

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

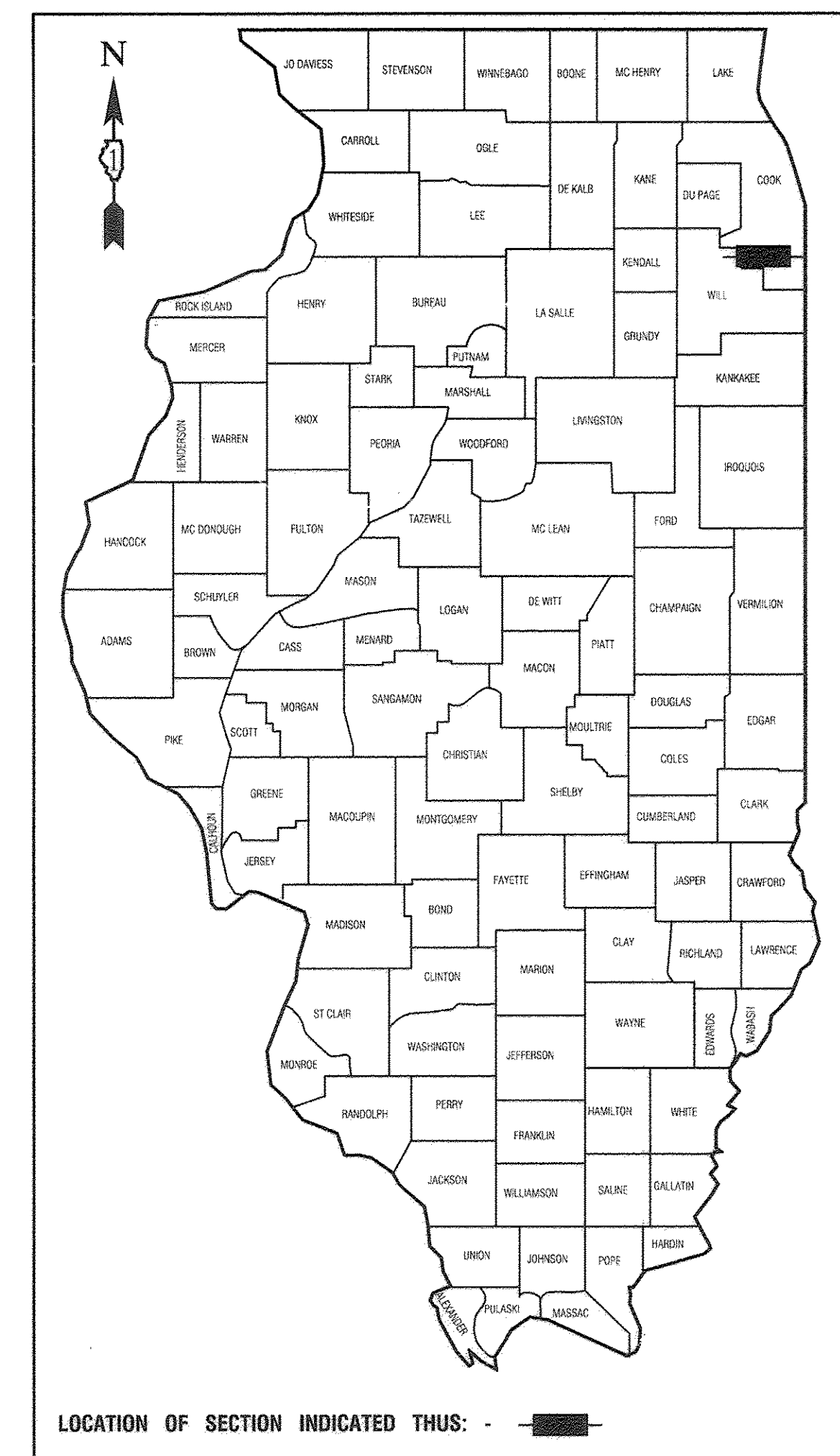
F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1613	16-00091-00-RS	COOK	13	01
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-4003(892)	

CONTRACT #61D91

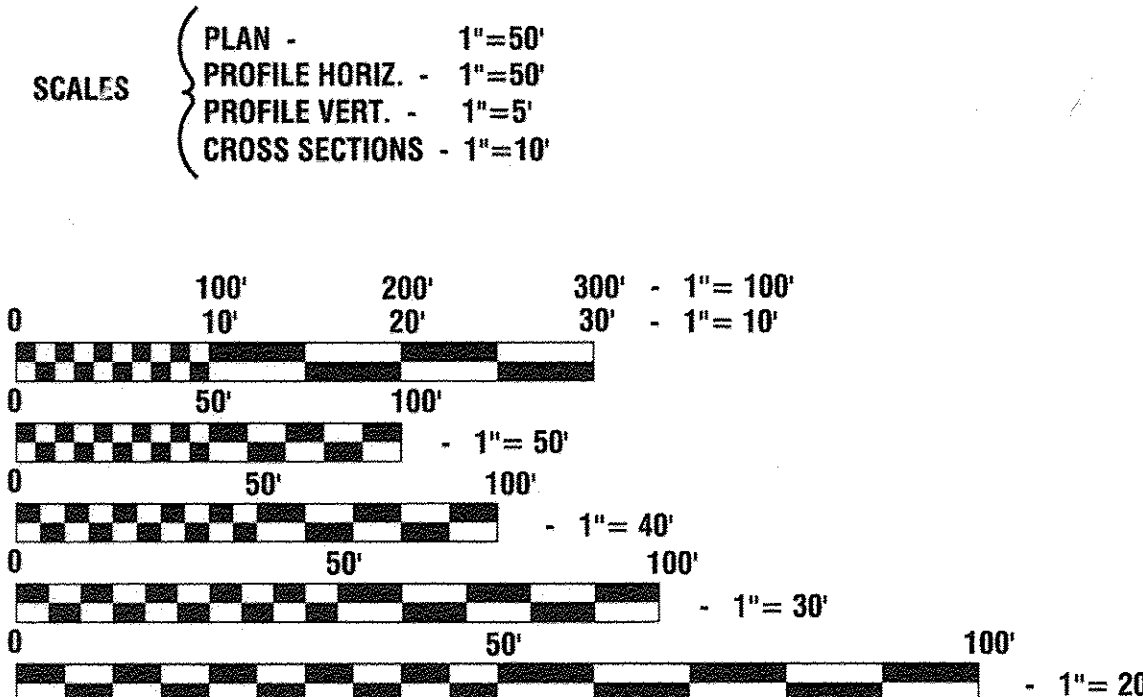
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SEE SHEET 2 FOR INDEX OF SHEETS.

FAU 1613 (170TH STREET)
WESTERN AVENUE TO DIXIE HIGHWAY
RESURFACING
PROJECT NO.: M-4003(892)
SECTION NO.: 16-00091-00-RS
VILLAGE of HAZEL CREST
COOK COUNTY
JOB NO.: C-91-188-17

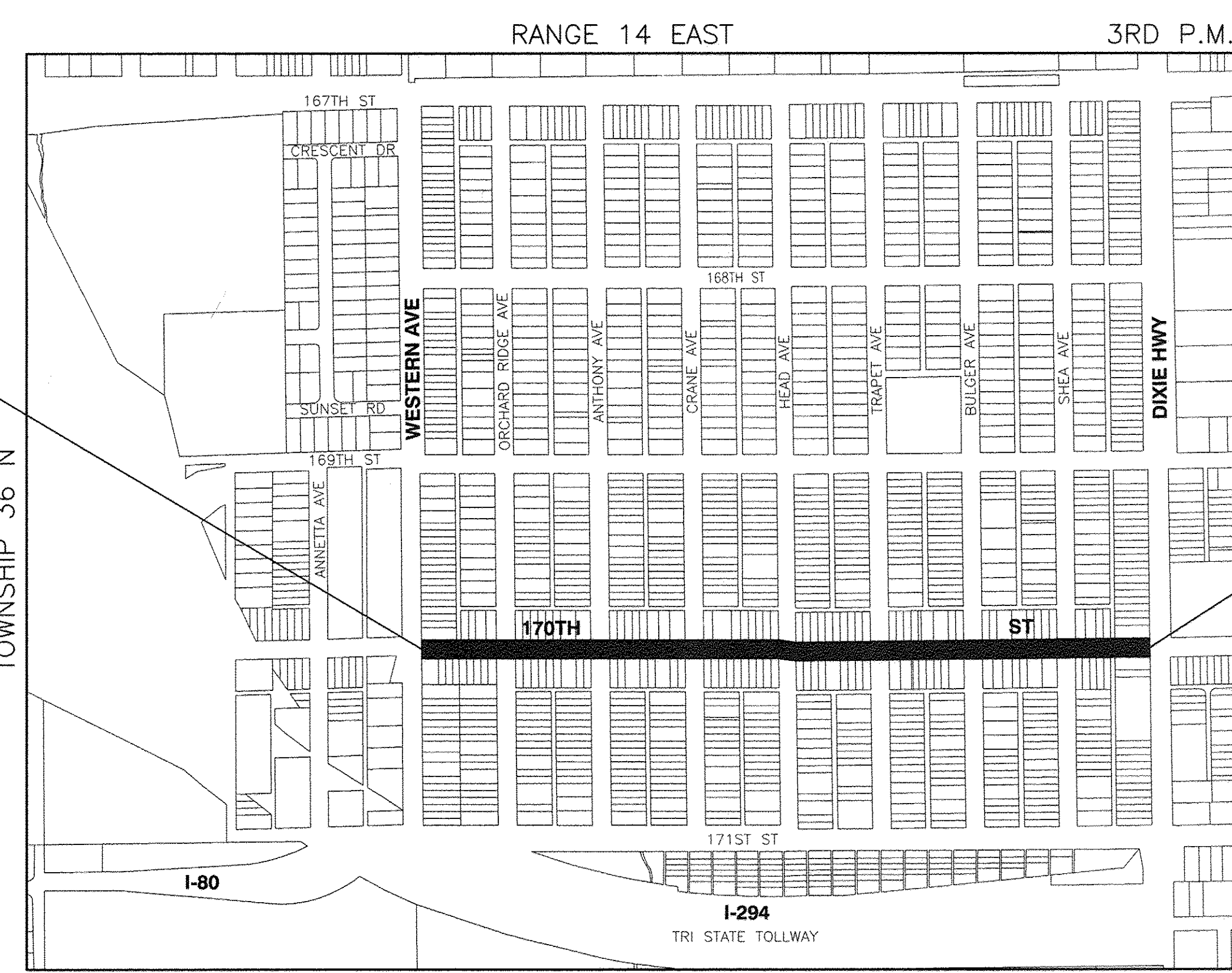


170TH STREET	
2014 ADT -	1,150
2040 ADT -	1,150
POSTED SPEED LIMIT -	25 mph
DESIGN PERIOD -	20 YEARS
DESIGN SPEED LIMIT -	30 mph
STREET CLASSIFICATION -	MAJOR COLLECTOR



BEGIN IMPROVEMENTS
170TH ST STA 10+26.65

END OF IMPROVEMENTS
170TH ST STA 35+99.35



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

CONTRACT NO. 61D91

LOCATION MAP
GROSS LENGTH=2572.70 FEET=0.49 MILES
NET LENGTH=2572.70 FEET=0.49 MILES

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

Approved: 3/22/2017
[Signature]
President, Village of Hazel Crest

Passed: MARCH 24, 2017
[Signature]
District 1 Engineer of Local Roads & Streets

Released for Bid Based on Limited Review: MARCH 24, 2017
[Signature]
Regional Engineer

PRINTED BY THE AUTHORITY OF
THE STATE OF ILLINOIS

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:
[Signature]
3/22/2017

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406 SCHAUMBURG, IL
CONSULTANTS: ROBINSON ENGINEERING, LTD. 708-331-6700

INDEX OF SHEETS

- 1. COVER SHEET, INDEX OF SHEETS & STATE STANDARDS
- 2. INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES
- 3. SUMMARY OF QUANTITIES
- 4. TYPICAL CROSS SECTIONS & GENERAL NOTES
- 5. PAVEMENT PLAN
- 6. PAVEMENT MARKING PLAN
- 7.-13. IDOT DISTRICT 1 STANDARD DETAILS

HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 424001-09 PERPENDICULAR CURB RAMPS
- 442201-03 CLASS C AND D PATCHES
- 606001-06 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 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
- 701901-06 TRAFFIC CONTROL DEVICES
- 886001-01 DETECTOR LOOP INSTALLATIONS

GENERAL NOTES

- 1. THE ROBINSON ENGINEERING, LTD. FIELD OFFICE (708-331-6700), AND THE PUBLIC WORKS DIRECTOR, AT THE VILLAGE OF HAZEL CREST, SHALL BE NOTIFIED TWO (2) WORKING DAYS BEFORE CONSTRUCTION BEGINS.
- 2. BEFORE STARTING ANY EXCAVATION THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 AND (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION REQUIRED)
- 3. UTILITIES INDICATED ON THE PLANS ARE PROVIDED FOR THE CONTRACTOR'S USE AND ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF THE ADVERTISEMENT FOR BIDS. THE OWNER AND ENGINEER DO NOT GUARANTEE THE ACCURACY OF UTILITY INFORMATION.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 5. THE THICKNESS OF HMA MIXTURE STATED IN THE SPECIFICATIONS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA SURFACE IS PLACED.
- 6. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR OTHER DRAINAGE STRUCTURES SHALL BE REMOVED BY THE END OF EACH DAY BY THE CONTRACTOR AT THEIR EXPENSE.
- 7. CLASS D PATCHING QUANTITIES FOR THIS CONTRACT SHALL BE PERFORMED AT THE DIRECTION OF THE ENGINEER AFTER PAVEMENT MILLING.
- 8. EXISTING TREES ARE NOT AFFECTED BY THE LIMITS OF CONSTRUCTION. CONTRACTOR SHALL BE CAUTIOUS ON TREE PROTECTION DURING THE CONSTRUCTION. IF ANY DAMAGE OCCURS, CONTRACTOR SHALL REPLACE ANY TREES.

