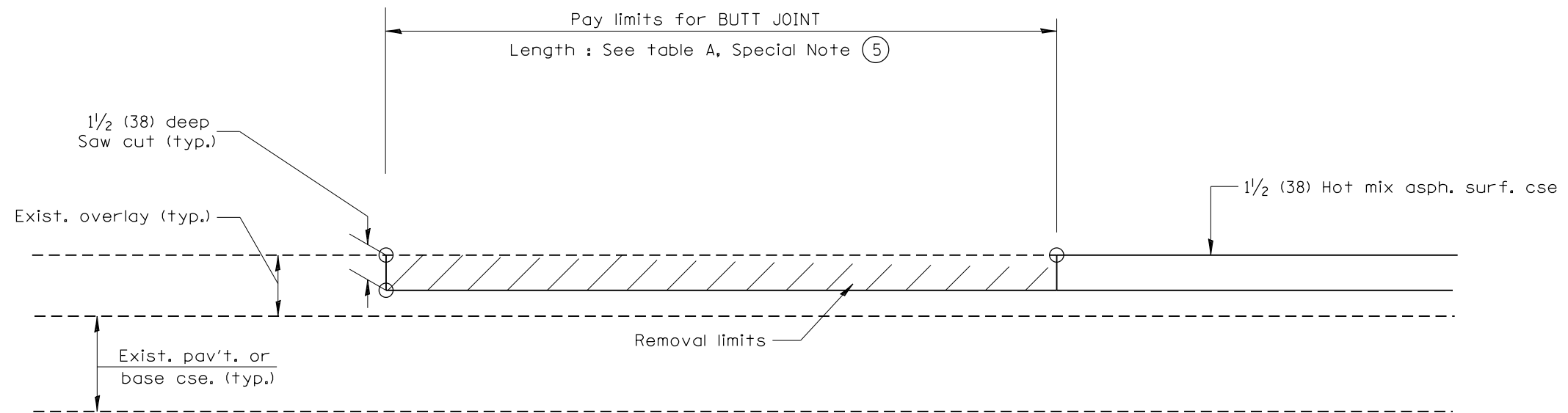
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHI 2 OF 3
CADD STD. 406101-04

F.A.P 313	SECTION 21RS-2	COUNTY KNOX	TOTAL SHEETS 18	SHEET NO. 14
RTE. US 34		CONTRACT NO. 68C54		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



CASE 5 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

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

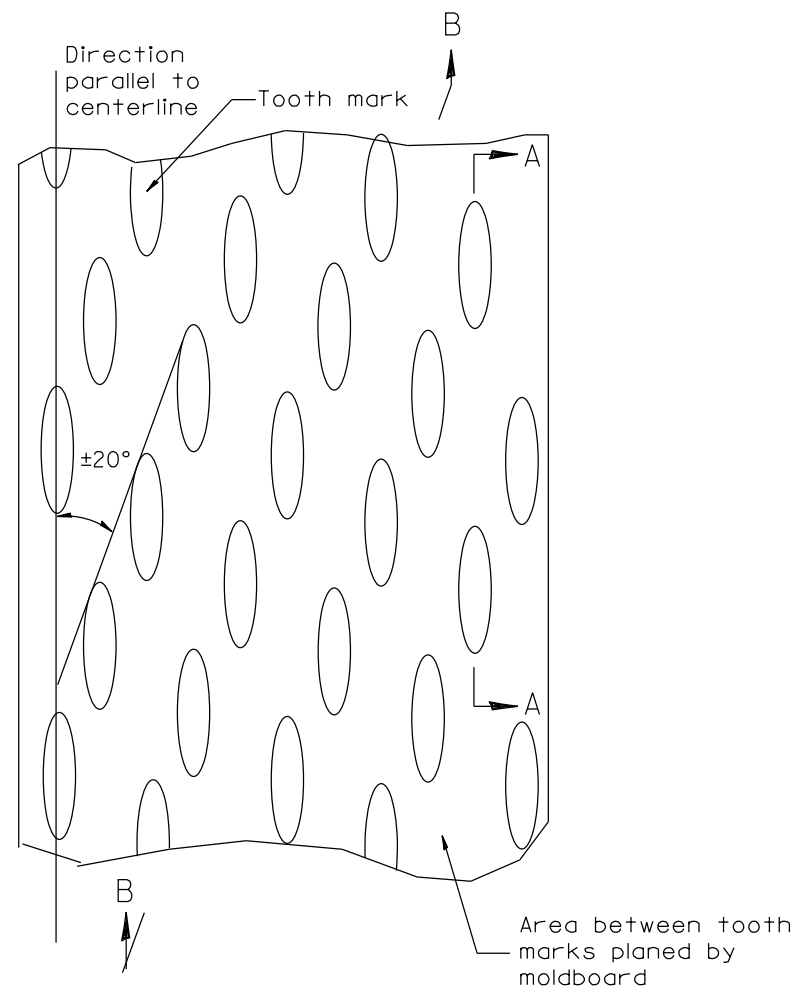
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHI 3 OF 3
CADD STD. 406101-04

