

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	1
		ILLINOIS	CONTRACT NO. 62W88	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN UNINCORPORATED COOK COUNTY, VILLAGE OF ORLAND PARK, CITIES OF OAK FOREST & PALOS HEIGHTS.

TRAFFIC DATA

IL 43 (HARLEM AVENUE)  
ADT: 30,200 (2021)  
POSTED SPEED LIMIT: 45 MPH

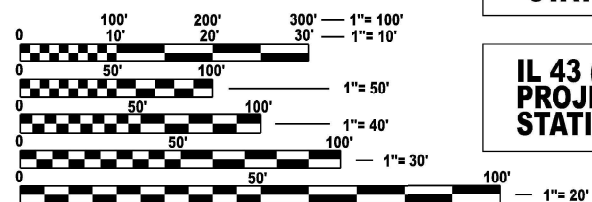
143RD STREET  
ADT: 20,300 (2022)  
POSTED SPEED LIMIT: 45 MPH

PROPOSED  
HIGHWAY PLANS

FAP ROUTE: 348 IL 43 (HARLEM AVENUE)  
AT 143RD STREET  
SECTION: 2024-963-N  
PROJECT: HSIP-I8L4(637)  
INTERSECTION IMPROVEMENT  
COOK COUNTY

C-91-235-24

R12E | R13E

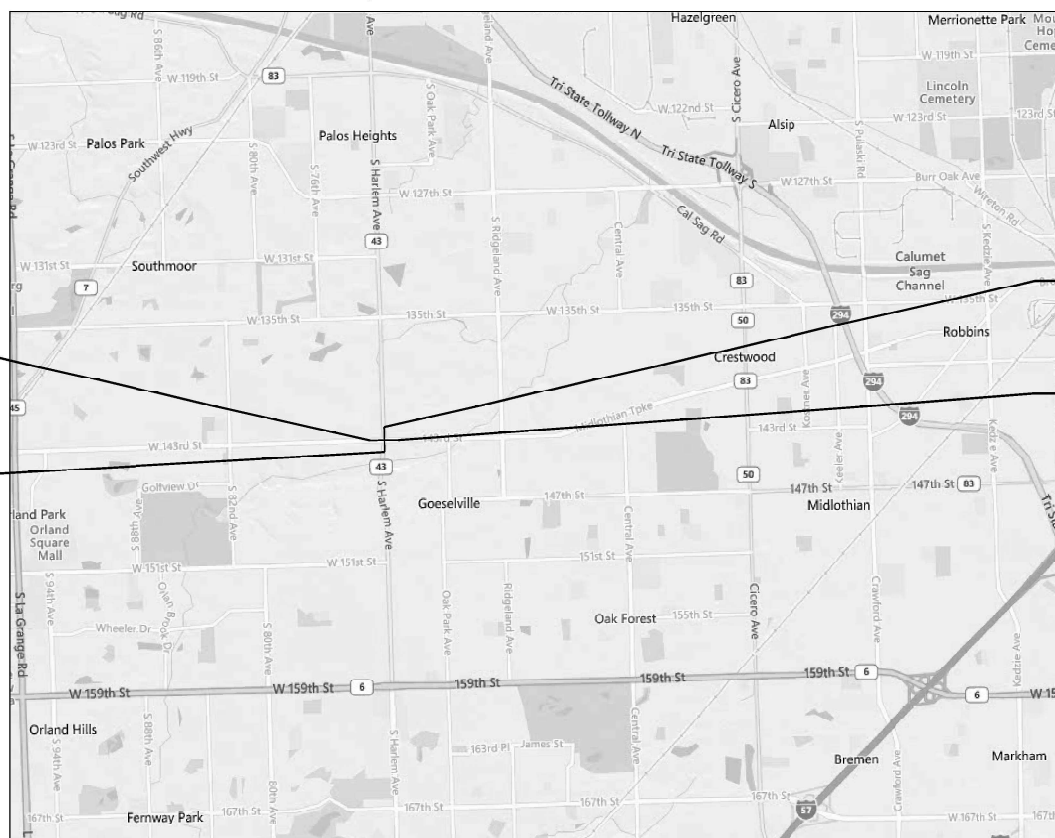


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

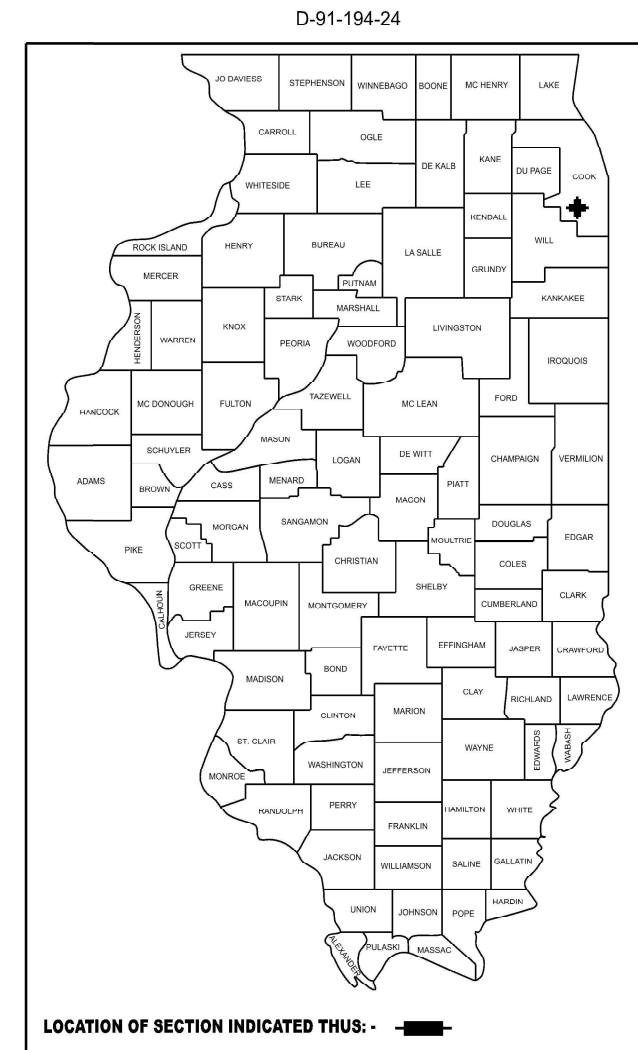
PROJECT ENGINEER: RODRIGO LEDEZMA (847) 705-4580  
PROJECT MANAGER: J. ALAIN MIDY (847) 221-3056

CONTRACT NO. 62W88



ORLAND & BREMEN TOWNSHIPS

GROSS & NET LENGTH = 2,203 FT. = 0.417 MILE



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

IL 43 (HARLEM AVE.)  
PROJECT ENDS:  
STATION 34+07

143RD STREET  
PROJECT ENDS:  
STATION 23+74

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED June 20, 2024  
[Signature]  
REGIONAL ENGINEER

August 16, 2024  
[Signature]  
ENGINEER OF DESIGN AND ENVIRONMENT

August 16, 2024  
[Signature]  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS



### SUMMARY OF QUANTITIES

Code No.	Item	Unit	Total Quantity	ROADWAY 0005	DETECTOR LOOPS 0021	ROADWAY 0005			
				90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% STATE			
20200100	EARTH EXCAVATION	CU YD	538	538	0	0			
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	200	200	0	0			
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	5400	5400	0	0			
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	30	30	0	0			
25000210	SEEDING, CLASS 2A	ACRE	0.1	0.1	0	0			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	2	2	0	0			
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	2	2	0	0			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	2	2	0	0			
25200200	SUPPLEMENTAL WATERING	UNIT	2	2	0	0			
28000500	INLET AND PIPE PROTECTION	EACH	10	10	0	0			
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	200	200	0	0			
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	800	800	0	0			
31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	50	50	0	0			
35501336	HOT-MIX ASPHALT BASE COURSE, 13"	SQ YD	182	182	0	0			
35600728	HOT-MIX ASPHALT BASE COURSE WIDENING, 13"	SQ YD	143	143	0	0			
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	5382	5382	0	0			
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	912	912	0	0			
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	3	3	0	0			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	23	23	0	0			
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	227	227	0	0			
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	20	20	0	0			
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	324	324	0	0			

### SUMMARY OF QUANTITIES

Code No.	Item	Unit	Total Quantity	ROADWAY 0005	DETECTOR LOOPS 0021	ROADWAY 0005			
				90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% STATE			
42001300	PROTECTIVE COAT	SQ YD	1132	1132	0	0			
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	2026	2026	0	0			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1361	1361	0	0			
44003100	MEDIAN REMOVAL	SQ FT	11216	11216	0	0			
44200050	WELDED WIRE REINFORCEMENT	SQ YD	40	40	0	0			
44200974	CLASS B PATCHES, TYPE III, 10 INCH	SQ YD	40	40	0	0			
44201298	DOWEL BARS 1 1/4"	EACH	40	40	0	0			
44201809	CLASS D PATCHES, TYPE IV, 13 INCH	SQ YD	179	179	0	0			
44213200	SAW CUTS	FOOT	126	126	0	0			
60250200	CATCH BASINS TO BE ADJUSTED	EACH	1	1	0	0			
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	2	2	0	0			
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	2	2	0	0			
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	417	417	0	0			
60609200	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12	FOOT	382	382	0	0			
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	1727	1727	0	0			
60619600	CONCRETE MEDIAN, TYPE SB-6.12	SQ FT	1338	1338	0	0			
60622800	CONCRETE MEDIAN, TYPE SM-6.12	SQ FT	2162	2162	0	0			
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	540	540	0	0			
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2	0	0			
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1	0	0			
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1	0	0			
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	4	4	0	0			

\*SPECIALTY ITEMS

MODEL: SOCO1 (Sheet)  
FILE NAME: c:\pwworking\oldiazad\0983576\119424-shi-SOO.dgn

USER NAME = ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 / in.	CHECKED -	REVISED -
PLOT DATE = 6/28/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES  
IL 43 AT 143RD STREET**

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	3
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				

### SUMMARY OF QUANTITIES

Code No.	Item	Unit	Total Quantity	ROADWAY 0005	DETECTOR LOOPS 0021	ROADWAY 0005			
				90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% STATE			
67100100	MOBILIZATION	L SUM	1	1	0	0			
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1	1	0	0			
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1	0	0			
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	0	0			
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	0	0			
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1758	1758	0	0			
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	782	782	0	0			
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	323	323	0	0			
70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	2198	2198	0	0			
70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	1764	1764	0	0			
70300261	TEMPORARY PAVEMENT MARKING - LINE 12"- PAINT	FOOT	820	820	0	0			
70300281	TEMPORARY PAVEMENT MARKING - LINE 24"- PAINT	FOOT	240	240	0	0			
72400205	REMOVE AND RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	4	4	0	0			
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	271	271	0	0			
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1978	1978	0	0			
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1689	1689	0	0			
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	720	720	0	0			
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	190	190	0	0			
* 78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	52	52	0	0			
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	220	220	0	0			
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	75	75	0	0			
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	100	100	0	0			

### SUMMARY OF QUANTITIES

Code No.	Item	Unit	Total Quantity	ROADWAY 0005	DETECTOR LOOPS 0021	ROADWAY 0005			
				90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% STATE			
* 78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	50	50	0	0			
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	35	35	0	0			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	35	35	0	0			
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	3238	3238	0	0			
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	67	0	67	0			
* 81400200	HEAVY-DUTY HANDHOLE	EACH	1	0	1	0			
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	0	1	0			
* 87900200	DRILL EXISTING HANDHOLE	EACH	4	0	4	0			
* 88600100	DETECTOR LOOP, TYPE I	FOOT	441	0	441	0			
* 89502380	REMOVE EXISTING HANDHOLE	EACH	1	0	1	0			
X4400501	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT LESS THAN OR EQUAL TO 10 FEET	FOOT	50	50	0	0			
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	300	0	0	300			
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	6	6	0	0			
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	0	0			
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	4	0	0	4			
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	102.8	102.8	0	0			
X2010516	SELECTIVE CLEARING	UNIT	9	9	0	0			

\* SPECIALTY ITEMS

MODEL: S0002 [Sheet]  
FILE NAME: c:\p\work\hollidiaz\119424-shr-S000.dgn

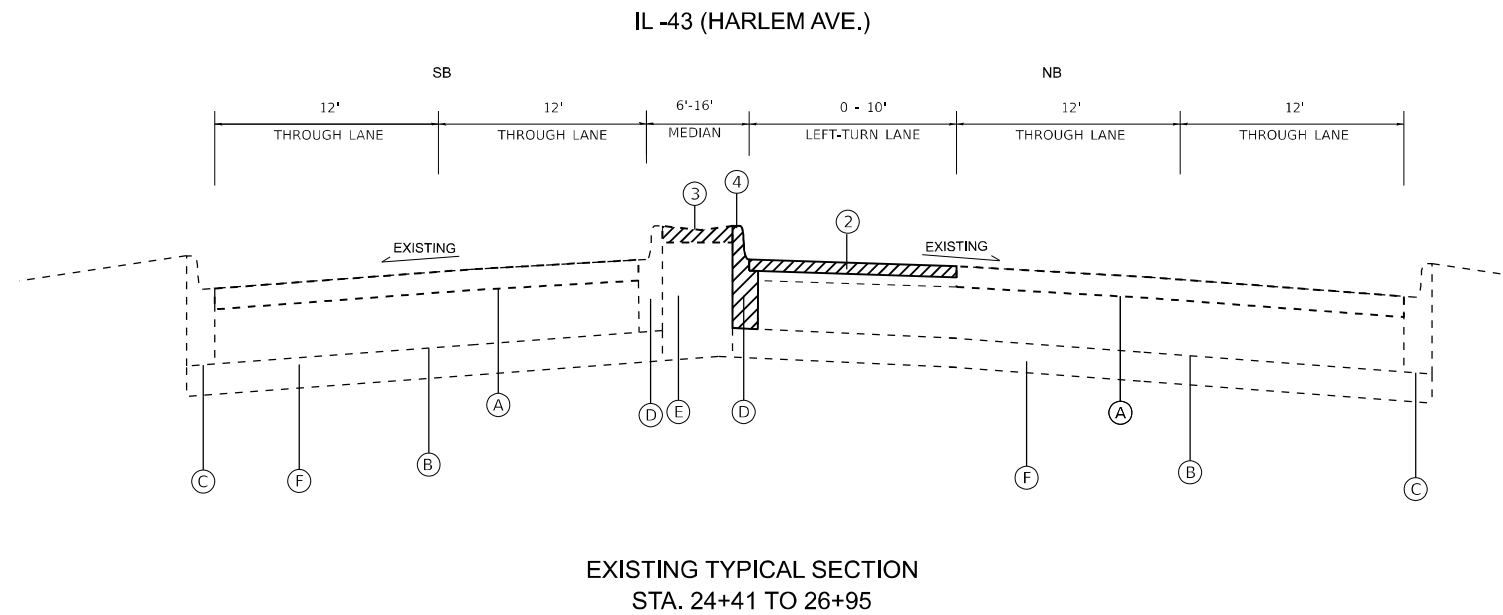
USER NAME = ivan.diaz	DESIGNED -	REVISED -
PLOT SCALE = 0.16666833 / in.	DRAWN -	REVISED -
PLOT DATE = 6/28/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

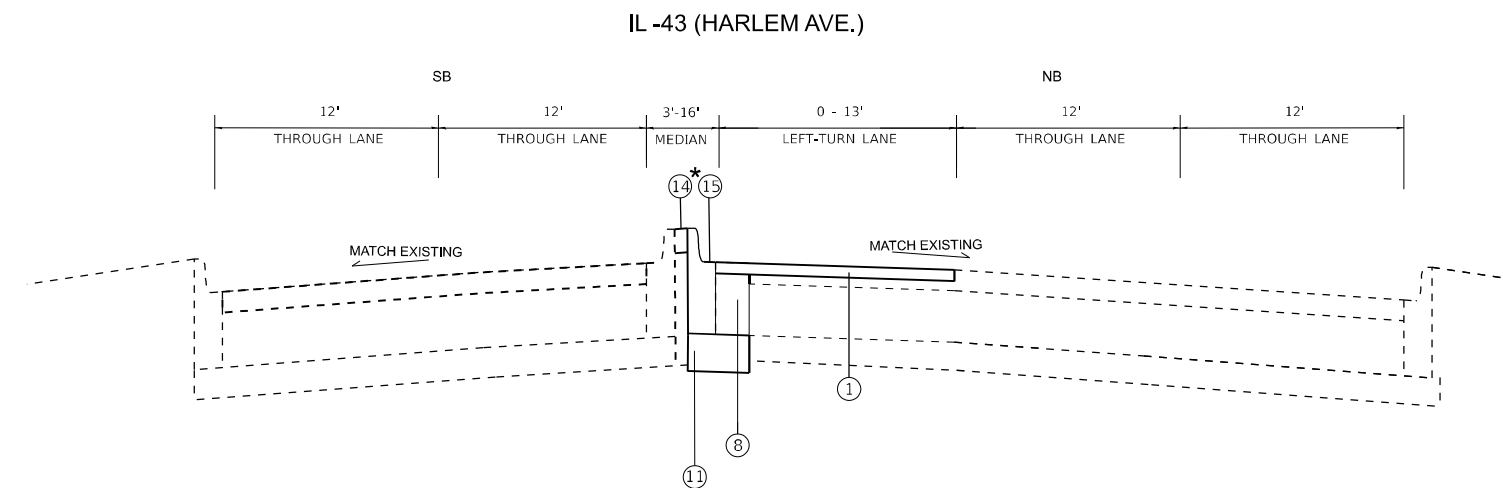
SUMMARY OF QUANTITIES  
IL 43 AT 143RD STREET

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	4
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION  
STA. 24+41 TO 26+95



PROPOSED TYPICAL SECTION  
STA. 24+41 TO 26+95

\* PROPOSED CONCRETE MEDIAN, TYPE SB-6.12 FROM APPROXIMATELY STATION 26+41 TO 28+00 ( PCC RAISED MEDIAN NOSE SECTION).

**LEGEND - EXISTING:**

- (A) EX. HOT-MIX ASPHALT PAVEMENT, 3.0" +/-
- (B) EX. PORTLAND-CEMENT CONCRETE PAVEMENT, 10" +/-
- (C) EX. COMBINATION CONCRETE CURB & GUTTER, VARIES
- (D) EX. CONC. MEDIAN W/ COMBINATION CONCRETE CURB & GUTTER
- (E) EX. SAND FILL
- (F) EX. SUBBASE

**LEGEND - PROPOSED**

- (1) PROP. HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"
- (2) PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (3) PROP. MEDIAN REMOVAL
- (4) PROP. COMBINATION CURB AND GUTTER REMOVAL
- (5) PROP. CONCRETE MEDIAN, TYPE SB-6.12
- (6) PROP. INCIDENTAL HOT-MIX ASPHALT SURFACING
- (7) PROP. CLASS D PATCHES, TYPE IV, 13 INCH (NOTE 2)
- (8) PROP. HOT-MIX ASPHALT BASE COURSE WIDENING, 13" (NOTE 1 & 2)
- (9) PROP. HOT-MIX ASPHALT BASE COURSE, 13" (NOTE 1 & 2)
- (10) PROP. PORTLAND CEMENT CONCRETE PAVEMENT 10"
- (11) PROP. AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (12) PROP. SUBBASE GRANULAR MATERIAL, TYPE B (AS DETERMINED BY ENGINEER)
- (13) PROP. CONCRETE MEDIAN, TYPE SM-6.12
- (14) PROP. CONCRETE MEDIAN SURFACE, 4 INCH
- (15) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (16) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

**ROADWAY NOTE:**

1. PROPOSED HMA BASE COURSE WIDENING SHALL CONSIST OF WIDENING AREAS NOT EXCEEDING 6 FEET. PROPOSED HOT-MIX ASPHALT BASE COURSE FOR WIDENING AREAS EXCEEDING 6 FEET.
2. CLASS D PATCH, HMA BC 13 AND HMA BC WID 13 SHALL MATCH EXISTING ELEVATION PRIOR TO MILLING OPERATIONS. THICKNESS OF THESE ITEMS TO BE REDUCED TO 11" (FOR 2" MILLING) WHEN MILLED PRIOR TO RESURFACING.
3. CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.

**NOTE:**

1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/IN.
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 RECLAIMED MATERIALS SPECIFICATIONS.

MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
MIXTURE USES	PERSCNT AIR VOIDS @ Ndes	
<b>LEFT TURN LANE RESURFACING &amp; WIDENING</b>		
HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"	4.0% AT 70 GYR.	QC/QA
HMA BASE COURSE (HMA BINDER COURSE, IL-19.0), 11"	4.0% AT 70 GYR.	QC/QA
HMA BASE COURSE WIDENING (HMA BINDER COURSE, IL-19.0), 11"	4.0% AT 70 GYR.	QC/QA
<b>CLASS D PATCHING</b>		
CLASS D PATCHES (HMA BINDER, IL-19.0), 13"	4.0% AT 70 GYR.	QC/QA
<b>INCIDENTAL HOT-MIX ASPHALT SURFACING</b>		
HMA SURFACE COURSE, MIX D, IL-9.5, N70	4.0% AT 70 GYR.	QC/QA
<b>QMP Designation: Pay for Performance (PPF); Quality Control/Quality Assurance (QC/QA); Quality Control for Performance (QCP)</b>		

MODEL: TYPICAL SECTION [Sheet]  
FILE NAME: c:\p\work\2024\119424-shr\typical.dgn

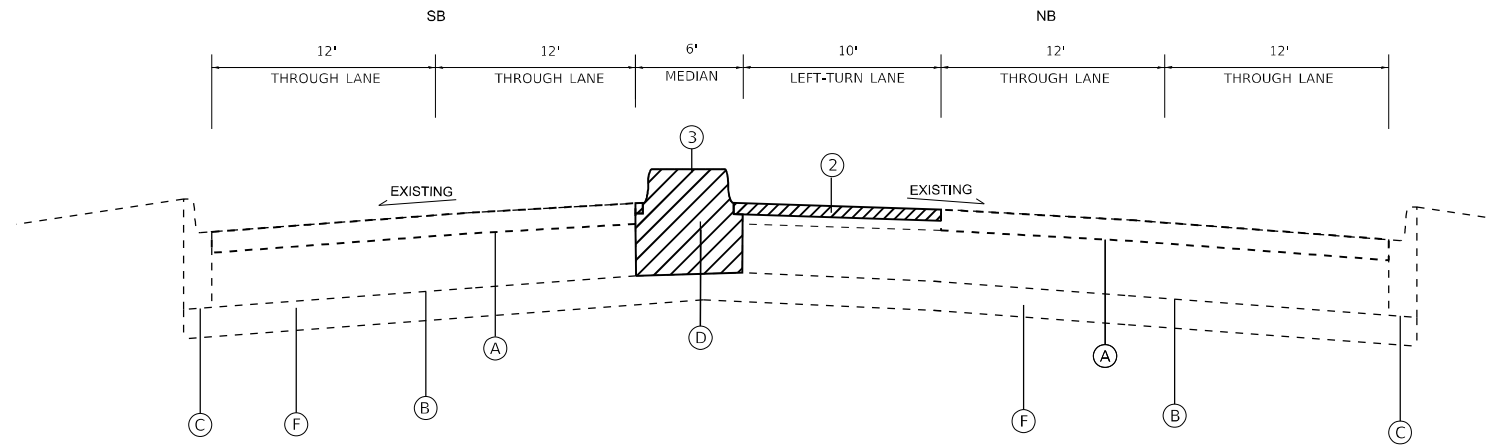
USER NAME = ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/27/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TYPICAL SECTION IL 43 AT 143RD STREET</b>	
SCALE:	SHEET OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	5
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				

IL -43 (HARLEM AVE.)



EXISTING TYPICAL SECTION  
STA. 26+95 TO 28+00

LEGEND - EXISTING:

- (A) EX. HOT-MIX ASPHALT PAVEMENT, 3.0" +/-
- (B) EX. PORTLAND-CEMENT CONCRETE PAVEMENT, 10" +/-
- (C) EX. COMBINATION CONCRETE CURB & GUTTER, VARIES
- (D) EX. CONC. MEDIAN W/ COMBINATION CONCRETE CURB & GUTTER
- (E) EX. SAND FILL
- (F) EX. SUBBASE

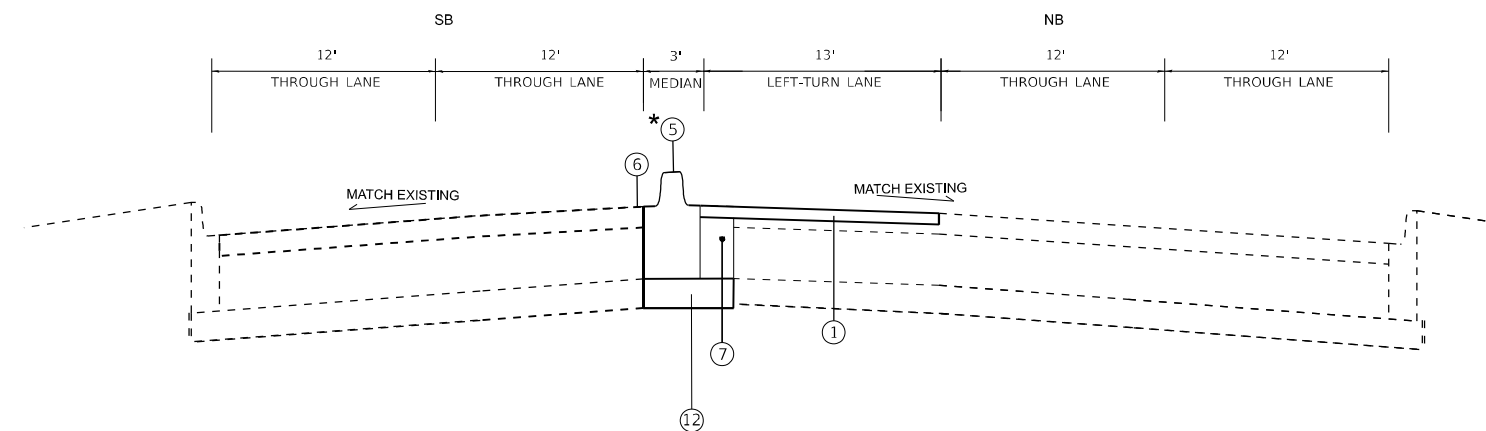
LEGEND - PROPOSED

- (1) PROP. HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"
- (2) PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (3) PROP. MEDIAN REMOVAL
- (4) PROP. COMBINATION CURB AND GUTTER REMOVAL
- (5) PROP. CONCRETE MEDIAN, TYPE SB-6.12
- (6) PROP. INCIDENTAL HOT-MIX ASPHALT SURFACING
- (7) PROP. CLASS D PATCHES, TYPE IV, 13 INCH (NOTE 2)
- (8) PROP. HOT-MIX ASPHALT BASE COURSE WIDENING, 13" (NOTE 1 & 2)
- (9) PROP. HOT-MIX ASPHALT BASE COURSE, 13" (NOTE 1 & 2)
- (10) PROP. PORTLAND CEMENT CONCRETE PAVEMENT 10"
- (11) PROP. AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (12) PROP. SUBBASE GRANULAR MATERIAL, TYPE B (AS DETERMINED BY ENGINEER)
- (13) PROP. CONCRETE MEDIAN, TYPE SM-6.12
- (14) PROP. CONCRETE MEDIAN SURFACE, 4 INCH
- (15) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (16) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

ROADWAY NOTE:

1. PROPOSED HMA BASE COURSE WIDENING SHALL CONSIST OF WIDENING AREAS NOT EXCEEDING 6 FEET. PROPOSED HOT-MIX ASPHALT BASE COURSE FOR WIDENING AREAS EXCEEDING 6 FEET.
2. CLASS D PATCH, HMA BC 13 and HMA BC WID 13 SHALL MATCH EXISTING ELEVATION PRIOR TO MILLING OPERATIONS. THICKNESS OF THESE ITEMS TO BE REDUCED TO 1" (FOR 2" MILLING) WHEN MILLED PRIOR TO RESURFACING.
3. CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.