FILE NAME = 16R0599-INDX-01 - IDOT P01

USER NAME =	DESIGNED -- SK	REVISED --
	CHECKED --	REVISED --
PLOT SCALE =	DRAWN -- RG	REVISED --
PLOT DATE = 03-17-17	CHECKED -- LTL	REVISED --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAU 1613 (170TH STREET)
ROADWAY RESURFACING
INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES

SCALE: NONE SHEET NO. 02 OF 13 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1613	16-00091-00-RS	COOK	13	02
CONTRACT NO. 61D91				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PRINTED BY: KYLE M. BROWN ON: 03/17/17

SUMMARY OF QUANTITIES					CONSTRUCTION TYPE CODE	
S.I.	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005	SAFETY 0021
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	380	380	
	25000210	SEEDING, CLASS 2A	ACRE	0.10	0.10	
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	9	9	
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	9	9	
	35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	200		200
	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	75	75	
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	6,800	6,800	
	40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	15	15	
	40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	425	425	
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	290	290	
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	850	850	
	42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	100	100	
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	3,710		3,710
	42400800	DETECTABLE WARNINGS	SQ FT	500		500
	44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	10,050	10,050	
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	200	200	
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1,700	1,700	
	44000600	SIDEWALK REMOVAL	SQ FT	3,710		3,710
	44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	50	50	
	44201721	CLASS D PATCHES, TYPE III, 6 INCH	SQ YD	50	50	
	44201723	CLASS D PATCHES, TYPE IV, 6 INCH	SQ YD	75	75	
	60250200	CATCH BASINS TO BE ADJUSTED	EACH	27	27	
	60255500	MANHOLES TO BE ADJUSTED	EACH	11	11	
	60266600	VALVE BOXES TO BE ADJUSTED	EACH	9	9	

* - INDICATES SPECIALTY ITEMS

SUMMARY OF QUANTITIES					CONSTRUCTION TYPE CODE	
S.I.	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005	SAFETY 0021
	67100100	MOBILIZATION	LSUM	1	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	
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	320		320
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	125		125
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	40		40
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	820		820
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	175		175
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	75		75
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	40		40
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	51		51
	Z0004522	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6"	SQ YD	100	100	
	X6061815	COMBINATION CONCRETE CURB AND GUTTER, TYPE M (SPECIAL)	FOOT	1,700	1,700	

* - INDICATES SPECIALTY ITEMS

FILE NAME = 16R0599-QUAN-01 - IDOT P01

USER NAME =
 PLOT SCALE =
 PLOT DATE = 03-17-17

DESIGNED -- SK
 CHECKED --
 DRAWN -- KWM
 CHECKED -- AG

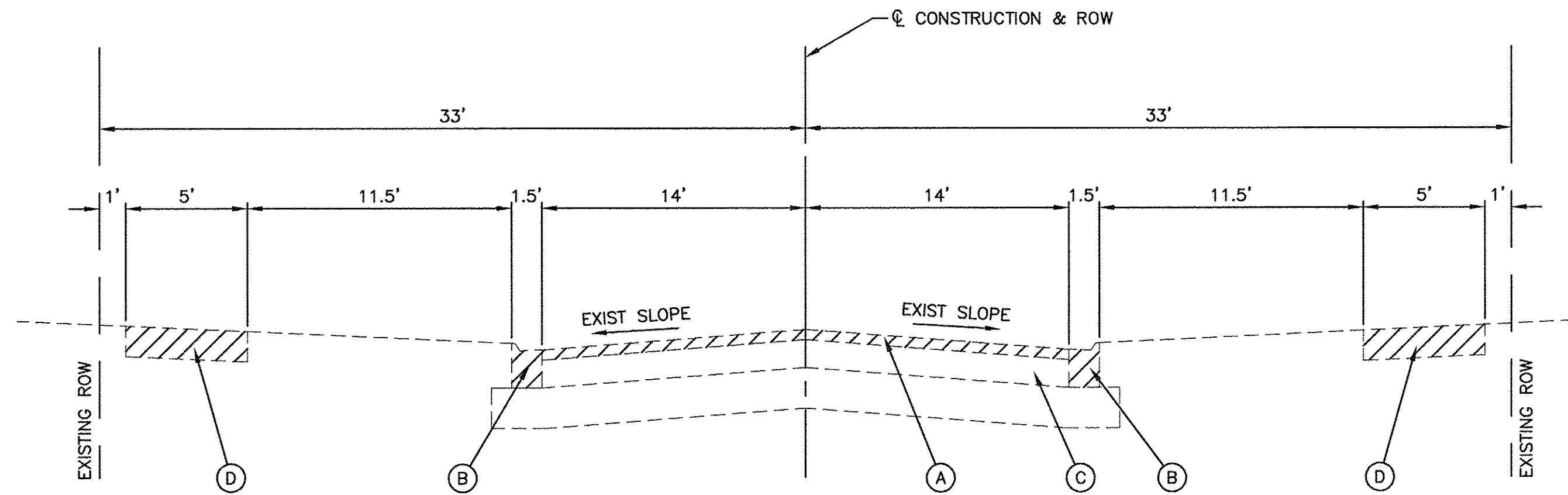
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FAU 1613 (170TH STREET)
 ROADWAY RESURFACING
 SUMMARY OF QUANTITIES

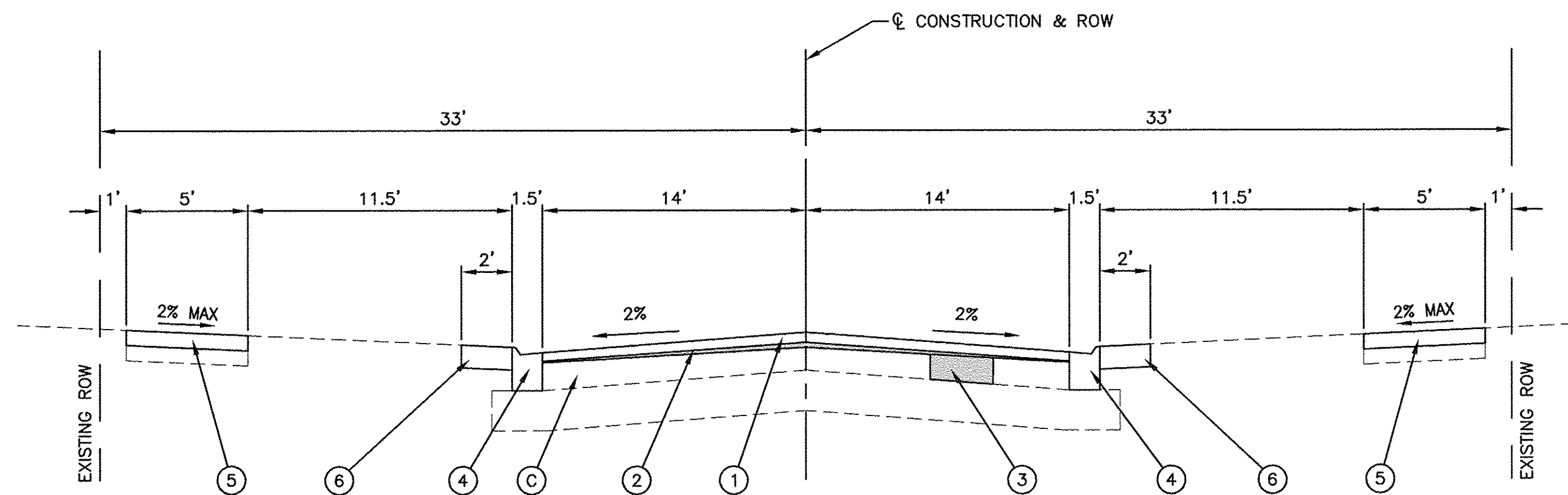
SCALE: NONE SHEET NO. 03 OF 13 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1613	16-00091-00-RS	COOK	13	03
FED. ROAD DIST. NO. 1 ILLINOIS			FED. AID PROJECT	
			CONTRACT NO. 61D91	



EXISTING TYPICAL SECTION

170TH STREET
WESTERN AVENUE TO DIXIE HIGHWAY



PROPOSED TYPICAL SECTION

170TH STREET
WESTERN AVENUE TO DIXIE HIGHWAY

NOTES:

1. PATCHING SHALL BE DONE AFTER MILLING THE PAVEMENT.
2. A MINIMUM OF TWO INCHES (2") OF HMA PAVEMENT SHALL REMAIN AFTER MILLING.

EXISTING LEGEND

- (A) HOT MIX ASPHALT SURFACE REMOVAL, 2"
- (B) EXISTING CURB & GUTTER, REMOVAL AT LOCATIONS SHOWN ON PLANS OR DIRECTED BY ENGINEER
- (C) EXISTING HOT-MIX ASPHALT PAVEMENT, ±4"
- (D) EXISTING PCC SIDEWALK TO BE REMOVED AT LOCATIONS SHOWN ON PLANS OR DIRECTED BY ENGINEER

PROPOSED LEGEND

- (1) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2"
- (2) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (3) CLASS D PATCH, 6", AT LOCATIONS SHOWN ON PLANS OR DIRECTED BY ENGINEER
- (4) PROPOSED CURB AND GUTTER, TYPE M (SPECIAL), TO BE INSTALLED AT LOCATIONS SHOWN ON PLAN OR DIRECTED BY ENGINEER (IN KIND)
- (5) PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5" (REPLACEMENT AT LOCATIONS DIRECTED BY THE ENGINEER)
- (6) TOPSOIL FURNISH AND PLACE, 4" AND SEEDING, CLASS 2A AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

(CONTRACTOR SHALL MILL BEFORE PATCHING)

MIXTURE TYPE	AIR VOIDS @ Ndes
ROADWAY RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, N50, 1-1/2"	4% @ 50 Gyr.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"	3.5% @ 50 Gyr.
PATCHING	
CLASS D PATCHES, (HMA BINDER IL-19.0mm): 6" (IN 2 LIFTS)	4% @ 70 Gyr.
HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6"	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL 9.5 MM), 2"	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; PE-4"	4% @ 50 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/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 SPECIAL PROVISIONS.

FILE NAME = 16R0599-TYPX-01 - IDOT P01

USER NAME =	DESIGNED -- SK	REVISED --
	CHECKED --	REVISED --
PLOT SCALE =	DRAWN -- RG	REVISED --
PLOT DATE = 03-17-17	CHECKED -- LTL	REVISED --

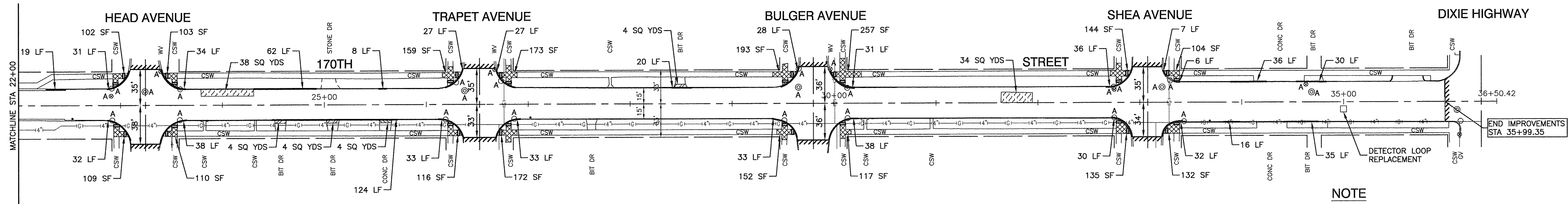
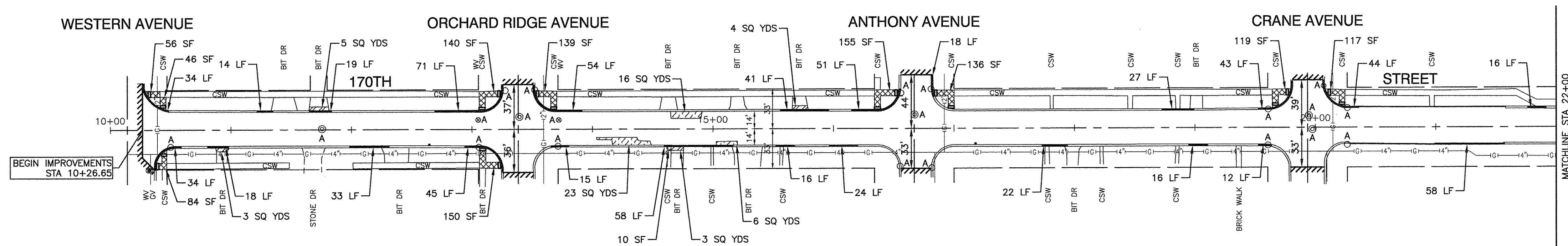
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAU 1613 (170TH STREET)
ROADWAY RESURFACING
TYPICAL CROSS SECTIONS

SCALE: NONE SHEET NO. 04 OF 13 SHEETS STA. TO STA.

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1613	16-00091-00-RS	COOK	13	04
CONTRACT NO. 61D91				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PLotted by: KENNETH M. H. GUY-04/17



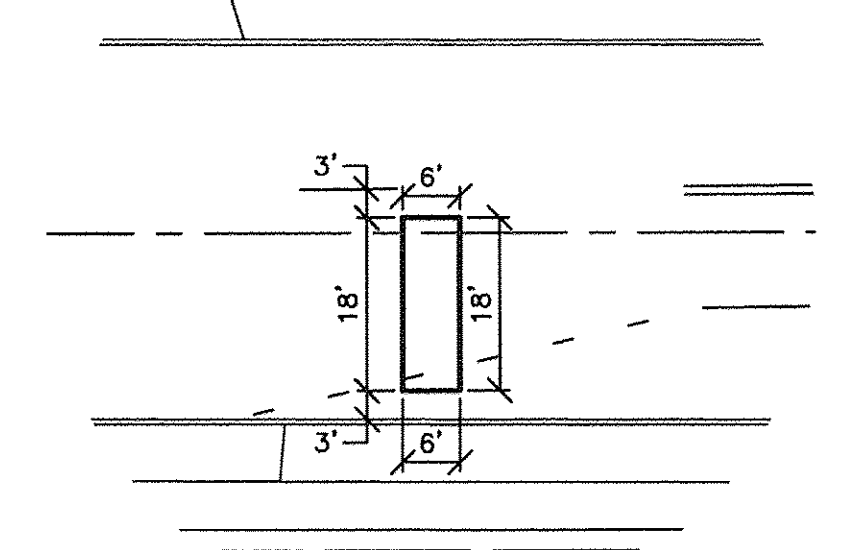
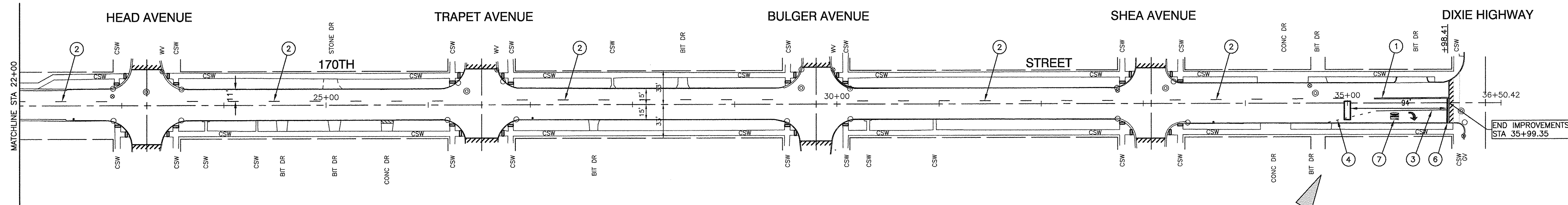
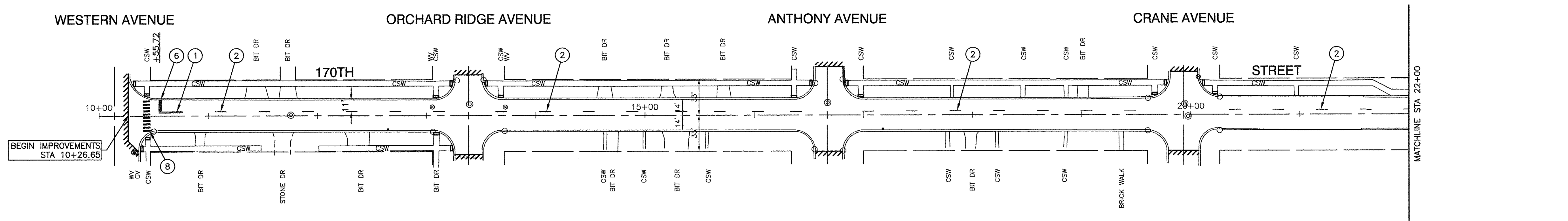
NOTE

AGGREGATE BASE COURSE, TYPE B, 4" SHALL BE USED AT PROPOSED SIDEWALK AND AS DIRECTED BY THE ENGINEER TO REPAIR THE DRIVEWAY PAVEMENT BASE.

