

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 348: IL ROUTE 43 (HARLEM AVE)
AT 143RD STREET
SECTION: (3127-1)N-1(13)
RIGHT TURN LANE, TRAFFIC SIGNAL MODERNIZATION
PROJECT: ACCM-0348 (053)
COOK COUNTY
C-91-179-14

FOR INDEX OF SHEETS, SEE SHEET NO. 2

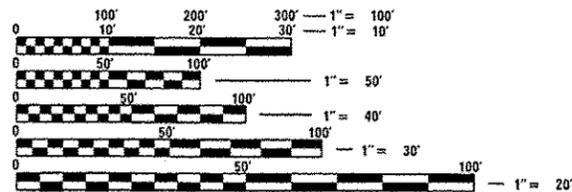
PROJECT LOCATED IN THE
VILLAGE OF ORLAND PARK

TRAFFIC DATA

2013 ADT

IL ROUTE 43 = 35,000 ADT
45 MPH

143RD ST. = 18,100 ADT
45 MPH



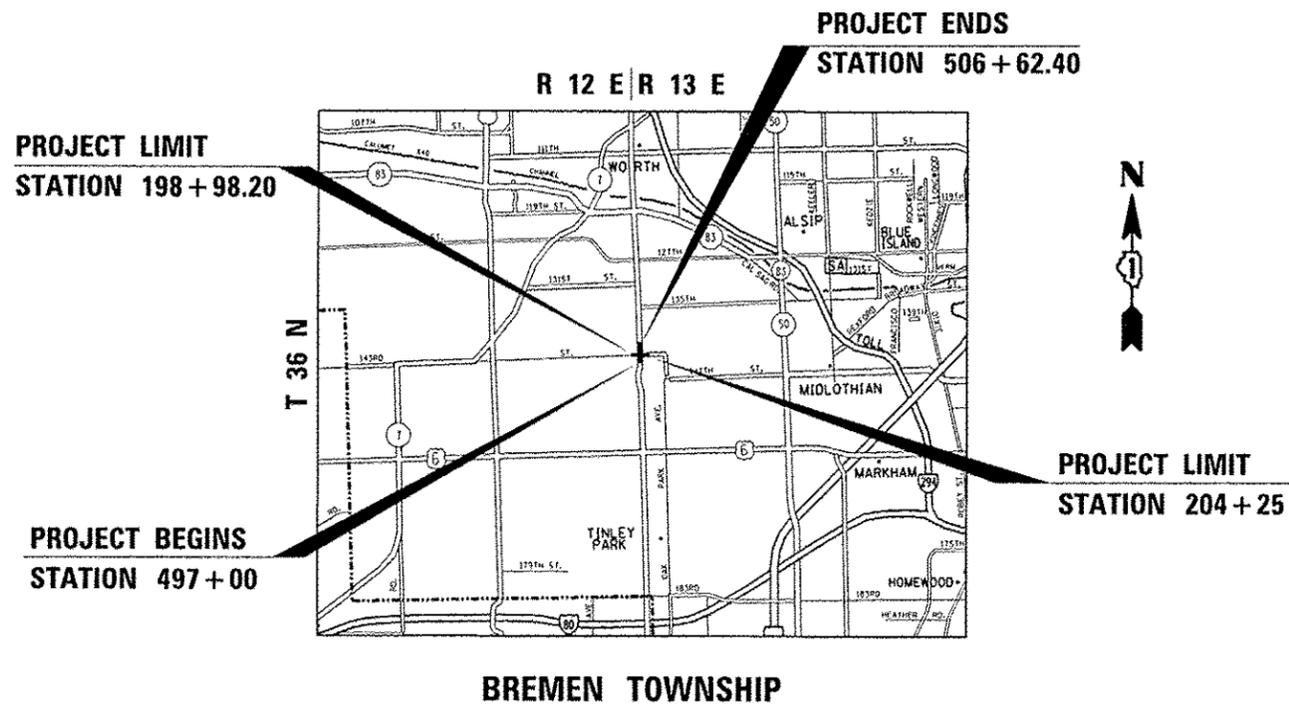
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER ALAIN MIDY (847) 221-3056
PROJECT MANAGER ISSAM RAYYAN (847) 705-4178

CONTRACT NO. 60X73

GROSS & NET LENGTH OF = 962.4 FT = 0.18 MILE



INDEX OF SHEETS

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STATE STANDARDS

000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

280001-07 TEMPORARY EROSION CONTROL SYSTEM

442201-03 CLASS C AND D PATCHES

542001-04 CONCRETE END SECTIONS FOR PIPE CULVERTS 15" THRU 84" DIA.

542301-03 PRECAST REINFORCED CONCRETE FLARED END SECTION

542311-05 TRAVERABLE PIPE GRATE

602011-02 CATCH BASIN, TYPE C

604001-04 FRAME AND LIDS TYPE 1

604091-03 FRAME AND GRATE, TYPE 24

606001-06 CONC. CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

701422-07 LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH TO 55 MPH

701426-07 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH

701606-10 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

701701-09 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE

701901-04 TRAFFIC CONTROL DEVICES

720001-01 SIGN PANEL MOUNTING DETAILS

720006-04 SIGN PANEL ERECTION DETAILS

720011-01 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS

729001-01 APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)

FILE NAME: c:\pwork\pwork\midjja\d0304985\PI2432\shlplan.dgn	USER NAME: midjja	DESIGNED: -	REVISOR: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 43 (HARLEM AVE.) AT 143RD ST. INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES		F.A.P. RTE: 348	SECTION: (3127-1N-11131)	COUNTY: COOK	TOTAL SHEETS: 74	SHEET NO.: 2
Default	PLOT SCALE: 100.0000' / 1" =	DRAWN: -	REVISOR: -		SCALE: SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 60X73				
	PLOT DATE: 1/29/2015	CHECKED: -	REVISOR: -								
		DATE: -	REVISOR: -								

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE						SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	STATE URBAN 0004 80% FEDERAL 20% STATE	TRAFFIC SIGNAL 0021 80% FEDERAL 15% STATE 5% VILLAGE	EVP 0021 100% FIRE DISTRICT	LIGHTING 0021 100% STATE			CODE NO	ITEM	UNIT	TOTAL QUANTITIES	STATE URBAN 0004 80% FEDERAL 20% STATE	TRAFFIC SIGNAL 0021 80% FEDERAL 15% STATE 5% VILLAGE	EVP 0021 100% FIRE DISTRICT	LIGHTING 0021 100% STATE			
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3008	3008						* 83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	19							19
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2065	2065						* 84100110	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	2							2
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	817	817						* 84200804	REMOVAL OF POLE FOUNDATION	EACH	2							2
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	130	130						* 84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	2							2
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	90	90						* 85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1				1			
* 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	64	64						* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	923				923			
* 80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1			1				* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1214				1214			
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1187				993		194	* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1557				1557			
* 81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	51				51			* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1868				1868			
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	109				109			* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2006				2006			
* 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	311				311			* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	94				94			
* 81400100	HANDHOLE	EACH	6				6			* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	601				601			
* 81400200	HEAVY-DUTY HANDHOLE	EACH	3				3			* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4				4			
* 81400300	DOUBLE HANDHOLE	EACH	1				1			* 87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2				2			
* 81603050	UNIT DUCT, 600V, 3-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	681						681	* 87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1				1			
* 81800300	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	562						562	* 87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1				1			

FILE NAME :	USER NAME : mjd/ja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 43 (HARLEM AVE.) AT 143RD ST. SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 1/8" = 1'-0"		CHECKED -	REVISED -			CONTRACT NO. 60X73				
PLOT DATE = 4/29/2015		DATE -	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

* SPECIALTY ITEMS

32

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	STATE URBAN 0004 80% FEDERAL 20% STATE	TRAFFIC SIGNAL 0021 80% FEDERAL 15% STATE 5% VILLAGE	EVP 0021 100% FIRE DISTRICT	LIGHTING 0021 100% STATE	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	STATE URBAN 0004 80% FEDERAL 20% STATE	TRAFFIC SIGNAL 0021 80% FEDERAL 15% STATE 5% VILLAGE	EVP 0021 100% FIRE DISTRICT	LIGHTING 0021 100% STATE		
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16		16			* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2		2				
* 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4			* 89502380	REMOVE EXISTING HANDHOLE	EACH	11		11				
* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	46		46			* 89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1		1				
* 87900200	DRILL EXISTING HANDHOLE	EACH	1		1			* 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9		9				
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7		7			* K0013030	PERENNIAL PLANTS, WETLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG	UNIT	96	96					
* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5		5			* K1005465	SELECTIVE MOWING STAKES	EACH	3	3					
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3		3			* X0322141	REMOVE TEMPORARY WOOD POLE	EACH	1			1			
* 88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1		1			* X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	264			264			
* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4		4			* X0326148	TEMPORARY WOOD POLE, 60 FT., CLASS 4, 15 FT. MAST ARM	EACH	2				2		
* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12		12			* X0327004	TEMPORARY WOOD POLE, 60 FT., CLASS 4	EACH	1				1		
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	8		8			X0327036	BIKE PATH REMOVAL	SQ YD	56	56					
* 88600100	DETECTOR LOOP, TYPE I	FOOT	814		814			△ X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	30	30					
* 88700200	LIGHT DETECTOR	EACH	2			2		X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1					
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	2			2		X7030025	WET REFLECTIVE TEMPORARY TAPE, TYPE III - LETTERS AND SYMBOLS	SQ FT	265	265					
* 88800100	PEDESTRIAN PUSH-BUTTON	EACH	4		4			X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	2272	2272					
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1												

FILE NAME : c:\p\work\p1001\m1y\p1001\p1001\p1001\p1001	USER NAME : m1y.ja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 43 (HARLEM AVE.) AT 143RD ST. SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE : 8000000 / 1/4	CHECKED -	REVISED -	348			(3127-1N-1113)	COOK	74	7	
PLOT DATE : 1/29/2015	DATE -	REVISED -	CONTRACT NO. 60X73							
			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

△ 100% State (NP) * SPECIALTY ITEMS

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		STATE URBAN 0004 80% FEDERAL 20% STATE	TRAFFIC SIGNAL 0021 80% FEDERAL 15% STATE 5% VILLAGE	EVP 0021 100% FIRE DISTRICT	LIGHTING 0021 100% STATE	CODE NO	ITEM	UNIT	STATE URBAN 0014 80% FEDERAL 20% STATE		TRAFFIC SIGNAL 0021 80% FEDERAL 15% STATE 5% VILLAGE	EVP 0021 100% FIRE DISTRICT	LIGHTING 0021 100% STATE		
X7030040	WET REFLECTIVE TEMPORARY TAPE TYPE III, 6 INCH	FOOT	1007	1007													
X7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 INCH	FOOT	82	82													
X8210005	TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	2				2										
* X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1		1												
* X8951011	REMOVE AERIAL CABLE	FOOT	562				562										
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1													
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	102.8	102.8													
* Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	2				2										
* Z0064600	SELECTIVE CLEARING	ACRE	0.23	0.23													
* Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1		1												
Z0077900	WOOD POST AND RAIL FENCE	FOOT	10	10													

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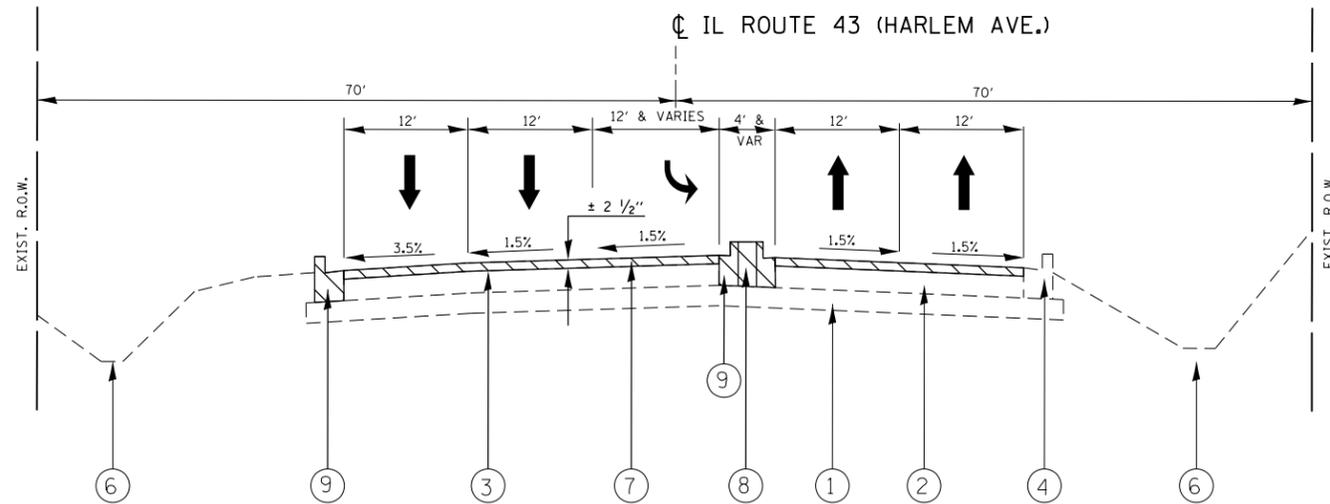
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 43 (HARLEM AVE.) AT 143RD ST.
SUMMARY OF QUANTITIES**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	7A
CONTRACT NO. 60X73				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

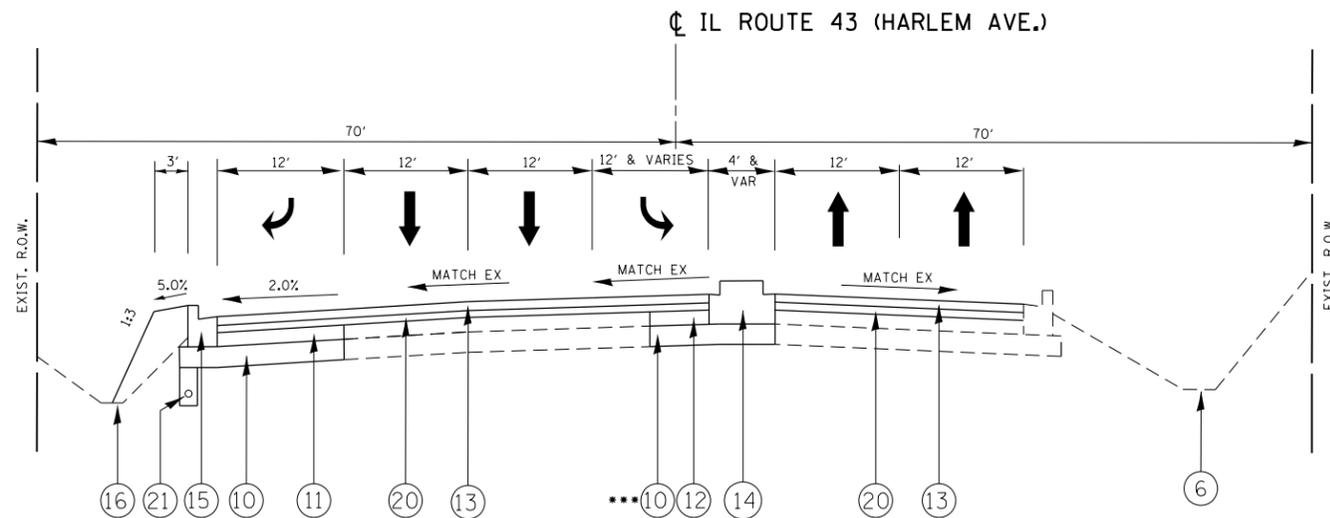
* SPECIALTY ITEMS



**EXISTING TYPICAL SECTION
IL ROUTE 43 (HARLEM AVE)**

STA 497+00 to STA 506+62 (HARLEM AVE.)

NOTE: MEDIAN REMOVAL FROM STA 500+54 TO STA 506+62
C&G B-6.24 REMOVAL FROM STA 500+00 TO STA 504+60



**PROPOSED TYPICAL SECTION
IL ROUTE 43 (HARLEM AVE)**

STA 500+00.00 to STA 506+62

*** FULL DEPTH VARIABLE WIDTH WIDENING FROM STA 501+70 TO 505+75

NOTE:
MEDIAN TO BE MONOLITHICALLY POURED TO A WIDTH OF 6'

LEGEND

- ① EXISTING SUB-BASE
- ② EXISTING P.C.C. PAVEMENT ± 10 "
- ③ EXISTING HMA AFTER MILLING ± 0"
- ④ EXISTING COMBINATION CURB AND GUTTER TYPE B-6.24
- ⑤ EXISTING CONCRETE MEDIAN
- ⑥ EXISTING DITCH
- ⑦ PROPOSED HMA SURFACE REMOVAL - 2 1/2"
- ⑧ PROPOSED CONCRETE MEDIAN REMOVAL
- ⑨ PROPOSED COMBINATION CURB AND GUTTER REMOVAL
- ⑩ PROPOSED AGGREGATED SUBGRADE IMPORVEMENT - 12"
- ⑪ PROPOSED HMA BASE COURSE - 8 3/4"
- ⑫ PROPOSED HMA BASE COURSE WIDENING - 8 3/4 "
- ⑬ PROPOSED POLYMERIZED HMA SURFACE COURSE MIX "F", N90 - 1 3/4"
- ⑭ PROPOSED CONCRETE MEDIAN TYPE SB6.06
- ⑮ PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24
- ⑯ PROPOSED DITCH
- ⑰ PROPOSED BIKE PATH REMOVAL
- ⑱ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
- ⑲ PROPOSED AGGREGATE BASE COURSE, TYPE B 4"
- ⑳ POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50 - 3/4"
- ㉑ PIPE UNDERDRAIN, 4"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
PAVEMENT RESURFACING		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm)	4% AT 90 Gyr.	QCP
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% AT 50 Gyr.	QC/QA
PAVEMENT WIDENING		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm)	4% AT 90 Gyr.	QCP
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm)	4% AT 70 Gyr.	QC/QA
HOT-MIX ASPHALT BASE COURSE WIDENING (HMA BINDER IL-19 mm)	4% AT 70 Gyr.	QC/QA
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% AT 50 Gyr.	QC/QA
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% AT 70 Gyr.	QC/QA
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	4% AT 70 Gyr.	QC/QA
BIKE PATH & MEDIAN SURFACE		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5 mm)	4% AT 50 Gyr.	QC/QA
QMP Designation: Quality Control/Quality Assurance (QC/QA); Quality Control for Performance (QCP)		

NOTES:

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

THE "AC TYPE" FOR POLYMERIZED LEVELING BINDER IL-4.75 MIXTURE SHALL BE "SBS/SBR PG 76-22," FOR POLYMERIZED HMA SURFACE COURSE, MIX F, N90 MIXTURE SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

THE CONTRACTOR WILL PATCH FIRST THEN MILL.

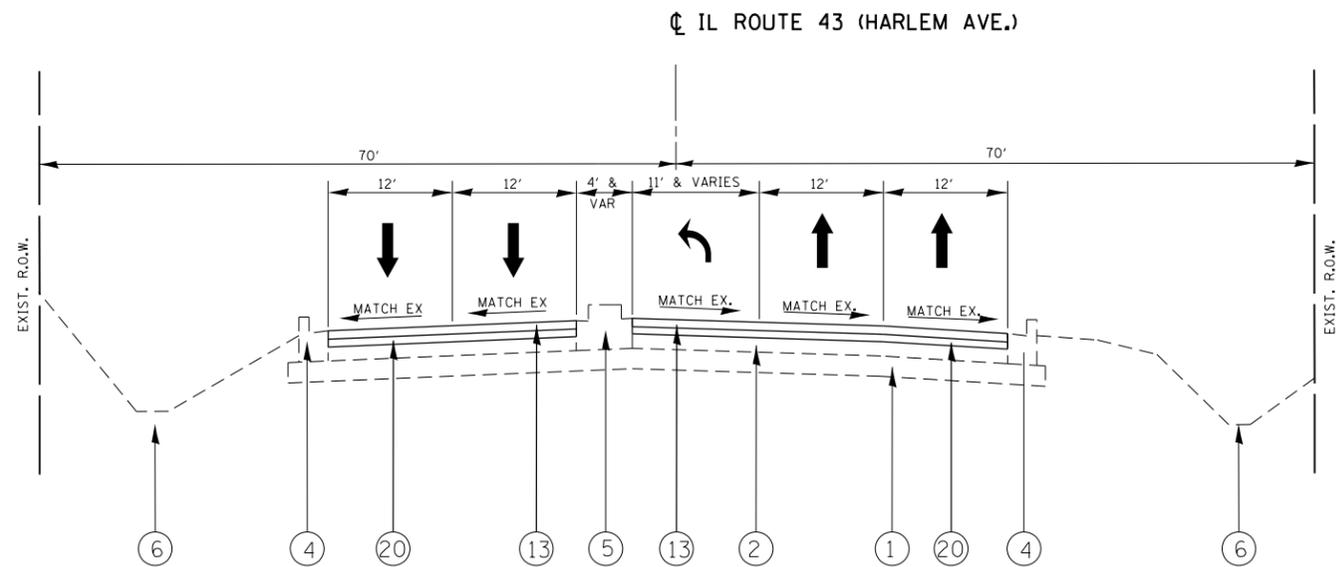
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/30/2015	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 43 (HARLEM AVE.) AT 143RD ST.
TYPICAL CROSS SECTIONS**

SCALE: SHEET OF SHEETS STA. TO STA.

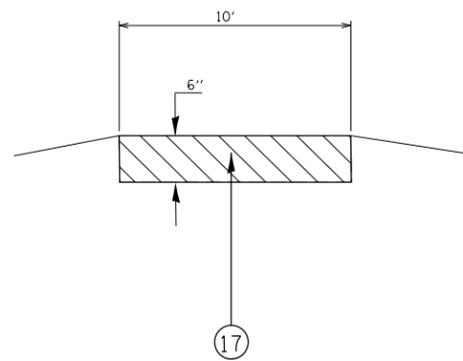
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	8
CONTRACT NO. 60X73			ILLINOIS FED. AID PROJECT	



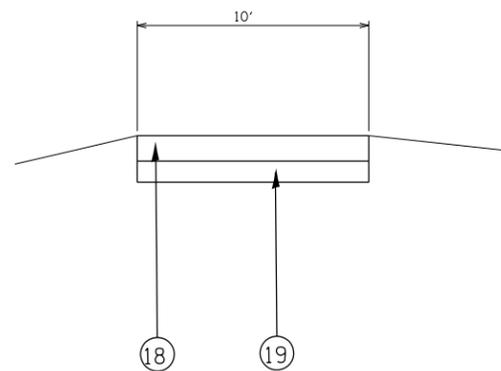
**PROPOSED TYPICAL SECTION
IL ROUTE 43 (HARLEM AVE)
STA 497+00 to STA 500+00**

LEGEND

- ① EXISTING SUB-BASE
- ② EXISTING P.C.C. PAVEMENT ± 10''
- ③ EXISTING HMA AFTER MILLING ± 0''
- ④ EXISTING COMBINATION CURB AND GUTTER TYPE B-6.24
- ⑤ EXISTING CONCRETE MEDIAN
- ⑥ EXISTING DITCH
- ⑦ PROPOSED HMA SURFACE REMOVAL - 2 1/2''
- ⑧ PROPOSED CONCRETE MEDIAN REMOVAL
- ⑨ PROPOSED COMBINATION CURB AND GUTTER REMOVAL
- ⑩ PROPOSED AGGREGATED SUBGRADE IMPORVEMENT - 12''
- ⑪ PROPOSED HMA BASE COURSE - 8 3/4''
- ⑫ PROPOSED HMA BASE COURSE WIDENING - 8 3/4''
- ⑬ PROPOSED POLYMERIZED HMA SURFACE COURSE MIX "F", N90 - 1 3/4''
- ⑭ PROPOSED CONCRETE MEDIAN TYPE SB6.06
- ⑮ PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24
- ⑯ PROPOSED DITCH
- ⑰ PROPOSED BIKE PATH REMOVAL
- ⑱ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2''
- ⑲ PROPOSED AGGREGATE BASE COURSE, TYPE B 4''
- ⑳ POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50 - 3/4''
- ㉑ PIPE UNDERDRAIN, 4''

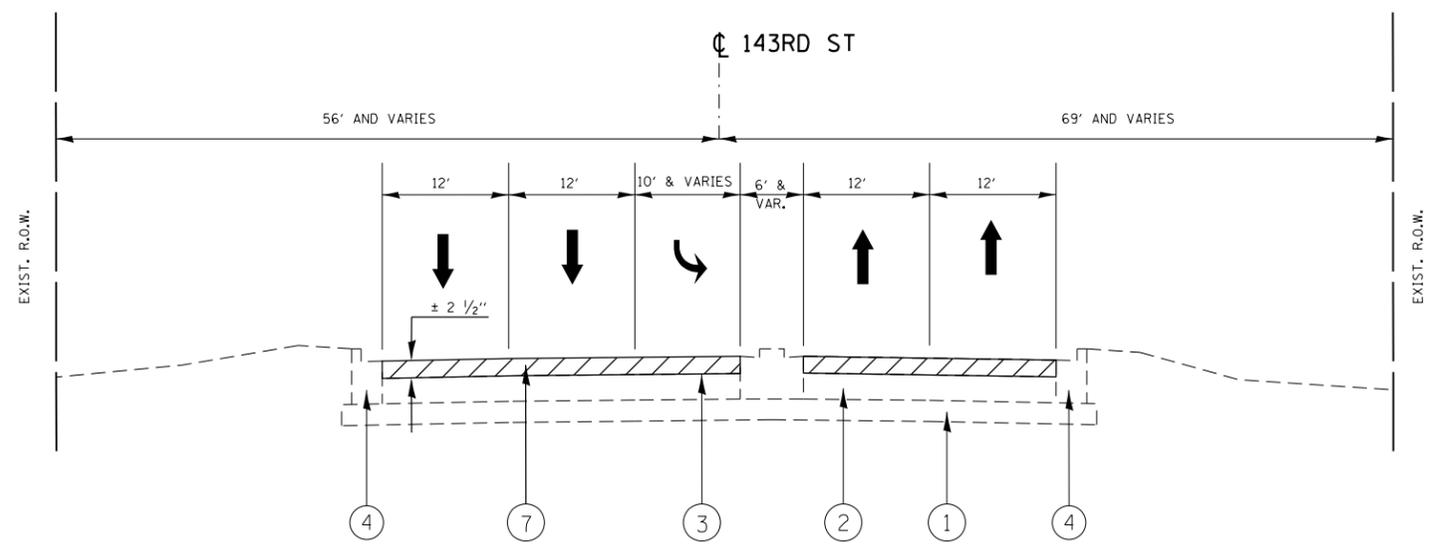


**BIKE PATH
EXSITING TYPICAL SECTION
IL ROUTE 43 (HARLEM AVE)
STA 500+65**

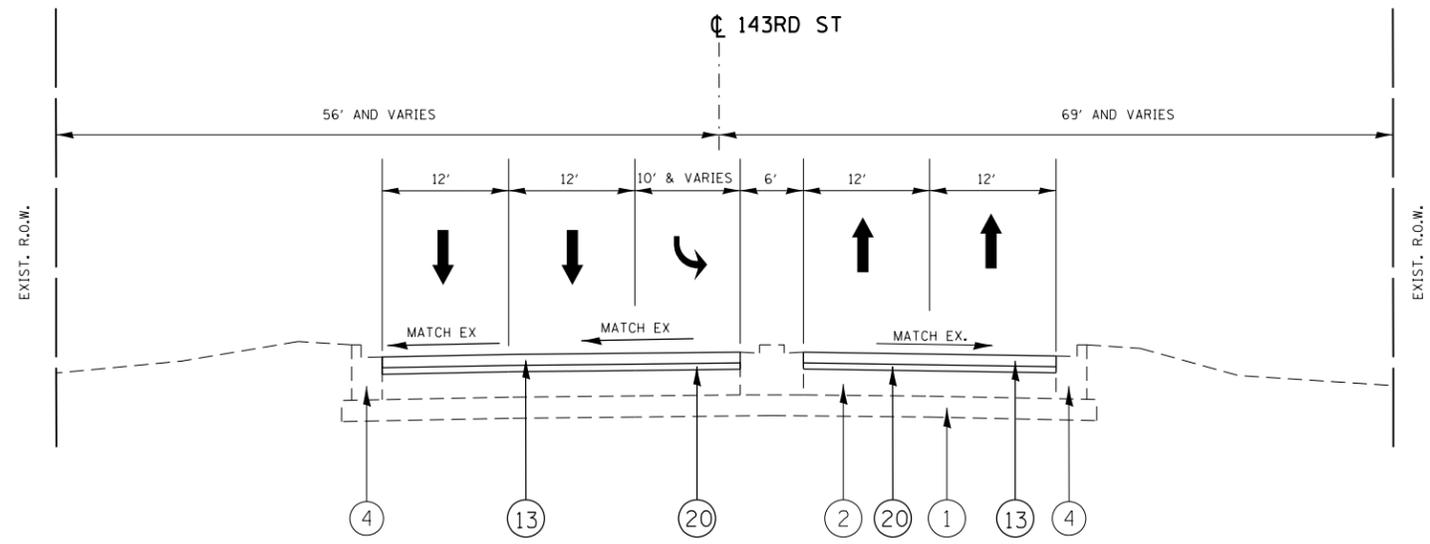


**BIKE PATH
PROPOSED TYPICAL SECTION
IL ROUTE 43 (HARLEM AVE)
STA 500+65**

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 43 (HARLEM AVE.) AT 143RD ST. TYPICAL CROSS SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	PLOT DATE = 1/30/2015	DRAWN -	REVISED -					348	(3127-1N-1(13))	COOK	74	9
		CHECKED -	REVISED -		CONTRACT NO. 60X73			ILLINOIS FED. AID PROJECT				
		DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	



EXISTING TYPICAL SECTION
143RD ST
STA 198+98 TO STA 204+25



PROPOSED TYPICAL SECTION
143RD ST
STA 198+98 TO STA 204+25

LEGEND

- ① EXISTING SUB-BASE
- ② EXISTING P.C.C. PAVEMENT ± 10 "
- ③ EXISTING HMA AFTER MILLING ± 0"
- ④ EXISTING COMBINATION CURB AND GUTTER TYPE B-6.24
- ⑤ EXISTING CONCRETE MEDIAN
- ⑥ EXISTING DITCH
- ⑦ PROPOSED HMA SURFACE REMOVAL - 2 1/2"
- ⑧ PROPOSED CONCRETE MEDIAN REMOVAL
- ⑨ PROPOSED COMBINATION CURB AND GUTTER REMOVAL
- ⑩ PROPOSED AGGREGATED SUBGRADE IMPORVEMENT - 12"
- ⑪ PROPOSED HMA BASE COURSE - 8 3/4"
- ⑫ PROPOSED HMA BASE COURSE WIDENING - 8 3/4 "
- ⑬ PROPOSED POLYMERIZED HMA SURFACE COURSE MIX "F", N90 - 1 3/4"
- ⑭ PROPOSED CONCRETE MEDIAN TYPE SB6.06
- ⑮ PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24
- ⑯ PROPOSED DITCH
- ⑰ PROPOSED BIKE PATH REMOVAL
- ⑱ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
- ⑲ PROPOSED AGGREGATE BASE COURSE, TYPE B 4"
- ⑳ POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50 - 3/4"
- ㉑ PIPE UNDERDRAIN, 4"

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -
et:\pw\work\p1dot\midyja\0304985\124312--sht-typical.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/30/2015	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

143RD ST.			
TYPICAL CROSS SECTIONS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	10
CONTRACT NO. 60X73			ILLINOIS FED. AID PROJECT	

STRUCTURES

△ 1	CATCH BASIN, TYP C W/ TYPE 24 F&G STA. 502+95.2, LT, EOP T.O.G.: 650.55 INV.: 648.03	△ 4	CONCRETE END SECTION, 36", 1:2 STA 500+85, 46' RT INV. 643.30
△ 2	CATCH BASIN, TY,PC W/ TYPE 24 F&G STA. 501+31.2, LT, EOP T.O.G.: 649.43 INV.: 646.69	△ 5	CONCRETE END SECTION, 36", 1:2 STA 200+01, 53' LT INV. 642.00
△ 3	EXIST. MANHOLE STA. 500+81.4, 59.6' LT T.O.G.: 648.85 INV.: 644.89 (N) INV.: 643.65 (SW) EXIST. INV.: 643.55 (E) EXIST.	△ 6	CONCRETE END SECTION, 36", 1:2 STA 201+99, 46' RT INV. 642.97

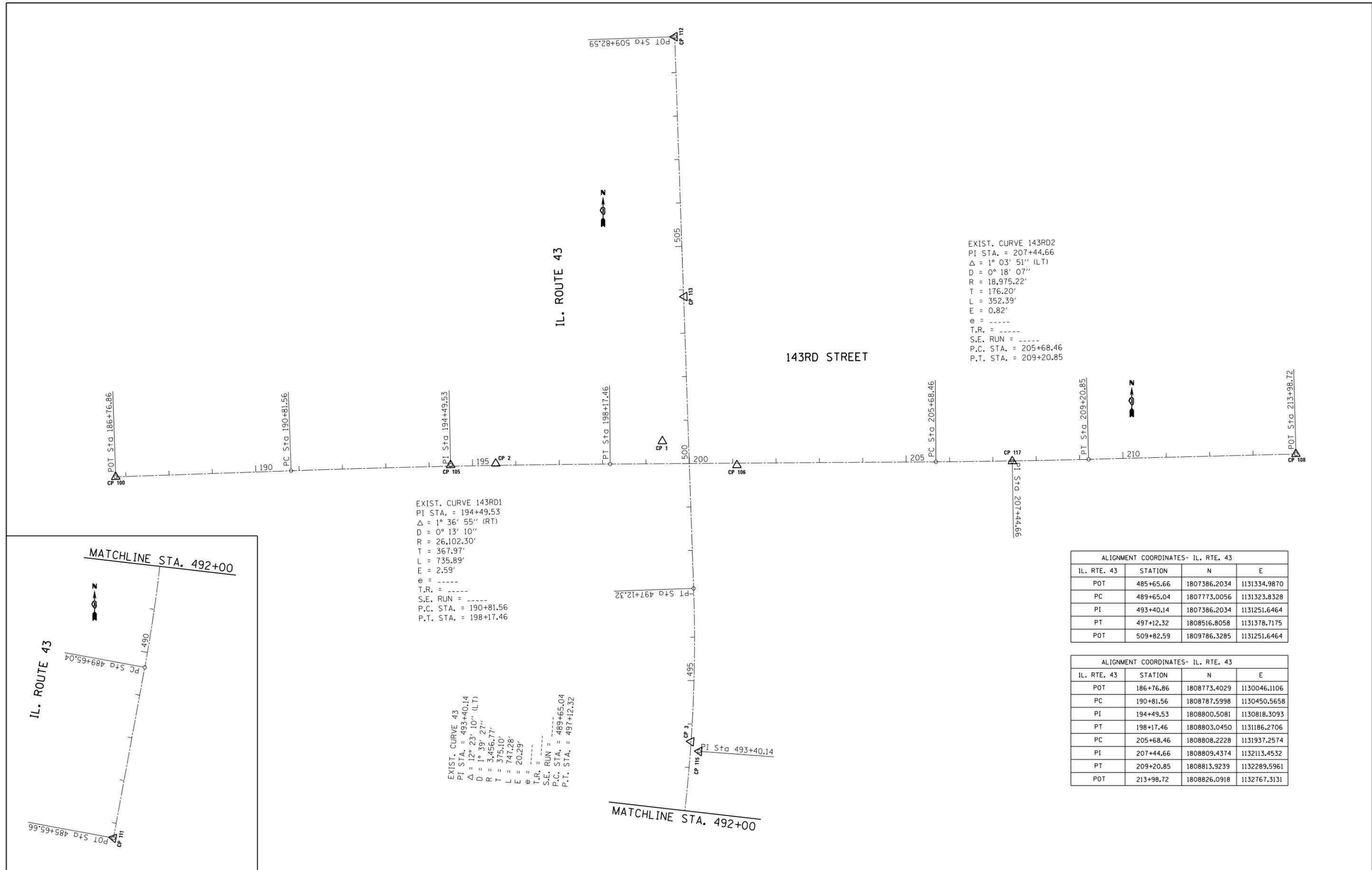
GRADING AND SHAPING DITCHES			
ROUTE	STATION	ELEV (FT)	OFFSET (FT)
IL 43	501+00	644.33	65.51 LT
		643.98	54.17 RT
	502+00	646.97	59.06 LT
		645.85	52.25 RT
	503+00	647.72	56.76 LT
		647.28	50.30 RT
	504+00	648.44	54.92 LT
		648.54	55.01 RT
	505+00	650.55	54.34 LT
		650.04	53.53 RT
	506+00	654.58	53.14 LT
		653.81	52.84 RT
143RD ST.	201+00	646.18	42.50 RT

PIPE TABLE			
No.	PIPE TYPE	DIA. (IN)	LENGTH (FT)
1	PROPOSED STORM SEWER, CLASS A, TYPE I W/PRECAST REINF. CONC. FLARED END SECTION, INV: 647.94	12	10
2	PROPOSED STORM SEWER, CLASS A, TYPE I W/PRECAST REINF. CONC. FLARED END SECTION, INV: 646.09	12	12
3	PROPOSED STORM SEWER, CLASS A, TYPE II W/PRECAST REINF. CONC. FLARED END SECTION, INV: 645.54	24	13
4	PROPOSED PIPE CULVERT, CLASS A, TYPE 1	36	104
5	PROPOSED PIPE CULVERT, CLASS A, TYPE 1	36	101

EARTHWORK SCHEDULE								
EARTHWORK LOCATION	EARTH EXCAVATION (CY)	TOPSOIL EXCAVATION (CY)	EARTH EXCAVATION ADJ. FOR SHRINKAGE (CY) 15%	TOPSOIL EXCAVATION ADJ. FOR SHRINKAGE (CY) 15%	EMBANKMENT (CY)	TOPSOIL PLACEMENT (CY)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CY)	TOPSOIL BALANCE WASTE (+) OR SHORTAGE (-) (CY)
IL 43								
STA 500+00 to 506+00	341.0	440.0	289.9	374.0	183.3	477.0	+106.6	-103.0
143RD ST.								
STA 200+00 to 203+00	5.2	75.6	4.4	64.3	2.6	92.7	+1.8	-28.4
TOTAL	346.2	515.6	294.3	438.3	185.9	569.7	+108.4	-131.5

NOTE:
A THICKNESS OF 6 INCHES OF TOPSOIL STRIPPING SHALL BE REUSED WITHIN THE PROJECT LIMITS

FILE NAME =	USER NAME = midyjo	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES IL 43 (HARLEM AVE.) AT 143RD ST.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	Default	DRAWN -	REVISED -			348	(3127-1IN-1(13)	COOK	74	11	
		CHECKED -	REVISED -			CONTRACT NO. 60X73					
		DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO



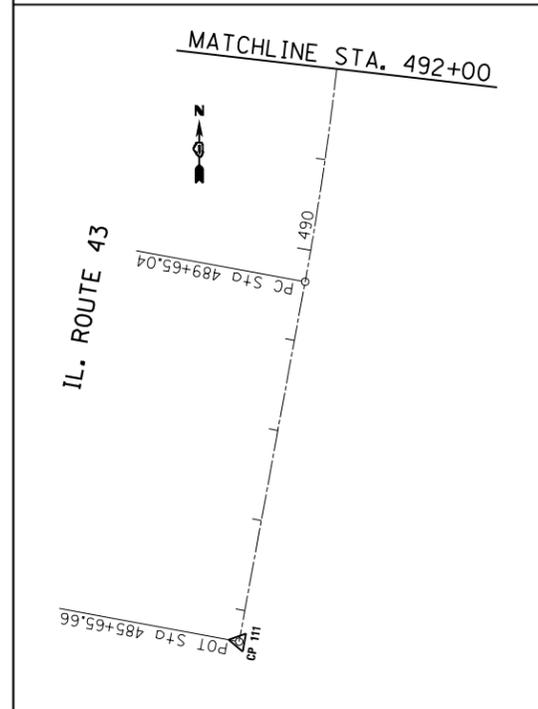
EXIST. CURVE 143RD2
 PI STA. = 207+44.66
 Δ = 1° 03' 51" (LT)
 D = 0° 18' 07"
 R = 18,975.22'
 T = 176.20'
 L = 352.39'
 E = 0.82'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 205+68.46
 P.T. STA. = 209+20.85

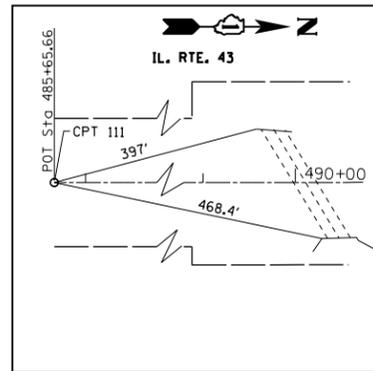
EXIST. CURVE 143RD1
 PI STA. = 194+49.53
 Δ = 1° 36' 55" (RT)
 D = 0° 13' 10"
 R = 26,102.30'
 T = 367.97'
 L = 735.89'
 E = 2.59'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 190+81.56
 P.T. STA. = 198+17.46

EXIST. CURVE 43
 PI STA. = 493+40.14
 Δ = 12° 23' 10" (LT)
 D = 1° 39' 27"
 R = 3,456.77'
 T = 375.10'
 L = 747.28'
 E = 20.29'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 489+65.04
 P.T. STA. = 497+12.32

ALIGNMENT COORDINATES- IL. RTE. 43			
IL. RTE. 43	STATION	N	E
POT	485+65.66	1807386.2034	1131334.9870
PC	489+65.04	1807773.0056	1131323.8328
PI	493+40.14	1807386.2034	1131251.6464
PT	497+12.32	1808516.8058	1131378.7175
POT	509+82.59	1809786.3285	1131251.6464

ALIGNMENT COORDINATES- IL. RTE. 43			
IL. RTE. 43	STATION	N	E
POT	186+76.86	1808773.4029	1130046.1106
PC	190+81.56	1808787.5998	1130450.5658
PI	194+49.53	1808800.5081	1130818.3093
PT	198+17.46	1808803.0450	1131186.2706
PC	205+68.46	1808808.2228	1131937.2574
PI	207+44.66	1808809.4374	1132113.4532
PT	209+20.85	1808813.9239	1132289.5961
POT	213+98.72	1808826.0918	1132767.3131





CONTROL POINT #111

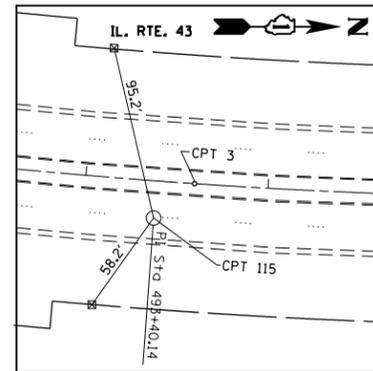
BEGINNING POINT IL. 43 SOUTH
MAGNETIC NAIL IN PAVEMENT

STA. 485+65.66, 0' RT.
N 1807380.2034
E 1131251.6464
ELEVATION

BENCHMARK #1

ELEVATION 648.092

"a" CUT IN CONCRETE VAULT OF HANDHOLE IN
NORTHWEST CORNER IL. RTE. 43 AND 143rd ST.