IL -43 (HARLEM AVE.)



PROPOSED TYPICAL SECTION  
STA. 26+95 TO 28+00

\* PROPOSED CONCRETE MEDIAN, TYPE SB-6.12 FROM APPROXIMATELY STATION 26+41 TO 28+00 ( PCC RAISED MEDIAN NOSE SECTION).

MODEL: TYP SECTION-3 (Sheet)  
FILE NAME: c:\p\work\143rd\143rd\119424-shr\typical.dgn

USER NAME = ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/27/2024	DATE -	REVISED -

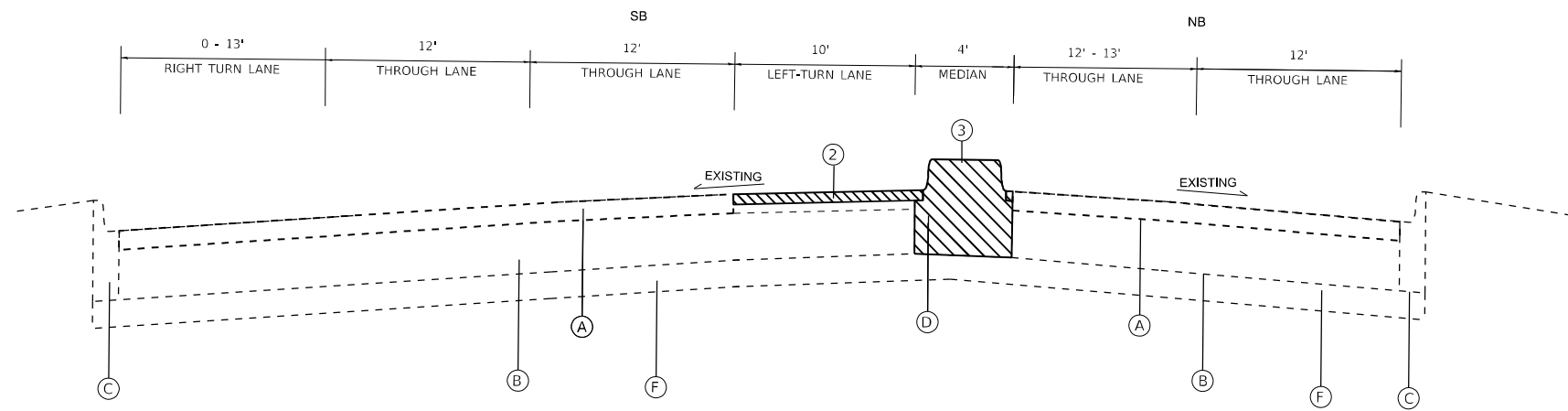
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS  
IL 43 AT 143RD STREET

SCALE: SHEET OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	6
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				

IL -43 (HARLEM AVE.)



EXISTING TYPICAL SECTION  
STA. 29+20 TO 32+22

LEGEND - EXISTING:

- (A) EX. HOT-MIX ASPHALT PAVEMENT, 3.0" +/-
- (B) EX. PORTLAND-CEMENT CONCRETE PAVEMENT, 10" +/-
- (C) EX. COMBINATION CONCRETE CURB & GUTTER, VARIES
- (D) EX. CONC. MEDIAN W/ COMBINATION CONCRETE CURB & GUTTER
- (E) EX. SAND FILL
- (F) EX. SUBBASE

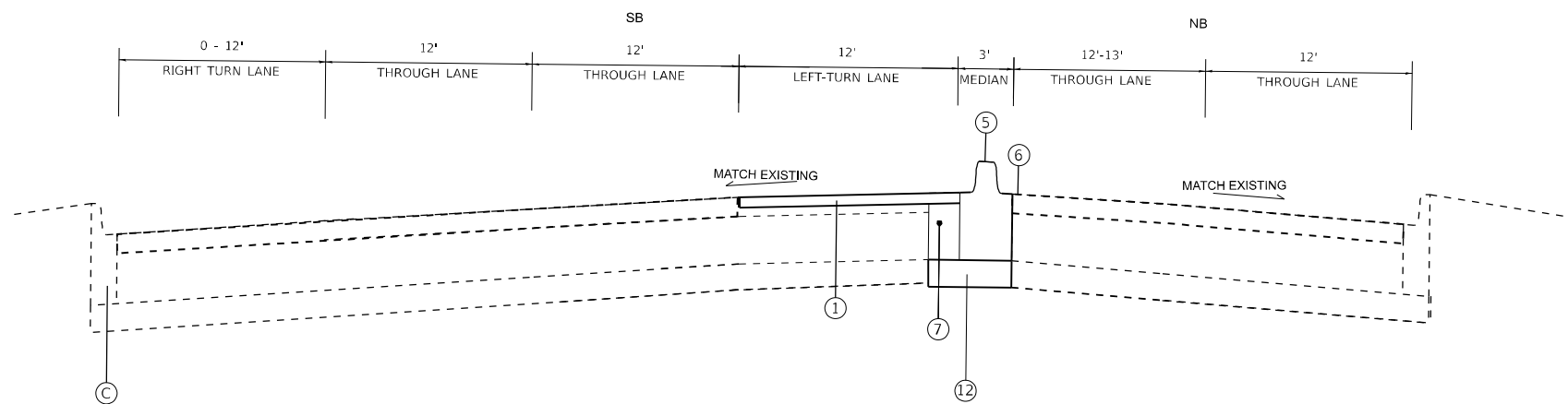
LEGEND - PROPOSED

- (1) PROP. HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"
- (2) PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (3) PROP. MEDIAN REMOVAL
- (4) PROP. COMBINATION CURB AND GUTTER REMOVAL
- (5) PROP. CONCRETE MEDIAN, TYPE SB-6.12
- (6) PROP. INCIDENTAL HOT-MIX ASPHALT SURFACING
- (7) PROP. CLASS D PATCHES, TYPE IV, 13 INCH (NOTE 2)
- (8) PROP. HOT-MIX ASPHALT BASE COURSE WIDENING, 13" (NOTE 1 & 2)
- (9) PROP. HOT-MIX ASPHALT BASE COURSE, 13" (NOTE 1 & 2)
- (10) PROP. PORTLAND CEMENT CONCRETE PAVEMENT 10"
- (11) PROP. AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (12) PROP. SUBBASE GRANULAR MATERIAL, TYPE B (AS DETERMINED BY ENGINEER)
- (13) PROP. CONCRETE MEDIAN, TYPE SM-6.12
- (14) PROP. CONCRETE MEDIAN SURFACE, 4 INCH
- (15) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (16) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

ROADWAY NOTE:

1. PROPOSED HMA BASE COURSE WIDENING SHALL CONSIST OF WIDENING AREAS NOT EXCEEDING 6 FEET. PROPOSED HOT-MIX ASPHALT BASE COURSE FOR WIDENING AREAS EXCEEDING 6 FEET.
2. CLASS D PATCH, HMA BC 13 and HMA BC WID 13 SHALL MATCH EXISTING ELEVATION PRIOR TO MILLING OPERATIONS. THICKNESS OF THESE ITEMS TO BE REDUCED TO 11" (FOR 2" MILLING) WHEN MILLED PRIOR TO RESURFACING.
3. CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.

IL -43 (HARLEM AVE.)



PROPOSED TYPICAL SECTION  
STA. 29+20 TO 32+22

MODEL: Typical Section (Sheet)  
FILE NAME: c:\p\work\143rd\143rd\119424-shr\typical.dgn

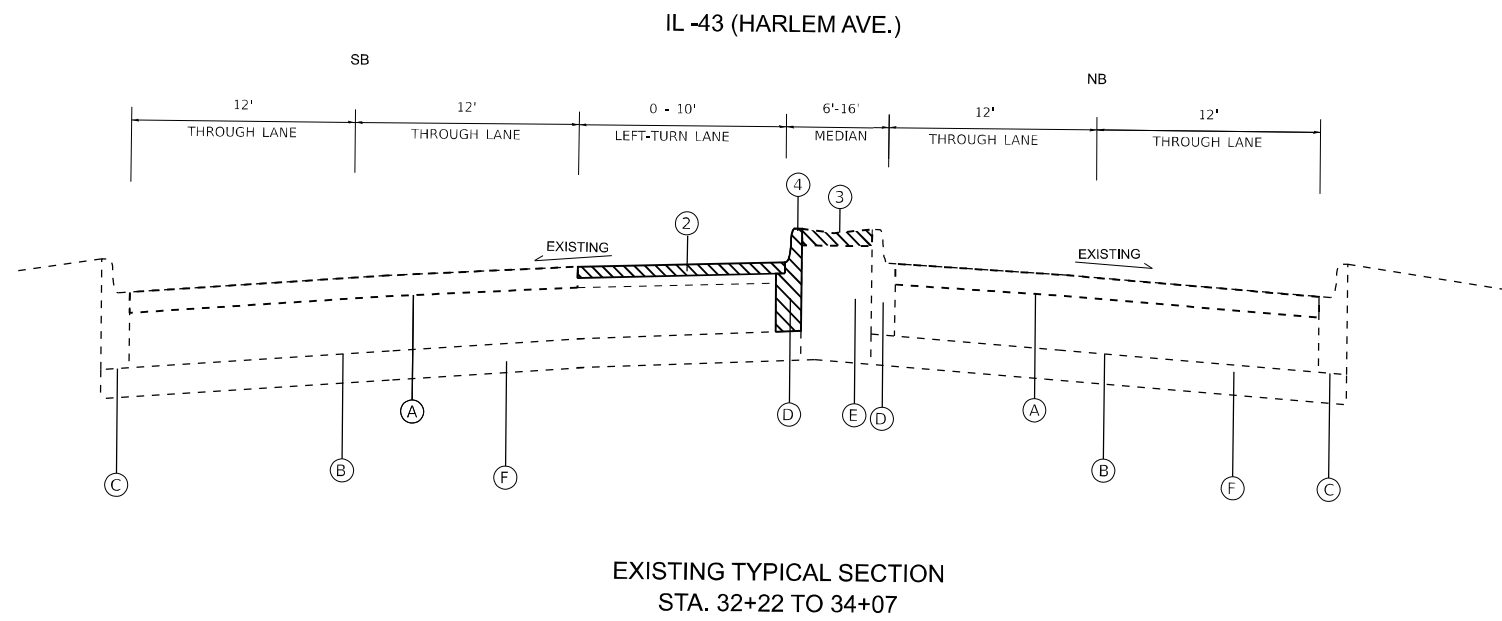
USER NAME = ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/27/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION  
IL 43 AT 143RD STREET

SCALE: SHEET OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	7
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				



**LEGEND - EXISTING:**

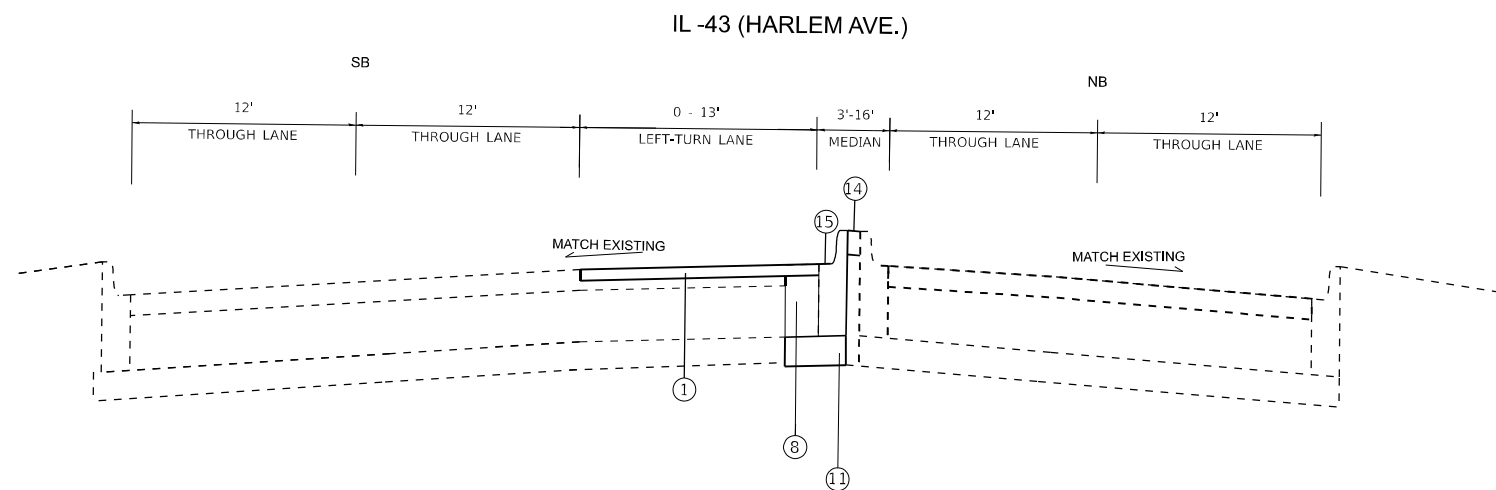
- (A) EX. HOT-MIX ASPHALT PAVEMENT, 3.0" +/-
- (B) EX. PORTLAND-CEMENT CONCRETE PAVEMENT, 10" +/-
- (C) EX. COMBINATION CONCRETE CURB & GUTTER, VARIES
- (D) EX. CONC. MEDIAN W/ COMBINATION CONCRETE CURB & GUTTER
- (E) EX. SAND FILL
- (F) EX. SUBBASE

**LEGEND - PROPOSED**

- (1) PROP. HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"
- (2) PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (3) PROP. MEDIAN REMOVAL
- (4) PROP. COMBINATION CURB AND GUTTER REMOVAL
- (5) PROP. CONCRETE MEDIAN, TYPE SB-6.12
- (6) PROP. INCIDENTAL HOT-MIX ASPHALT SURFACING
- (7) PROP. CLASS D PATCHES, TYPE IV, 13 INCH (NOTE 2)
- (8) PROP. HOT-MIX ASPHALT BASE COURSE WIDENING, 13" (NOTE 1 & 2)
- (9) PROP. HOT-MIX ASPHALT BASE COURSE, 13" (NOTE 1 & 2)
- (10) PROP. PORTLAND CEMENT CONCRETE PAVEMENT 10"
- (11) PROP. AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (12) PROP. SUBBASE GRANULAR MATERIAL, TYPE B (AS DETERMINED BY ENGINEER)
- (13) PROP. CONCRETE MEDIAN, TYPE SM-6.12
- (14) PROP. CONCRETE MEDIAN SURFACE, 4 INCH
- (15) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (16) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

**ROADWAY NOTE:**

1. PROPOSED HMA BASE COURSE WIDENING SHALL CONSIST OF WIDENING AREAS NOT EXCEEDING 6 FEET. PROPOSED HOT-MIX ASPHALT BASE COURSE FOR WIDENING AREAS EXCEEDING 6 FEET.
2. CLASS D PATCH, HMA BC 13 and HMA BC WID 13 SHALL MATCH EXISTING ELEVATION PRIOR TO MILLING OPERATIONS. THICKNESS OF THESE ITEMS TO BE REDUCED TO 11" (FOR 2" MILLING) WHEN MILLED PRIOR TO RESURFACING.
3. CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.



**PROPOSED TYPICAL SECTION  
STA. 32+22 TO 34+07**

MODEL: Typical Section-2 (Sheet)  
FILE NAME: c:\p\work\143rd\143rd\119424-shr\typical.dgn

USER NAME = ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/27/2024	DATE -	REVISED -

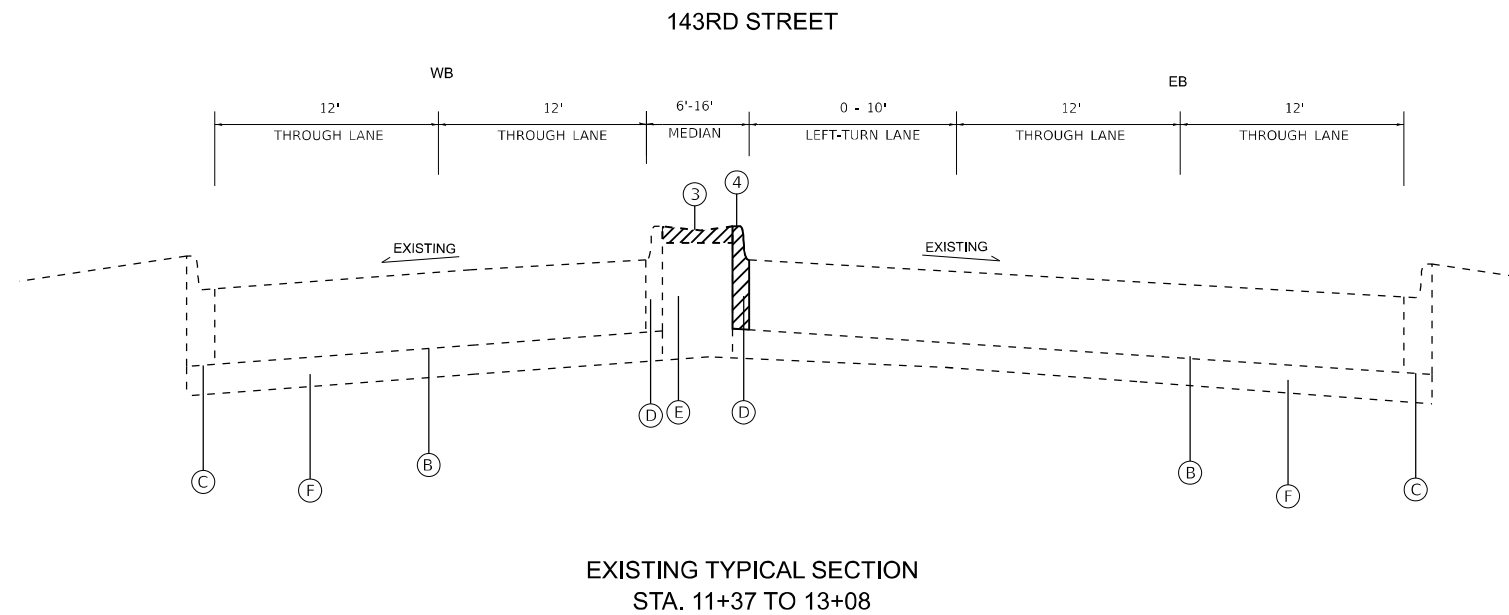
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTION  
IL 43 AT 143RD STREET**

SCALE: SHEET OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	8
CONTRACT NO. 62W88			ILLINOIS FED. AID PROJECT	





**LEGEND - EXISTING:**

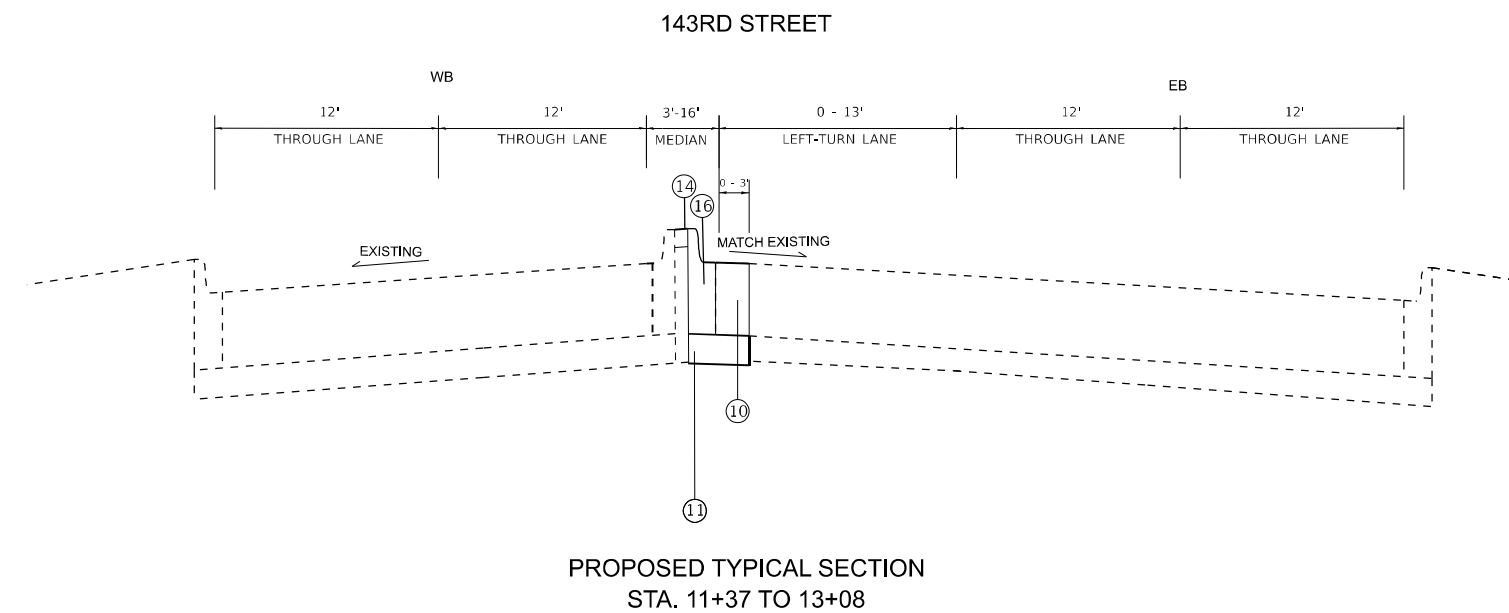
- (A) EX. HOT-MIX ASPHALT PAVEMENT, 3.0" +/-
- (B) EX. PORTLAND-CEMENT CONCRETE PAVEMENT, 10" +/-
- (C) EX. COMBINATION CONCRETE CURB & GUTTER, VARIES
- (D) EX. CONC. MEDIAN W/ COMBINATION CONCRETE CURB & GUTTER
- (E) EX. SAND FILL
- (F) EX. SUBBASE

**LEGEND - PROPOSED**

- (1) PROP. HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"
- (2) PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (3) PROP. MEDIAN REMOVAL
- (4) PROP. COMBINATION CURB AND GUTTER REMOVAL
- (5) PROP. CONCRETE MEDIAN, TYPE SB-6.12
- (6) PROP. INCIDENTAL HOT-MIX ASPHALT SURFACING
- (7) PROP. CLASS D PATCHES, TYPE IV, 13 INCH (NOTE 2)
- (8) PROP. HOT-MIX ASPHALT BASE COURSE WIDENING, 13" (NOTE 1 & 2)
- (9) PROP. HOT-MIX ASPHALT BASE COURSE, 13" (NOTE 1 & 2)
- (10) PROP. PORTLAND CEMENT CONCRETE PAVEMENT 10"
- (11) PROP. AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (12) PROP. SUBBASE GRANULAR MATERIAL, TYPE B (AS DETERMINED BY ENGINEER)
- (13) PROP. CONCRETE MEDIAN, TYPE SM-6.12
- (14) PROP. CONCRETE MEDIAN SURFACE, 4 INCH
- (15) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (16) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

**ROADWAY NOTE:**

1. PROPOSED HMA BASE COURSE WIDENING SHALL CONSIST OF WIDENING AREAS NOT EXCEEDING 6 FEET. PROPOSED HOT-MIX ASPHALT BASE COURSE FOR WIDENING AREAS EXCEEDING 6 FEET.
2. CLASS D PATCH, HMA BC 13 and HMA BC WID 13 SHALL MATCH EXISTING ELEVATION PRIOR TO MILLING OPERATIONS. THICKNESS OF THESE ITEMS TO BE REDUCED TO 1" (FOR 2" MILLING) WHEN MILLED PRIOR TO RESURFACING.
3. CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.



