

1-20-2012 LETTING ITEM 007

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

F.A.P. ROUTE 374 (IL 21)  
EUCLID AVE. TO GLENVIEW RD.  
SECTION 211K-RS-1  
PROJECT: NHF-0374(014)  
RESURFACING (3P)  
COOK COUNTY  
C-91-074-11

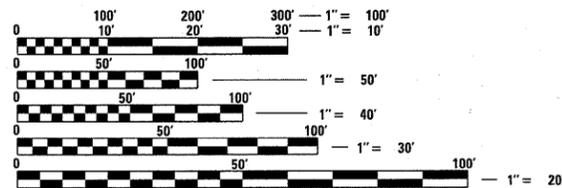
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	211K-RS-1	COOK	27	1
		ILLINOIS	CONTRACT NO. 60M07	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED  
IN THE VILLAGE OF GLENVIEW

**TRAFFIC DATA:**

ADT (EUCLID AVE. TO I-294) = 34,800 (2007)  
ADT (I-294 TO GLENVIEW RD.) = 28,600 (2009)  
SPEED LIMIT = 35-45 MPH

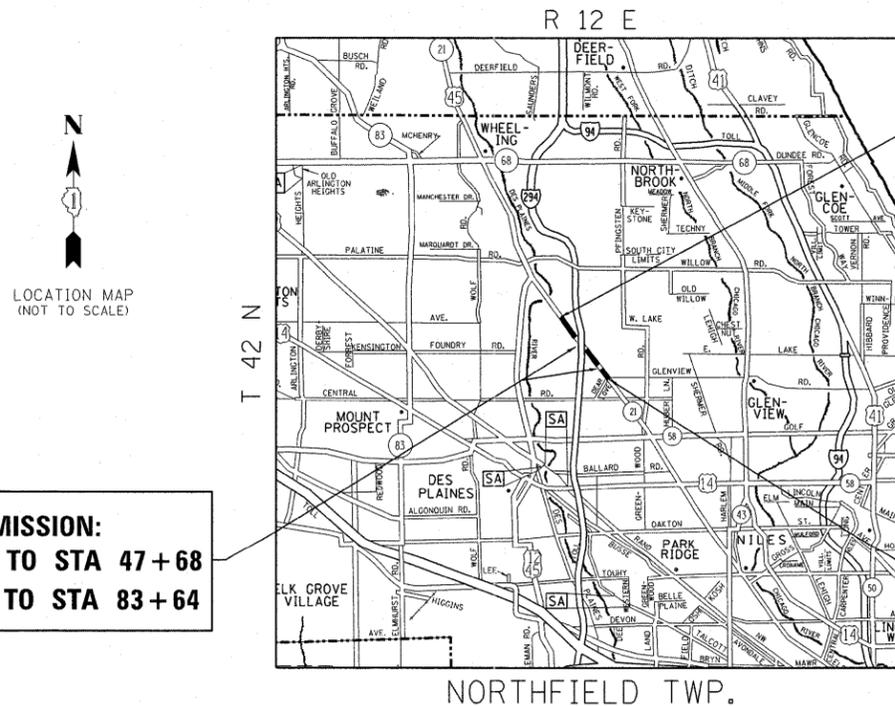


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: DAN WILGREEN (847) 705-4240  
PROJECT MANAGER: KEN ENG (847) 705-4247

CONTRACT NO. 60M07



**OMISSION:**  
STA 39+21 TO STA 47+68  
STA 81+11 TO STA 83+64

PROJECT BEGINS  
STA 14+61

PROJECT ENDS  
STA 89+81

GROSS LENGTH = 7,520 FT. = 1.424 MILE  
NET LENGTH = 6,420 FT. = 1.216 MILE

D-91-074-11



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

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED OCTOBER 20, 20 11

*Diana M. O'Keefe*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 9, 20 11  
*Scott E. Stitt, P.E.*  
acting ENGINEER OF DESIGN AND ENVIRONMENT

December 9, 20 11  
*William R. Frey, Jr.*  
Interim DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

**INDEX OF SHEETS**

**STATE STANDARDS**

**GENERAL NOTES**

SHEET NO.	DESCRIPTION
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3-4	SUMMARY OF QUANTITIES
5-8	EXISTING AND PROPOSED TYPICAL SECTIONS
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12-14	DETECTOR LOOP REPLACEMENT PLANS
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17	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
18	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
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26	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05A)
27	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

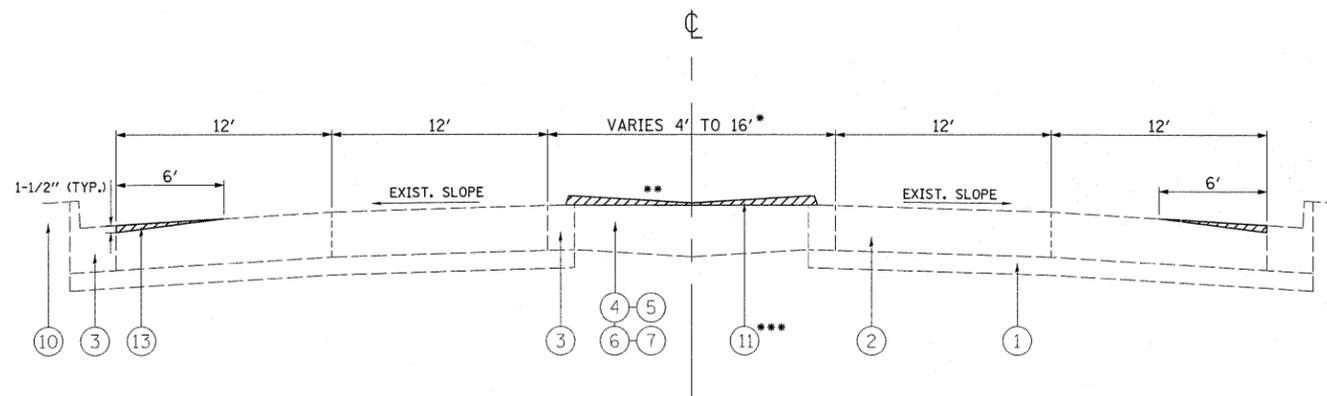
STANDARD NO.	DESCRIPTION
000001-06	TYPICAL SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
604001-03	FRAME AND LIDS, TYPE 1
604091-02	FRAME AND GRATE, TYPE 24
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701421-04	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >= 45 MPH TO 55 MPH
701426-04	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS >= 45 MPH
701427	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS <= 40 MPH
701602-05	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIUM
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES
780001-03	TYPICAL PAVEMENT MARKINGS
814001-02	HANDHOLES
886001-01	DETECTOR LOOP INSTALLATION
886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF GLENVIEW.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
- ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- ALL PAVEMENT PATCHING, CURB AND GUTTER REMOVAL AND REPLACEMENT, AND DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE RESIDENT ENGINEER SHALL CONTACT WALLY CZARNY, AREA TRAFFIC FIELD ENGINEER, AT (847) 715-8419 A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 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 ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.
- PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS OVER 45 MPH. WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1:3 (V:H).
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
- CLEANING OF LONGITUDINAL AND TRANSVERSE CRACKS (REMOVAL OF COLD PATCH MATERIALS AND BLOWING) SHALL BE INCIDENTAL TO THE PAY ITEM MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS.

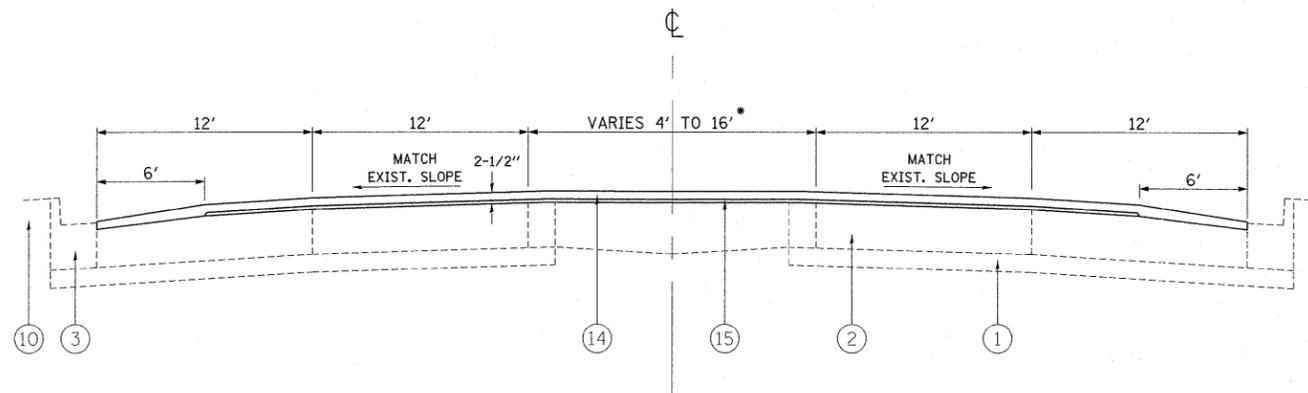
SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	80% FED. 20% STATE 0005						CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	80% FED. 20% STATE 0005					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	655	655						67100100	MOBILIZATION	L SUM	1	1					
25200110	SODDING, SALT TOLERANT	SO YD	655	655						70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	1					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	42	42						70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1					
40600300	AGGREGATE (PRIME COAT)	TON	202	202						70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	76	76						70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1					
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1793	1793						70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1					
40600895	CONSTRUCTING TEST STRIP	EACH	2	2						70300100	SHORT TERM PAVEMENT MARKING	FOOT	6558	6558					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	155	155						70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	795	795					
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SO YD	1850	1850						70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	24420	24420					
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	10	10						70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	4475	4475					
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	135	135						70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	200	200					
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	5115	5115						70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1000	1000					
42001300	PROTECTIVE COAT	SO YD	2408	2408						70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	510	510					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	2344	2344						70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	1052	1052					
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	5915	5915					*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	795	795					
44000600	SIDEWALK REMOVAL	SO FT	2344	2344					*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	24420	24420					
44002210	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 2 1/2"	SO YD	70	70					*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	4475	4475					
44003100	MEDIAN REMOVAL	SO FT	3720	3720					*	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	200	200					
44003510	MEDIAN REMOVAL PARTIAL DEPTH	SO FT	26900	26900					*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1000	1000					
44022029	PARTIAL DEPTH REMOVAL 3"	SO YD	800	800					*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	510	510					
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	1354	1354					*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	700	700					
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SO YD	556	556						78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	315	315					
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SO YD	546	546					*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	1508	1508					
60250200	CATCH BASINS TO BE ADJUSTED	EACH	34	34						89502378	REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	4	4					
60251740	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 24 FRAME AND GRATE	EACH	4	4						X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SO YD	119	119					
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1															
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1															
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	1															
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	36	36															
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	10	10															
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6															

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	80% FED. 20% STATE 0005						CODE NO	ITEM	UNIT	TOTAL QUANTITIES						
X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL ( VARIABLE DEPTH)	SO YD	7925	7925															
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	400	400															
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	6039	6039															
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	40	40															
Z0018600	DRAINAGE STRUCTURES TO BE RECONSTRUCTED	EACH	1	1															
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4															
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1															

△ Non-participating (100% STATE)



**IL 21 - MILWAUKEE AVE.**  
**EXISTING TYPICAL SECTION**  
 STA. 14+61 TO STA. 34+40  
 STA. 35+23 TO STA. 39+21  
 STA. 47+68 TO STA. 50+32  
 STA. 55+78 TO STA. 70+90



**IL 21 - MILWAUKEE AVE.**  
**PROPOSED TYPICAL SECTION**  
 STA. 14+61 TO STA. 34+40  
 STA. 35+23 TO STA. 39+21  
 STA. 47+68 TO STA. 50+32  
 STA. 55+78 TO STA. 70+90

**NOTES:**

- \* AT LOCATIONS WHERE MEDIAN IS 4' WIDE THERE IS A 12' TRN LN
- \*\* ALL MEDIANS THAT ARE TO BE MILLED SHALL BE MILLED FLUSH TO MATCH ADJACENT EXISTING PCC PAVEMENT
- \*\*\* LOCATIONS OF MEDIAN REMOVAL PARTIAL DEPTH:

**SB MEDIAN:**

STA 17+86 TO STA 18+76  
 STA 55+78 TO STA 56+13  
 STA 64+16 TO STA 67+68

**STABILIZED MEDIAN SURFACE:**

STA 27+62 TO STA 33+44  
 STA 47+68 TO STA 50+32  
 STA 56+13 TO STA 62+92  
 STA 68+37 TO STA 70+90

**CORRUGATED MEDIAN:**

STA 14+61 TO STA 17+05  
 STA 18+76 TO STA 21+17  
 SECTIONS ON EUCLID AVE. E/O  
 AND W/O OF IL 21

**LEGEND**

- ① EXISTING STABILIZED SUB-BASE, 4"
- ② EXISTING PCC PAVEMENT, 10"±
- ③ EXISTING COMBINATION CONCRETE CURB AND GUTTER
- ④ EXISTING SB MEDIAN
- ⑤ EXISTING SM MEDIAN
- ⑥ EXISTING STABILIZED MEDIAN SURFACE, 12"
- ⑦ EXISTING CORRUGATED MEDIAN
- ⑧ EXISTING CONCRETE MEDIAN SURFACE, 4"
- ⑨ EXISTING SAND FILL
- ⑩ EXISTING TOP SOIL AND SODDING
- ⑪ PROPOSED MEDIAN REMOVAL PARTIAL DEPTH
- ⑫ PROPOSED HMA SURFACE REMOVAL, 2-1/2"
- ⑬ PROPOSED PCC SURFACE REMOVAL, VARIABLE DEPTH
- ⑭ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1-3/4"
- ⑮ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑯ PROPOSED PARTIAL DEPTH REMOVAL, 3"
- ⑰ PROPOSED HMA BINDER COURSE, IL-19.0, N70, 3"  
(NOTE: FOR LONGITUDINAL JOINT REPAIR, SEE DETAIL ON SHEET #6)
- ⑱ PROPOSED MEDIAN REMOVAL
- ⑲ PROPOSED CLASS D PATCHES, TYPE IV, 10 INCH