CONTROL POINT #115

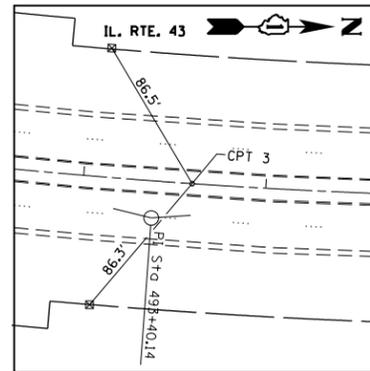
P.I. IL. 43 SOUTH OF 143rd ST.
MAGNETIC NAIL IN PAVEMENT

STA. 493+40.14, 20.29' RT.
N 1808141.9276
E 1131391.6307
ELEVATION

BENCHMARK #2

ELEVATION 648.537

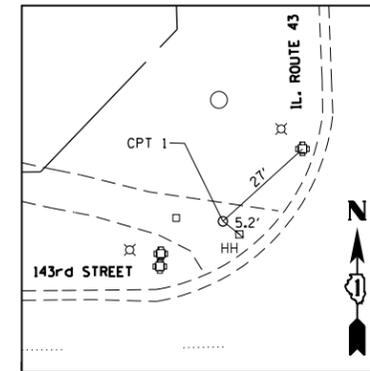
"a" CUT IN CONCRETE RIM OF HANDHOLE IN
SOUTHEAST CORNER IL. RTE. 43 AND 143rd ST.



CONTROL POINT #3

MAGNETIC NAIL IN MEDIAN
143rd ST. EAST OF IL. RTE. 43

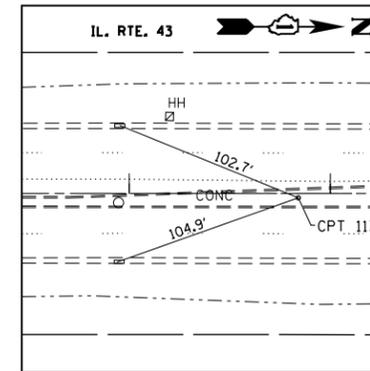
STA. 493+60, 0' RT.
N 1808164.2875
E 1131372.8761
ELEVATION 654.639



CONTROL POINT #1

MAGNETIC NAIL IN BIKE PATH
IN NORTHWEST CORNER OF IL. RTE. 43 AND 143rd ST.

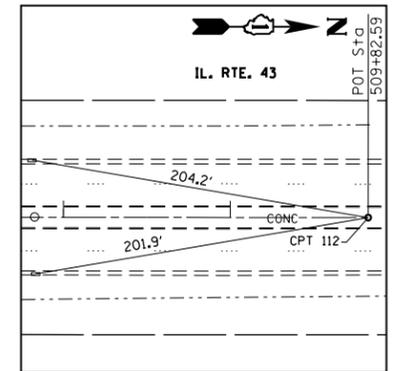
STA. 500+38.2, 56.8' LT.
N 1808855.5537
E 1131306.6823
ELEVATION 648.85



CONTROL POINT #113

MAGNETIC NAIL IN MEDIAN
ON 143rd ST. EAST OF IL. RTE. 43

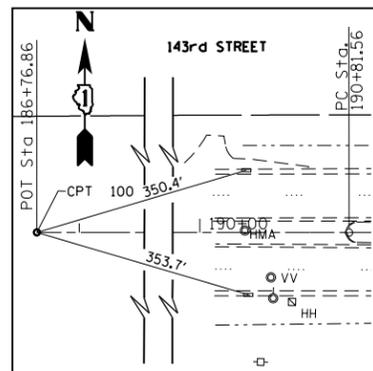
STA. 503+84.1, 2.1 RT.
N 1809188.2347
E 1131357.7097
ELEVATION 660.298



CONTROL POINT #112

END POINT MAGNETIC NAIL IN MEDIAN
ON 143rd ST. EAST OF IL. RTE. 43

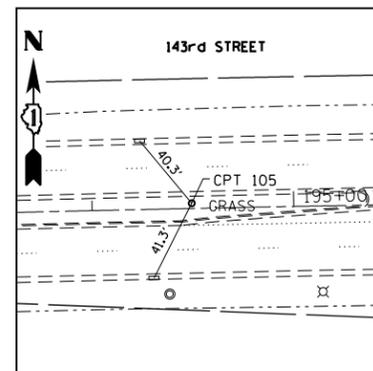
STA. 509+82.59, 0' RT.
N 1809786.3285
E 1131334.9870
ELEVATION



CONTROL POINT #100

END POINT MAGNETIC NAIL IN MEDIAN
ON 143rd ST. EAST OF IL. RTE. 43

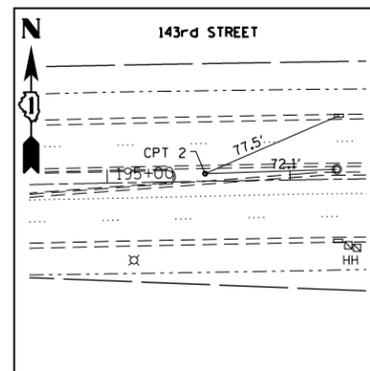
STA. 186+76.86, 0' RT.
N 1808773.4029
E 1130046.1106
ELEVATION



CONTROL POINT #105

MAGNETIC NAIL IN MEDIAN
ON 143rd ST. EAST OF IL. RTE. 43

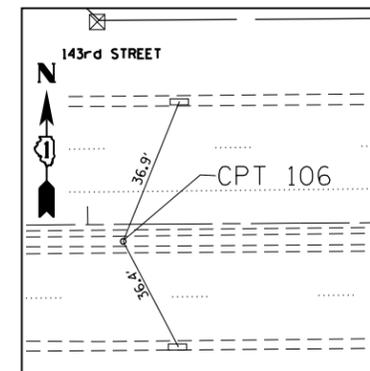
STA. 194+49.51, 2.6' LT.
N 1808800.5081
E 1130818.3093
ELEVATION



CONTROL POINT #2

MAGNETIC NAIL IN MEDIAN
ON 143rd ST. EAST OF IL. RTE. 43

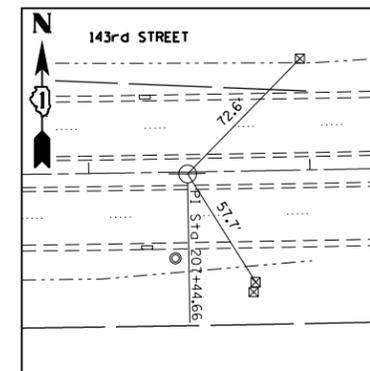
STA. 195+09.7, 4.17' LT.
N 1808804.0658
E 1130922.3765
ELEVATION 651.824



CONTROL POINT #106

MAGNETIC NAIL IN MEDIAN
ON 143rd ST. EAST OF IL. RTE. 43

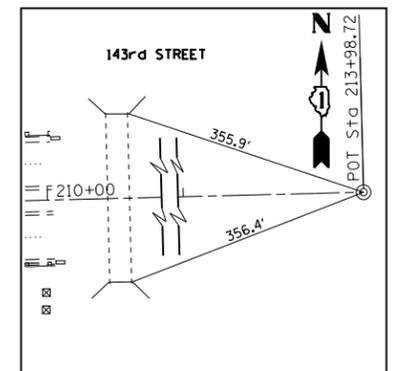
STA. 201+09.7, 4.6' RT.
N 1808800.4213
E 1131478.4969
ELEVATION 653.137



CONTROL POINT #117

MAGNETIC NAIL IN MEDIAN
ON 143rd ST. EAST OF IL. RTE. 43

STA. 207+44.7, 0.82' RT.
N 1808809.4374
E 1132113.4532
ELEVATION

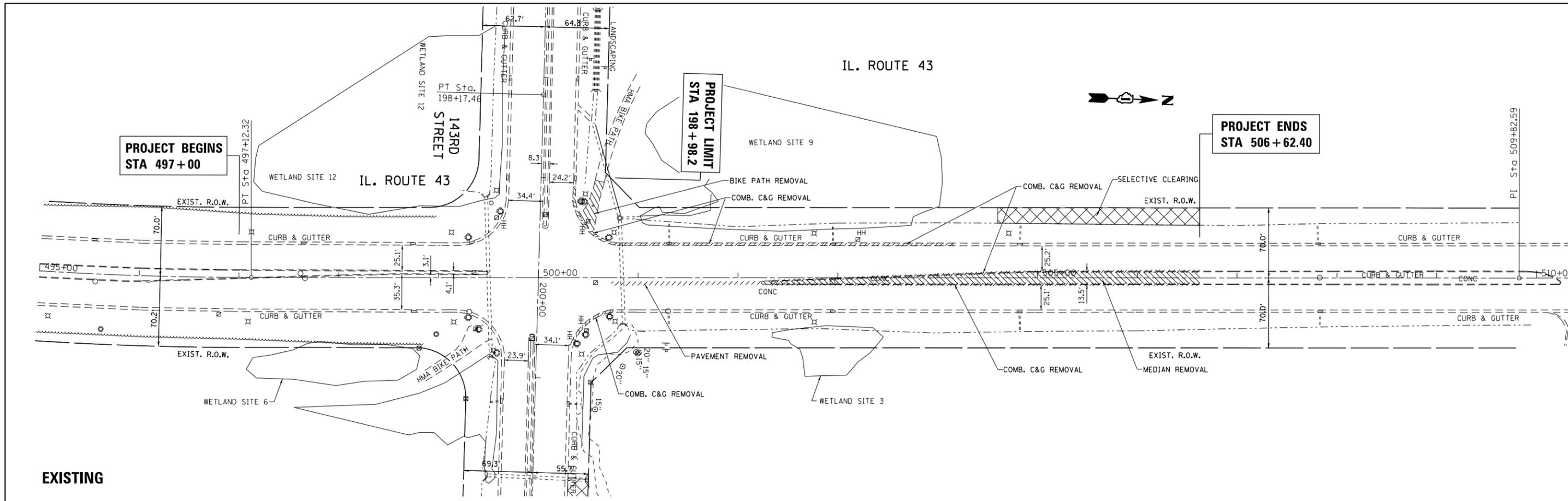


CONTROL POINT #108

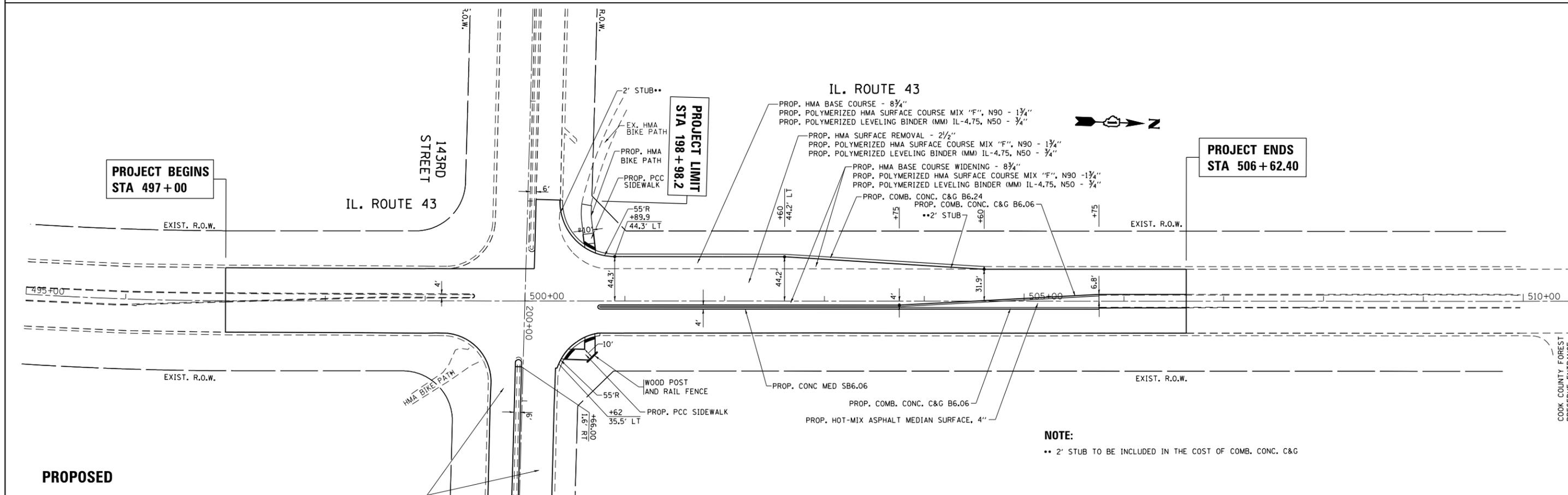
MAGNETIC NAIL IN MEDIAN
ON 143rd ST. EAST OF IL. RTE. 43

STA. 213+98.7, 0' RT.
N 1808826.0918
E 1132767.3131
ELEVATION

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT, TIES AND BENCHMARKS IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	Plot Scale = 200.0000' / in.	DRAWN -	REVISED -					348	(3127-1N-1(13))	COOK	74	13
	PLOT DATE = 1/30/2015	CHECKED -	REVISED -		CONTRACT NO. 60X73							
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



EXISTING

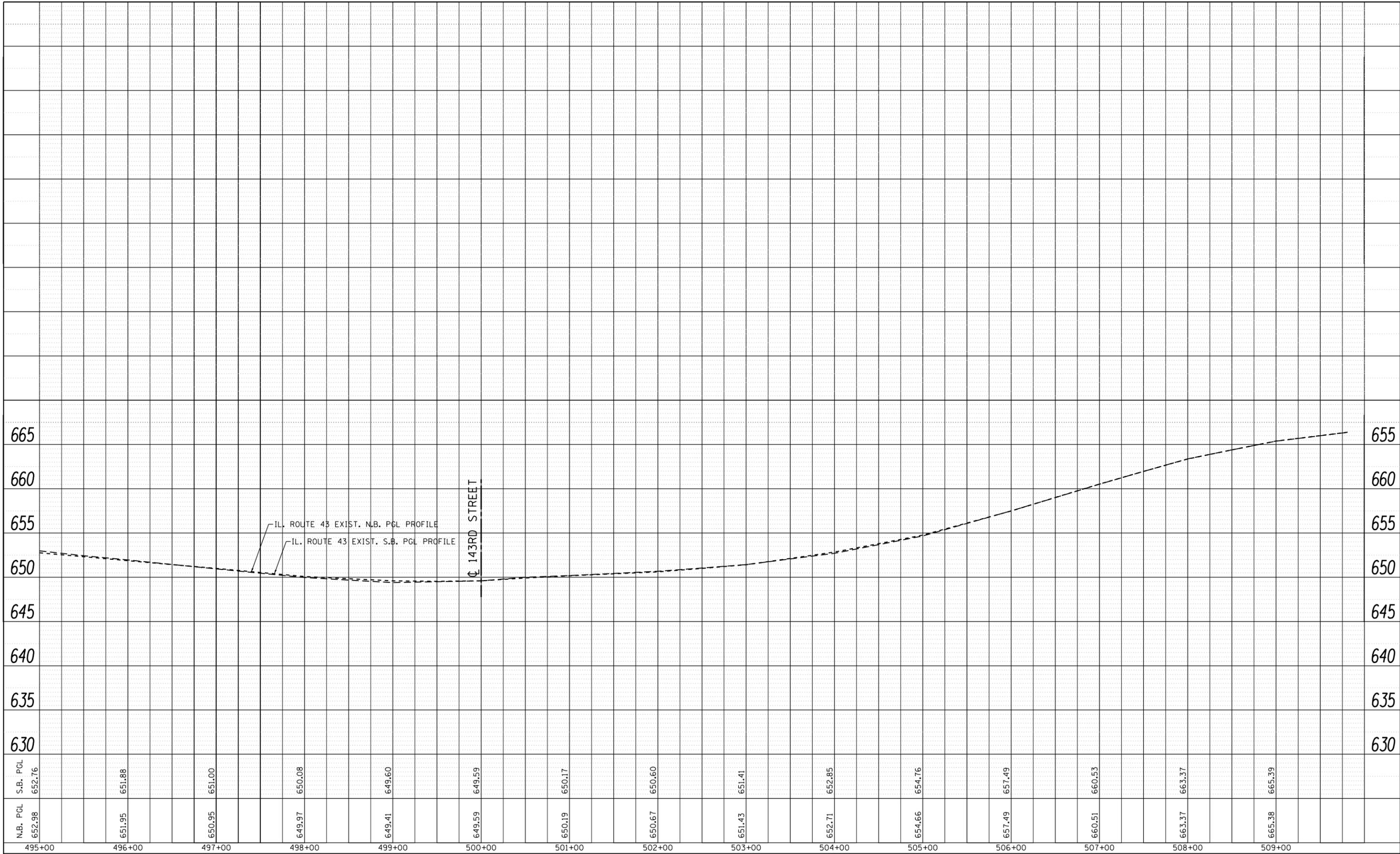


PROPOSED

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 60X73							
Default	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							

PLAN	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	ALIGNMENT		
	CHECKED		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	GRADES		
	CHECKED		
	STRUCTURE		
	NOT AT THIS OFFICE		



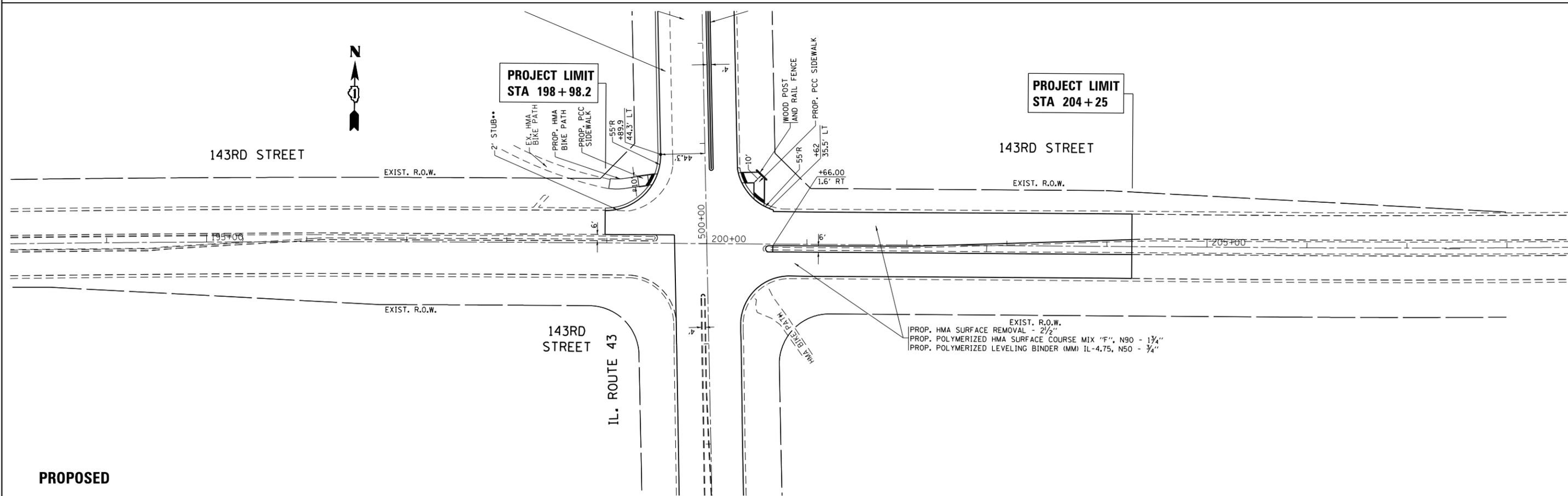
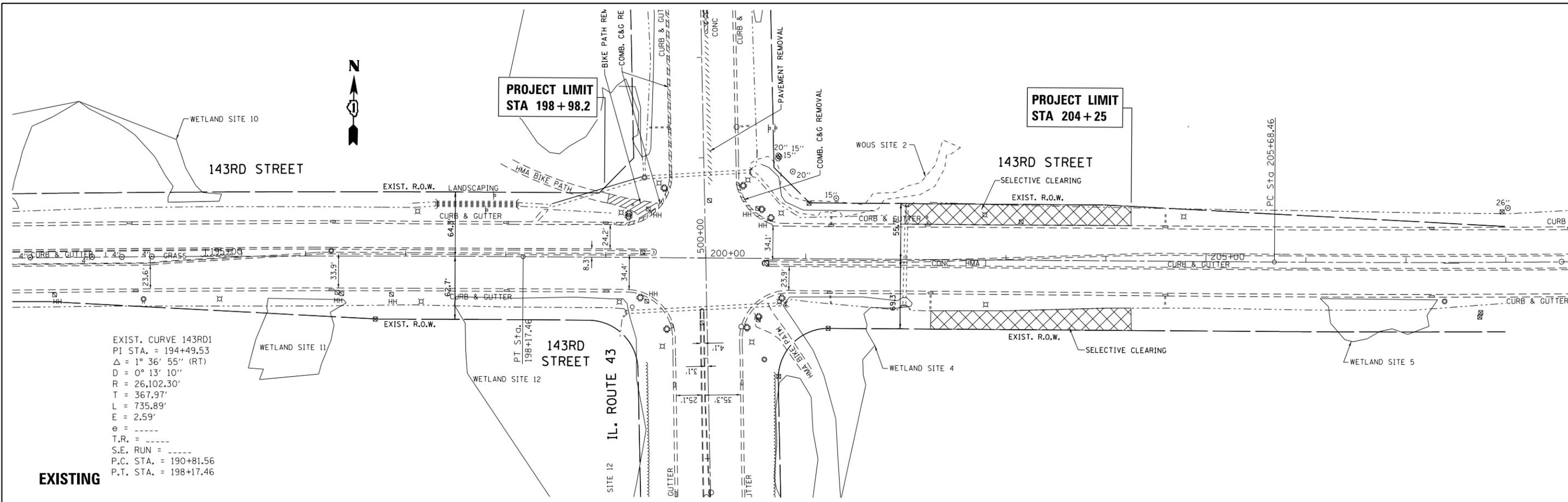
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/30/2015	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ROADWAY PROFILE
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	15
CONTRACT NO. 60X73			ILLINOIS FED. AID PROJECT	



FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	Default	DRAWN -	REVISED -			348	(3127-1N-1(13))	COOK	74	16	
		CHECKED -	REVISED -			CONTRACT NO. 60X73					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

PRE-STAGE

REMOVE AND REPLACE PIPE CULVERTS AND CONCRETE END SECTIONS USING STANDARD 701606.

STAGE I

INSTALL ARTERIAL ROAD INFORMATION SIGNING PER DISTRICT 1 DETAIL TC-22 A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION.

REMOVE ALL CONFLICTING PAVEMENT MARKINGS ALONG IL ROUTE 43 AND 143RD STREET AND INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL FOR SOUTHBOUND IL ROUTE 43 AND WESTBOUND 143RD STREET ACCORDING TO CURRENT MUTCD STANDARDS AND IDOT STANDARD 701422.

CONSTRUCT ADDITIONAL RIGHT TURN LANE ON NORTH LEG OF IL ROUTE 43.

REMOVE AND CONSTRUCT HMA BIKE PATH IN NORTHWEST QUADRANT OF THE INTERSECTION.

CONSTRUCT CORNER CUT WITH RETAINING WALL IN THE NORTHEAST QUADRANT OF THE INTERSECTION.

STAGE II

REMOVE ALL CONFLICTING PAVEMENT MARKINGS ALONG IL ROUTE 43 AND 143RD STREET AND INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL FOR SOUTHBOUND IL ROUTE 43 AND WESTBOUND 143RD STREET ACCORDING TO CURRENT MUTCD AND I.D.O.T. STANDARDS

PERFORM MEDIAN WORK FOR NORTH LEG OF IL ROUTE 43.

PERFORM MEDIAN WORK AND RELOCATE HANDHOLD ON EAST LEG OF 143RD STREET.

STAGE III

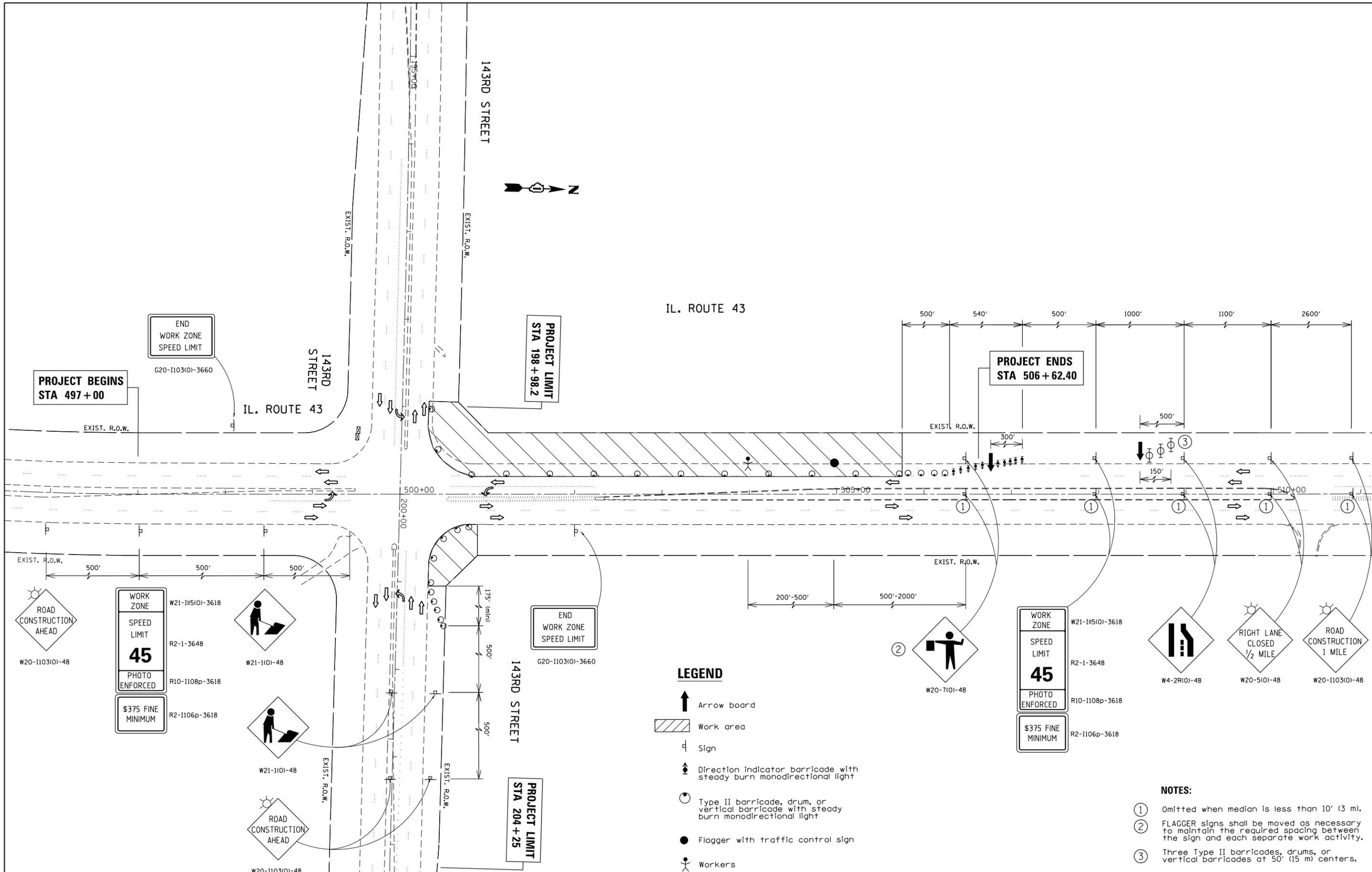
MILL EXISTING PAVEMENT AND INSTALL FINAL SURFACE & BINDER ON THE MILLED AND WIDENING AREA.

INSTALL FINAL PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS.

NOTE:

ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE BEGINNING OF ANY CONSTRUCTION ACTIVITIES WHICH MAY CREATE ERODABLE CONDITIONS.

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL IL ROUTE 43 AT 143RD STREET				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		CONTRACT NO. 60X73								
	PLOT DATE = 1/30/2015	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT	



LEGEND

- Arrow board
- Work area
- Sign
- Direction indicator barricade with steady burn monodirectional light
- Type II barricade, drum, or vertical barricade with steady burn monodirectional light
- Flagger with traffic control sign
- Workers

- NOTES:**
- ① Omitted when median is less than 10' (3 m).
 - ② FLAGGER signs shall be moved as necessary to maintain the required spacing between the sign and each separate work activity.
 - ③ Three Type II barricades, drums, or vertical barricades at 50' (15 m) centers.

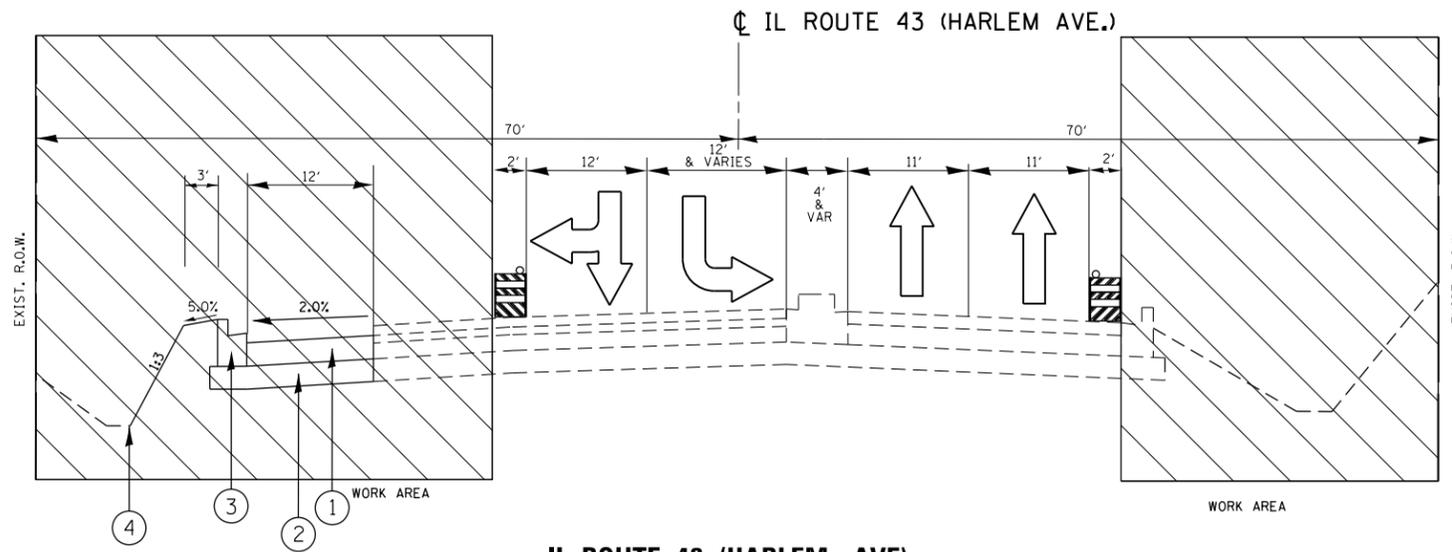
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/30/2015	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGE I CONSTRUCTION PLAN
IL ROUTE 43 AT 143RD STREET**

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

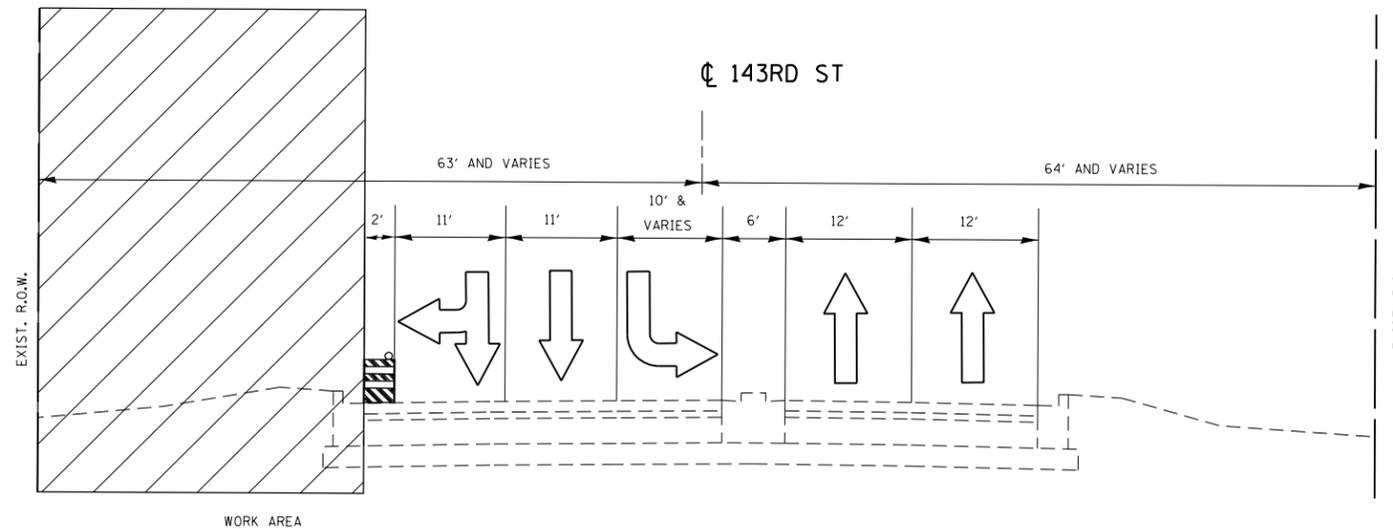
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127)N-1(13)	COOK	74	18
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				



IL ROUTE 43 (HARLEM AVE)
 STA 500+00.00 to STA 505+75.00
 PROPOSED IMPROVEMENT
 STAGE I

LEGEND

- ① PROPOSED HMA BASE COURSE WIDENING - 8 3/4"
- ② PROPOSED AGGREGATED SUBGRADE IMPROVEMENT - 12"
- ③ PROPOSED COMBINATION CURB AND GUTTER TYPE B-6.24
- ④ PROPOSED DITCH



143RD ST
 STA 200+00 TO STA 201+00
 PROPOSED IMPROVEMENT
 STAGE I

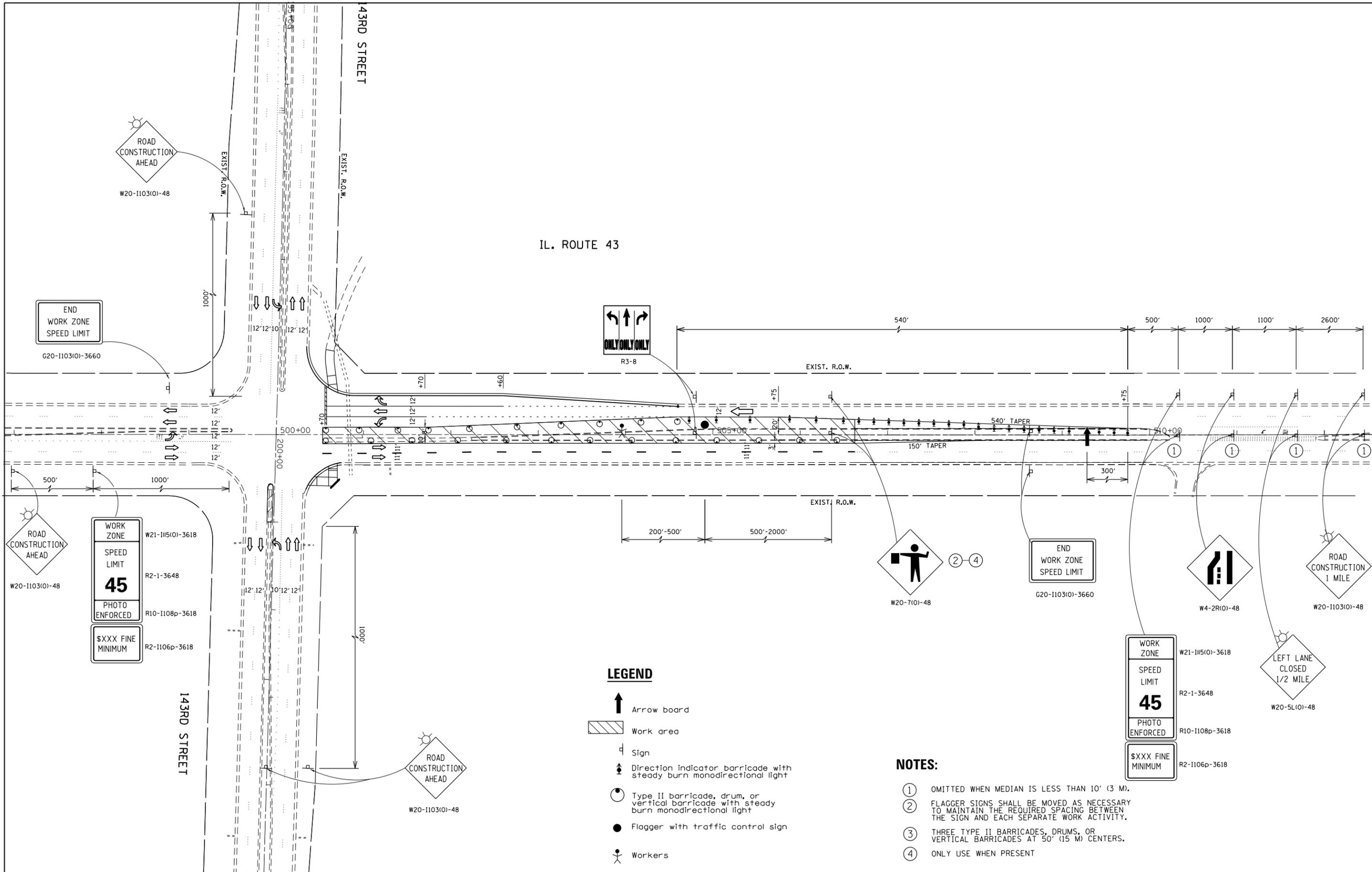
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Default	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 1/30/2015	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGE I CONSTRUCTION PLAN
 IL ROUTE 43 AT 143RD STREET**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127)N-1(13)	COOK	74	19
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				



LEGEND

-  Arrow board
-  Work area
-  Sign
-  Direction indicator barricade with steady burn monodirectional light
-  Type II barricade, drum, or vertical barricade with steady burn monodirectional light
-  Flagger with traffic control sign
-  Workers

NOTES:

- ① OMITTED WHEN MEDIAN IS LESS THAN 10' (3 M).
- ② FLAGGER SIGNS SHALL BE MOVED AS NECESSARY TO MAINTAIN THE REQUIRED SPACING BETWEEN THE SIGN AND EACH SEPARATE WORK ACTIVITY.
- ③ THREE TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 50' (15 M) CENTERS.
- ④ ONLY USE WHEN PRESENT

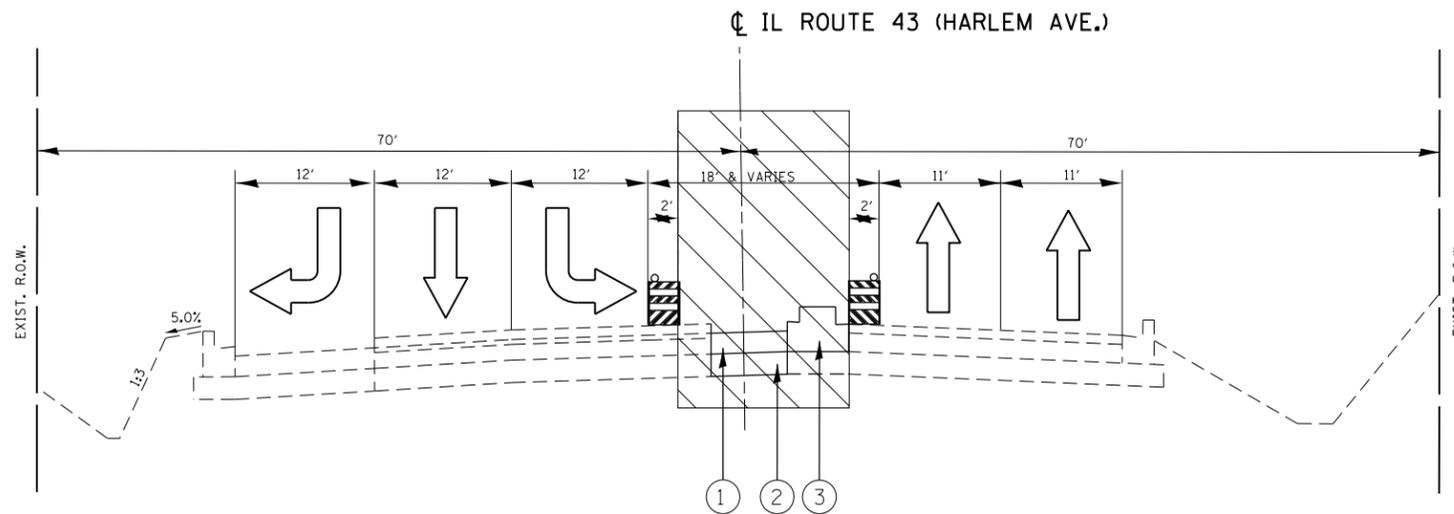
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	PLOT DATE = 1/30/2015	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGE II CONSTRUCTION PLAN
IL. ROUTE 43 AT 143RD STREET**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127)N-1(13)	COOK	74	20
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				

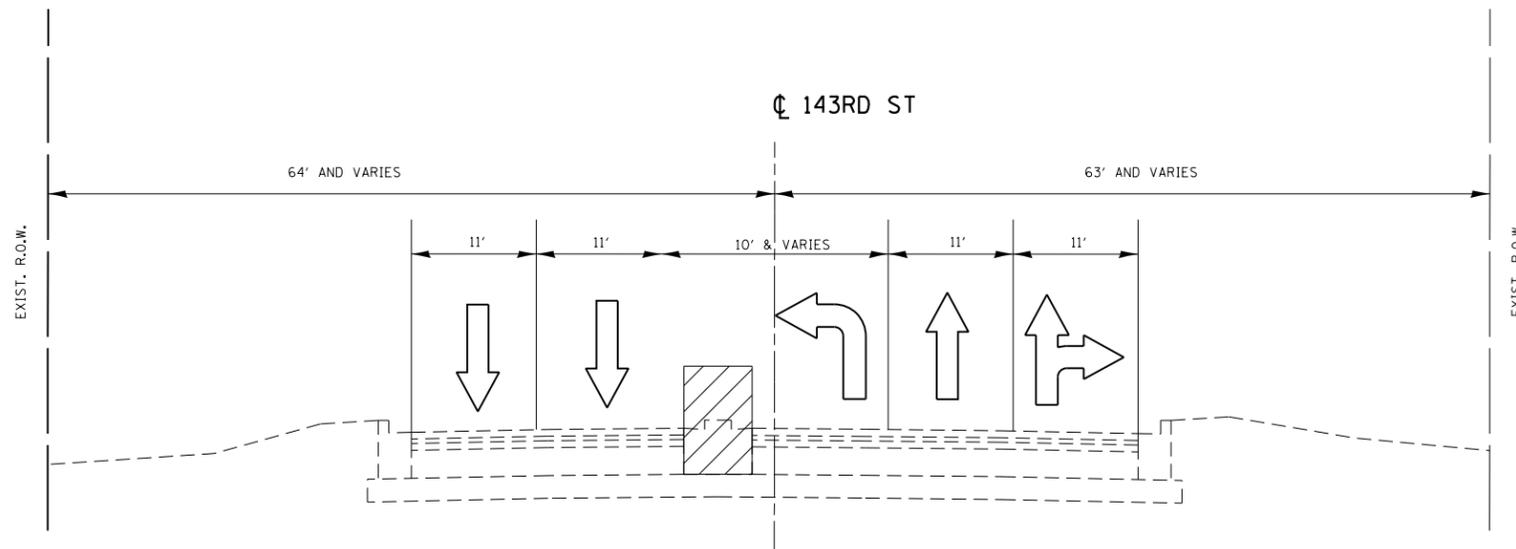


IL ROUTE 43 (HARLEM AVE.)