LEGEND

- CONCRETE SIDEWALK REMOVAL AND REPLACEMENT
- CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT
- HMA DRIVEWAY REMOVAL AND REPLACEMENT
- CLASS D PATCH, 6"
- DETECTABLE WARNINGS
- BUTT JOINTS
- COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT
- "A" STRUCTURE TO BE ADJUSTED
- DETECTOR LOOP TO BE REPLACED

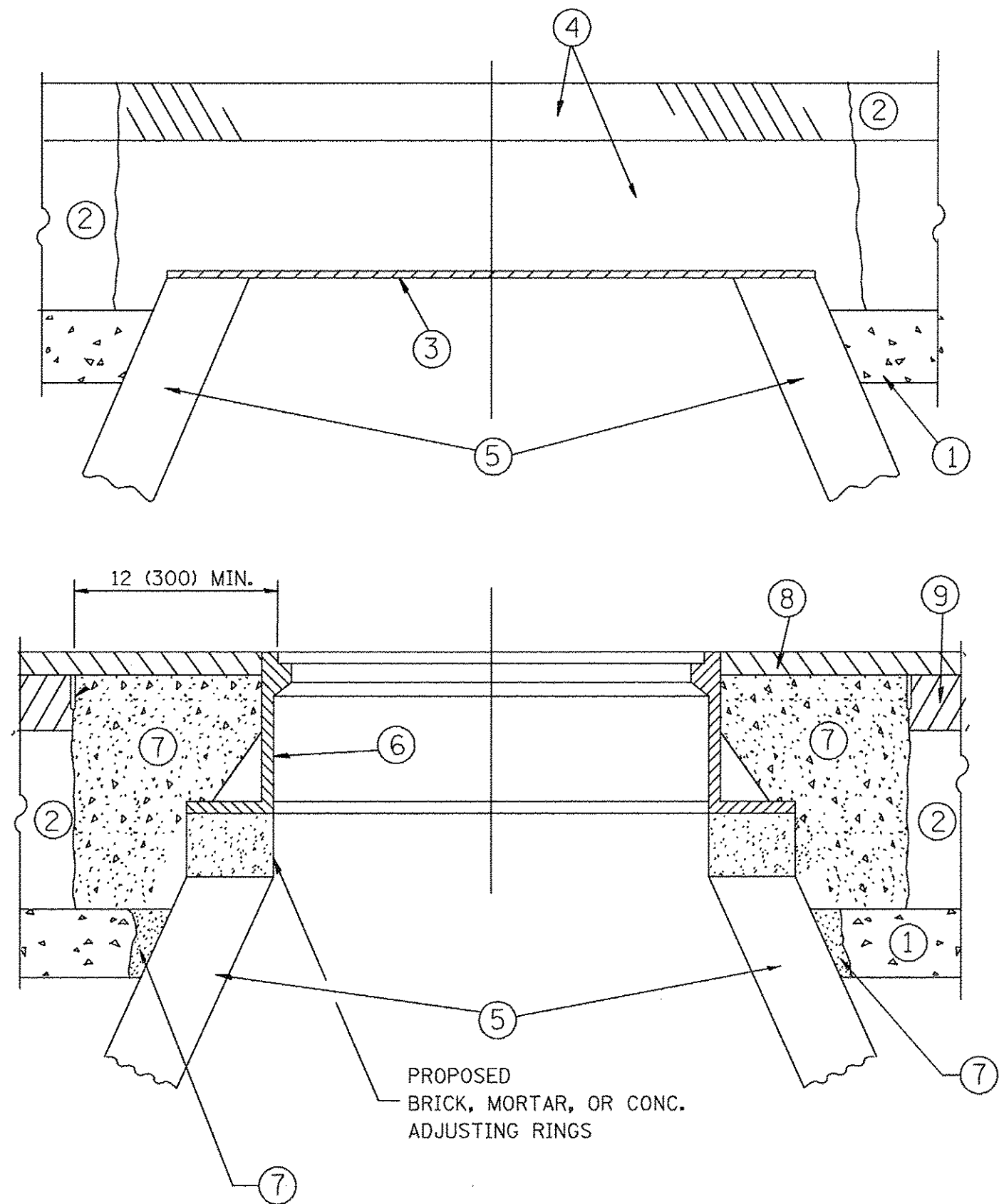
FILE NAME = 16R0599-PLAN-01 - IDOT P01	USER NAME =	DESIGNED -- SK	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAU 1613 (170TH STREET) ROADWAY RESURFACING PAVEMENT PLAN	F.A.U. RTE. 1613	SECTION 16-00091-00-RS	COUNTY COOK	TOTAL SHEETS 13	SHEET NO. 05	
	PLOT SCALE =	DRAWN -- KWM	REVISED --		SCALE: 1"=50'	SHEET NO. 05 OF 13 SHEETS	STA. TO STA.		CONTRACT NO. 61D91		
	PLOT DATE = 03-17-17	CHECKED -- APG	REVISED --		ILLINOIS FED. AID PROJECT						
CONTRACT NO. 61D91											



DETECTOR LOOP REPLACEMENT DETAIL

- LEGEND**
- ① 4" DOUBLE YELLOW LINE (11" C-C)
 - ② 4" YELLOW SKIP DASH (10' LINE-30' SPACE)
 - ③ 6" WHITE LINE
 - ④ 6" WHITE SKIP DASH (2' LINE-6' SPACE)
 - ⑤ 6" WHITE CROSSWALK LINE
 - ⑥ 24" WHITE STOP BAR
 - ⑦ LETTERS AND SYMBOLS - WHITE
 - ⑧ 12" WHITE CROSSWALK LINES

FILE NAME = 16R0598-PLAN-01 - IDOT P02	USER NAME =	DESIGNED -- SK	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAU 1613 (170TH STREET) ROADWAY RESURFACING PAVEMENT MARKING PLAN			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED --	REVISED --					1613	16-00091-00-RS	COOK	13	06
PLOT DATE = 03-17-17	DRAWN -- KWM	REVISED --	REVISED --	SCALE: 1"=50'	SHEET NO. 06	OF 13 SHEETS	STA.	TO STA.	CONTRACT NO. 61D91			
	CHECKED -- APG	REVISED --	REVISED --						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (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
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- 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.

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.

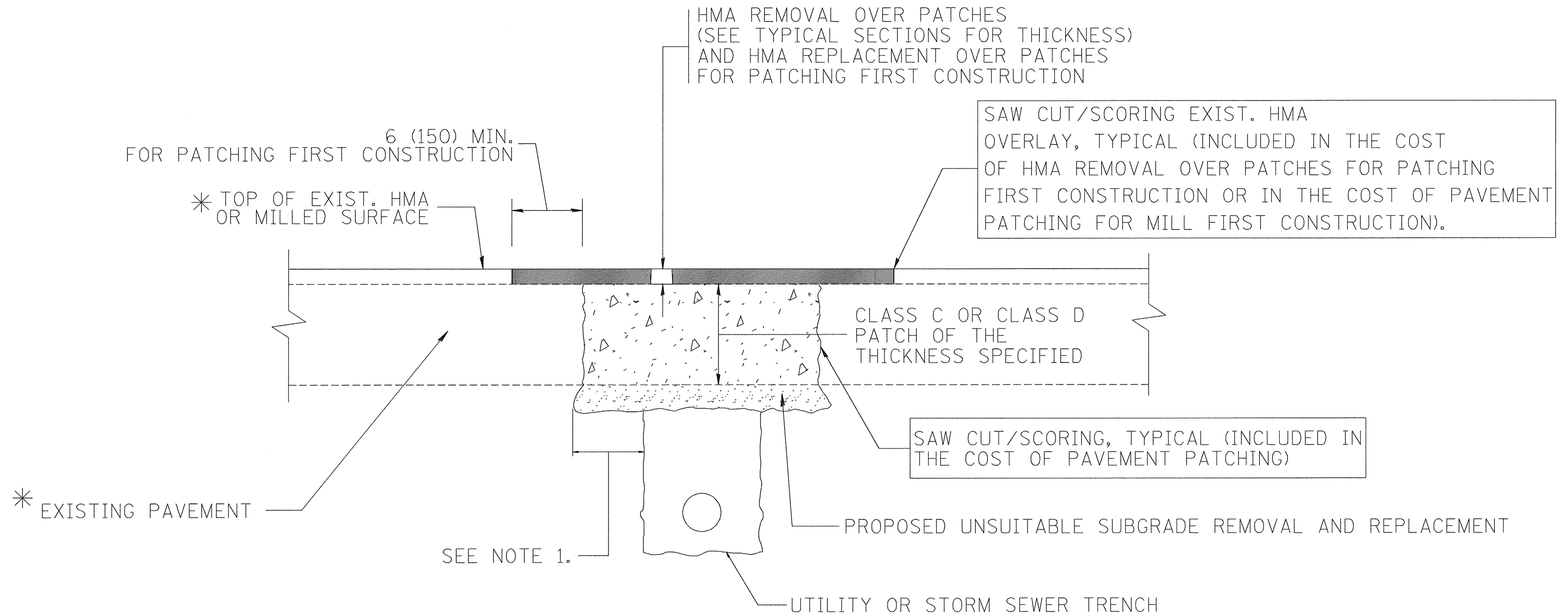
THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = 16R0599-DTLS-01 - B008	USER NAME = bauerdl	DESIGNED -- R. SHAH	REVISED -- R. WIEDEMAN 05-14-04	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING	F.A.U. RTE. 1613	SECTION 16-00091-00-RS	COUNTY COOK	TOTAL SHEETS 13	SHEET NO. 07	
	CHECKED --	REVISOR -- R. BORO 01-01-07	REVISOR -- R. BORO 03-09-11			SCALE: NONE	SHEET NO. 07 OF 13 SHEETS	STA. TO STA.	BD600-03 (BD-8)		CONTRACT NO. 61D91
	PLOT SCALE = 1/648.5000' / m	DRAWN --	REVISOR -- R. BORO 12-06-11			FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT	
	PLOT DATE = 12/6/2011	CHECKED -- 10-25-94	REVISOR -- R. BORO 12-06-11								



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

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)

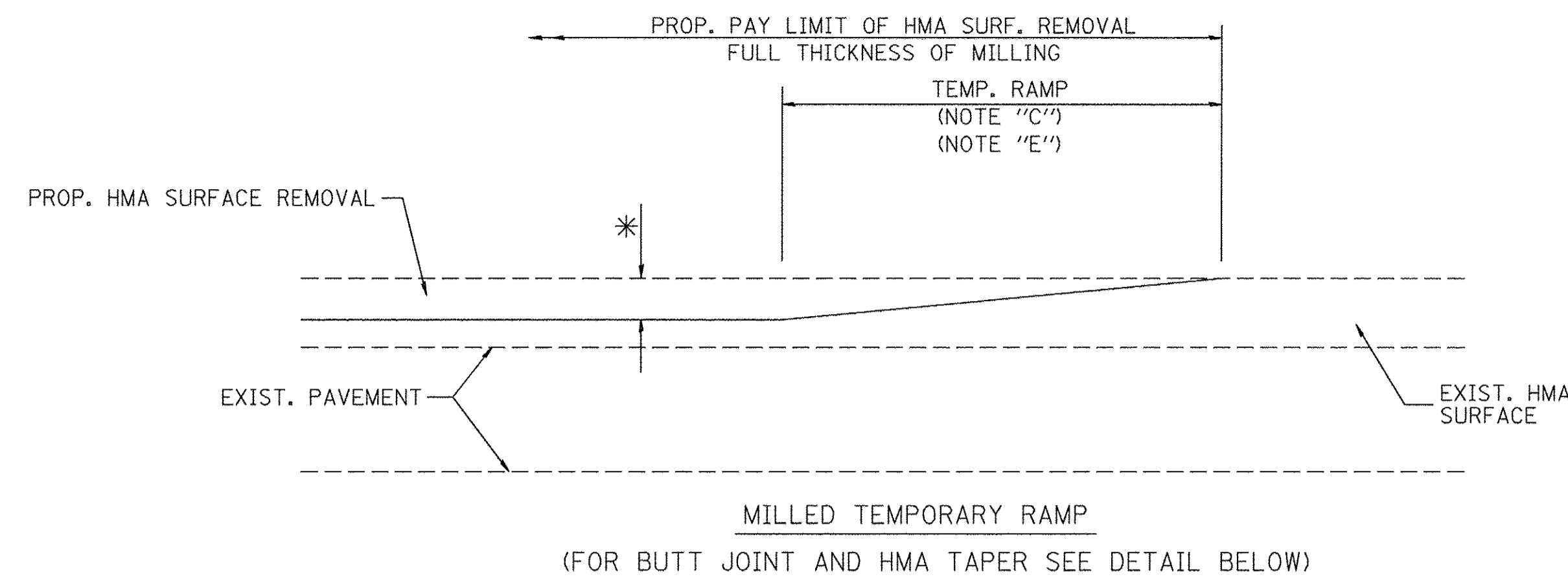
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

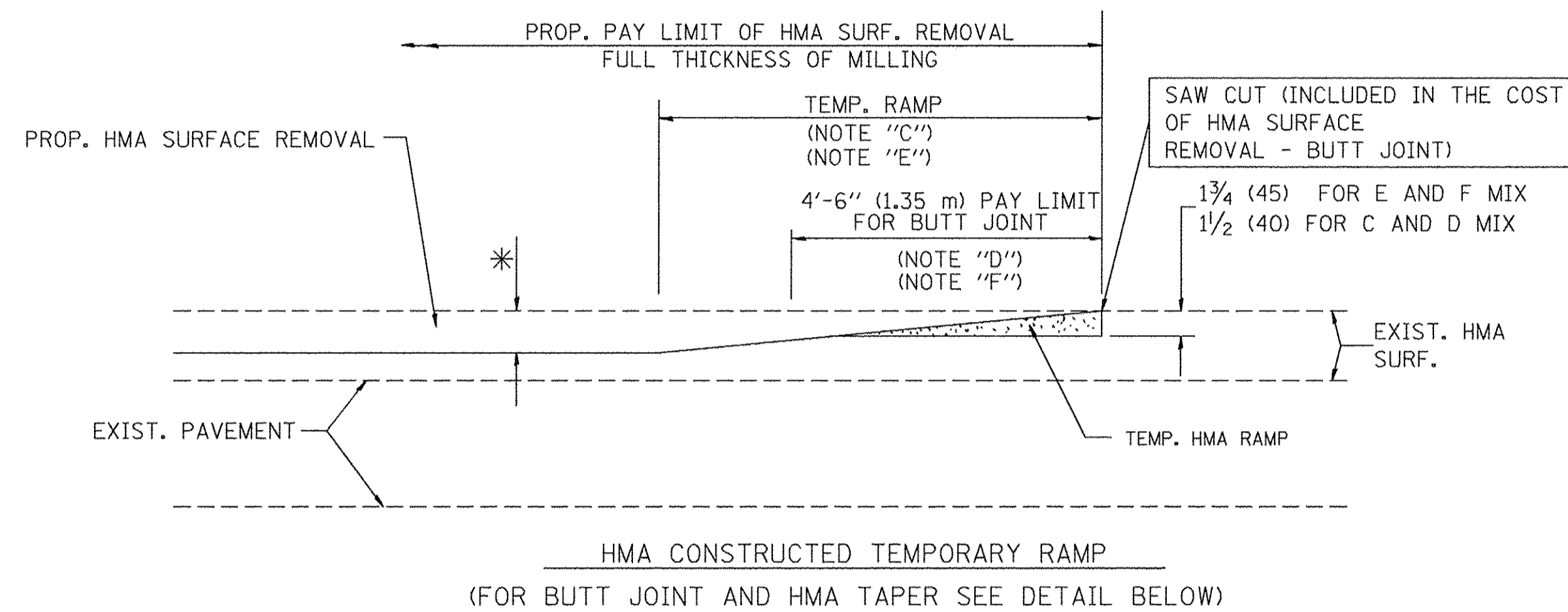
1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