MODEL: TYPICAL SECTION 3 (Sheet)  
FILE NAME: c:\p\work\143rd\143rd\119424-shr\typical.dgn

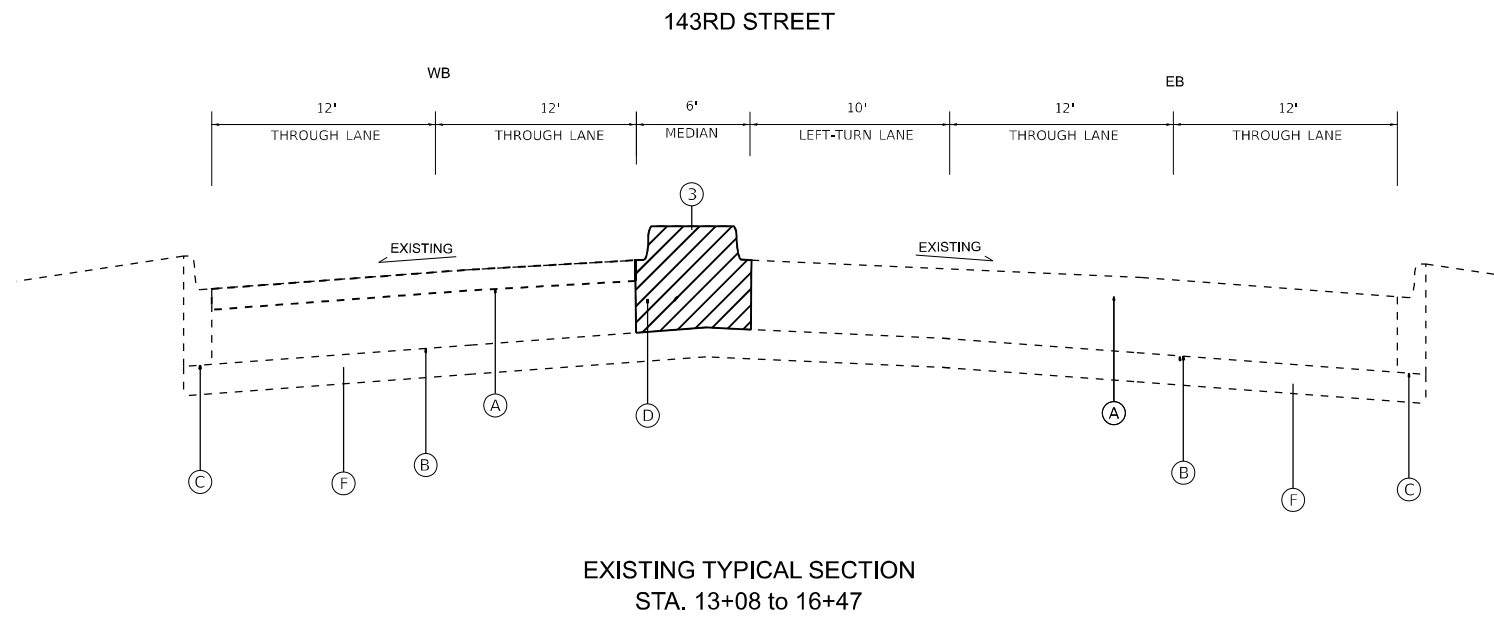
USER NAME = ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/27/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTION  
IL 43 AT 143RD STREET**

SCALE: SHEET OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	9
CONTRACT NO. 62W88				
ILLINOIS		FED. AID PROJECT		



**LEGEND - EXISTING:**

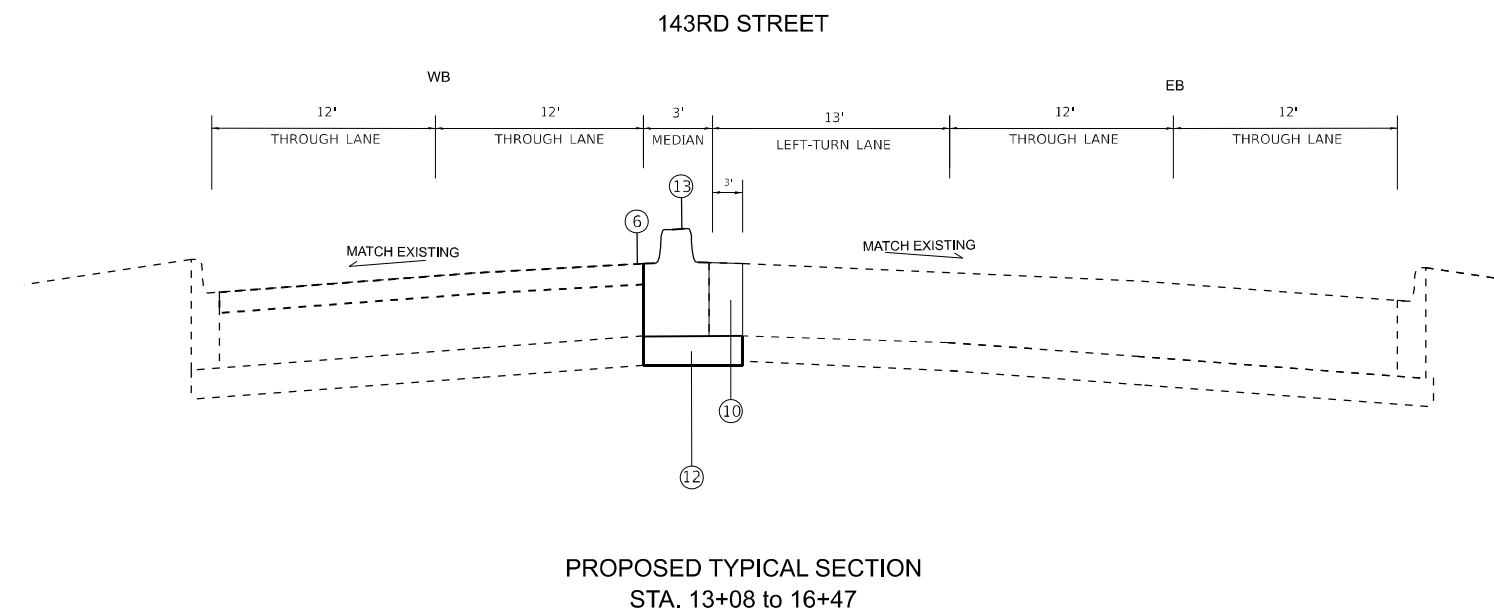
- (A) EX. HOT-MIX ASPHALT PAVEMENT, 3.0" +/-
- (B) EX. PORTLAND-CEMENT CONCRETE PAVEMENT, 10" +/-
- (C) EX. COMBINATION CONCRETE CURB & GUTTER, VARIES
- (D) EX. CONC. MEDIAN W/ COMBINATION CONCRETE CURB & GUTTER
- (E) EX. SAND FILL
- (F) EX. SUBBASE

**LEGEND - PROPOSED**

- ① PROP. HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"
- ② PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- ③ PROP. MEDIAN REMOVAL
- ④ PROP. COMBINATION CURB AND GUTTER REMOVAL
- ⑤ PROP. CONCRETE MEDIAN, TYPE SB-6.12
- ⑥ PROP. INCIDENTAL HOT-MIX ASPHALT SURFACING
- ⑦ PROP. CLASS D PATCHES, TYPE IV, 13 INCH (NOTE 2)
- ⑧ PROP. HOT-MIX ASPHALT BASE COURSE WIDENING, 13" (NOTE 1 & 2)
- ⑨ PROP. HOT-MIX ASPHALT BASE COURSE, 13" (NOTE 1 & 2)
- ⑩ PROP. PORTLAND CEMENT CONCRETE PAVEMENT 10"
- ⑪ PROP. AGGREGATE SUBGRADE IMPROVEMENT, 12"
- ⑫ PROP. SUBBASE GRANULAR MATERIAL, TYPE B (AS DETERMINED BY ENGINEER)
- ⑬ PROP. CONCRETE MEDIAN, TYPE SM-6.12
- ⑭ PROP. CONCRETE MEDIAN SURFACE, 4 INCH
- ⑮ PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- ⑯ PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

**ROADWAY NOTE:**

1. PROPOSED HMA BASE COURSE WIDENING SHALL CONSIST OF WIDENING AREAS NOT EXCEEDING 6 FEET. PROPOSED HOT-MIX ASPHALT BASE COURSE FOR WIDENING AREAS EXCEEDING 6 FEET.
2. CLASS D PATCH, HMA BC 13 and HMA BC WID 13 SHALL MATCH EXISTING ELEVATION PRIOR TO MILLING OPERATIONS. THICKNESS OF THESE ITEMS TO BE REDUCED TO 1" (FOR 2" MILLING) WHEN MILLED PRIOR TO RESURFACING.
3. CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.



MODEL: Typ\_Sec\_2 (Sheet)  
FILE NAME: c:\p\work\143rd\143rd\119424-shr-typical.dgn

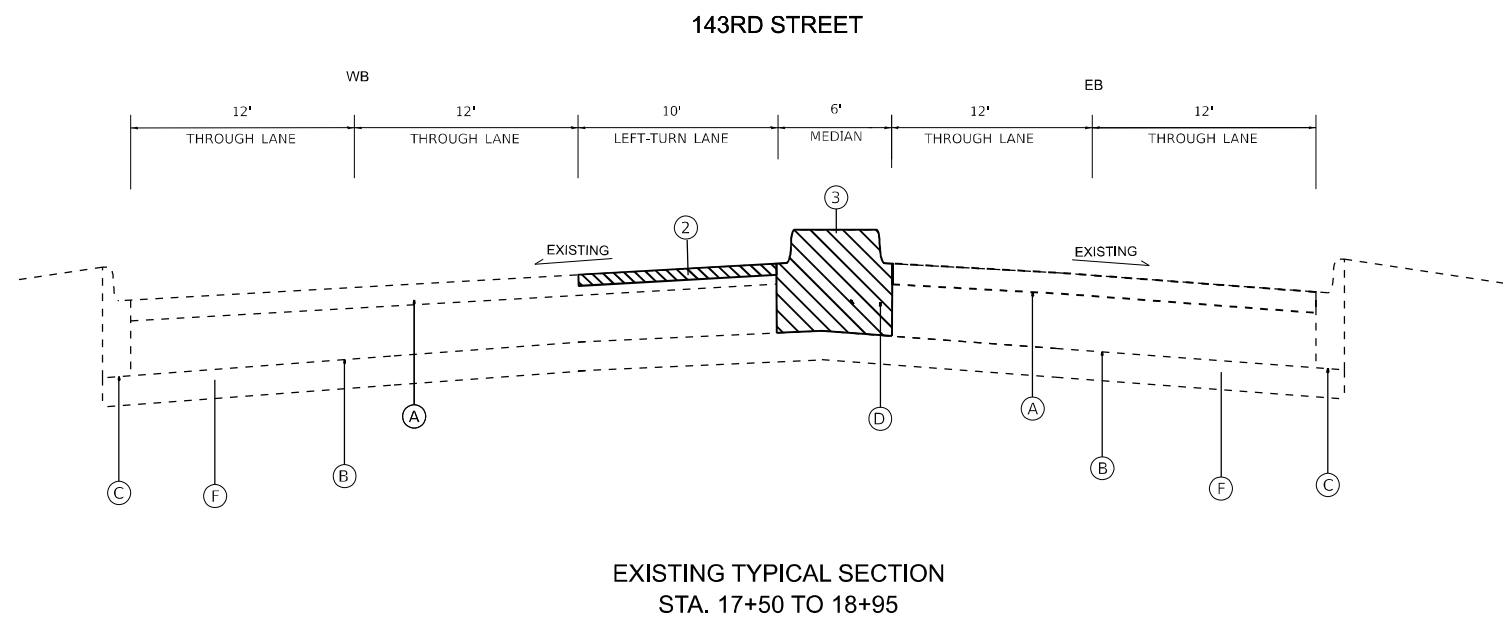
USER NAME = ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/27/2024	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS**  
**IL 43 AT 143RD STREET**

SCALE: SHEET 2 OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	10
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				



**LEGEND - EXISTING:**

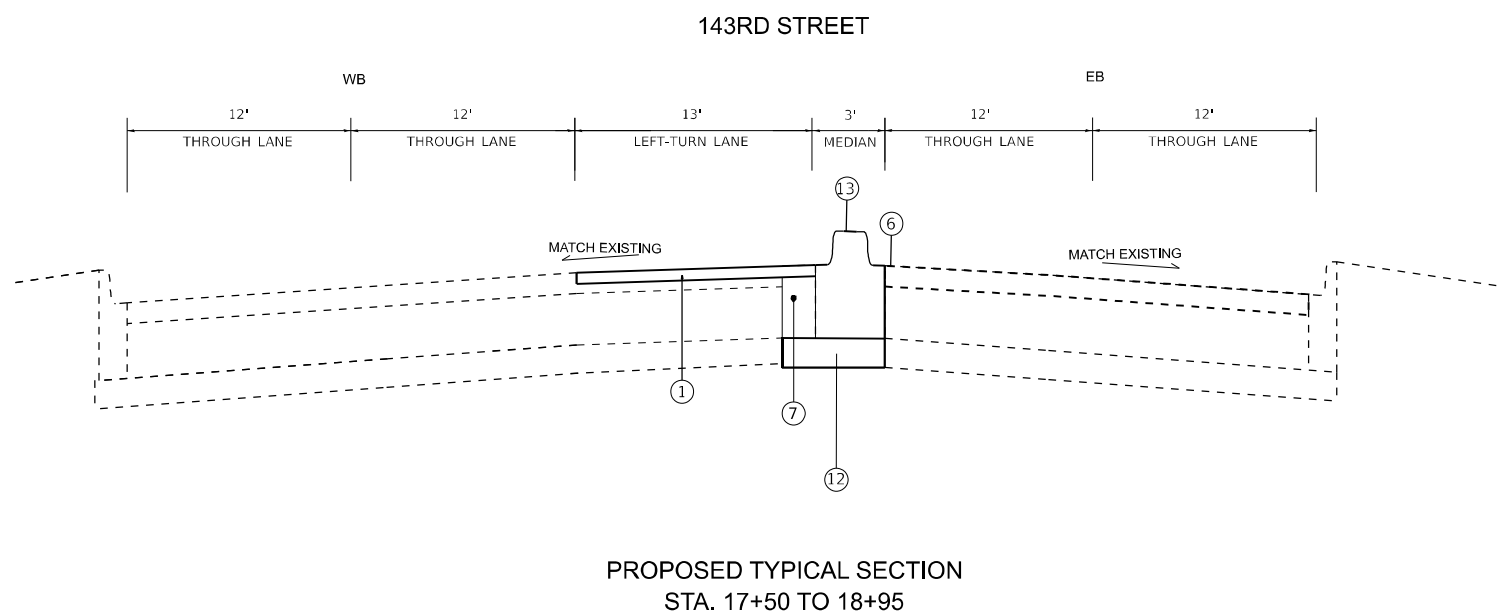
- (A) EX. HOT-MIX ASPHALT PAVEMENT, 3.0" +/-
- (B) EX. PORTLAND-CEMENT CONCRETE PAVEMENT, 10" +/-
- (C) EX. COMBINATION CONCRETE CURB & GUTTER, VARIES
- (D) EX. CONC. MEDIAN W/ COMBINATION CONCRETE CURB & GUTTER
- (E) EX. SAND FILL
- (F) EX. SUBBASE

**LEGEND - PROPOSED**

- (1) PROP. HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"
- (2) PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (3) PROP. MEDIAN REMOVAL
- (4) PROP. COMBINATION CURB AND GUTTER REMOVAL
- (5) PROP. CONCRETE MEDIAN, TYPE SB-6.12
- (6) PROP. INCIDENTAL HOT-MIX ASPHALT SURFACING
- (7) PROP. CLASS D PATCHES, TYPE IV, 13 INCH (NOTE 2)
- (8) PROP. HOT-MIX ASPHALT BASE COURSE WIDENING, 13" (NOTE 1 & 2)
- (9) PROP. HOT-MIX ASPHALT BASE COURSE, 13" (NOTE 1 & 2)
- (10) PROP. PORTLAND CEMENT CONCRETE PAVEMENT 10"
- (11) PROP. AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (12) PROP. SUBBASE GRANULAR MATERIAL, TYPE B (AS DETERMINED BY ENGINEER)
- (13) PROP. CONCRETE MEDIAN, TYPE SM-6.12
- (14) PROP. CONCRETE MEDIAN SURFACE, 4 INCH
- (15) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (16) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

**ROADWAY NOTE:**

1. PROPOSED HMA BASE COURSE WIDENING SHALL CONSIST OF WIDENING AREAS NOT EXCEEDING 6 FEET. PROPOSED HOT-MIX ASPHALT BASE COURSE FOR WIDENING AREAS EXCEEDING 6 FEET.
2. CLASS D PATCH, HMA BC 13 and HMA BC WID 13 SHALL MATCH EXISTING ELEVATION PRIOR TO MILLING OPERATIONS. THICKNESS OF THESE ITEMS TO BE REDUCED TO 1" (FOR 2" MILLING) WHEN MILLED PRIOR TO RESURFACING.
3. CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.



MODEL: TYPICAL SECTION-1 (Sheet)  
FILE NAME: c:\p\work\143rd\143rd\119424-shr\typical.dgn

USER NAME = ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/27/2024	DATE -	REVISED -

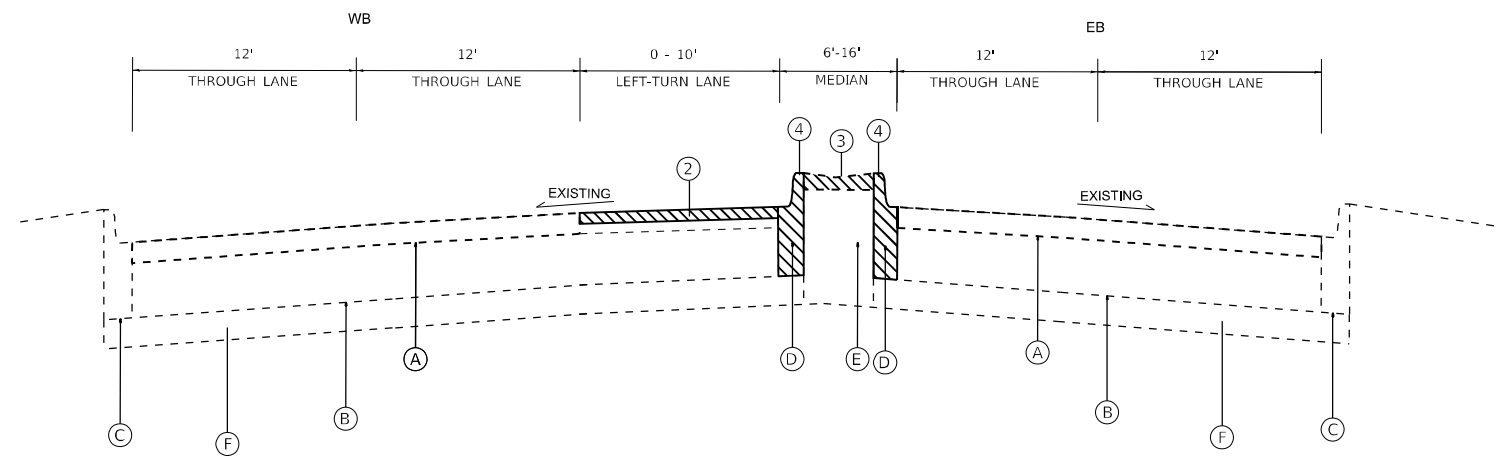
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTION  
IL 43 AT 143RD STREET**

SCALE: SHEET OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	11
CONTRACT NO. 62W88				
ILLINOIS		FED. AID PROJECT		

143RD STREET



EXISTING TYPICAL SECTION  
STA. 18+95 TO 21+37

LEGEND - EXISTING:

- (A) EX. HOT-MIX ASPHALT PAVEMENT, 3.0" +/-
- (B) EX. PORTLAND-CEMENT CONCRETE PAVEMENT, 10" +/-
- (C) EX. COMBINATION CONCRETE CURB & GUTTER, VARIES
- (D) EX. CONC. MEDIAN W/ COMBINATION CONCRETE CURB & GUTTER
- (E) EX. SAND FILL
- (F) EX. SUBBASE

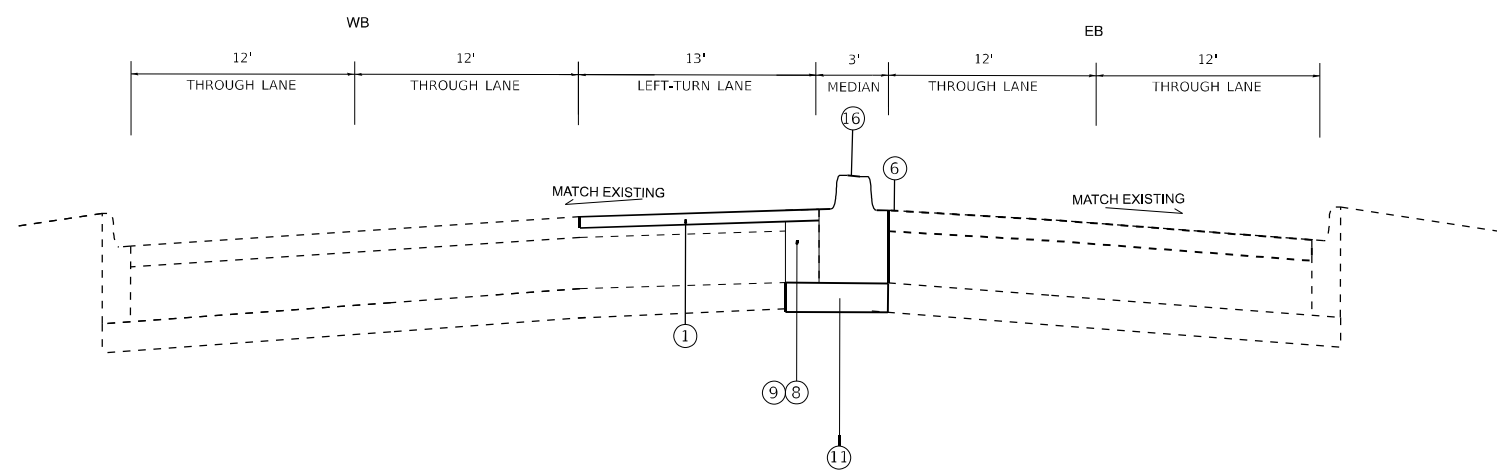
LEGEND - PROPOSED

- (1) PROP. HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"
- (2) PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (3) PROP. MEDIAN REMOVAL
- (4) PROP. COMBINATION CURB AND GUTTER REMOVAL
- (5) PROP. CONCRETE MEDIAN, TYPE SB-6.12
- (6) PROP. INCIDENTAL HOT-MIX ASPHALT SURFACING
- (7) PROP. CLASS D PATCHES, TYPE IV, 13 INCH (NOTE 2)
- (8) PROP. HOT-MIX ASPHALT BASE COURSE WIDENING, 13" (NOTE 1 & 2)
- (9) PROP. HOT-MIX ASPHALT BASE COURSE, 13" (NOTE 1 & 2)
- (10) PROP. PORTLAND CEMENT CONCRETE PAVEMENT 10"
- (11) PROP. AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (12) PROP. SUBBASE GRANULAR MATERIAL, TYPE B (AS DETERMINED BY ENGINEER)
- (13) PROP. CONCRETE MEDIAN, TYPE SM-6.12
- (14) PROP. CONCRETE MEDIAN SURFACE, 4 INCH
- (15) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (16) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

ROADWAY NOTE:

1. PROPOSED HMA BASE COURSE WIDENING SHALL CONSIST OF WIDENING AREAS NOT EXCEEDING 6 FEET. PROPOSED HOT-MIX ASPHALT BASE COURSE FOR WIDENING AREAS EXCEEDING 6 FEET.
2. CLASS D PATCH, HMA BC 13 and HMA BC WID 13 SHALL MATCH EXISTING ELEVATION PRIOR TO MILLING OPERATIONS. THICKNESS OF THESE ITEMS TO BE REDUCED TO 11" (FOR 2" MILLING) WHEN MILLED PRIOR TO RESURFACING.
3. CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.

143RD STREET



PROPOSED TYPICAL SECTION  
STA. 18+95 TO 21+37

MODEL: TYPICAL SECTION-2 (Sheet)  
FILE NAME: c:\p\work\143rd\143rd\119424-shr\typical.dgn

USER NAME = ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/27/2024	DATE -	REVISED -

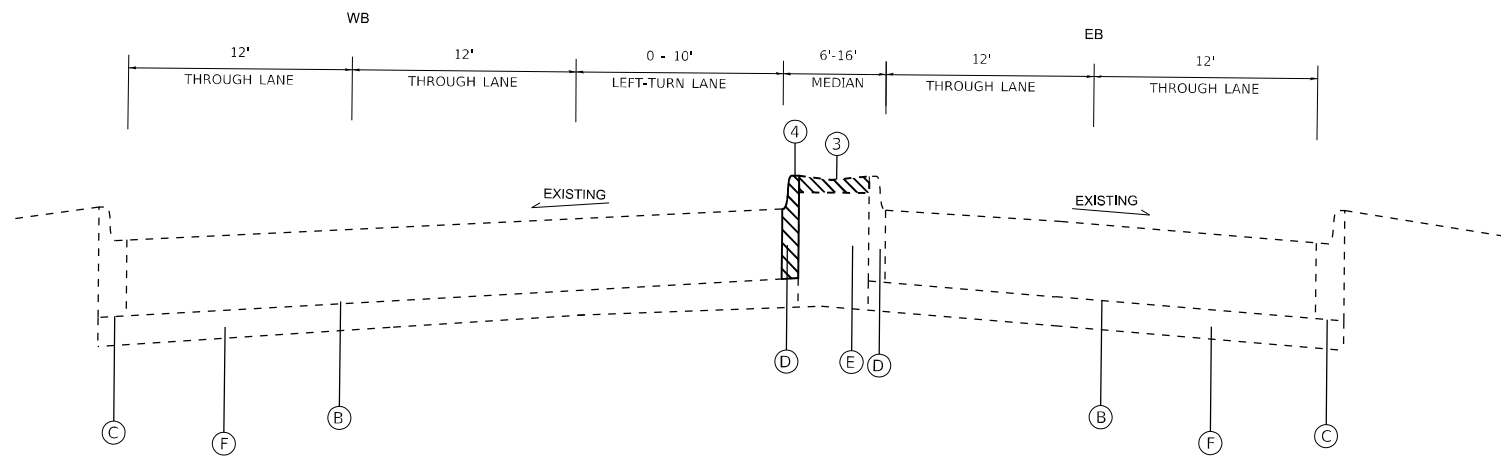
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION  
IL 43 AT 143RD STREET

SCALE: SHEET OF 9 SHEETS STA. TO STA.

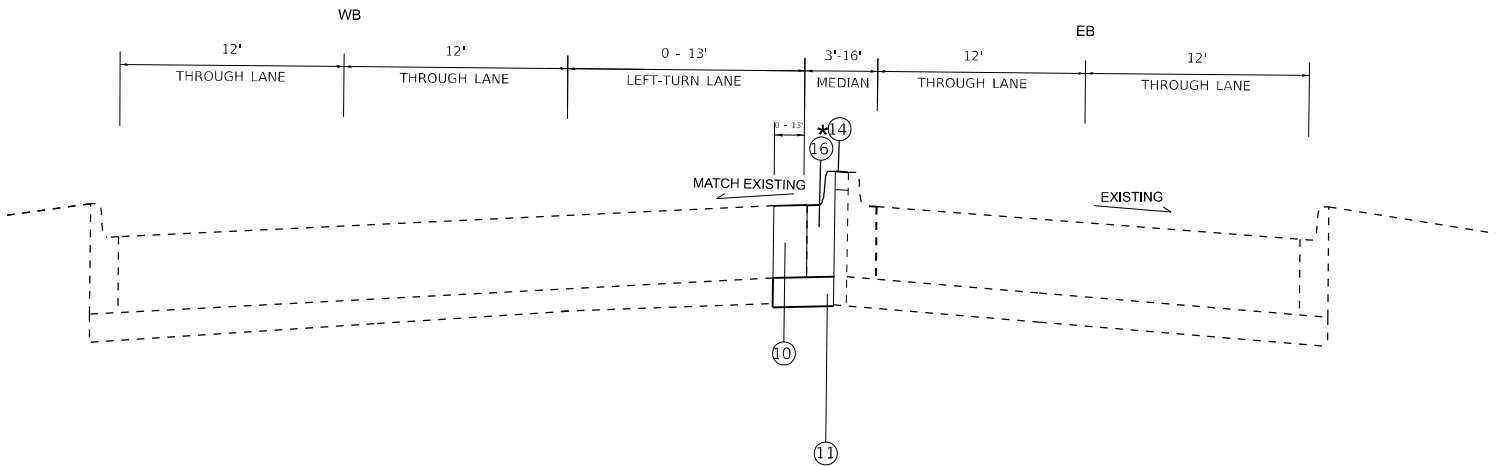
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	12
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				

143RD STREET



EXISTING TYPICAL SECTION  
STA. 21+37 TO 23+74

143RD STREET



PROPOSED TYPICAL SECTION  
STA. 21+37 TO 23+74

\* PROPOSED CONCRETE MEDIAN, TYPE SM-6.12 FROM APPROXIMATELY STATION 21+37 TO 21+54 (PCC RAISED MEDIAN NOSE SECTION).

LEGEND - EXISTING:

- (A) EX. HOT-MIX ASPHALT PAVEMENT, 3.0" +/-
- (B) EX. PORTLAND-CEMENT CONCRETE PAVEMENT, 10" +/-
- (C) EX. COMBINATION CONCRETE CURB & GUTTER, VARIES
- (D) EX. CONC. MEDIAN W/ COMBINATION CONCRETE CURB & GUTTER
- (E) EX. SAND FILL
- (F) EX. SUBBASE

LEGEND - PROPOSED

- (1) PROP. HMA SURFACE COURSE, MIX D, IL-9.5, N70, 2"
- (2) PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (3) PROP. MEDIAN REMOVAL
- (4) PROP. COMBINATION CURB AND GUTTER REMOVAL
- (5) PROP. CONCRETE MEDIAN, TYPE SB-6.12
- (6) PROP. INCIDENTAL HOT-MIX ASPHALT SURFACING
- (7) PROP. CLASS D PATCHES, TYPE IV, 13 INCH (NOTE 2)
- (8) PROP. HOT-MIX ASPHALT BASE COURSE WIDENING, 13" (NOTE 1 & 2)
- (9) PROP. HOT-MIX ASPHALT BASE COURSE, 13" (NOTE 1 & 2)
- (10) PROP. PORTLAND CEMENT CONCRETE PAVEMENT 10"
- (11) PROP. AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (12) PROP. SUBBASE GRANULAR MATERIAL, TYPE B (AS DETERMINED BY ENGINEER)
- (13) PROP. CONCRETE MEDIAN, TYPE SM-6.12
- (14) PROP. CONCRETE MEDIAN SURFACE, 4 INCH
- (15) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (16) PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

ROADWAY NOTE:

1. PROPOSED HMA BASE COURSE WIDENING SHALL CONSIST OF WIDENING AREAS NOT EXCEEDING 6 FEET.  
PROPOSED HOT-MIX ASPHALT BASE COURSE FOR WIDENING AREAS EXCEEDING 6 FEET.
2. CLASS D PATCH, HMA BC 13 and HMA BC WID 13 SHALL MATCH EXISTING ELEVATION PRIOR TO MILLING OPERATIONS.  
THICKNESS OF THESE ITEMS TO BE REDUCED TO 11" (FOR 2" MILLING) WHEN MILLED PRIOR TO RESURFACING.
3. CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.