PROPOSED IMPROVEMENT
STA 500+00.00 to STA 505+75.00

LEGEND

- ① PROPOSED HMA BASE COURSE WIDENING, IL-19.0, N70 - 8 3/4"
- ② PROPOSED AGGREGATED SUBGRADE IMPORVEMENT - 12"
- ③ PROPOSED HMA MEDIAN SB-6.06



143RD ST

PROPOSED IMPROVEMENT
STA 200+00 to STA 204+25

NOTE:

USE TEMPORARY LANE CLOSURE FOR MEDIAN OPERATIONS

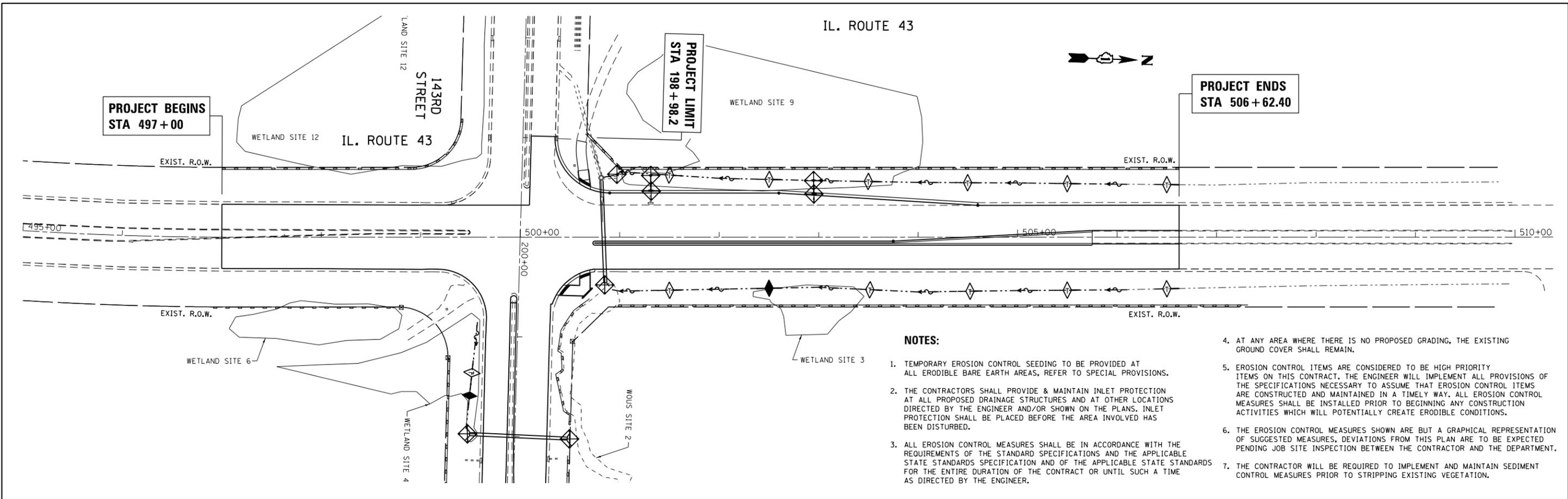
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGE II CONSTRUCTION PLAN
IL. ROUTE 43 AT 143RD STREET

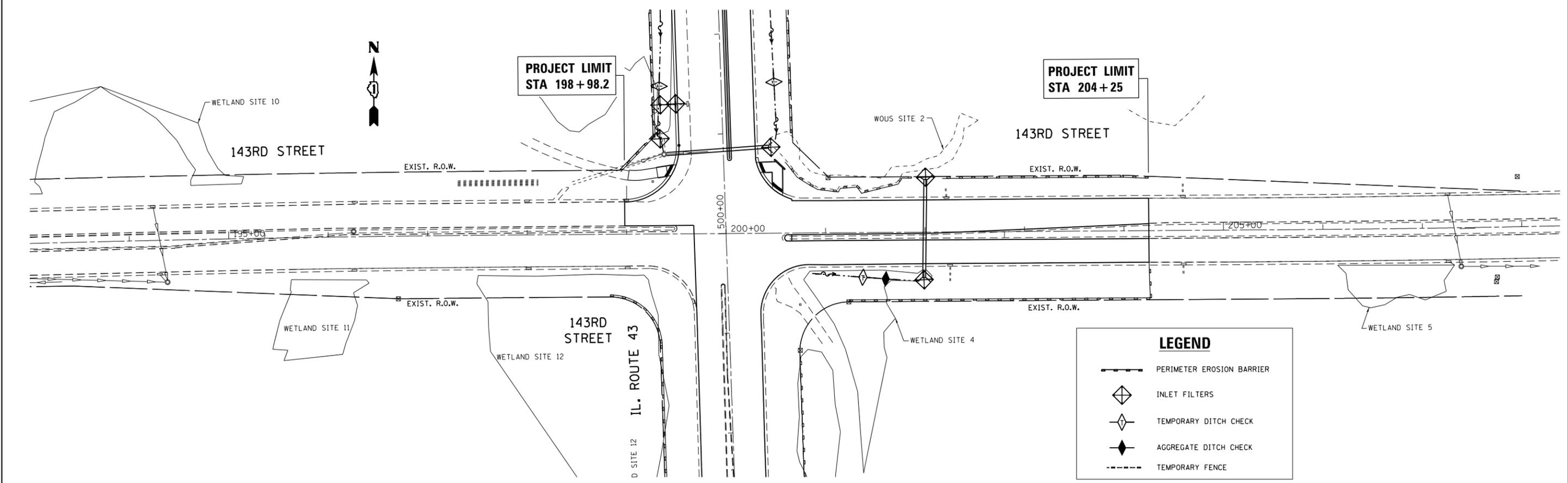
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127)N-1(13)	COOK	74	21
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X73	



NOTES:

1. TEMPORARY EROSION CONTROL SEEDING TO BE PROVIDED AT ALL ERODIBLE BARE EARTH AREAS, REFER TO SPECIAL PROVISIONS.
2. THE CONTRACTORS SHALL PROVIDE & MAINTAIN INLET PROTECTION AT ALL PROPOSED DRAINAGE STRUCTURES AND AT OTHER LOCATIONS DIRECTED BY THE ENGINEER AND/OR SHOWN ON THE PLANS. INLET PROTECTION SHALL BE PLACED BEFORE THE AREA INVOLVED HAS BEEN DISTURBED.
3. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE STATE STANDARDS SPECIFICATION AND OF THE APPLICABLE STATE STANDARDS FOR THE ENTIRE DURATION OF THE CONTRACT OR UNTIL SUCH A TIME AS DIRECTED BY THE ENGINEER.
4. AT ANY AREA WHERE THERE IS NO PROPOSED GRADING, THE EXISTING GROUND COVER SHALL REMAIN.
5. EROSION CONTROL ITEMS ARE CONSIDERED TO BE HIGH PRIORITY ITEMS ON THIS CONTRACT. THE ENGINEER WILL IMPLEMENT ALL PROVISIONS OF THE SPECIFICATIONS NECESSARY TO ASSURE THAT EROSION CONTROL ITEMS ARE CONSTRUCTED AND MAINTAINED IN A TIMELY WAY. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WHICH WILL POTENTIALLY CREATE ERODIBLE CONDITIONS.
6. THE EROSION CONTROL MEASURES SHOWN ARE BUT A GRAPHICAL REPRESENTATION OF SUGGESTED MEASURES. DEVIATIONS FROM THIS PLAN ARE TO BE EXPECTED PENDING JOB SITE INSPECTION BETWEEN THE CONTRACTOR AND THE DEPARTMENT.
7. THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT AND MAINTAIN SEDIMENT CONTROL MEASURES PRIOR TO STRIPPING EXISTING VEGETATION.



LEGEND

- PERIMETER EROSION BARRIER
- INLET FILTERS
- TEMPORARY DITCH CHECK
- AGGREGATE DITCH CHECK
- TEMPORARY FENCE

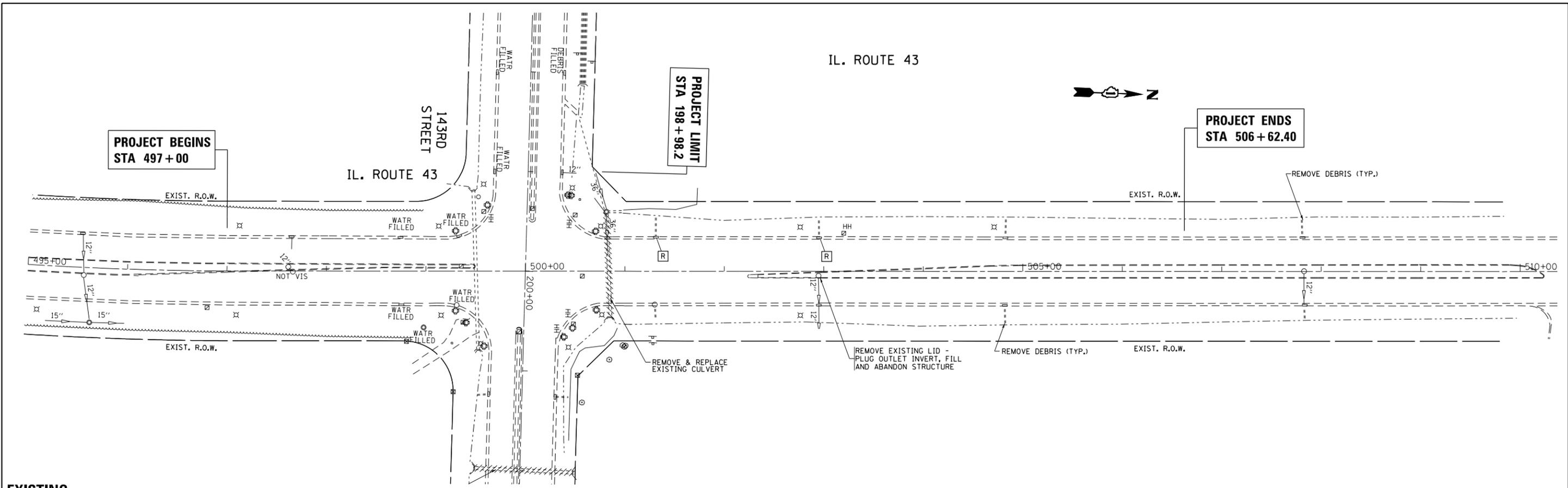
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

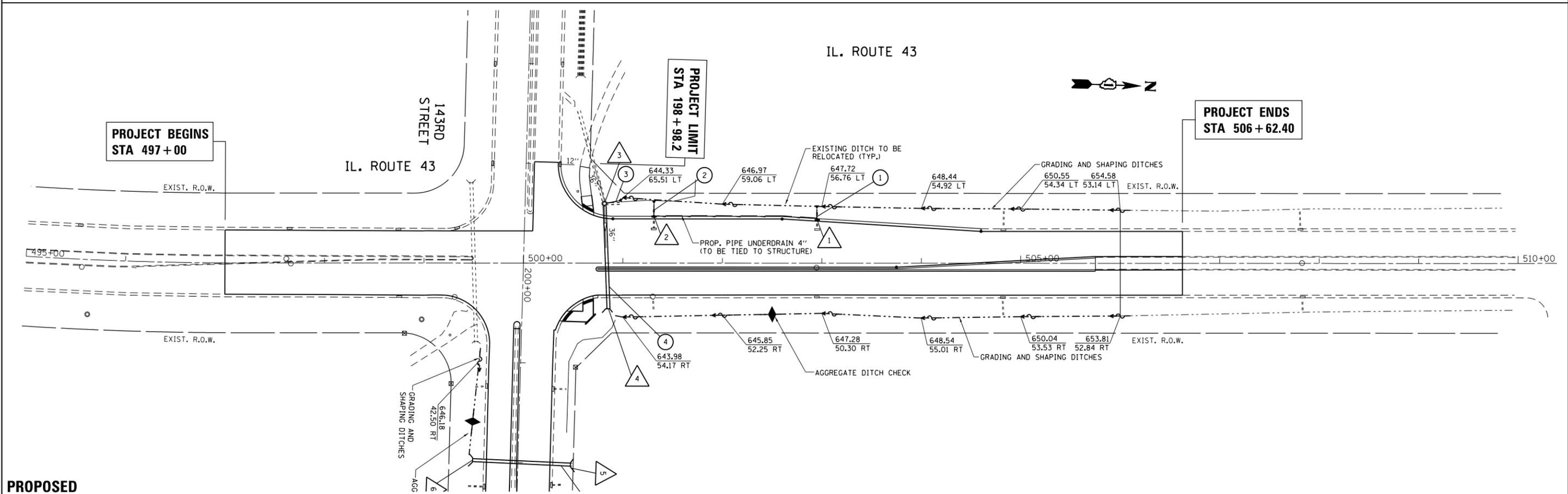
**EROSION CONTROL PLAN
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	23
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				



EXISTING

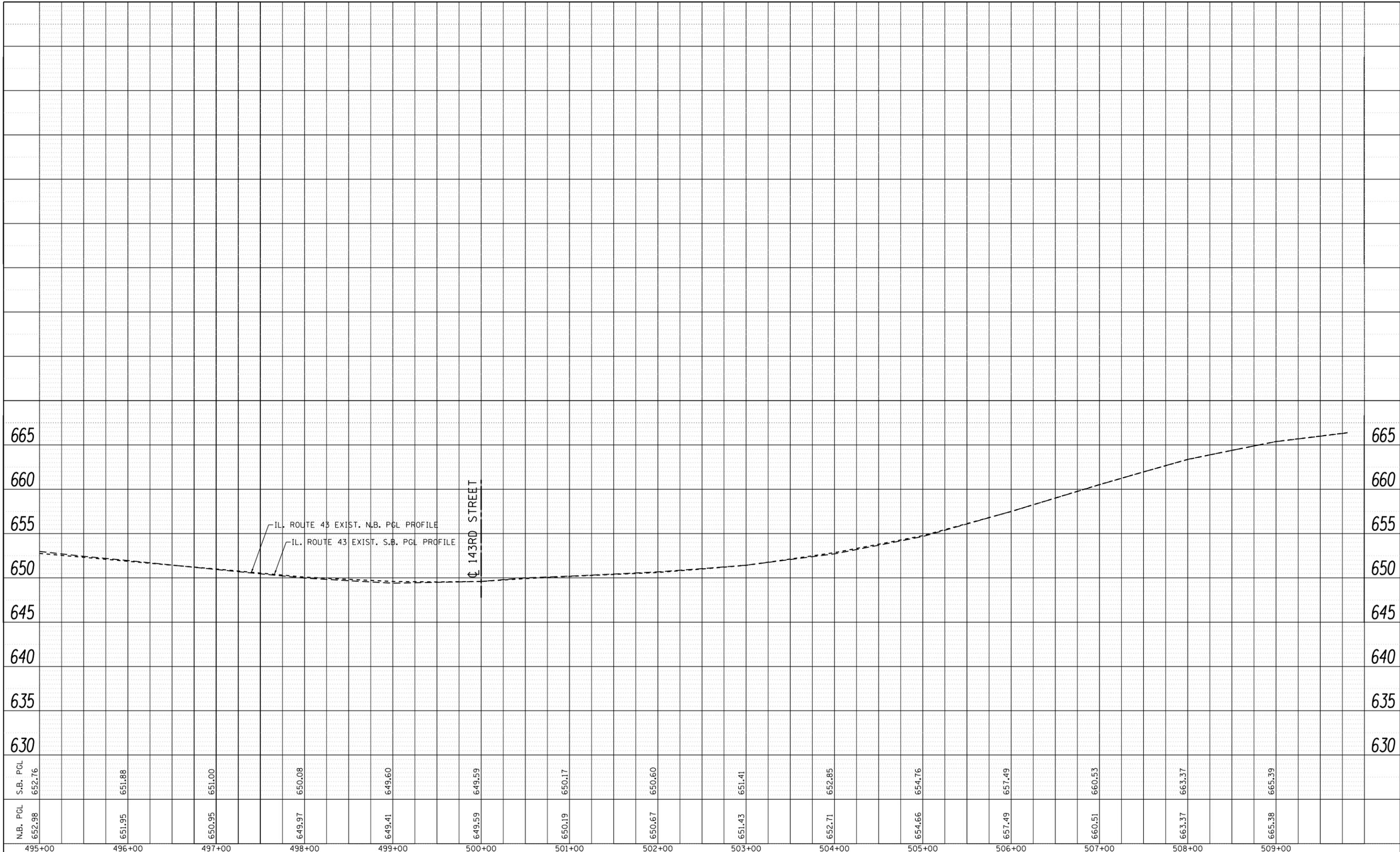


PROPOSED

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PLOT SCALE = 100.0000' / 1\"/>										
Default	PLOT DATE = 1/30/2015	DATE -	REVISED -			SCALE: 1" = 50'	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

PLAN	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	ALIGNMENT		
	CHECKED		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	GRADES CHECKED		
	STRUCTURE		
	NOT AT THIS OFFICE		



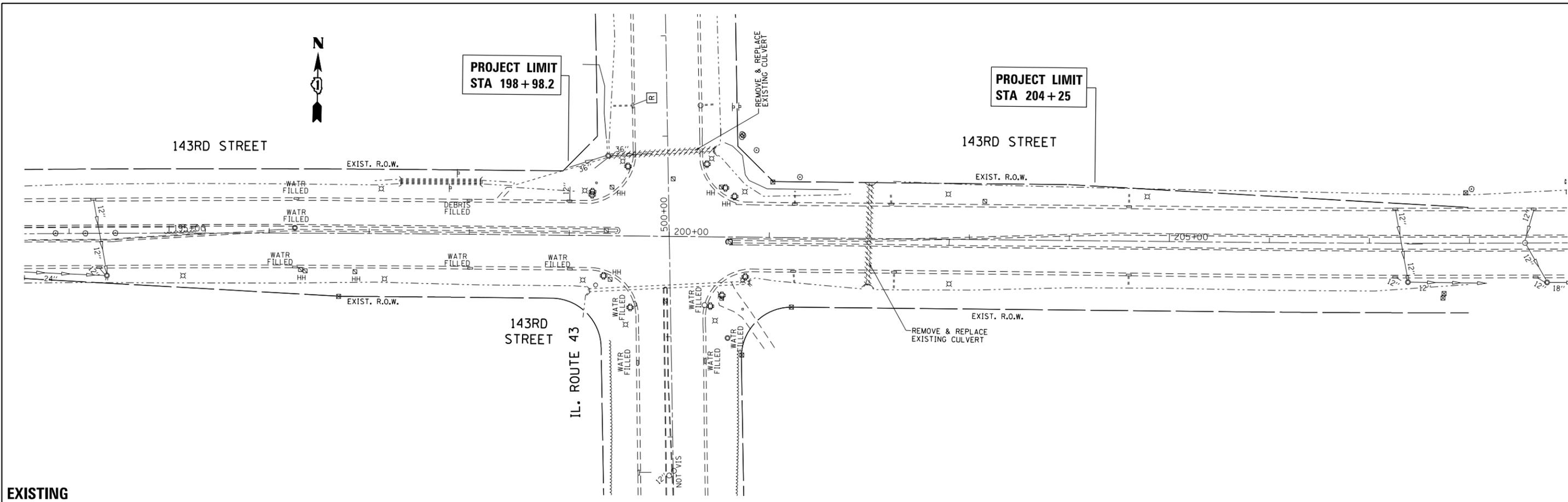
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

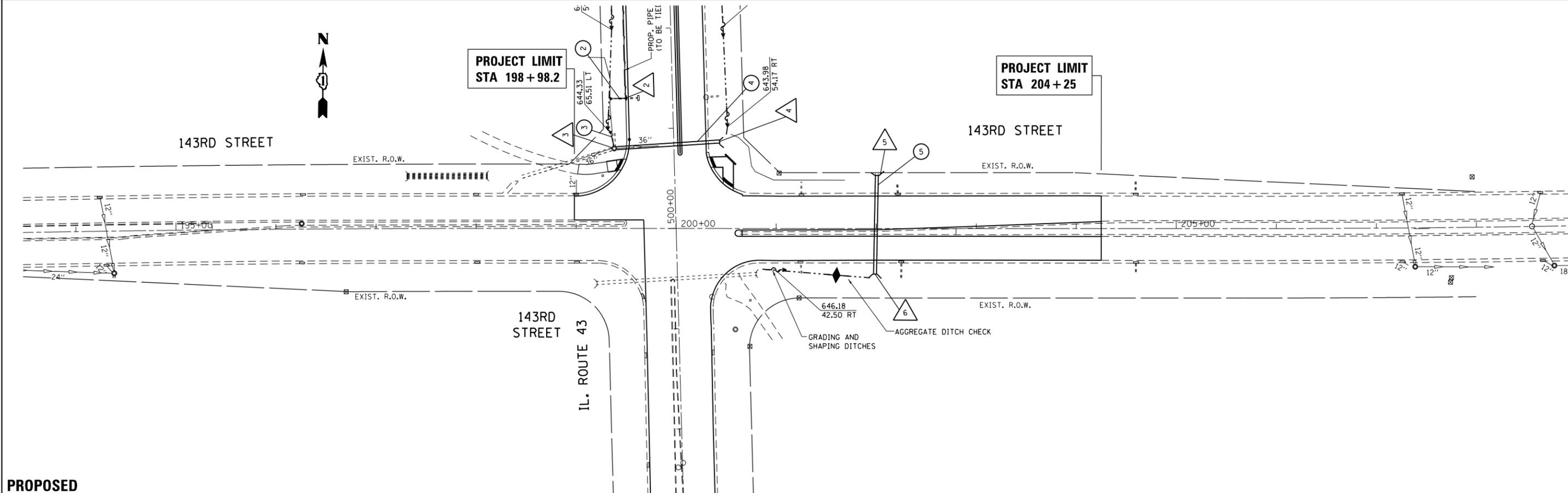
**DRAINAGE PROFILE
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	25
CONTRACT NO. 60X73			ILLINOIS FED. AID PROJECT	



EXISTING



PROPOSED

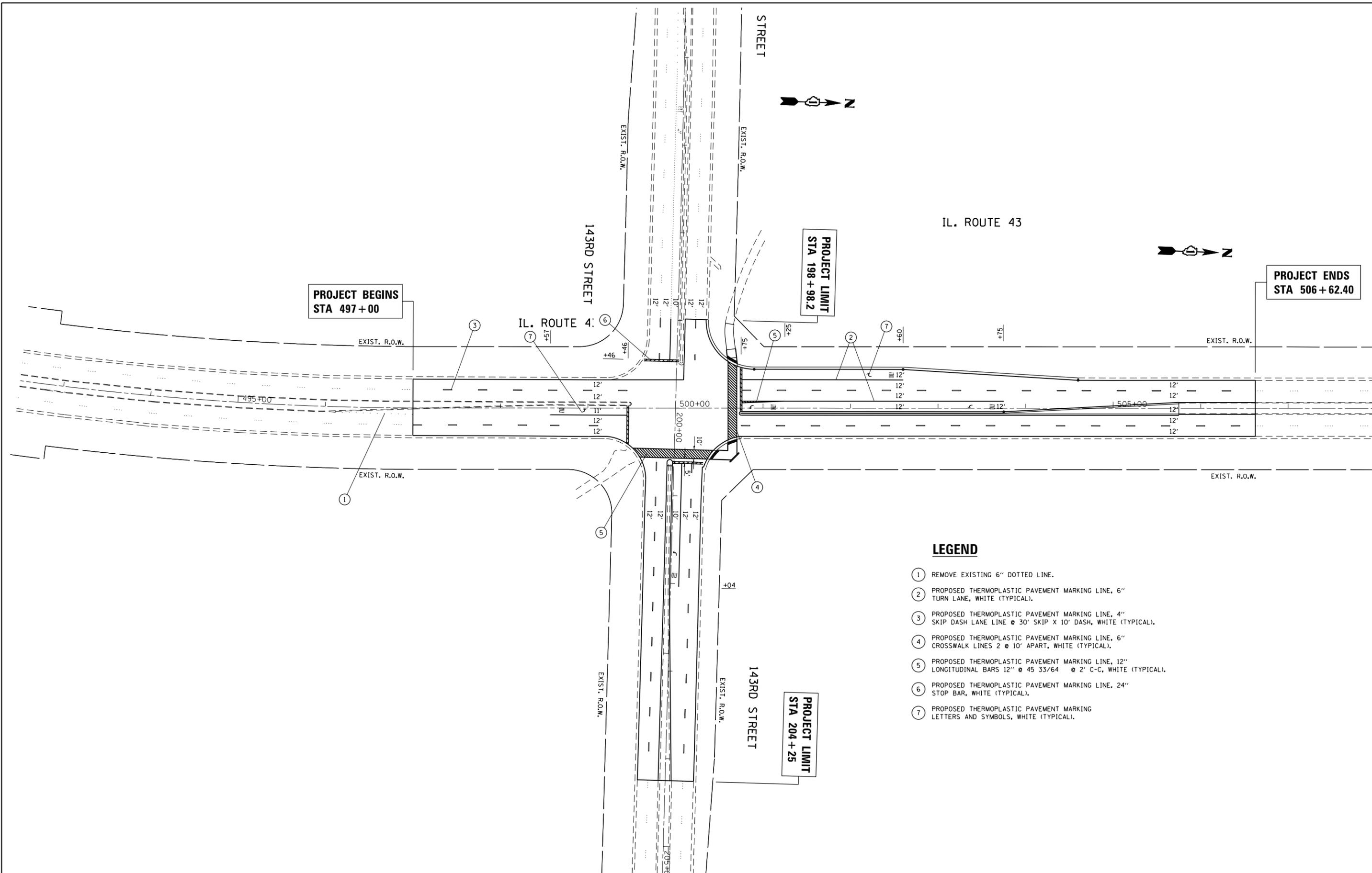
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Default	PLOT DATE = 1/30/2015	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	26
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.



LEGEND

- ① REMOVE EXISTING 6" DOTTED LINE.
- ② PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE, 6" TURN LANE, WHITE (TYPICAL).
- ③ PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH LANE LINE @ 30' SKIP X 10' DASH, WHITE (TYPICAL).
- ④ PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE, 6" CROSSWALK LINES 2 @ 10' APART, WHITE (TYPICAL).
- ⑤ PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE, 12" LONGITUDINAL BARS 12" @ 45 33/64 @ 2' C-C, WHITE (TYPICAL).
- ⑥ PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE, 24" STOP BAR, WHITE (TYPICAL).
- ⑦ PROPOSED THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYPICAL).

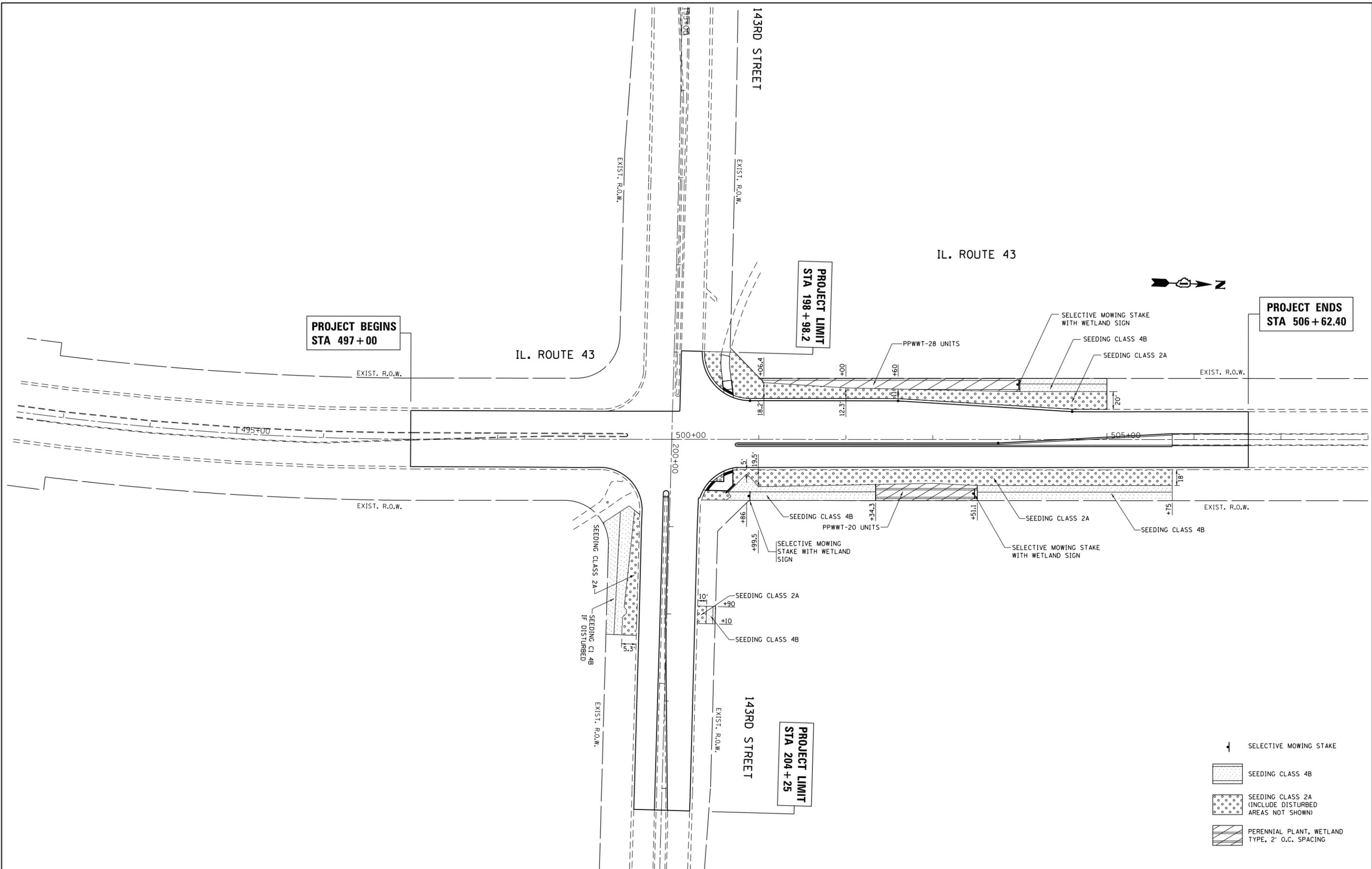
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED PAVEMENT MARKING PLAN
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

SCALE: 1" = 50' SHEET OF SHEETS STA. 493+00.00 TO STA. 508+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	27
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				



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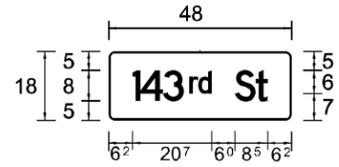
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LANDSCAPING PLAN
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	28
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

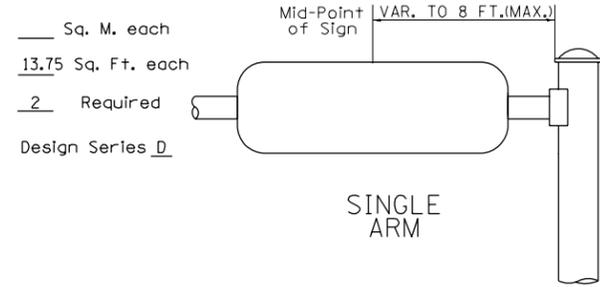
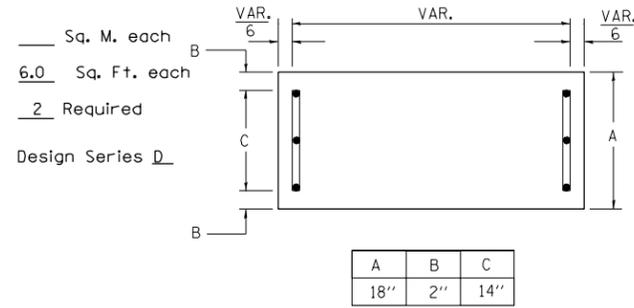
SIGN PANEL - TYPE 1



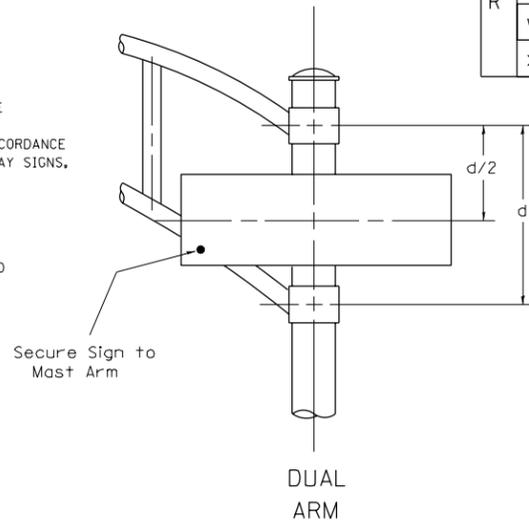
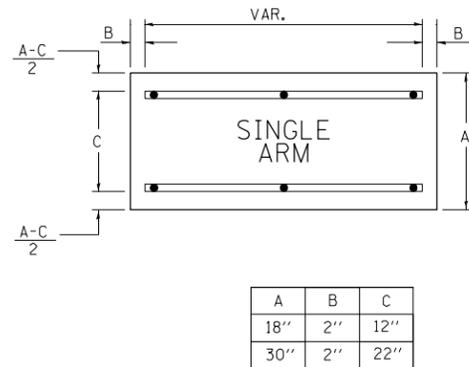
SIGN PANEL - TYPE 2



SUPPORTING CHANNELS



SUPPORTING CHANNELS



SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.

Upper Case To Lower Case
Spacing Chart 8-6 Inch Series "C & D"

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	g o q	m n p r u														
A W X	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ²	1 ⁴
B	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁶	1 ⁷
C E G	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
D O O R	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
F	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²
H I M N	2 ⁰	2 ¹	2 ²	2 ⁴	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹	2 ⁰	2 ¹
J U	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹
K L	1 ¹	1 ²	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
P	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
S	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴						
T	1 ¹	1 ²	1 ⁶	1 ⁷	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
V	0 ⁶	1 ⁰	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁶	1 ⁰	1 ²	1 ⁴						
Y	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁵	0 ⁷	0 ⁵	0 ⁶	0 ⁶	1 ⁰	1 ¹	1 ²
Z	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹

Lower Case To Lower Case
Spacing Chart 6 Inch Series "C & D"

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	g o q	m n p r u														
ad h g i j	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷
l m n q u																
b f k o p s	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
c e	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴						
r	0 ⁶	1 ⁰	1 ²	1 ⁴	0 ⁶	1 ⁰	0 ³	0 ³	0 ⁵	0 ⁶	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰
t z	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
v y	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²
w	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
x	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴

Number To Number
Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷
1	2 ⁰	2 ¹	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹
2 3 4	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁶	1 ⁷	1 ⁴	1 ⁵
5	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
6	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
7	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁵	0 ⁵	0 ⁶	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴
8	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁴	1 ⁵

EXAMPLE, 2³ DENOTES 3/8

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES		SERIES		SERIES			C	D
	C	D	C	D	C	D	C	D			
A	3 ⁶	5 ⁰	5 ⁰	6 ⁵	a	3 ⁵	4 ²				
B	3 ²	4 ⁰	4 ³	5 ³	b	3 ⁵	4 ²				
C	3 ²	4 ⁰	4 ³	5 ³	c	3 ⁵	4 ¹				
D	3 ²	4 ⁰	4 ³	5 ³	d	3 ⁵	4 ²				
E	3 ⁰	3 ⁵	4 ⁰	4 ⁷	e	3 ⁵	4 ²				
F	3 ⁰	3 ⁵	4 ⁰	4 ⁷	f	2 ³	2 ⁶				
G	3 ²	4 ⁰	4 ³	5 ³	g	3 ⁵	4 ²				
H	3 ²	4 ⁰	4 ³	5 ³	h	3 ⁵	4 ²				
I	0 ⁷	0 ⁷	1 ¹	1 ²	i	1 ¹	1 ¹				
J	3 ⁰	3 ⁶	4 ⁰	5 ⁰	j	2 ⁰	2 ²				
K	3 ²	4 ¹	4 ³	5 ⁴	k	3 ⁵	4 ²				
L	3 ⁰	3 ⁵	4 ⁰	4 ⁷	l	1 ¹	1 ¹				
M	3 ⁷	4 ⁵	5 ¹	6 ¹	m	6 ⁰	7 ⁰				
N	3 ²	4 ⁰	4 ³	5 ³	n	3 ⁵	4 ²				
O	3 ⁴	4 ²	4 ⁵	5 ⁵	o	3 ⁶	4 ³				
P	3 ²	4 ⁰	4 ³	5 ³	p	3 ⁵	4 ²				
Q	3 ⁴	4 ²	4 ⁵	5 ⁵	q	3 ⁵	4 ²				
R	3 ²	4 ⁰	4 ³	5 ³	r	2 ⁶	3 ²				
S	3 ²	4 ⁰	4 ³	5 ³	s	3 ⁶	4 ²				
T	3 ⁰	3 ⁵	4 ⁰	4 ⁷	t	2 ⁷	3 ²				
U	3 ²	4 ⁰	4 ³	5 ³	u	3 ⁵	4 ²				
V	3 ⁵	4 ⁴	4 ⁷	6 ⁰	v	4 ²	4 ⁷				
W	4 ⁴	5 ²	6 ⁰	7 ⁰	w	5 ⁵	6 ⁴				
X	3 ⁴	4 ⁰	4 ⁵	5 ³	x	4 ⁴	5 ¹				
Y	3 ⁶	5 ⁰	5 ⁰	6 ⁶	y	4 ⁶	5 ³				
Z	3 ²	4 ⁰	4 ³	5 ³	z	3 ⁶	4 ³				

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 ²	1 ⁴	1 ⁵	2 ⁰
2	3 ²	4 ⁰	4 ³	5 ³
3	3 ²	4 ⁰	4 ³	5 ³
4	3 ⁵	4 ³	4 ⁷	5 ⁷
5	3 ²	4 ⁰	4 ³	5 ³
6	3 ²	4 ⁰	4 ³	5 ³
7	3 ²	4 ⁰	4 ³	5 ³
8	3 ²	4 ⁰	4 ³	5 ³
9	3 ²	4 ⁰	4 ³	5 ³
0	3 ⁴	4 ²	4 ⁵	5 ⁵

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

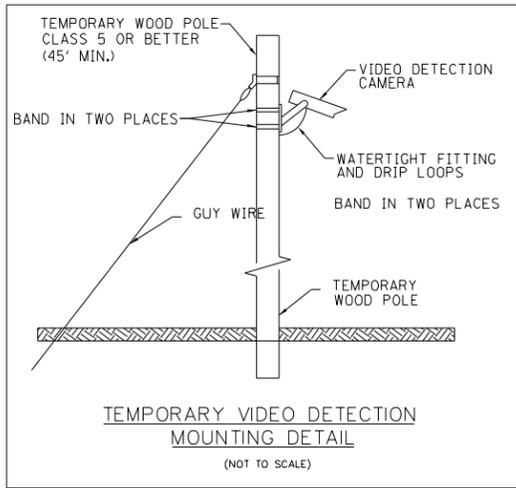
GENERAL NOTES

- 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 HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

- * J.O. HERBERT CO. 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
 - BRACKETS PART *HPN034 (UNIVERSAL)
 - 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.



EXISTING LOOPS DETECTOR ON WEST LEG OF 143RD STREET TO REMAIN

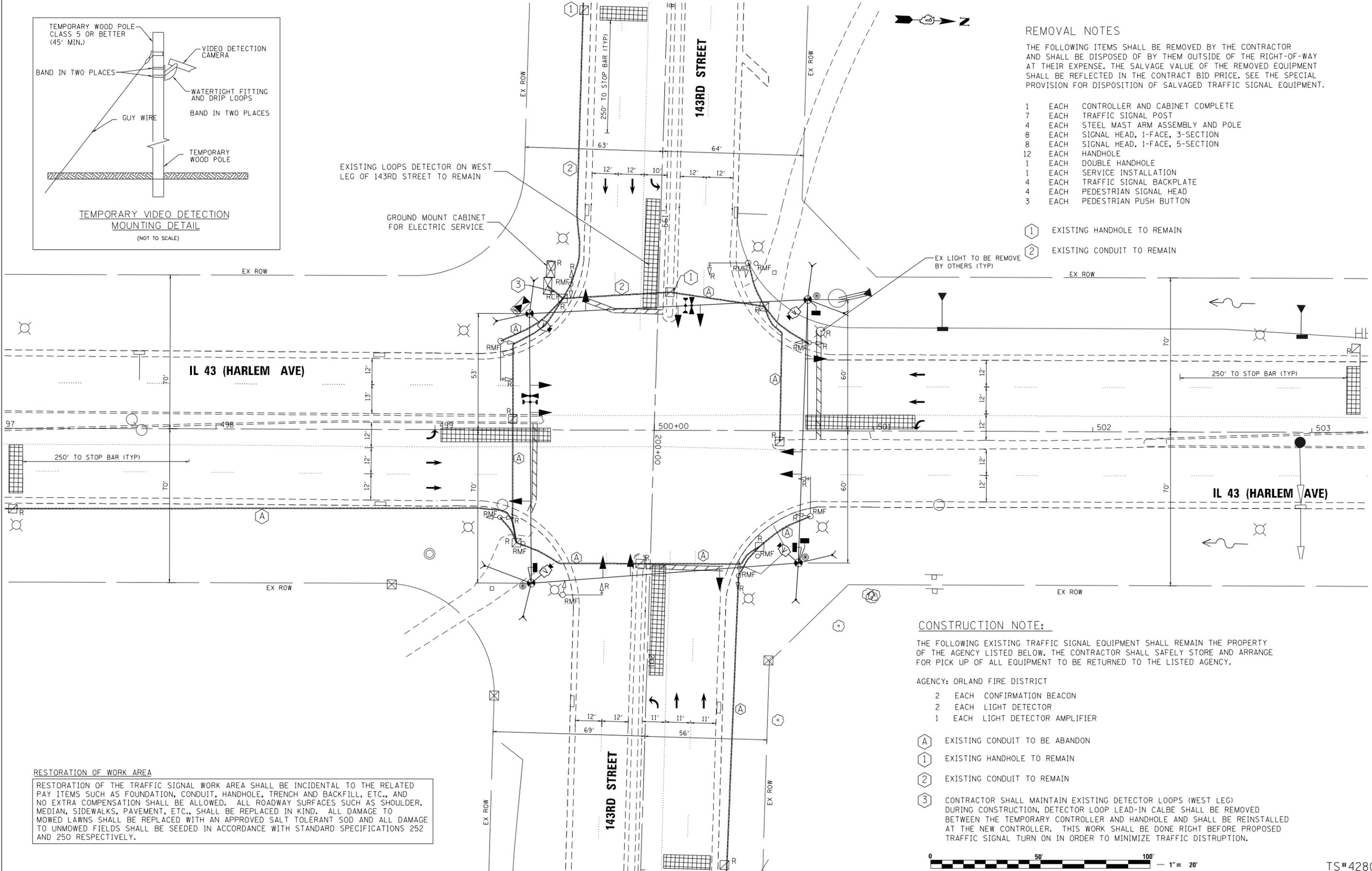
GROUND MOUNT CABINET FOR ELECTRIC SERVICE

REMOVAL NOTES

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE OF THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. SEE THE SPECIAL PROVISION FOR DISPOSITION OF SALVAGED TRAFFIC SIGNAL EQUIPMENT.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 7 EACH TRAFFIC SIGNAL POST
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 8 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 8 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 12 EACH HANDHOLE
- 1 EACH DOUBLE HANDHOLE
- 1 EACH SERVICE INSTALLATION
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN SIGNAL HEAD
- 3 EACH PEDESTRIAN PUSH BUTTON

- ① EXISTING HANDHOLE TO REMAIN
- ② EXISTING CONDUIT TO REMAIN



CONSTRUCTION NOTE:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY.

