03-08-2019 LETTING ITEM 143

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	1
F.H.W.A. REG.	ILLINOIS	PROJECT PTB4(661)		

CONTRACT NO. 61F03

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

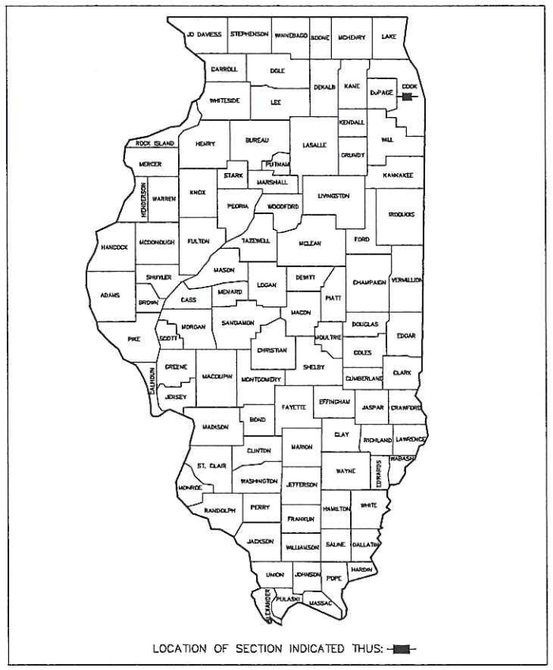
FAU 1459 (26th STREET) / FAU 3569 (RIVERSIDE DRIVE)

FAP 0348 (HARLEM AVENUE) TO HOME AVENUE

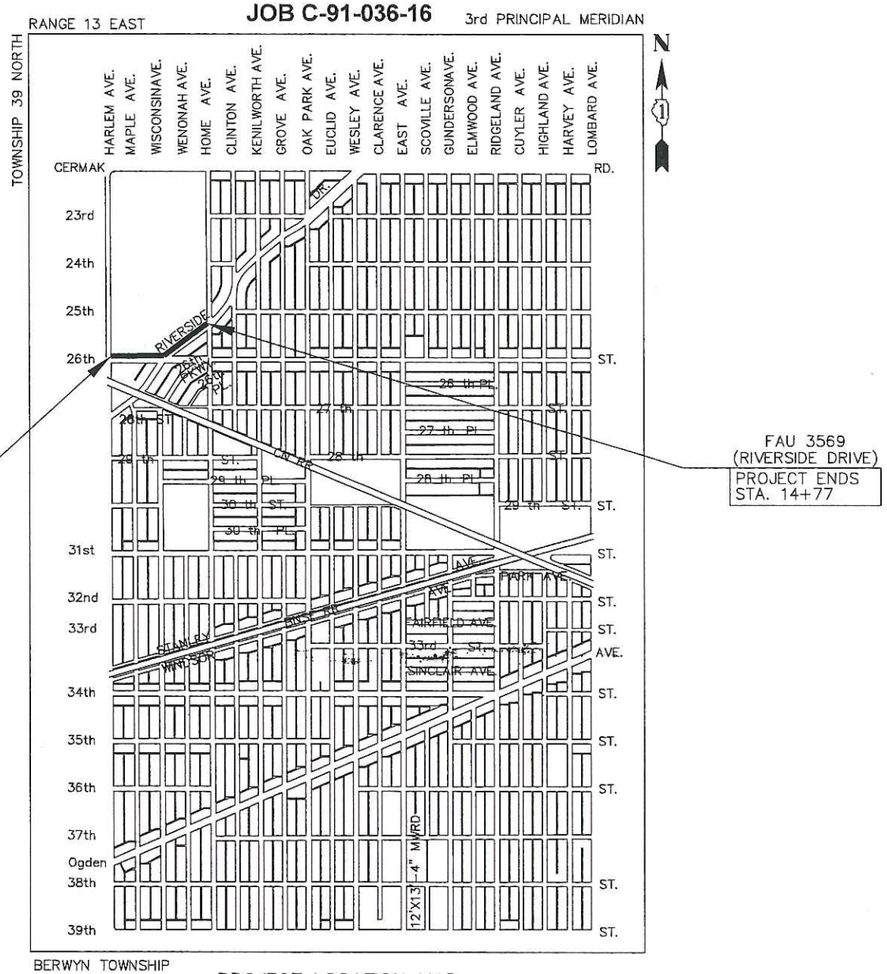
SIDEWALKS

SECTION 15-00173-00-SW
PROJECT PTB4(661)
CITY OF BERWYN
COOK COUNTY
JOB C-91-036-16

FOR INDEX OF SHEETS AND HIGHWAY STANDRARDS, SEE SHEET 2



LOCATION OF SECTION INDICATED THUS: -■-



PROJECT LOCATION MAP
N.T.S.