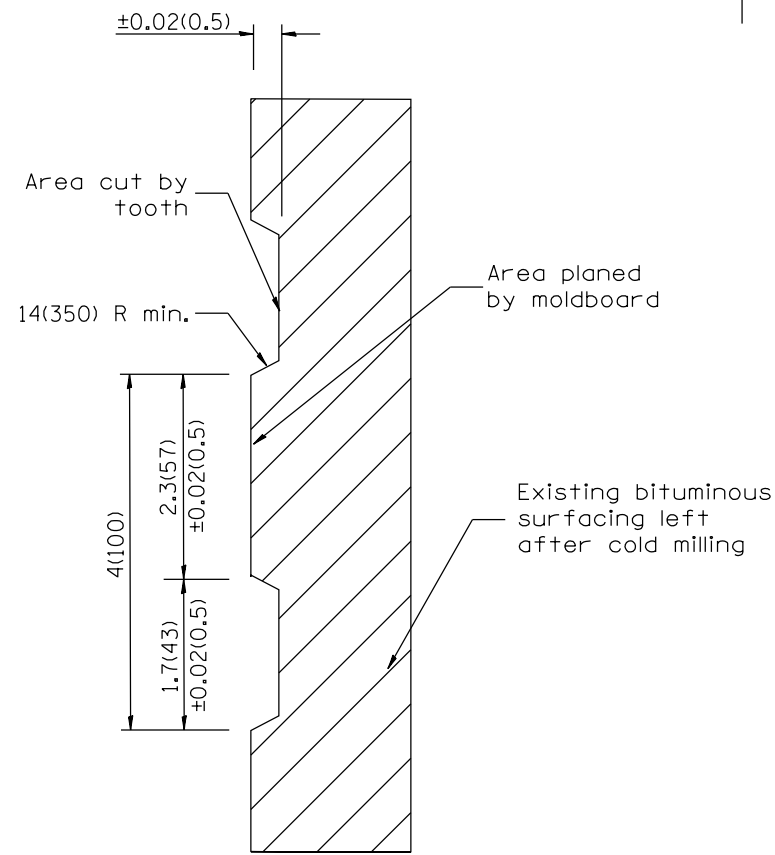
F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	21RS-2	KNOX	18	15
RTE. US 34		CONTRACT NO. 68C54		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		



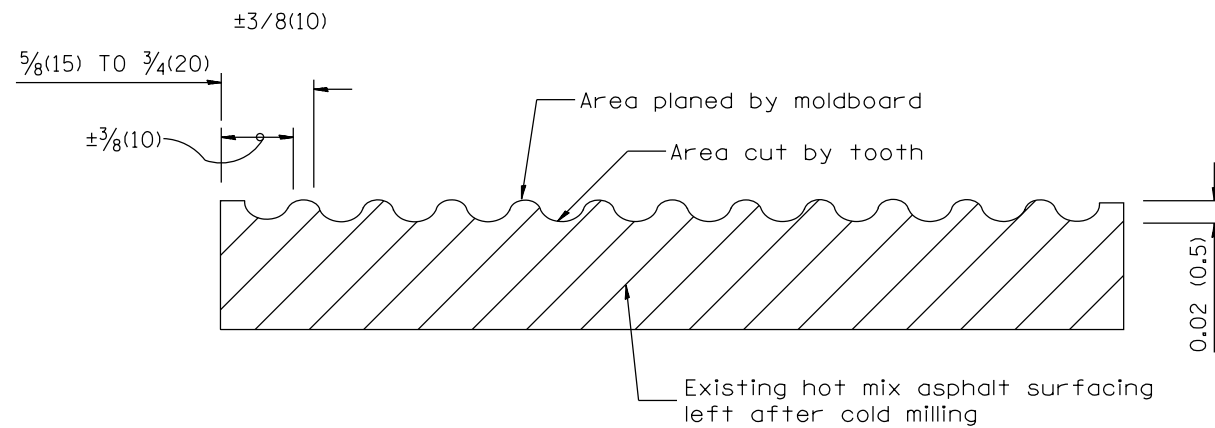
PLAN

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.