- AGENCY: ORLAND FIRE DISTRICT
- 2 EACH CONFIRMATION BEACON
 - 2 EACH LIGHT DETECTOR
 - 1 EACH LIGHT DETECTOR AMPLIFIER

- A EXISTING CONDUIT TO BE ABANDON
- ① EXISTING HANDHOLE TO REMAIN
- ② EXISTING CONDUIT TO REMAIN
- ③ CONTRACTOR SHALL MAINTAIN EXISTING DETECTOR LOOPS (WEST LEG) DURING CONSTRUCTION, DETECTOR LOOP LEAD-IN CALBE SHALL BE REMOVED BETWEEN THE TEMPORARY CONTROLLER AND HANDHOLE AND SHALL BE REINSTALLED AT THE NEW CONTROLLER. THIS WORK SHALL BE DONE RIGHT BEFORE PROPOSED TRAFFIC SIGNAL TURN ON IN ORDER TO MINIMIZE TRAFFIC DISTRUPTION.

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



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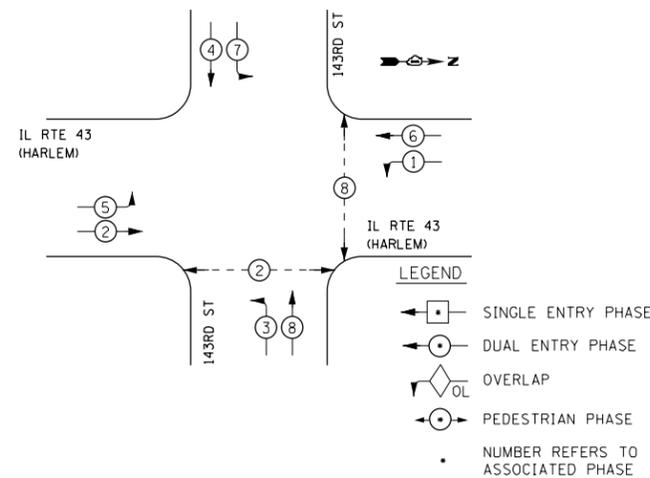
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

IL 43 (HARLEM AVE) AT 143RD STREET	
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN	
SCALE: -	TO STA. -
SHEET NO. OF SHEETS	STA. TO STA.

F.A.P. RTE. 348	SECTION (3127-1N-1(13))	COUNTY COOK	TOTAL SHEETS 74	SHEET NO. 30
CONTRACT NO. 60X73				

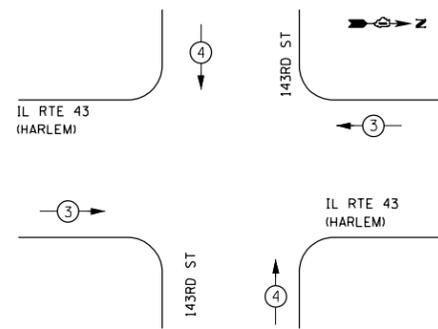
TS#4280

PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

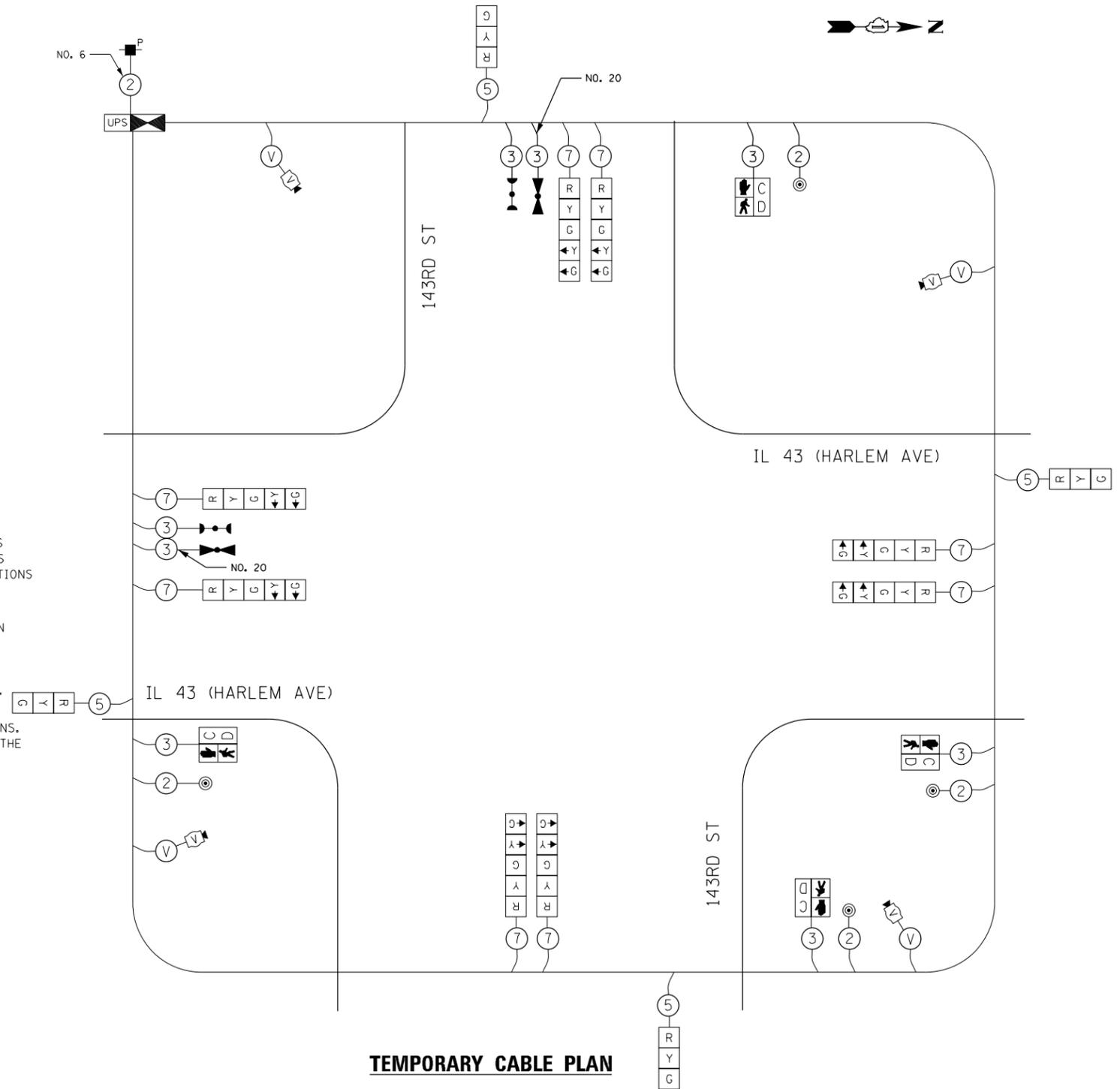
NOTES FOR TEMPORARY TRAFFIC SIGNALS

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR MICROPROCESSOR BASE WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1 INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC STAGING ARE IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
- TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
- DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
- WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	120	0.05	
VIDEO VEH. SENSOR	4	15	15	1.00	60
FLASHER				0.50	
TOTAL					401.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 1
201 W. CENTER CT/SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT: LLYAS MOHIUDDIN
PHONE: 708-235-2692
COMPANY: COMMONWEALTH EDISON



TEMPORARY CABLE PLAN

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 43 (HARLEM AVE) AT 143RD STREET
TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

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

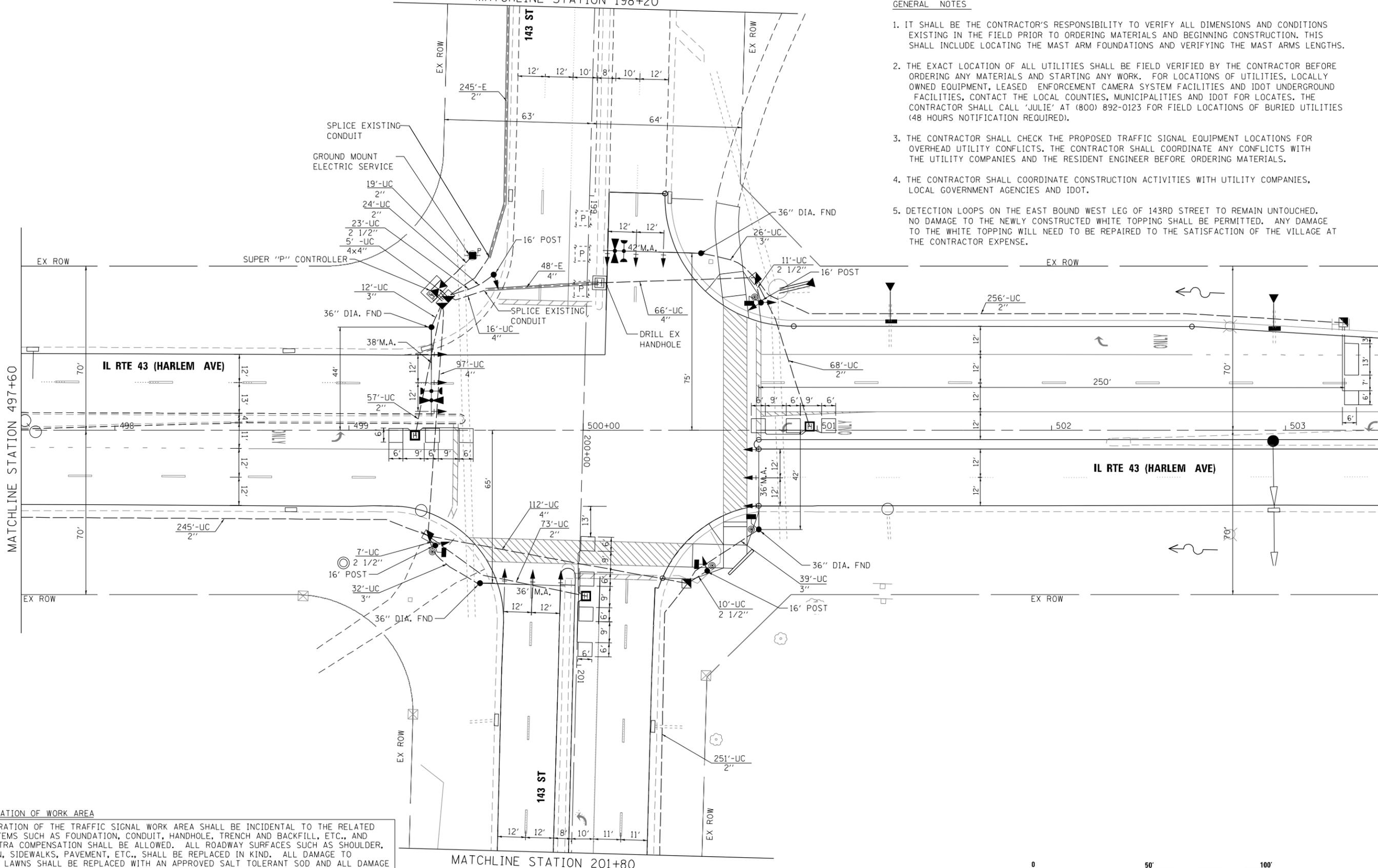
F.A.P. RTE. 348	SECTION (3127-1N-1(13))	COUNTY COOK	TOTAL SHEETS 74	SHEET NO. 31
CONTRACT NO. 60X73			TS#4280	



MATCHLINE STATION 198+20

GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
3. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.
5. DETECTION LOOPS ON THE EAST BOUND WEST LEG OF 143RD STREET TO REMAIN UNTOUCHED. NO DAMAGE TO THE NEWLY CONSTRUCTED WHITE TOPPING SHALL BE PERMITTED. ANY DAMAGE TO THE WHITE TOPPING WILL NEED TO BE REPAIRED TO THE SATISFACTION OF THE VILLAGE AT THE CONTRACTOR EXPENSE.



MATCHLINE STATION 497+60

IL RTE 43 (HARLEM AVE)

IL RTE 43 (HARLEM AVE)

143 ST

MATCHLINE STATION 201+80

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 43 AT 143 STREET
TRAFFIC SIGNAL INSTALLATION PLAN

SCALE: 1"=20' SHEET NO. 3 OF 6 SHEETS STA. TO STA.

F.A.P. RTE. 348	SECTION (3127-1N-1(13))	COUNTY COOK	TOTAL SHEETS 74	SHEET NO. 32
CONTRACT NO. 60X73			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

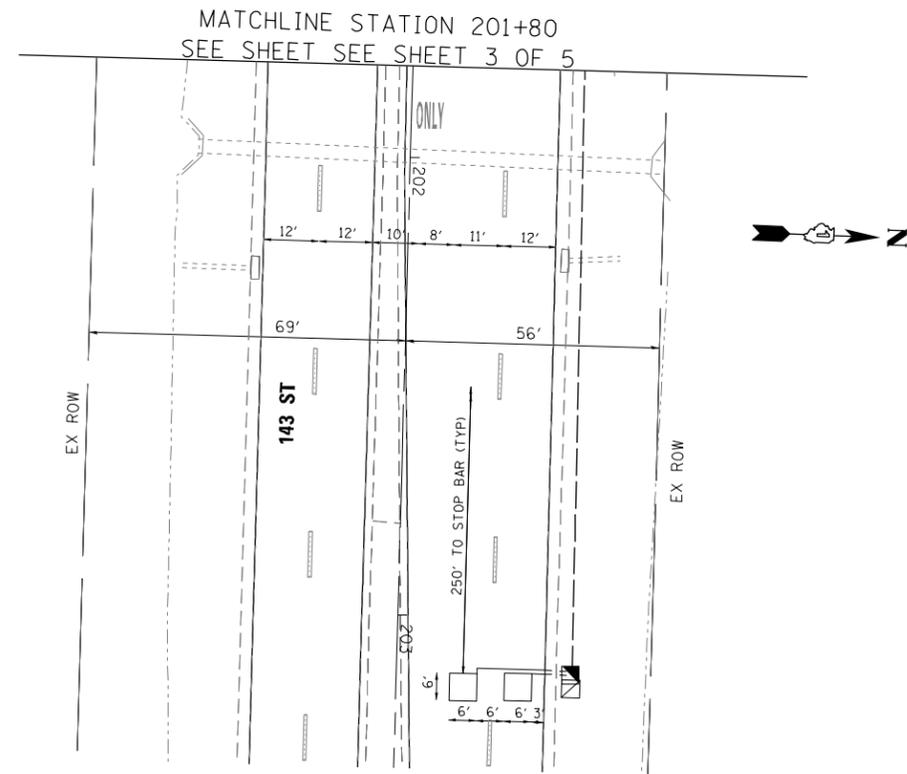
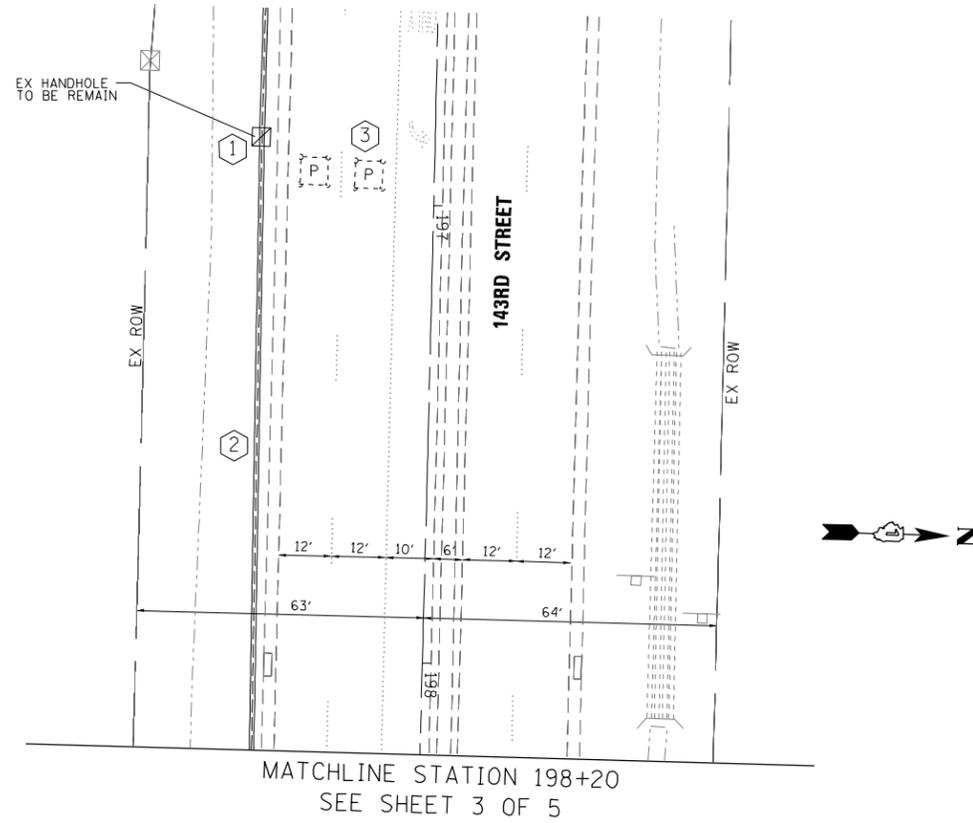
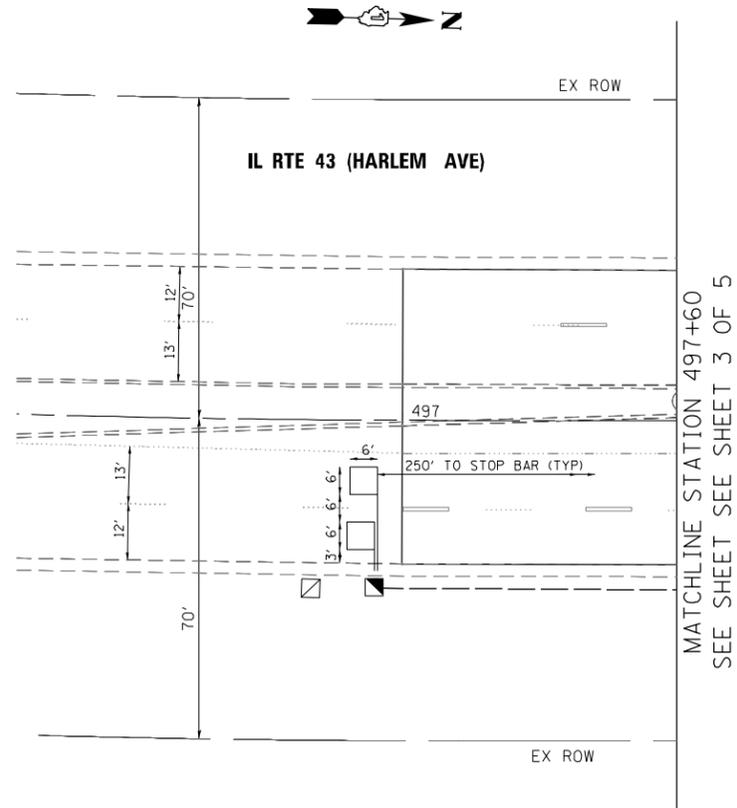
TS#4280

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

CONSTRUCTION NOTE:

- ① EXISTING HANDHOLE TO REMAIN
- ② EXISTING CONDUIT TO REMAIN
- ③ EXISTING LOOPS TO REMAIN



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 43 AT 143 STREET
TRAFFIC SIGNAL INSTALLATION PLAN**

SCALE: 1"=20' SHEET NO. 4 OF 5 SHEETS STA. TO STA.

F.A.P. RTE. 348	SECTION (3127-1N-1(13))	COUNTY COOK	TOTAL SHEETS 74	SHEET NO. 33
CONTRACT NO. 60X73				

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

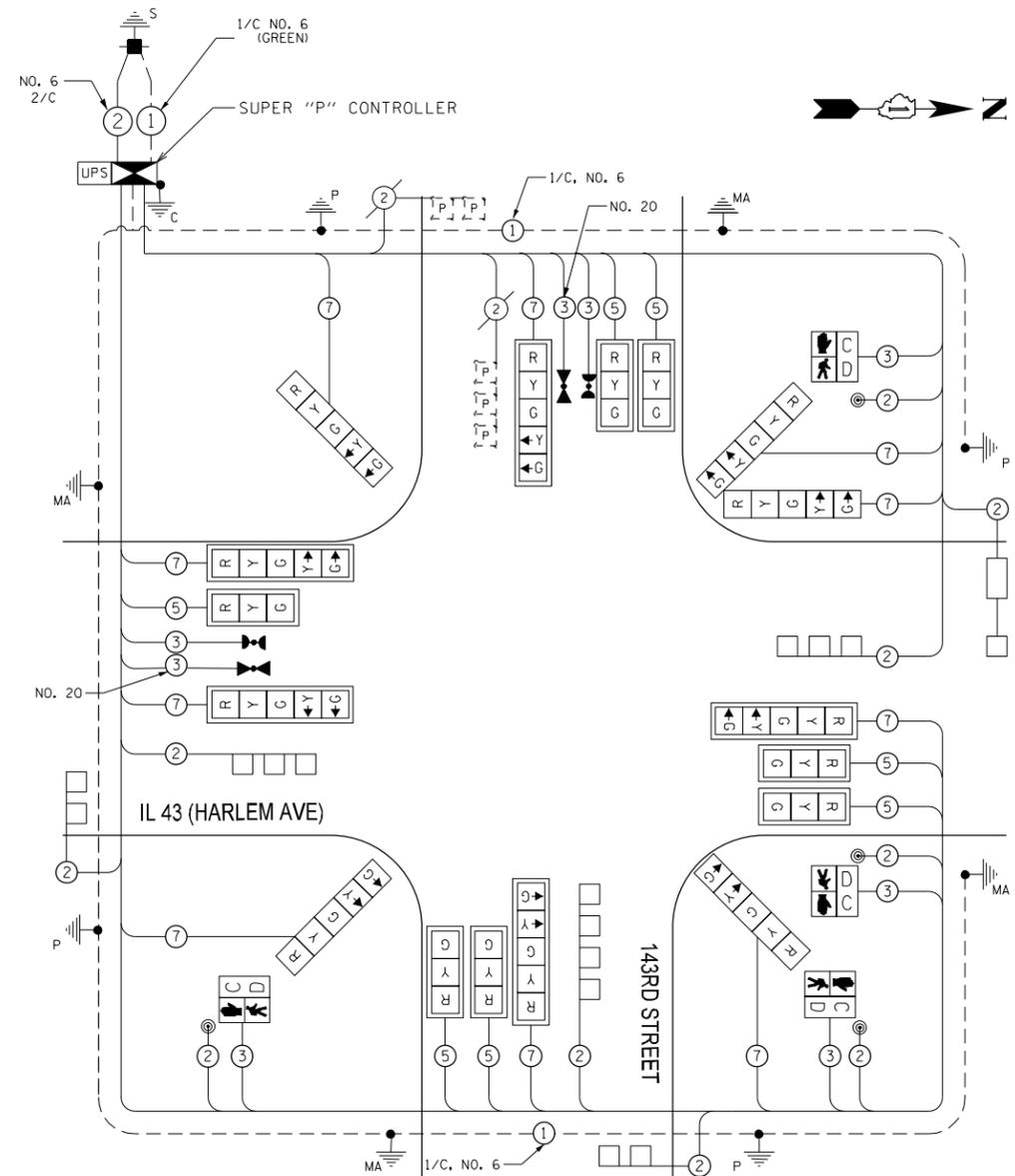
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SCHEDULE OF QUANTITIES

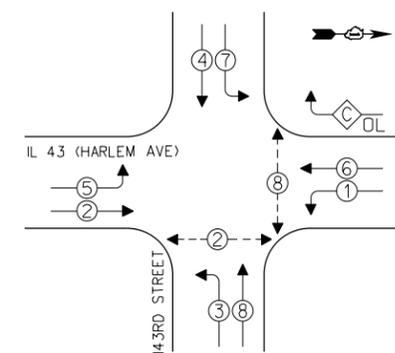
ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SO FT	12
SIGN PANEL - TYPE 2	SO FT	28
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	993
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	51
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	109
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	311
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
* FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	923
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1214
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1557
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1868
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2006
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	94
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	601
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	46
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	814
** LIGHT DETECTOR	EACH	2
** LIGHT DETECTOR AMPLIFIER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2
REMOVE EXISTING HANDHOLE	EACH	11
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
** EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	264
* UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

* SUPER P CABINET
 ** 100% COST TO ORLAND FIRE DISTRICT



CABLE PLAN

PROPOSED CONTROLLER SEQUENCE

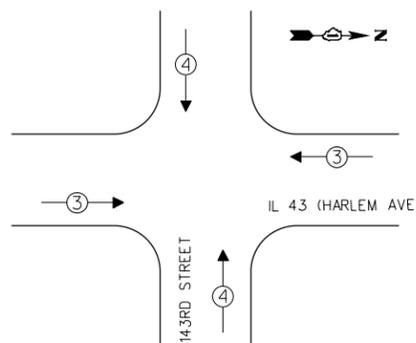


PHASE DESIGNATION DIAGRAM

- LEGEND**
- ◀ □ ▶ SINGLE ENTRY PHASE
 - ◀ ○ ▶ DUAL ENTRY PHASE
 - ◀ ◊ ▶ OVERLAP
 - ◀ ○ ▶ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE
 C = 6 + 7

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3 4
MOVEMENT	↔ ↑↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS x	WATTAGE L.E.D.	OPERATION	
SIGNAL (RED)	17	17	0.50	144.5
(YELLOW)	17	25	0.25	106.3
(GREEN)	17	15	0.25	63.8
ARROW	20	12	0.10	24
PED. SIGNAL	4	25	1.00	100
CONTROLLER	1	100	1.00	100
ILLUM. SIGN		120	0.05	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
TOTAL				538.5

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS/DISTRICT 1
 201 W. CENTER CT/SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT: LLYAS MOHIUDDIN
 PHONE: 708-235-2692
 COMPANY: COMMONWEALTH EDISON

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL 43 (HARLEM AVENUE) AT 143RD STREET SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

SCALE: 1"=20' SHEET NO. 5 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13))	COOK	74	34
CONTRACT NO. 60X73				

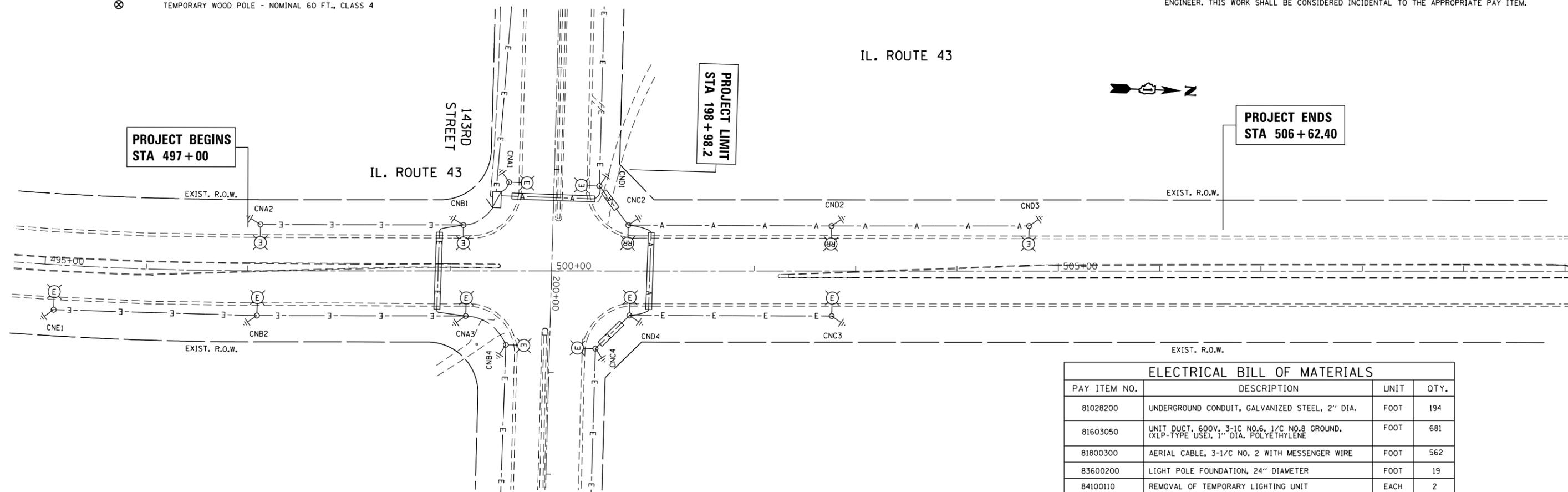
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ELECTRICAL SYMBOLS

-  EXISTING LIGHTING CONTROLLER "CN" 240/480V, SINGLE PHASE 3 WIRE.
-  EXISTING 250W, 240V, MCIII HPS, 12' MA, 47.5' MH ON ALUM. POLE WITH BREAKAWAY DEVICE
-  EXISTING 250W, 240V, MCIII HPS, 12' MA, 47.5' MH ON ALUM. POLE TO BE REMOVED AND RELOCATED ON NEW FOUNDATION
-  LOCATION OF REINSTALLED 250W, 240V, MCIII HPS, 12' MA, 47.5' MH ON ALUM. POLE WITH NEW FOUNDATION
-  TEMPORARY LIGHT POLE 250W, 240V, MCIII HPS. WITH PHOTOCELL 15' MA, 50' MH ON WOOD POLE, CLASS 4
-  - E - EXISTING UNIT DUCT WITH 3-1/C NO. 6 CABLES AND 1/C NO. 8 GROUND CABLE IN 1" UD
-  - A - EXISTING UNIT DUCT WITH 3-1/C NO. 6 CABLES AND 1/C NO. 8 GROUND CABLE IN 1" UD TO BE ABANDONED
-  --- AC --- 3-1/C #2 AERIAL CABLE WITH MESSENGER WIRE
-  - - - - PROPOSED UNIT DUCT WITH 3-1/C NO. 6 CABLES AND 1/C NO. 8 GROUND CABLE IN 1" UD
-  = P = PROPOSED PUSHED GALVANIZED RIGID STEEL CONDUIT 2"
-  GROUND ROD, 5/8" DIA. 10' LONG
-  EXISTING COM ED SERVICE POLE (APROX. 1310' WEST OF IL 43)
-  ⊗ TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4

GENERAL ELECTRICAL PLAN NOTES

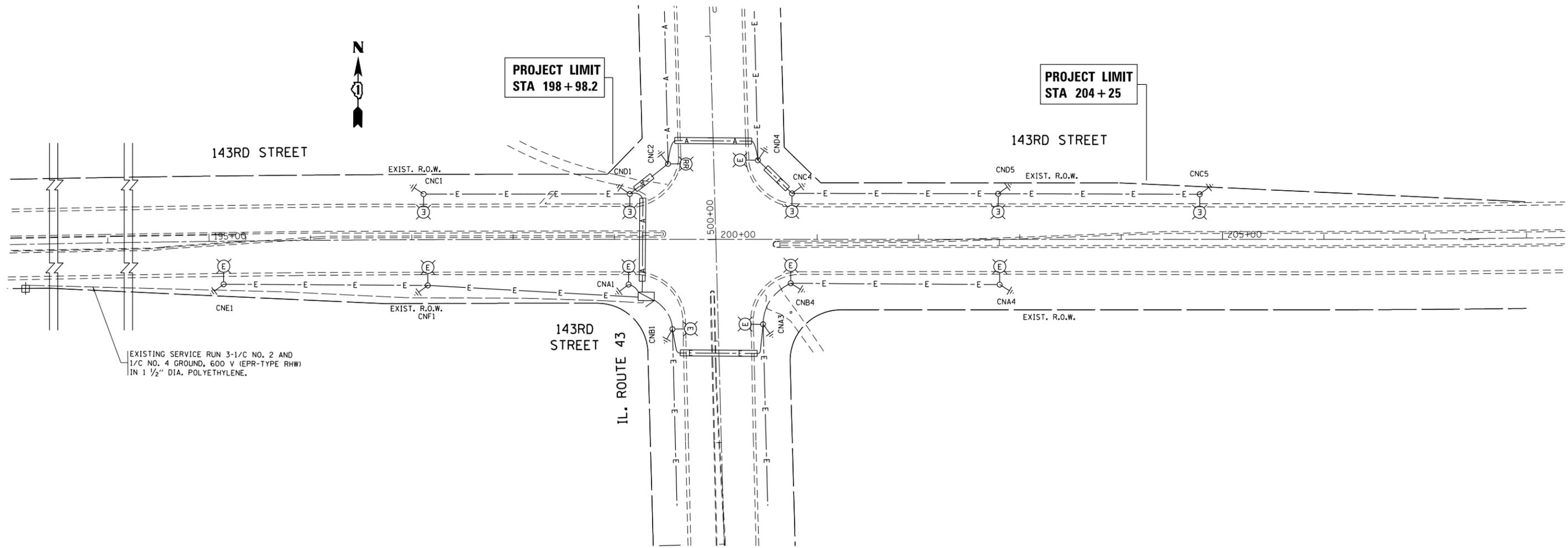
1. THE CONTRACTOR SHALL REQUEST A FORMAL MAINTENANCE TRANSFER BEFORE ANY WORK, LIGHTING OR OTHER, BEGINS. THE CONTRACTOR SHALL CONTACT THE ELECTRICAL MAINTENANCE AT (708)-860-3570.
2. THE CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY COMPANY TO COORDINATE THE ELECTRICAL SERVICE WORK.
3. TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE LIGHT POLES, THE LIGHT POLES SHALL NOT BE ERECTED AND/OR LEFT TO STAND WITHOUT LUMINAIRES. NOTE THAT THE LIGHT POLES WILL NOT BE PAID FOR UNTIL THE POLES ARE FULLY APPROVED AND THE LUMINAIRES ARE REINSTALLED.
4. THE CONTRACTOR SHALL VERIFY ALL THE INFORMATION SHOWN ON THE CONTRACT DRAWINGS, WHICH WOULD AFFECT THE WORK UNDER THIS CONTRACT.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN THE EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT, SPECIFICALLY AS THEY RELATE TO LUMP SOME ITEMS AND UNIT PRICE ITEMS.
6. THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ASSOCIATED SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS (LATEST EDITION).
7. THE CONTRACTOR SHALL FURNISH AND INSTALL LUMINAIRE LAMPS IN ACCORDANCE WITH THE SUPPLIER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE SPECIFICATIONS. THE COST OF THIS WORK AND MATERIAL SHALL BE INCLUDED IN THE APPLICABLE LUMINAIRE PAY ITEM. SEPARATE PAYMENT WILL NOT BE MADE.
8. CONDUIT AND UNIT DUCTS SHALL BE INSTALLED AT A MINIMUM 30" DEPTH BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCT AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST TO THE STATE. THE CONTRACTOR SHALL COORDINATE RACEWAY DEPTH WITH ELECTRICAL DETAILS AND THE ENGINEER.
9. WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTION IN WRITING PRIOR TO EXCAVATION. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING SYSTEMS OR UTILITIES AND REMOVE EXISTING OBSTRUCTIONS AND FOUNDATIONS TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE PAY ITEM.



ELECTRICAL BILL OF MATERIALS			
PAY ITEM NO.	DESCRIPTION	UNIT	QTY.
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	194
81603050	UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	681
81800300	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	562
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	19
84100110	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	2
84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	2
X0322141	REMOVE TEMPORARY WOOD POLE	EACH	1
X0326148	TEMPORARY WOOD POLE, 60 FT., CLASS 4, 15 FT. MAST ARM	EACH	1
X0327004	TEMPORARY WOOD POLE, 60 FT., CLASS 4	EACH	1
X8210005	TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	2
Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	2

ELECTRICAL SYMBOLS

-  EXISTING LIGHTING CONTROLLER "CN" 240/480V, SINGLE PHASE 3 WIRE.
-  EXISTING 250W, 240V, MCIII HPS, 12' MA, 47.5' MH ON ALUM. POLE WITH BREAKAWAY DEVICE
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-  EXISTING UNIT DUCT WITH 3-1/C NO. 6 CABLES AND 1/C NO. 8 GROUND CABLE IN 1" UD TO BE ABANDONED
-  3-1/C #2 AERIAL CABLE WITH MESSENGER WIRE
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-  PROPOSED PUSHED GALVANIZED RIGID STEEL CONDUIT 2"
-  GROUND ROD, 5/8" DIA, 10' LONG
-  EXISTING COM ED SERVICE POLE (APROX. 1310' WEST OF IL 43)
-  TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

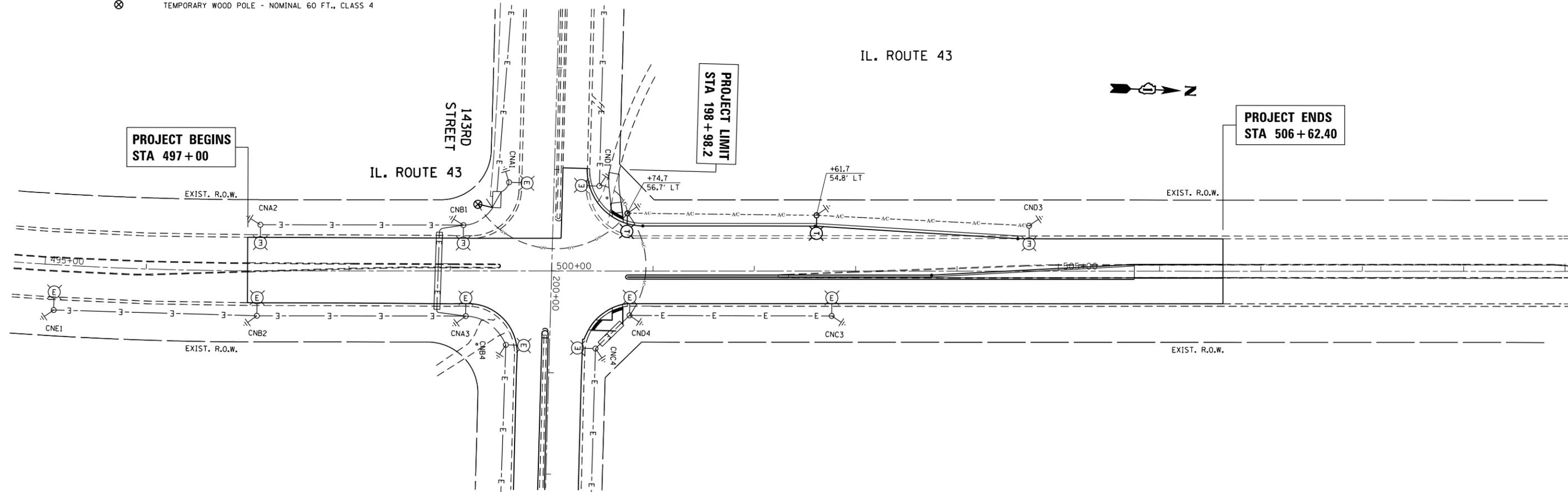
**EXISTING LIGHTING PLAN
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	36
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				

ELECTRICAL SYMBOLS

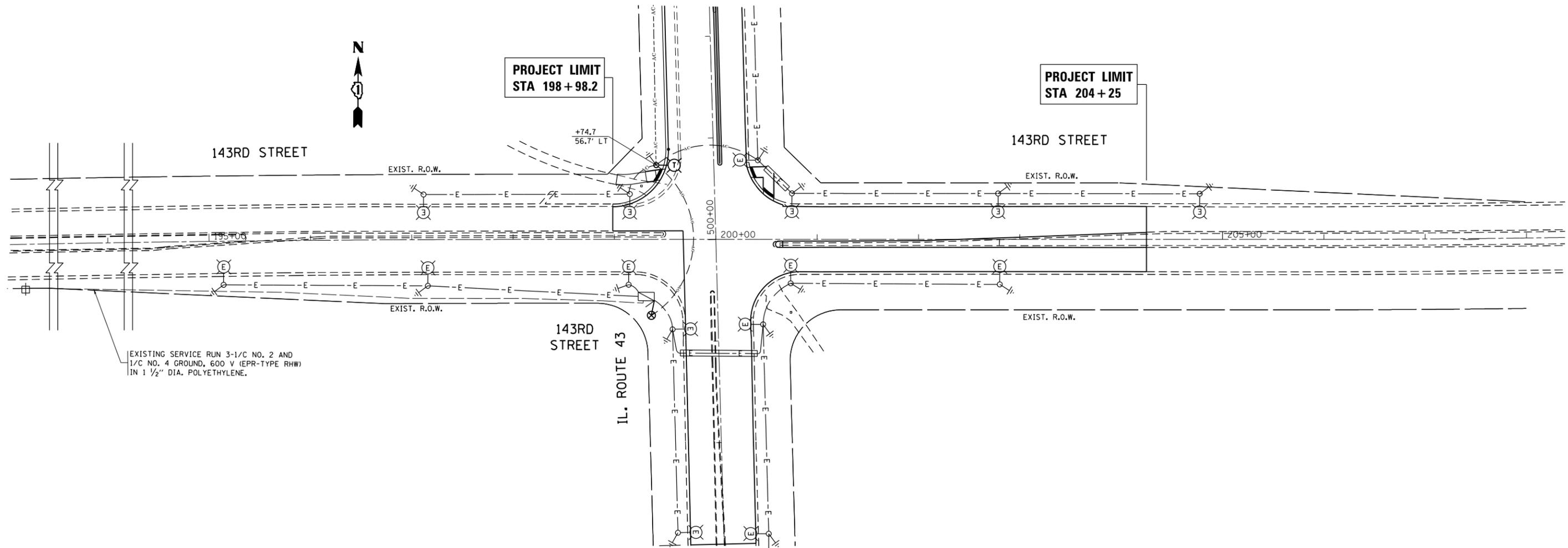
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-  PROPOSED PUSHED GALVANIZED RIGID STEEL CONDUIT 2"
-  GROUND ROD, 5/8" DIA, 10' LONG
-  EXISTING COM ED SERVICE POLE (APPROX. 1310' WEST OF IL 43)
-  TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4



FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING PLAN IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -			348	(3127-1N-1(13))	COOK	74	37	
		CHECKED -	REVISED -			CONTRACT NO. 60X73					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
Default	PLOT DATE = 1/30/2015			SCALE: 1"= 50'	SHEET OF SHEETS	STA.	TO STA.				