**OMISSION**

STA. 39+21 TO STA. 47+68

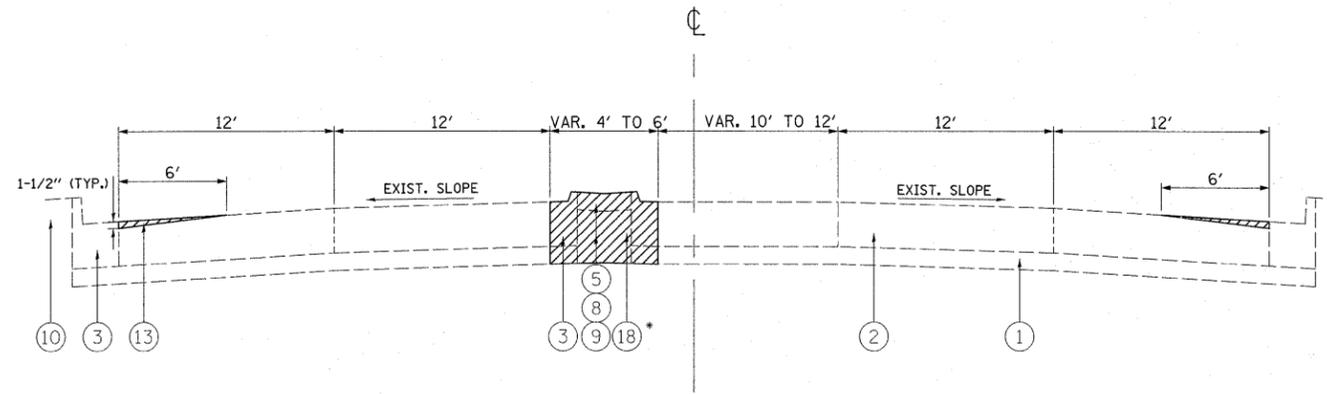
THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE USES	MIXTURE TYPE	AIR VOIDS @ Ndes
ROADWAY RESURFACING	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (IL-9.5 mm)	4% @ 90 GYR
	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	4% @ 50 GYR
PATCHES*	CLASS D PATCHES (HMA BINDER IL-19 mm), 10"	4% @ 70 GYR
	HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR
LONGITUDINAL JOINT REPAIR	HMA BINDER COURSE, IL-19.0, N70, 3"	4% @ 70 GYR
DRIVEWAYS	HMA SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% @ 50 GYR
	HMA BASE COURSE (HMA BINDER IL-19 mm); 6"	4% @ 50 GYR

\* LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER

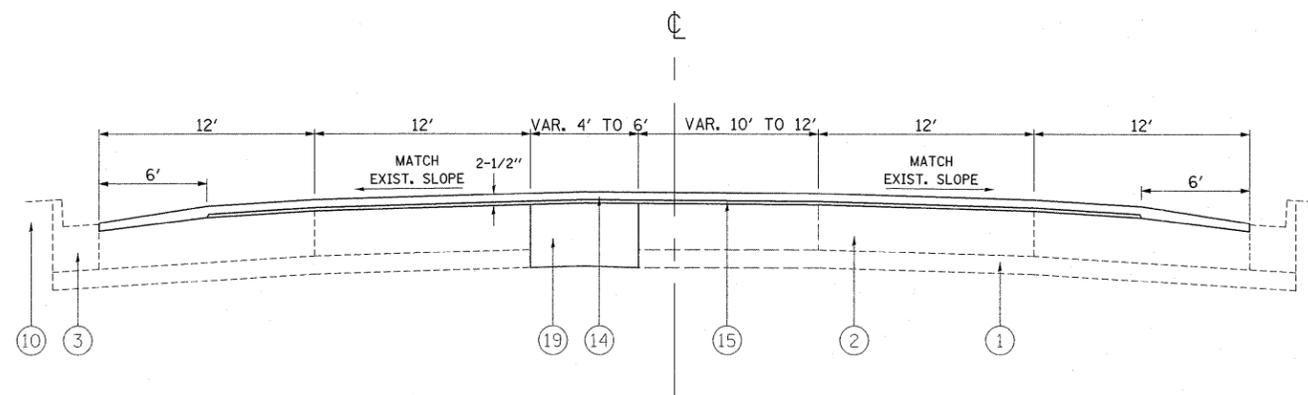
NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURES IS 112 LBS/SQYD/IN.

NOTE 2: 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 "PERCENT OF RAP" SEE SPECIAL PROVISIONS.



**IL 21 - MILWAUKEE AVE.  
EXISTING TYPICAL SECTION**

STA. 34+40 TO STA. 35+23  
 STA. 50+32 TO STA. 55+78  
 STA. 70+90 TO STA. 72+39



**IL 21 - MILWAUKEE AVE.  
PROPOSED TYPICAL SECTION**

STA. 34+40 TO STA. 35+23  
 STA. 50+32 TO STA. 55+78  
 STA. 70+90 TO STA. 72+39

**NOTES:**

- LOCATIONS FOR MEDIAN REMOVAL:  
 STA 34+40 TO STA 35+23  
 STA 50+32 TO STA 51+25  
 STA 51+79 TO STA 55+25  
 STA 70+90 TO STA 72+39

REMOVAL OF MEDIAN SURFACE, CURB AND GUTTER, SUB-BASE, AND SAND FILL IS INCLUDED IN THE COST OF MEDIAN REMOVAL

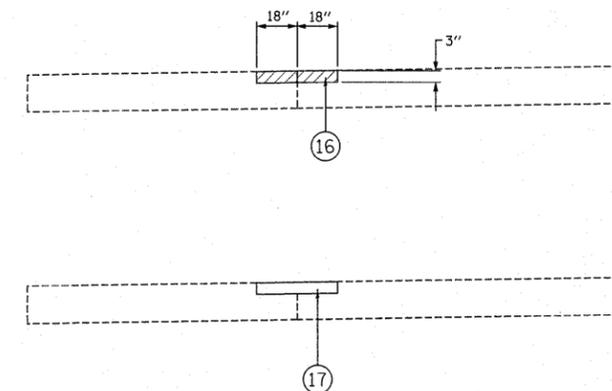
**LEGEND**

- ① EXISTING STABILIZED SUB-BASE, 4"
- ② EXISTING PCC PAVEMENT, 10"±
- ③ EXISTING COMBINATION CONCRETE CURB AND GUTTER
- ④ EXISTING SB MEDIAN
- ⑤ EXISTING SM MEDIAN
- ⑥ EXISTING STABILIZED MEDIAN SURFACE, 12"
- ⑦ EXISTING CORRUGATED MEDIAN
- ⑧ EXISTING CONCRETE MEDIAN SURFACE, 4"
- ⑨ EXISTING SAND FILL
- ⑩ EXISTING TOP SOIL AND SODDING
- ⑪ PROPOSED MEDIAN REMOVAL PARTIAL DEPTH
- ⑫ PROPOSED HMA SURFACE REMOVAL, 2-1/2"
- ⑬ PROPOSED PCC SURFACE REMOVAL, VARIABLE DEPTH
- ⑭ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1-3/4"
- ⑮ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑯ PROPOSED PARTIAL DEPTH REMOVAL, 3"
- ⑰ PROPOSED HMA BINDER COURSE, IL-19.0, N70, 3"  
(NOTE: FOR LONGITUDINAL JOINT REPAIR, SEE DETAIL ON SHEET #6)
- ⑱ PROPOSED MEDIAN REMOVAL
- ⑲ PROPOSED CLASS D PATCHES, TYPE IV, 10 INCH

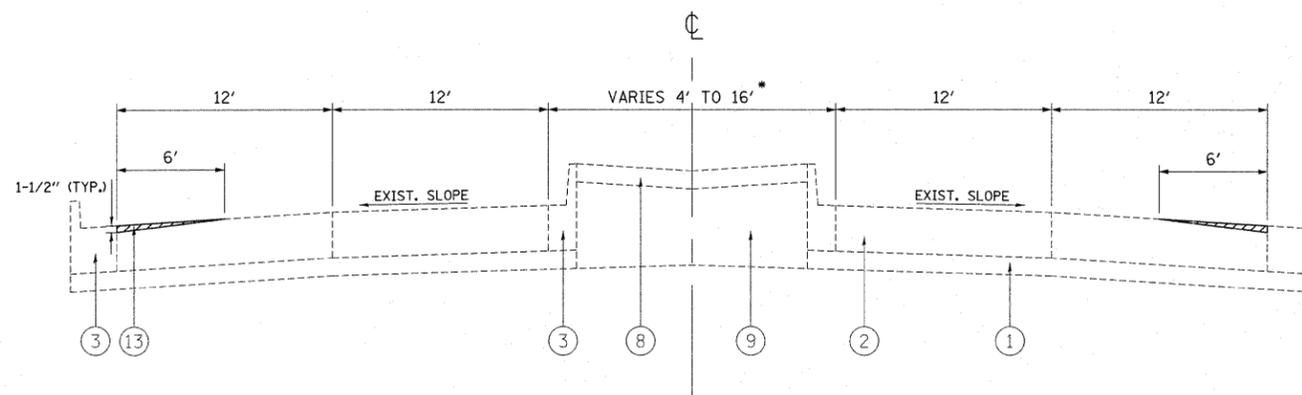
THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

**DETAIL A  
LONGITUDINAL JOINT REPAIR (TYP.)**

(LOCATIONS TO BE DETERMINED BY ENGINEER)

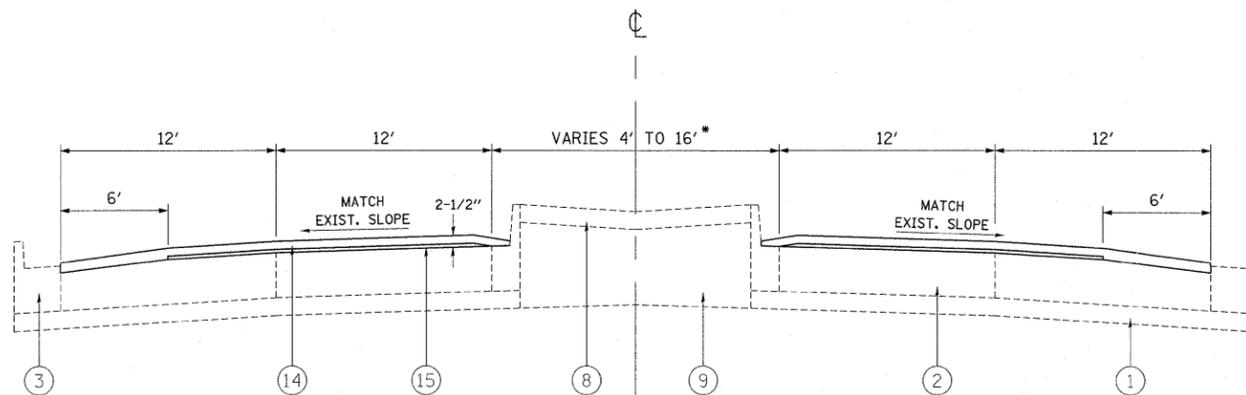


FILE NAME = c:\pvt_work\pvt\dot\tariqfm\0238476\0107	USER NAME = tariqfm 11-sht-plan.dgn	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 21 (EUCLID AVE. TO GLENVIEW RD.) EXISTING AND PROPOSED TYPICAL SECTIONS</b>				F.A.P. RTE. 374	SECTION 211K-RS-1	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 6
PLOT SCALE = 5/8" = 1'-0"					SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60M07 ILLINOIS FED. AID PROJECT		
PLOT DATE = 10/18/2011					DATE -								
					REVISED -								



**IL 21 - MILWAUKEE AVE.  
EXISTING TYPICAL SECTION**

STA. 72+39 TO STA. 81+11  
 STA 83+64 TO STA 85+53  
 EXCLUDES NB RT TRN LN: STA 73+20 TO STA 76+68



**IL 21 - MILWAUKEE AVE.  
PROPOSED TYPICAL SECTION**

STA. 72+39 TO STA. 81+11  
 STA 83+64 TO STA 85+53  
 EXCLUDES NB RT TRN LN: STA 73+20 TO STA 76+68

**LEGEND**

- ① EXISTING STABILIZED SUB-BASE, 4"
- ② EXISTING PCC PAVEMENT, 10"±
- ③ EXISTING COMBINATION CONCRETE CURB AND GUTTER
- ④ EXISTING SB MEDIAN
- ⑤ EXISTING SM MEDIAN
- ⑥ EXISTING STABILIZED MEDIAN SURFACE, 12"
- ⑦ EXISTING CORRUGATED MEDIAN
- ⑧ EXISTING CONCRETE MEDIAN SURFACE, 4"
- ⑨ EXISTING SAND FILL
- ⑩ EXISTING TOP SOIL AND SODDING
- ⑪ PROPOSED MEDIAN REMOVAL PARTIAL DEPTH
- ⑫ PROPOSED HMA SURFACE REMOVAL, 2-1/2"
- ⑬ PROPOSED PCC SURFACE REMOVAL, VARIABLE DEPTH
- ⑭ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1-3/4"
- ⑮ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑯ PROPOSED PARTIAL DEPTH REMOVAL, 3"
- ⑰ PROPOSED HMA BINDER COURSE, IL-19.0, N70, 3"  
(NOTE: FOR LONGITUDINAL JOINT REPAIR, SEE DETAIL ON SHEET #6)
- ⑱ PROPOSED MEDIAN REMOVAL
- ⑲ PROPOSED CLASS D PATCHES, TYPE IV, 10 INCH

**OMISSION**

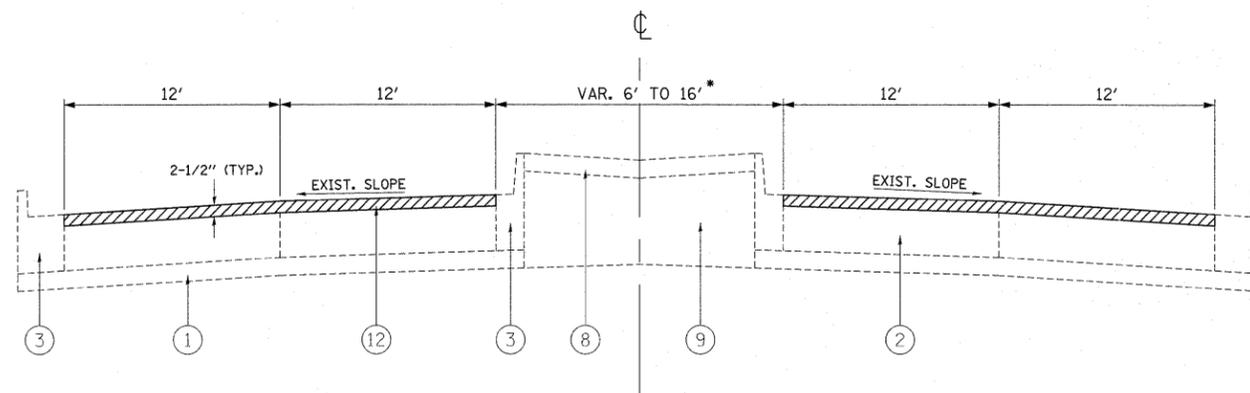
STA. 81+11 TO STA. 83+64

THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

**NOTES:**

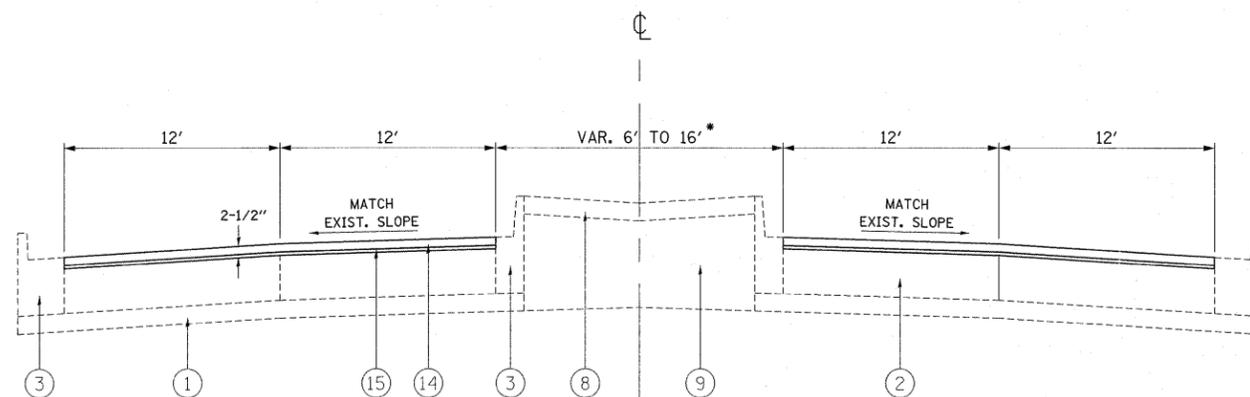
- \* AT LOCATIONS WHERE MEDIAN IS 4' WIDE THERE IS A 12' TRN LN

FILE NAME =	USER NAME = tariqfm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 21 (EUCLID AVE. TO GLENVIEW RD.) EXISTING AND PROPOSED TYPICAL SECTIONS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et\pw_work\pwsdot\tariqfm\0238476\0107	11-sh-t-plandgn	DRAWN -	REVISED -			374	211K-RS-1	COOK	27	7	
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -	REVISED -			CONTRACT NO. 60M07					
PLOT DATE = 10/18/2011	DATE -	REVISED -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE:	SHEET NO. OF SHEETS STA. TO STA.					