GROSS LENGTH OF PROJECT = 1,477 FEET (0.28 MILES)
NET LENGTH OF PROJECT = 1,477 FEET (0.28 MILES)

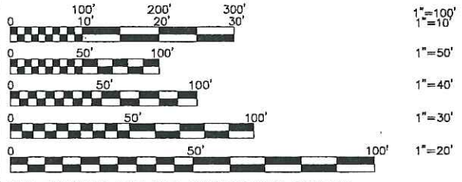
PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. SCHAUMBURG, IL.

TRAFFIC DATA
ADT:
26TH STREET 14,800 (2017)
RIVERSIDE DRIVE 4,250 (2017)

DESIGN DESIGNATION
MAJOR COLLECTOR
MAJOR COLLECTOR

POSTED SPEED
25 MPH (EXISTING)
25 MPH (PROPOSED)

DESIGN SPEED
25 MPH (EXISTING)
25 MPH (PROPOSED)



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
CALL 811

811
Know what's below.
Call before you dig.

CONTRACT NO. 61F03

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED 12/20 2018

CITY OF BERWYN _____
ROBERT J. LOVERO, MAYOR

PASSED _____ 2018

_____
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW _____ 2018

_____
REGIONAL ENGINEER

Thomas R. Brandstedt
THOMAS R. BRANDSTEDT, P.E.
IL. P.E. NO. 062-036190
EXPIRES 11-30-2019

12-20-18
DATE

THOMAS R. BRANDSTEDT
062-066946
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS
SEAL

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-07 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001-07 TEMPORARY EROSION CONTROL SYSTEMS
424001-11 PERPENDICULAR CURB RAMPS FOR SIDEWALKS
606001-07 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB & GUTTER
701101-05 OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-06 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701501-06 URBAN LANE CLOSURE, 2 L, 2 WUNDIVIDED
701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06 SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08 TRAFFIC CONTROL DEVICES
857001-01 STANDARD PHASE DESIGNATION DIAGRAMS & PHASE SEQUENCES
862001-01 UNINTERRUPTIBLE POWER SUPPLY (UPS)

GENERAL NOTES

SPECIFICATIONS

THE APRIL 1, 2016 EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", PREPARED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" SHALL GOVERN ALL WORK ASSOCIATED WITH THIS PROJECT. THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" MAY GOVERN OTHER WORK ON THIS PROJECT AS INDICATED BY REFERENCE.

CARE IN EXCAVATION

THE CONTRACTOR SHALL EXERCISE CARE DURING EARTH AND/OR TRENCHING OPERATIONS TO AVOID DAMAGE TO LOCAL UTILITY SERVICES, WATER VALVES, MANHOLES, CATCH BASINS, INLETS, BUFFALO BOXES, AND OTHER STRUCTURES. ALL DAMAGE DONE BY THE CONTRACTOR, WHETHER THE STRUCTURE OR SERVICE IS VISIBLE AT THE GROUND SURFACE OR NOT, SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH ARTICLE 105.07 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

NOTIFICATION OF PUBLIC UTILITIES

PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OFFICIAL OF THE PUBLIC WORKS DEPARTMENT OF THE THE CITY OF BERWYN AT (708) 749-4700, J.U.L.I.E. AT 1-800-892-0123 OR 811, AND OTHER PUBLIC AND PRIVATE UTILITIES TO MAKE ARRANGEMENTS TO LOCATE THEIR VARIOUS FACILITIES WITHIN THE LIMITS OF CONSTRUCTION UNDER THIS CONTRACT, AND TO PROVIDE ADEQUATE PROTECTION AND INSPECTION. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES IN THE FIELD.

TRAFFIC CONTROL DEVICES

BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 107.14 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

PROTECTION OF SIGNS AND PROPERTY

ALL TRAFFIC SIGNS, STREET SIGNS, ETC., THAT INTERFERE WITH THE CONSTRUCTION OPERATIONS SHALL BE REMOVED AND PLACED AT NEW LOCATIONS AS DESIGNATED BY THE ENGINEER. IN ADDITION, ALL MAIL BOXES THAT INTERFERE WITH CONSTRUCTION SHALL BE SIMILARLY RELOCATED IN ACCORDANCE WITH ARTICLES 107.20 AND 107.21 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

SUPERINTENDENCE

THE CONTRACTOR SHALL HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES, IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT AND SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVING CONTROL OF ALL THE WORK AS THE AGENT OF THE GENERAL CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 108.07.