ELECTRICAL SYMBOLS

-  EXISTING LIGHTING CONTROLLER "CN" 240/480V, SINGLE PHASE 3 WIRE.
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-  EXISTING COM ED SERVICE POLE (APROX. 1310' WEST OF IL 43)
-  TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

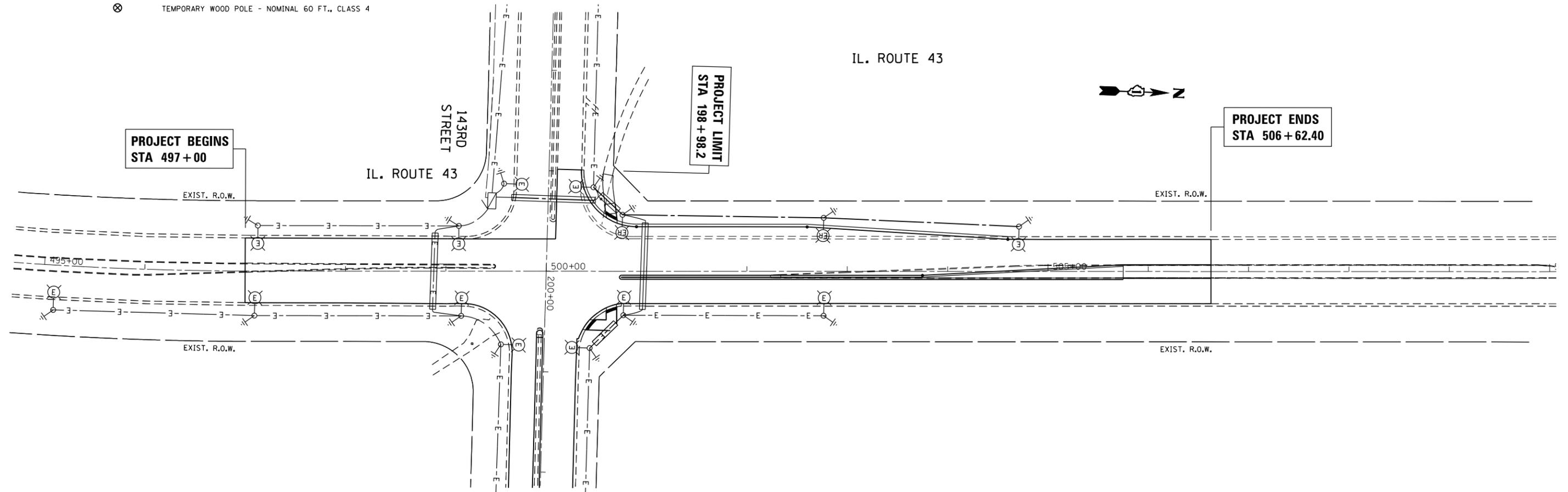
**TEMPORARY LIGHTING PLAN
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13))	COOK	74	38
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				

ELECTRICAL SYMBOLS

-  EXISTING LIGHTING CONTROLLER "CN" 240/480V, SINGLE PHASE 3 WIRE.
-  EXISTING 250W, 240V, MCIII HPS, 12' MA, 47.5' MH ON ALUM. POLE WITH BREAKAWAY DEVICE
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

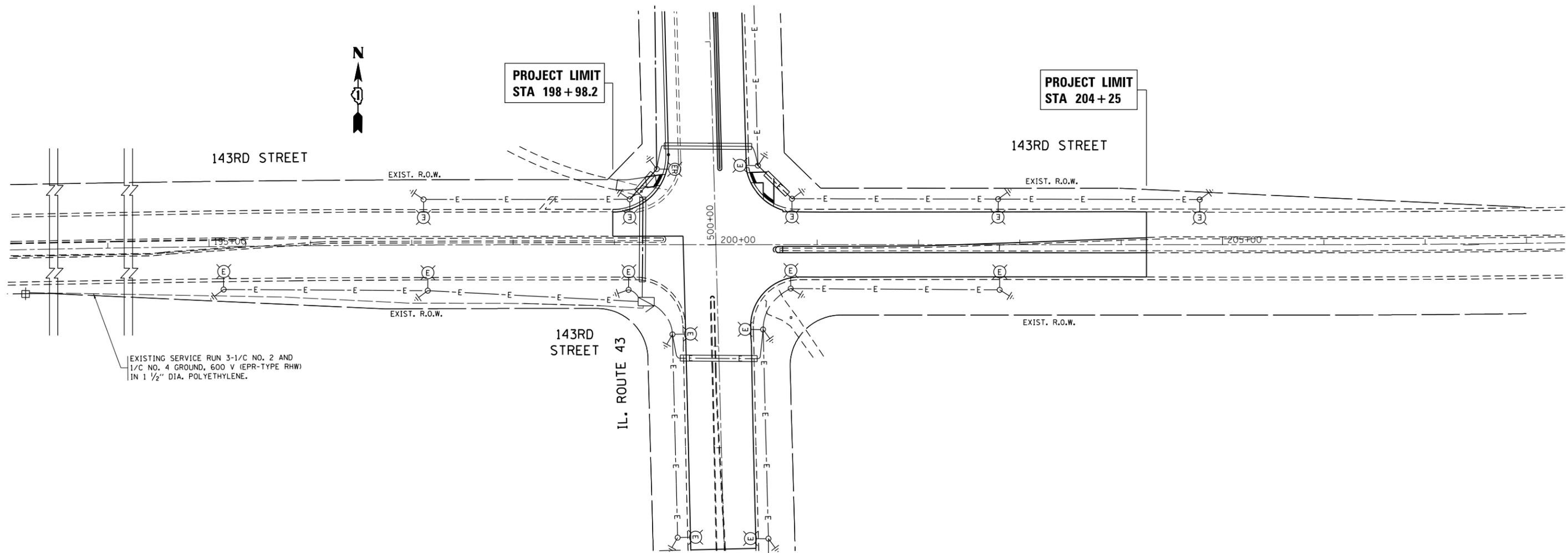
**PROPOSED LIGHTING PLAN
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13))	COOK	74	39
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				

ELECTRICAL SYMBOLS

-  EXISTING LIGHTING CONTROLLER "CN" 240/480V, SINGLE PHASE 3 WIRE.
-  EXISTING 250W, 240V, MCIII HPS, 12' MA, 47.5' MH ON ALUM. POLE WITH BREAKAWAY DEVICE
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-  TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4



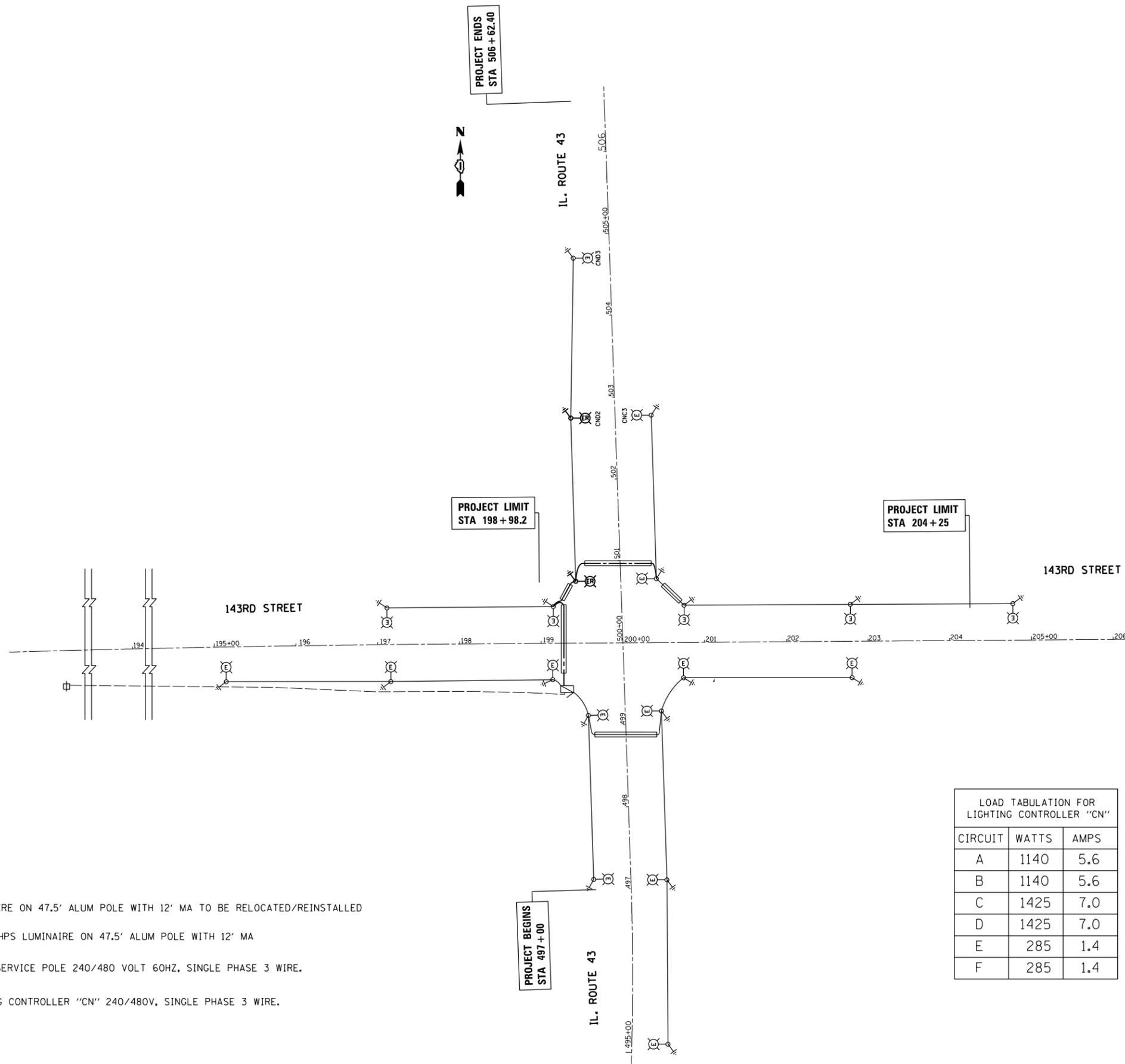
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13))	COOK	74	40
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				



LEGEND

-  250W HPS LUMINAIRE ON 47.5' ALUM POLE WITH 12' MA TO BE RELOCATED/REINSTALLED
-  EXISTING 250 W. HPS LUMINAIRE ON 47.5' ALUM POLE WITH 12' MA
-  EXISTING COMED SERVICE POLE 240/480 VOLT 60HZ, SINGLE PHASE 3 WIRE.
-  EXISTING LIGHTING CONTROLLER "CN" 240/480V, SINGLE PHASE 3 WIRE.

LOAD TABULATION FOR LIGHTING CONTROLLER "CN"		
CIRCUIT	WATTS	AMPS
A	1140	5.6
B	1140	5.6
C	1425	7.0
D	1425	7.0
E	285	1.4
F	285	1.4

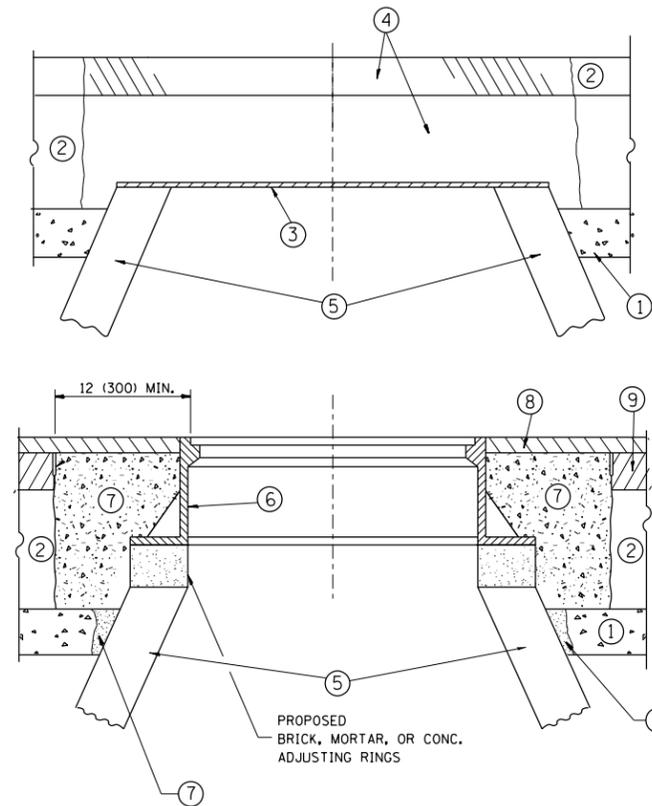
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONTROLLER "CN" WIRING DIAGRAM
IL. ROUTE 43 (HARLEM AVENUE) AT 143RD STREET**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	41
CONTRACT NO. 60X73				
ILLINOIS FED. AID PROJECT				



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ⑥ FRAME AND LID (SEE NOTES)
- ② EXISTING PAVEMENT
- ⑦ CLASS PP-1* CONCRETE
- ③ 36 (900) DIAMETER METAL PLATE
- ⑧ PROPOSED HMA SURFACE COURSE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑨ PROPOSED HMA BINDER COURSE
- ⑤ EXISTING STRUCTURE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

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

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

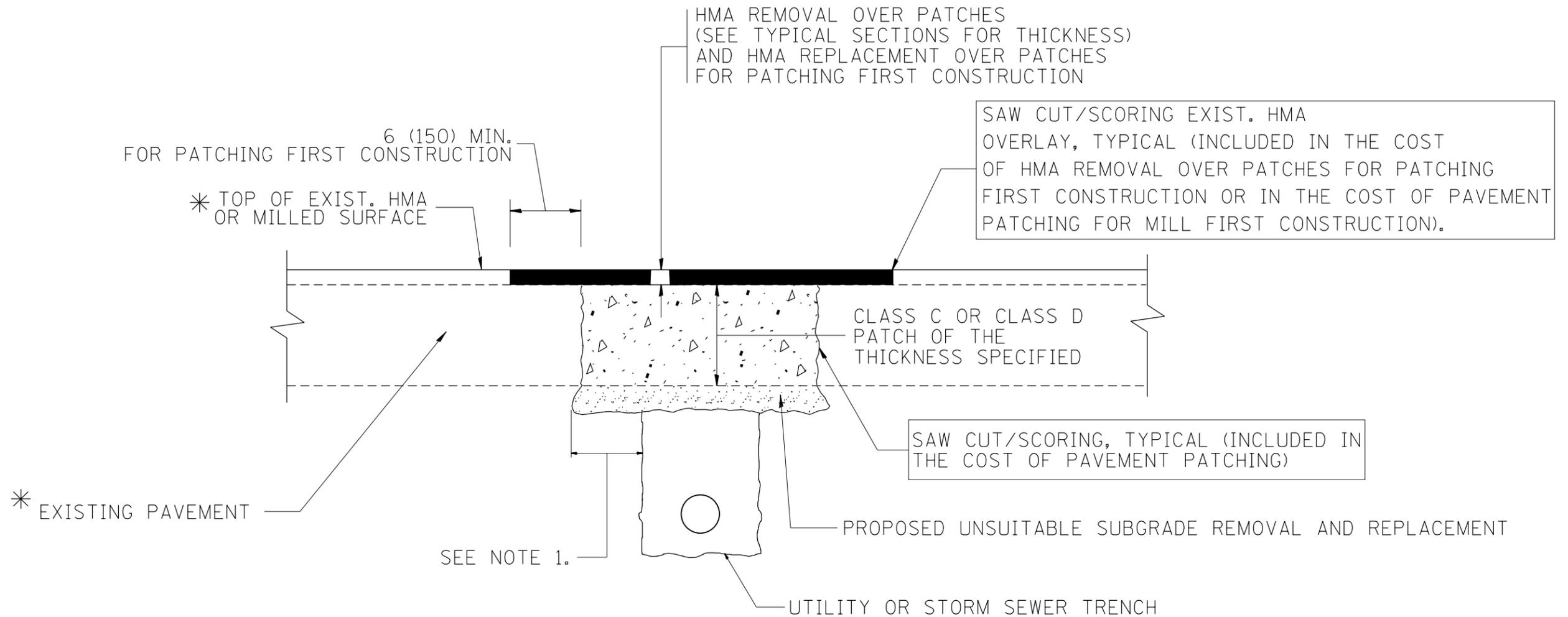
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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	PLOT DATE = 1/29/2015	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	42
BD600-03 (BD-8)			CONTRACT NO. 60X73	
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

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	PLOT DATE = 1/29/2015	DATE - 10-25-94	REVISED - K. ENG 10-27-08

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	43
BD400-04 (BD-22)			CONTRACT NO. 60X73	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

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

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

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

18" (450) MAX.

1/4" (5) **

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

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

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

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

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

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

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

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

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

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

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

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

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

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

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

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

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

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

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

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

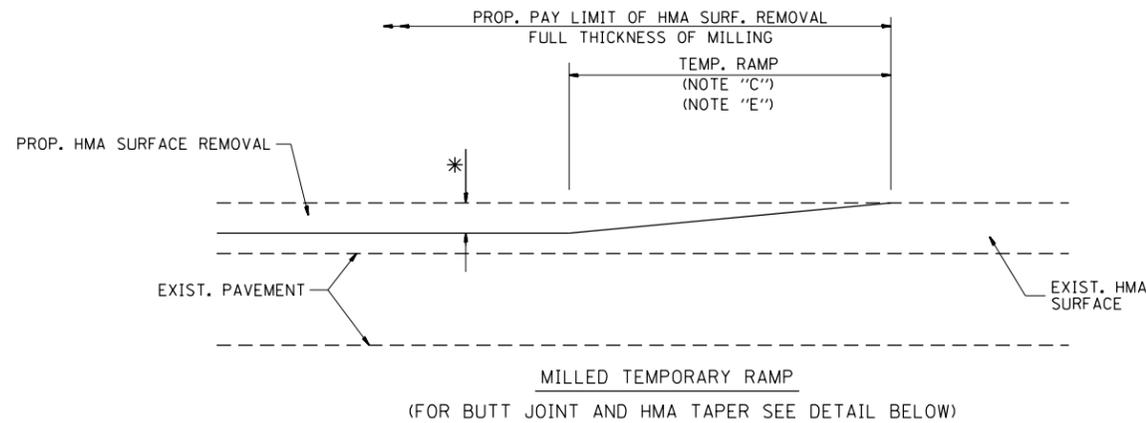
BASIS OF PAYMENT:

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

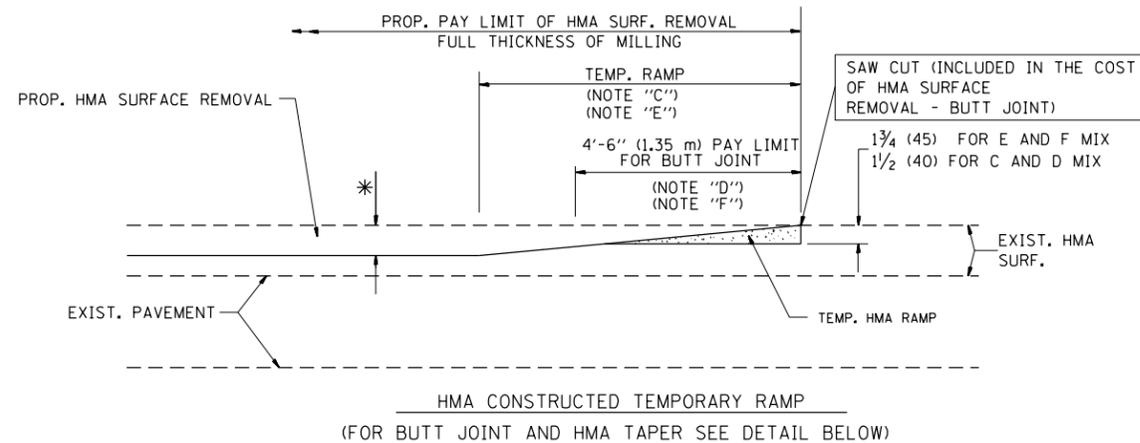
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = midyja	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\p\midot\midyja\0304985\Dist5.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97			348	(3127-1N-1(13)	COOK	74	44	
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED - M. GOMEZ 01-22-01			BD600-06 (BD-24)		CONTRACT NO. 60X73			
	PLOT DATE = 1/29/2015	DATE - 03-11-94	REVISED - R. BORO 12-15-09			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

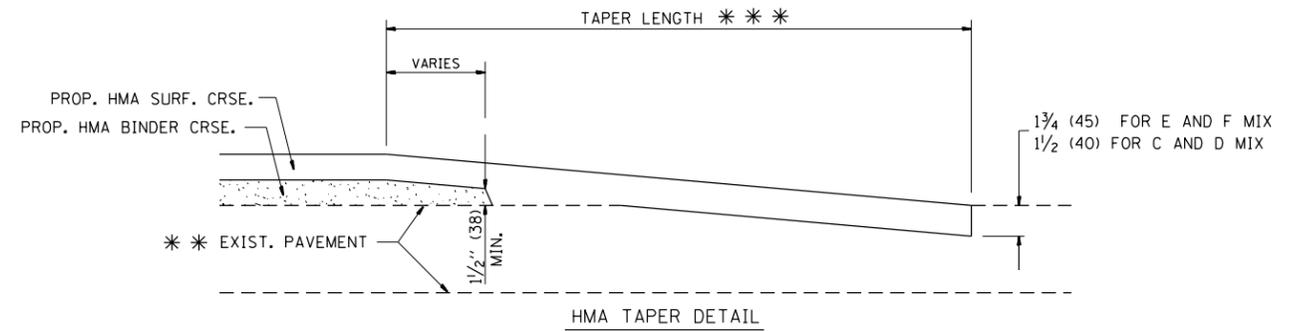
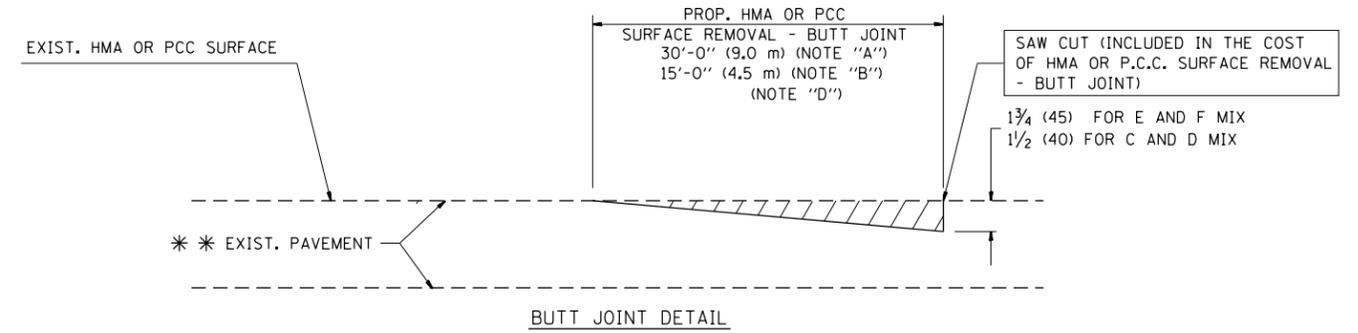


OPTION 1



OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

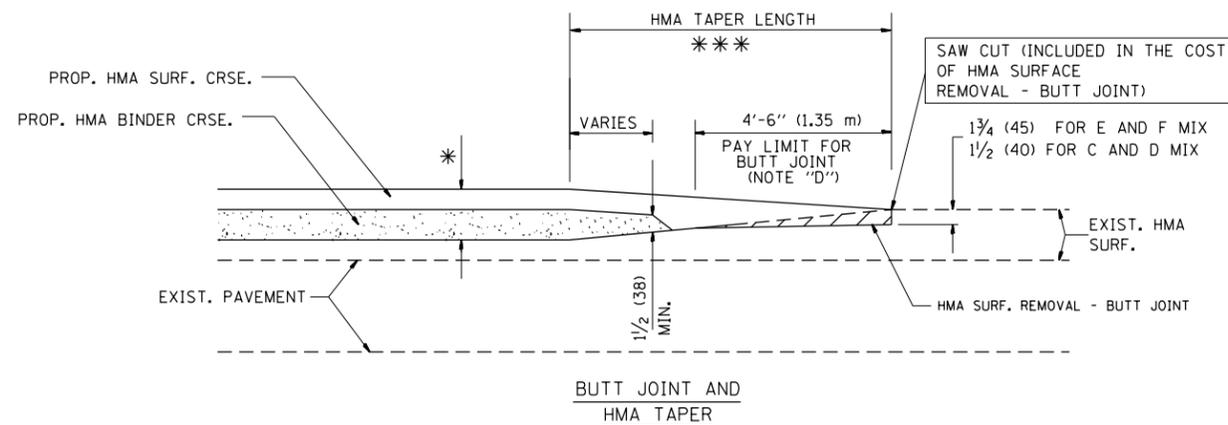
NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- * * * 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

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

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



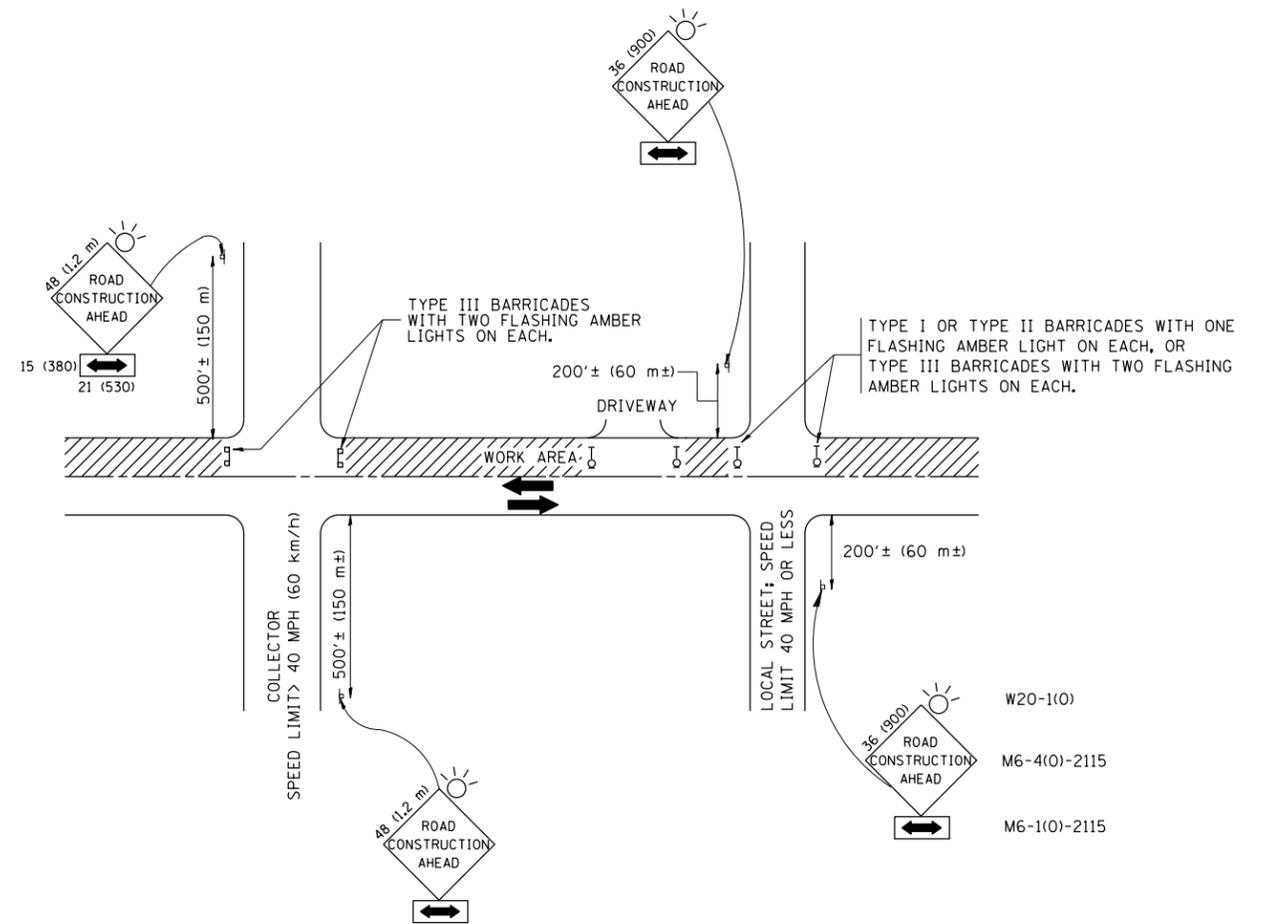
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME =	USER NAME = midyja	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
et:\pw\work\p1dot\midyja\0304985\DistStd.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/29/2015	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BUTT JOINT AND HMA TAPER DETAILS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	45
BD400-05 BD32		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

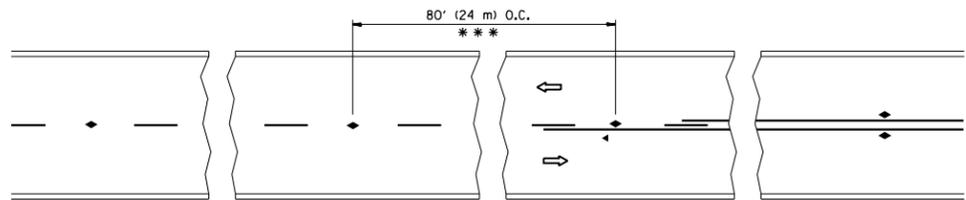
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/29/2015	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

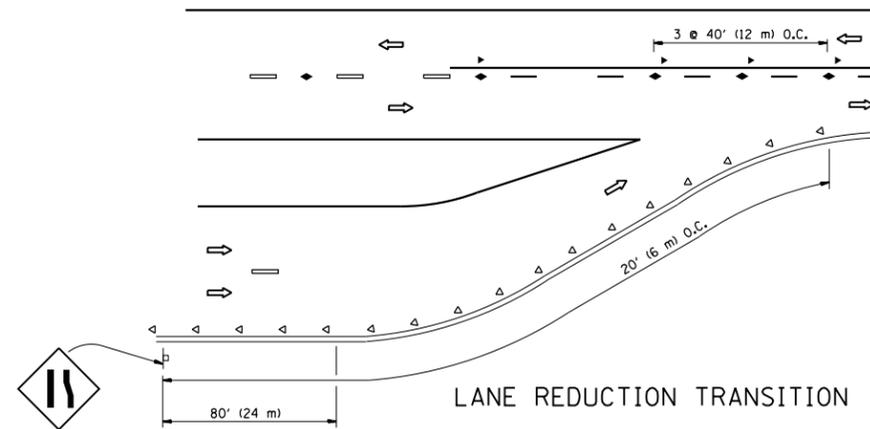
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO. 60X73	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

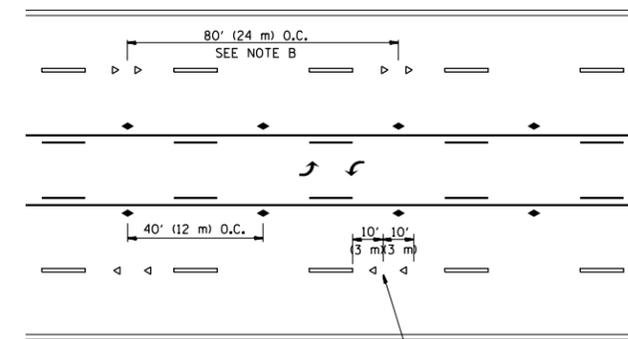


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

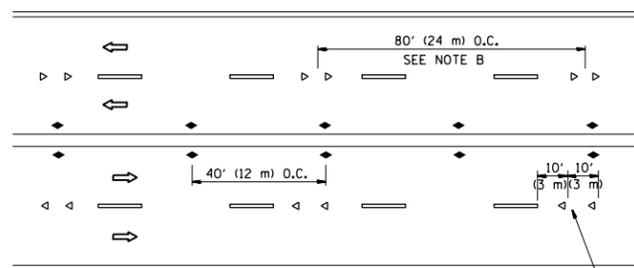
TWO-LANE/TWO-WAY



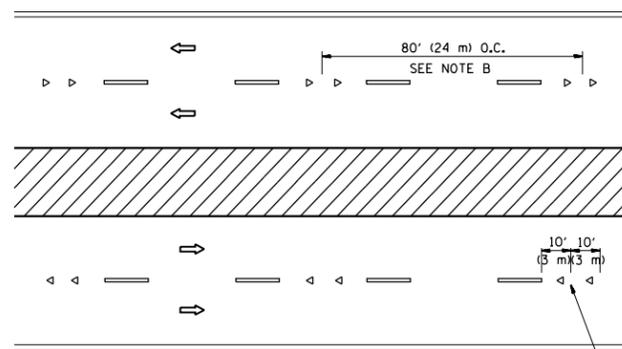
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

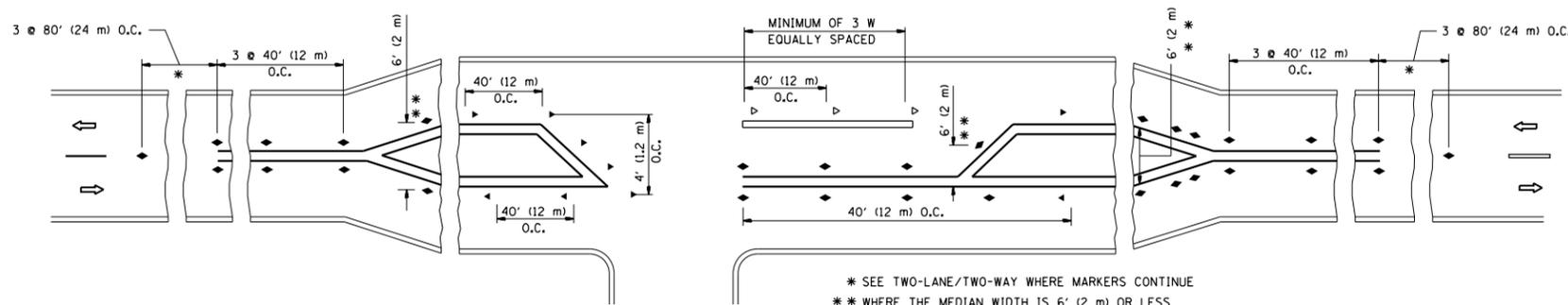
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

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

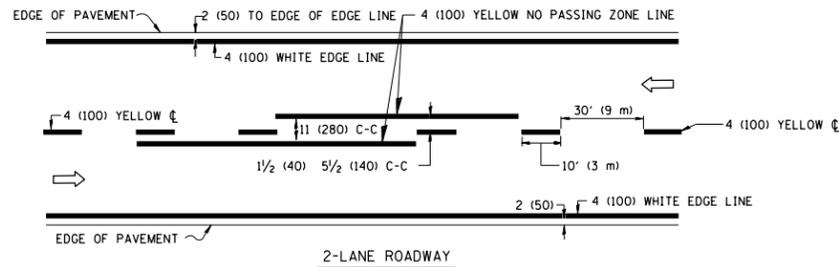
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
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	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 1/29/2015	DATE -	REVISED - C. JUCIUS 09-09-09

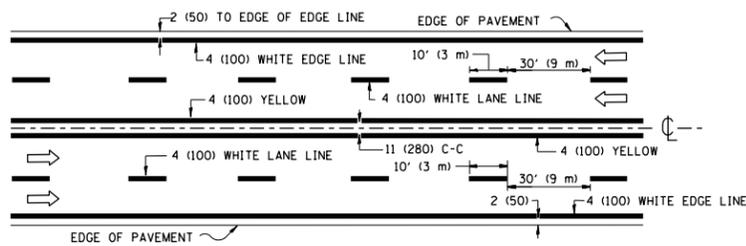
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

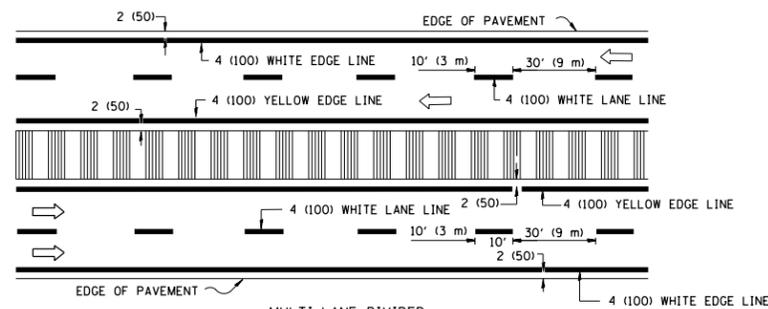
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	47
TC-11			CONTRACT NO. 60X73	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY



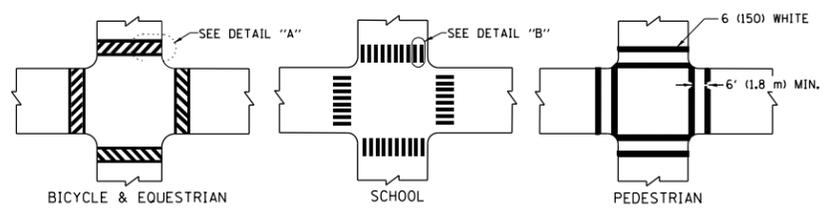
MULTI-LANE UNDIVIDED



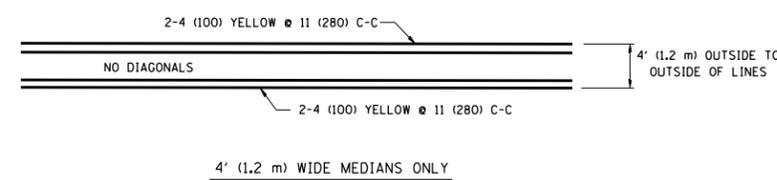
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

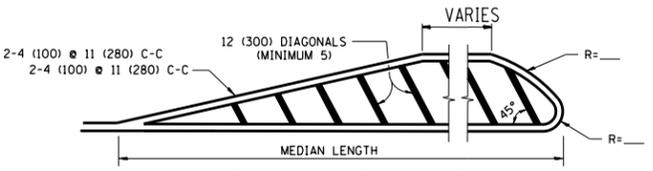
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



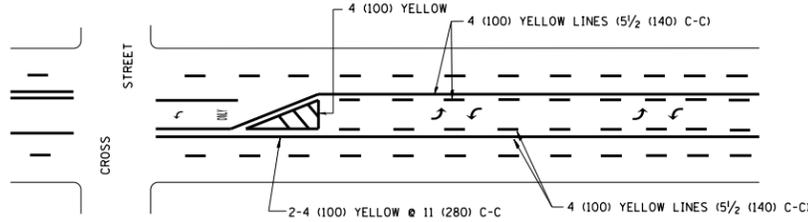
4' (1.2 m) WIDE MEDIANS ONLY



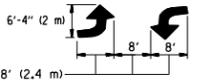
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

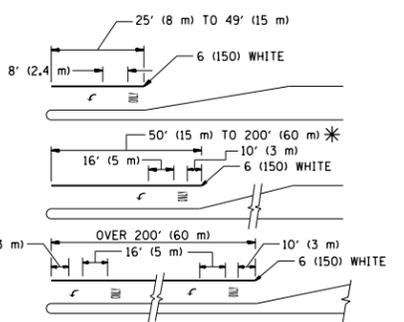


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

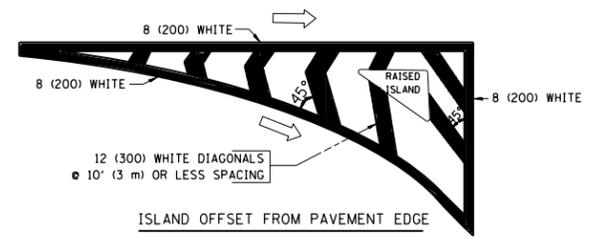


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

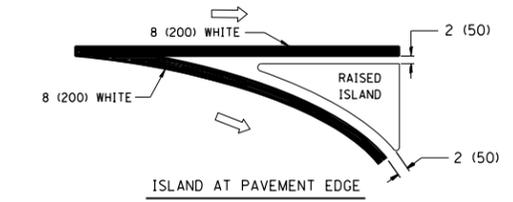
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE. SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R": 3.6 SQ. FT. (0.33 m ²) EACH "X": 54.0 SQ. FT. (5.0 m ²) EACH
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

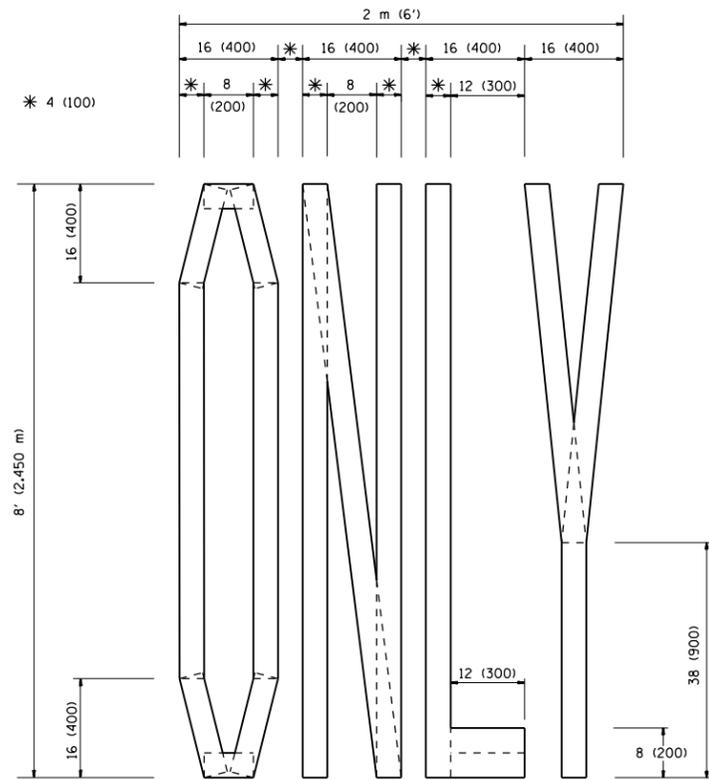
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = midyja	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/29/2015	DATE - 03-19-90	REVISED -

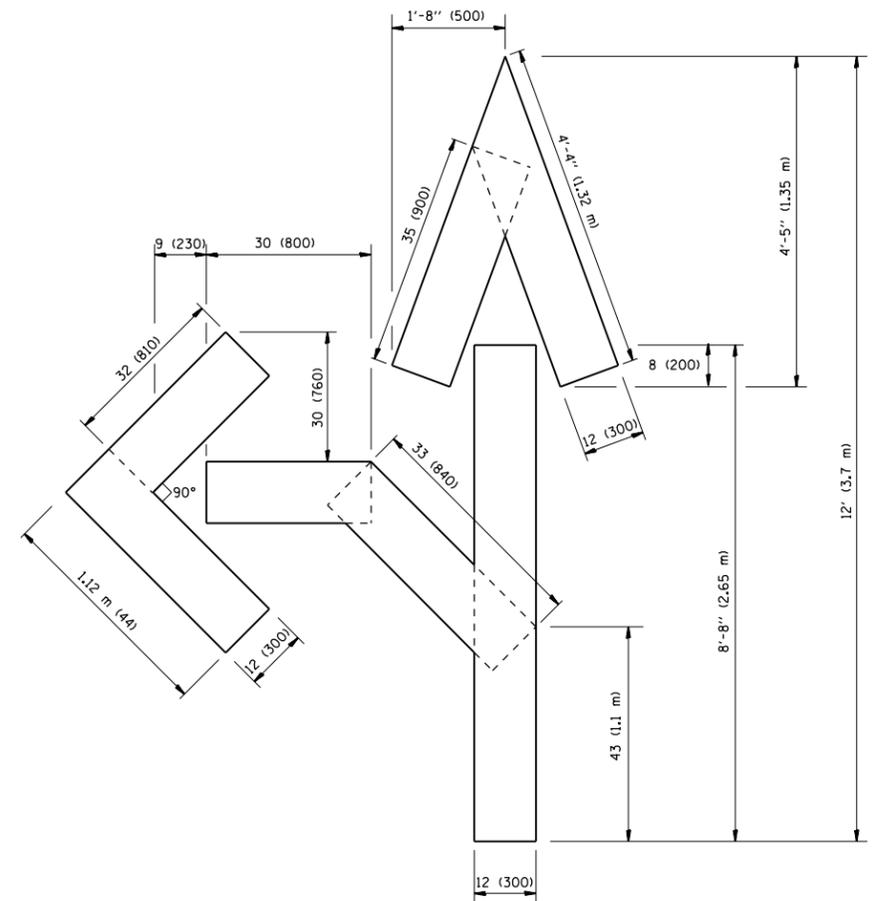
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