**IL 21 - MILWAUKEE AVE.  
EXISTING TYPICAL SECTION**

STA. 85+53 TO STA. 89+81  
INCLUDES NB RT TRN LN: STA 73+20 TO STA 76+68



**IL 21 - MILWAUKEE AVE.  
PROPOSED TYPICAL SECTION**

STA. 85+53 TO STA. 89+81  
INCLUDES NB RT TRN LN: STA 73+20 TO STA 76+68

LEGEND

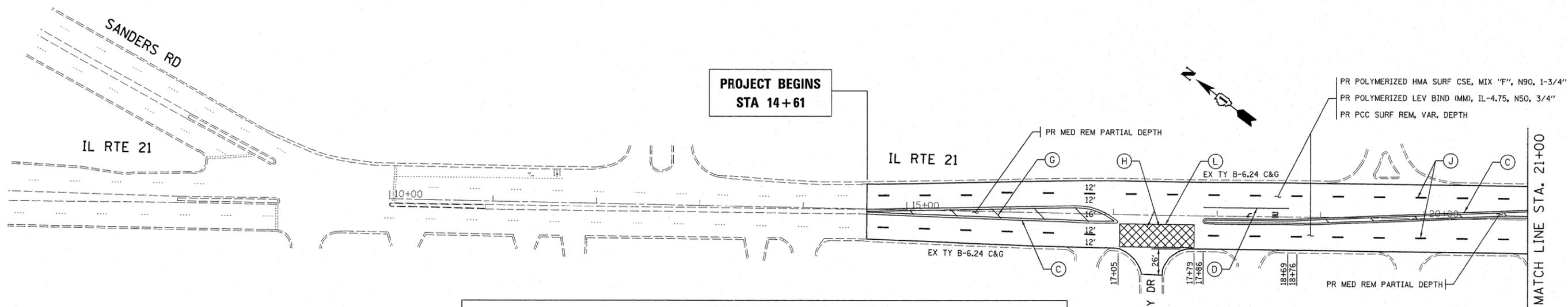
- ① EXISTING STABILIZED SUB-BASE, 4"
- ② EXISTING PCC PAVEMENT, 10"±
- ③ EXISTING COMBINATION CONCRETE CURB AND GUTTER
- ④ EXISTING SB MEDIAN
- ⑤ EXISTING SM MEDIAN
- ⑥ EXISTING STABILIZED MEDIAN SURFACE, 12"
- ⑦ EXISTING CORRUGATED MEDIAN
- ⑧ EXISTING CONCRETE MEDIAN SURFACE, 4"
- ⑨ EXISTING SAND FILL
- ⑩ EXISTING TOP SOIL AND SODDING
- ⑪ PROPOSED MEDIAN REMOVAL PARTIAL DEPTH
- ⑫ PROPOSED HMA SURFACE REMOVAL, 2-1/2"
- ⑬ PROPOSED PCC SURFACE REMOVAL, VARIABLE DEPTH
- ⑭ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1-3/4"
- ⑮ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑯ PROPOSED PARTIAL DEPTH REMOVAL, 3"
- ⑰ PROPOSED HMA BINDER COURSE, IL-19.0, N70, 3"  
(NOTE: FOR LONGITUDINAL JOINT REPAIR, SEE DETAIL ON SHEET #6)
- ⑱ PROPOSED MEDIAN REMOVAL
- ⑲ PROPOSED CLASS D PATCHES, TYPE IV, 10 INCH

THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

NOTES:

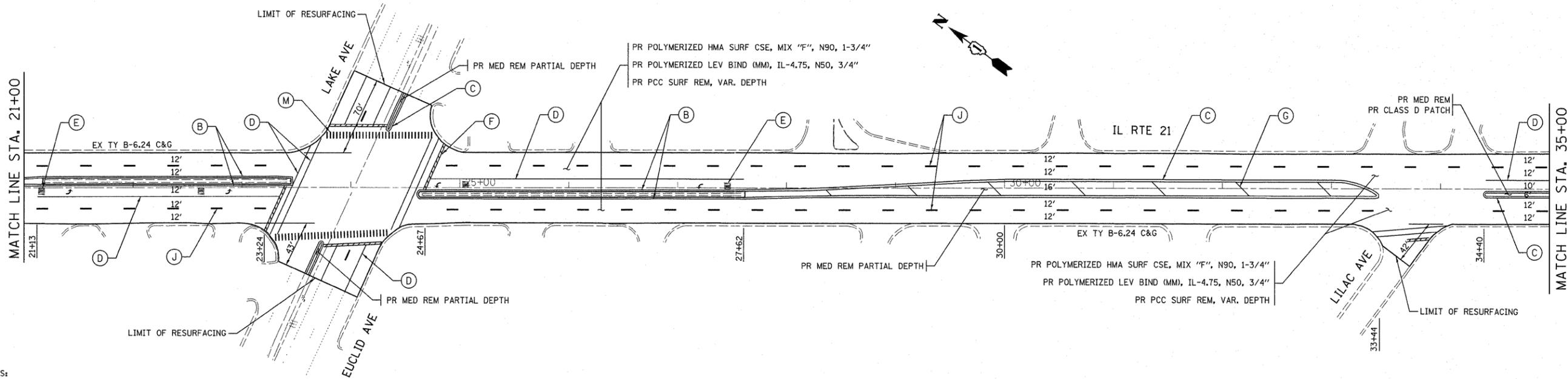
- \* AT LOCATIONS WHERE MEDIAN IS 6' WIDE THERE IS A 10' TRN LN

FILE NAME = c:\pwork\pwork\proj\dot\tariqfm\20230476\0107	USER NAME = tariqfm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 21 (EUCLID AVE. TO GLENVIEW RD.) EXISTING AND PROPOSED TYPICAL SECTIONS</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	11-sht-plan.dgn	DRAWN -	REVISED -						374	211K-RS-1	COOK	27	8
PLOT SCALE = 50.0000' / 1in.	CHECKED -	REVISED -	SCALE: SHEET NO. OF SHEETS STA. TO STA.					CONTRACT NO. 60M07					
PLOT DATE = 10/18/2011	DATE -	REVISED -	ILLINOIS FED. AID PROJECT										



**THERMOPLASTIC PAVEMENT MARKING LEGEND**

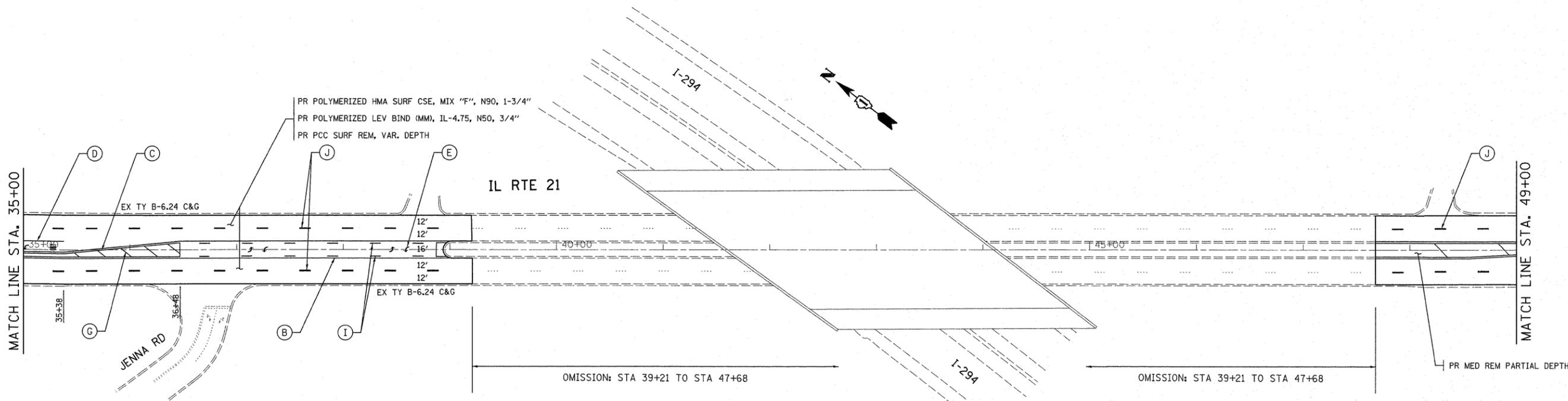
(A) THERMOPLASTIC PAVEMENT MARKING 4" SOLID WHITE LINE (TYPICAL)	(F) THERMOPLASTIC PAVEMENT MARKING 24" SOLID WHITE, STOP BAR (TYPICAL)	(J) THERMOPLASTIC PAVEMENT MARKING 4" WHITE SKIP-DASH (10' DASH, 30' SKIP) (TYPICAL)
(B) THERMOPLASTIC PAVEMENT MARKING 4" SOLID YELLOW, EDGE LINE (TYPICAL)	(G) THERMOPLASTIC PAVEMENT MARKING 12" SOLID YELLOW DIAGONALS AT 75' C-C (OR MINIMUM OF 5 EQUALLY SPACED LINES)	(K) THERMOPLASTIC PAVEMENT MARKING 6" WHITE SKIP-DASH (2' DASH, 6' SKIP) (TYPICAL)
(C) THERMOPLASTIC PAVEMENT MARKING 4" YELLOW, 2 @ 11" C-C (TYPICAL)	(H) THERMOPLASTIC PAVEMENT MARKING 6" SOLID WHITE DIAGONALS AT 8' C-C	(L) THERMOPLASTIC PAVEMENT MARKING 8" SOLID WHITE LINE
(D) THERMOPLASTIC PAVEMENT MARKING 6" SOLID WHITE LINE	(I) THERMOPLASTIC PAVEMENT MARKING 4" YELLOW SKIP-DASH (10' DASH, 30' SKIP) (TYPICAL)	(M) THERMOPLASTIC PAVEMENT MARKING 12" SOLID WHITE LINE
(E) THERMOPLASTIC PAVEMENT MARKING LETTERS & SYMBOLS, WHITE (TYPICAL)		



**GENERAL NOTES:**

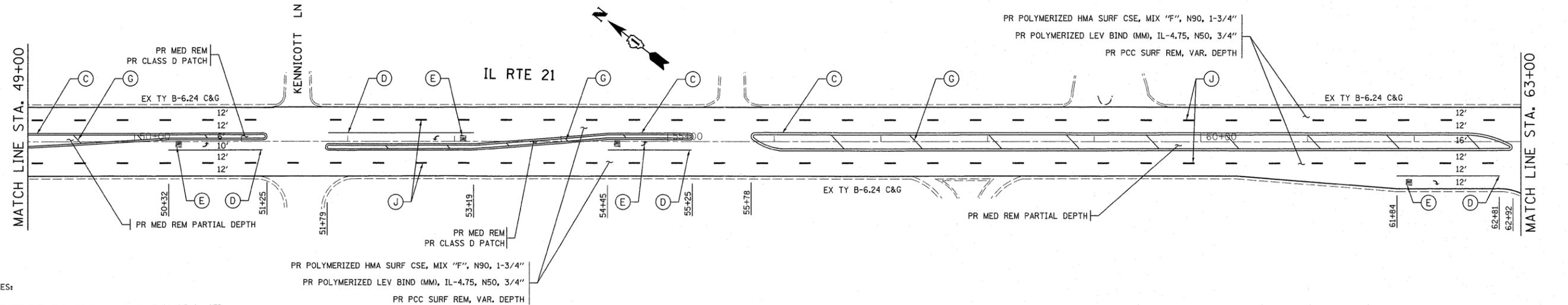
- 1) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)" STANDARD DETAIL.
- 2) ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH "DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)" STANDARD DETAIL.