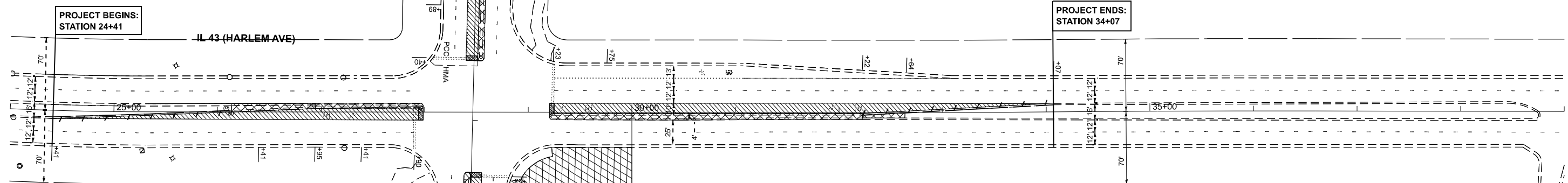
MODEL: Typical Section-1 (Sheet)  
FILE NAME: c:\p\work\143rd\143rd\119424-shr\typical.dgn

USER NAME	= ivan.diaz	DESIGNED	-	REVISED	-
DRAWN	-	REVISIONS	-	REVISIONS	-
CHECKED	-	DATE	-	DATE	-
PLOT DATE	= 6/27/2024				

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

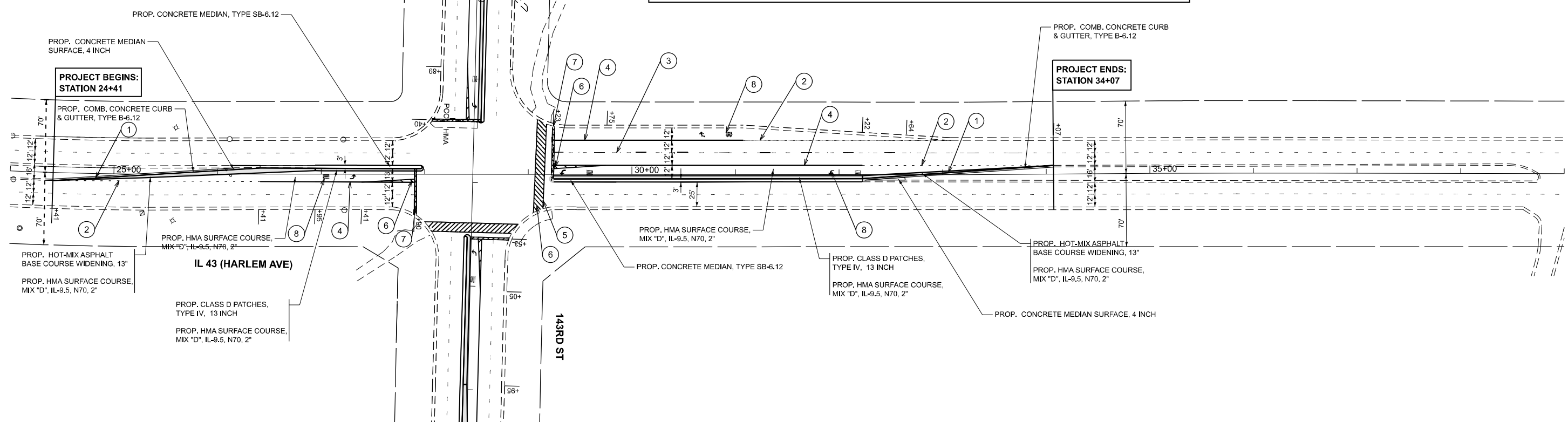
<b>TYPICAL SECTION IL 43 AT 143RD STREET</b>			
SCALE:	SHEET	OF 9 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	13
CONTRACT NO. 62W88			ILLINOIS FED. AID PROJECT	



PAVEMENT MARKING LEGEND	
1	PROP. THERMOPLASTIC PAVEMENT MARKING 4", EDGE, YELLOW-LEFT, WHITE - RIGHT (TYP.)
2	PROP. THERMOPLASTIC PAVEMENT MARKING 4", DOTTED SKIP DASH @ 6' SKIP & 2' DASH, YELLOW (TYP.)
3	PROP. THERMOPLASTIC PAVEMENT MARKING 4", SKIP DASH @ 30' SKIP & 10' DASH, YELLOW (TYP.)
4	PROP. THERMOPLASTIC PAVEMENT MARKING 6", TURN LANE, WHITE (TYP.)
5	PROP. THERMOPLASTIC PAVEMENT MARKING 6", CROSSWALK EDGE LINE 2 @ 6' MIN. C-C, WHITE (TYP.)
6	PROP. THERMOPLASTIC PAVEMENT MARKING 12", DIAGONALS @ 2 WHITE (TYP.) REFER TO TC-13
7	PROP. THERMOPLASTIC PAVEMENT MARKING 24", STOPBAR, WHITE (TYP.)
8	PROP. THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP.)
9	PROP. MODIFIED URETHANE PAVEMENT MARKING 4", EDGE, YELLOW-LEFT, WHITE - RIGHT (TYP.)
10	PROP. MODIFIED URETHANE MARKING 4", DOTTED SKIP DASH @ 6' SKIP & 2' DASH, YELLOW (TYP.)
11	PROP. MODIFIED URETHANE MARKING 4", SKIP DASH @ 30' SKIP & 10' DASH, YELLOW (TYP.)
12	PROP. MODIFIED URETHANE MARKING 6", TURN LANE, WHITE (TYP.)
13	PROP. MODIFIED URETHANE MARKING 6", CROSSWALK EDGE LINE 2 @ 6' MIN. C-C, WHITE (TYP.)
14	PROP. MODIFIED URETHANE PAVEMENT MARKING 12", DIAGONALS @ 2 WHITE (TYP.) REFER TO TC-13
15	PROP. MODIFIED URETHANE PAVEMENT MARKING 24", STOPBAR, WHITE (TYP.)
16	PROP. MODIFIED URETHANE PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP.)

ROADWAY LEGEND	
	PROP. MEDIAN REMOVAL
	PROP. COMB. CURB & GUTTER REMOVAL
	PROP. HMA SURFACE REMOVAL, 2"
	PROP. HMA SURFACE REMOVAL - BUTT JOINT
	PROP. SELECTIVE CLEARING
	PROP. PAVEMENT WIDENING AREAS



MODEL: IL43 - ExPlan02 (Sheet)  
 FILE NAME: c:\pwworking\illinois\119424\sh12plan.dgn

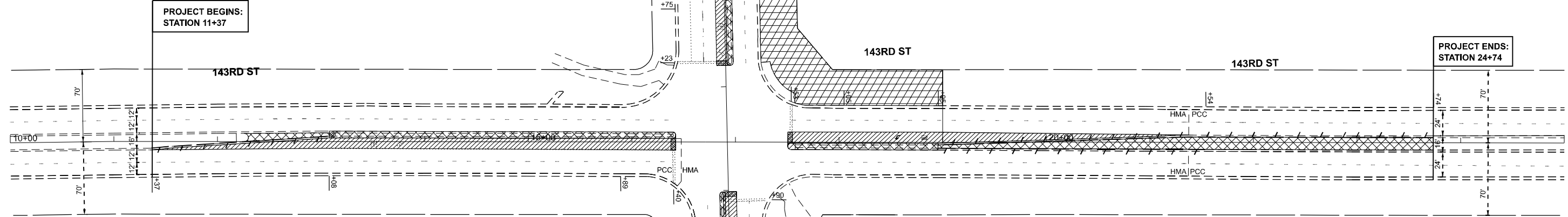
USER NAME = Ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/28/2024	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ROADWAY PLAN**  
**IL 43 AT 143RD STREET**

SCALE: 1"=50'    SHEET 1 OF 2 SHEETS    STA. 25+00.00 TO STA. 40+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	14
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				

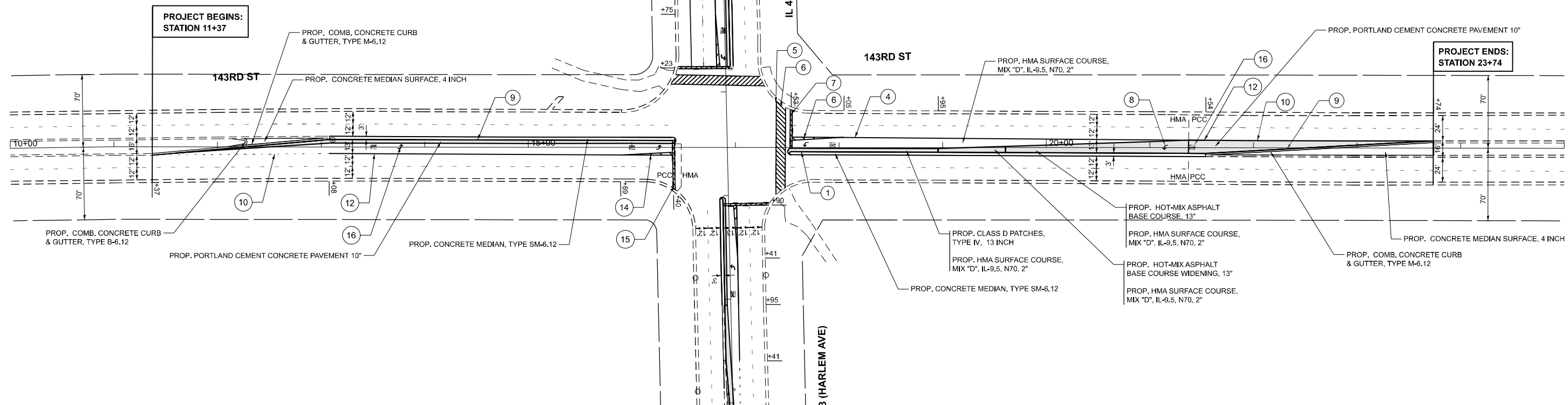


**PAVEMENT MARKING LEGEND**

- |  |   |
|--|---|
| ① PROP. THERMOPLASTIC PAVEMENT MARKING 4", EDGE, YELLOW-LEFT, WHITE - RIGHT (TYP.)             | ⑨ PROP. MODIFIED URETHANE PAVEMENT MARKING 4", EDGE, YELLOW-LEFT, WHITE - RIGHT (TYP.)    |
| ② PROP. THERMOPLASTIC PAVEMENT MARKING 4", DOTTED SKIP DASH @ 6' SKIP & 2' DASH, YELLOW (TYP.) | ⑩ PROP. MODIFIED URETHANE MARKING 4", DOTTED SKIP DASH @ 6' SKIP & 2' DASH, YELLOW (TYP.) |
| ③ PROP. THERMOPLASTIC PAVEMENT MARKING 4", SKIP DASH @ 30' SKIP & 10' DASH, YELLOW (TYP.)      | ⑪ PROP. MODIFIED URETHANE MARKING 4", SKIP DASH @ 30' SKIP & 10' DASH, YELLOW (TYP.)      |
| ④ PROP. THERMOPLASTIC PAVEMENT MARKING 6", TURN LANE, WHITE(TYP.)                              | ⑫ PROP. MODIFIED URETHANE MARKING 6", TURN LANE, WHITE(TYP.)                              |
| ⑤ PROP. THERMOPLASTIC PAVEMENT MARKING 6", CROSSWALK EDGE LINE 2 @ 6' MIN. C-C, WHITE (TYP.)   | ⑬ PROP. MODIFIED URETHANE MARKING 6", CROSSWALK EDGE LINE 2 @ 6' MIN. C-C, WHITE (TYP.)   |
| ⑥ PROP. THERMOPLASTIC PAVEMENT MARKING 12", DIAGONALS @ 2 WHITE (TYP.) REFER TO TC-13          | ⑭ PROP. MODIFIED URETHANE PAVEMENT MARKING 12", DIAGONALS @ 2 WHITE (TYP.) REFER TO TC-13 |
| ⑦ PROP. THERMOPLASTIC PAVEMENT MARKING 24", STOPBAR, WHITE (TYP.)                              | ⑮ PROP. MODIFIED URETHANE PAVEMENT MARKING 24", STOPBAR, WHITE (TYP.)                     |
| ⑧ PROP. THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP.)                       | ⑯ PROP. MODIFIED URETHANE PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP.)              |

**ROADWAY LEGEND**

- PROP. MEDIAN REMOVAL
- PROP. COMB. CURB & GUTTER REMOVAL
- PROP. HMA SURFACE REMOVAL, 2"
- PROP. HMA SURFACE REMOVAL - BUTT JOINT
- PROP. SELECTIVE CLEARING
- PROP. PAVEMENT WIDENING AREAS



MODEL: 143rd - ExPlan01 (Sheet)  
 FILE NAME: c:\p\work\143rd\143rd\143rd\143rd.dwg

USER NAME = Ivan.diaz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/28/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY PLAN  
IL 43 AT 143RD STREET**

SCALE: 1"=50'      SHEET 2      OF 2      SHEETS      STA. 10+00.00      TO STA. 25+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	15
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				

# TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

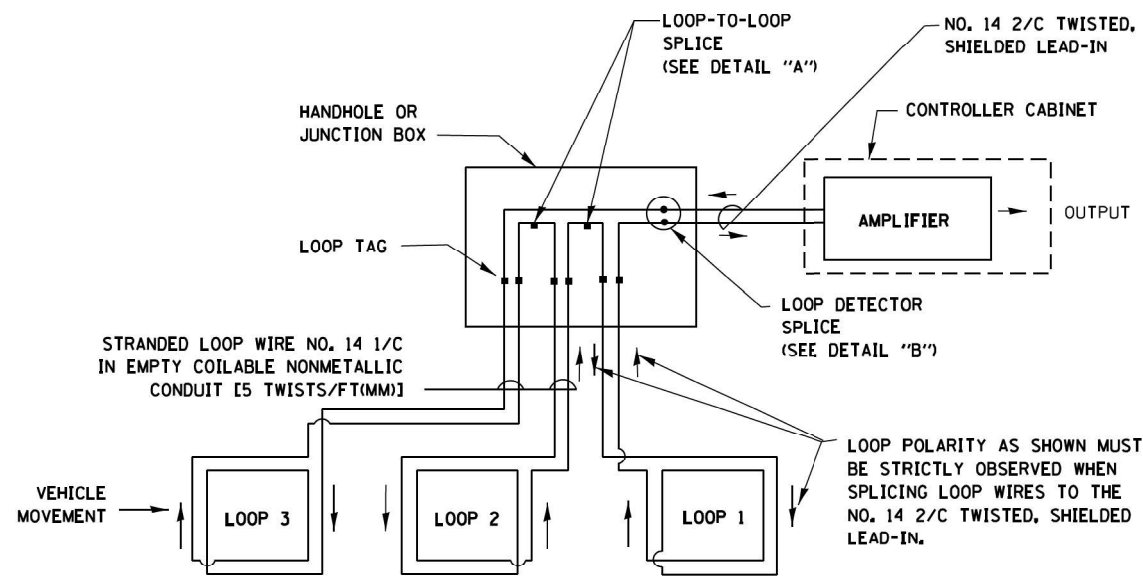
ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE			SIGNAL HEAD		
COMMUNICATION CABINET			-SQUARE			- (P) PROGRAMMABLE SIGNAL HEAD		
MASTER CONTROLLER			HEAVY DUTY HANDHOLE			SIGNAL HEAD WITH BACKPLATE		
MASTER MASTER CONTROLLER			-SQUARE			- (P) PROGRAMMABLE SIGNAL HEAD		
UNINTERRUPTABLE POWER SUPPLY			-ROUND			- (RB) RETROREFLECTIVE BACKPLATE		
SERVICE INSTALLATION			DOUBLE HANDHOLE					
- (P) POLE MOUNTED			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD		
SERVICE INSTALLATION			RAILROAD CANTILEVER MAST ARM			AT RAILROAD INTERSECTIONS		
- (G) GROUND MOUNTED			RAILROAD FLASHING SIGNAL			PEDESTRIAN SIGNAL HEAD		
- (GM) GROUND MOUNTED METERED			RAILROAD CROSSING GATE			WITH COUNTDOWN TIMER		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ILLUMINATED SIGN		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			"NO LEFT TURN"/"NO RIGHT TURN"		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
SIGNAL POST			SYSTEM ITEM			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
- (BM) BARREL MOUNTED - TEMPORARY			INTERSECTION ITEM			COAXIAL CABLE		
WOOD POLE			REMOVE ITEM			VENDOR CABLE		
GUY WIRE			RELOCATE ITEM			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL HEAD			ABANDON ITEM			FIBER OPTIC CABLE		
SIGNAL HEAD WITH BACKPLATE			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			- NO. 62.5/125, MM12F		
SIGNAL HEAD OPTICALLY PROGRAMMED			MAST ARM POLE AND FOUNDATION TO BE REMOVED			- NO. 62.5/125, MM12F SM12F		
FLASHER INSTALLATION			SIGNAL POST AND FOUNDATION TO BE REMOVED			- NO. 62.5/125, MM12F SM24F		
- (FS) SOLAR POWERED			DETECTOR LOOP, TYPE I			- NO. 62.5/125, MM12F SM24F		
PEDESTRIAN SIGNAL HEAD			PREFORMED DETECTOR LOOP			GROUND ROD		
PEDESTRIAN PUSH BUTTON			SAMPLING (SYSTEM) DETECTOR			- (C) CONTROLLER		
- (APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			- (M) MAST ARM		
RADAR DETECTION SENSOR			QUEUE AND SAMPLING (SYSTEM) DETECTOR			- (P) POST		
VIDEO DETECTION CAMERA			WIRELESS DETECTOR SENSOR			- (S) SERVICE		
RADAR/VIDEO DETECTION ZONE			WIRELESS ACCESS POINT					
PAN, TILT, ZOOM (PTZ) CAMERA								
EMERGENCY VEHICLE LIGHT DETECTOR								
CONFIRMATION BEACON								
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

TS SHT NO.1



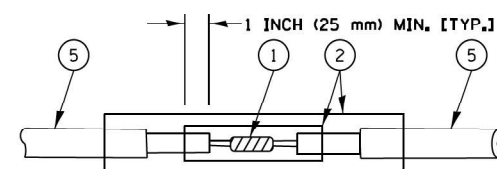
**LOOP DETECTOR NOTES**

- 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 DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 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.

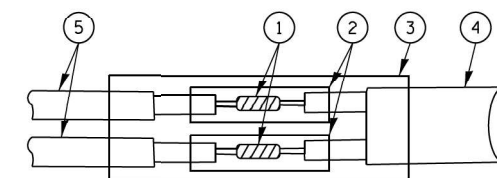


**DETECTOR LOOP WIRING SCHEMATIC**

- 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.



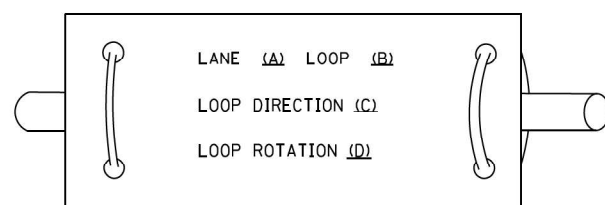
DETAIL "A"  
LOOP-TO-LOOP SPLICE



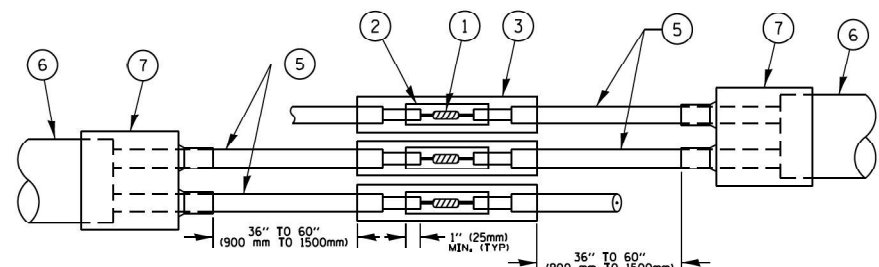
DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**

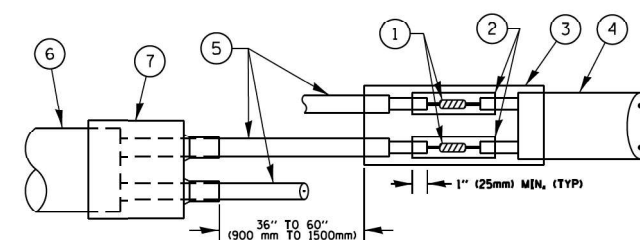
**LOOP LEAD-IN CABLE TAG**



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



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

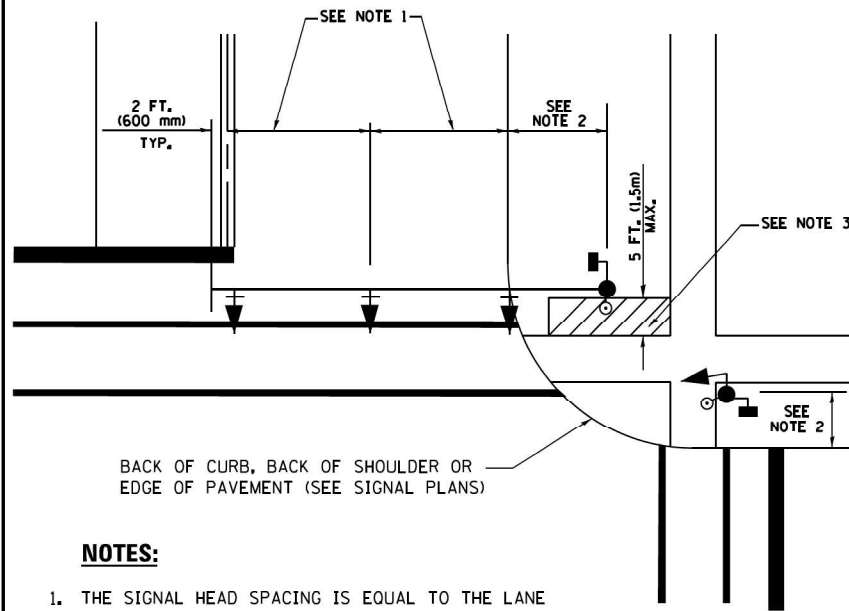
**LOOP DETECTOR SPLICE**

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PRE-FORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

TS SHT NO. 2

FILE NAME =	USER NAME = plascencia1	DESIGNED -	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.		
Default	TSexample01-sht-ts.dgn	DRAWN -	REVISED -		SCALE: NONE	SHEET 2	OF 7 SHEETS	STA.	TO STA.	348	2024-963-N	COOK	34	17
	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -							<b>TS-05</b>		CONTRACT NO. 62W88		
	PLOT DATE = 5/17/2016	DATE -	REVISED -							ILLINOIS FED. AID PROJECT				

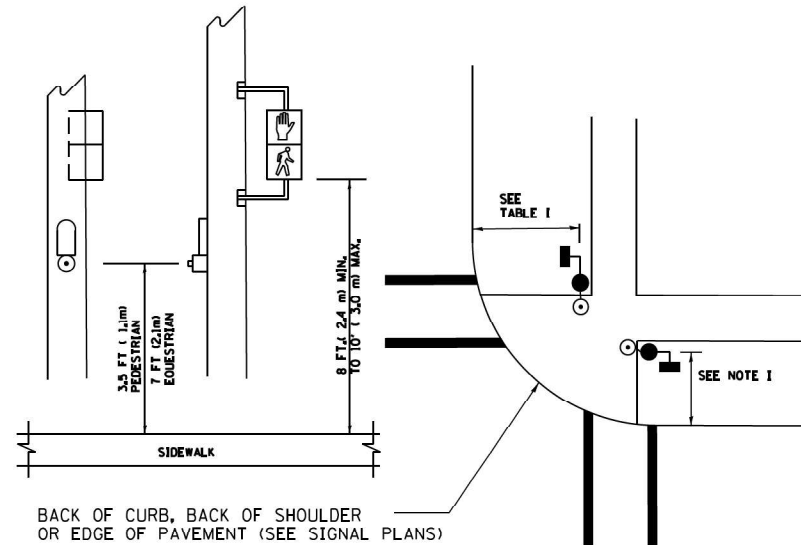
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

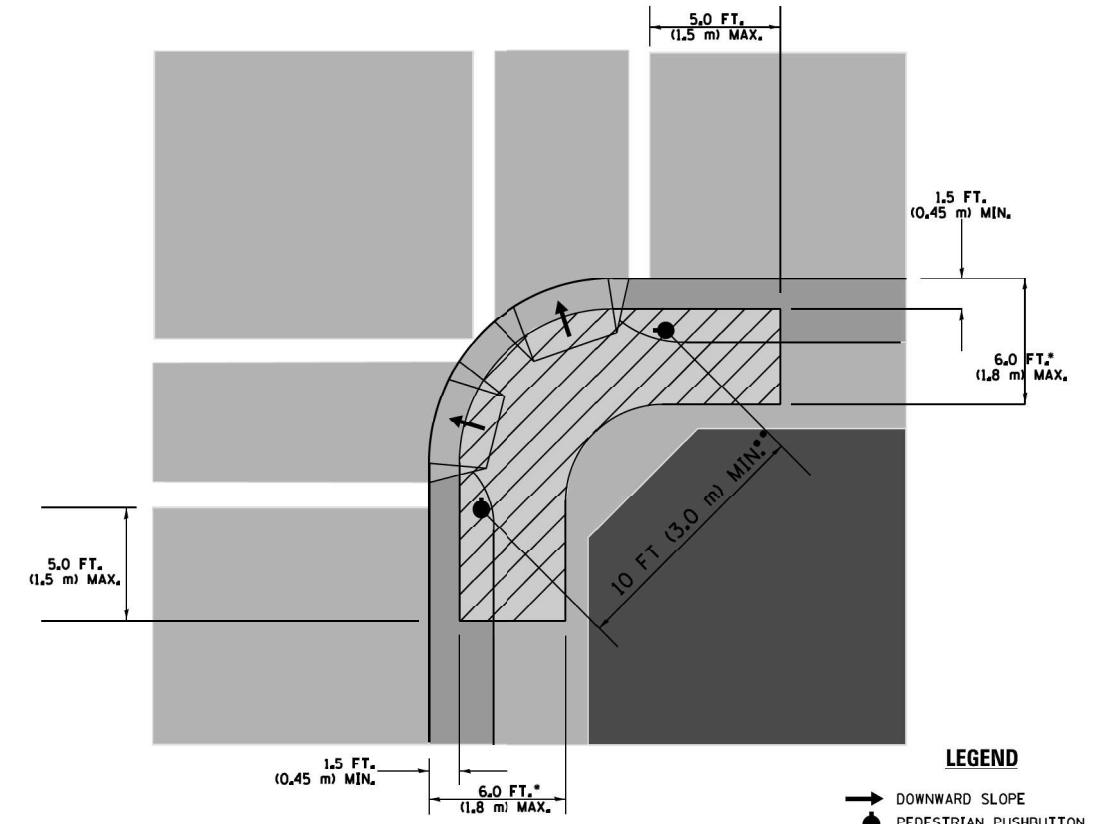
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