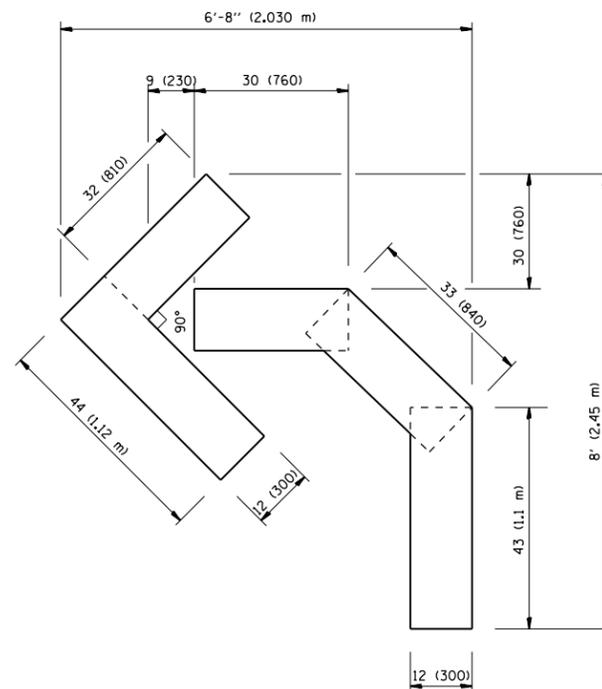
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	48
TC-13		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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



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



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

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

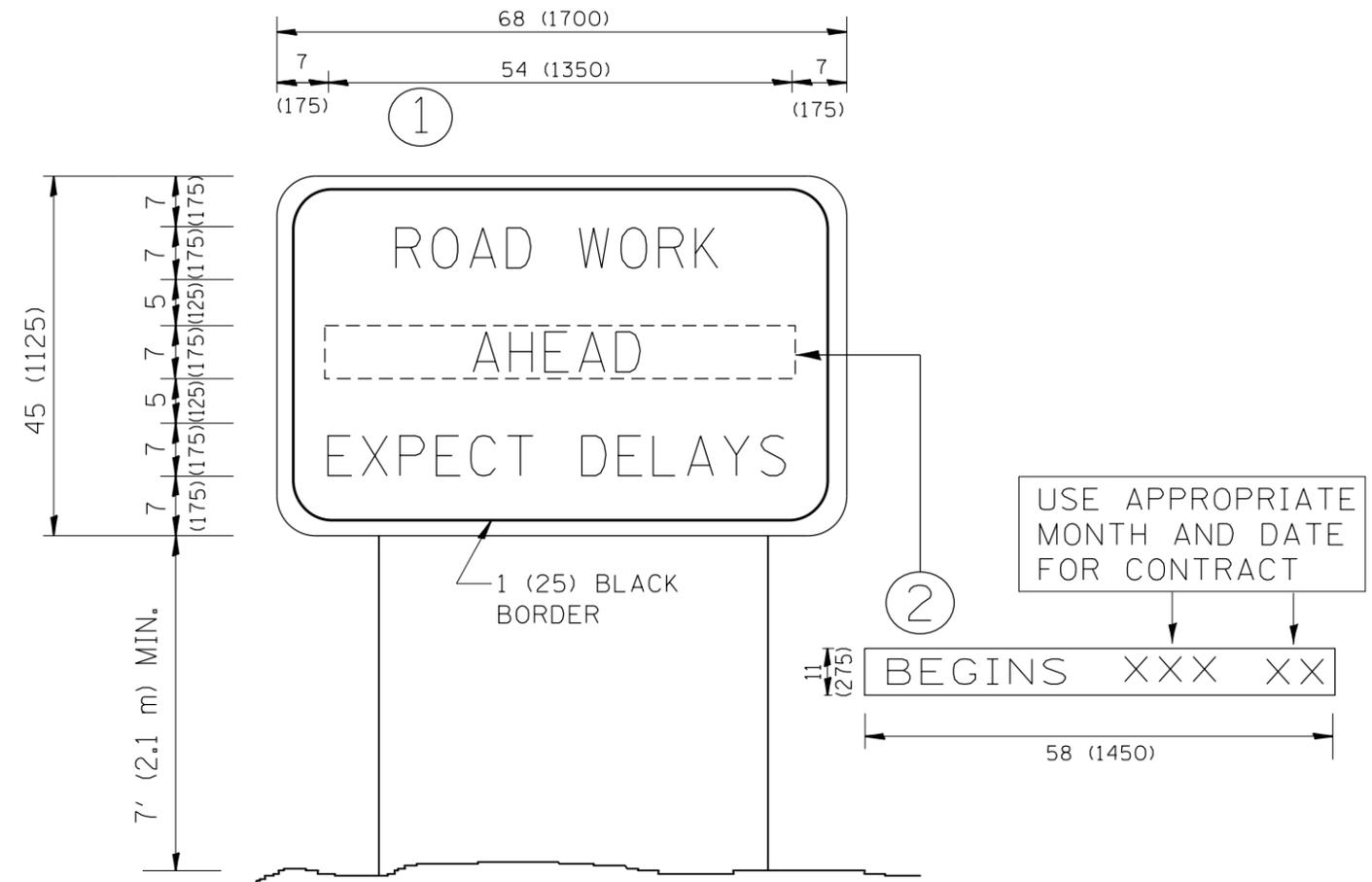
FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
et:\pw\work\p\midot\midyja\0304985\Dist5.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/29/2015	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	49
TC-16		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p1dot\midyja\0304985\Dist5.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	348			(3127-1)N-1(13)	COOK	74	50	
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	TC-22			CONTRACT NO. 60X73				
PLOT DATE = 1/29/2015	DATE -	REVISED - C. JUCIUS 01-31-07	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED QUEUE DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT							
DETECTOR LOOP, TYPE I				RADIO REPEATER							
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

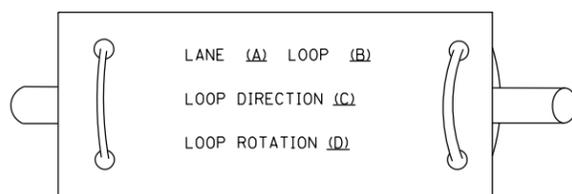
RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

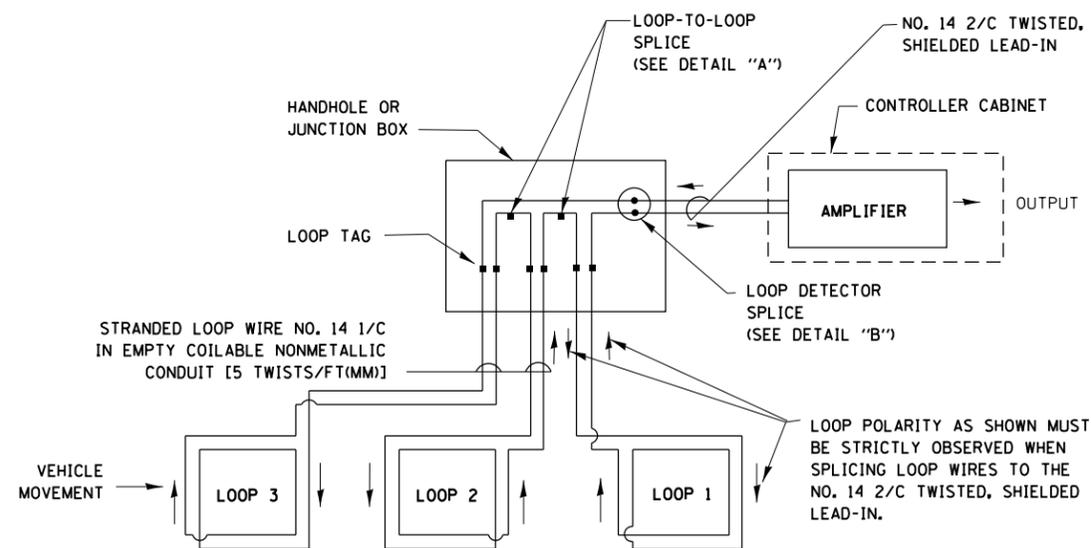
LOOP DETECTOR NOTES

1. 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.
2. 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.
3. 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.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. 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.
6. 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.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

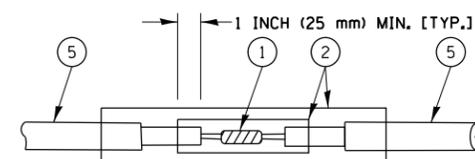


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

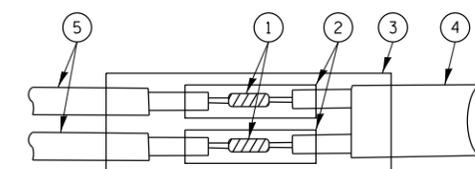


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

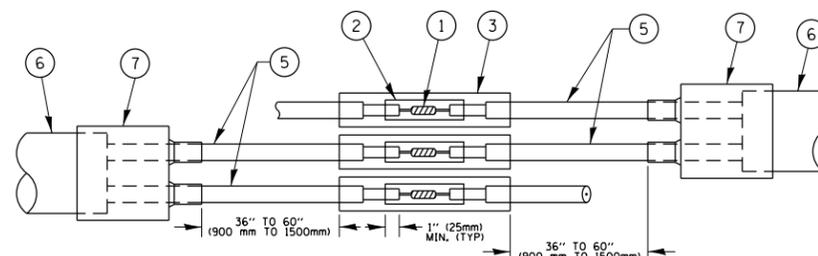


DETAIL "A"
LOOP-TO-LOOP SPLICE

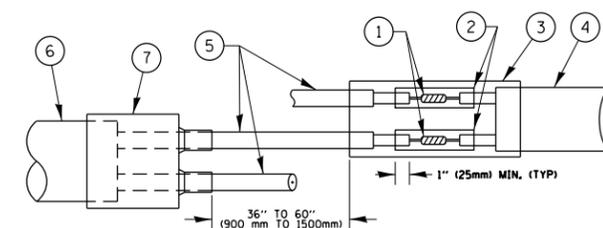


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PRE-FORMED LOOP

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

FILE NAME =	USER NAME = midyja	DESIGNED - DAD	REVISED - DAG 1-1-14
et:\pw\work\p\midot\midyja\0304985\DistStd.dgn		DRAWN - BCK	REVISED -
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	PLOT DATE = 1/29/2015	DATE - 10-28-09	REVISED -

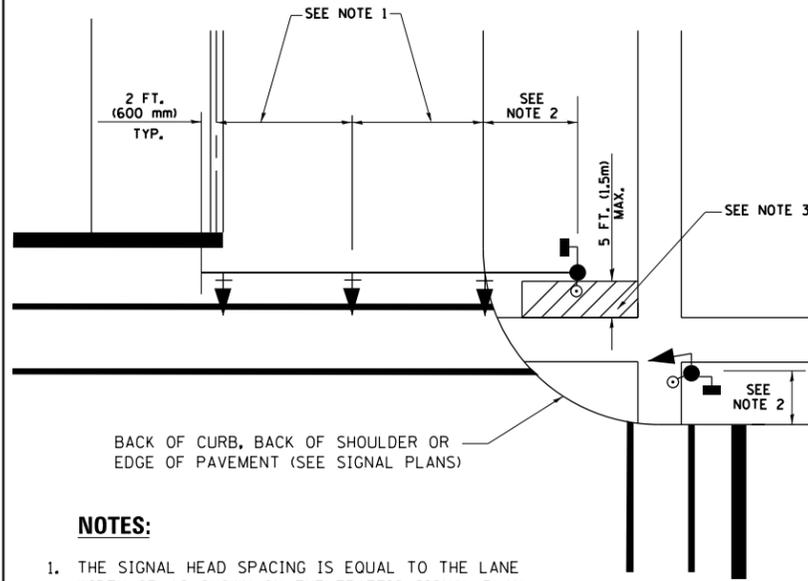
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13))	COOK	74	52
TS-05		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

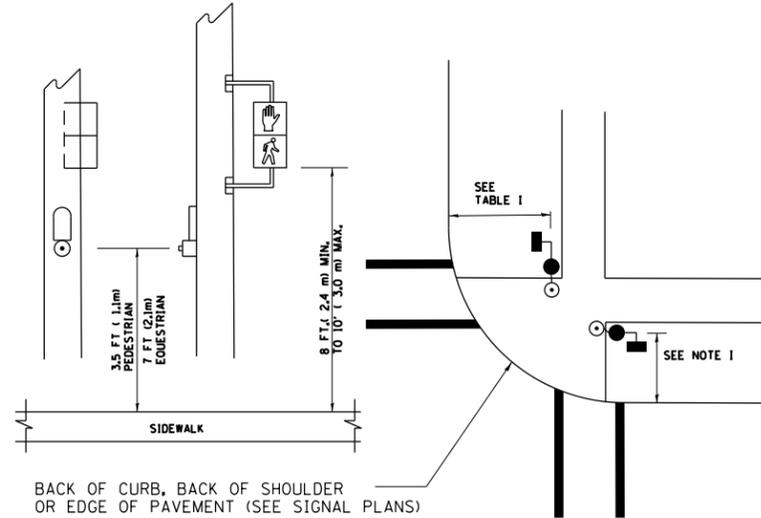
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



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."

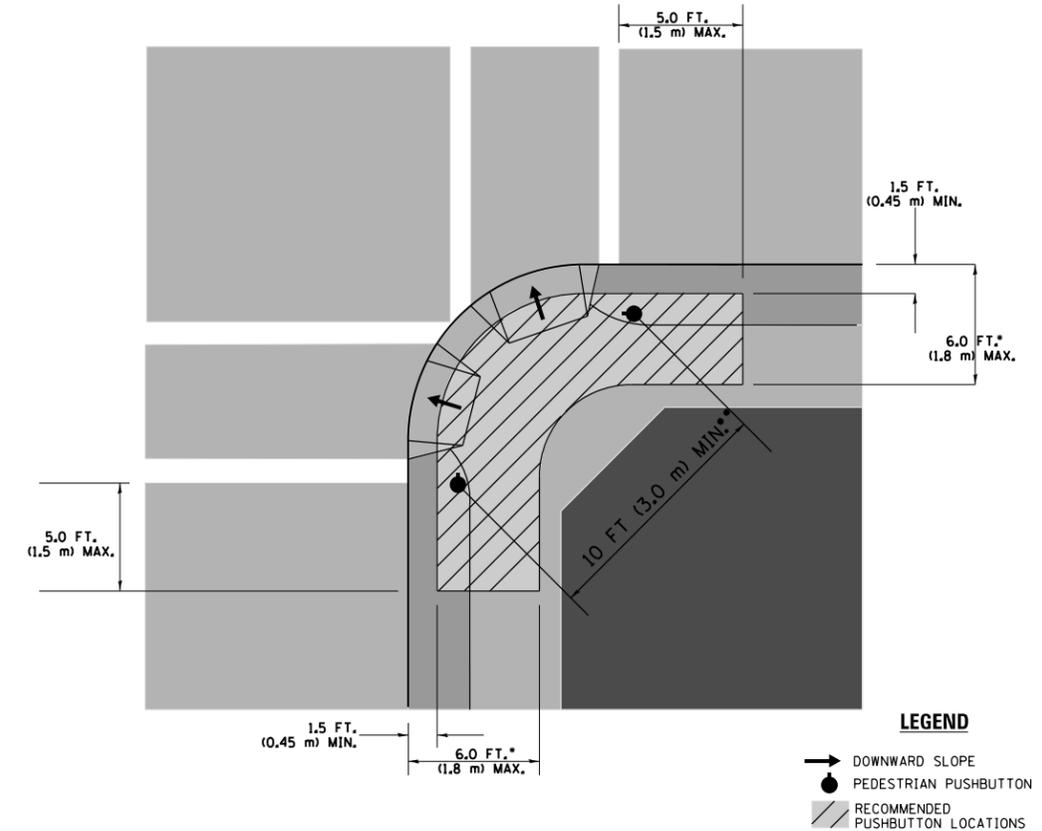
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



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



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ 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:

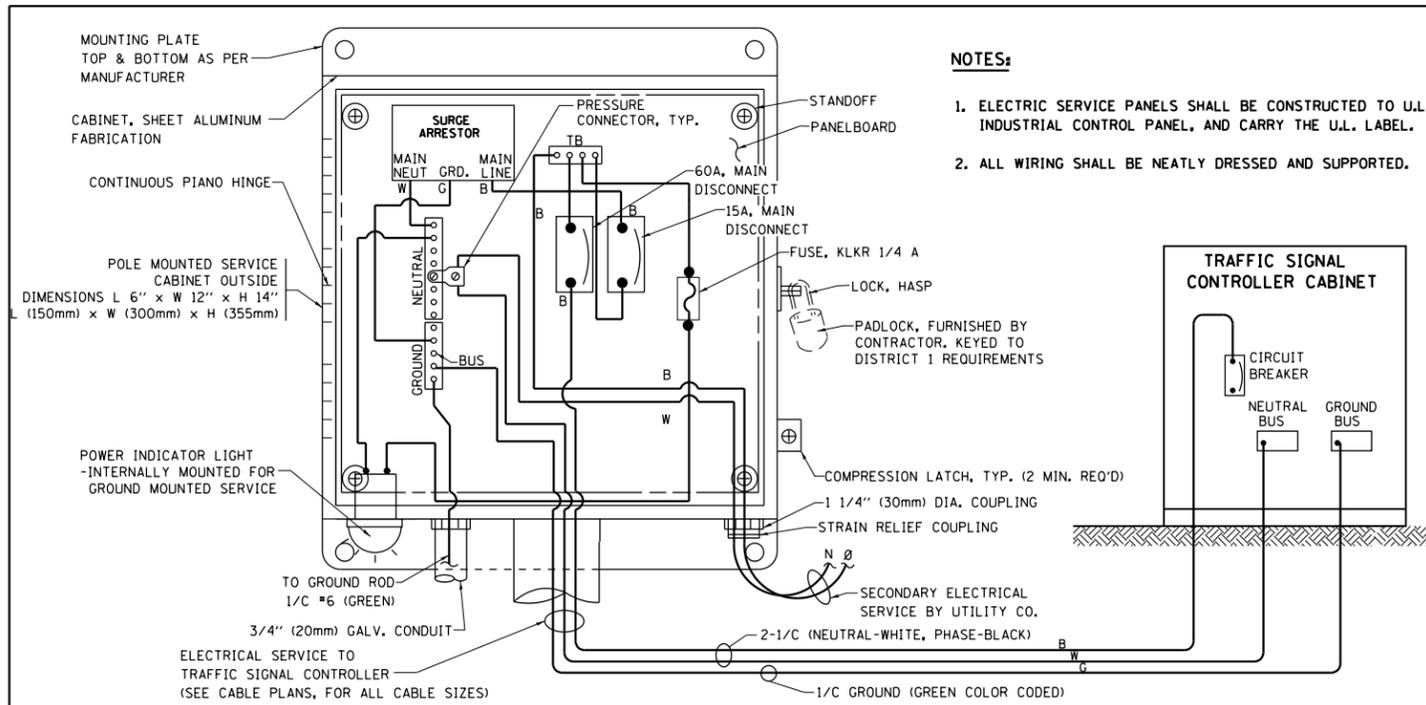
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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

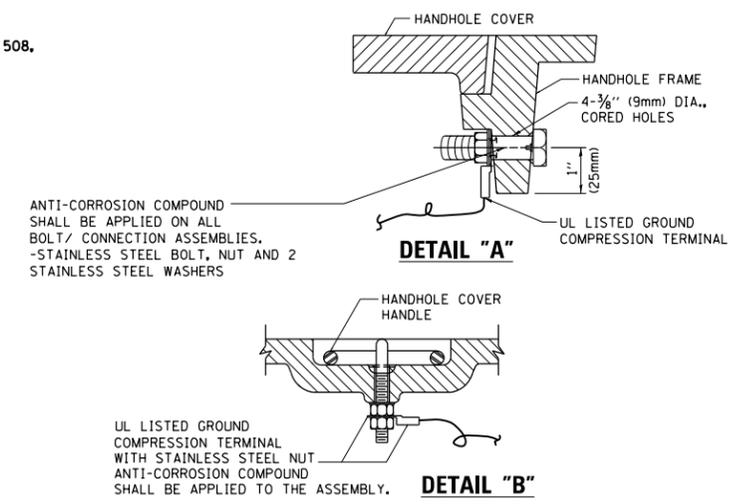
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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.

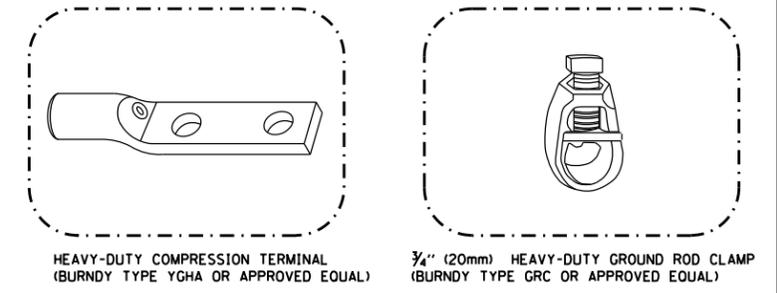
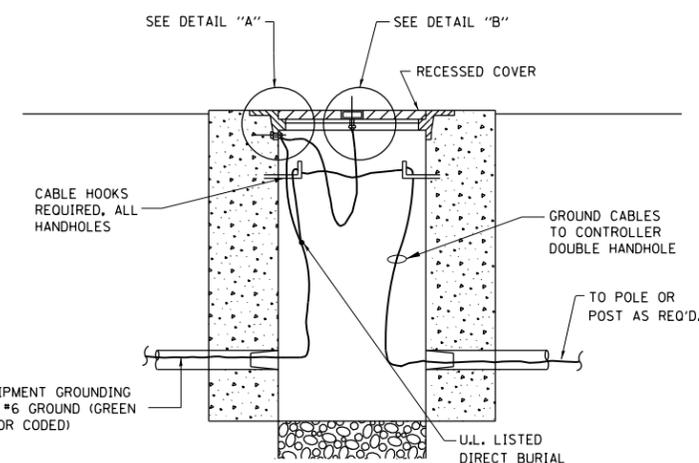


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**

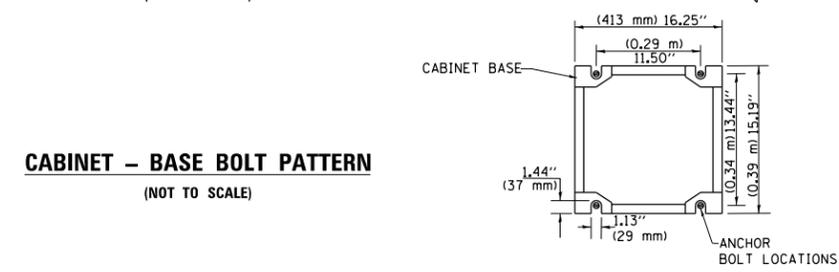
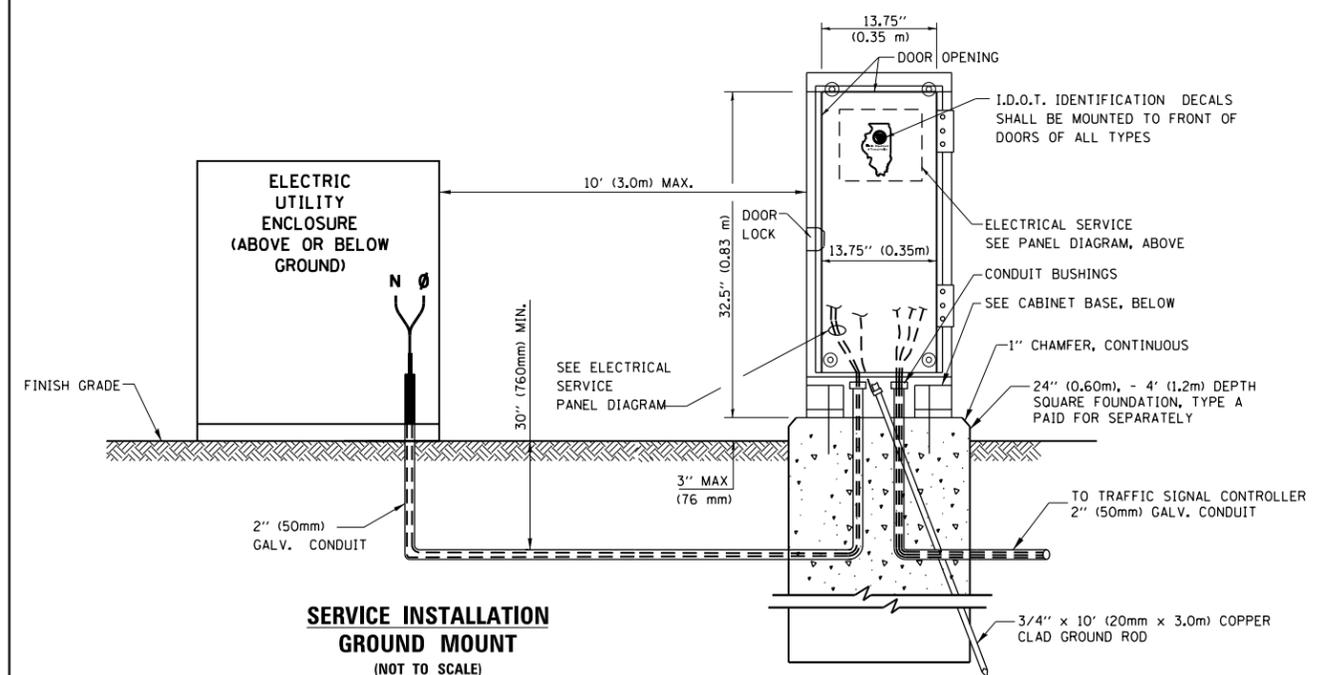
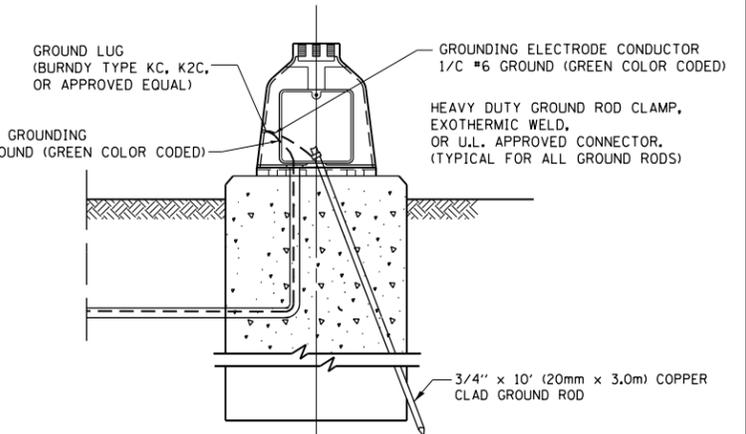
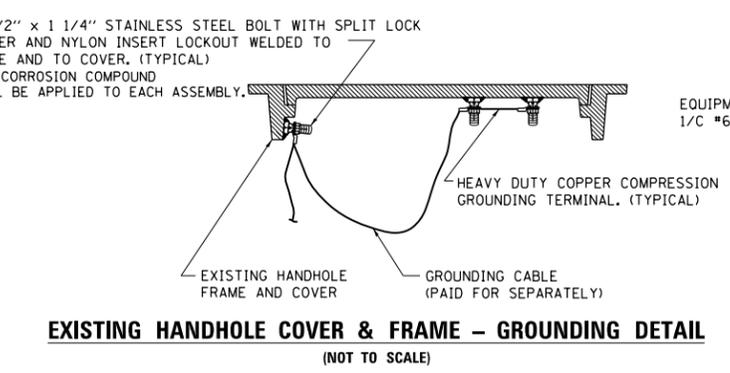


**NOTES:
GROUNDING SYSTEM**

- 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 ENCLOSED. 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.



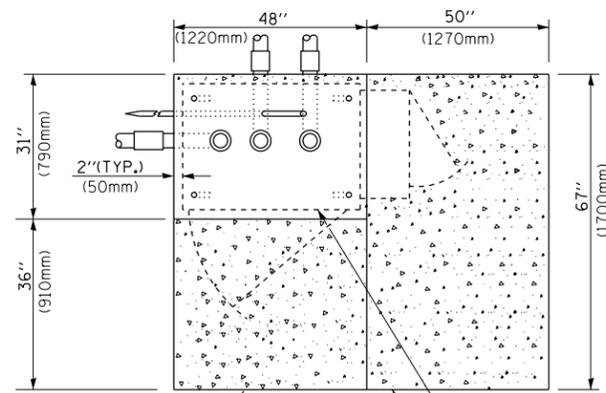
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		DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

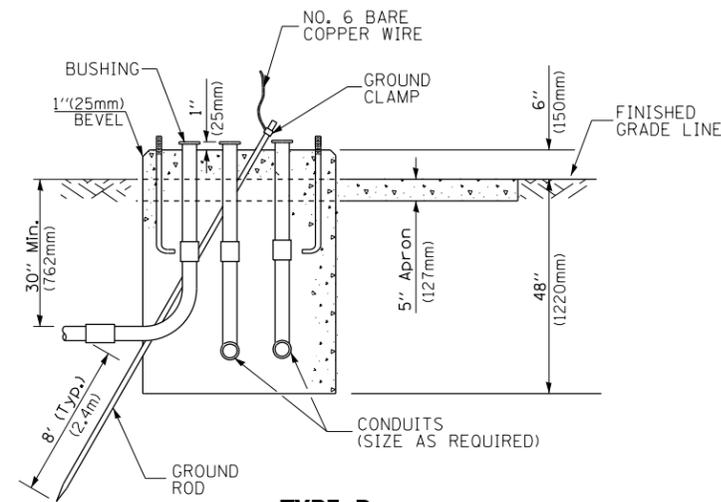
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 4 OF 7 SHEETS STA. TO STA.

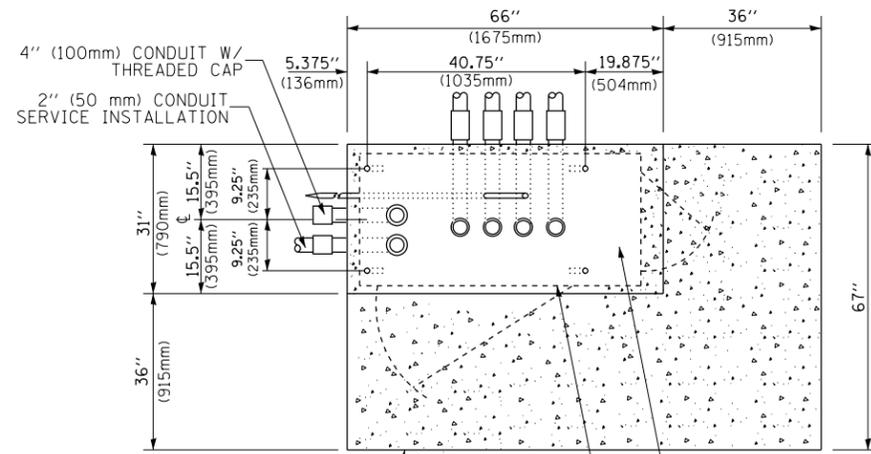
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13))	COOK	74	54
TS-05		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



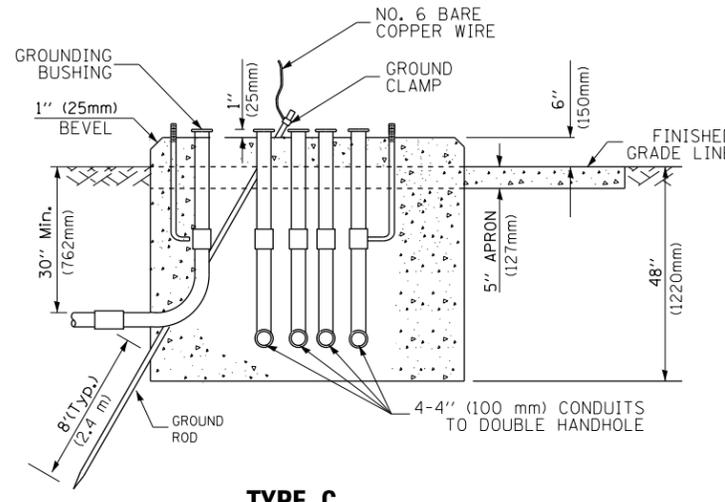
TOP VIEW



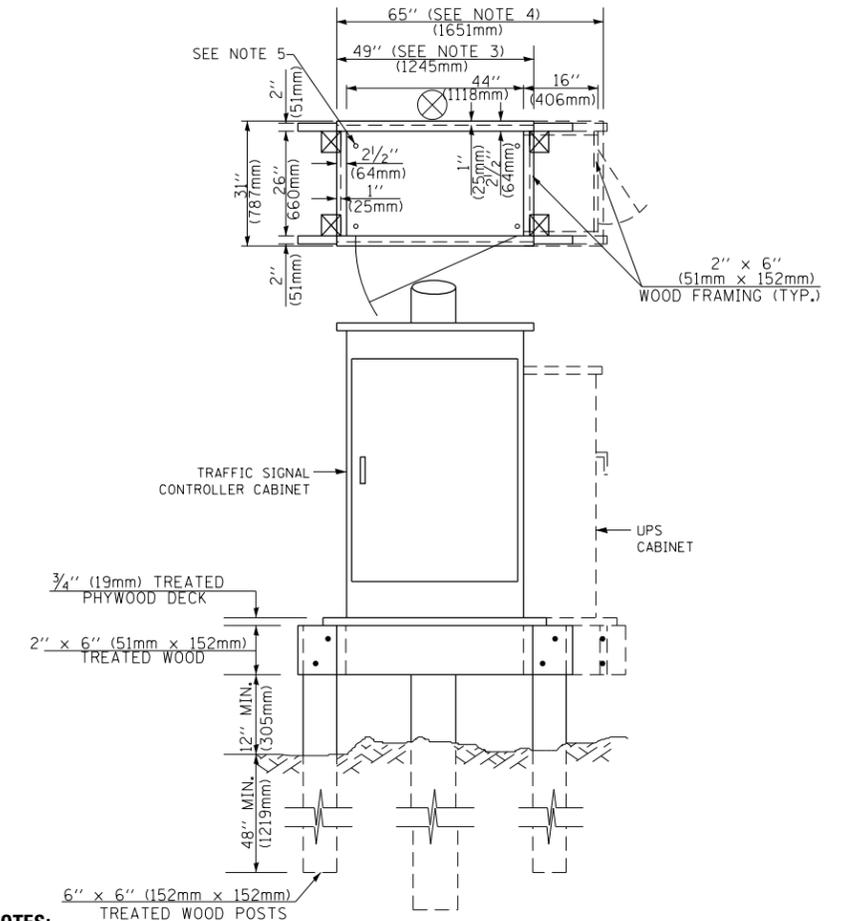
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



TOP VIEW



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



NOTES:

1. 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.
2. 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.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. 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.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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	① 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 less than 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 up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

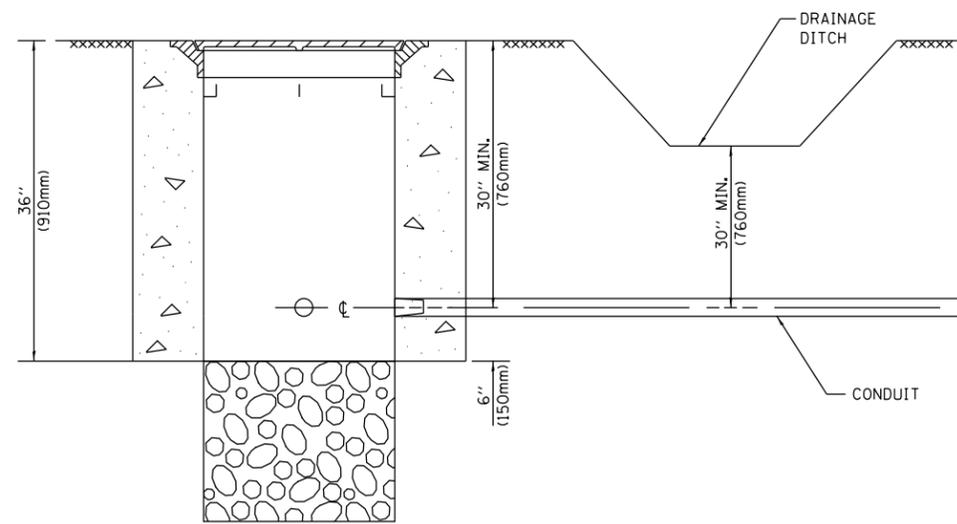
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average unconfined compressive strength (qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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	PLOT SCALE = 100.0000' / 1in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/29/2015	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

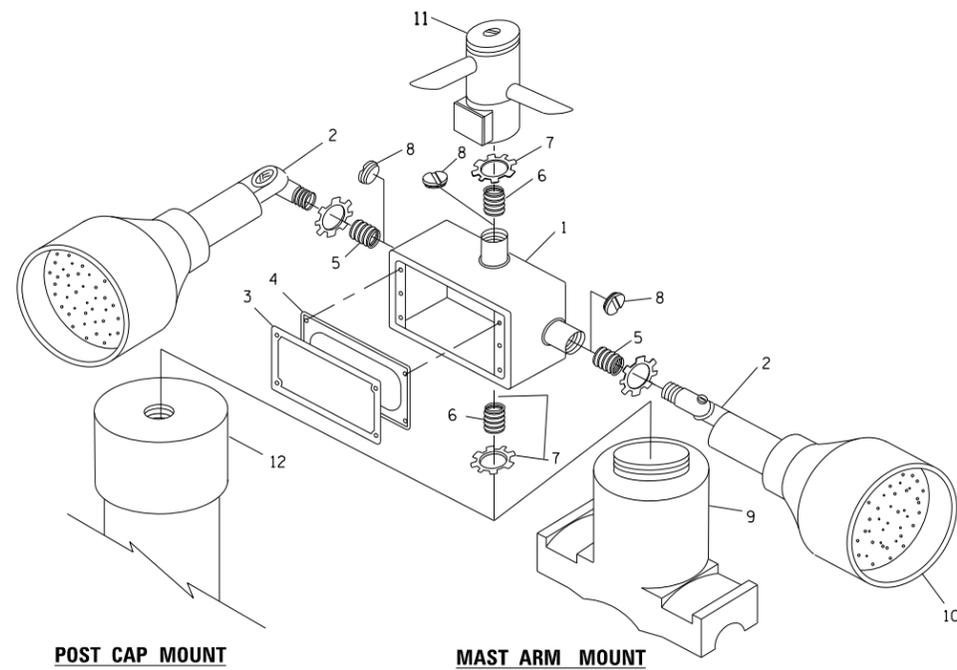
DISTRICT ONE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS		348	(3127-1N-1(13)	COOK	74	55
SCALE: NONE		SHEET NO. 5 OF 7 SHEETS		STA.	TO STA.	
		TS-05		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						



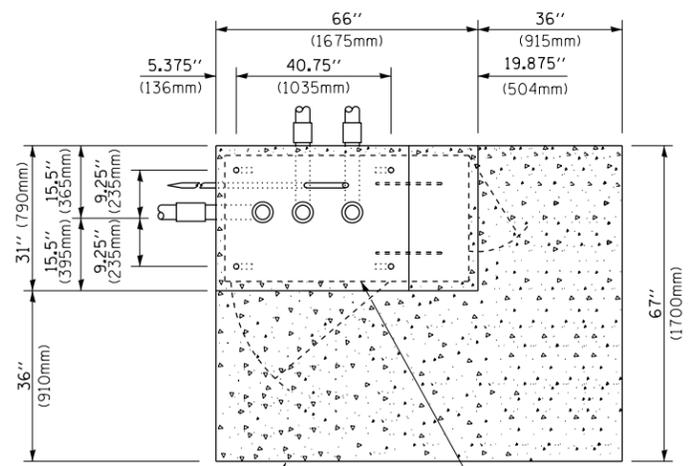
NOTES:

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.

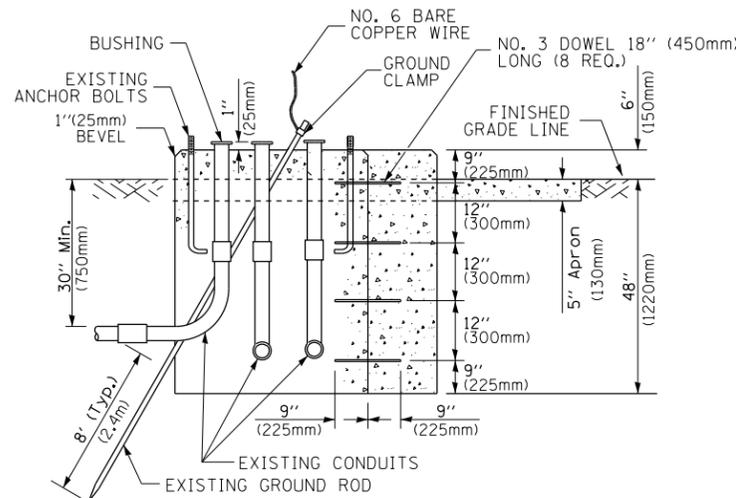
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

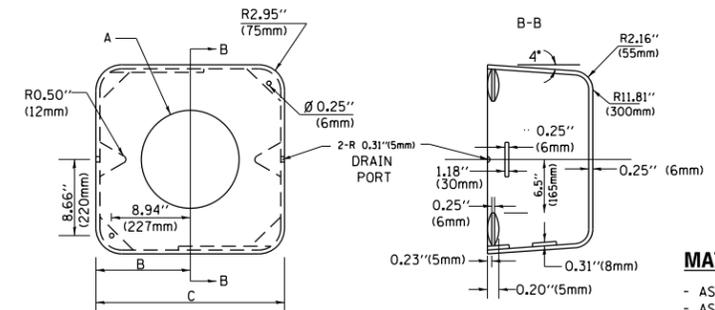


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

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

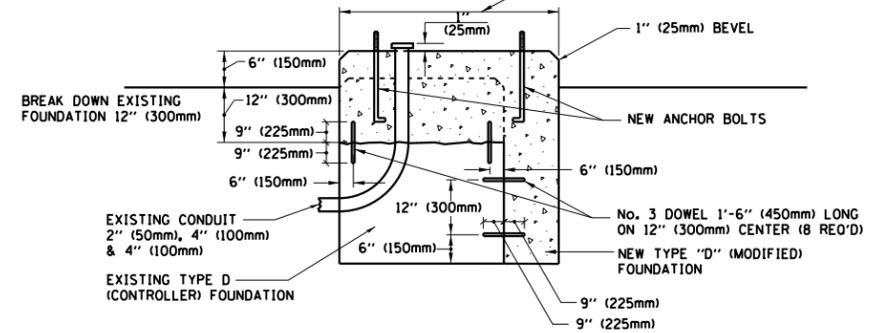
SHROUD

NOTES:

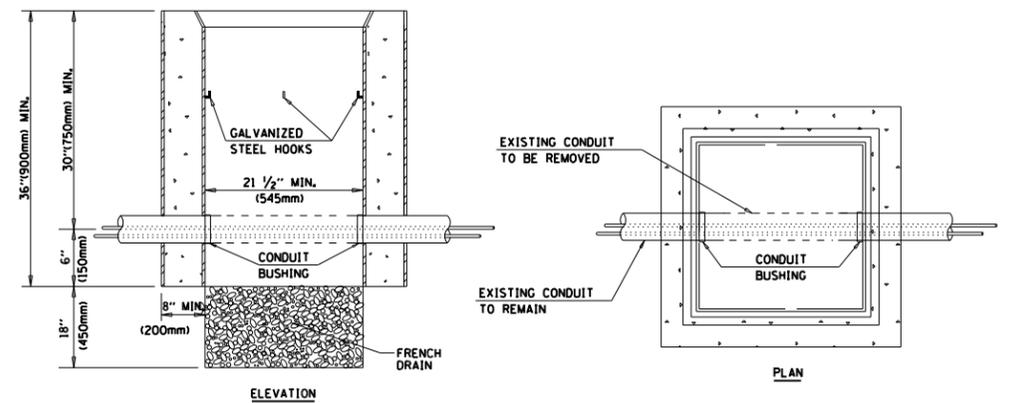
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

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



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.