FILE NAME =	USER NAME = tarqfm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 21 (EUCLID AVE. TO GLENVIEW RD.) ROADWAY AND PAVEMENT MARKING PLANS</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es\pwwork\pwwdot\tarqfm\d0238476\010711-sh-t-plan.dgn	11-sh-t-plan.dgn	DRAWN -	REVISED -		374	211K-RS-1	COOK	27	9				
PLOT SCALE = 50.0000' / 1" =		CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 60M07				
PLOT DATE = 10/16/2011		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								



**THERMOPLASTIC PAVEMENT MARKING LEGEND**

(A) THERMOPLASTIC PAVEMENT MARKING 4" SOLID WHITE LINE (TYPICAL)	(F) THERMOPLASTIC PAVEMENT MARKING 24" SOLID WHITE, STOP BAR (TYPICAL)	(J) THERMOPLASTIC PAVEMENT MARKING 4" WHITE SKIP-DASH (10' DASH, 30' SKIP) (TYPICAL)
(B) THERMOPLASTIC PAVEMENT MARKING 4" SOLID YELLOW, EDGE LINE (TYPICAL)	(G) THERMOPLASTIC PAVEMENT MARKING 12" SOLID YELLOW DIAGONALS AT 75' C-C (OR MINIMUM OF 5 EQUALLY SPACED LINES)	(K) THERMOPLASTIC PAVEMENT MARKING 6" WHITE SKIP-DASH (2' DASH, 6' SKIP) (TYPICAL)
(C) THERMOPLASTIC PAVEMENT MARKING 4" YELLOW, 2 @ 11" C-C (TYPICAL)	(H) THERMOPLASTIC PAVEMENT MARKING 6" SOLID WHITE DIAGONALS AT 8' C-C	(L) THERMOPLASTIC PAVEMENT MARKING 8" SOLID WHITE LINE
(D) THERMOPLASTIC PAVEMENT MARKING 6" SOLID WHITE LINE	(I) THERMOPLASTIC PAVEMENT MARKING 4" YELLOW SKIP-DASH (10' DASH, 30' SKIP) (TYPICAL)	(M) THERMOPLASTIC PAVEMENT MARKING 12" SOLID WHITE LINE
(E) THERMOPLASTIC PAVEMENT MARKING LETTERS & SYMBOLS, WHITE (TYPICAL)		

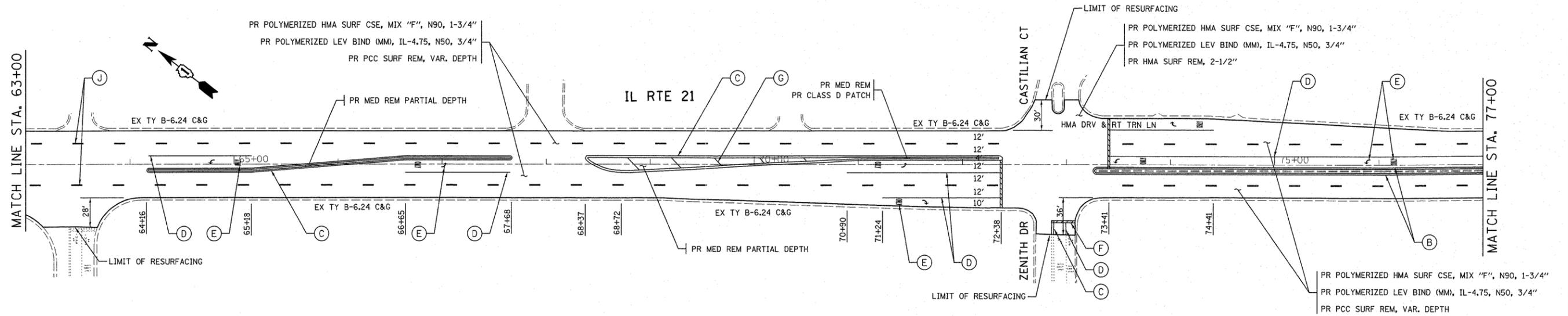


**GENERAL NOTES:**

1) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)" STANDARD DETAIL.

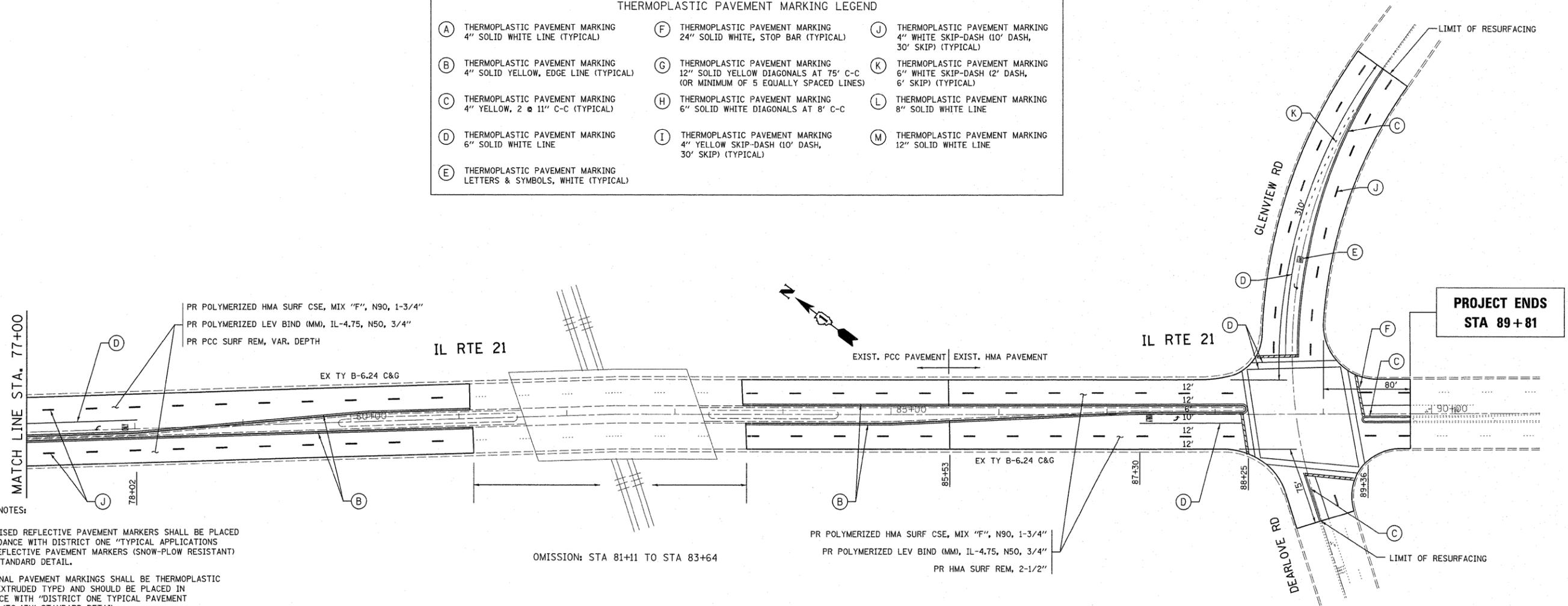
2) ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH "DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)" STANDARD DETAIL.

FILE NAME =	USER NAME = tariqfm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 21 (EUCLID AVE. TO GLENVIEW RD.) ROADWAY AND PAVEMENT MARKING PLANS</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
02:\pw_work\pwidot\tariqfm\0238476\10107-11-sh-t-pln.dgn		DRAWN -	REVISED -						374	211K-RS-1	COOK	27	10
PLOT SCALE = 50.0000' / 1"		CHECKED -	REVISED -		CONTRACT NO. 60M07								
PLOT DATE = 10/18/2011		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								



**THERMOPLASTIC PAVEMENT MARKING LEGEND**

(A) THERMOPLASTIC PAVEMENT MARKING 4" SOLID WHITE LINE (TYPICAL)	(F) THERMOPLASTIC PAVEMENT MARKING 24" SOLID WHITE, STOP BAR (TYPICAL)	(J) THERMOPLASTIC PAVEMENT MARKING 4" WHITE SKIP-DASH (10' DASH, 30' SKIP) (TYPICAL)
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(C) THERMOPLASTIC PAVEMENT MARKING 4" YELLOW, 2 @ 11" C-C (TYPICAL)	(H) THERMOPLASTIC PAVEMENT MARKING 6" SOLID WHITE DIAGONALS AT 8' C-C	(L) THERMOPLASTIC PAVEMENT MARKING 8" SOLID WHITE LINE
(D) THERMOPLASTIC PAVEMENT MARKING 6" SOLID WHITE LINE	(I) THERMOPLASTIC PAVEMENT MARKING 4" YELLOW SKIP-DASH (10' DASH, 30' SKIP) (TYPICAL)	(M) THERMOPLASTIC PAVEMENT MARKING 12" SOLID WHITE LINE
(E) THERMOPLASTIC PAVEMENT MARKING LETTERS & SYMBOLS, WHITE (TYPICAL)		



**GENERAL NOTES:**

1) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)" STANDARD DETAIL.

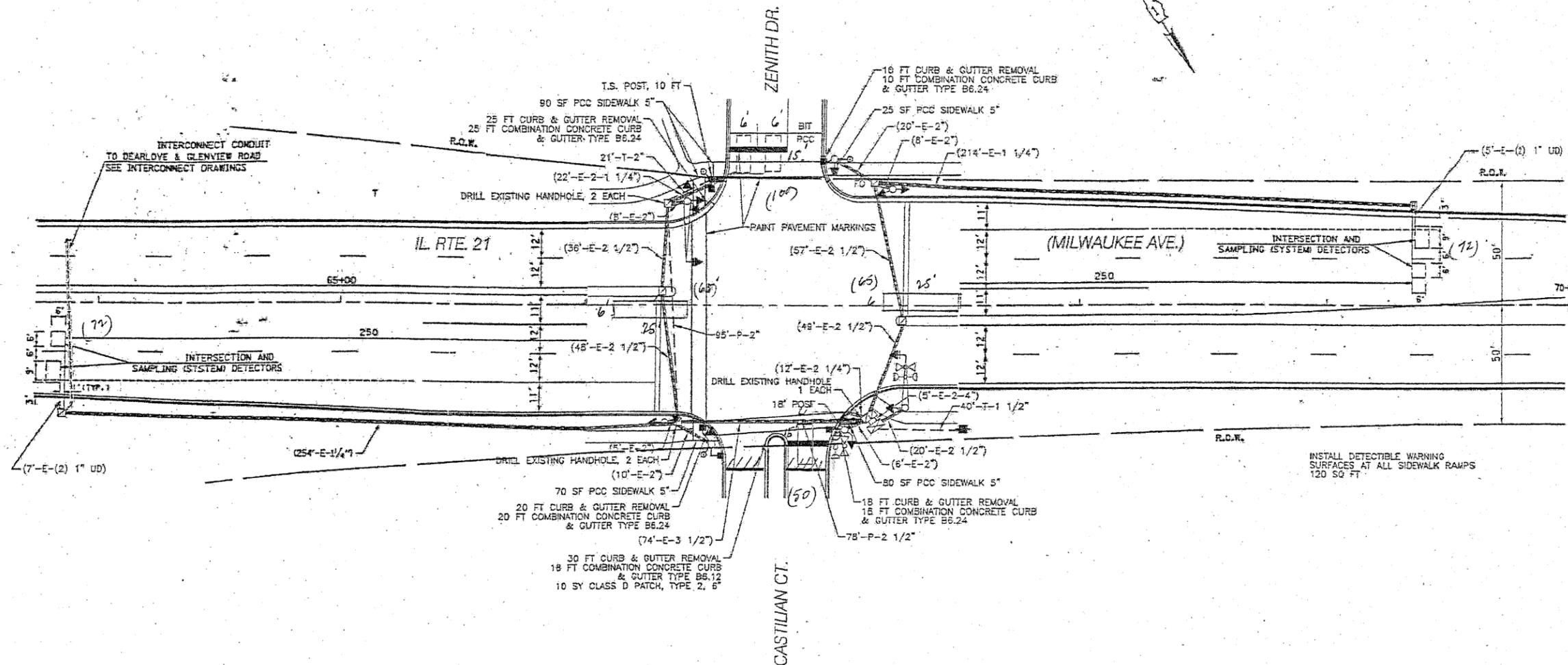
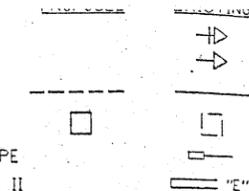
2) ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH "DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)" STANDARD DETAIL.

FILE NAME =	USER NAME = tarigfm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 21 (EUCLID AVE. TO GLENVIEW RD.) ROADWAY AND PAVEMENT MARKING PLANS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
es:\pwwork\pwwork\tarigfm\d2238476\0187	11-sh-t-plan.dgn	DRAWN -	REVISED -			374	211K-RS-1	COOK	27	11	
	PLOT SCALE = 50.0000' / 1" =	CHECKED -	REVISED -			CONTRACT NO. 60M07					
	PLOT DATE = 10/18/2011	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC CONTROL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

SIGNAL HEAD WITH BACKPLATE  
 SIGNAL HEAD  
 GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED  
 DETECTOR LOOP  
 VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE  
 RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II



INSTALL DETECTIBLE WARNING SURFACES AT ALL SIDEWALK RAMPS 120 SQ FT

THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

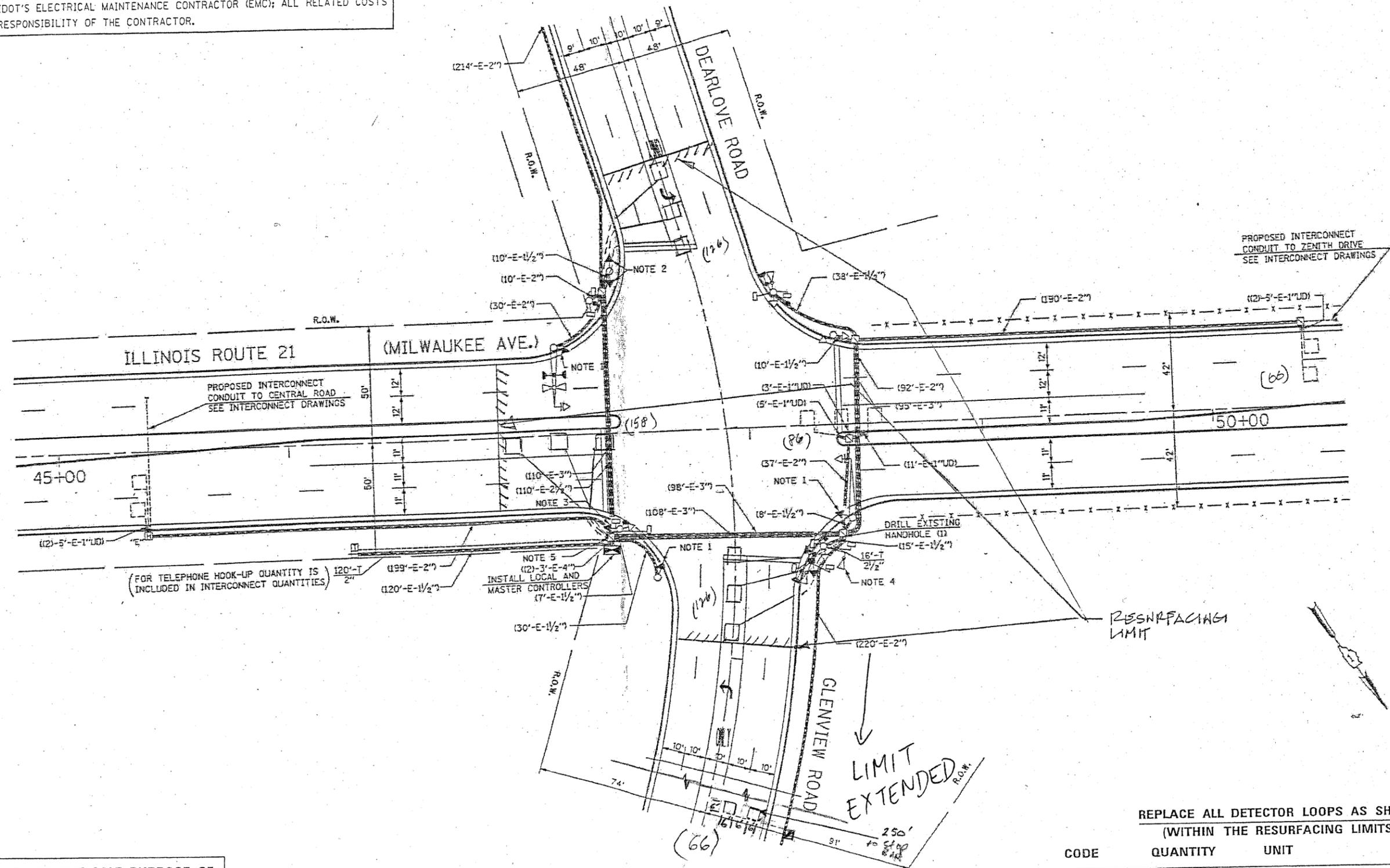
CODE	QUANTITY	UNIT	ITEM
88600600	424	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME *	USER NAME = nguyensm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT ILL. (Milw. Av) and Zenith Dr	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca:\pwork\pwork\idot\nguyensm\d8112618\1\101.dgn		DRAWN -	REVISED -			374	211 K-RS-1	COOK	27	13	
PLOT SCALE = 100.0000 "/ IN.		CHECKED -	REVISED -			CONTRACT NO. 60M107					
PLOT DATE = 1/5/2011		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
				SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.				