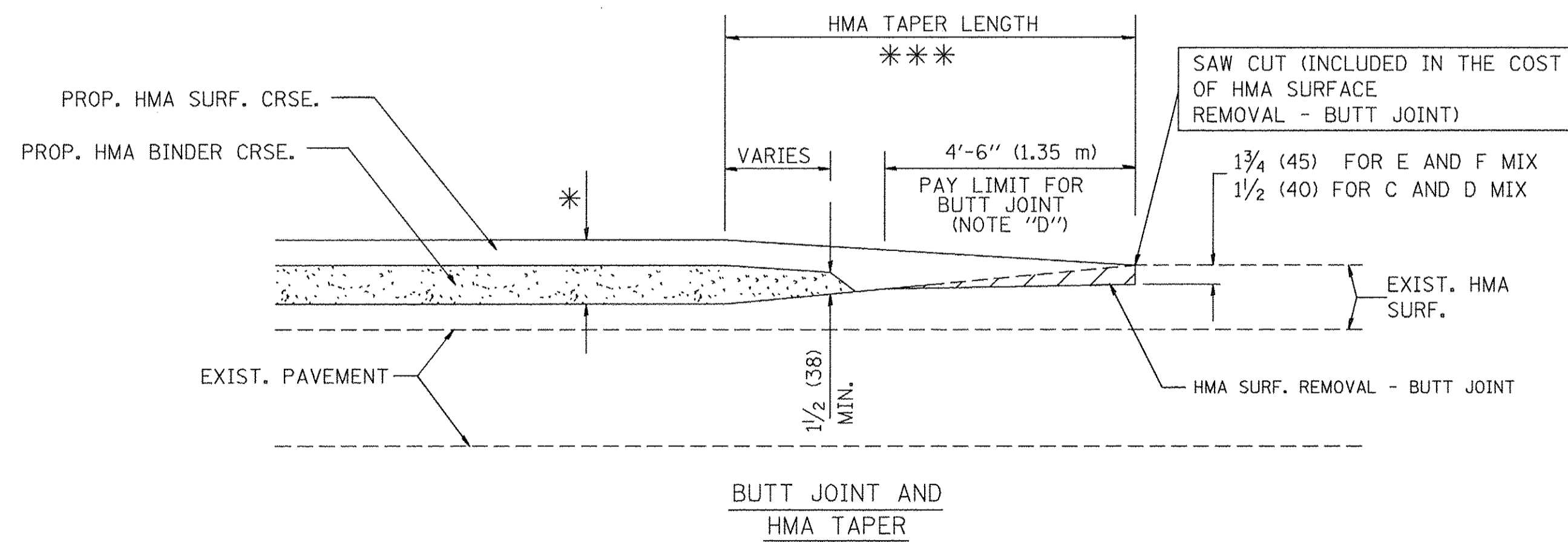
FILE NAME = 16R0599-DTLS-01 - BD22	USER NAME = bauerd	DESIGNED -- R. SHAH	REVISED -- A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED --	REVISED -- R. BORO 01-01-07			1613	16-00091-00-RS	COOK	13	08	
	PLOT SCALE = 50.000' / IN.	DRAWN --	REVISED -- R. BORO 09-04-07			BD400-04 (BD-22)		CONTRACT NO. 61D91			
	PLOT DATE = 10/27/2008	CHECKED -- 10-25-94	REVISED -- K. ENG 10-27-08			SCALE: NONE	SHEET NO. 08 OF 13 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1



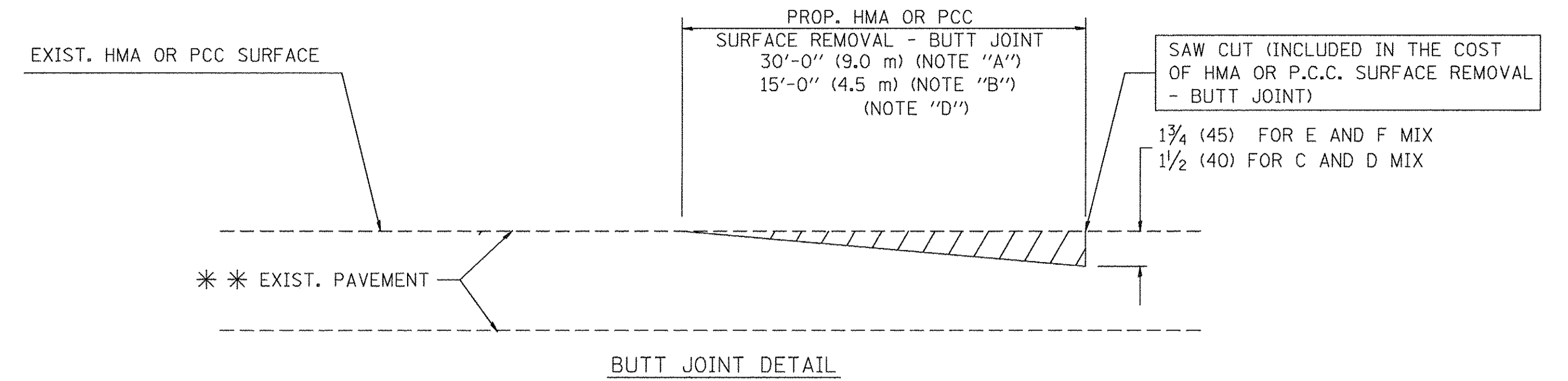
OPTION 1



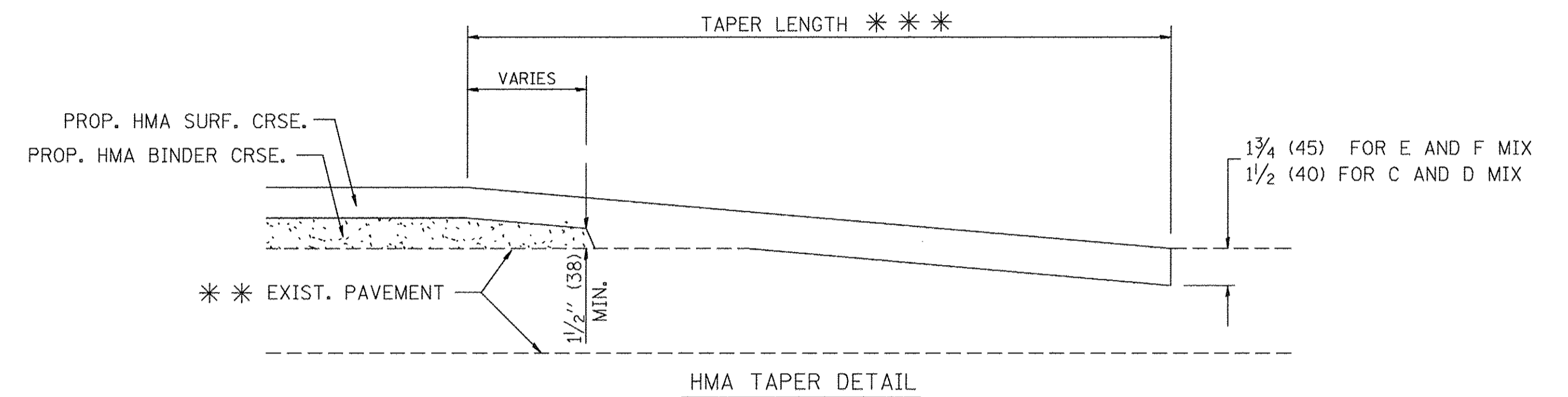
OPTION 2
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER 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.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

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

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

FILE NAME = 16R0099-DTLS-01 - B032

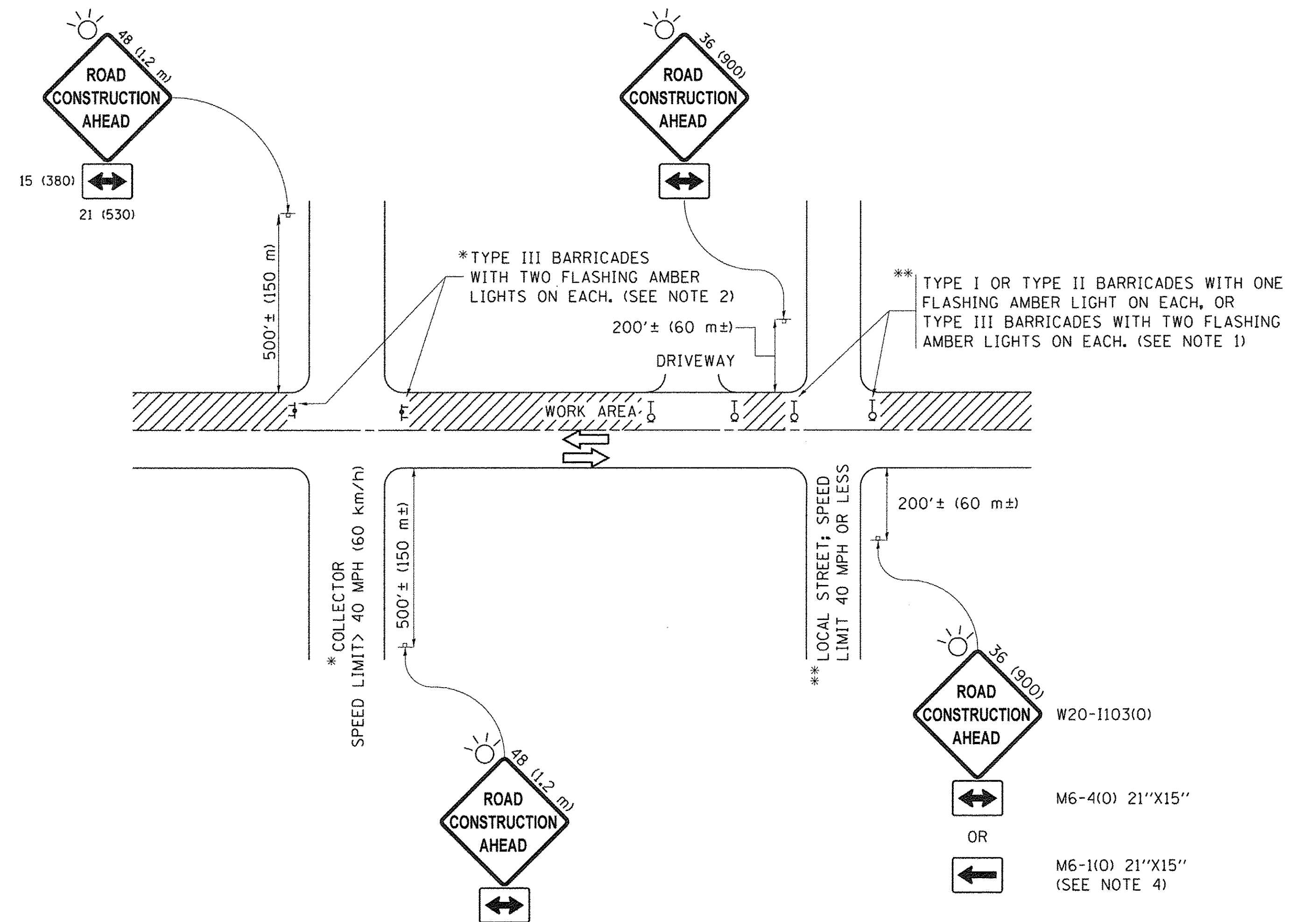
USER NAME = geglianobt	DESIGNED -- M. DE YONG	REVISED -- R. SHAH 10-25-94
	CHECKED --	REVISED -- A. ABBAS 03-21-97
PLOT SCALE = 58.0000' / IN.	DRAWN --	REVISED -- M. GOMEZ 04-06-01
PLOT DATE = 1/4/2008	CHECKED -- 06-13-90	REVISED -- R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND
HMA TAPER DETAILS

SCALE: NONE SHEET NO. 09 OF 13 SHEETS STA. TO STA.

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1613	16-00091-00-RS	COOK	13	09
BD400-05 BD32		CONTRACT NO. 61D91		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

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:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER 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:
 - a) 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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

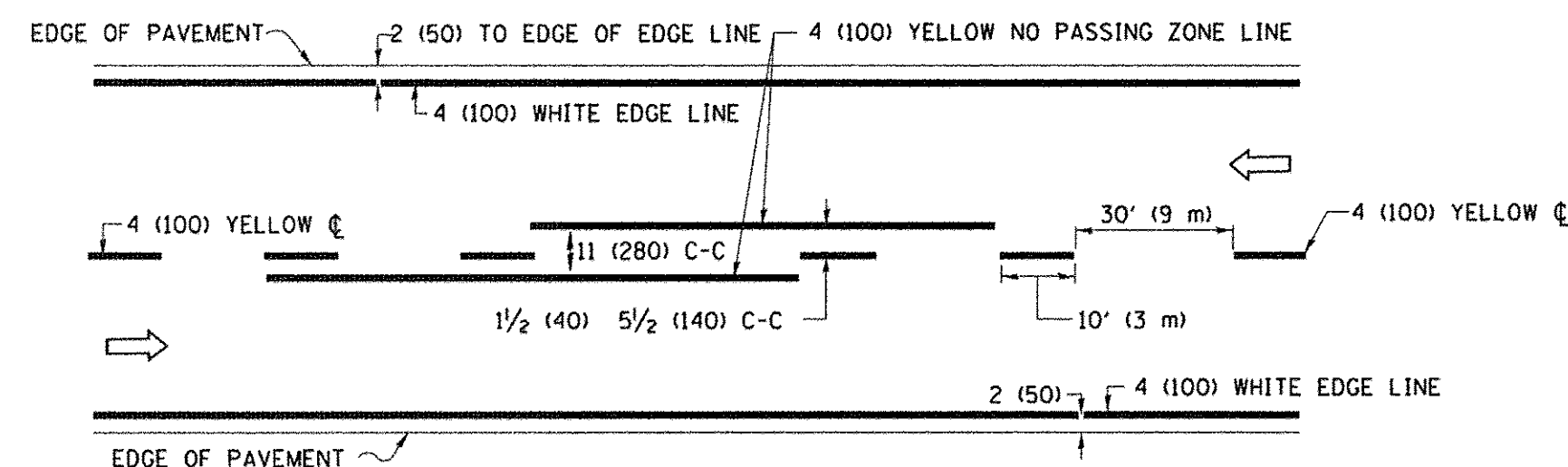
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