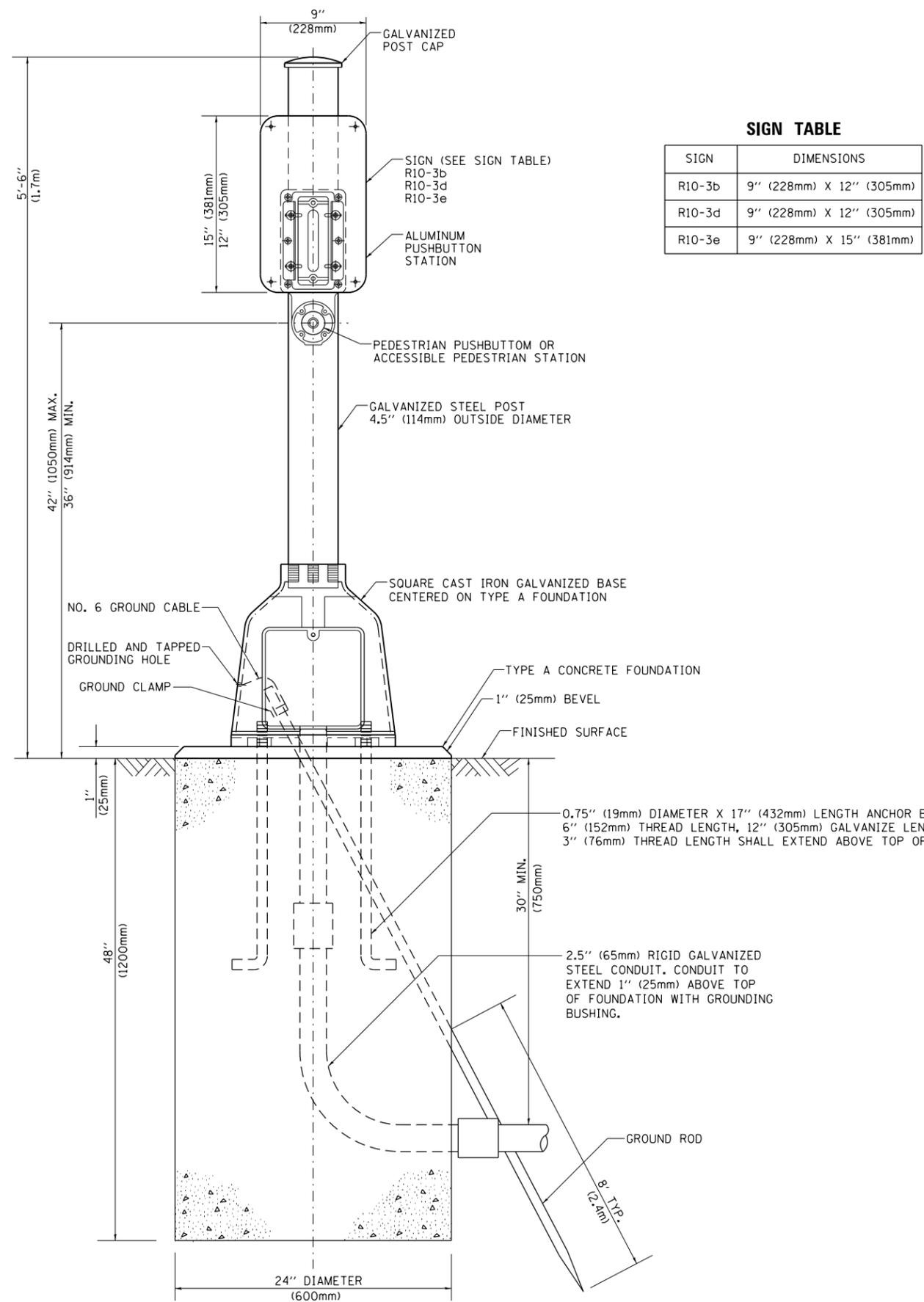
HANDHOLE TO INTERCEPT EXISTING CONDUIT

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	PLOT SCALE = 100.0000' / 1"	CHECKED - DAD	REVISED -
	PLOT DATE = 1/29/2015	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

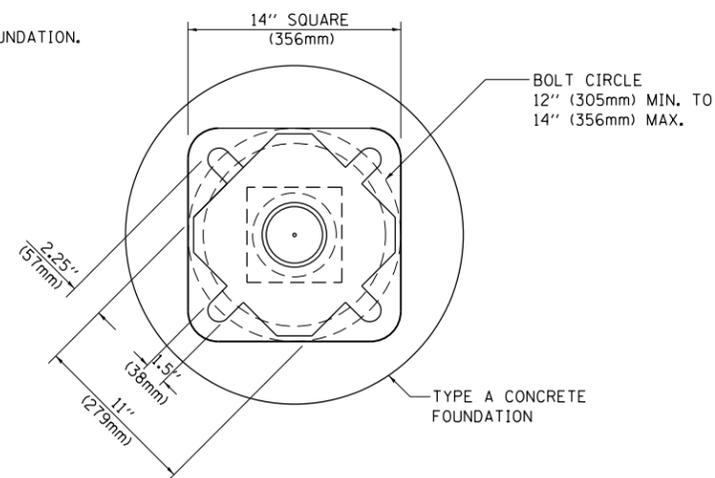
DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 6 OF 7 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	56
TS-05		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SIGN TABLE

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



BOLT PATTERN

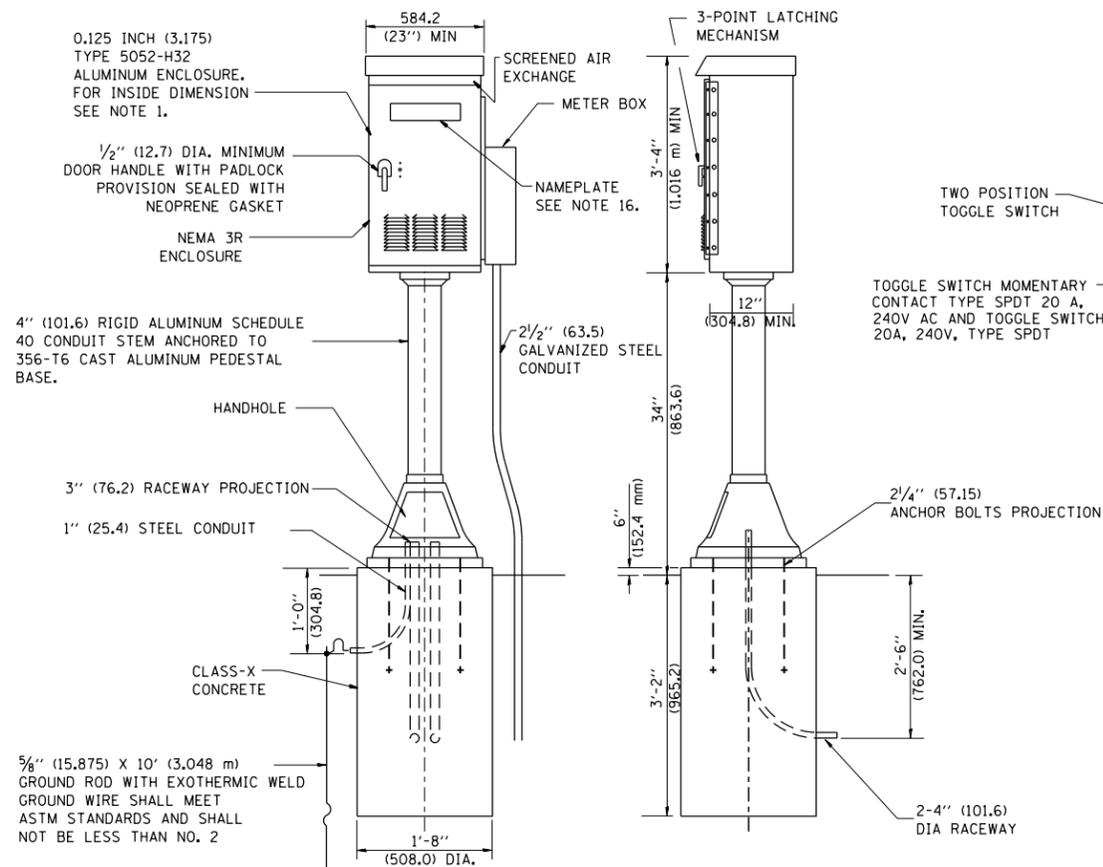
PEDESTRIAN PUSH BUTTON POST, TYPE A

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PLOT DATE = 1/29/2015		DATE - 10/1/2012	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

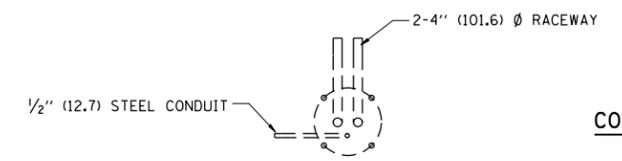
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1W-1(13))	COOK	74	57
TS-05			CONTRACT NO. 60X73	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



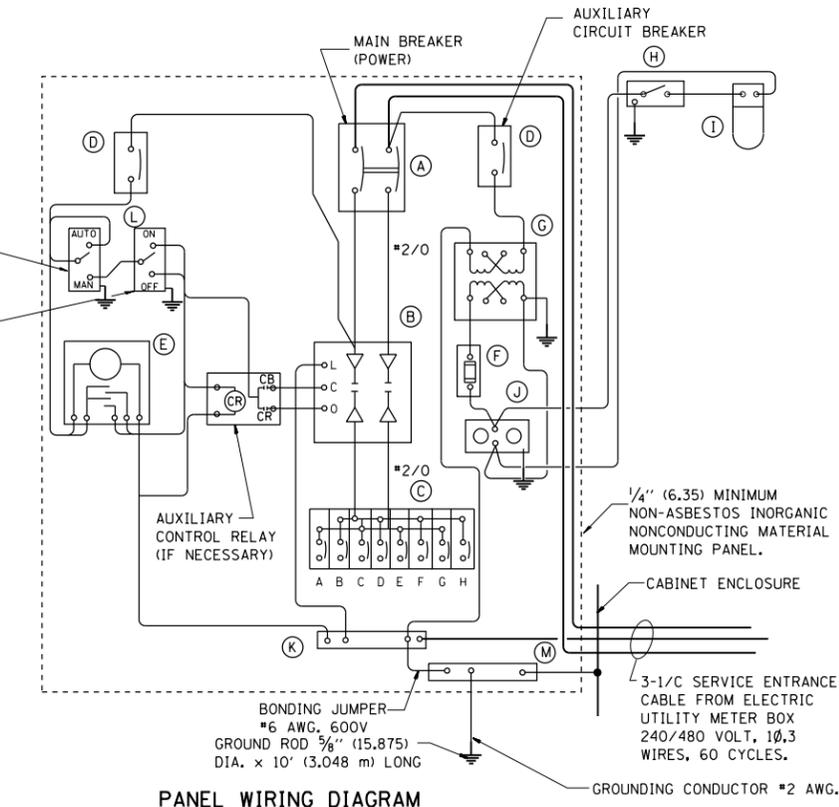
FRONT

SIDE



FOUNDATION PLAN

CONTROL CABINET



PANEL WIRING DIAGRAM

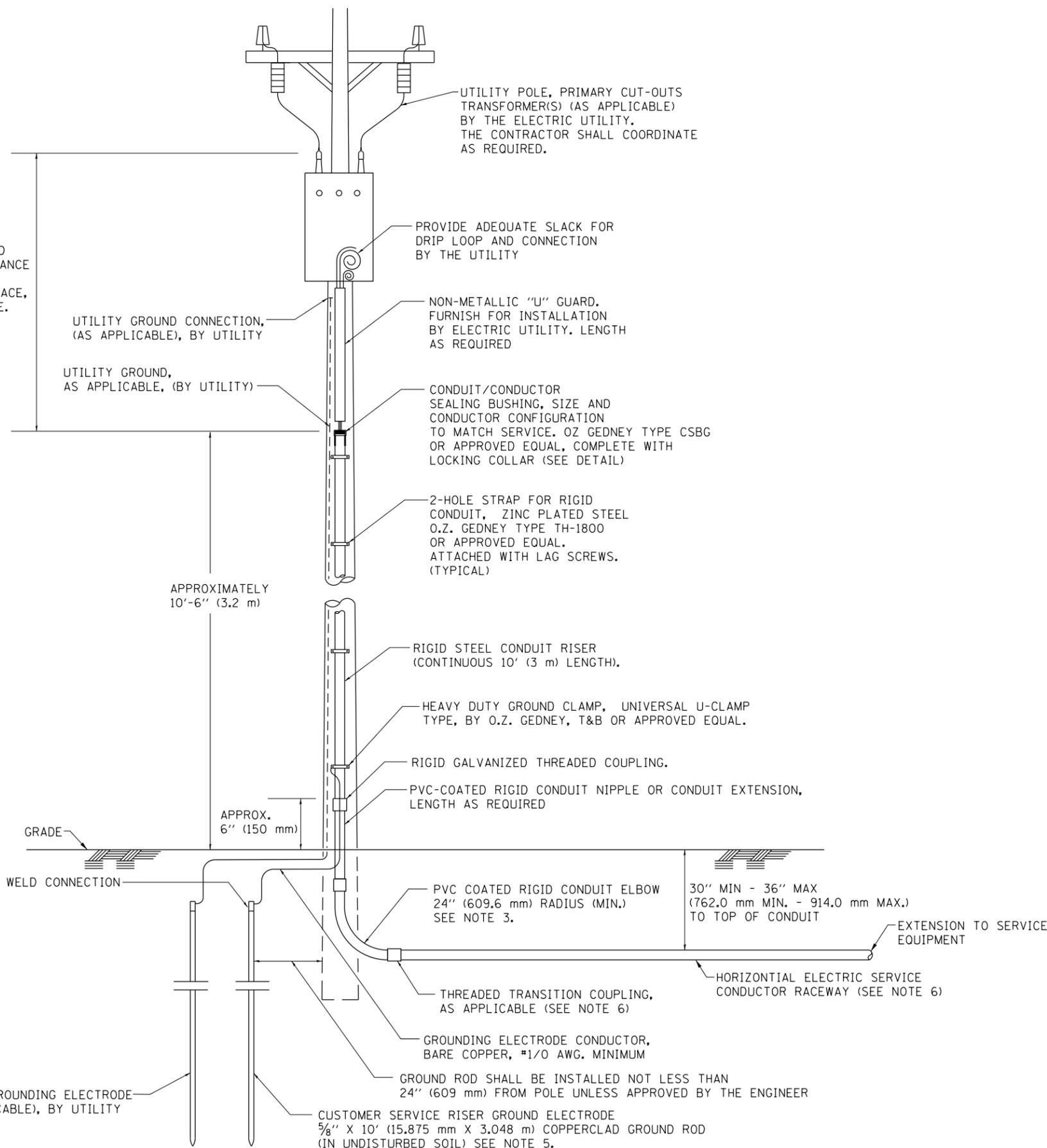
PANEL EQUIPMENT

BILL OF MATERIAL		
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100 AMP. FRAME, 100 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
C	8	CIRCUIT BREAKERS, 1 POLE, 277V., 100 AMP., FRAME 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100 AMP. FRAME, 15 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER (TIME SWITCH).
F	1	20 A., 120 V. FUSE.
G	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 Hz.
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN,
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 4" (101.6) X 4" (101.6 mm) BOX.
M	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS

NOTES:

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- UNLESS OTHERWISE INDICATED, THE CABINET SHALL BE MOUNTED ATOP A 4-INCH (101.6 mm) RIGID ALUMINUM SCHEDULE 40 CONDUIT STEM ANCHORED TO A CAST ALUMINUM PEDESTAL BASE.
- IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL, LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) X 60" (1828.8 mm) X 4" (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
- ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
- CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
R = RED BL = BLUE W = WHITE
B = BLACK Y = YELLOW G = GREEN
- PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.

ASCERTAIN AND ASSURE CLEARANCE FROM UTILITY SECONDARY SPACE, AS APPLICABLE.

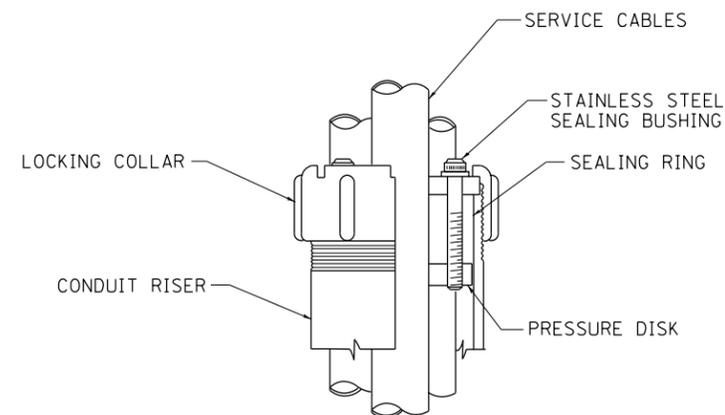


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

- SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

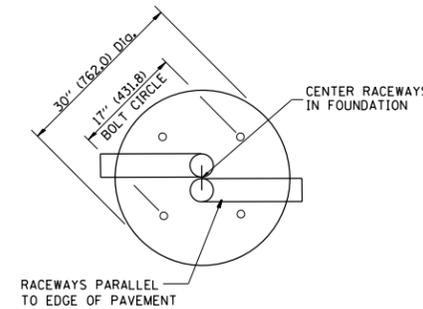
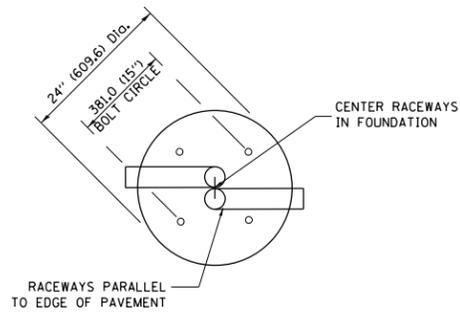
**ELECTRIC SERVICE INSTALLATION
AERIAL, REMOTE DISCONNECT**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	59
BE-220			CONTRACT NO. 60X73	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY O _u = 0.375 TON/SQ. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY O _u = 0.75 TON/SQ.FT	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY O _u = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)

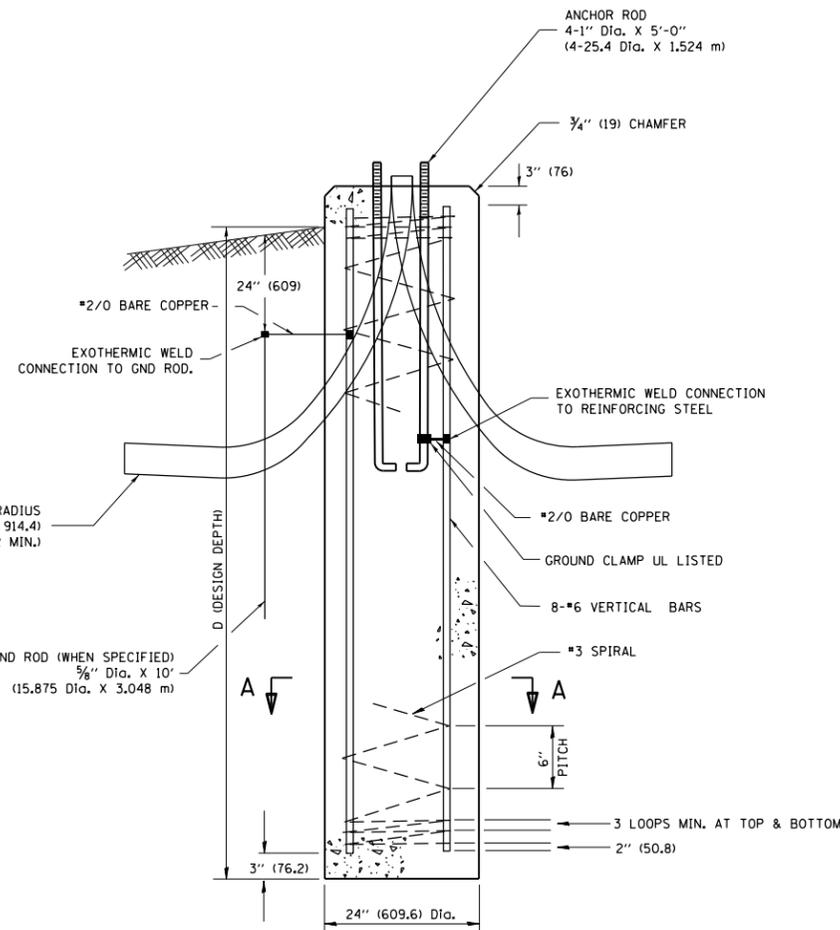


TOP VIEW

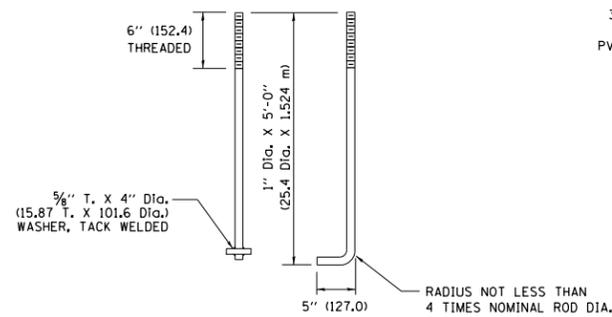
TOP VIEW

NOTES

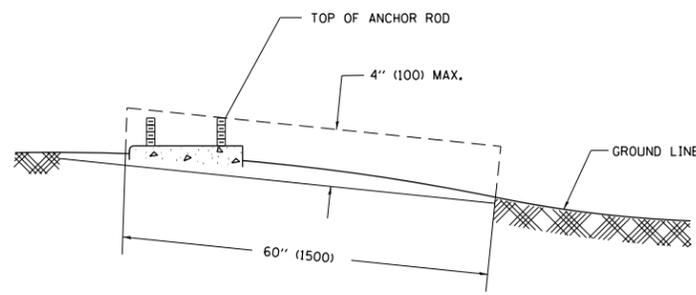
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG (MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



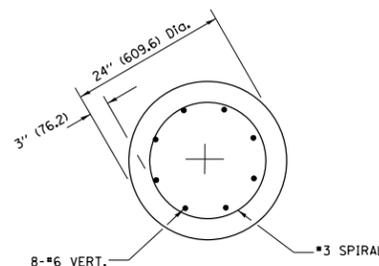
FOUNDATION DETAIL



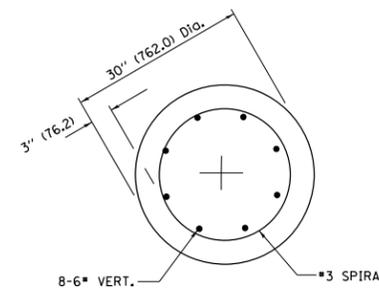
ANCHOR ROD DETAIL



FOUNDATION EXTENSION DETAIL

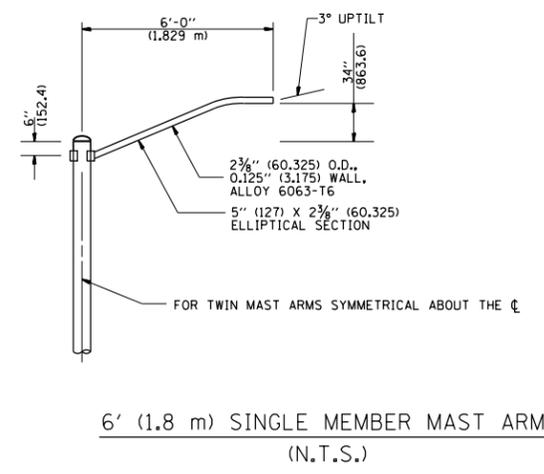
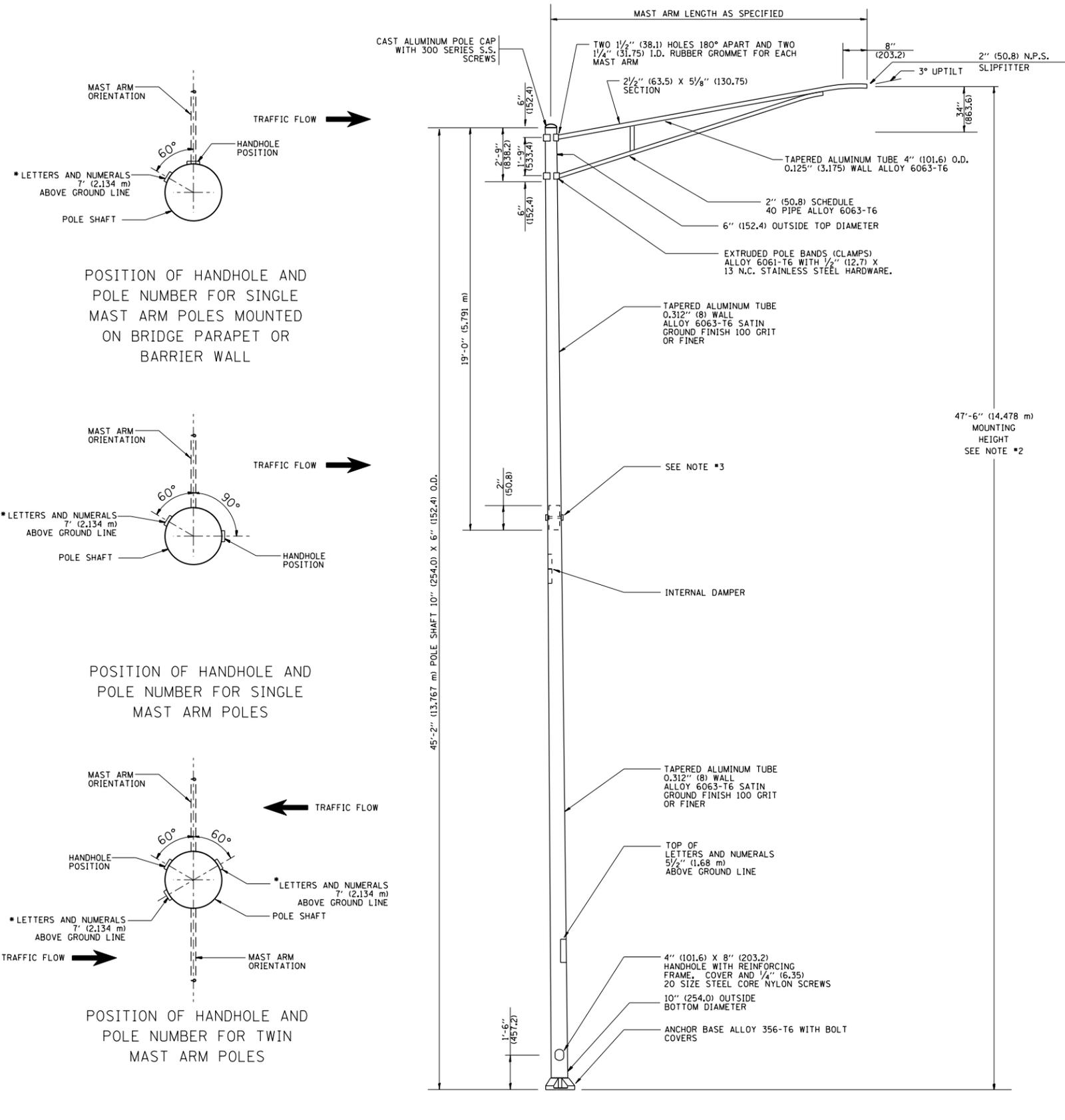


SECTION A-A

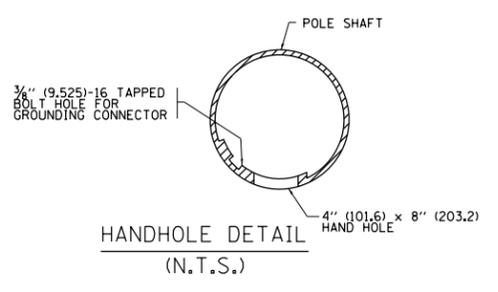
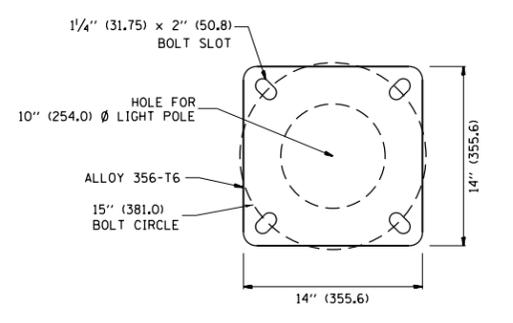


SECTION A-A

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED - 04-22-02	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHT POLE FOUNDATION			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\midot\midyja\10304985\Dist5.dgn		DRAWN -	REVISED -		40' (12.192 m) TO 47' 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE			348	(3127-1)N-1(13)	COOK	74	60
		CHECKED -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	BE-301 CONTRACT NO. 60X73				
		DATE -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



- NOTES:**
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
 2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
 3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
 4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
 5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
 6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
 7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
 8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.

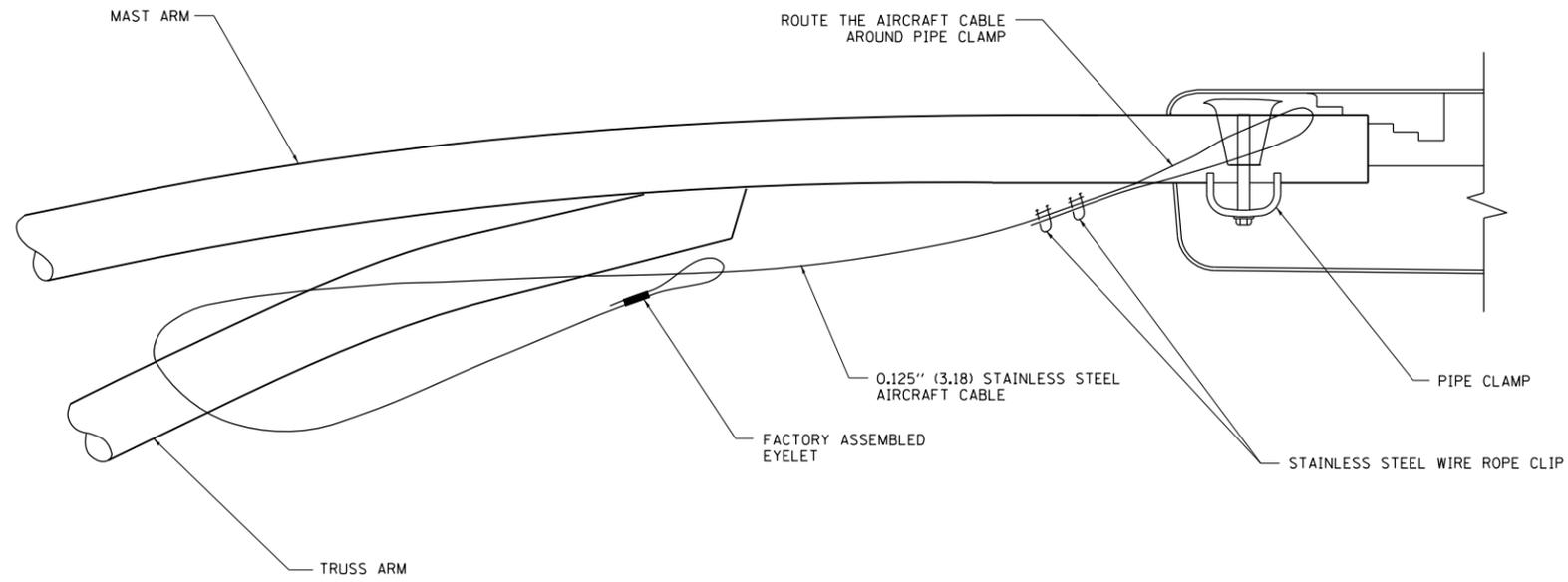


FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED - R. TOMSONS 09-06-00
et:\pwork\pwork\midyja\0304985\DistStd.dgn		DRAWN -	REVISED - R. TOMSONS 09-03-03
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED - R. TOMSONS 01-18-13
	PLOT DATE = 1/29/2015	DATE -	REVISED -

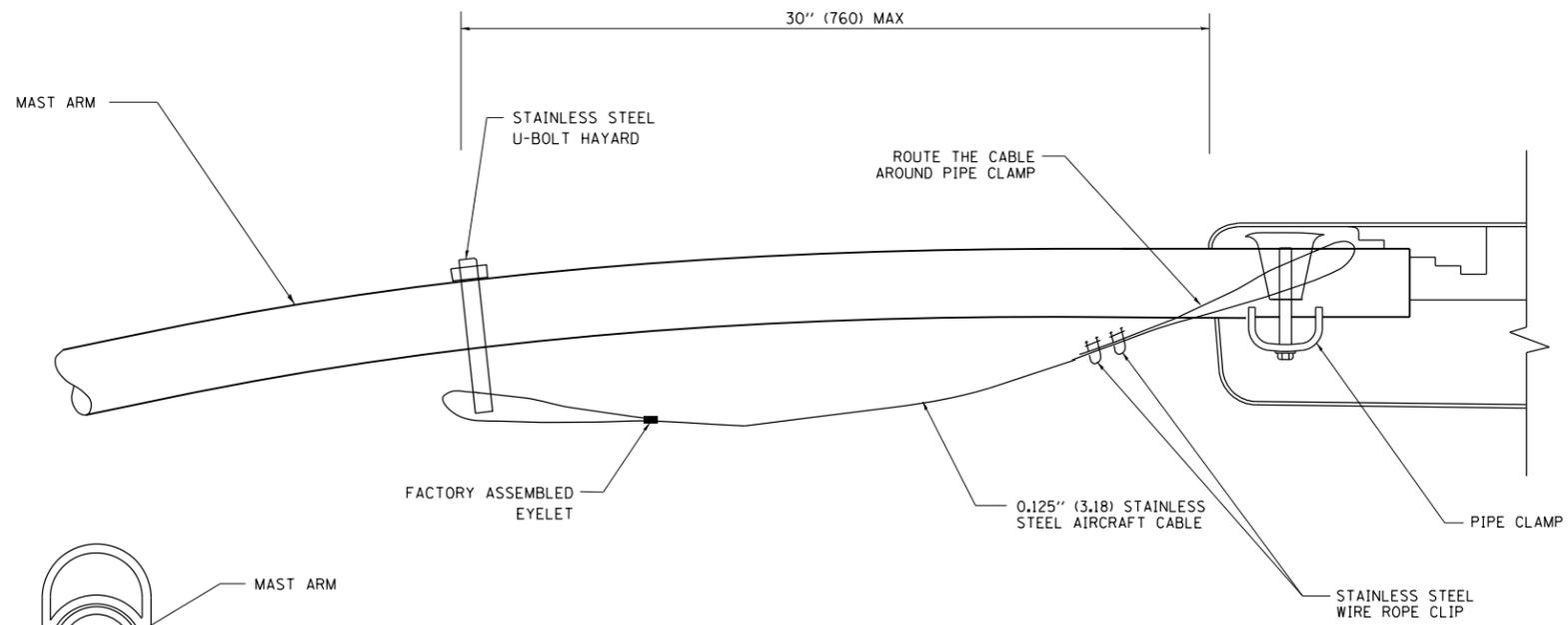
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ALUMINUM LIGHT POLE			
47'-6" (14,478 m) MOUNTING HEIGHT			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

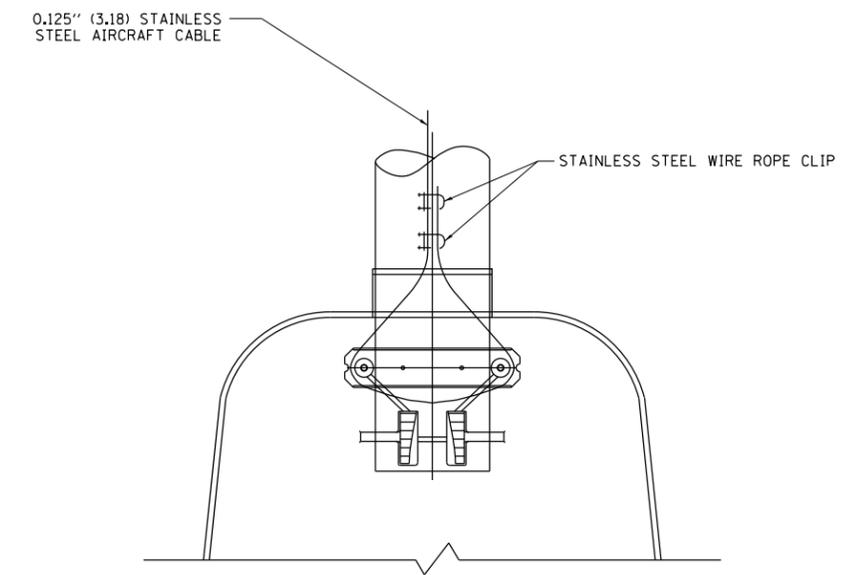
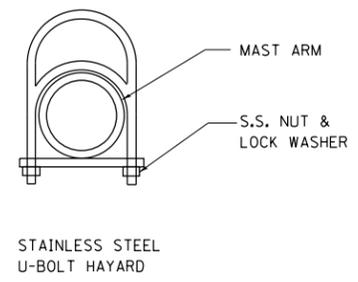
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-(113)	COOK	74	61
BE-400		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SIDE VIEW (TRUSS ARM)
N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)
N.T.S.

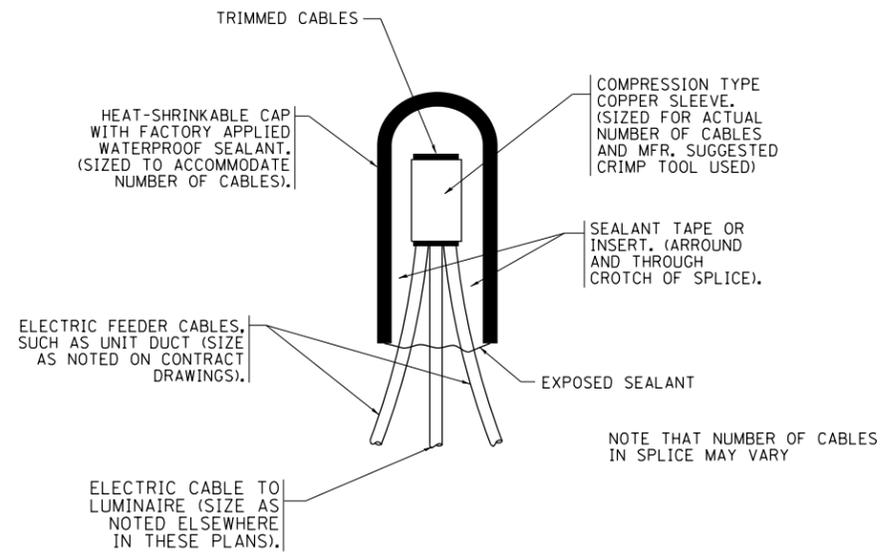


BOTTOM VIEW
N.T.S.