PROJECT SAFETY

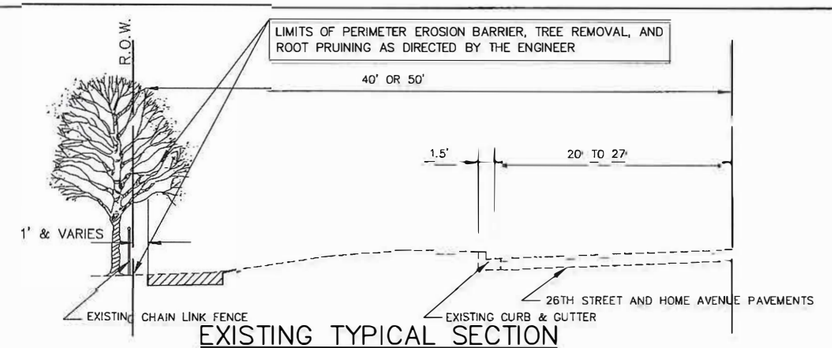
THE CONTRACTOR SHALL COMPLY WITH AND OBSERVE THE RULES AND REGULATIONS OF O.S.H.A. AND APPROPRIATE AUTHORITIES REGARDING SAFETY PROVISIONS. THE CONTRACTOR, ENGINEER, AND OWNER SHALL EACH BE RESPONSIBLE FOR THEIR OWN RESPECTIVE AGENTS AND EMPLOYEES.

THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS, OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS/HER WORK IN ACCORDANCE WITH THE DOCUMENTS AND SPECIFICATIONS.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

SPECIAL PROJECT NOTES

1.) MEET EXISTING CURB AND FLOW LINE ELEVATIONS AT REPLACEMENT LIMITS.
2.) MEET EXISTING SIDEWALK ELEVATIONS AT NEW CONSTRUCTION LIMITS.
3.) "TOPSOIL FURNISH AND PLACE, 4 INCH" SHALL BE INSTALLED IN DISTURBED AREAS.

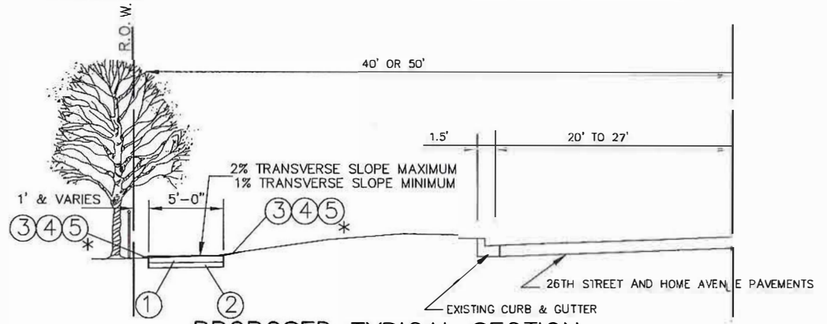


EXISTING TYPICAL SECTION

1"=5'

26TH STREET AND RIVERSIDE DRIVE – STA. 0+00 TO STA. 14+77

INDICATES REMOVAL ITEMS AS APPLICABLE "EARTH EXCAVATION"



PROPOSED TYPICAL SECTION

1"=5'

26TH STREET AND RIVERSIDE DRIVE – STA. 0+00 TO STA. 14+77

① PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH OR
PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH (FOR FIELD ENTRANCE DRIVEWAYS)

② SUBBASE GRANULAR MATERIAL TYPE B, 4 INCH

③ TRANSITION TO EXISTING GROUND LEVEL, 4:1 MAXIMUM SLOPE

④ TOPSOIL FURNISH & PLACE, 4 INCH (ALL DISTURBED AREAS AND AS DIRECTED)

*⑤ SODDING (ALL DISTURBED AREAS AND AS DIRECTED)

NOTE: MINIMUM TRANSVERSE SLOPE FOR SIDEWALK SHALL BE 1%.
MAXIMUM TRANSVERSE SLOPE FOR SIDEWALK SHALL BE 2%.
MAXIMUM LONGITUDINAL SLOPE FOR SIDEWALK SHALL BE 5%.

FILE NAME = CITY OF BERWYN	USER NAME =	DESIGNED - AMS	REVISED - TRB 5/22/18
FAU 1459 (26th STREET) / FAU 3569 (RIVERSIDE DRIVE)		DRAWN - JFP	REVISED - TRB 7/18/18
FAP 0348 (HARLEM AVENUE) TO HOME AVENUE	PLOT SCALE =	CHECKED - TRB	REVISED -
#14471 SIDEWALK	PLOT DATE =	DATE - 5/1/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, LIST OF DISTRICT 1 STANDARD DETAILS, LIST OF ILLINOIS DOT HIGHWAY STANDARDS, GENERAL NOTES, SPECIAL PROJECT NOTES

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

NOVOTNY ENGINEERING
545 Plainfield Road, Suite A
Willowbrook, IL 60527
T: (630) 887.8640
F: (630) 887.0132
Illinois Professional Design Firm No. 184-000928