**RECOMMENDED PUSHBUTTON LOCATIONS**



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

**NOTES:**

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

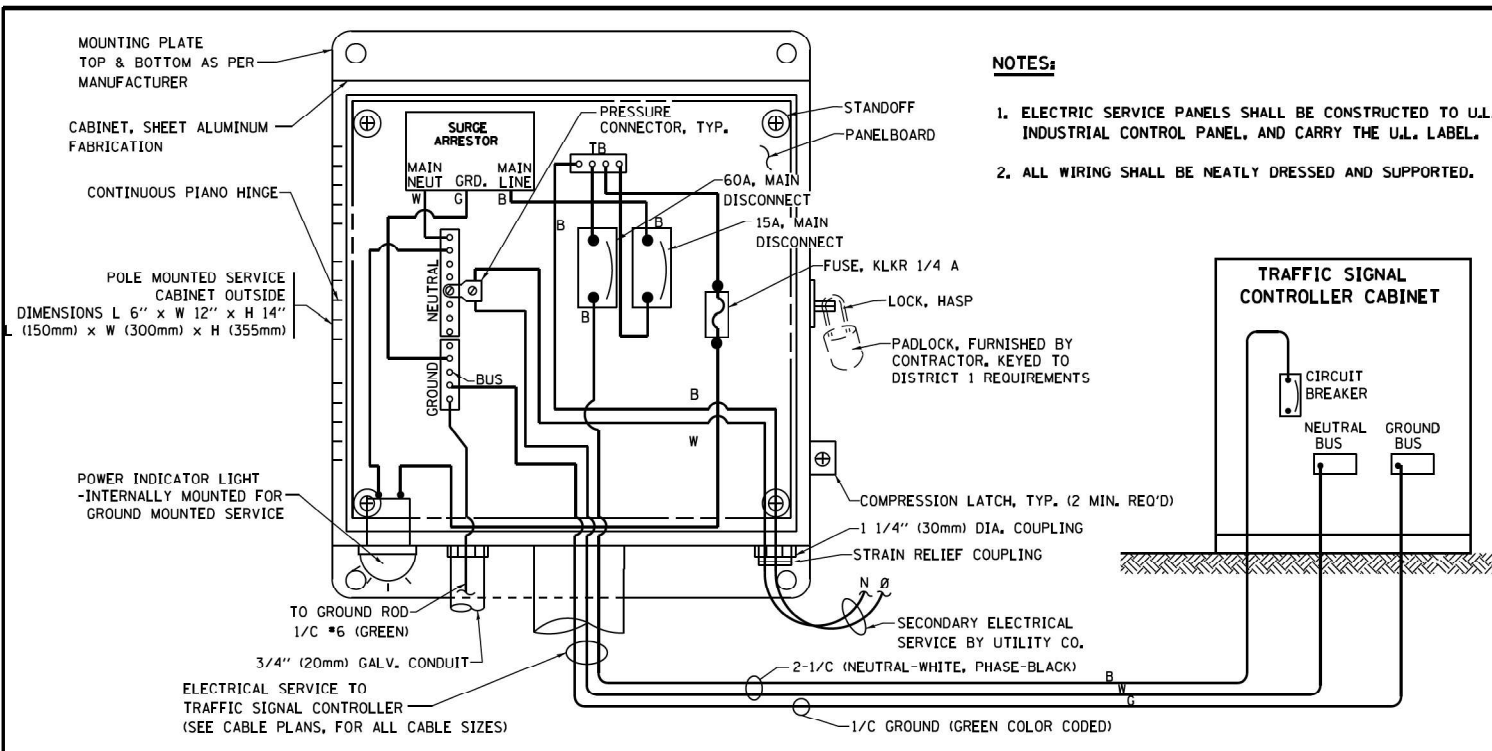
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

**NOTES:**

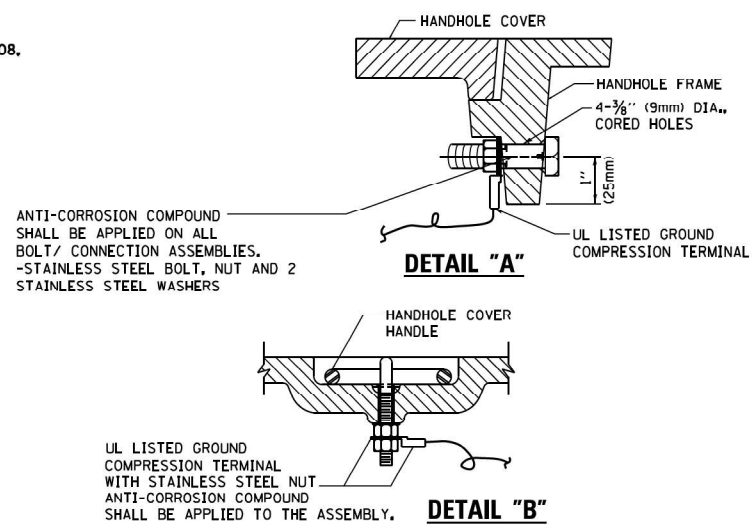
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

TS SHT NO. 3

FILE NAME = S:\WP\Design\Iover\SamplePlans\DNF\Files\TSE\example01-sht-ts.dgn	USER NAME = plascencia1	DESIGNED -	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.
PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -	348			2024-963-N	COOK	34	18	
Default	DATE -	REVISED -	<b>TS-05</b>			CONTRACT NO. 62W88		ILLINOIS   FED. AID PROJECT		
			SCALE: NONE			SHEET 3 OF 7 SHEETS	STA. TO STA.			

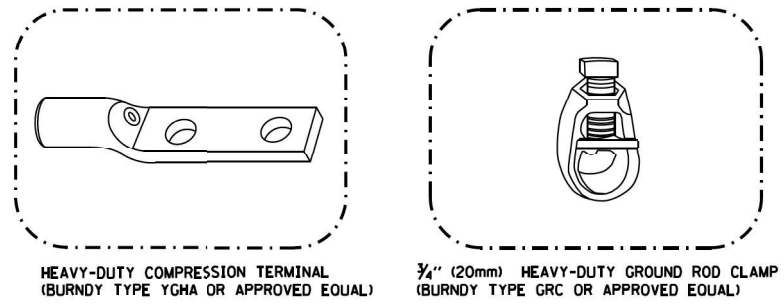
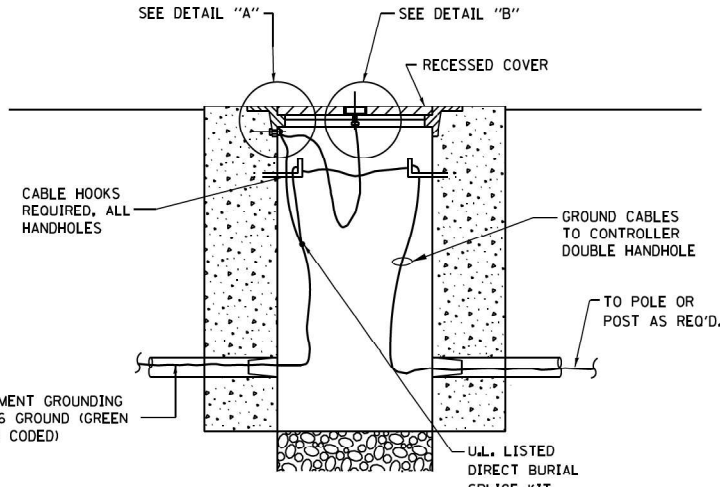


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)

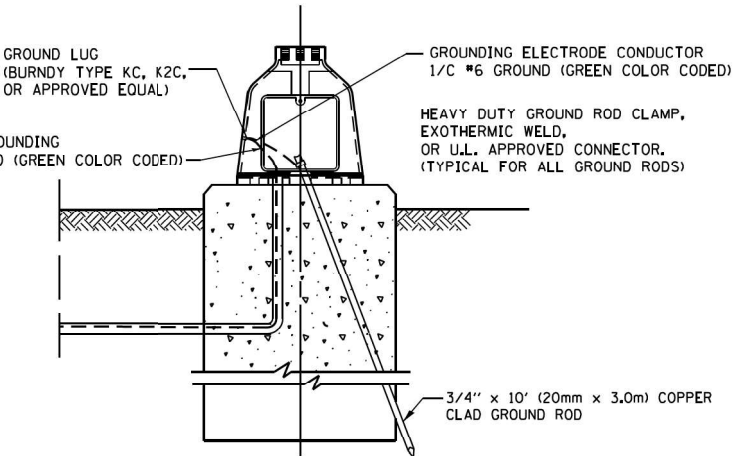
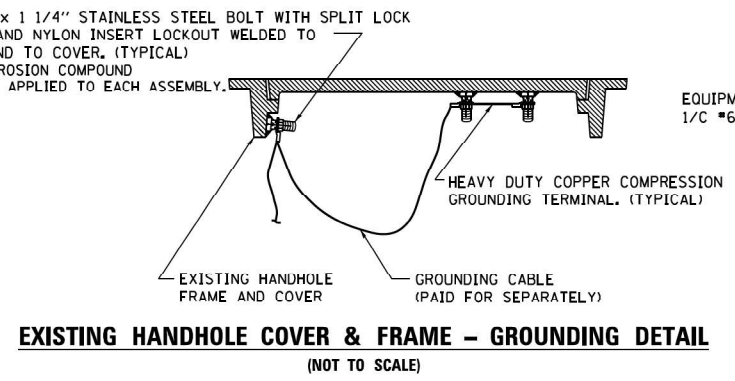
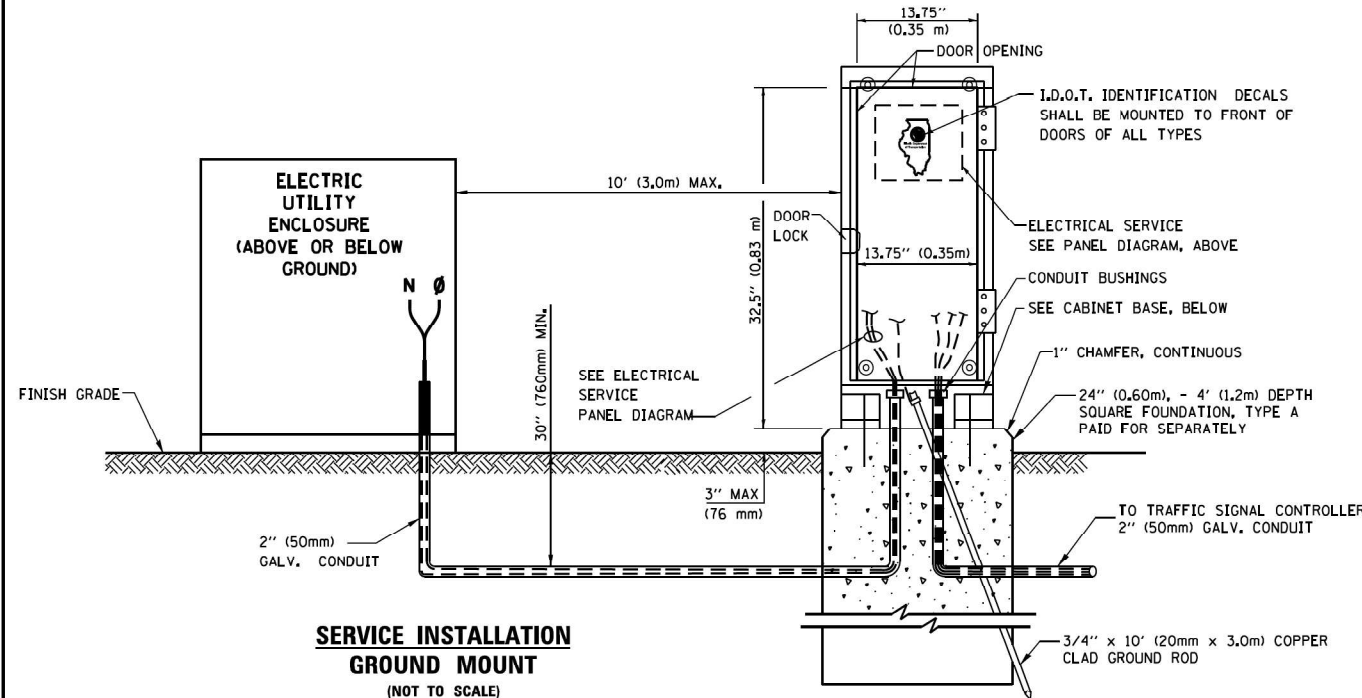


**NOTES:**  
**GROUNDING SYSTEM**

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

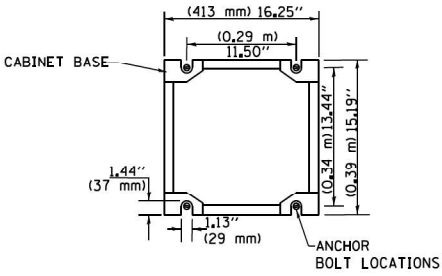


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
  - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



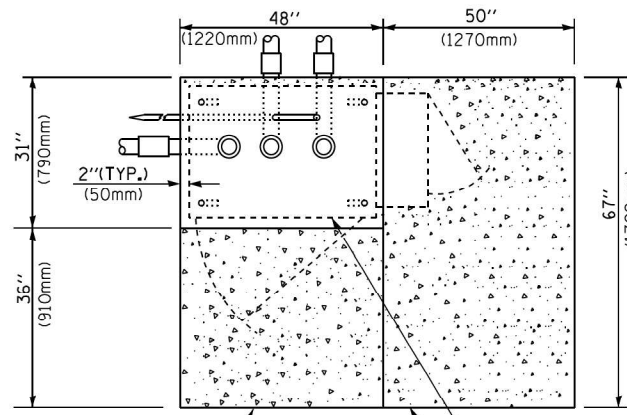
**SERVICE INSTALLATION GROUND MOUNT**  
 (NOT TO SCALE)

**CABINET - BASE BOLT PATTERN**  
 (NOT TO SCALE)



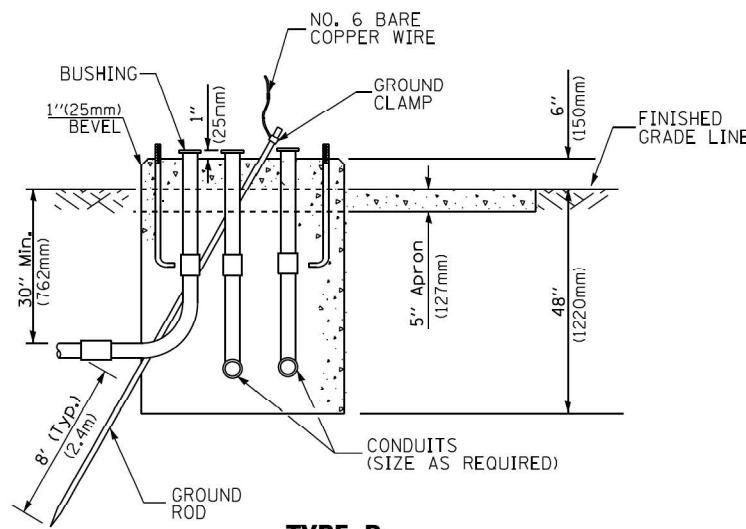
TS SHT NO. 4

FILE NAME =	USER NAME = plascencia	DESIGNED -	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.	
Default	TSExample01-sht-ts.dgn	DRAWN -	REVISED -			348	2024-963-N	COOK	34	19	
	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -			<b>TS-05</b>		CONTRACT NO. 62W88			
	PLOT DATE = 5/17/2016	DATE -	REVISED -			SCALE: NONE		SHEET 4 OF 7 SHEETS		STA. TO STA.	

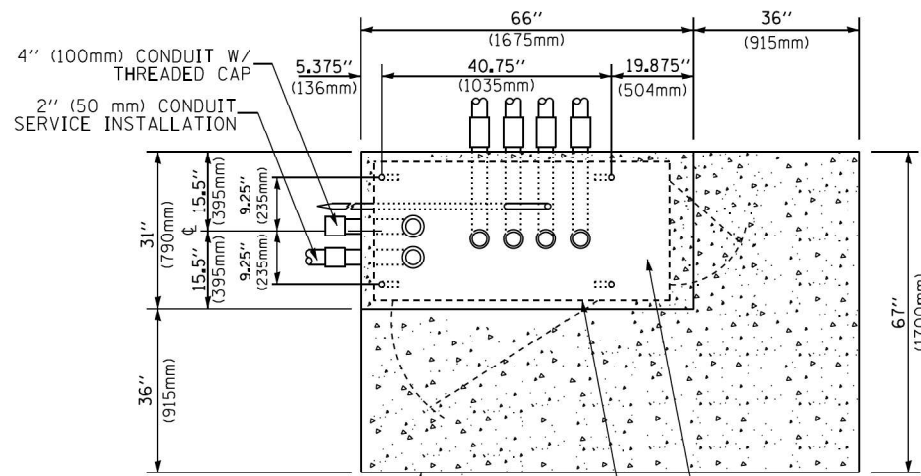


**TOP VIEW**

EXISTING APRON  
CONTROLLER CABINET BASE  
PROPOSED APRON



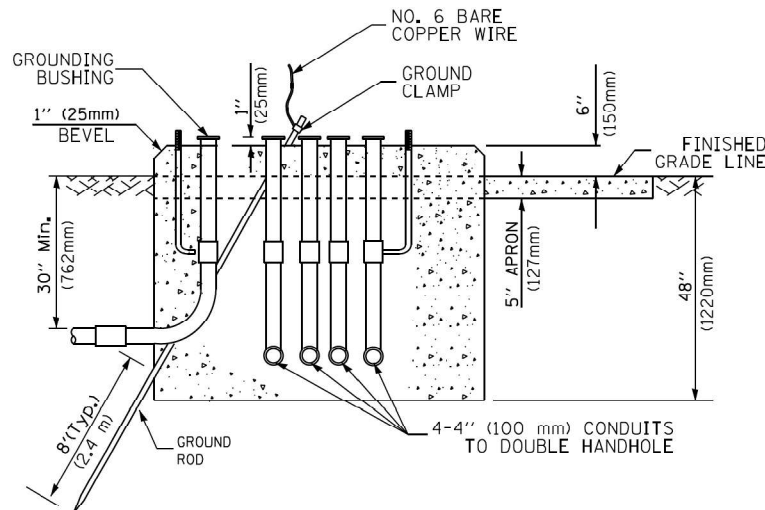
**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**



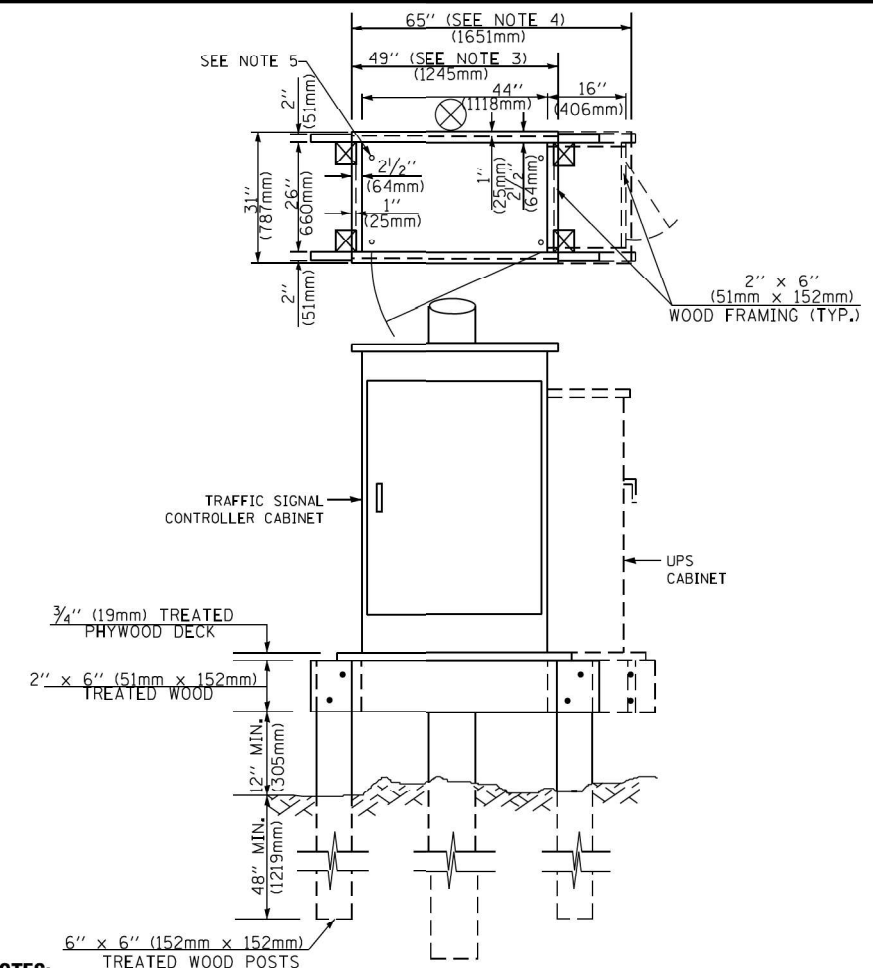
**TOP VIEW**

NOTE:  
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

APRON  
CONTROLLER CABINET BASE  
UPS BATTERY COMPARTMENT



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

- NOTES:**
- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
  - BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
  - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
  - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
  - DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
  - FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

**CABLE SLACK**

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

**VERTICAL CABLE LENGTH**

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

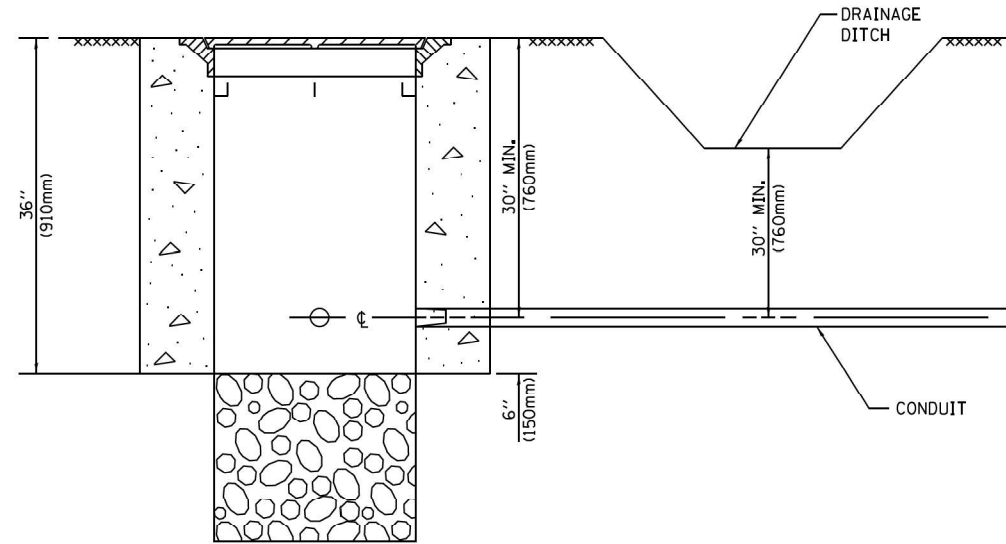
**DEPTH OF FOUNDATION**

MAST ARM LENGTH	FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

- NOTES:**
- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average unconfined compressive strength (qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
  - Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
  - Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
  - For mast arm assemblies with dual arms refer to state standard 878001..