NOTES:

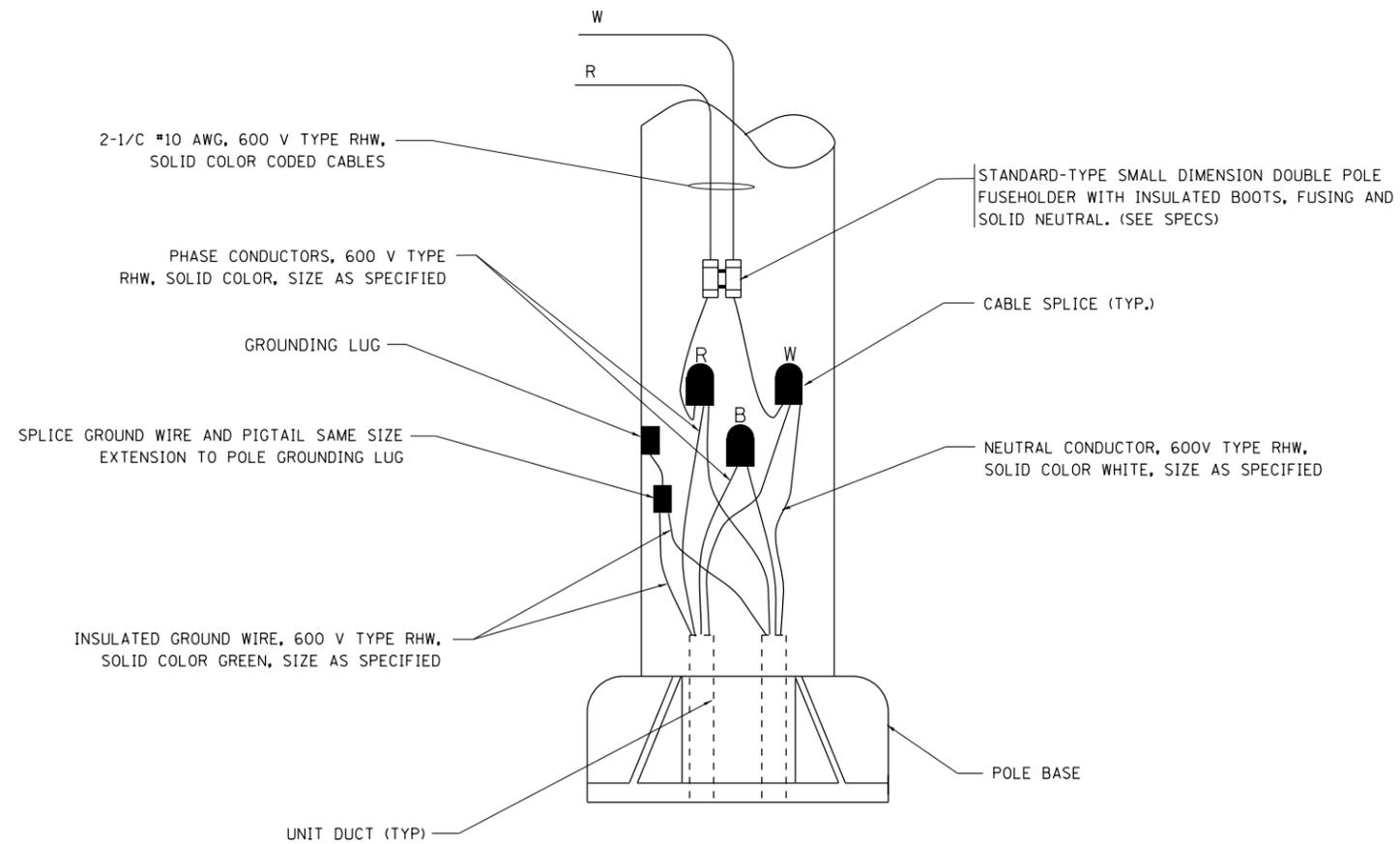
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LUMINAIRE SAFETY CABLE ASSEMBLY			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 100.0000' / 1in.		CHECKED -	REVISED -		BE-701			CONTRACT NO. 60X73				
PLOT DATE = 1/29/2015		DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



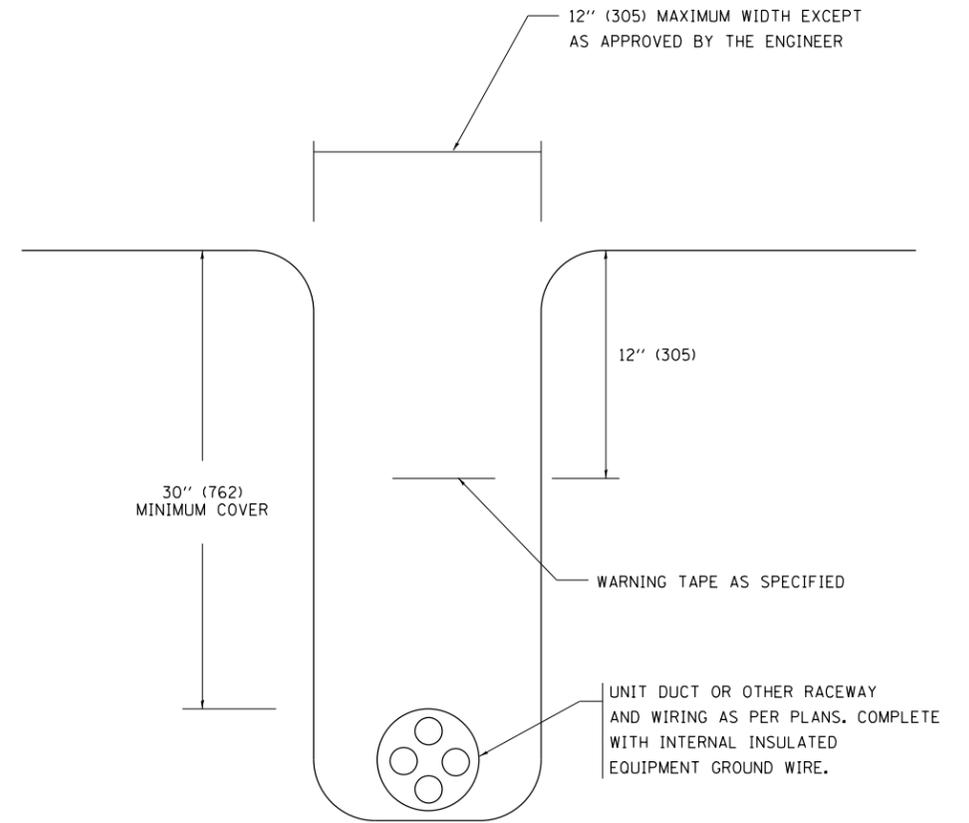
TYPICAL SPLICE DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

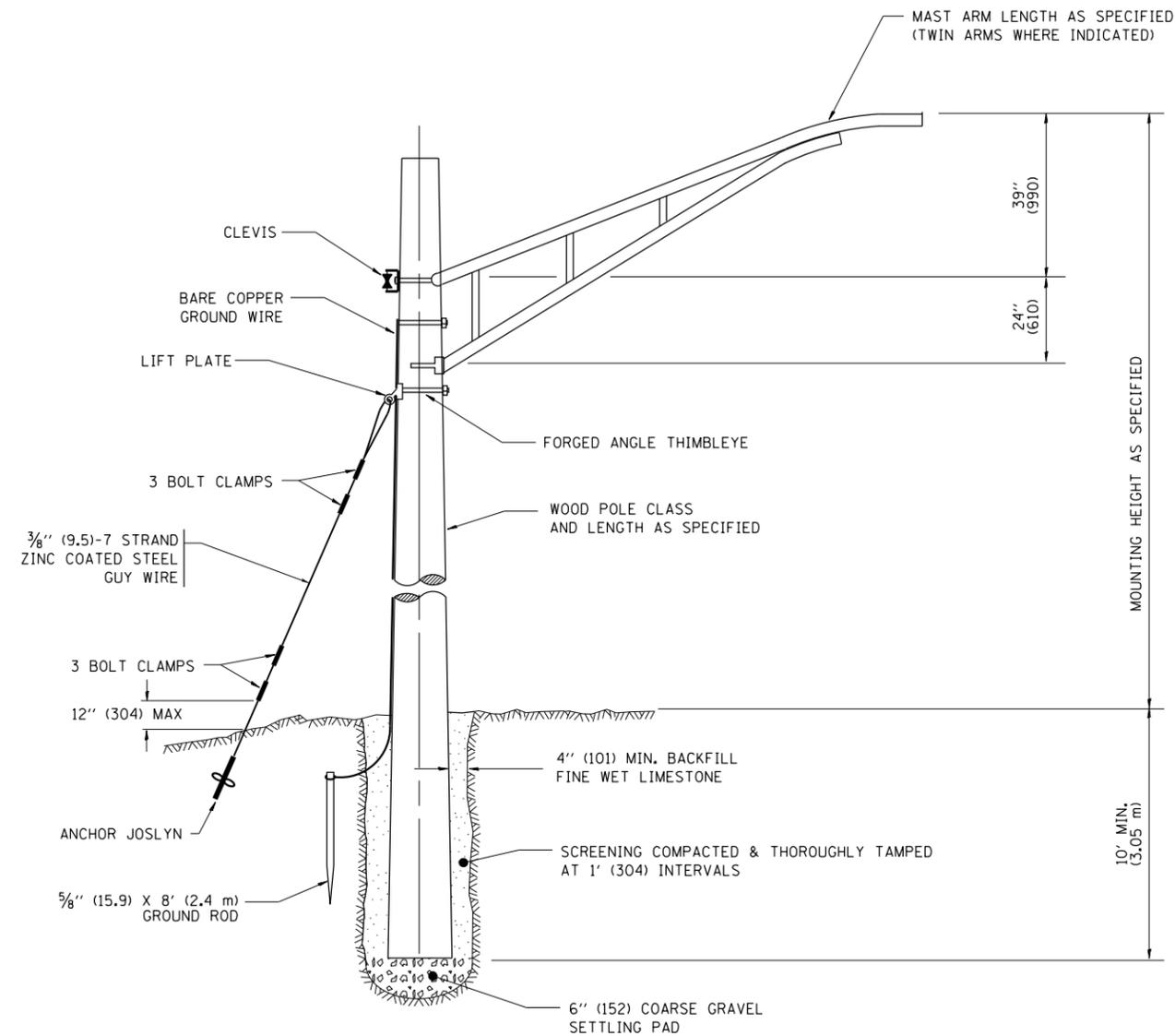
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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

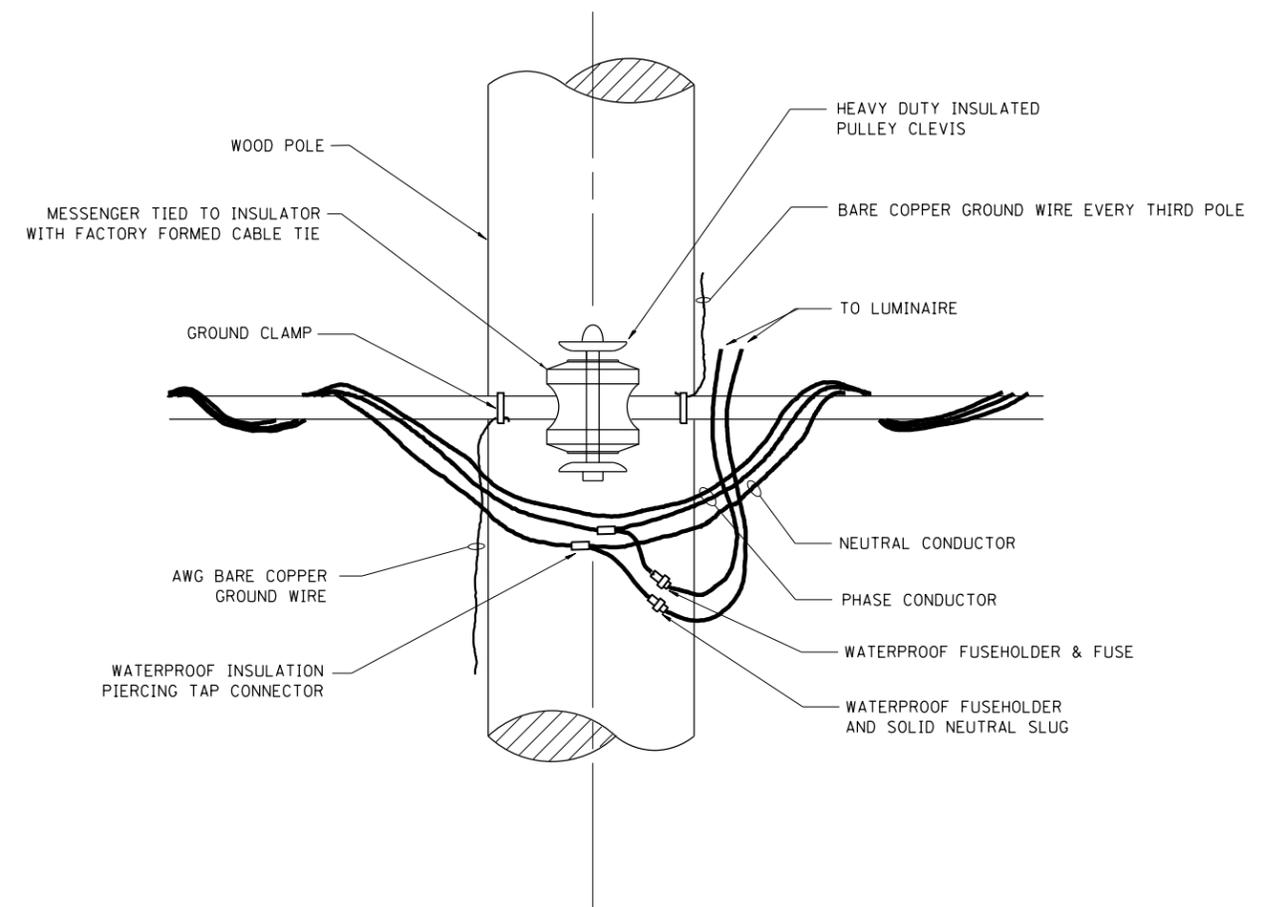
**MISC. ELECTRICAL DETAILS
SHEET A**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	63
BE-702		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



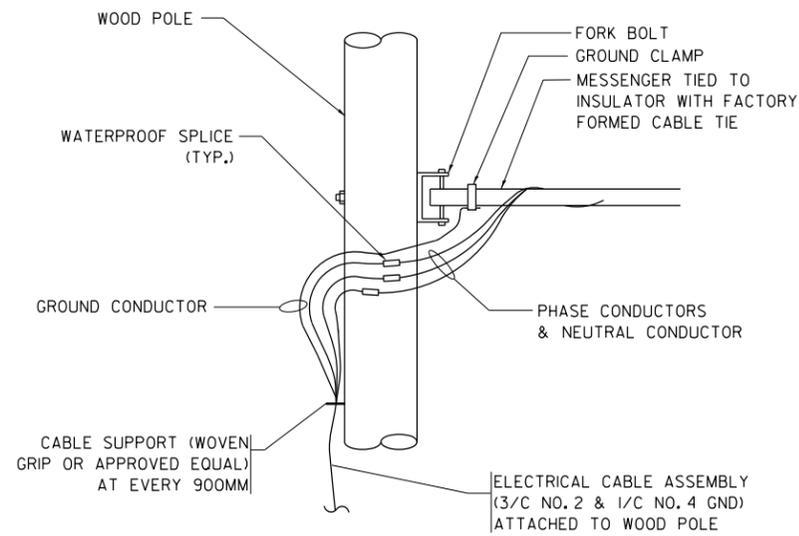
TEMPORARY LIGHT POLE DETAIL



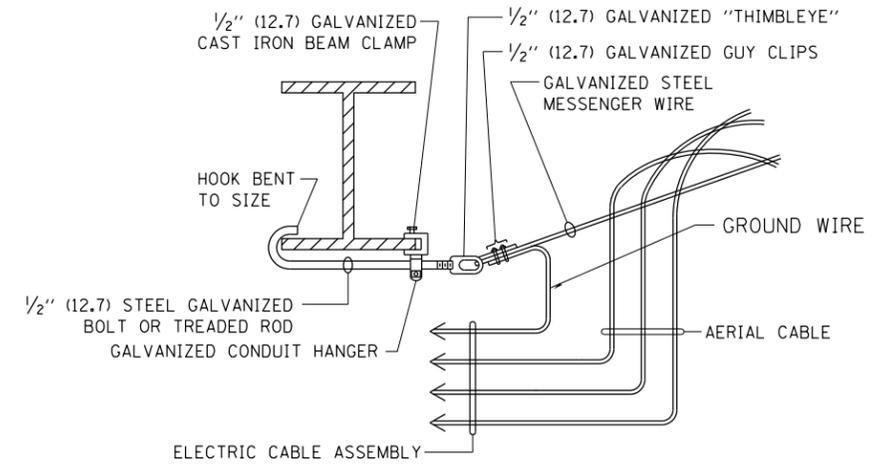
TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTES:
 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHT POLE DETAILS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\pwidot\midyja\0304985\DistStd.dgn		DRAWN -	REVISED -		348	(3127-1)N-1(13)	COOK	74	64			
PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED -		BE-800			CONTRACT NO. 60X73				
PLOT DATE = 1/29/2015		DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



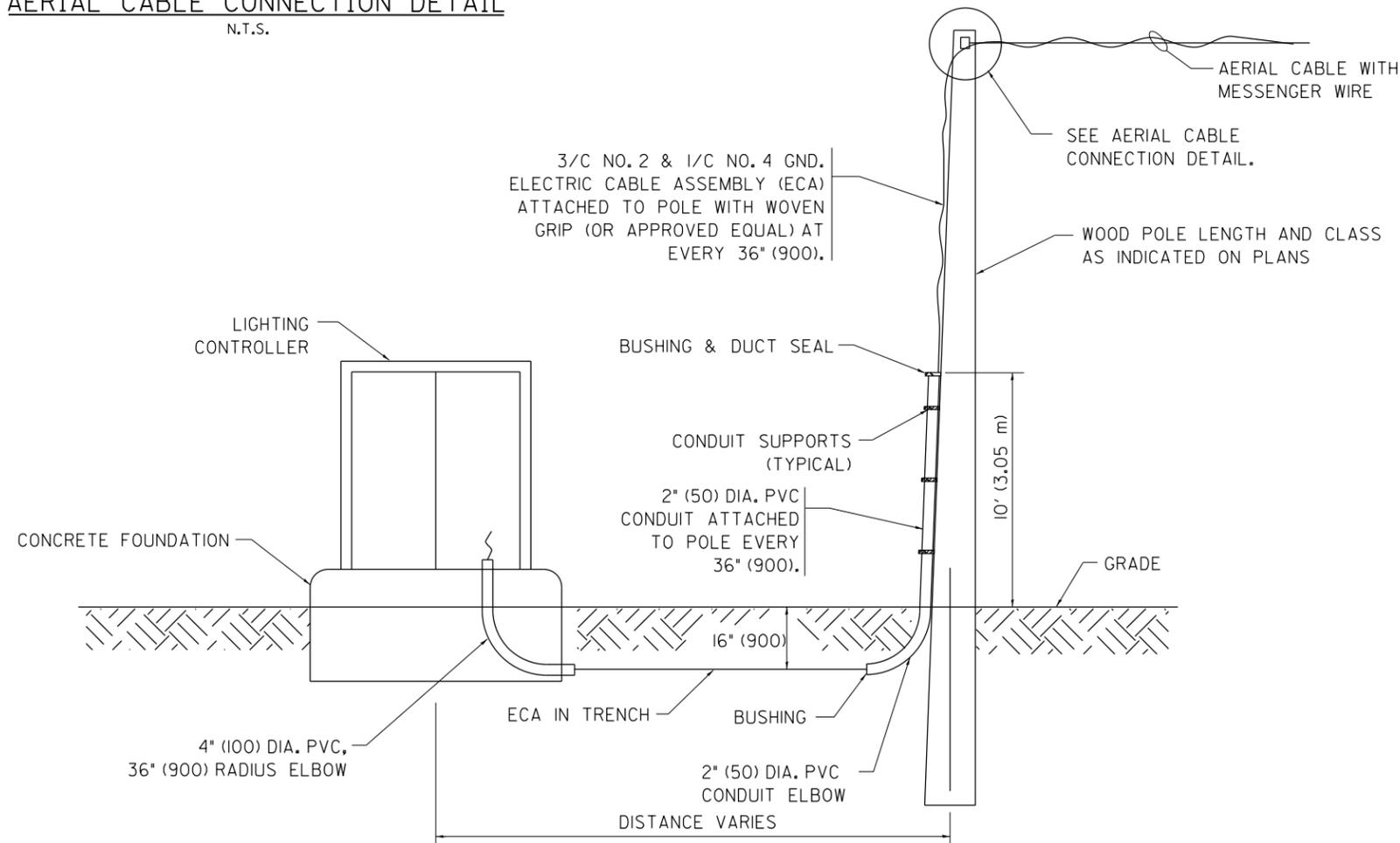
AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL
N.T.S.

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED - 08-08-03
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

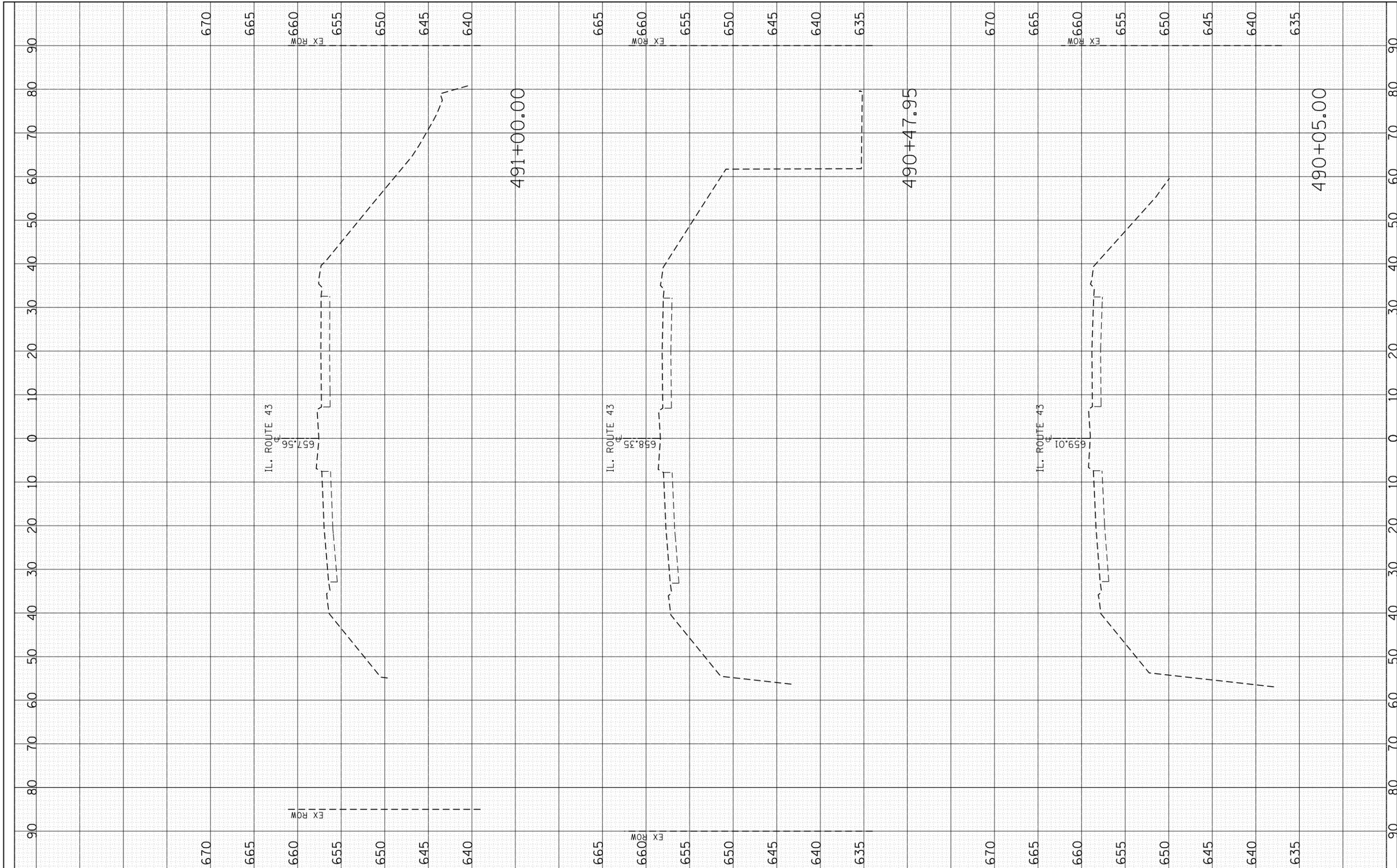
TEMPORARY AERIAL CABLE INSTALLATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1)N-1(13)	COOK	74	65
BE-801		CONTRACT NO. 60X73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		



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 PLOT DATE = 1/31/2015

DESIGNED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

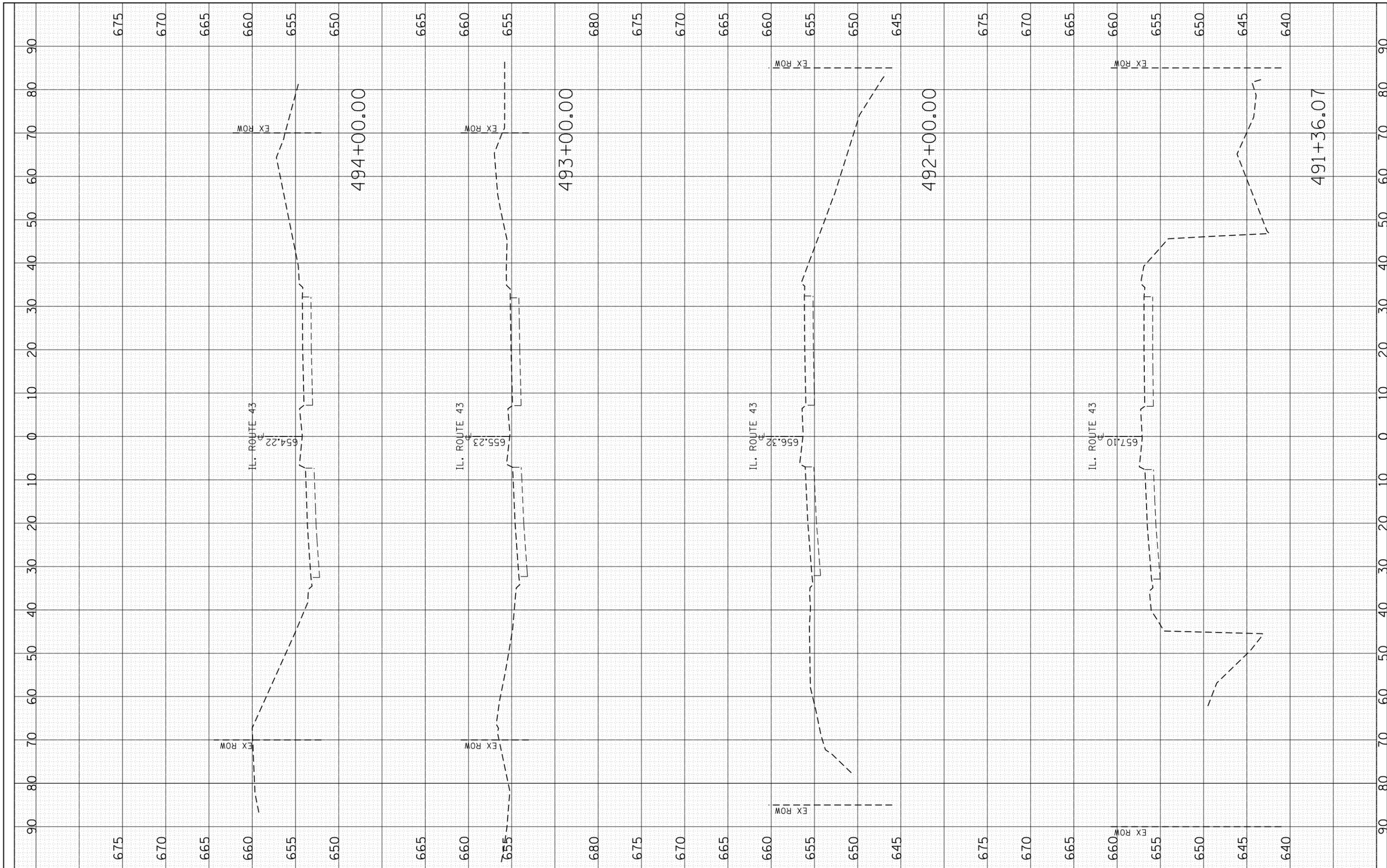
**IL. 43 (HARLEM AVE.)
 EXISTING CROSS SECTIONS**

SCALE: SHEET OF SHEETS STA. 490+05.00 TO STA. 491+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13))	COOK	74	66
CONTRACT NO. 60X73			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	SURVEYED PLOTTED	BY	DATE
NOTE BOOK	TEMPLATE		
AREAS CHECKED	AREAS CHECKED		

ORIGINAL SURVEY NO.	SURVEYED PLOTTED	BY	DATE
NOTE BOOK	TEMPLATE		
AREAS CHECKED	AREAS CHECKED		



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 PLOT DATE = 1/31/2015

DESIGNED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

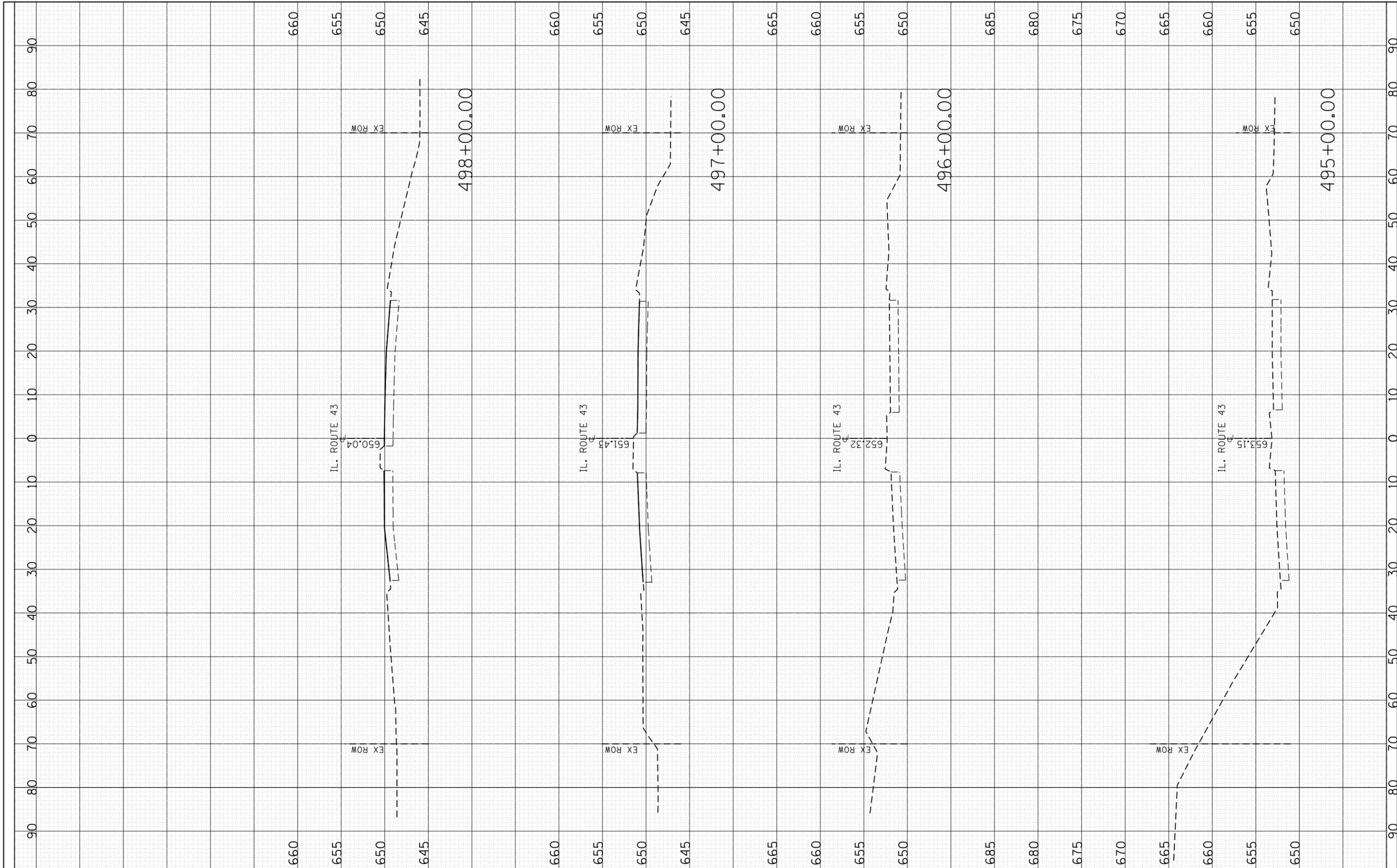
IL. 43 (HARLEM AVE.)
 EXISTING CROSS SECTIONS

SCALE: SHEET OF SHEETS STA. 491+36.07 TO STA. 494+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13))	COOK	74	67
CONTRACT NO. 60X73			ILLINOIS FED. AID PROJECT	

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
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ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		



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 PLOT DATE = 1/31/2015

DESIGNED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

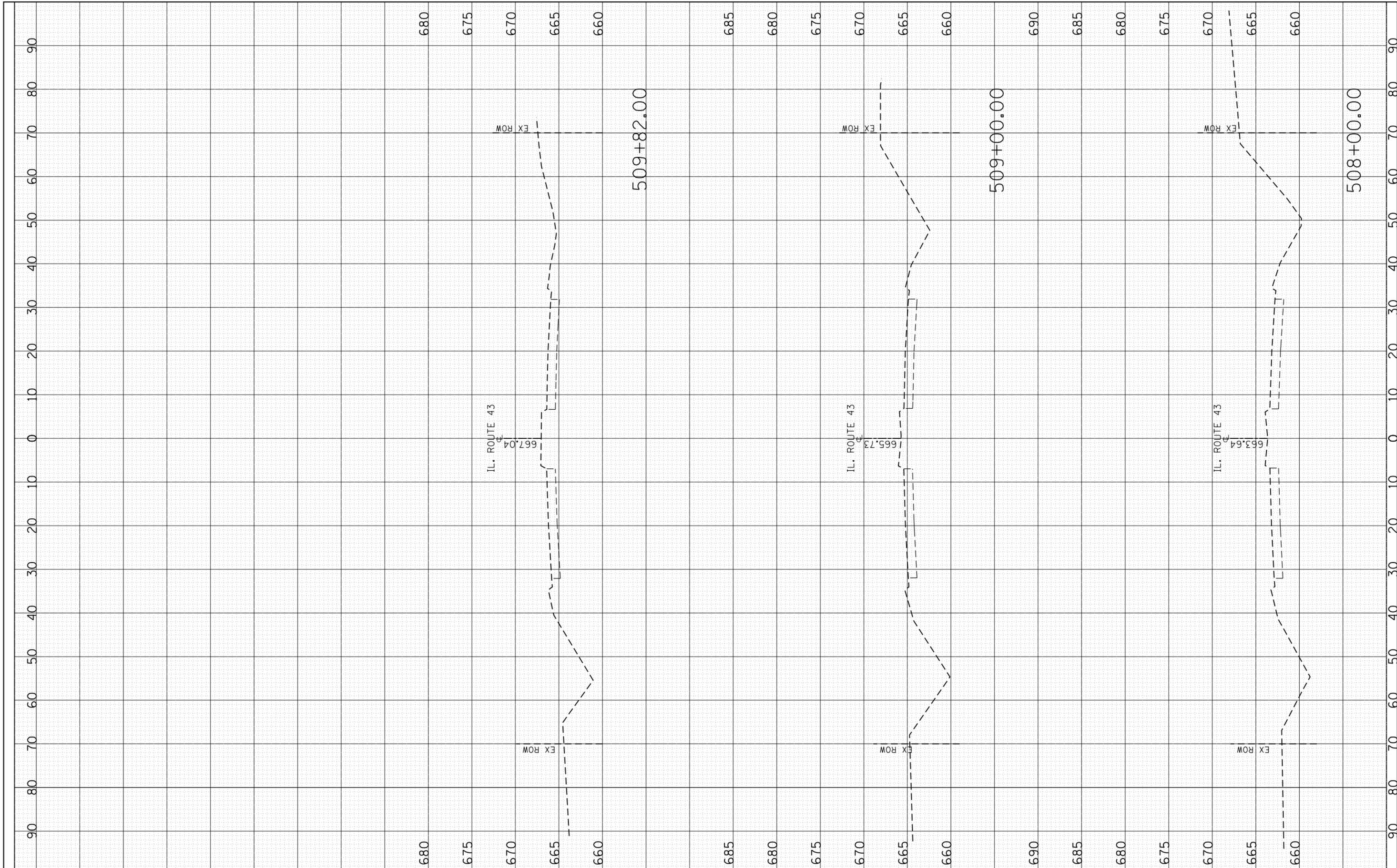
**IL. 43 (HARLEM AVE.)
 EXISTING CROSS SECTIONS**

SCALE: SHEET OF SHEETS STA. 495+00.00 TO STA. 498+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	68
CONTRACT NO. 60X73			ILLINOIS FED. AID PROJECT	

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		



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USER NAME = midyja
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DESIGNED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

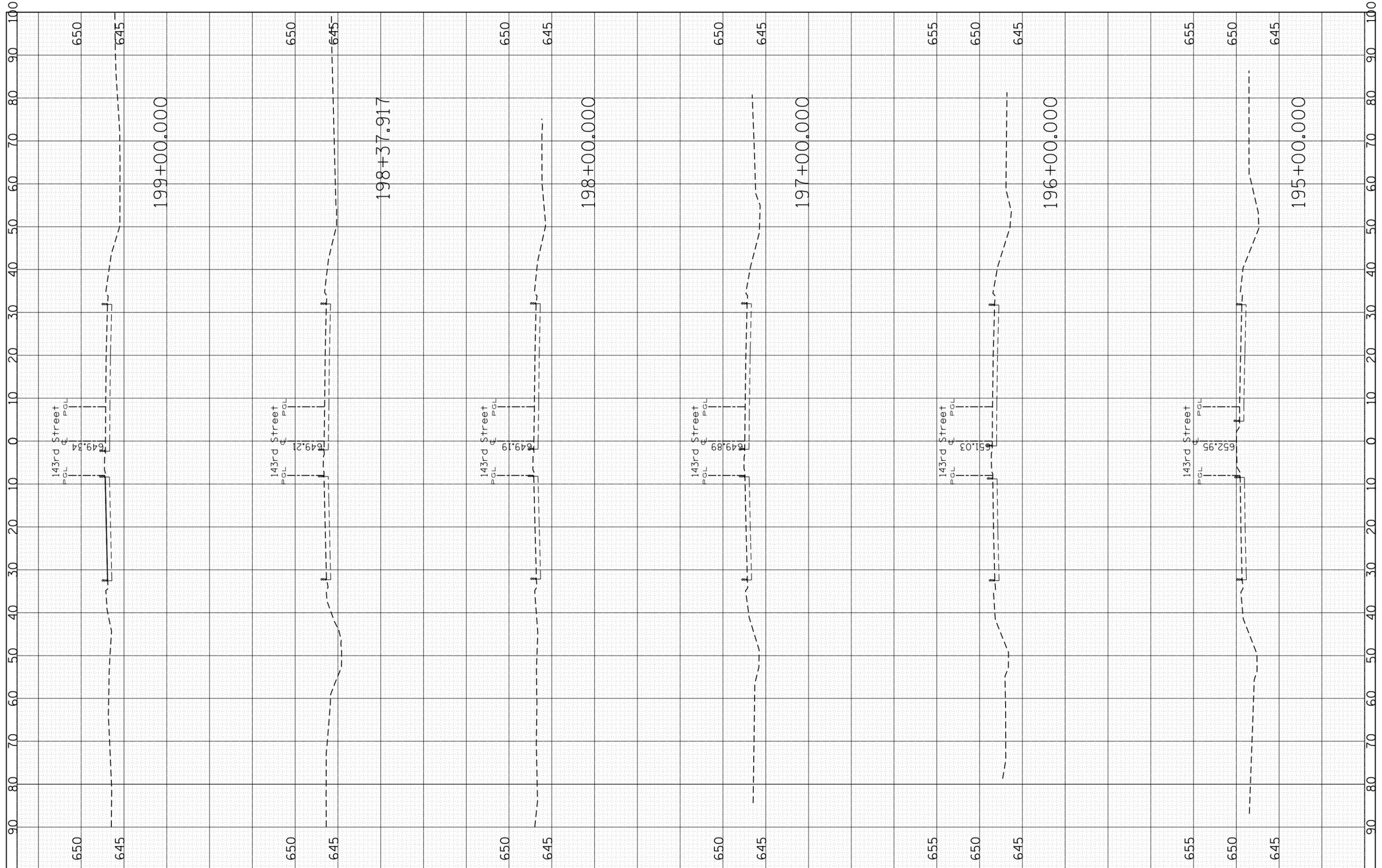
**IL. 43 (HARLEM AVE.)
 EXISTING CROSS SECTIONS**

SCALE: SHEET OF SHEETS STA. 508+00.00 TO STA. 509+82.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(3127-1N-1(13)	COOK	74	72
CONTRACT NO. 60X73			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -
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Default	PLOT SCALE = 20.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/30/2015	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

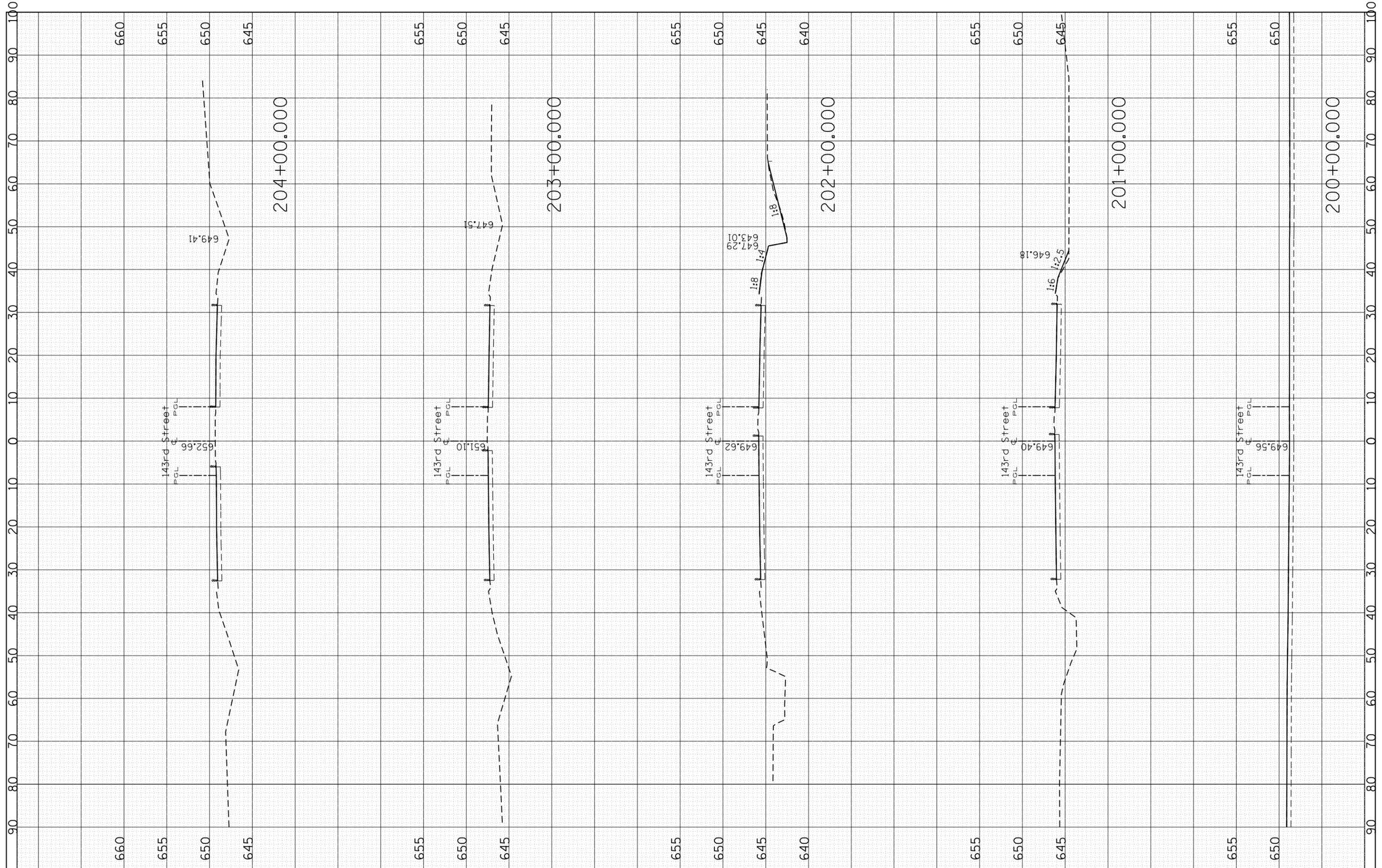
EXISTING CROSS SECTIONS
143rd ST. AT IL. ROUTE 43

SCALE: SHEET OF SHEETS STA. 195+00.000 TO STA. 199+00.000

F.A.P. RTE. 348	SECTION	COUNTY COOK	TOTAL SHEETS 74	SHEET NO. 73
			CONTRACT NO. 60X73	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE



FILE NAME =	USER NAME = miduja	DESIGNED -	REVISED -
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Default		CHECKED -	REVISED -
		DATE - 1/30/2015	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING CROSS SECTIONS
143rd ST. AT IL. ROUTE 43

SCALE: SHEET OF SHEETS STA. 200+00.000 TO STA. 204+00.000

F.A.P. RTE. 348	SECTION (3127N-1(13))	COUNTY COOK	TOTAL SHEETS 74	SHEET NO. 74
CONTRACT NO. 60X73				ILLINOIS FED. AID PROJECT