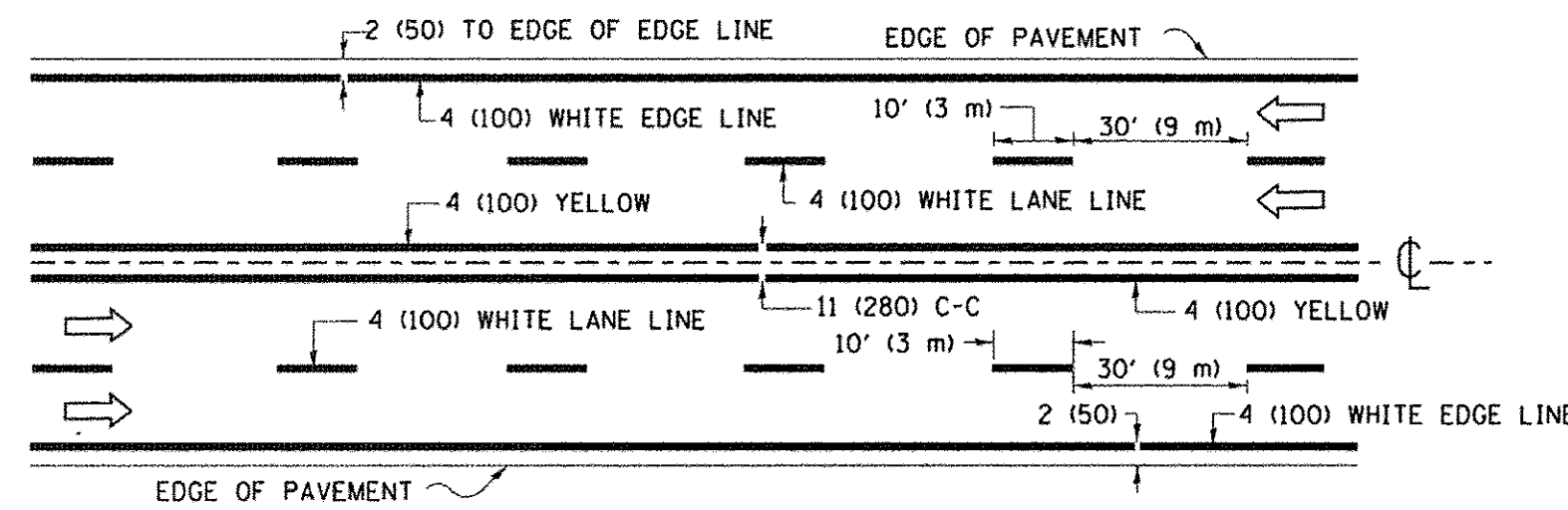
FILE NAME = 16R0599-DTIS-01 - TC10	USER NAME = footemj	DESIGNED -- L.H.A.	REVISED -- A. HOUSEH 10-15-96
	FILES \District 1\Projects\DI	CHECKED -- \CADsheets\tcl0.dgn	REVISED -- . RAMMACHER 01-06-00
	PLOT SCALE = 50.000' / in.	DRAWN --	REVISED -- A. SCHUETZE 07-01-13
	PLOT DATE = 9/15/2016	CHECKED -- 06-89	REVISED -- A. SCHUETZE 09-15-16

SCALE: NONE SHEET NO. 10 OF 13 SHEETS STA. TO STA.

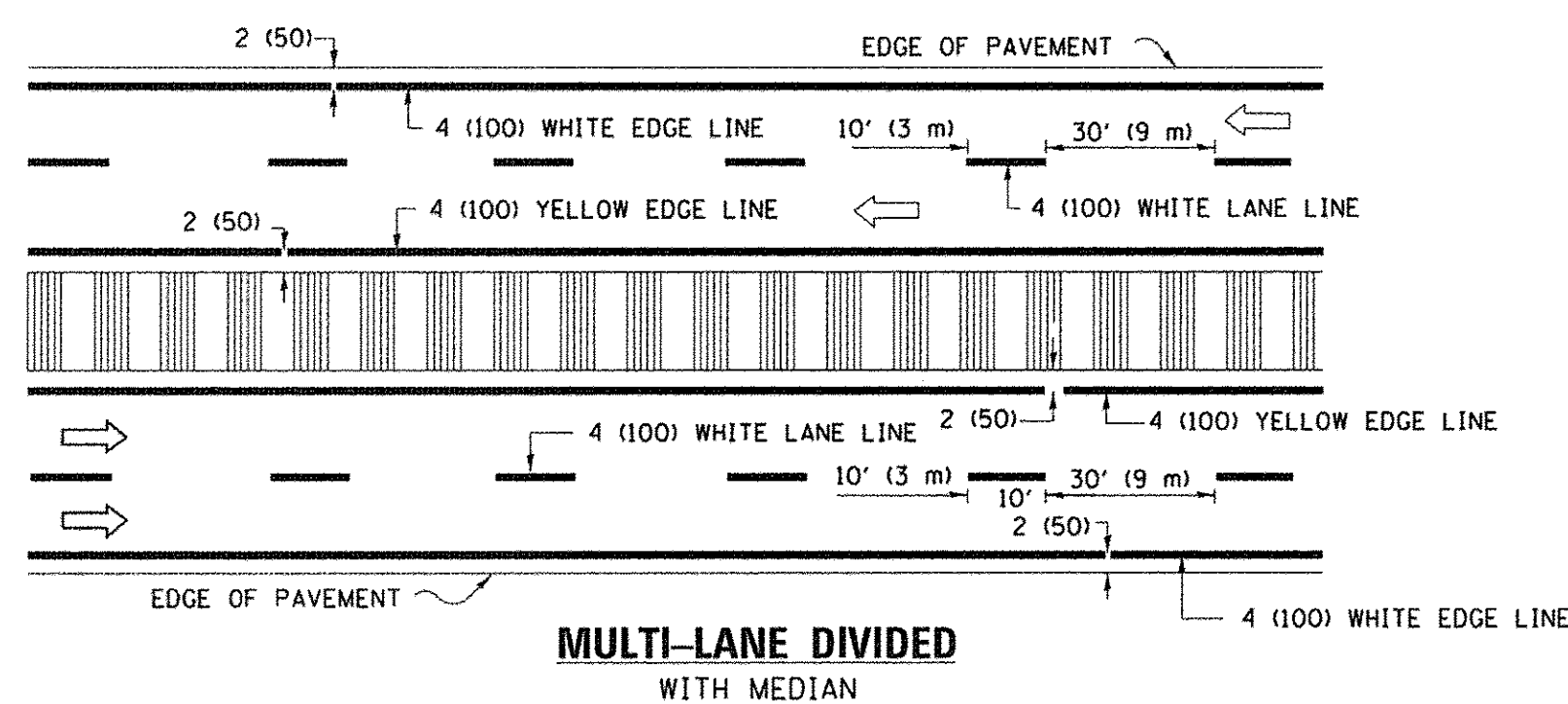
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1613	16-00091-00-RS	COOK	13	10
TC-10		CONTRACT NO. 61D91		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY

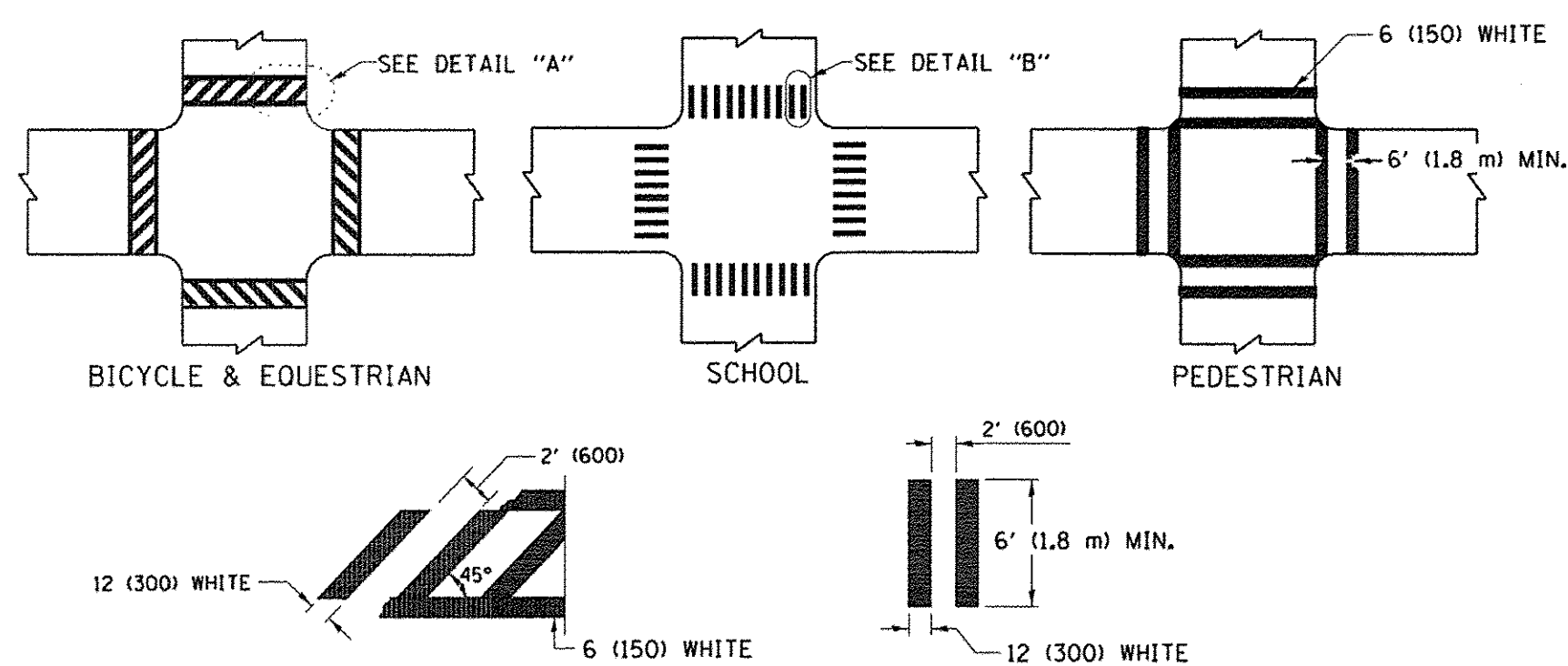


MULTI-LANE UNDIVIDED



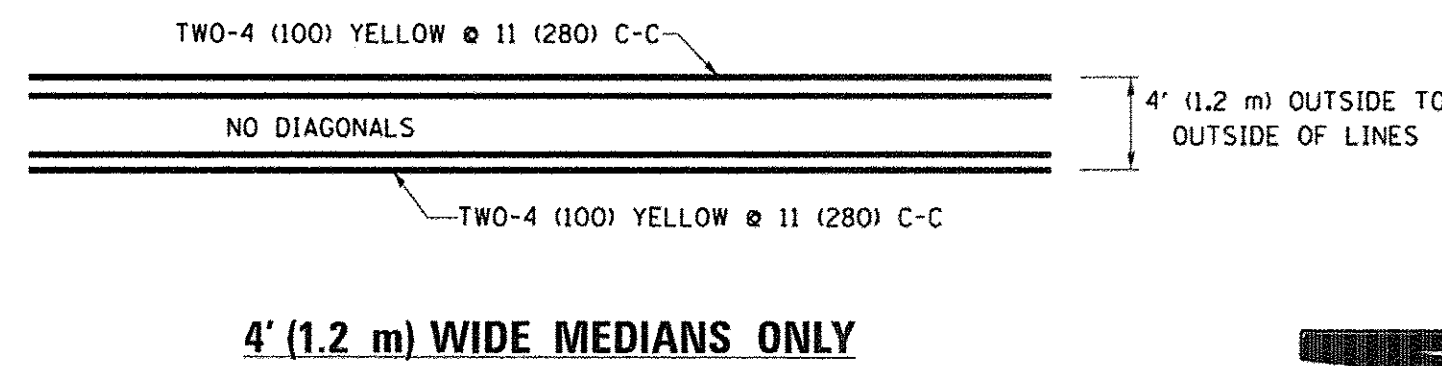
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