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

PROPOSED  
EXISTING

SIGNAL HEAD WITH BACKPLATE  
SIGNAL HEAD  
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED  
DETECTOR LOOP  
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE  
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II

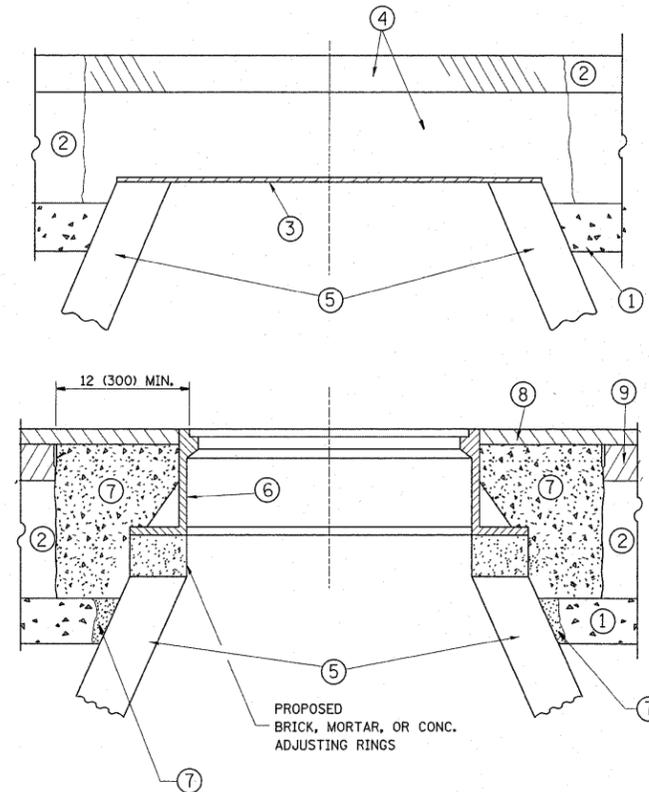


THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	562+66 = 628	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME #	USER NAME # nguyenam	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT ILL. RTE. 21 @ GLENVIEW RD.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pwwork\pwwid\nguyenam\08112618\110111.dgn		DRAWN -	REVISED -			374	211 KRS-1	COOK	27	14	
PLOT SCALE = 100.0000 "/ IN.		CHECKED -	REVISED -			CONTRACT NO. 60M07		ILLINOIS FED. AID PROJECT			
PLOT DATE = 1/5/2011		DATE -	REVISED -								



**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.

**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:** THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL" NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**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.

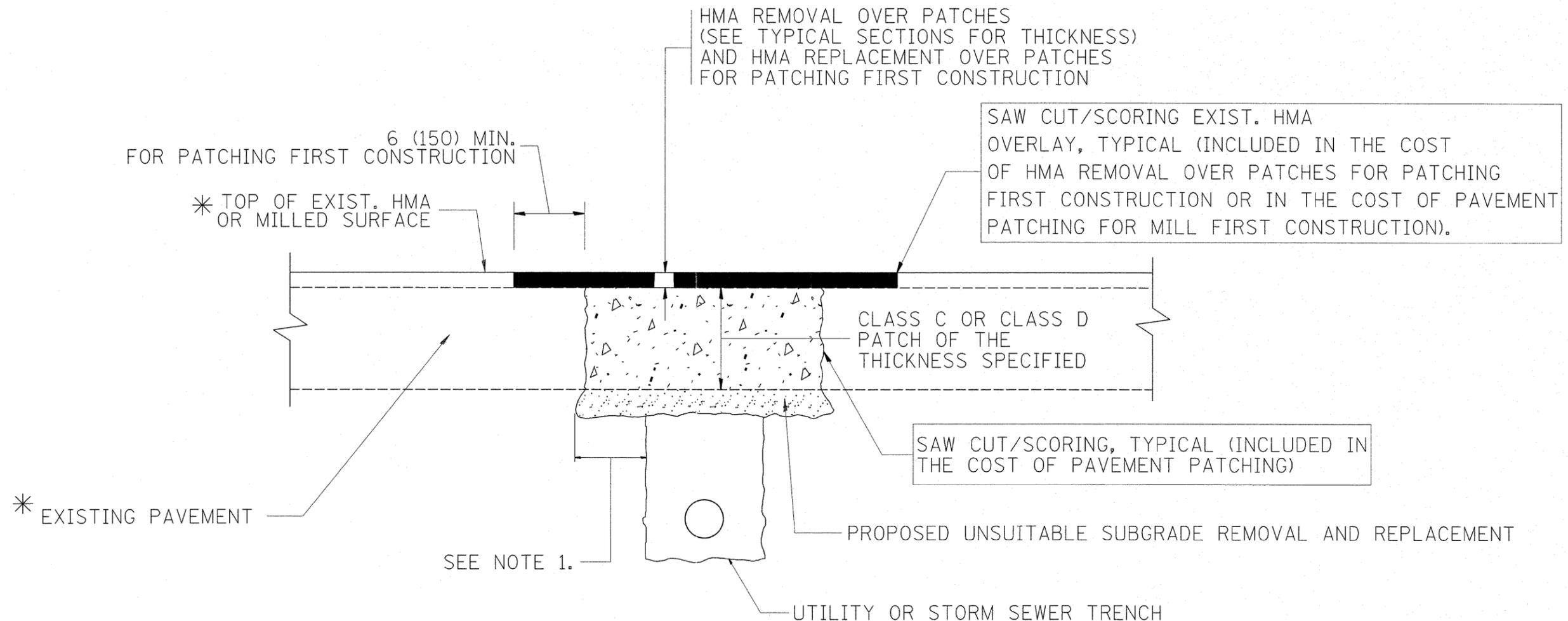
THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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 =	USER NAME = tariqfm	DESIGNED - R. SHAH	REVISED - A. ABBAS 03-21-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
es:\pw_work\pwsdot\tariqfm\0238476\Dist\td.dgn		DRAWN -	REVISED - R. WIEDEMAN 05-14-04		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	374	211K-RS-1	COOK	27	15
PLOT SCALE = 50.0000' / 1" =		CHECKED -	REVISED - R. BORO 01-01-07		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			<b>BD600-03 (BD-8)</b>		CONTRACT NO. 60M07			
PLOT DATE = 10/18/2011		DATE - 10-25-94	REVISED - R. BORO 03-09-11										



\* 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 =	USER NAME = tarsiqfm	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
es:\pav_work\pwsdot\tarsiqfm\0238476\DistStd.dgn		DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	374	211K-RS-1	COOK	27	16
PLOT SCALE = 50.0000' / 1"		CHECKED -	REVISED - R. BORO 09-04-07		BD400-04 (BD-22)			CONTRACT NO. 60M07					
PLOT DATE = 10/16/2011		DATE - 10-25-94	REVISED - K. ENG 10-27-08		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) \*\*

18" (450) MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

T/2 \*

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY,

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

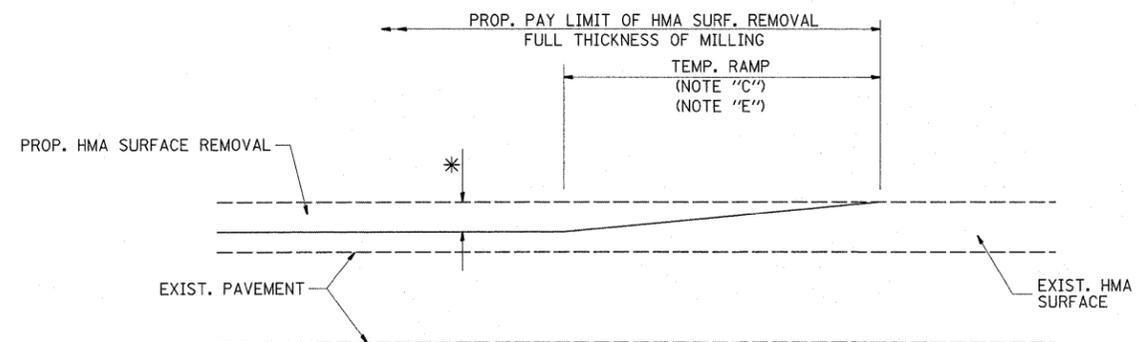
**BASIS OF PAYMENT:**

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

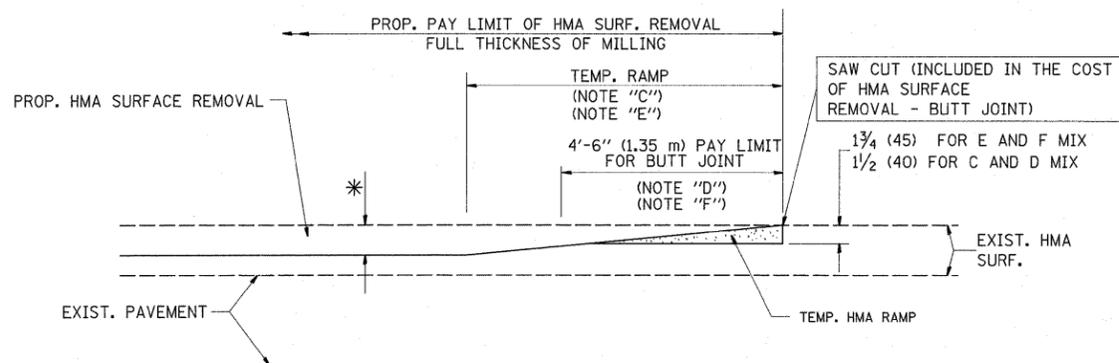
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = tcrjfm	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pw_work\pwsdot\tcrjfm\0238475\Dist\dgn		DRAWN -	REVISED - A. ABBAS 03-21-97		374	211K-RS-1	COOK	27	17			
PLOT SCALE = 50.0000' / 1"		CHECKED -	REVISED - M. GOMEZ 01-22-01		BD600-06 (BD-24)			CONTRACT NO. 60M07				
PLOT DATE = 10/18/2011		DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

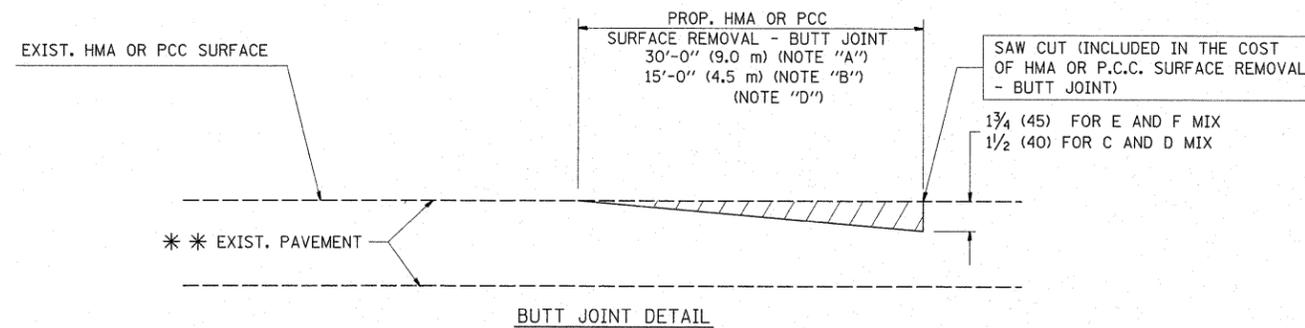
**OPTION 1**



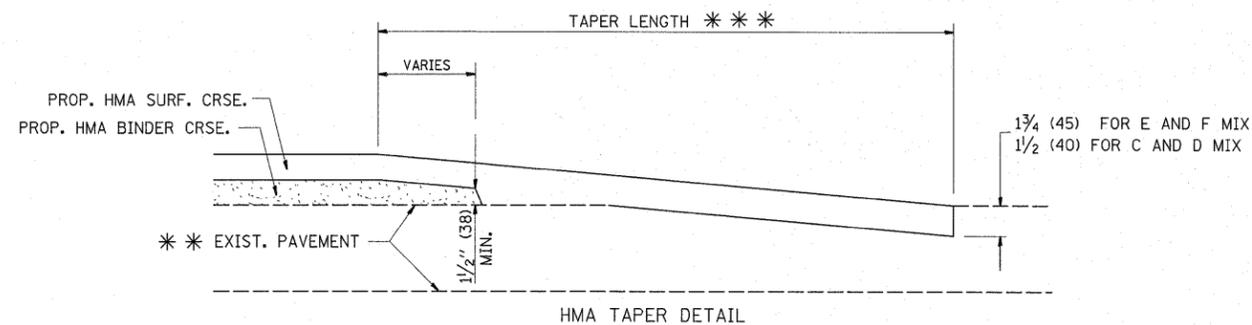
HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**

**TYPICAL TEMPORARY RAMP**



BUTT JOINT DETAIL



HMA TAPER DETAIL

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

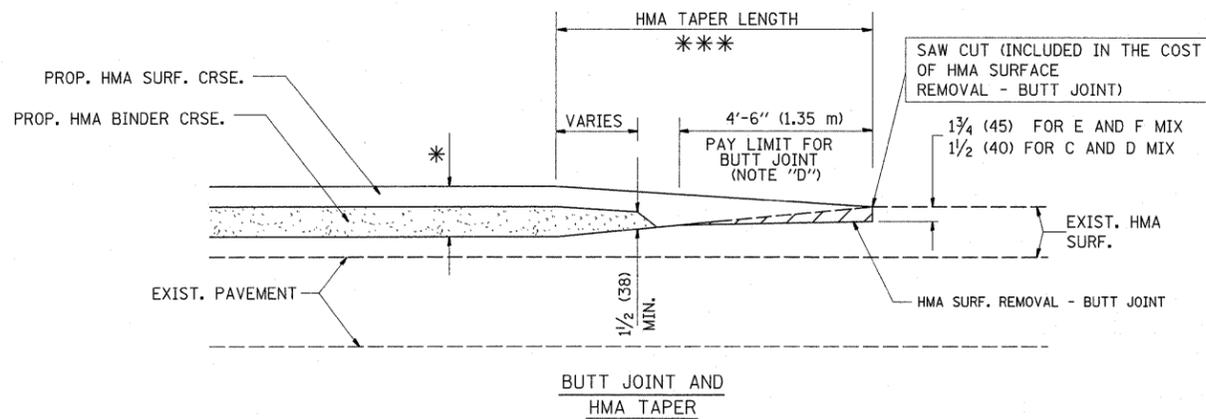
**NOTES**

- 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.