SECTION A-A



SECTION B-B PROJECTED PERPENDICULAR TO CENTERLINE

DESIGNER NOTES:
1. INCLUDE DISTRICT SPECIAL PROVISION, IF APPLICABLE.

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

01-01-97	BENUM, C-104,01, NEW REVISION BOX	J.P.
04-20-98	REMOVED MILLING DETAIL FROM STANDARD	J.A.
09-08-98	CORRECT NOTE LEADER PLACEMENT	B.W.
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

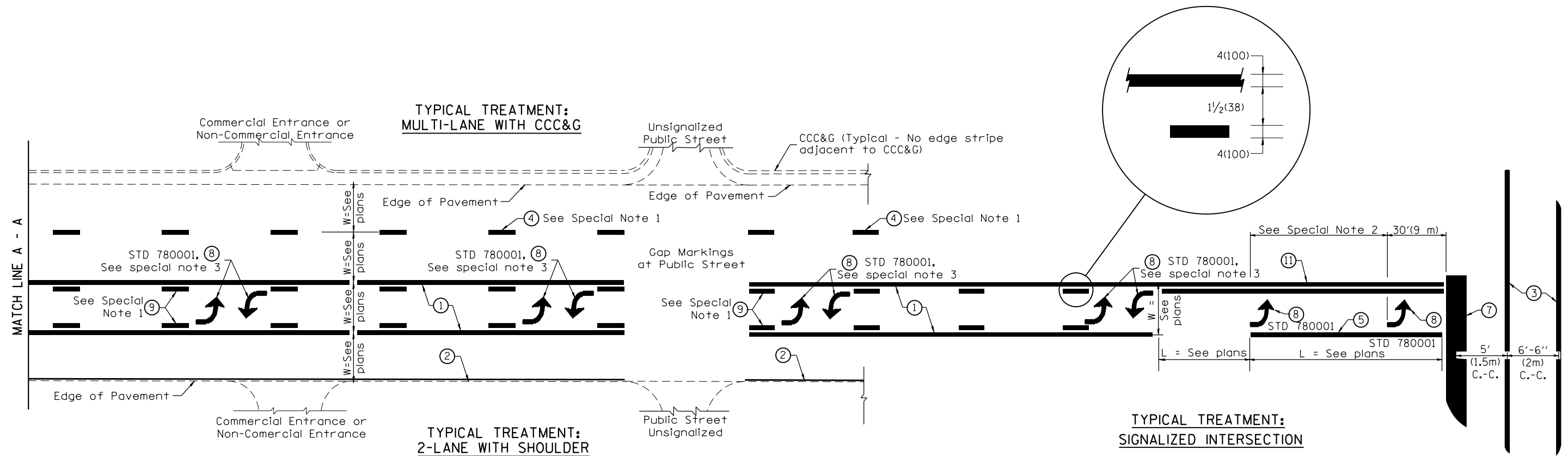
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

NOT TO SCALE

CADD STD. 440001-04

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	21RS-2	KNOX	18	16
RTE. US 34		CONTRACT NO. 68C54		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- ① 4(100) Solid (Yellow)
- ② 4(100) Solid (White)
- ③ 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
- ④ 6(150) Skip-Dash (White) (See Special Note 1)
- ⑤ 8(200) Solid (White)
- ⑥ 12(300) Diagonal (White) (Item ⑥ is shown on Std. 780001)
- ⑦ 24(600) Stop Bar (White)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 4(100) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 12(300) Diagonal (Yellow) (See Table A)
- ⑪ 4(100) Double Solid (Yellow) (See Table A)

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
 - A. A minimum of two (2) arrows is required.
 - B. The maximum spacing between arrows is 80' (24 m).
 - C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
 - A. A minimum of two (2) arrow pairs is required.
 - B. The maximum spacing between arrow pairs is 200' (61 m).
 - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
 - D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

01-01-97	BENUM, F-8.03, NEW REVISION BOX	J.P.	10-16-06	REVISED TO 2007 SPEC.
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.		
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.		
08-02	ADD CROSSWALK DIMS. WITH T.S.	M.A.		