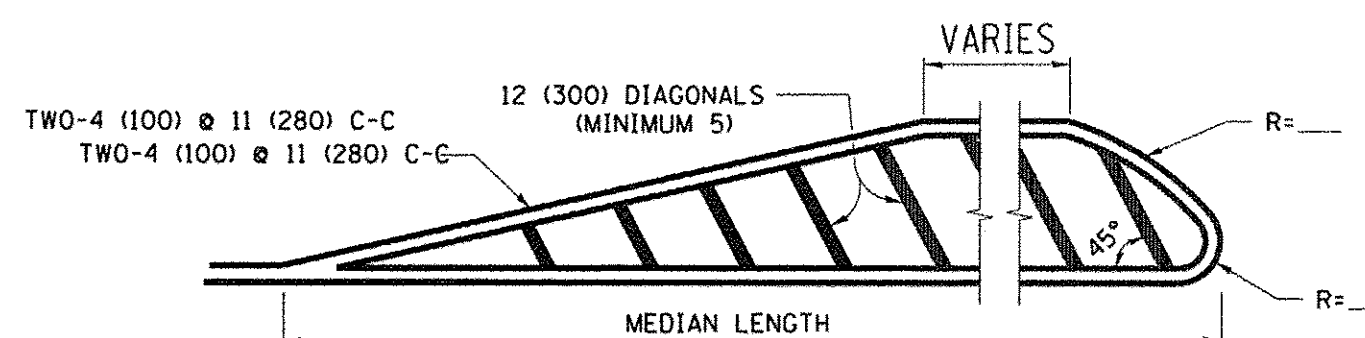


DETAIL "A" TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

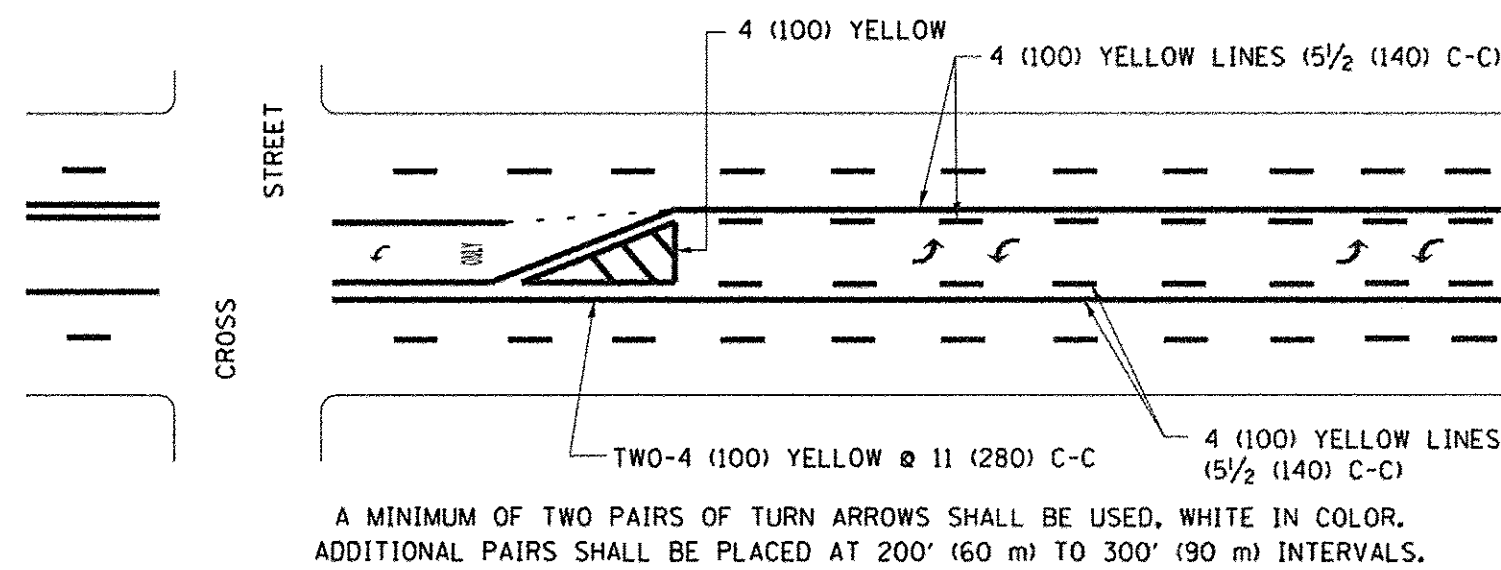


4' (1.2 m) WIDE MEDIANS ONLY



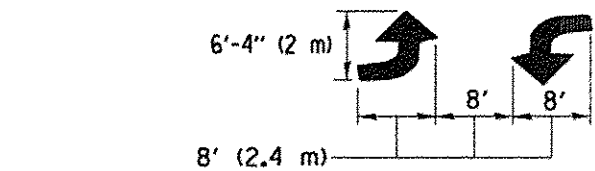
MEDIANS OVER 4' (1.2 m) WIDE

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



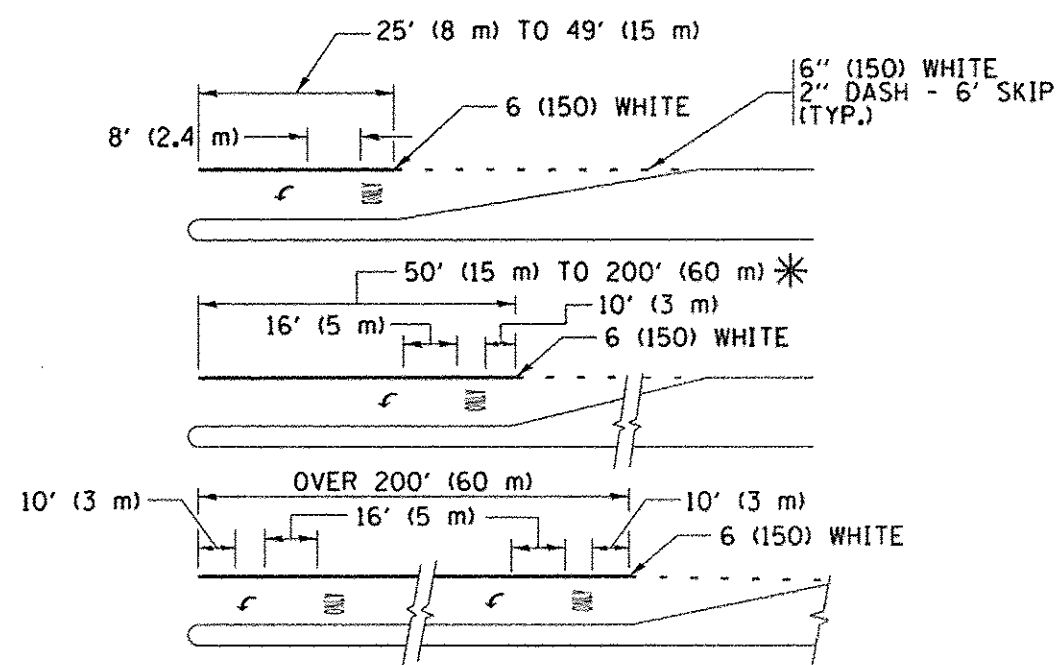
MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING

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



MEDIAN WITH TWO-WAY LEFT TURN LANE

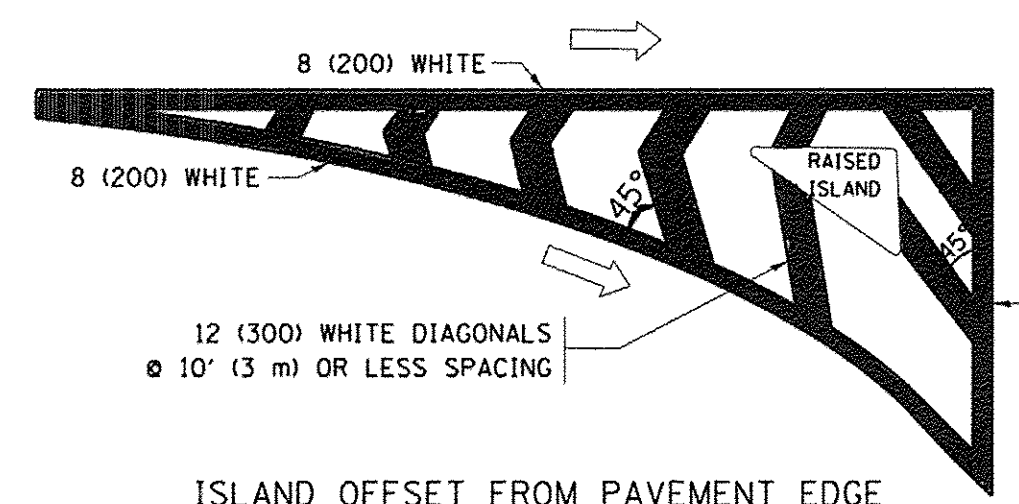
TYPICAL PAINTED MEDIAN MARKING



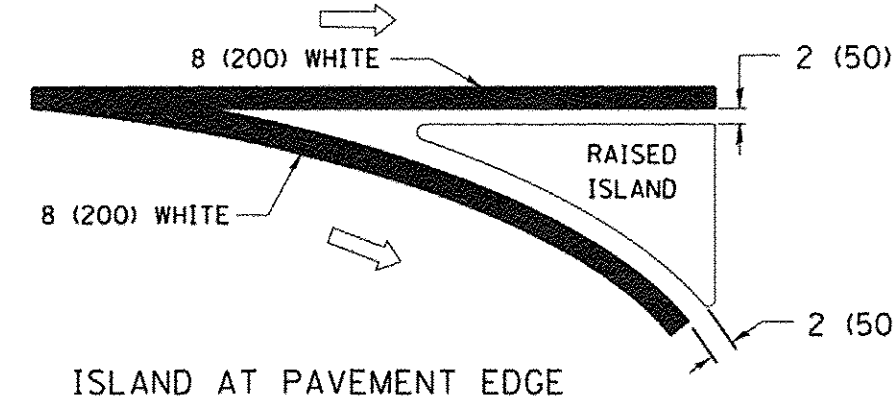
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

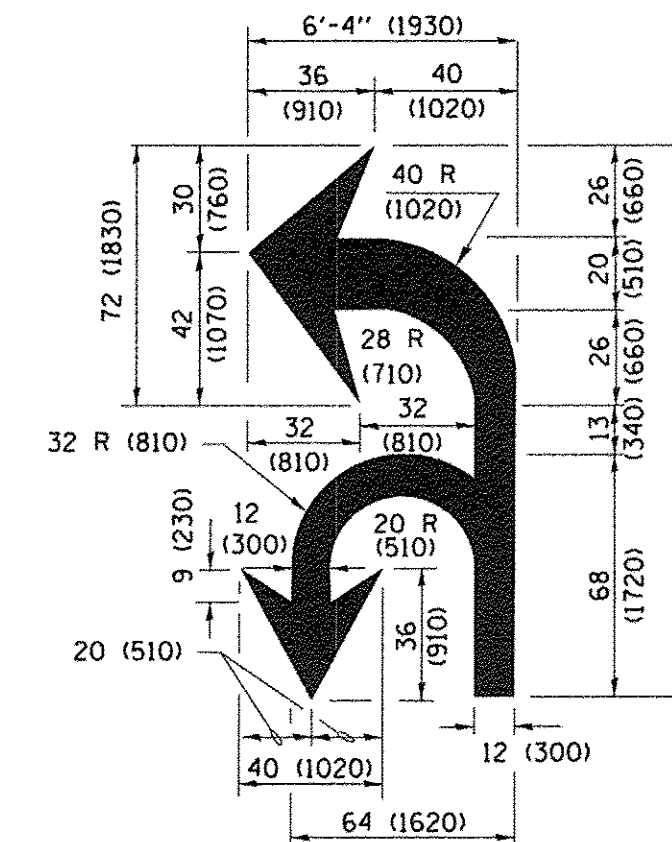


ISLAND OFFSET FROM PAVEMENT EDGE

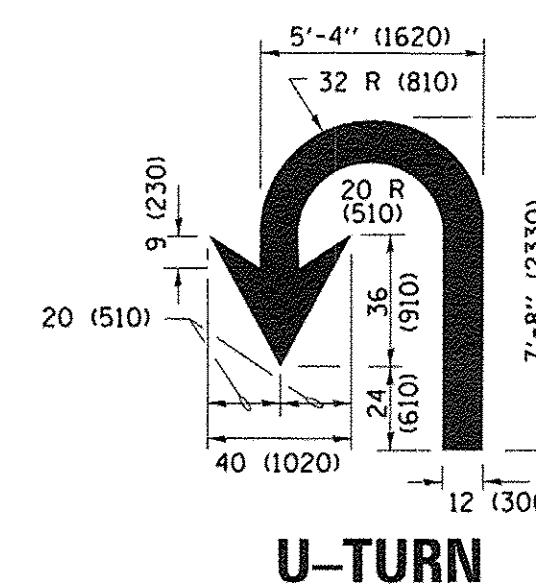


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

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

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

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 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (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 WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (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 SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
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 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30 MPH (50 km/h) TO 45MPH (70 km/h) 150' (45 m) C-C (OVER 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

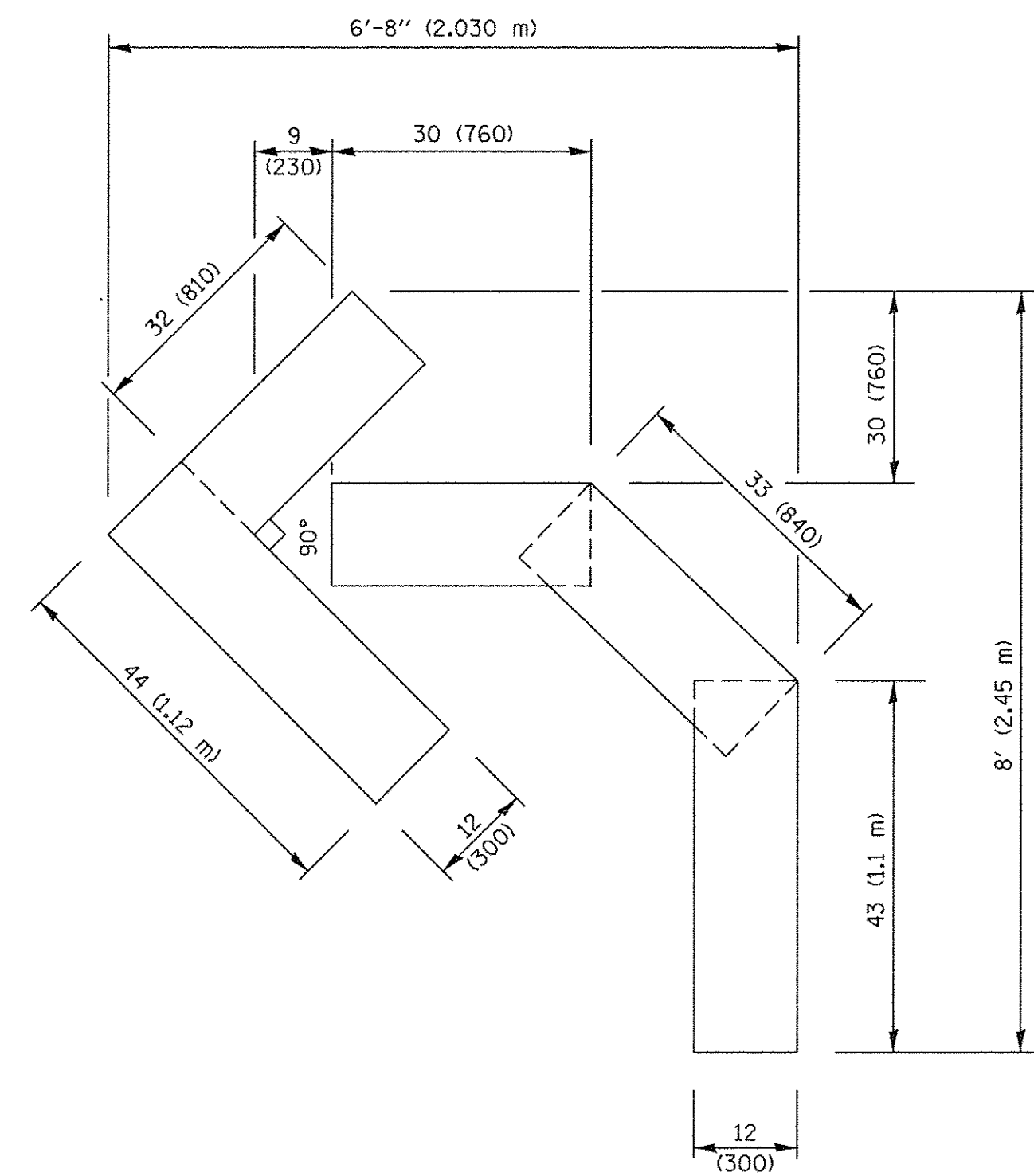
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME = 18R0599-DTLS-01 - TC13	USER NAME = footemj	DESIGNED = EVERS	REVISED = C. JUCIUS 09-09-09
	FILES\District 1\Projects\0	CHECKED = CAD\sheets\to13.dgn	REVISED = C. JUCIUS 07-01-13
	PLOT SCALE = 50.000 / 1 in.	DRAWN =	REVISED = C. JUCIUS 12-21-15
	PLOT DATE = 4/13/2016	CHECKED = 03-19-90	REVISED = C. JUCIUS 04-12-16