BUTT JOINT AND HMA TAPER

**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

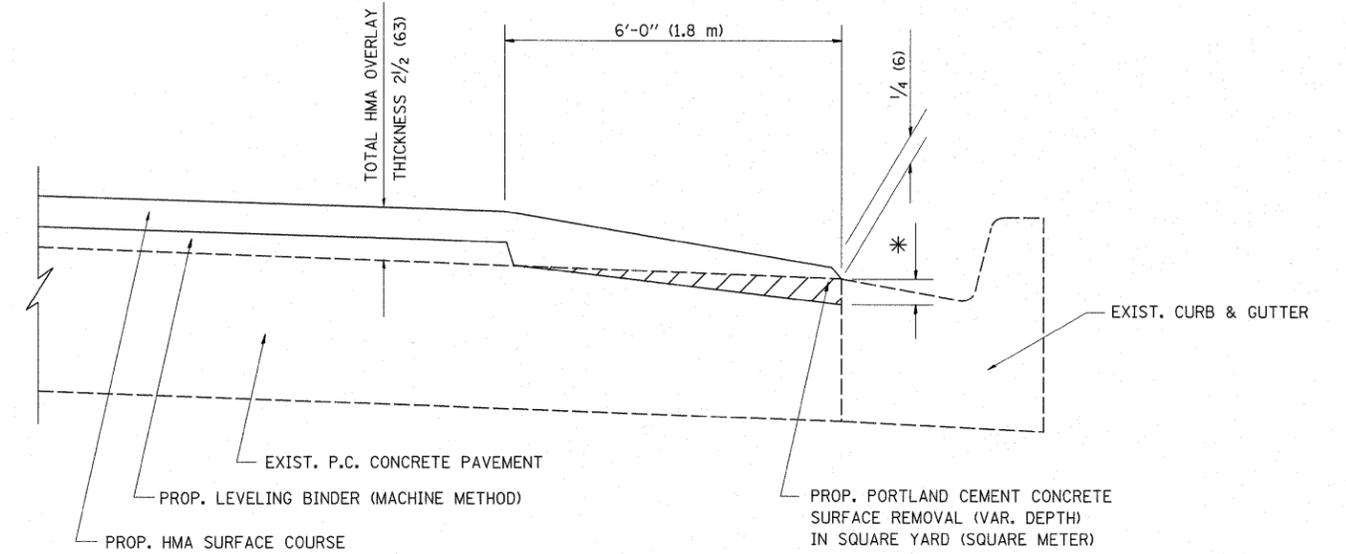
FILE NAME =	USER NAME = tariqfm	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
or\pwwork\pwwdot\tariqfm\d0238476\Dist\td.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
PLOT SCALE = 58.0000' / 1 in.		CHECKED -	REVISED - M. GOMEZ 04-06-01
PLOT DATE = 10/18/2011		DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	211K-RS-1	COOK	27	18
BD400-05 BD32			CONTRACT NO. 60M07	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



HMA TAPER AT  
EDGE OF P.C.C PAVEMENT

HMA SURFACE	THICKNESS	LEVELING BINDER THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1 1/2 (38)	1 (25)	1/4 (33)
F	1 3/4 (44)	3/4 (19)	1/2 (38)

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

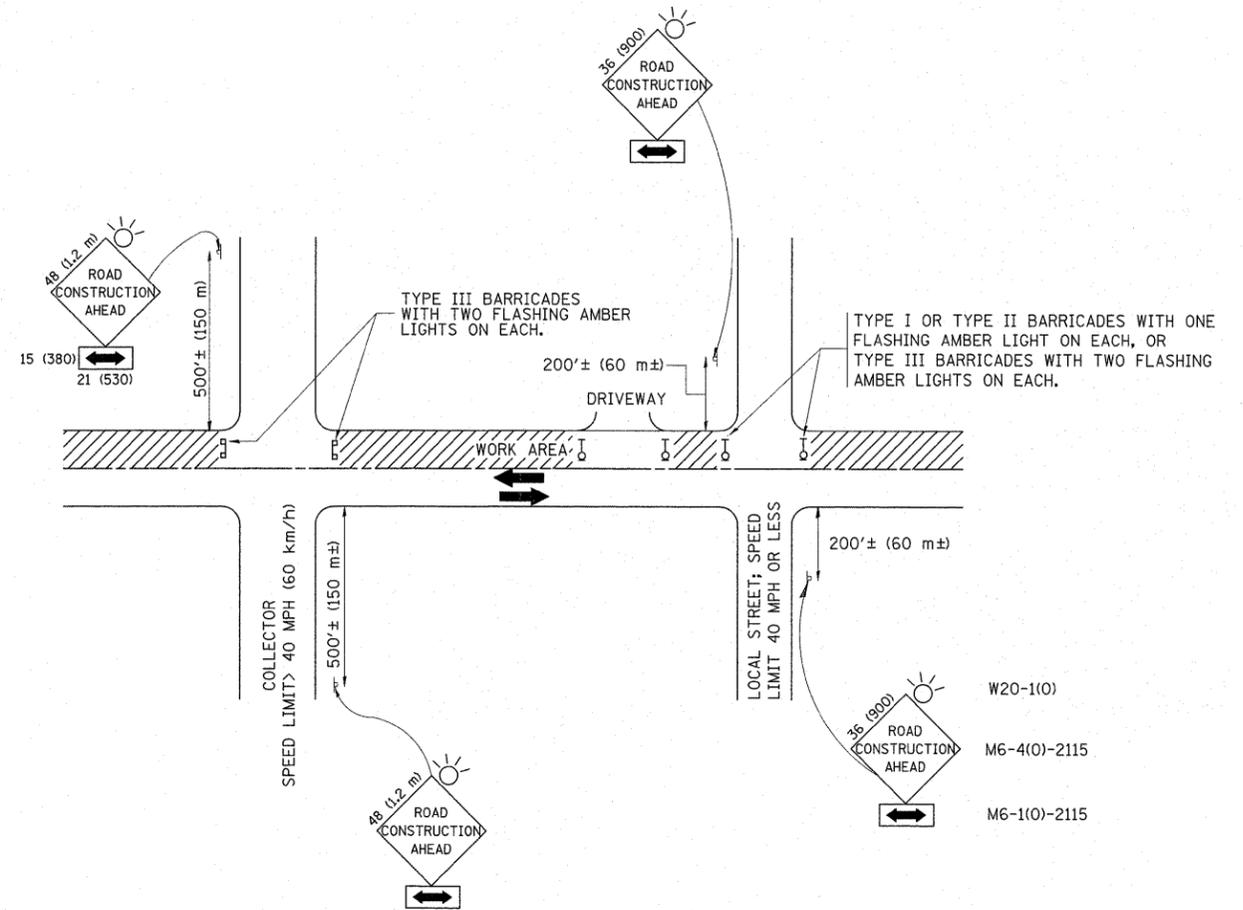
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es:\pw_work\pwsdot\tarqfm\0238476\Dist\td.dgn		DRAWN - JIS	REVISED - A. ABBAS 05-05-99
PLOT SCALE = 50.0000' / in.		CHECKED - A. ABBAS	REVISED - E. GOMEZ 12-21-00
PLOT DATE = 10/18/2011		DATE - 09-10-94	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**HMA TAPER AT  
EDGE OF P.C.C PAVEMENT**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	211K-RS-1	COOK	27	19
<b>BD400-06 (BD33)</b>		<b>CONTRACT NO. 60M07</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - 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.
  - 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.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - 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.
  - 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.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

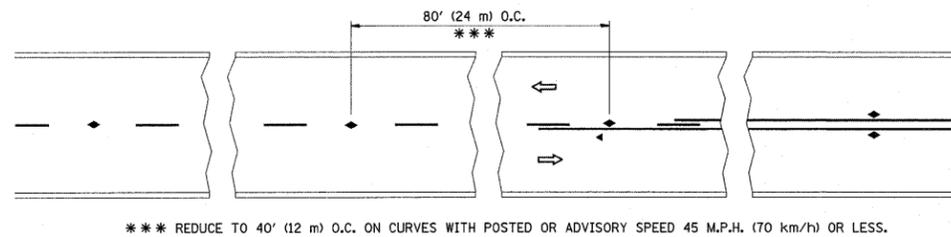
FILE NAME =	USER NAME = tariqf	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
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	PLOT SCALE = 50,0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 10/18/2011	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

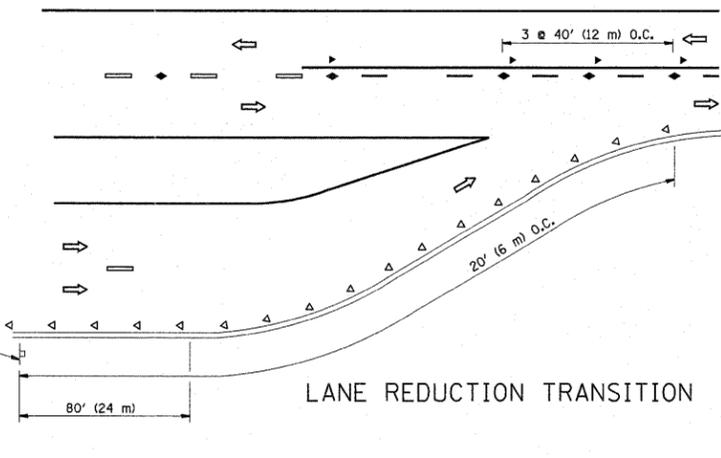
TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

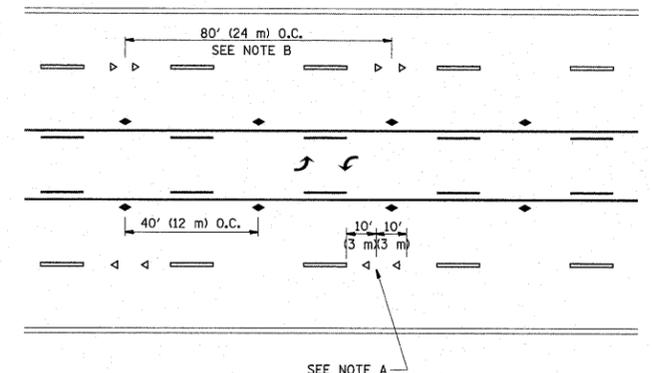
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374	211K-RS-1	COOK	27	20
TC-10		CONTRACT NO. 60M07		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



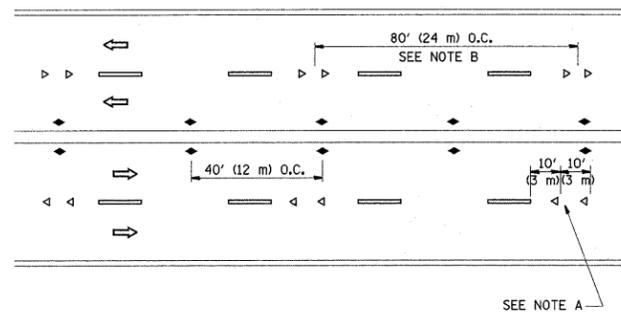
TWO-LANE/TWO-WAY



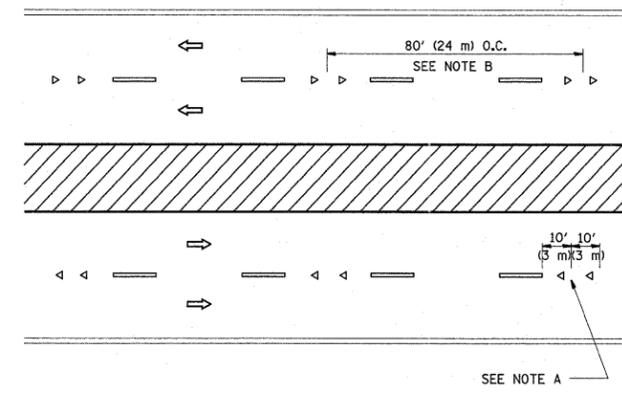
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

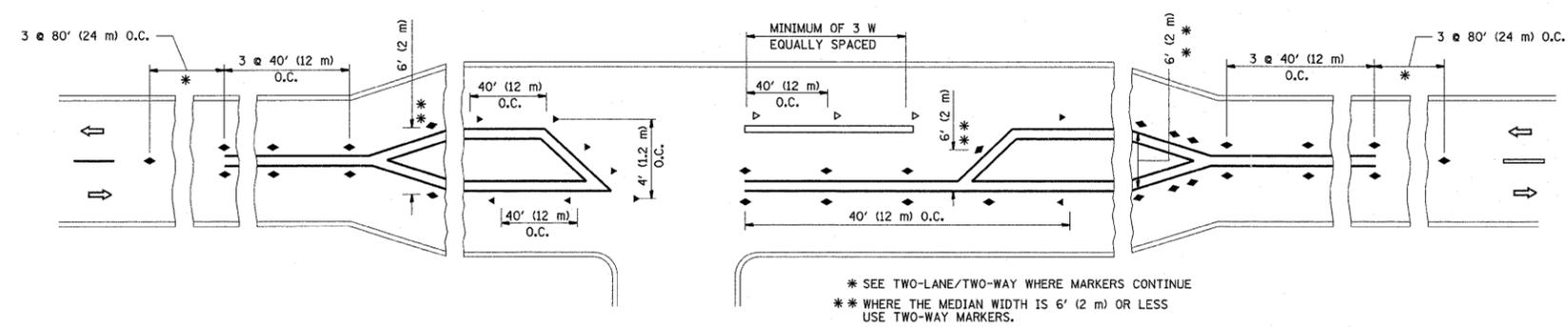
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

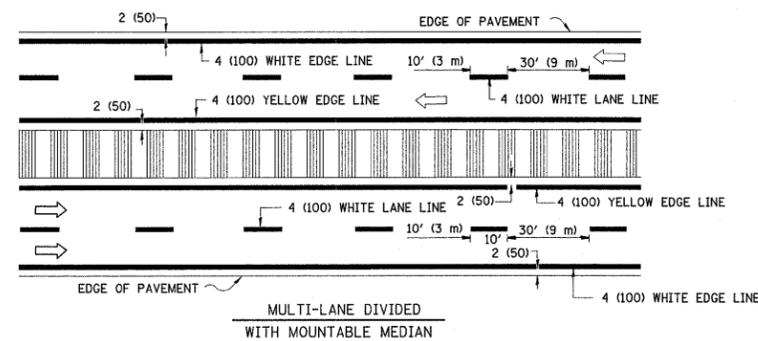
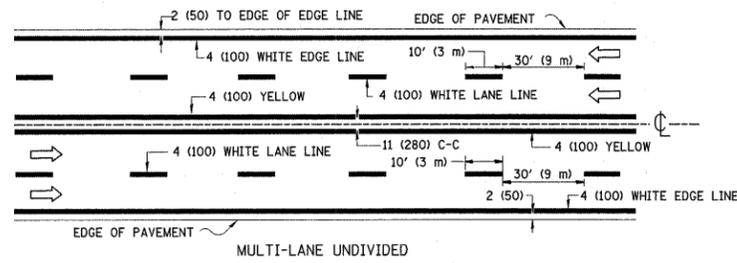
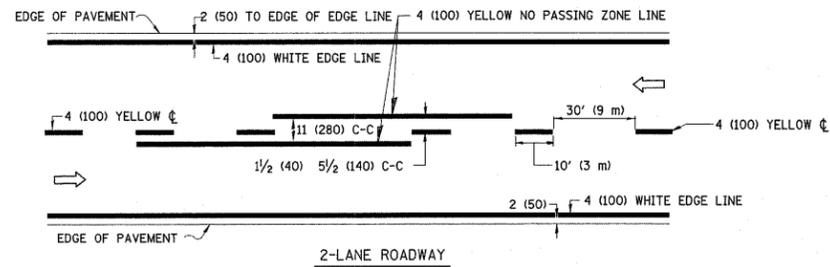
1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS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