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

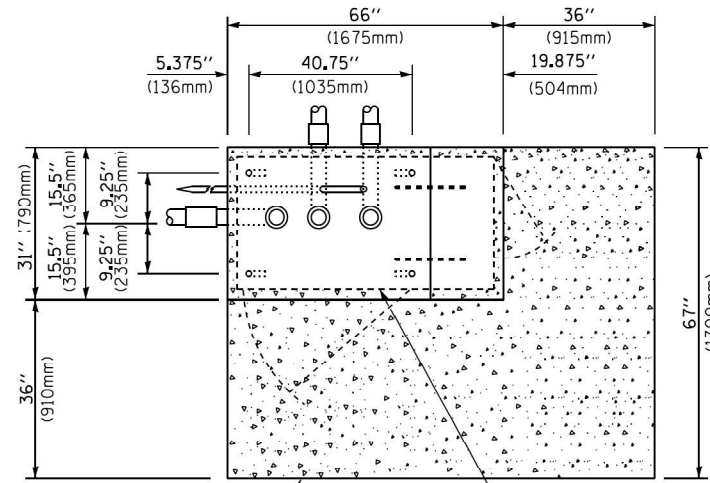
**TS SHT NO. 5**



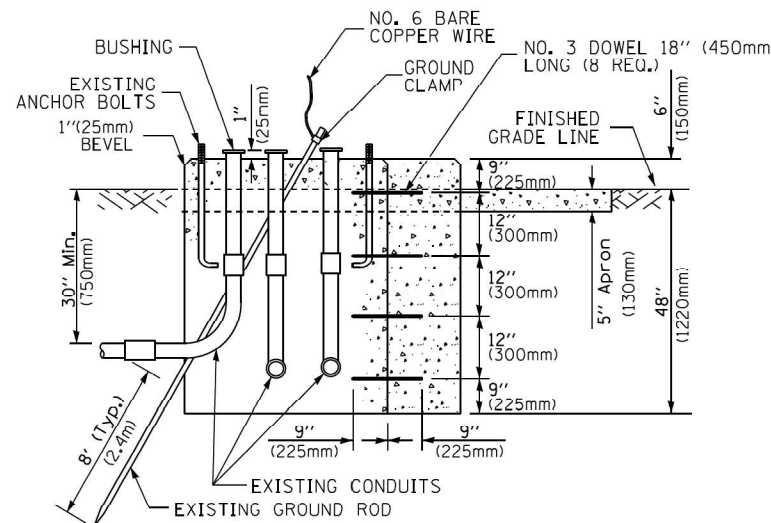
**NOTES:**

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



**TOP VIEW**  
(NOT TO SCALE)

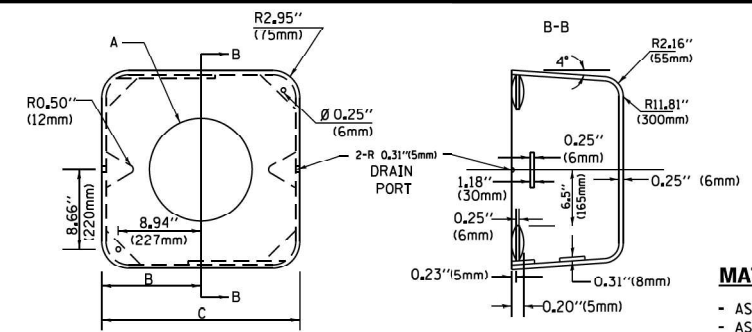


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

**NOTES:**

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**MATERIAL:**

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

	A	B	C	HEIGHT	WEIGHT
VARIES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)	
VARIES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)	
VARIES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)	
VARIES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)	

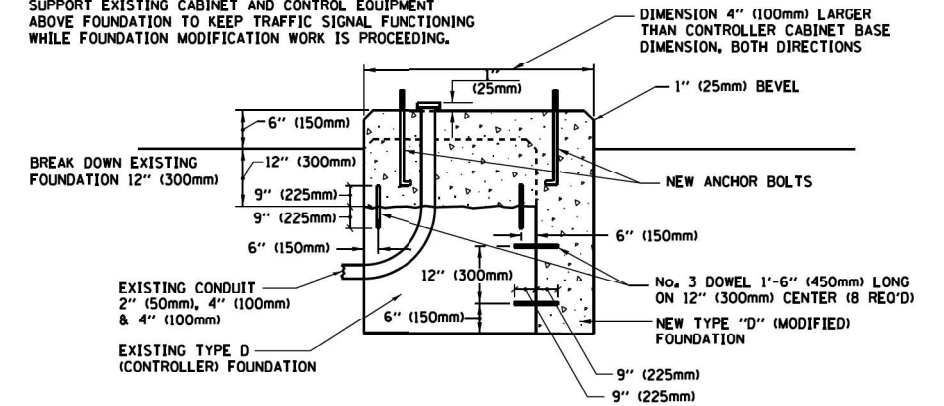
**SHROUD**

**NOTES:**

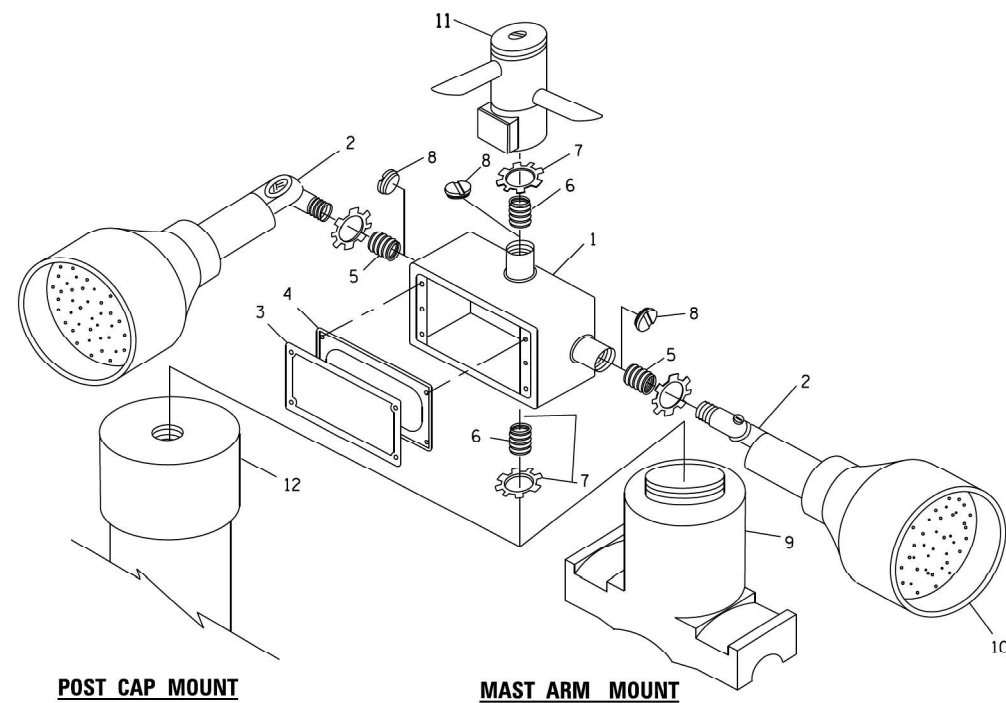
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



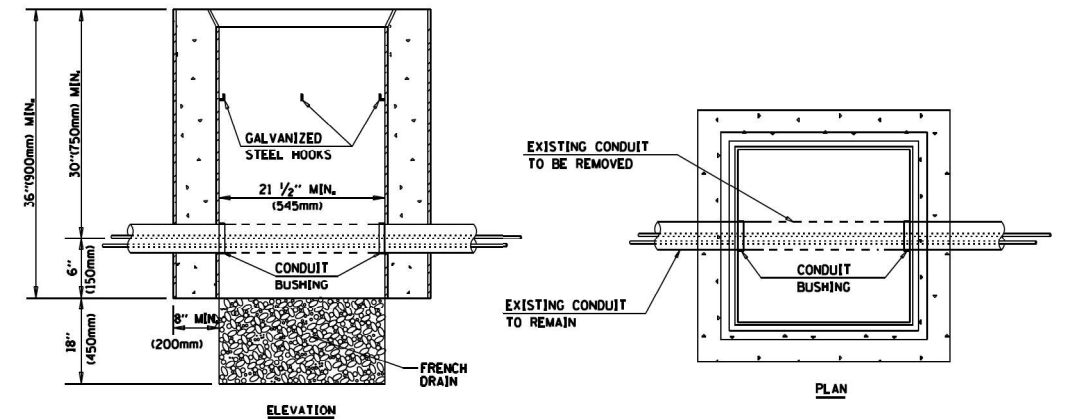
**MODIFY EXISTING TYPE "D" FOUNDATION**



**POST CAP MOUNT**

**MAST ARM MOUNT**

**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**

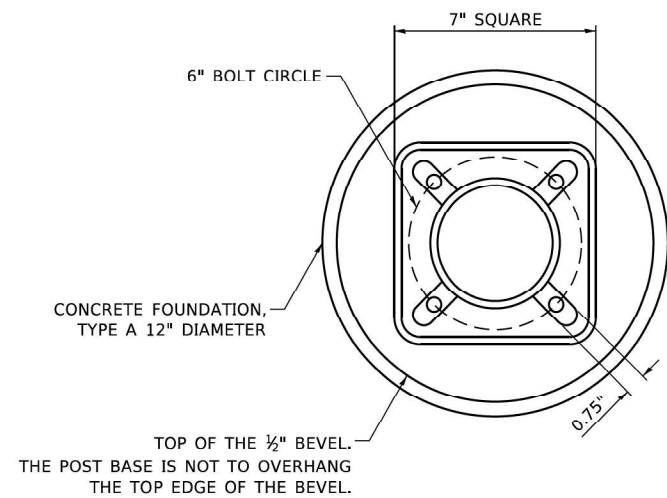


**NOTES:**

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

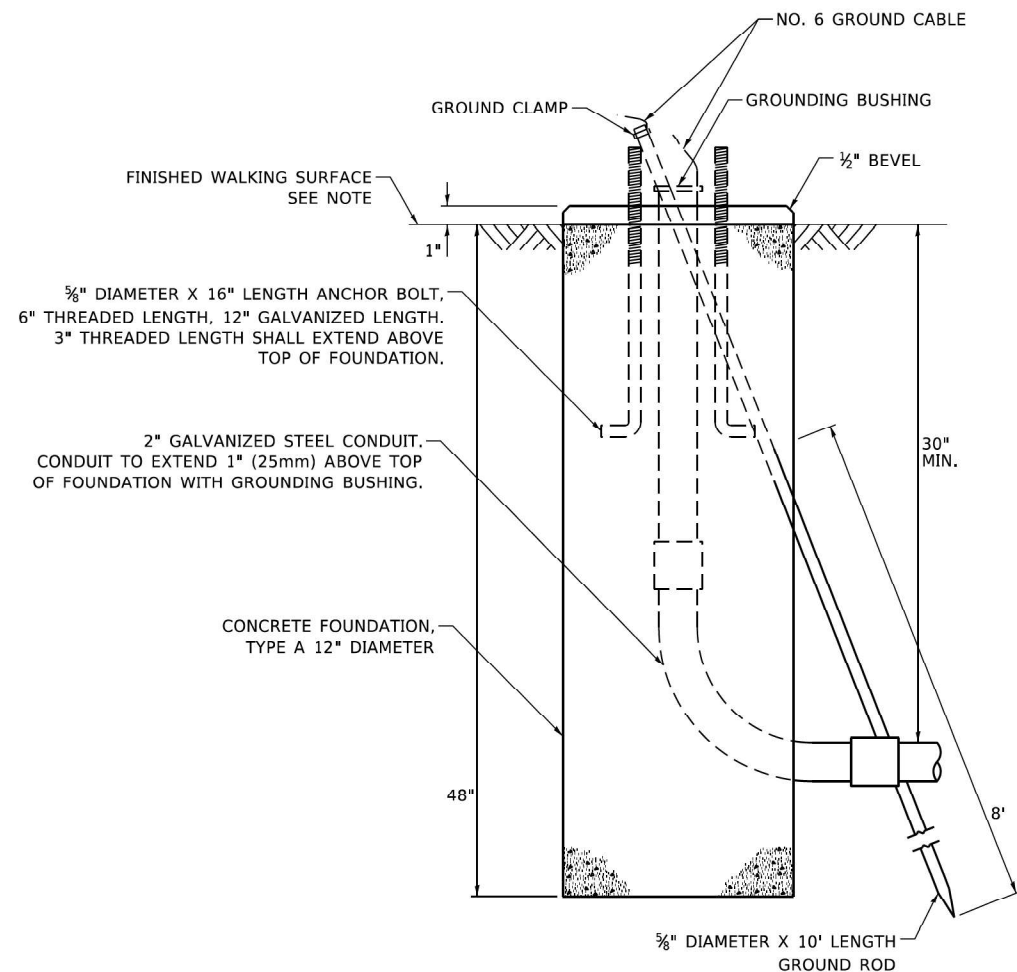
TS SHT NO. 6



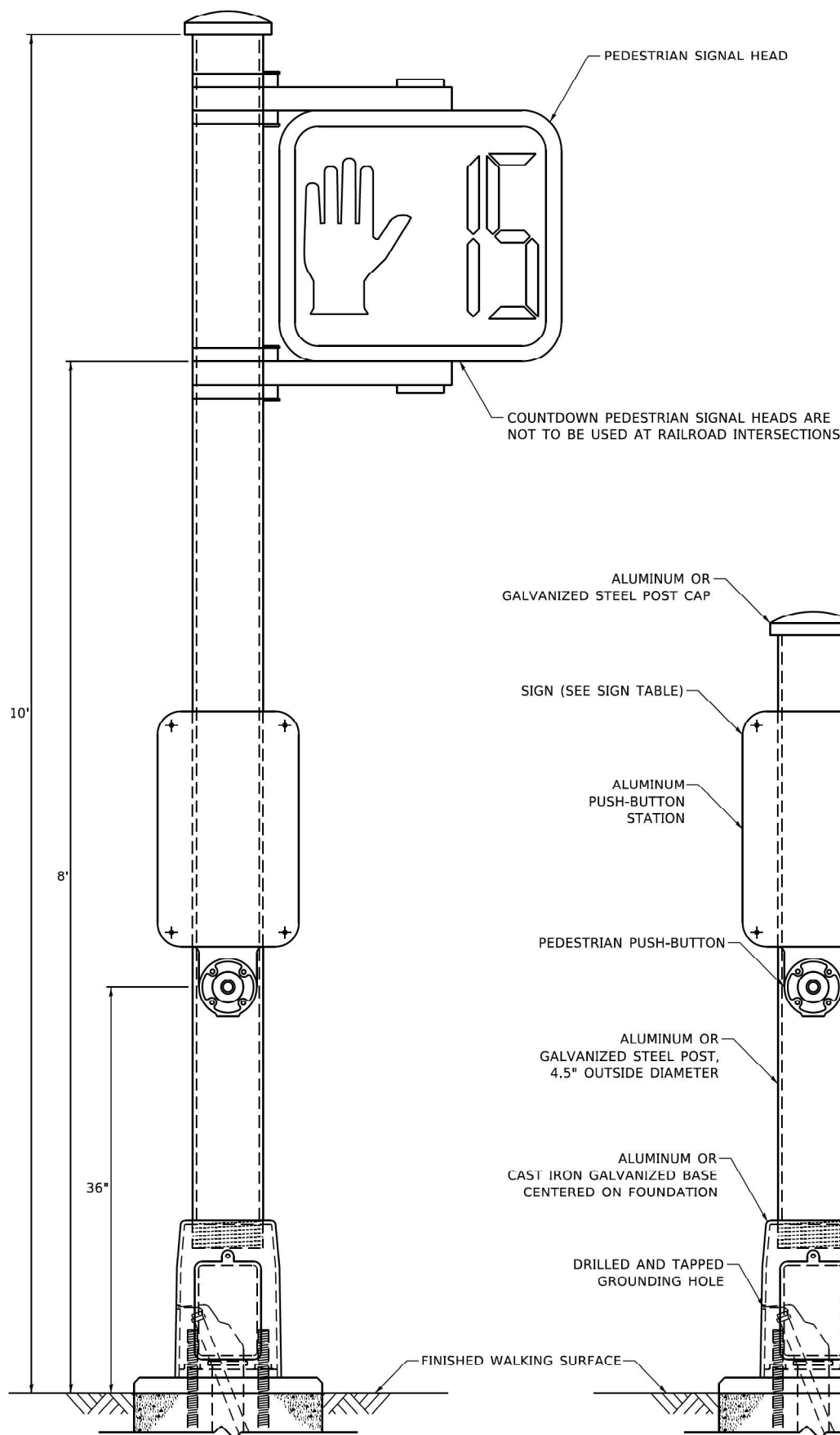
**BOLT PATTERN**

**NOTE:**

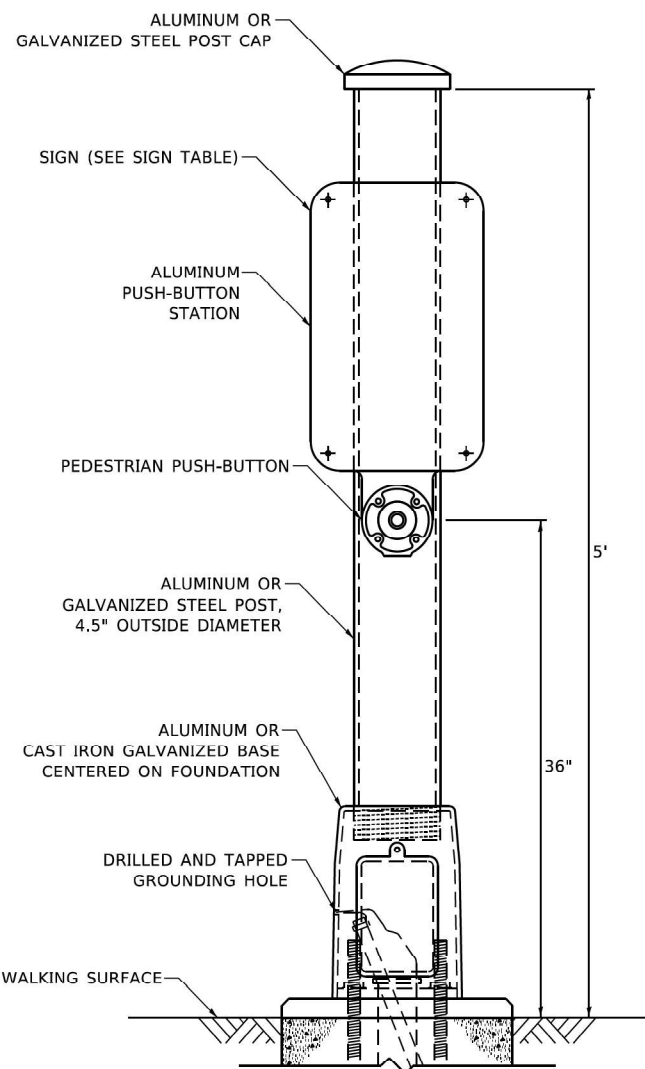
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



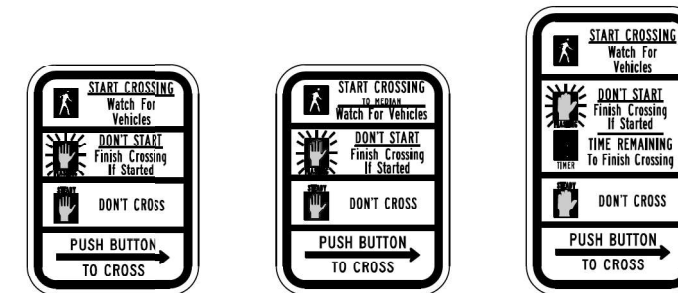
**CONCRETE FOUNDATION,  
TYPE A 12-INCH DIAMETER**



**PEDESTRIAN SIGNAL POST, 10 FT.**



**PEDESTRIAN SIGNAL POST, 5 FT.**



R10-3b

R10-3d

R10-3e

**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 15"

**NOTES:**

1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

MODEL: Default  
FILE NAME: SWIPDesign\bovan11\_01\chrt\PedestrianPost\PedestrianSignalPost\_Working\File-DC-NCT-USG.dgn

USER NAME = plascencal	DESIGNED - IP	REVISED - 10/15/2020
PLOT SCALE = 100.0000' / in.	DRAWN - IP	REVISED -
PLOT DATE = 11/17/2020	CHECKED - LP	REVISED -
	DATE - 10/15/2018	REVISED -

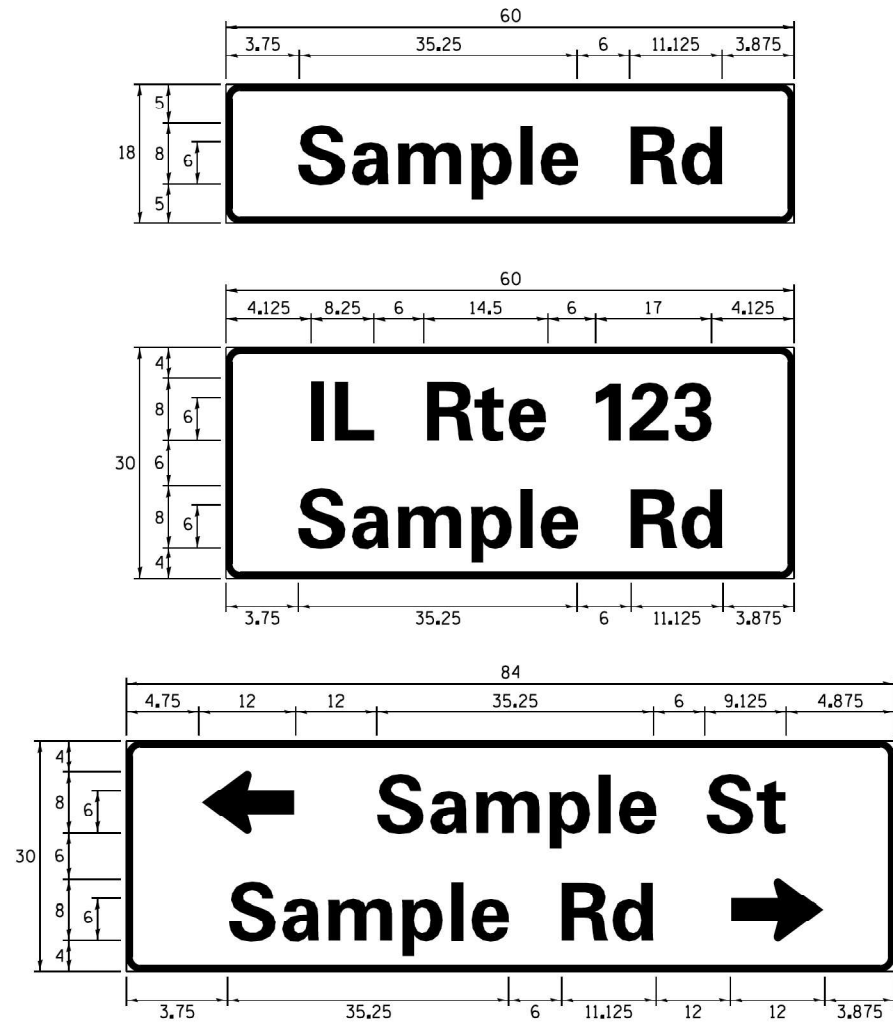
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NTS SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	22
<b>TS-05</b>		CONTRACT NO. 62W88		
ILLINOIS FED. AID PROJECT				

**SIGN PANEL – TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

**COMMON STREET NAME ABBREVIATIONS AND WIDTHS**

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

**GENERAL NOTES**

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

**LOCAL SUPPLIERS:**

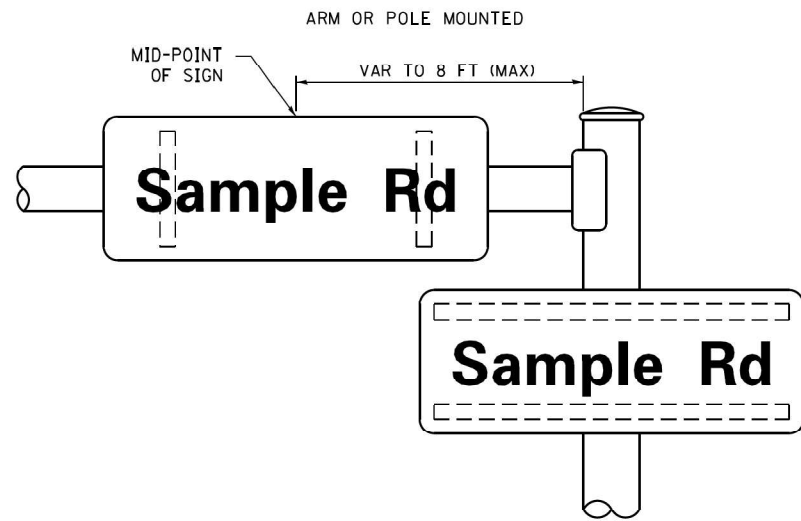
- J.O. HERBERT COMPANY, INC  
MIDLOTHIAN, VA  
  
- WESTERN REMAC, INC.  
WOODRIDGE, IL

**PARTS LISTING:**

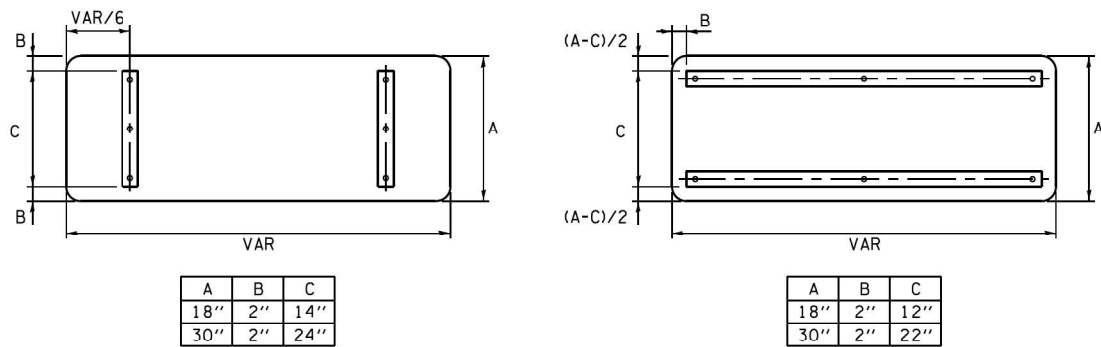
SIGN CHANNEL PART #HPN053 (MED. CHANNEL)  
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3  
SELF TAPPING WITH NEOPRENE WASHER  
PART #HPN034 (UNIVERSAL)  
BRACKETS CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

**MOUNTING LOCATION**



**SUPPORTING CHANNELS**



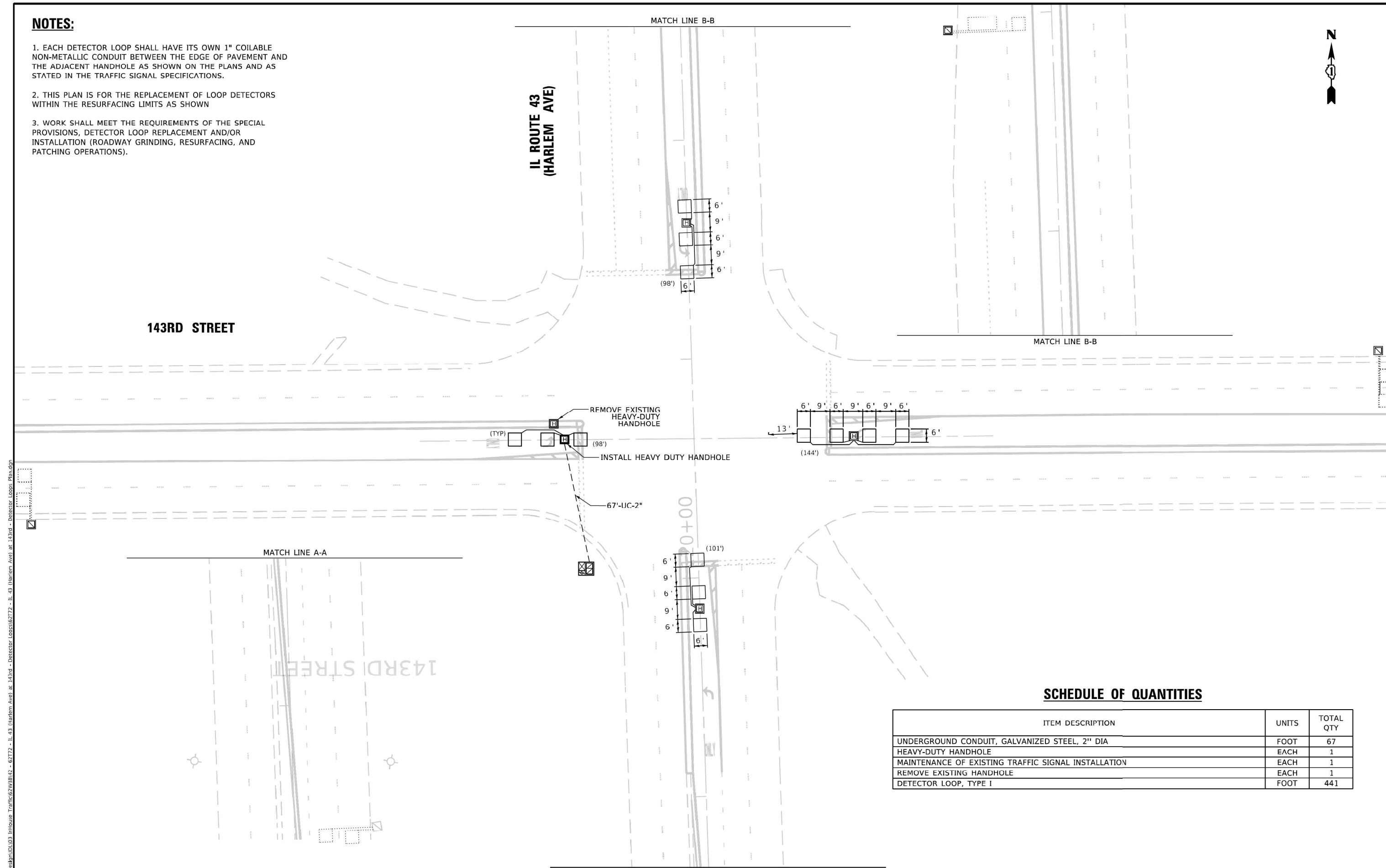
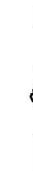
**STANDARD ALPHABETS SPACING CHART**  
(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"			FHWA SERIES "D"				
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.032	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.032	0.240	L	0.960	4.962	0.240
M	0.880	5.234	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.032	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.034	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.032	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.032	0.720	d	0.480	4.802	0.800
e	0.480	4.032	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.032	0.720	g	0.480	4.802	0.800
h	0.720	4.032	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.032	0.640	n	0.800	4.722	0.720
o	0.480	4.032	0.480	o	0.480	4.882	0.480
p	0.720	4.032	0.480	p	0.800	4.802	0.480
q	0.480	4.032	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.032	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

TS SHT NO. 8

**NOTES:**

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
2. THIS PLAN IS FOR THE REPLACEMENT OF LOOP DETECTORS WITHIN THE RESURFACING LIMITS AS SHOWN
3. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS, DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, AND PATCHING OPERATIONS).