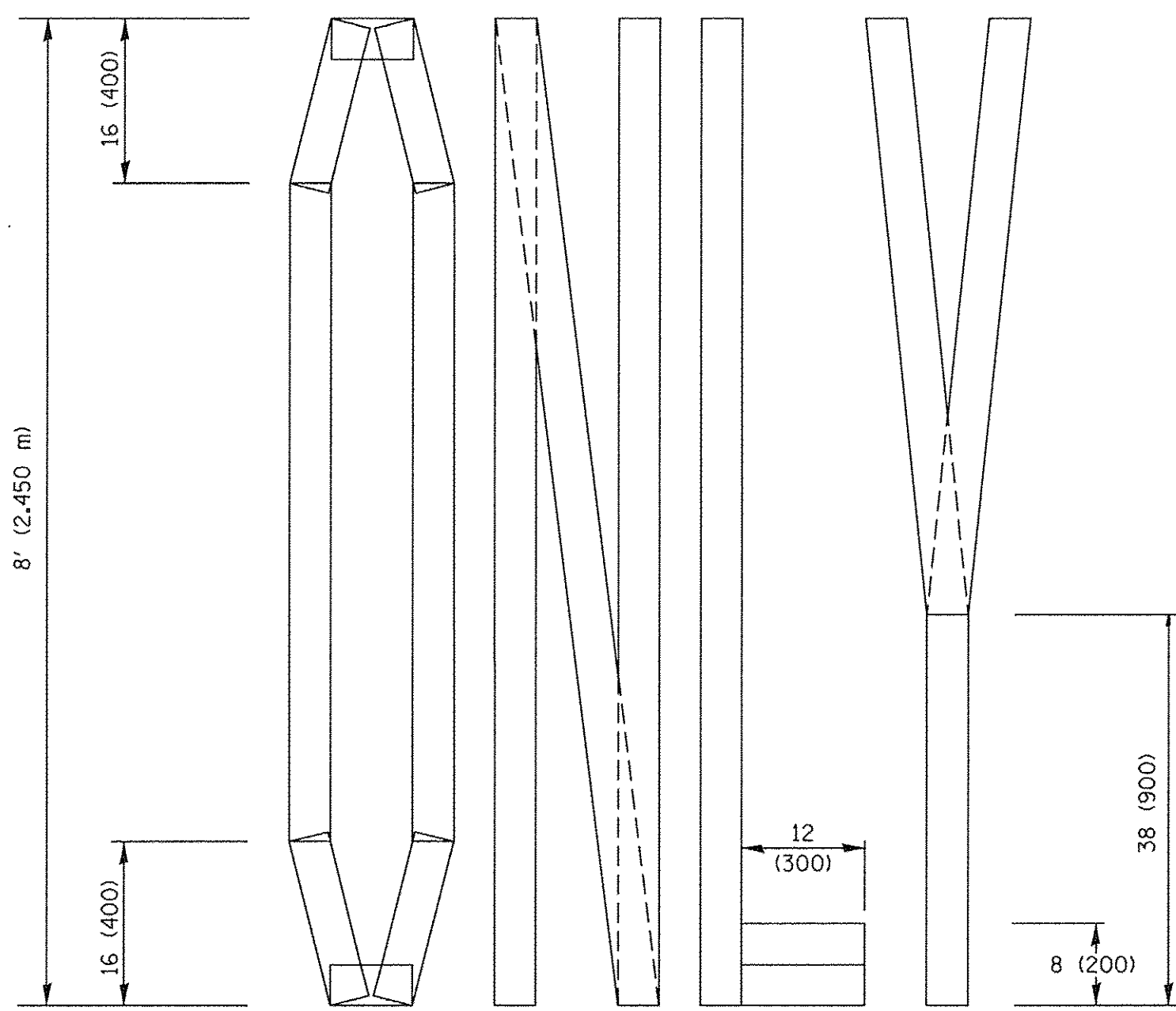
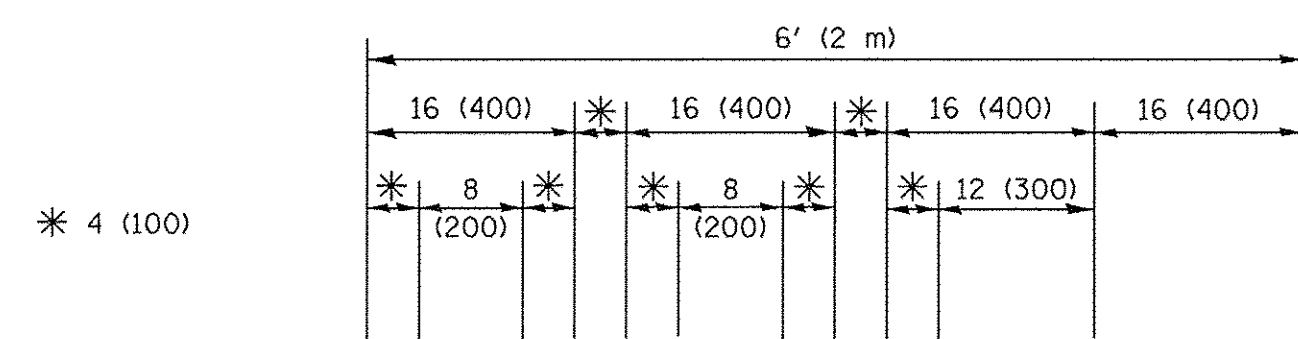
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: NONE		SHEET NO. 11 OF 13 SHEETS		STA. TO STA.	
DISTRICT ONE TYPICAL PAVEMENT MARKINGS					
FA.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
1613	16-00091-00-RS	COOK	13	11	
TC-13			CONTRACT NO. 61D91		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT			



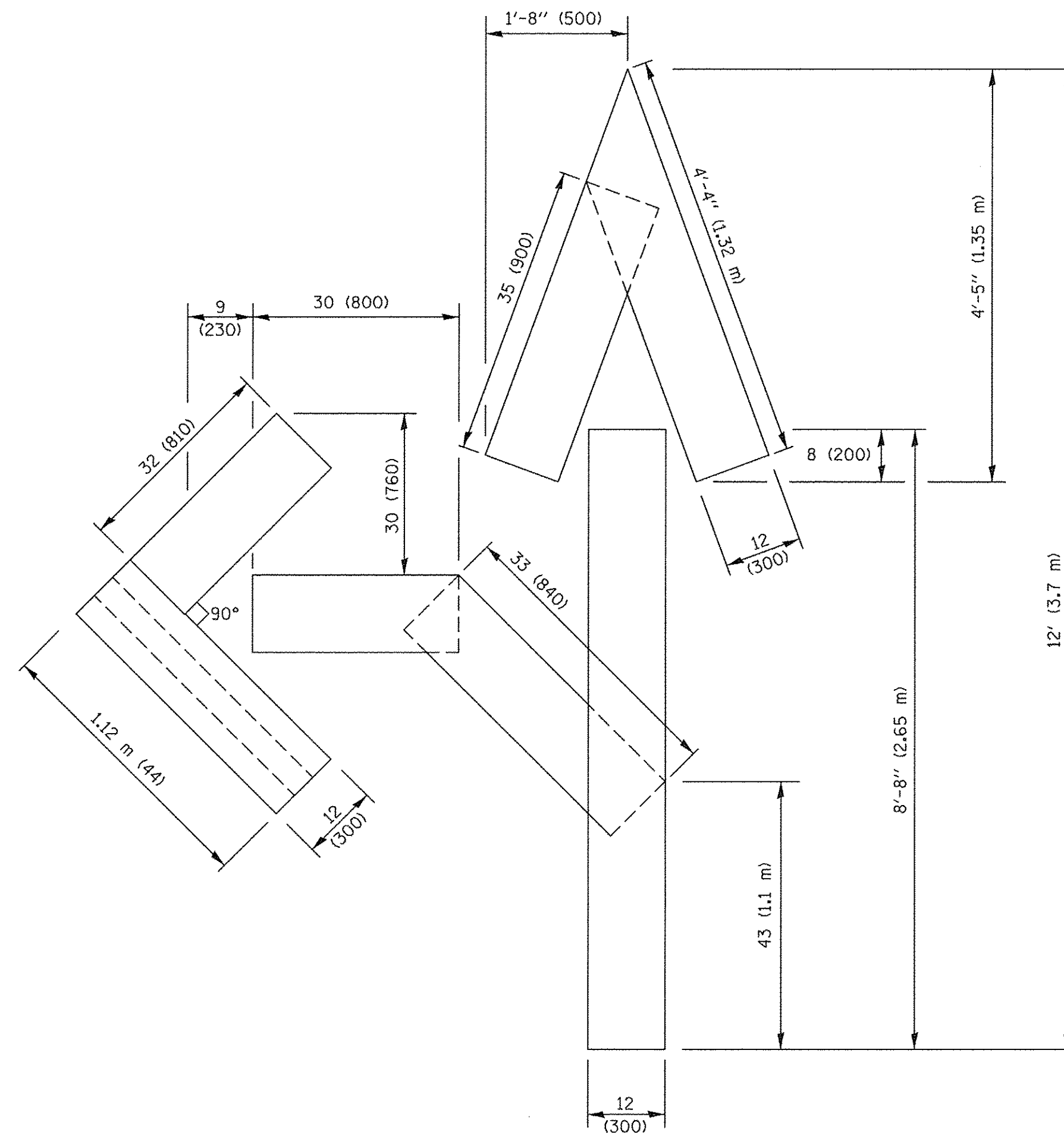
QUANTITY

4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.41 sq. m)



QUANTITY

4 (100) LINE = 64.1 ft. (19.5 m)
21.4 sq. ft. (1.99 sq. m)

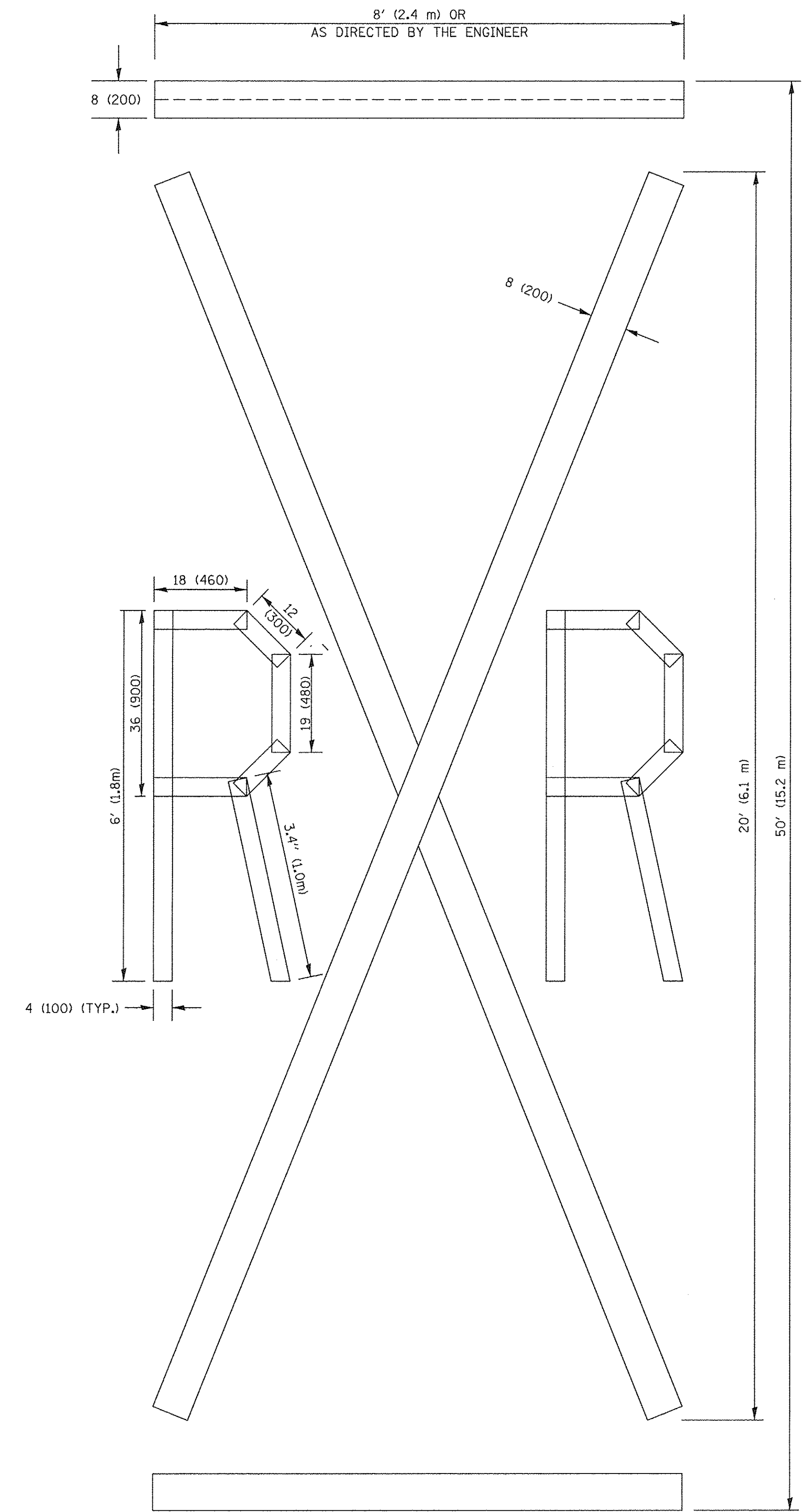


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m)
27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY

4 (100) LINE = 225.9 ft. (68.9 m)
75.3 sq. ft. (6.99 sq. m)

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

FILE NAME = 16R0999-DTLS-01 - TC16

USER NAME = footemj

DESIGNED —

REVISED —T. RAMMACHER 03-02-98

PLOT SCALE = 50.0000' / 1in.

CHECKED —

REVISED —E. GOMEZ 08-28-00

PLOT DATE = 9/15/2016

DRAWN —

REVISED —E. GOMEZ 08-28-00

CHECKED — 09-18-94

REVISED —A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

SCALE: NONE

SHEET NO. 12 OF 13 SHEETS

STA. TO STA.

F.A.U. RTE.

1613

SECTION

16-00091-00-RS

COUNTY

COOK

TOTAL SHEETS

13

SHEET NO.