LEFT TURN

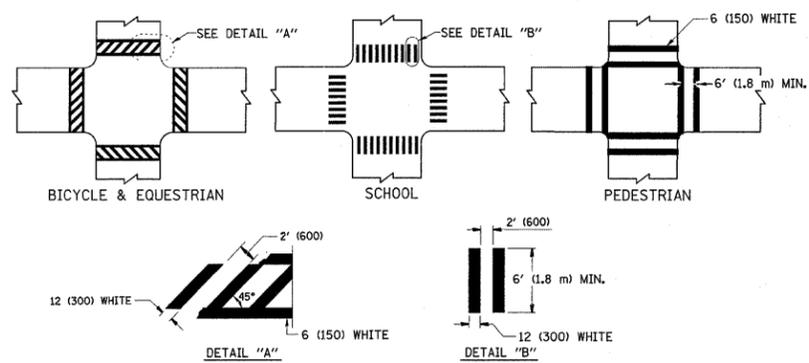
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = tariqf.m	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
21\pw\work\pwsdot\tariqf.m\2238476\Dist15.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99		<b>RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>			374	211K-RS-1	COOK	27	21	
		CHECKED -	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	<b>TC-11</b>		CONTRACT NO. 60M07
		DATE -	REVISED - C. JUCIUS 09-09-09		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								

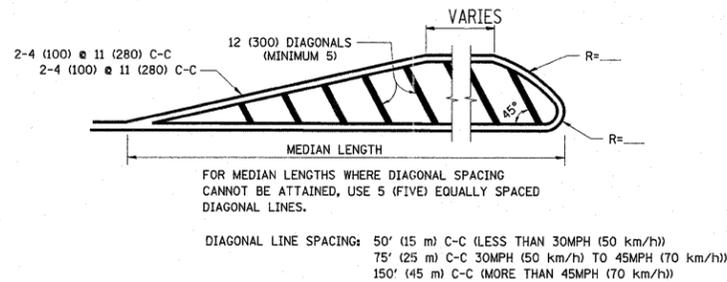
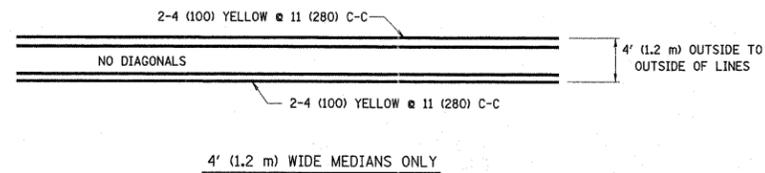


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

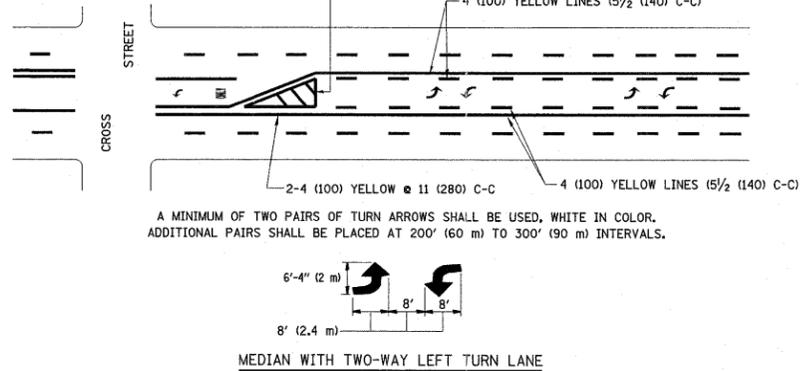
**TYPICAL LANE AND EDGE LINE MARKING**



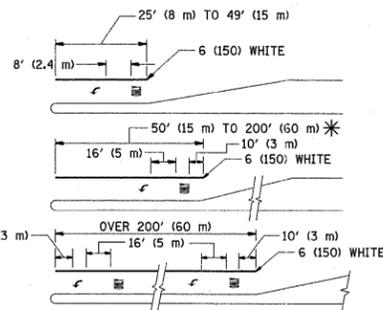
**TYPICAL CROSSWALK MARKING**



**MEDIANS OVER 4' (1.2 m) WIDE**



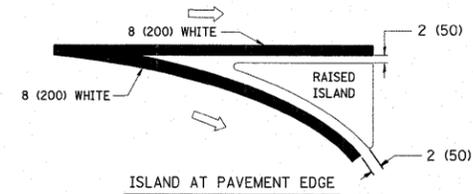
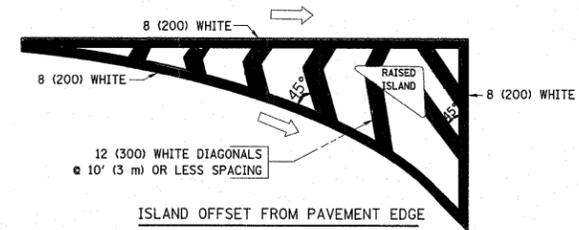
**TYPICAL PAINTED MEDIAN MARKING**



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 \* AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* 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**



**TYPICAL ISLAND MARKING**

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE 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 MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE, FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 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 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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

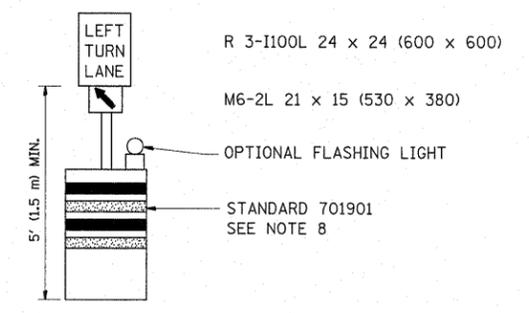
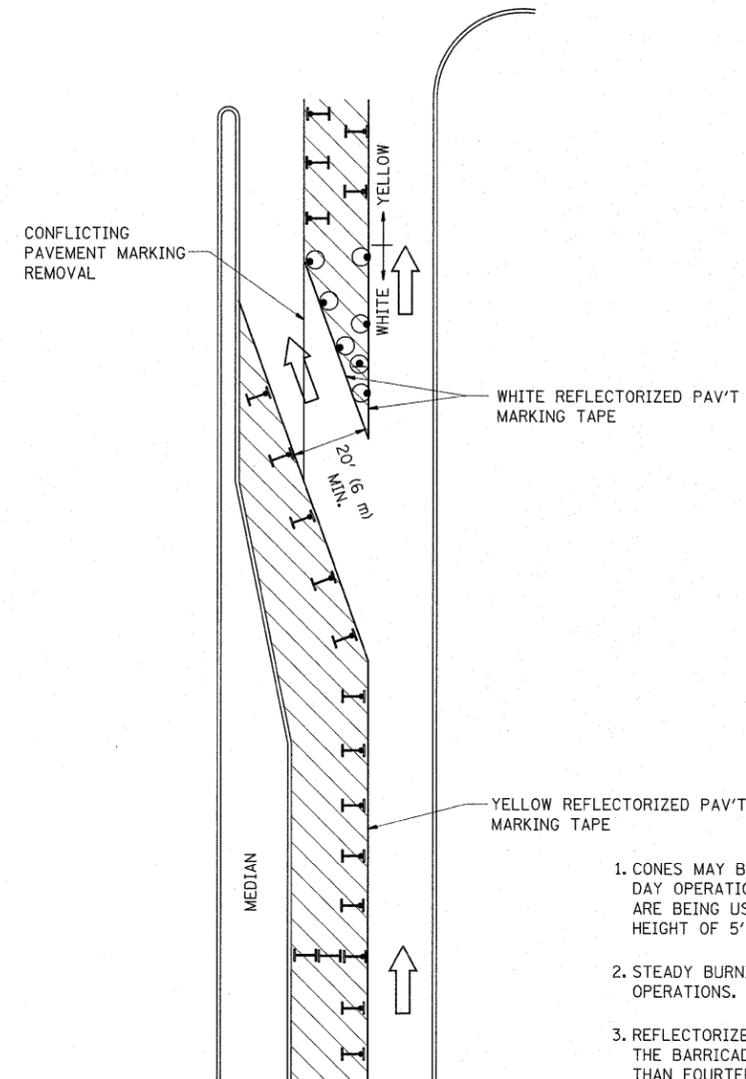
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	PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/18/2011	DATE - 03-19-90	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	211K-RS-1	COOK	27	22
TC-13		CONTRACT NO. 60M07		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**GENERAL NOTES**

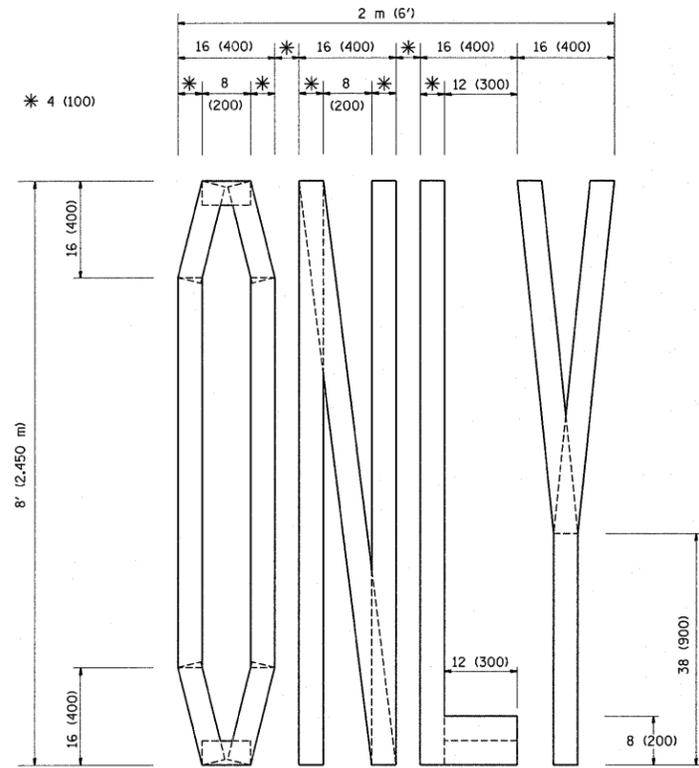
1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

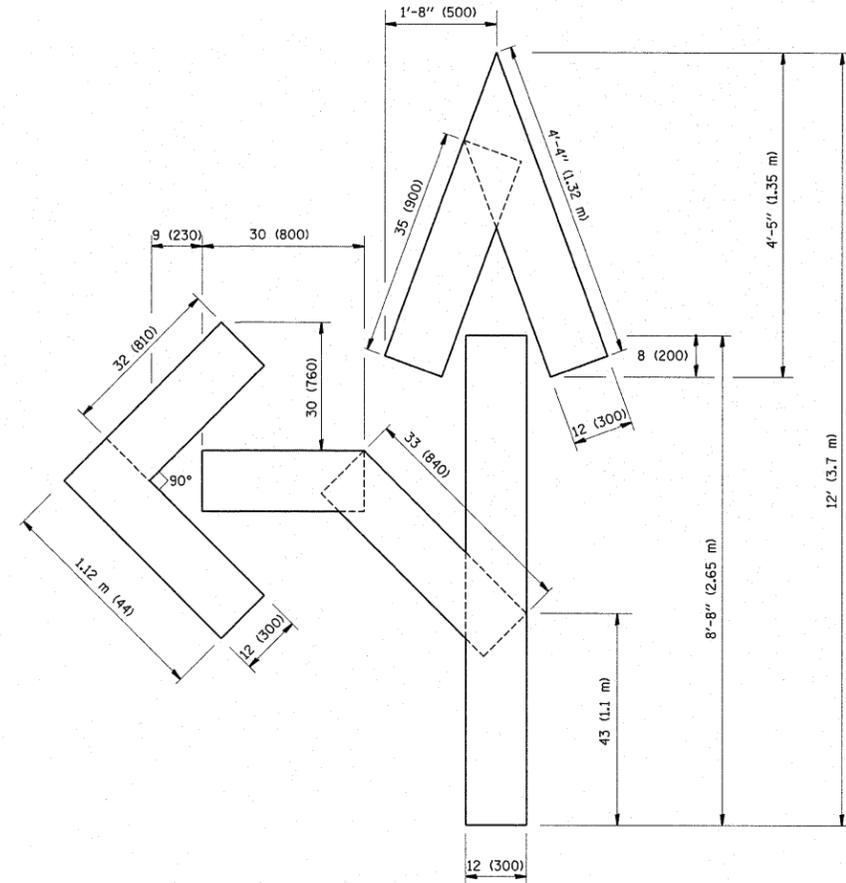
**LEGEND**

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

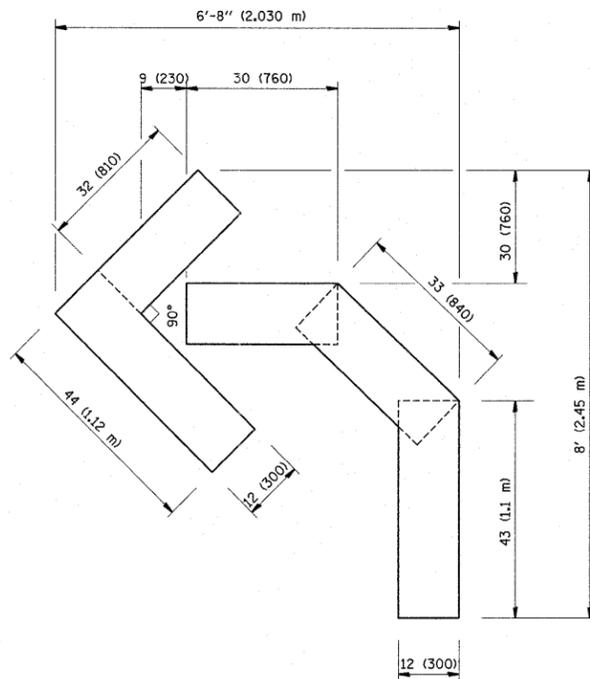
FILE NAME =	USER NAME = tar1qfm	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw\work\pwwork\tar1qfm\20238476\01st5	td.dgn	REVISED - A. HOUSEH 11-07-95	REVISED -		374	211K-RS-1	COOK	27	23			
PLOT SCALE = 50.0000' / 1" =	PLOT DATE = 10/18/2011	REVISED - A. HOUSEH 10-12-96	REVISED -		<b>TC-14</b>			CONTRACT NO. 60M07				
		REVISED - T. RAMMACHER 01-06-00	REVISED -	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