**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA	FOOT	67
HEAVY-DUTY HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
DETECTOR LOOP, TYPE I	FOOT	441

MODEL: Default  
 FILE NAME: SWPDesign\DL103\_Initials\_Traffic\248843 - 62772 - IL 43 (Harlem Ave) at 143rd - Detector Loops Plan.dgn  
 MODEL: Default  
 FILE NAME: SWPDesign\DL103\_Initials\_Traffic\248843 - 62772 - IL 43 (Harlem Ave) at 143rd - Detector Loops Plan.dgn

USER NAME	DESIGNED	REVISED
Jakob.Larson	JR	J.LARSON 6/3/2024
DRAWN	REVISED	
JR		
PLOT SCALE	CHECKED	REVISED
40.0000' / in.		
PLOT DATE	DATE	REVISED
6/3/2024	12/29/2023	

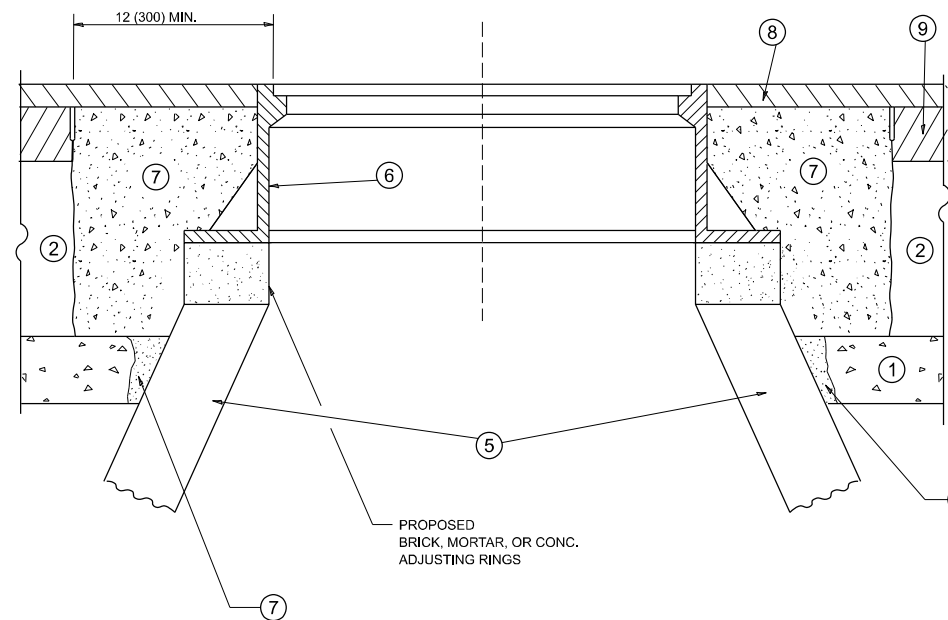
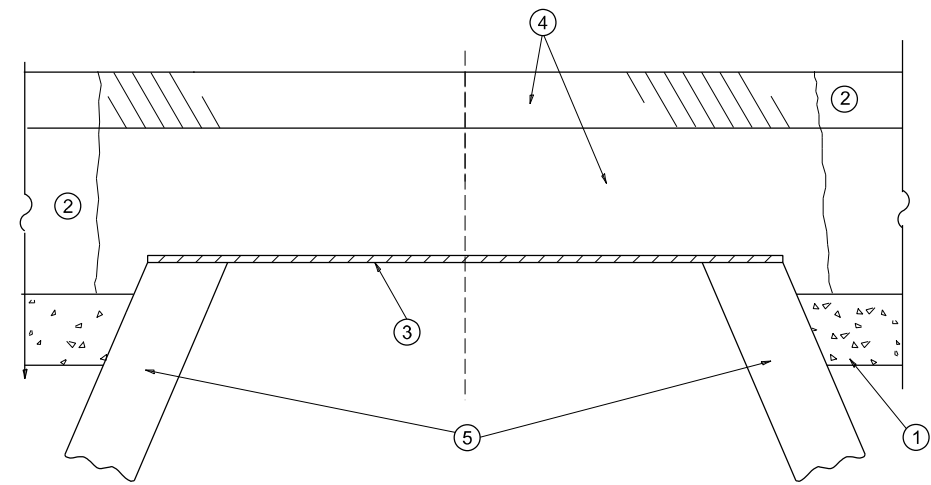
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETECTOR LOOP REPLACEMENT PLAN  
IL ROUTE 43 (HARLEM AVE) AND 143RD ST**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	24
CONTRACT NO. 62W88				
ILLINOIS FED. AID PROJECT				





**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

**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 HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

**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-2\* 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-2\* 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**

- 1. 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)."
- 2. THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
- 3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
- 4. 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.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

**NOTES**

- 1. 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.
- 2. 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.
- 3. CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
- 4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
- 5. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

USER NAME = ivan.diaz	DESIGNED - R. SHAH	REVISED - R. BORO 03-09-11
PLOT SCALE = 0.16666833' / in.	DRAWN -	REVISED - R. BORO 12-06-11
PLOT DATE = 6/27/2024	CHECKED -	REVISED - K. SMITH 11-18-22
	DATE - 10-25-94	REVISED - K. SMITH 09-15-23

F.A.P. RTE. 348	SECTION 2024-963-N	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 25
<b>BD600-03 (BD-08)</b>		CONTRACT NO. 62W88		
ILLINOIS FED. AID PROJECT				

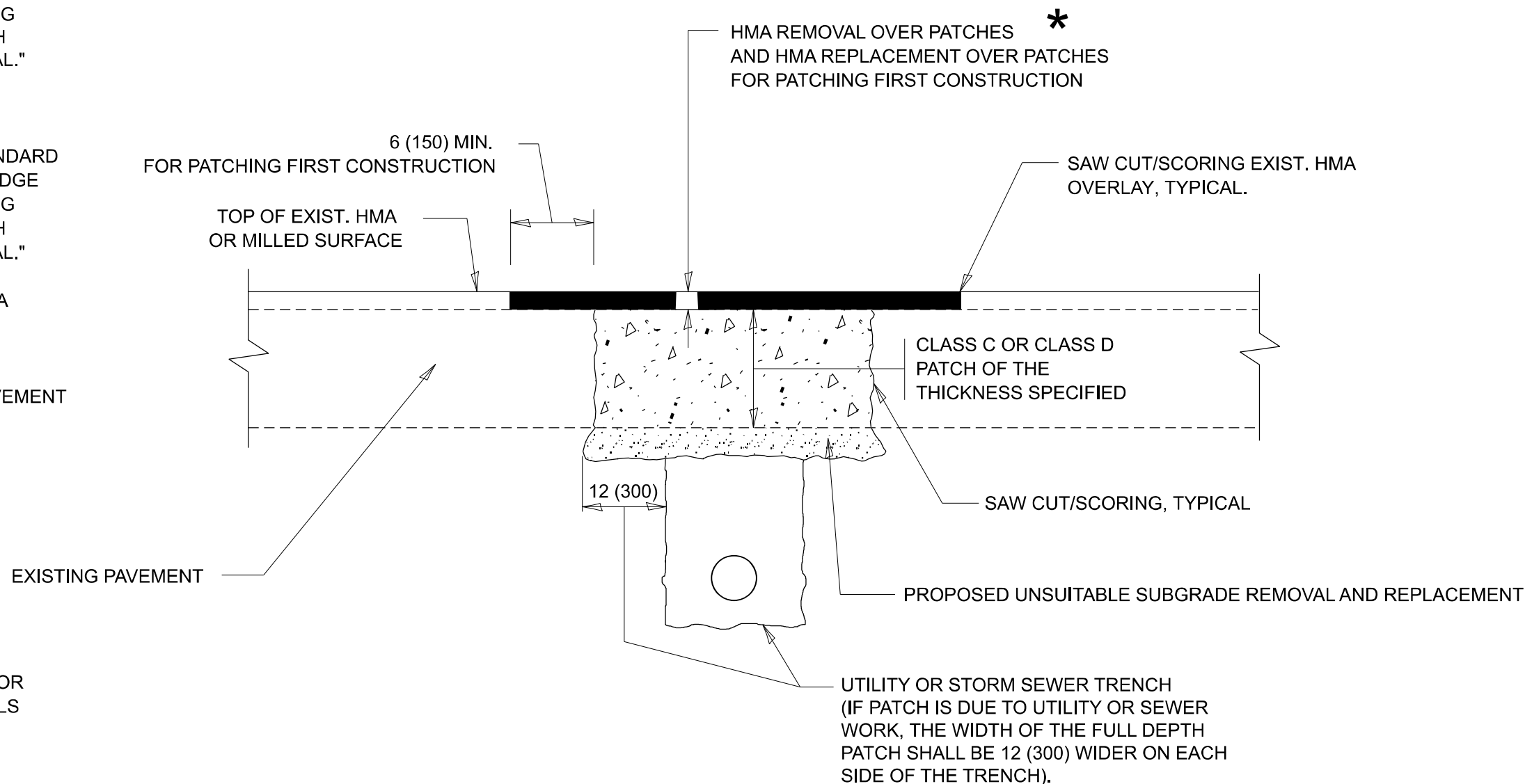
MODEL: BD-08 (Sheet)  
FILE NAME: c:\pav\_work\wv\wv\bd600-03\bd600-03-08-01.dwg

**METHOD OF MEASUREMENT**

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

**BASIS OF PAYMENT**

1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
2. SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**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.

MODEL: BD-22 (Sheet)  
FILE NAME: c:\pav\_work\pav\bd22\bd22\119424-shr-Dhs\Sides.dgn

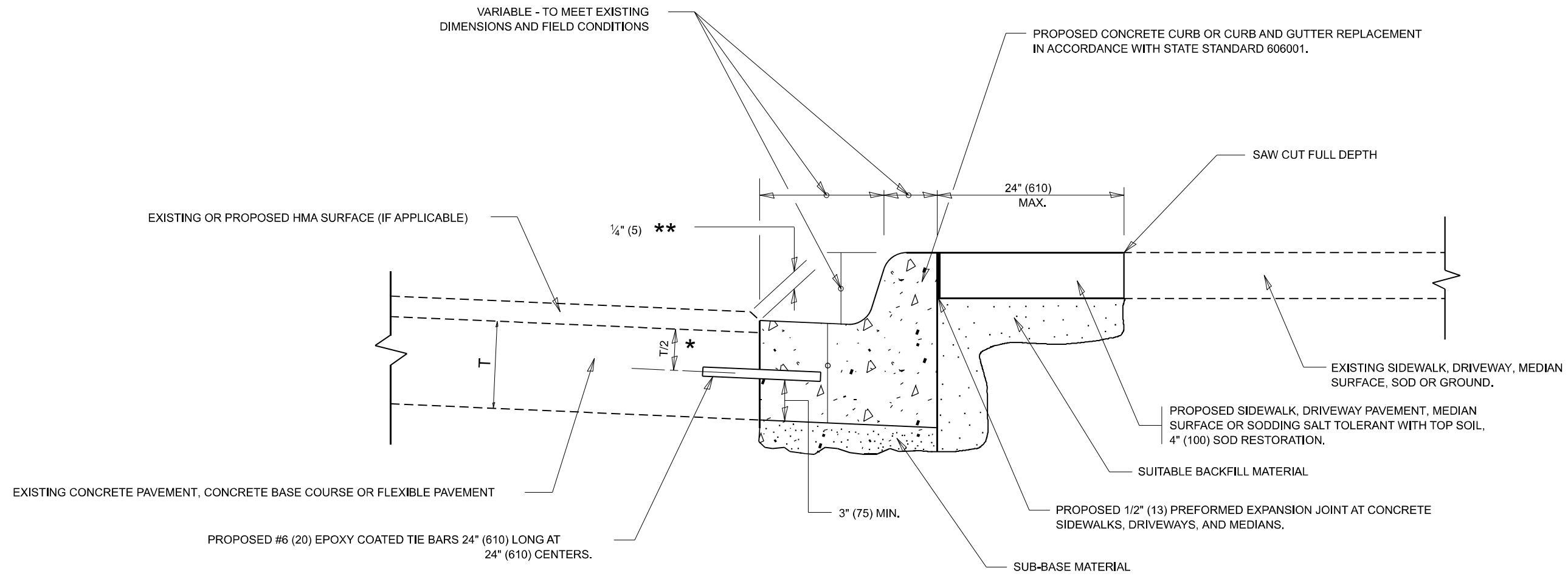
USER NAME = ivan.diaz	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07
PLOT SCALE = 0.16666633' / in.	DRAWN -	REVISED - R. BORO 09-04-07
PLOT DATE = 6/27/2024	CHECKED -	REVISED - K. ENG 10-27-08
	DATE - 10-25-94	REVISED - K. SMITH 11-18-22

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	26
BD400-04 (BD-22)			CONTRACT NO. 62W88	
ILLINOIS FED. AID PROJECT				



- \* 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.

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

MODEL: BD-24 (Sheet)  
FILE NAME: c:\pwworking\ivandiaz\0983576\119424-shr-Dwg-Side.dgn

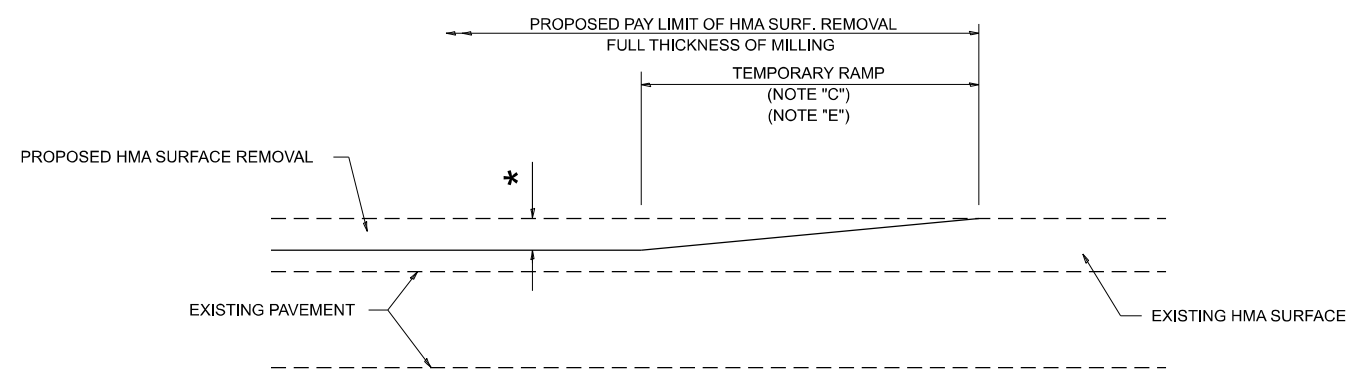
USER NAME = ivan.diaz	DESIGNED - A. HOUSEH	REVISED - A. ABBAS 03-21-97
	DRAWN -	REVISED - M. GOMEZ 01-22-01
PLOT SCALE = 0.16666633' / in.	CHECKED -	REVISED - R. BORO 12-15-09
PLOT DATE = 6/27/2024	DATE - 03-11-94	REVISED - K. SMITH 07-11-19

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CURB OR CURB AND GUTTER  
REMOVAL AND REPLACEMENT**

SCALE: NONE    SHEET 1 OF 1 SHEETS    STA.    TO STA.

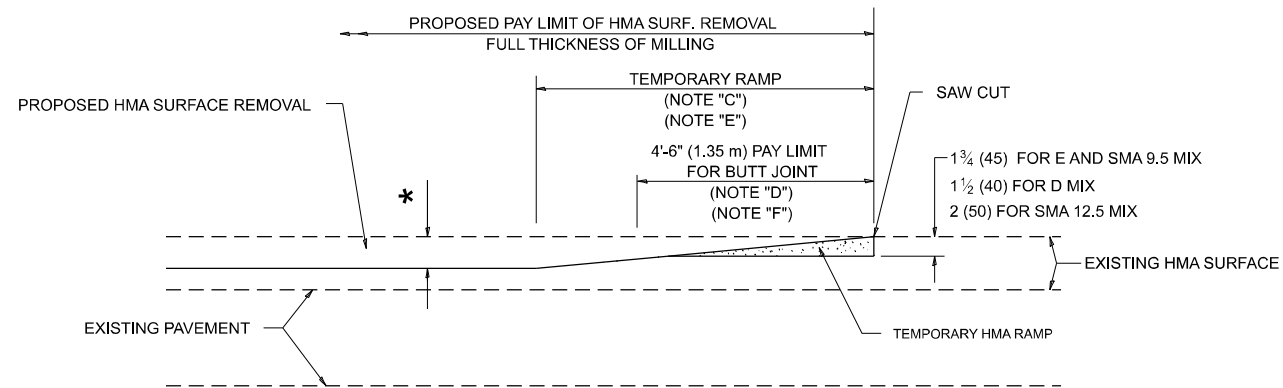
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	27
<b>BD600-06 (BD-24)</b>		CONTRACT NO. 62W88		
ILLINOIS FED. AID PROJECT				



**MILLED TEMPORARY RAMP**

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 1**

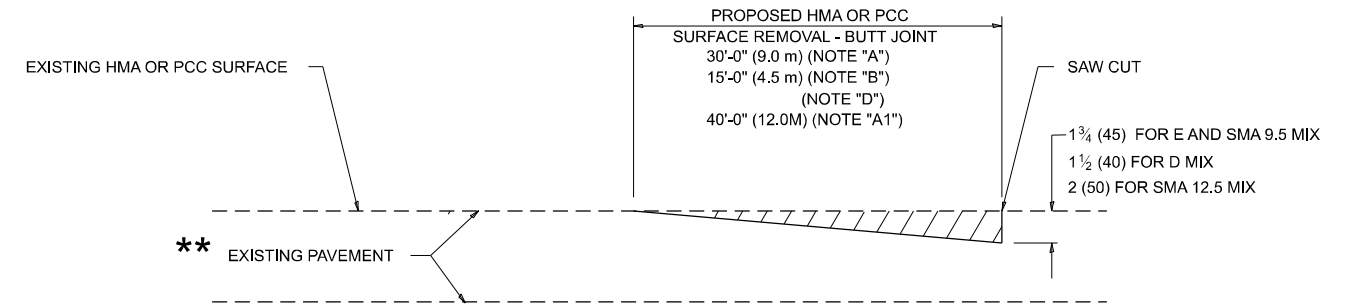


**HMA CONSTRUCTED TEMPORARY RAMP**

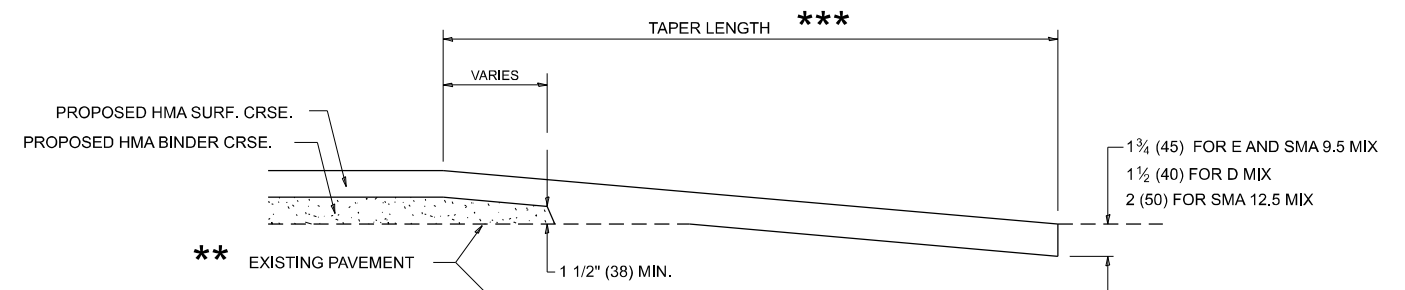
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

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

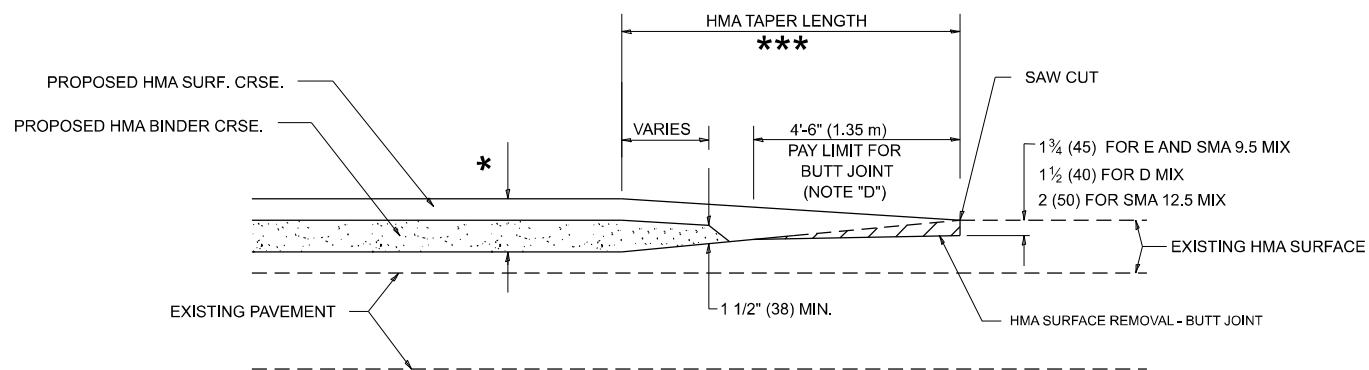
\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

**GENERAL NOTES**

- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- 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' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.  
\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".  
\*\*\* 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**

- 1. 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".
- 2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.



**BUTT JOINT AND HMA TAPER**

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

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

MODEL: BD-32 (Sheet)  
FILE NAME: c:\paw\work\paw\101\119424\4-shr-Dtbl\Std.s.dgn

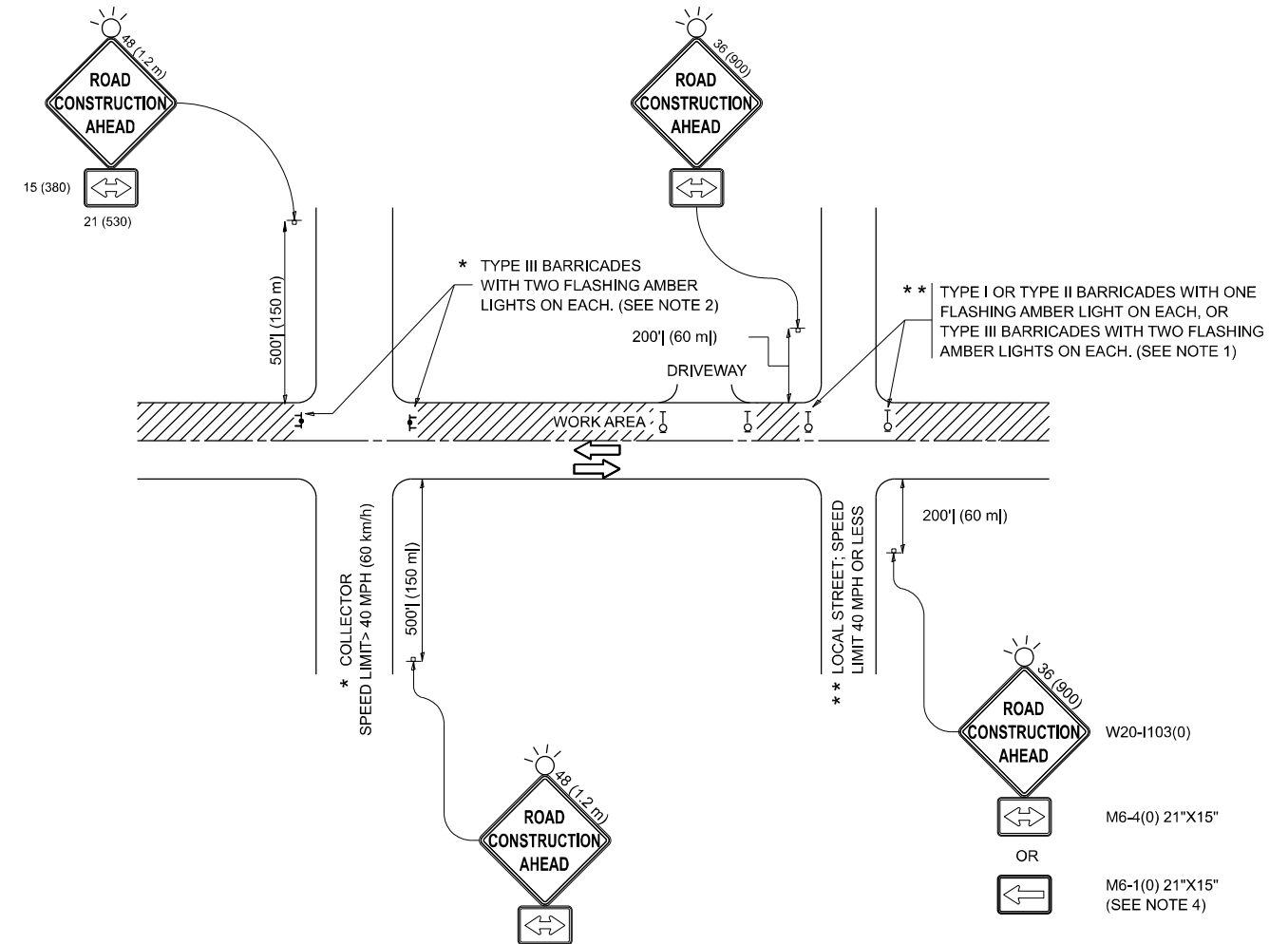
USER NAME = ivan.diaz	DESIGNED - M. DE YONG	REVISED - A. ABBAS 03-21-97
PLOT SCALE = 0.16666633' / in.	DRAWN -	REVISED - M. GOMEZ 04-06-01
PLOT DATE = 6/27/2024	CHECKED -	REVISED - R. BORO 01-01-07
	DATE - 06-13-90	REVISED - K. SMITH 11-18-22

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	28
<b>BD400-05 BD-32</b>			CONTRACT NO. 62W88	
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.