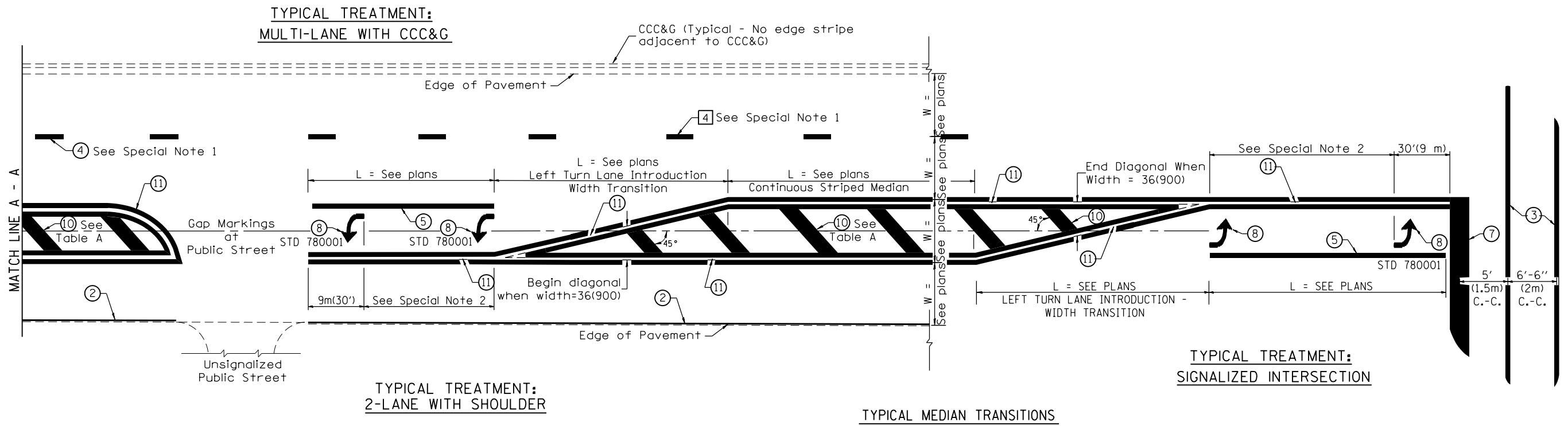
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL PAVEMENT MARKINGS

NOT TO SCALE

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	21RS-2	KNOX	18	17
RTE. US 34		CONTRACT NO. 68C54		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

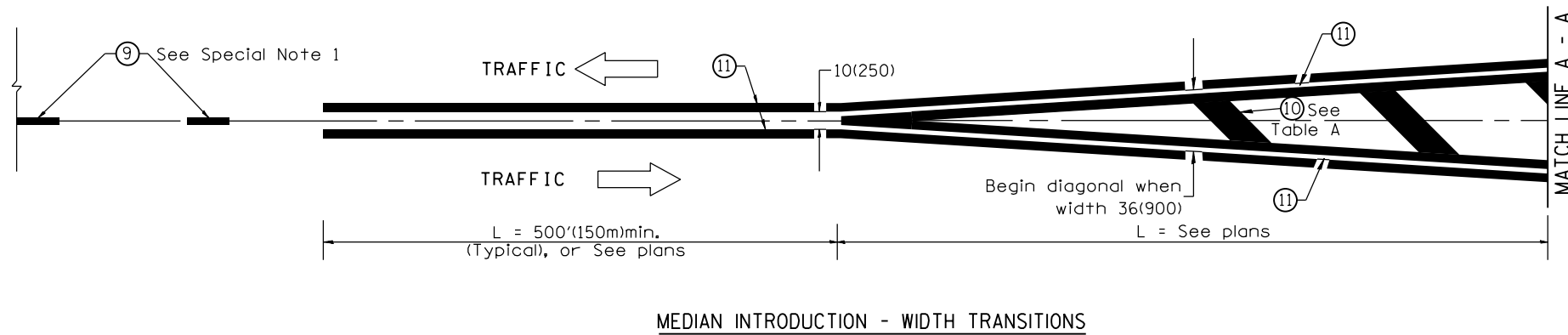
SHI, 1 OF 2
CADD, STD, 780001-04



FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)	
	CONTINUOUS	
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



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