QUANTITY  
 4 (100) LINE = 82.5 ft. (25.3 m)  
 27.5 sq. ft. (2.53 sq. m)



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

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

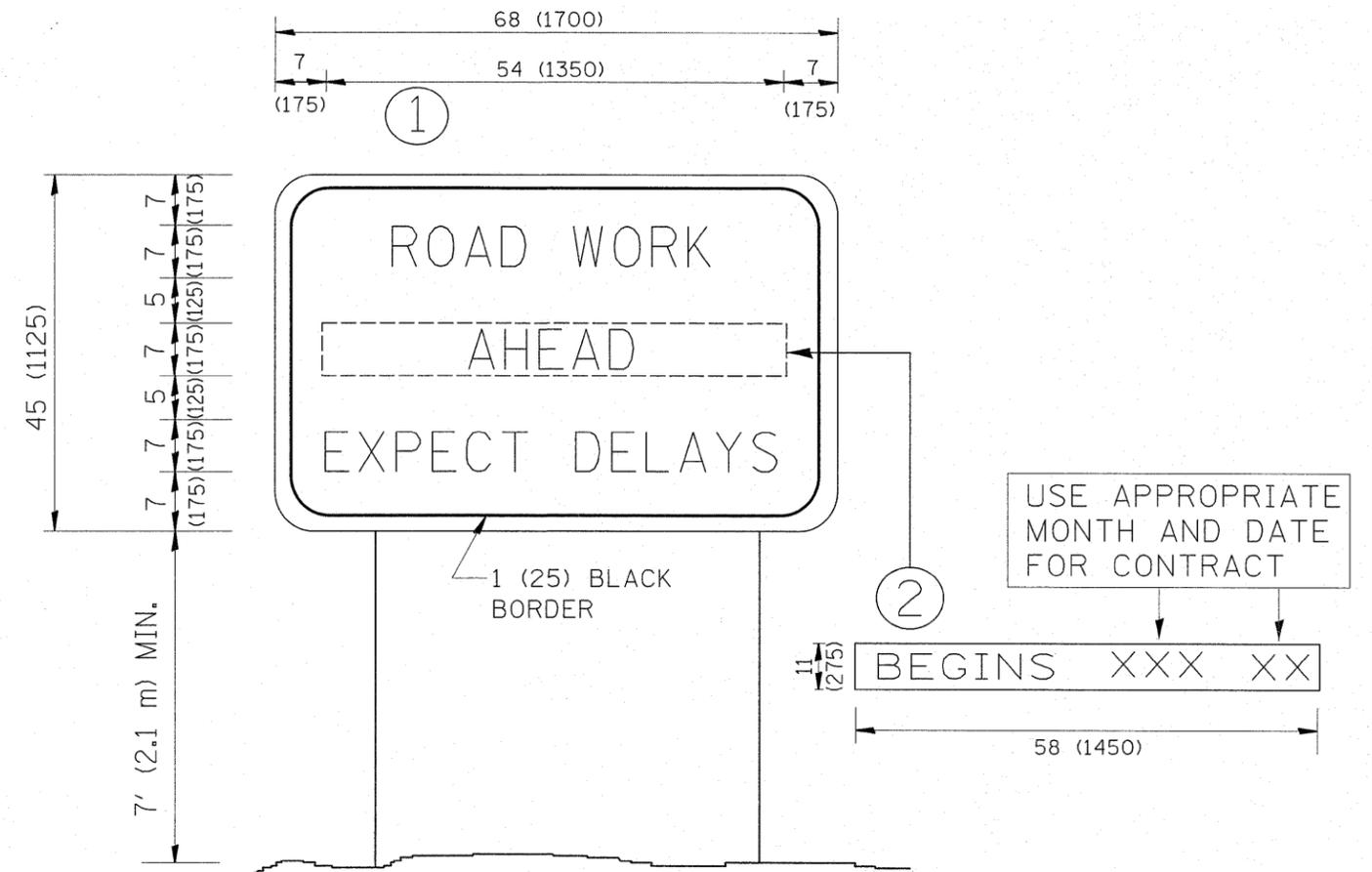
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PLOT SCALE = 50.0000' / in.		CHECKED -	REVISED -T. RAMMACHER 03-02-98
PLOT DATE = 10/18/2011		DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	211K-RS-1	COOK	27	24
TC-16		CONTRACT NO. 60M07		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

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

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

FILE NAME =	USER NAME = tarigfm	DESIGNED -	REVISED - R. MIRS 09-15-97
es:\pw_work\pwsdot\tarigfm\0238476\Dist\td.dgn		DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 50.0000' / 1" =		CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 10/18/2011		DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

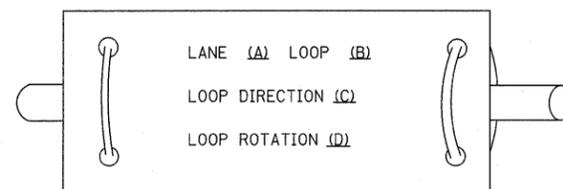
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	211K-RS-1	COOK	27	25
TC-22		CONTRACT NO. 60M07		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

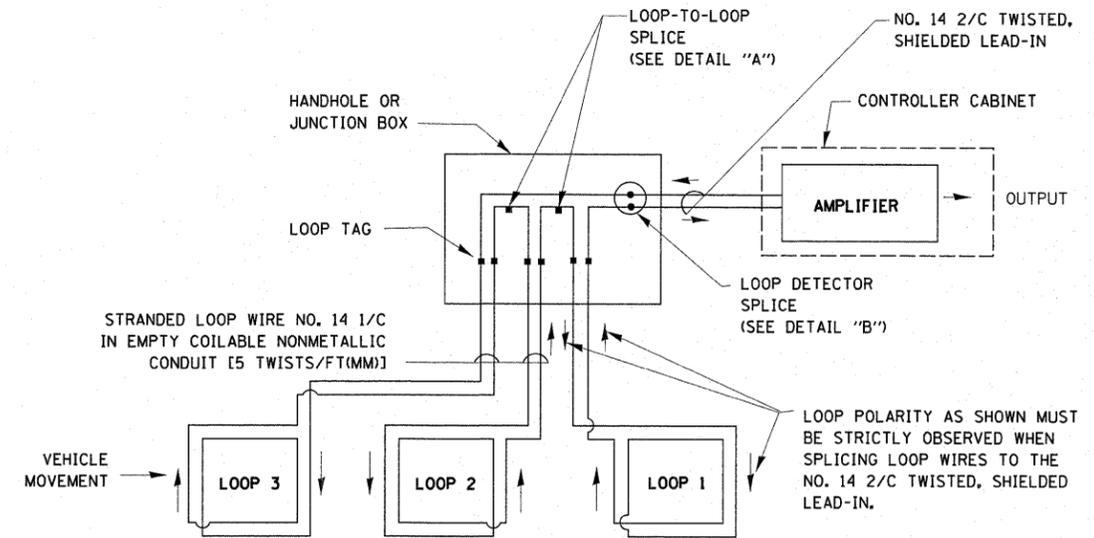
## LOOP DETECTOR NOTES

- 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.
- 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.
- 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.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES 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.
- 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.
- 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

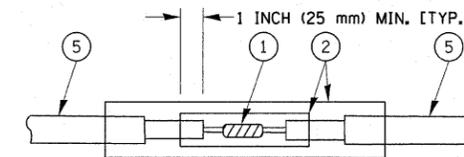


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

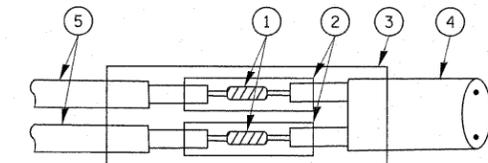


### DETECTOR LOOP WIRING SCHEMATIC

- 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.

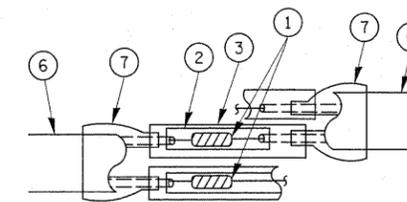


DETAIL "A"  
LOOP-TO-LOOP SPLICE

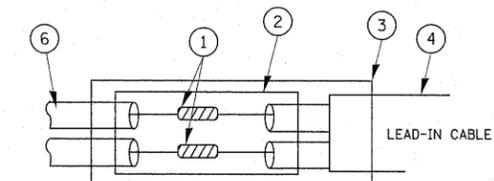


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

### TYPE I LOOP



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

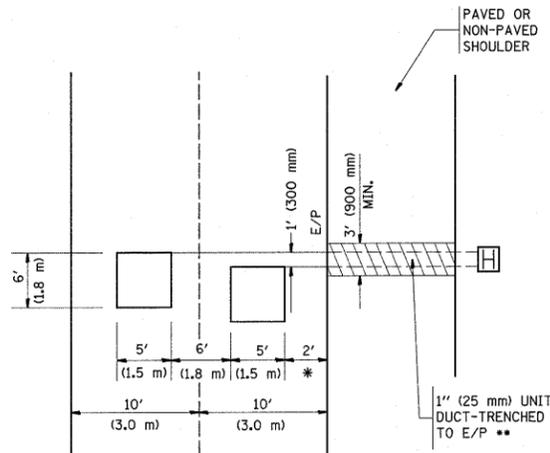
### LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = tarqfm	DESIGNED - DAD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
es:\pw_work\pwsdot\tarqfm\0238476\Dist1	td.dgn	DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	374	211K-RS-1	COOK	27	26
	PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVISED -						<b>TS-05</b>		CONTRACT NO. 60M07		
	PLOT DATE = 10/18/2011	DATE - 10-28-09	REVISED -						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.



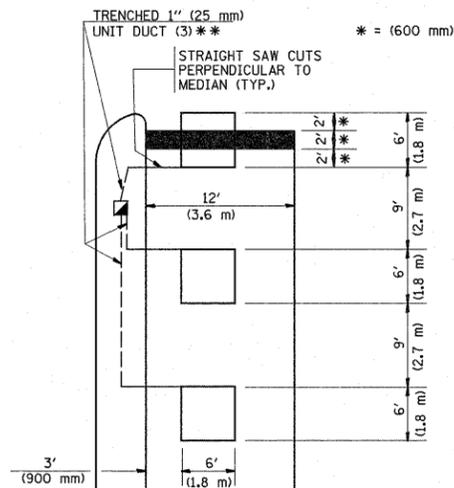
\* = (600 mm)

\*\* 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.

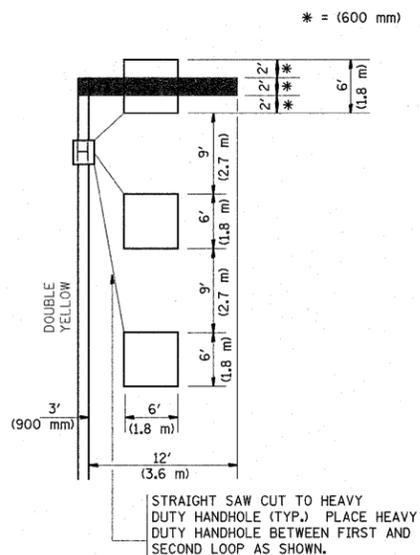


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS  
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

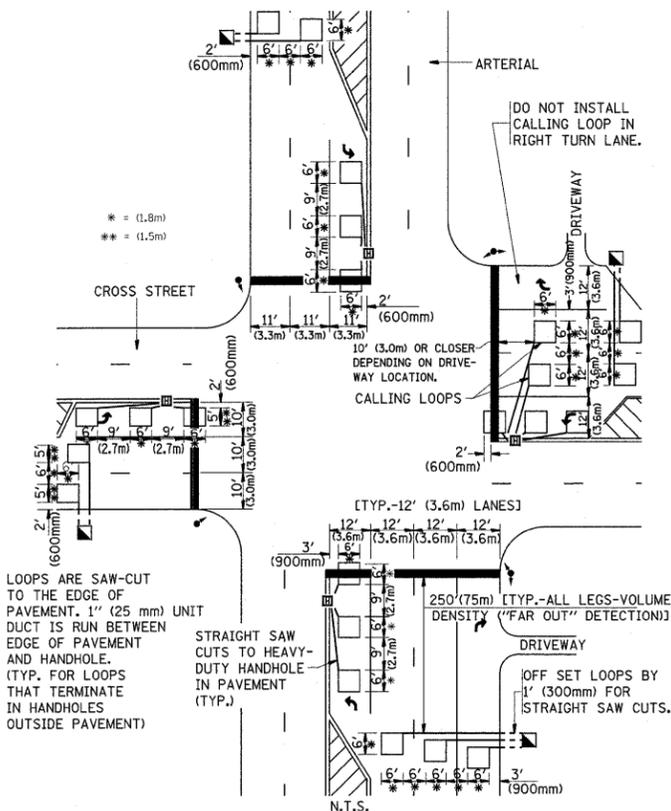
**LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)



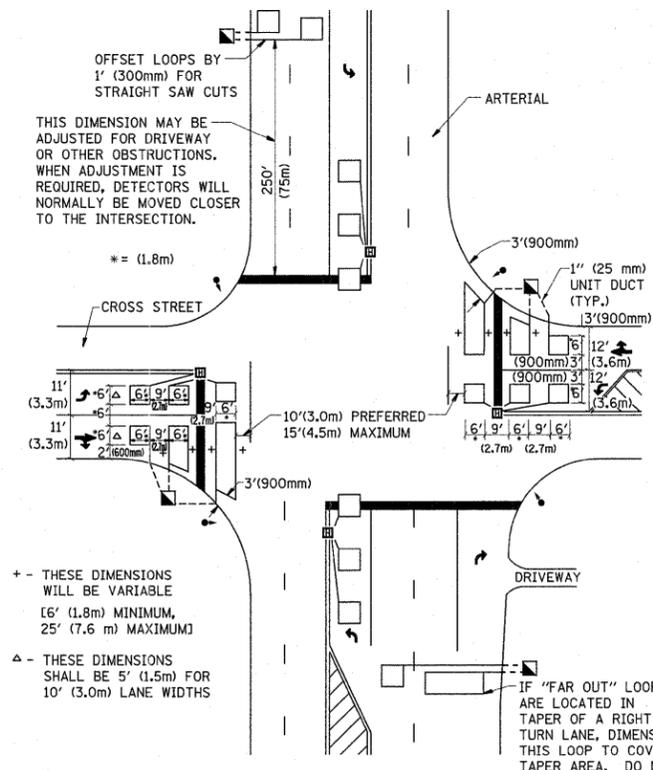
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO  
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**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 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 = toriqfm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pw\work\pwsdot\toriqfm\02238476\DistStd.dgn		DRAWN -	REVISED -		374	211K-RS-1	COOK	27	27			
PLOT SCALE = 50.0000' / 1"		CHECKED - R.K.F.	REVISED -		<b>TS-07</b>			CONTRACT NO. 60M07				
PLOT DATE = 10/18/2011		DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				