MODEL: TC-10 (Sheet)  
FILE NAME: c:\p\work\pww\ltd\ltdia\0983576\ID119424-shr-Dhs\Sides.dgn

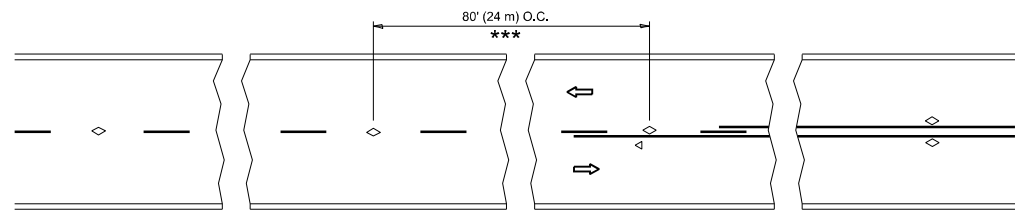
USER NAME = ivan.diaz	DESIGNED - L.H.A.	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 0.16666833" / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
PLOT DATE = 6/27/2024	DATE - 06-89	REVISED - A. SCHUETZE 09-15-06
		REVISED - D. SENDERAK 05-03-24

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

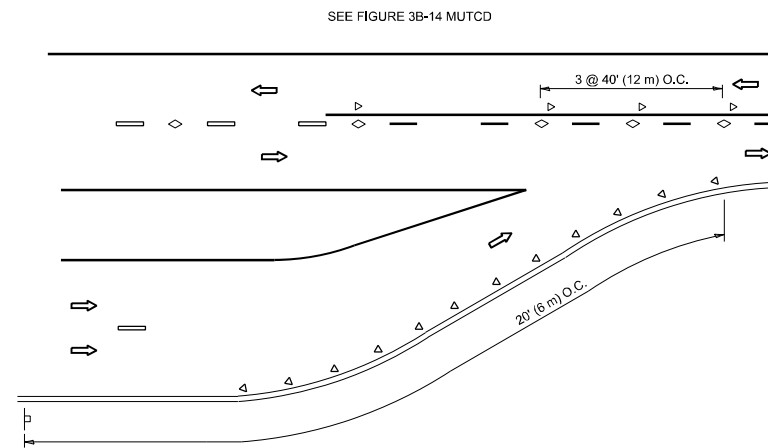
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	29
<b>TC-10</b>			CONTRACT NO. 62W88	
ILLINOIS FED. AID PROJECT				

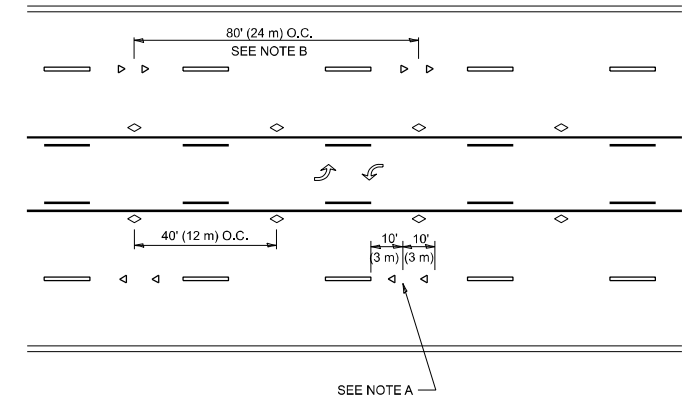


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

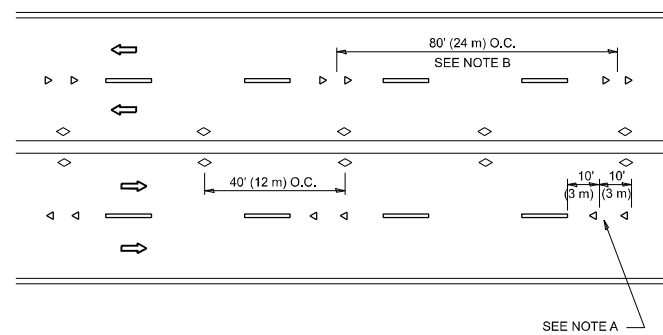
### TWO-LANE/TWO-WAY



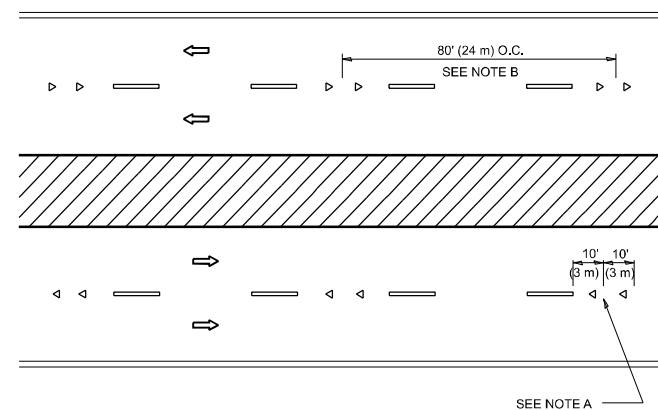
### LANE REDUCTION TRANSITION



### TWO-WAY LEFT TURN



### MULTI-LANE/UNDIVIDED



### MULTI-LANE/DIVIDED

### GENERAL NOTES

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

### SYMBOLS

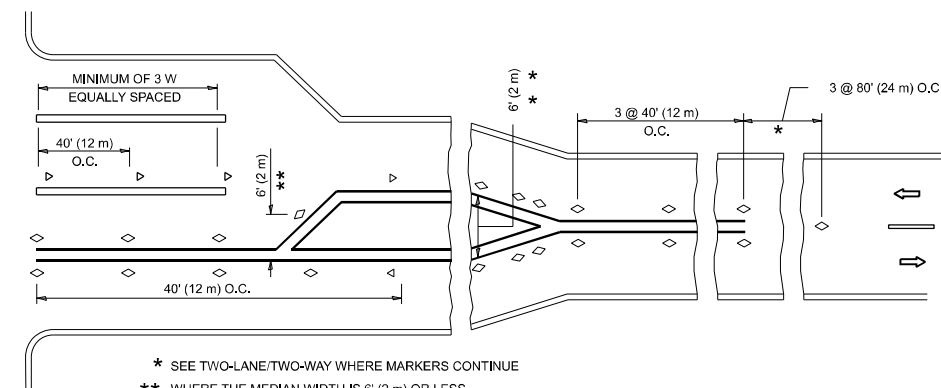
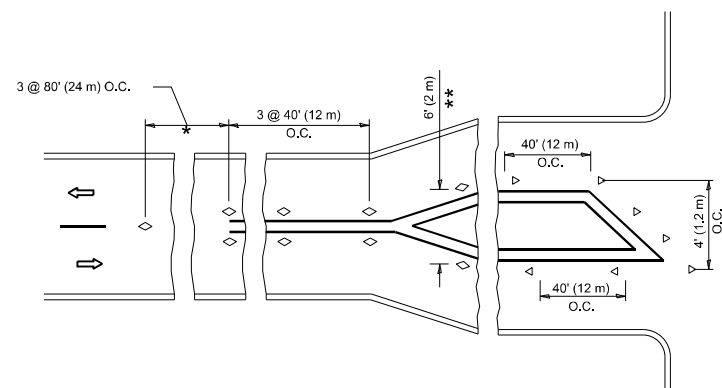
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◇ TWO-WAY AMBER MARKER

### LANE MARKER NOTES

- USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- 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

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



### TURN LANES

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

MODEL: TC-11 (Sheet)  
 FILE NAME: c:\p\work\pav\mtd\ia\0983576\ID119424-shr-Dhs\Stds.dgn

USER NAME = ivan.diaz	DESIGNED -	REVISED - T. RAMMACHER 03-12-99
PLOT SCALE = 0.16666833 / in.	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT DATE = 6/27/2024	CHECKED -	REVISED - C. JUCIUS 09-09-09
	DATE -	REVISED - C. JUCIUS 07-01-13

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

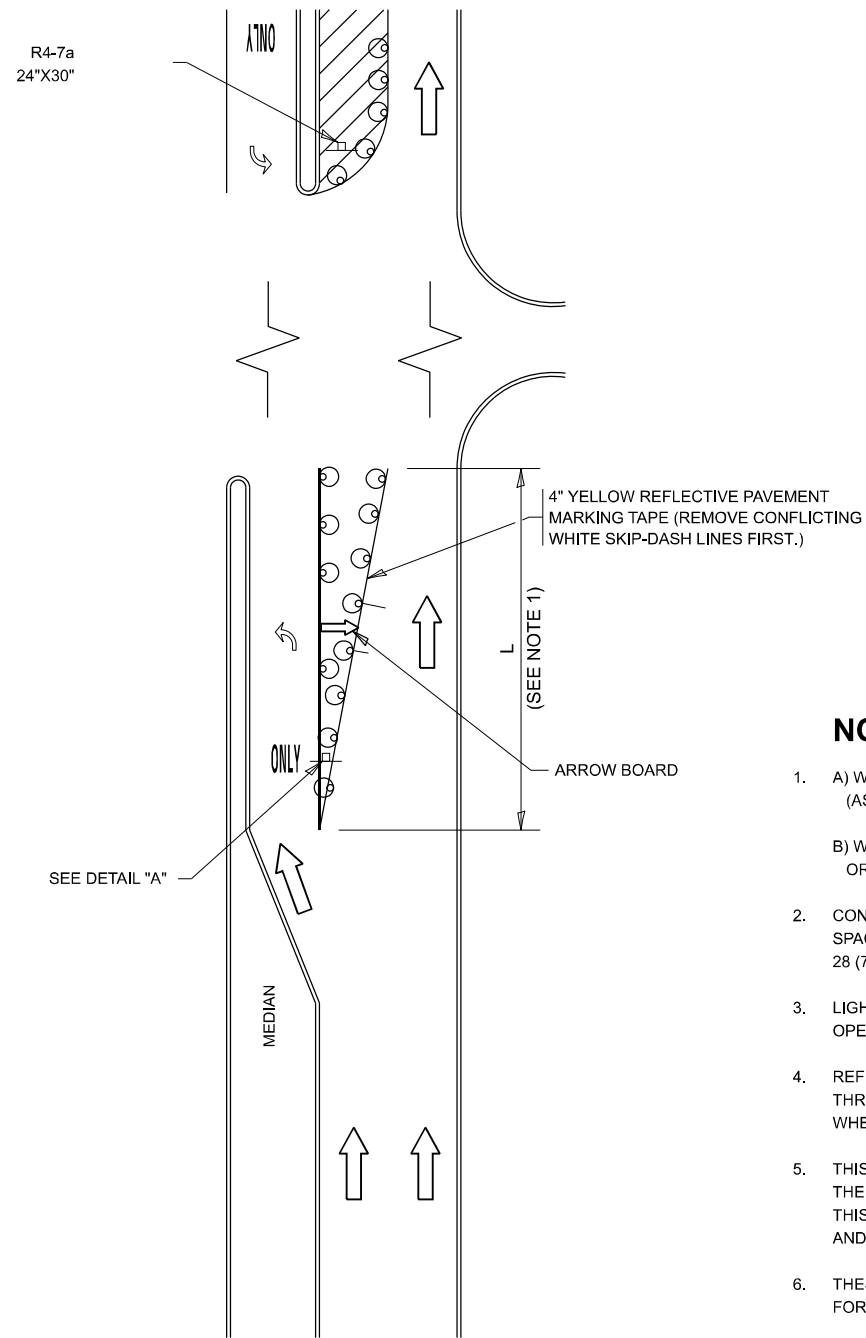
TYPICAL APPLICATIONS  
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	30
TC-11			CONTRACT NO. 62W88	
ILLINOIS FED. AID PROJECT				

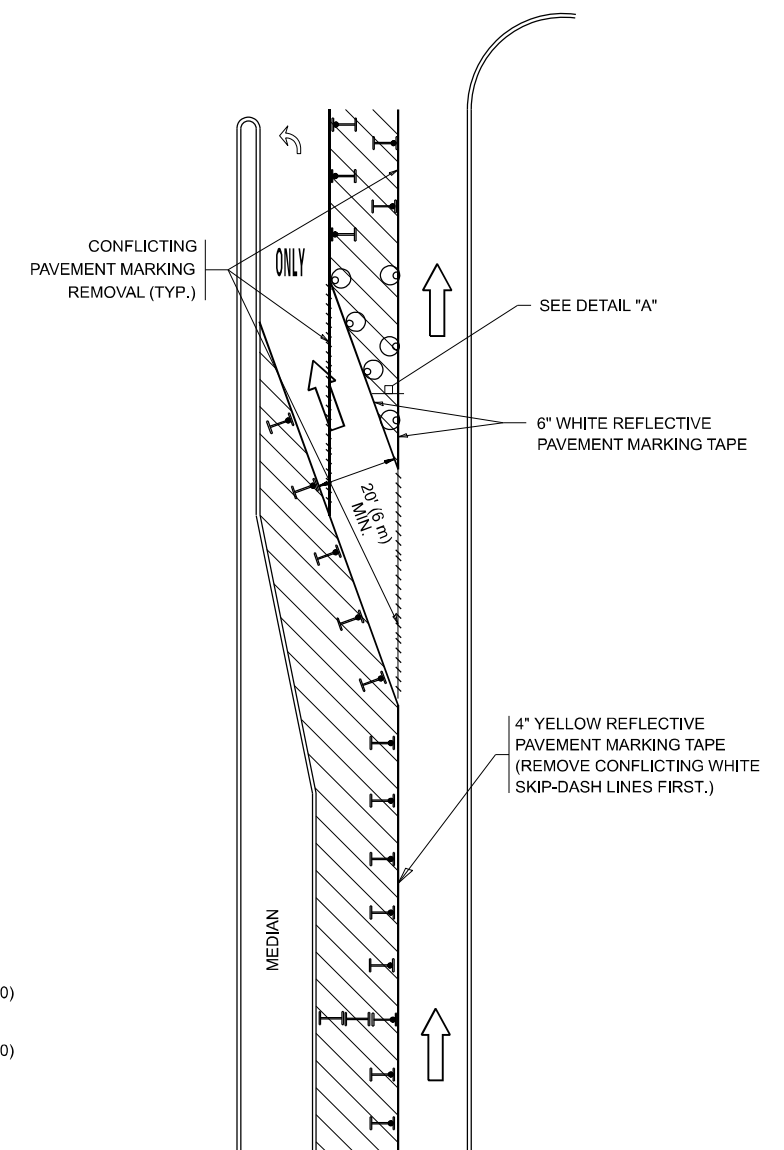


# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



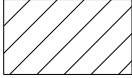






**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE



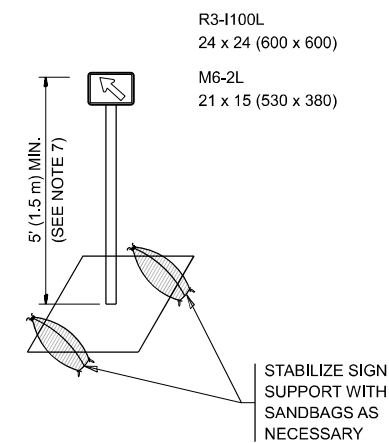
**FIGURE 2**

### LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  ARROW BOARD
-  TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  SIGN ASSEMBLY
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

### NOTES:

1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. 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.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. 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" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



**DETAIL A**

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

MODEL: TC-14 (Sheet)  
FILE NAME: c:\p\work\pww\tdiazia\09083576\ID119424-shr-DibSids.dgn

USER NAME = ivan.diaz	DESIGNED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
DRAWN - A. HOUSEH 11-07-95	REVISOR - A. SCHUETZE 07-01-13	
PLOT SCALE = 0.16666633' / in.	CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16
PLOT DATE = 6/27/2024	DATE - T. RAMMACHER 01-06-00	REVISED -

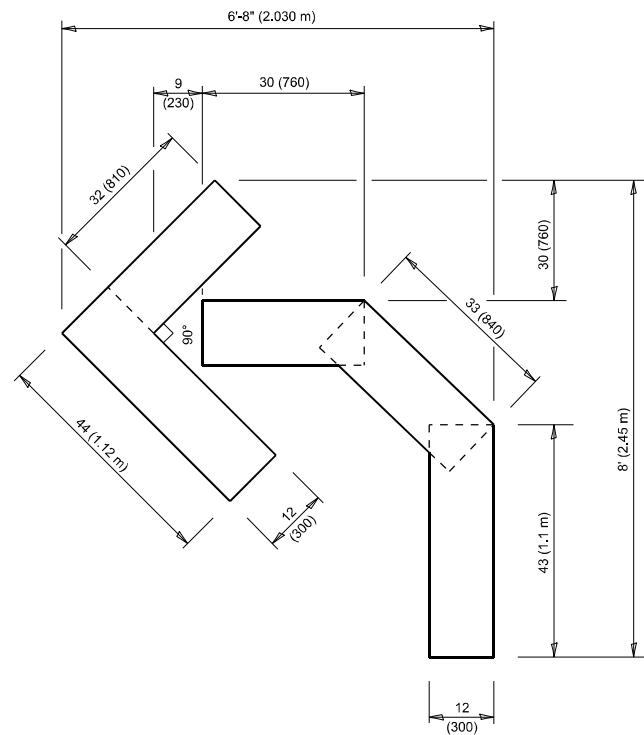
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

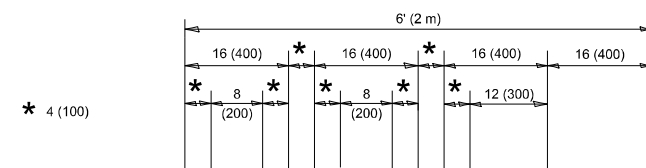
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	32
<b>TC-14</b>		CONTRACT NO. 62W88		
ILLINOIS FED. AID PROJECT				





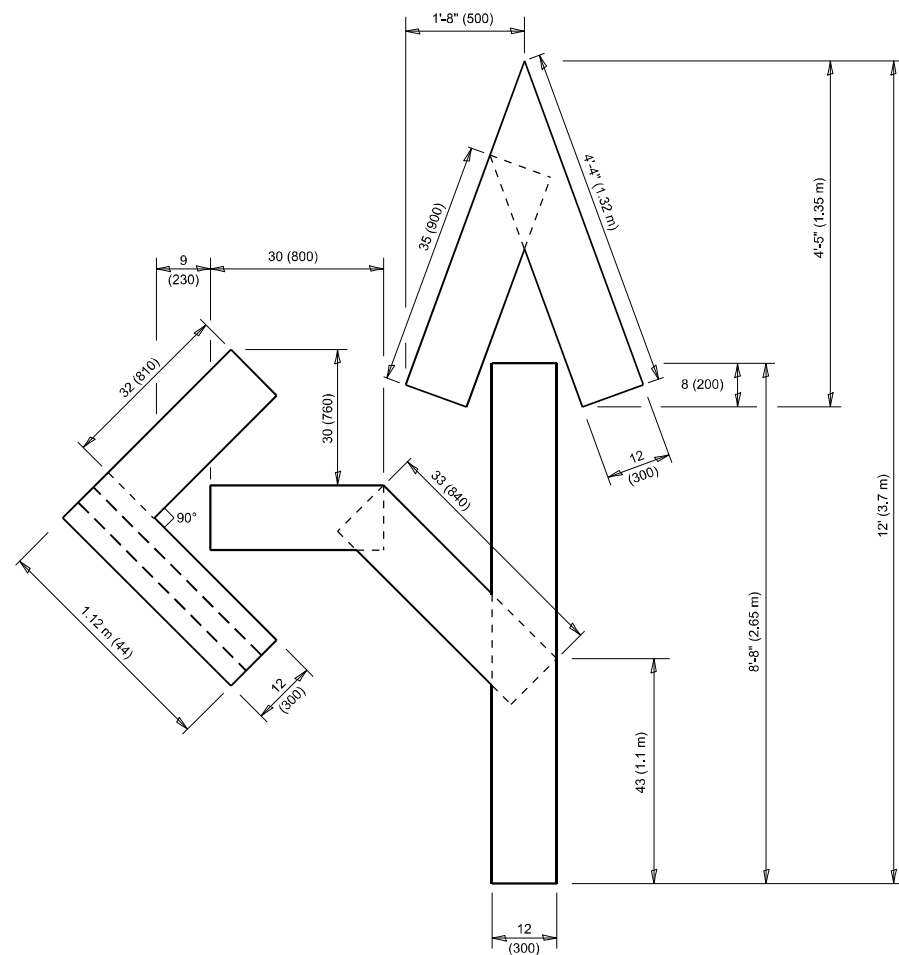
**QUANTITY**

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)

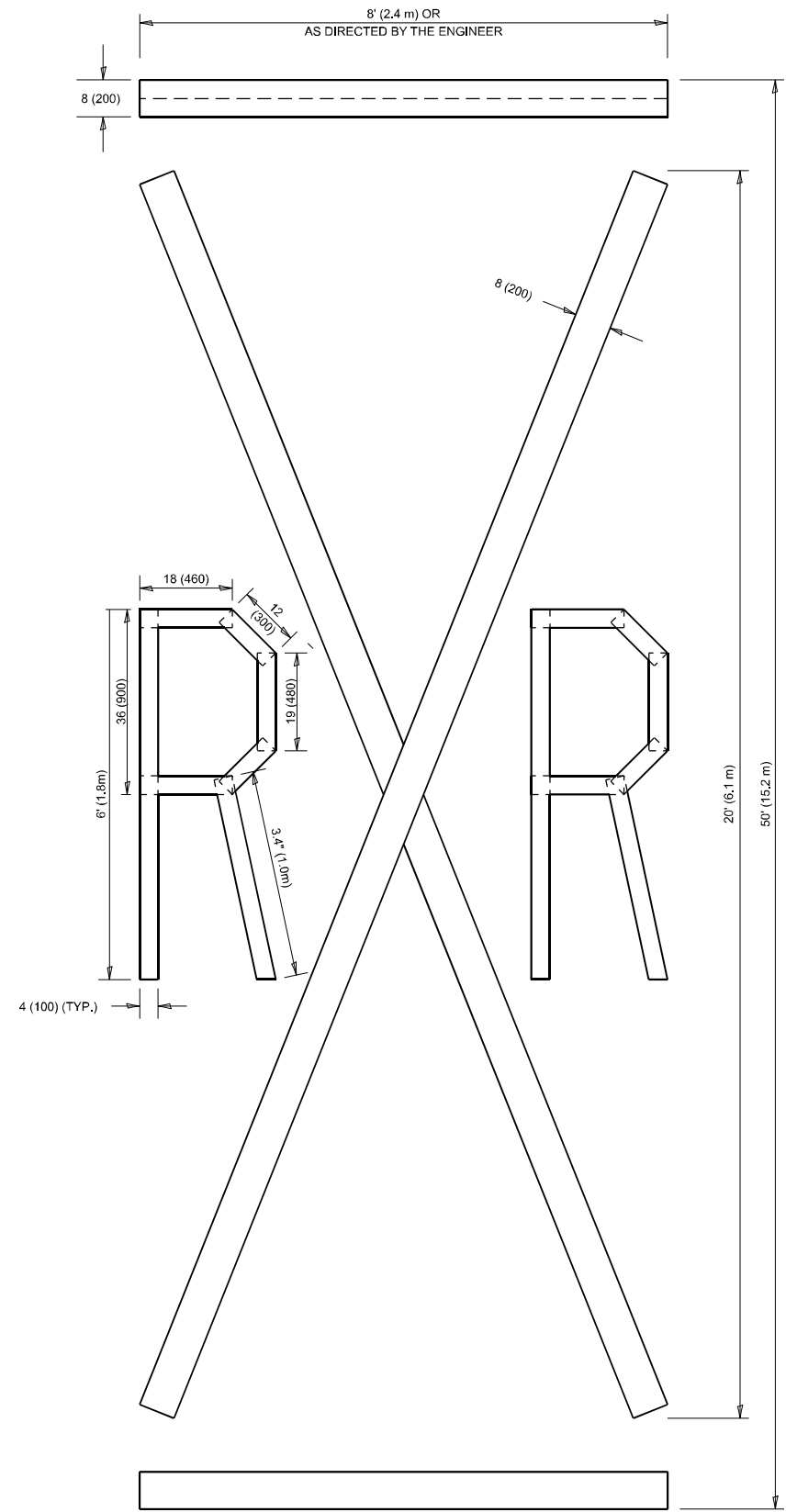


**QUANTITY**

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.

MODEL: TC-16 (Sheet)  
FILE NAME: c:\p\work\pav\illinois\09083576\ID119424-shr-Dib-Side.dgn

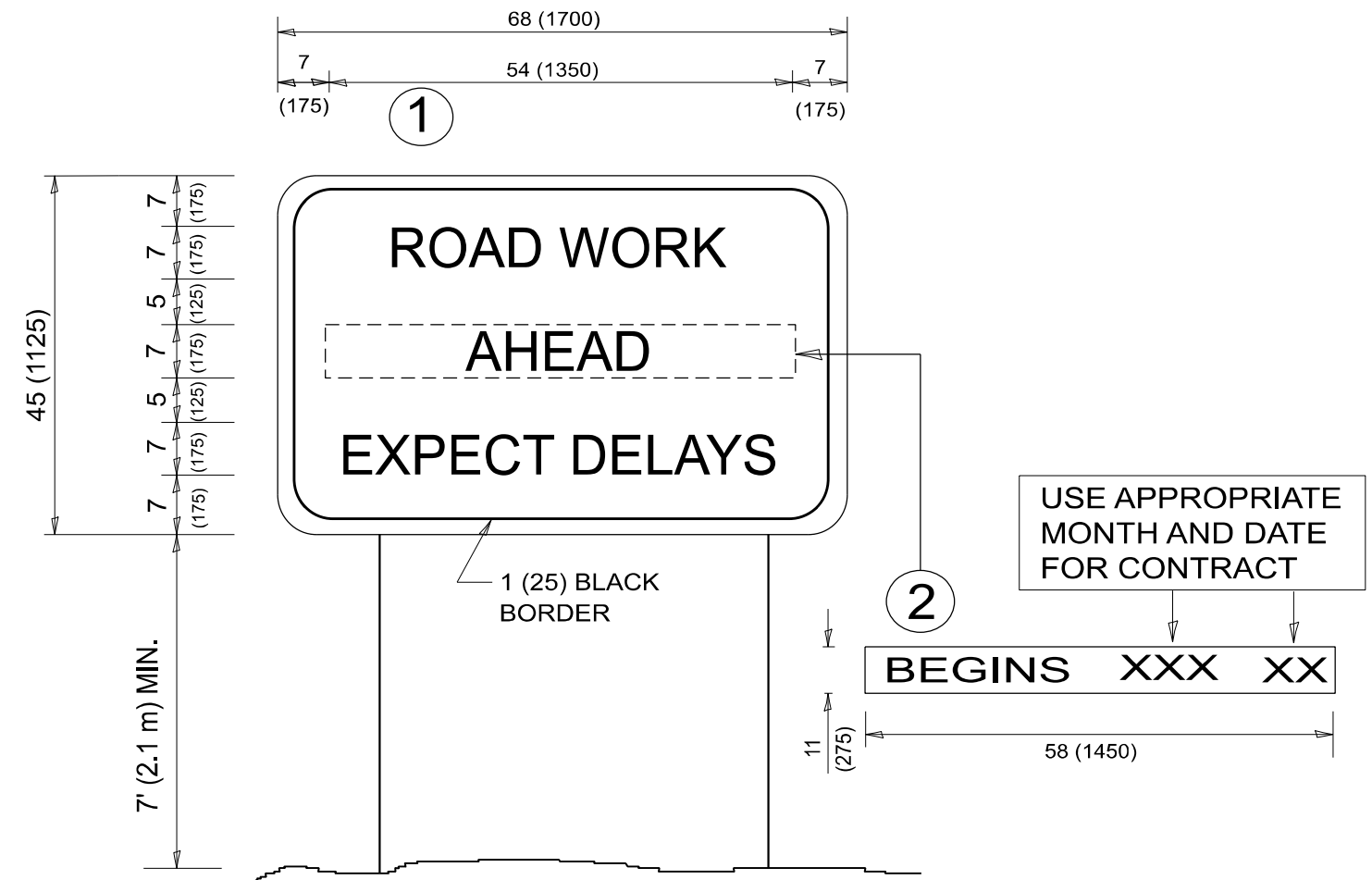
USER NAME = ivan.diaz	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
PLOT SCALE = 0.16666833' / in.	DRAWN -	REVISED - E. GOMEZ 08-28-00
PLOT DATE = 6/27/2024	CHECKED -	REVISED - E. GOMEZ 08-28-00
	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	33
<b>TC-16</b>		CONTRACT NO. 62W88		
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.

MODEL: TC-22 (Sheet)  
FILE NAME: c:\p\work\pww\tdiazia\0983576\ID119424-shr-Dhs\Sides.dgn

USER NAME = ivan.diaz	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 0.16666833 1/ in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 6/25/2024	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2024-963-N	COOK	34	34
<b>TC-22</b>			CONTRACT NO. 62W88	
ILLINOIS FED. AID PROJECT				