12

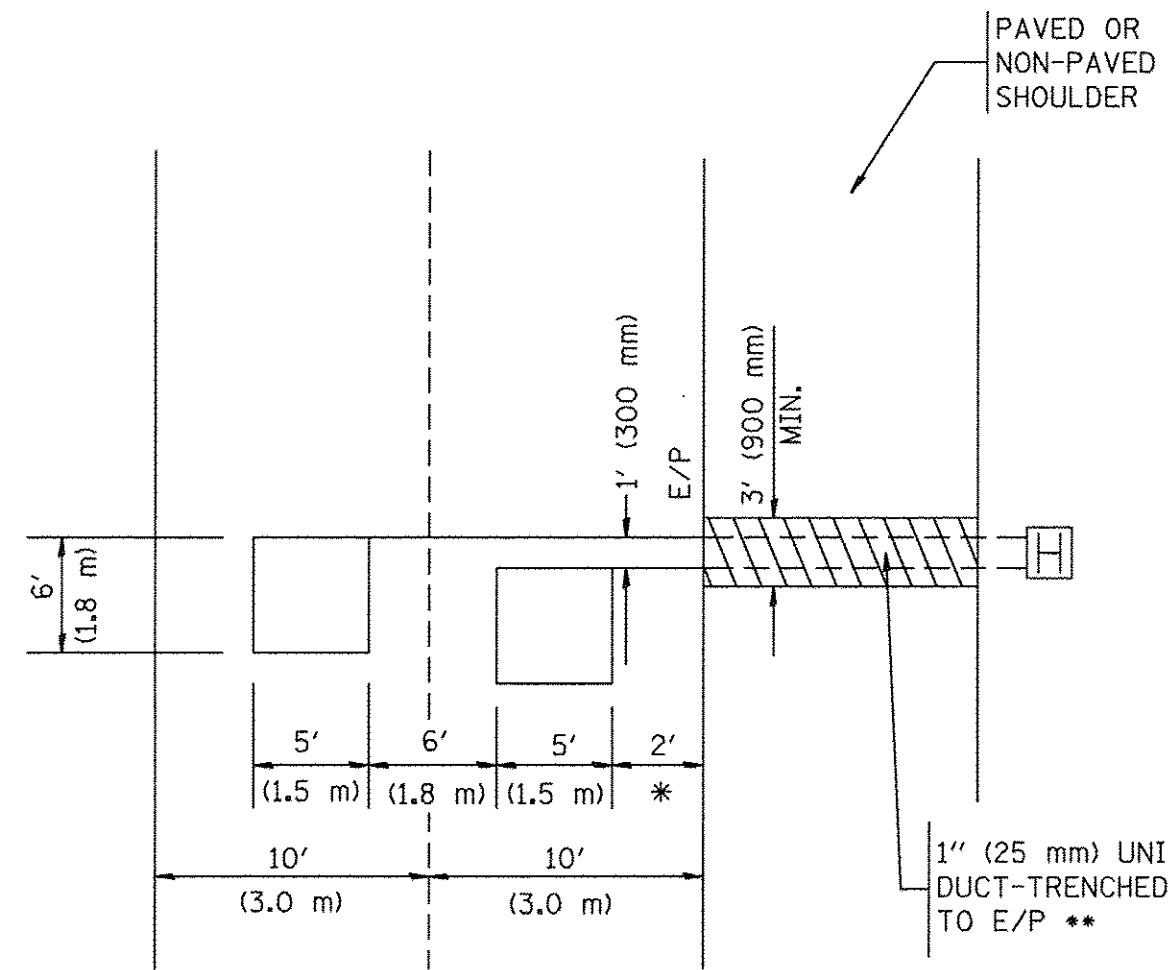
TC-16

CONTRACT NO. 61D91

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

LOOPS NEXT TO SHOULDERS

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

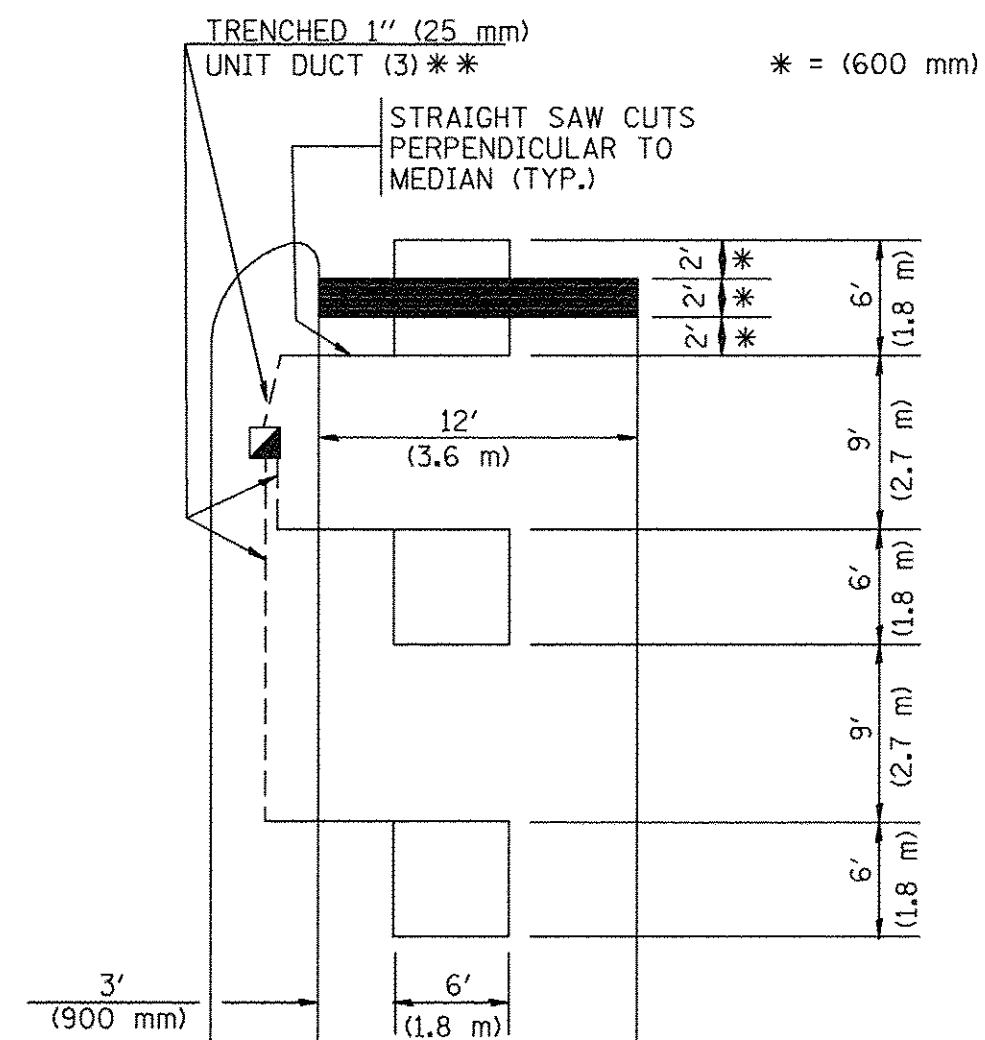


* = (600 mm)

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

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

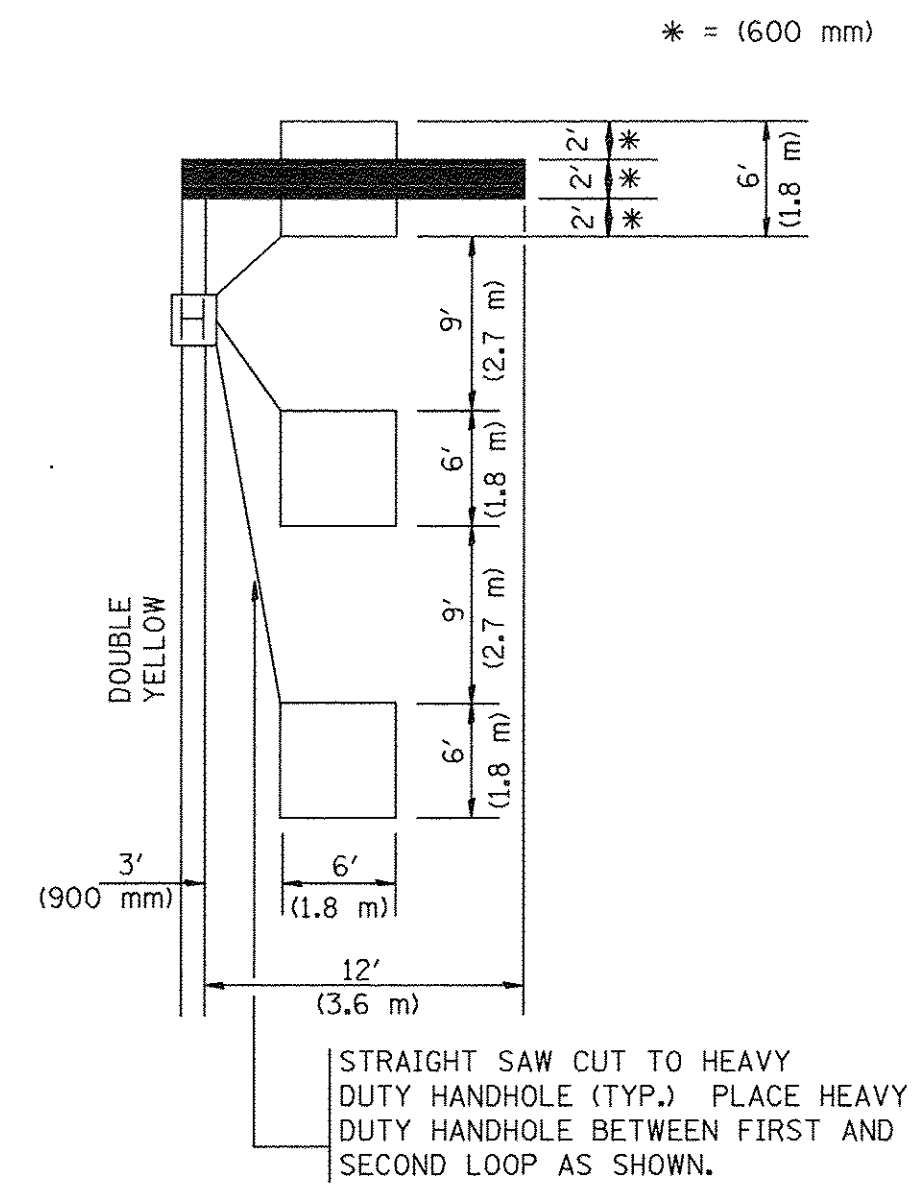
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

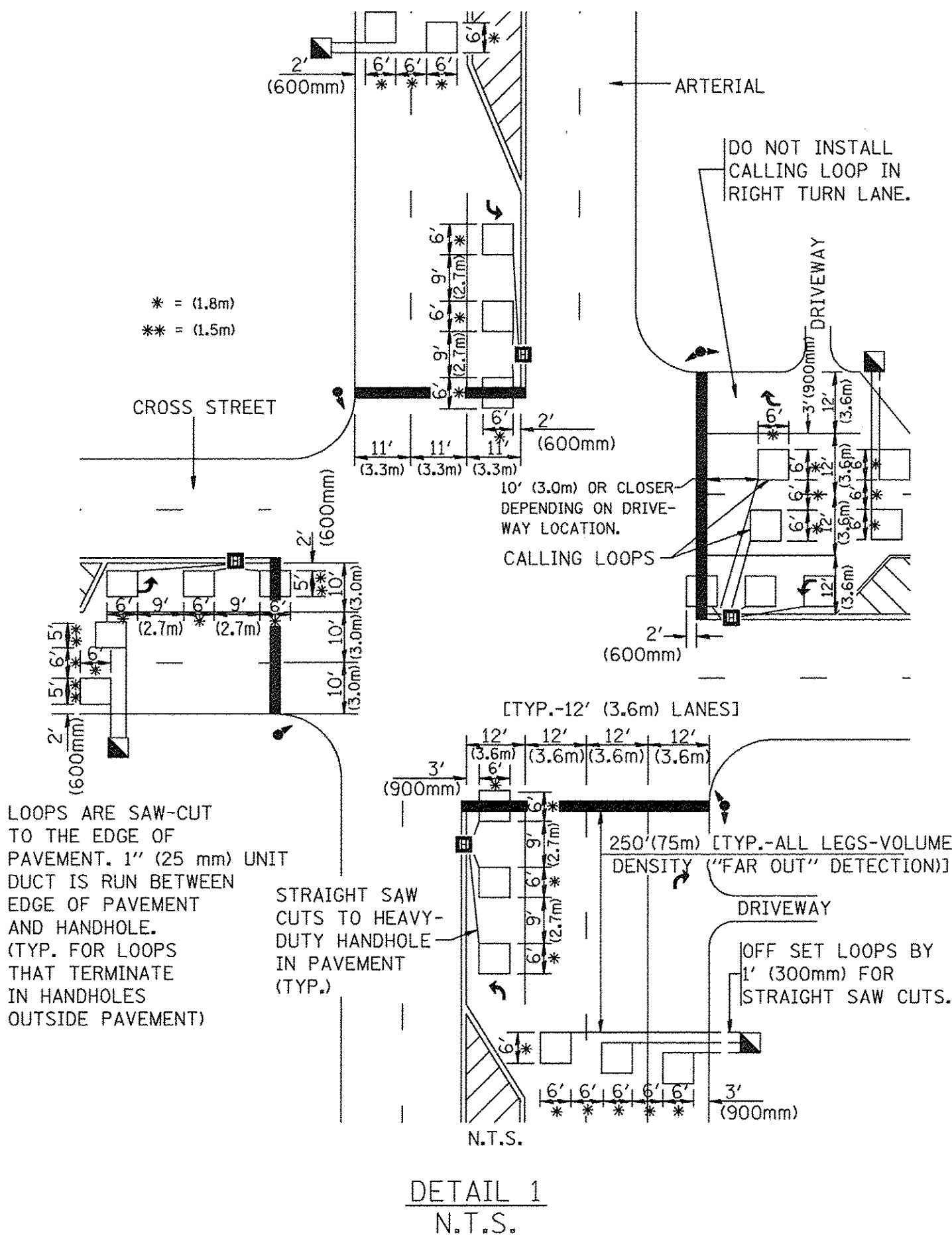
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



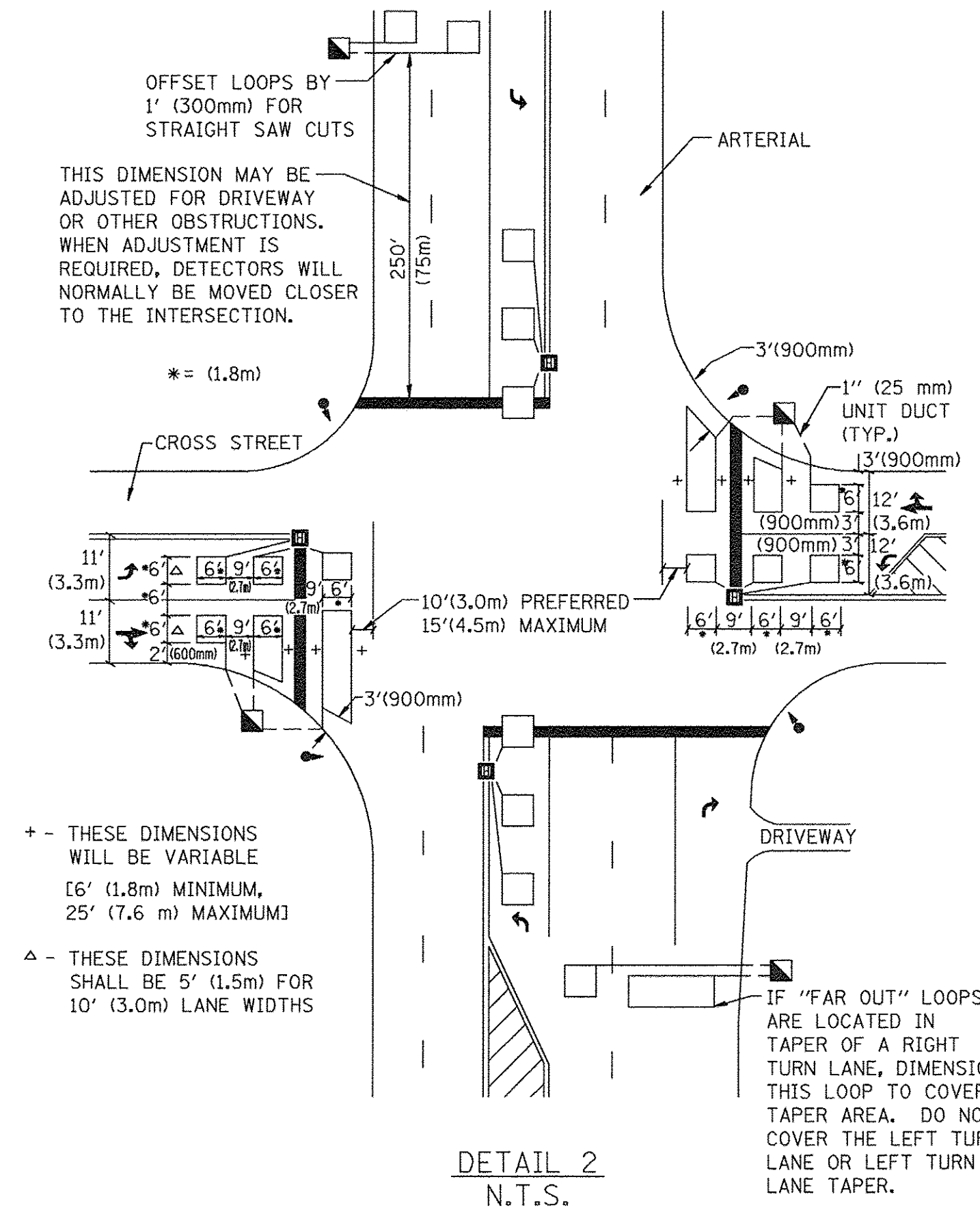
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. 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 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 = 16R0999-DTLS-01 - TS07

USER NAME = gaglionobt	DESIGNED --	REVISD --
PLOT SCALE = 50.0000' / IN.	CHECKED --	REVISD --
PLOT DATE = 1/4/2008	DRAWN --	REVISD --
	CHECKED --	REVISD --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING

SCALE: NONE SHEET NO. 13 OF 13 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1613	16-00091-00-RS	COOK	13	13
TS-07		CONTRACT NO. 61D91		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		