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	2
		CONTRACT NO. 61F03		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Specialty Item	Special Provision	Code No	Item	Unit	Total Quantity	Construction Code Roadway 0028
*		20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	105	
		20101100	TREE TRUNK PROTECTION	EACH	30	
*		20101200	TREE ROOT PRUNING	EACH	60	
		20200100	EARTH EXCAVATION	CU YD	350	
		21101600	TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH	SQ YD	2,000	
		25000400	NITROGEN FERTILIZER NUTRIENT	POUND	40	
		25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	40	
		25200110	SODDING, SALT TOLERANT	SQ YD	2,000	
		25200200	SUPPLEMENTAL WATERING	UNIT	20	
		28000400	PERIMETER EROSION CONTROL BARRIER	FOOT	600	
		28000510	INLET FILTERS	EACH	5	
		31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	1,015	
		42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 8 INCH	SQ YD	100	
		42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	9,000	
		42400800	DETECTABLE WARNINGS	SQ FT	20	
		44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	100	
		44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	135	
		44000600	SIDEWALK REMOVAL	SQ FT	500	
		60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	135	
		67100100	MOBILIZATION	L SUM	1	
		70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701501	L SUM	1	
		70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701701	L SUM	1	
		70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701801	L SUM	1	
*		78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	650	
*		78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	150	

Specialty Item	Special Provision	Code No	Item	Unit	Total Quantity	Construction Code Roadway 0028
*		81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	40	
*		85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	
*		87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,080	
*		87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	848	
*		87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8	
*		87900200	DRILL EXISTING HANDHOLE	EACH	2	
*		88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4	
*		88800100	PEDESTRIAN PUSH-BUTTON	EACH	4	
*		89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	2	
*		89502200	MODIFY EXISTING CONTROLLER	EACH	1	
*		89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1	
*		89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	261	
*	SP	89502376	REBUILD EXISTING HANDHOLE	EACH	2	
	SP	X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	
	SP	X0326806	WASHOUT BASIN	L SUM	1	
	SP	X0327979	PAVEMENT MARKING REMOVAL-GRINDING	SQ FT	200	
		X0328980	PAVEMENT MARKING REMOVAL-WATER BLASTING	SQ FT	200	
*		X8760055	PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	2	
		Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	65	

NOVOTNY ENGINEERING
Illinois Professional Design Firm No. 184-000928
545 Plainfield Road, Suite A
Willowbrook, IL 60527
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F: (630) 887.0132

FILE NAME: CITY OF BERWYN
FAU 1459 (26th STREET) / FAU 3569 (RIVERSIDE DRIVE)
FAP 0348 (HARLEM AVENUE) TO HOME AVENUE
#14471 SIDEWALK

USER NAME =
PLOT SCALE =
PLOT DATE =

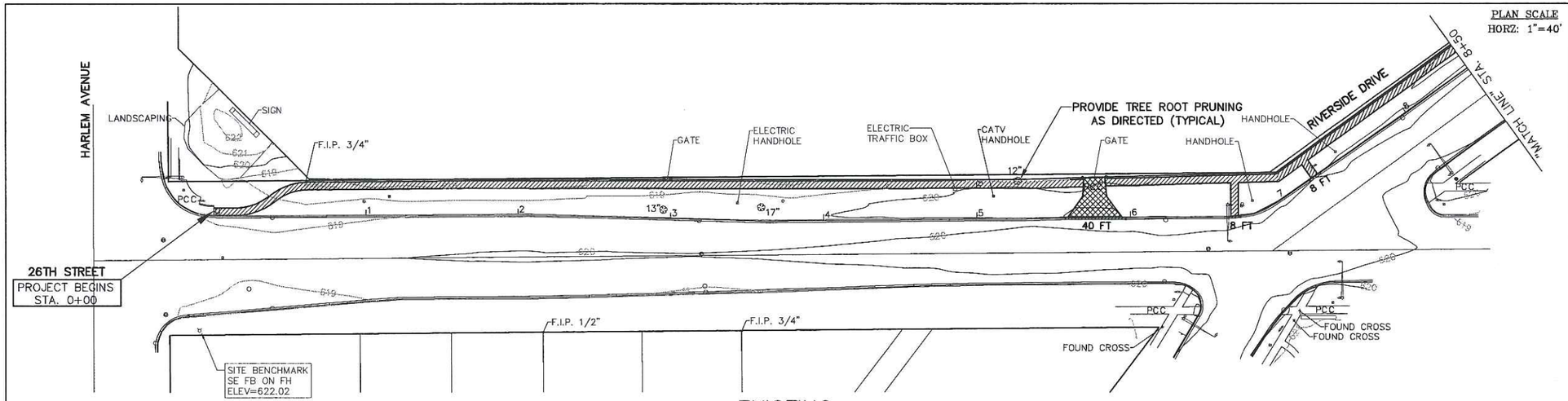
DESIGNED - AMS | REVISED - TRB 5/22/18
DRAWN - JFP | REVISED - TRB 7/18/18
CHECKED - TRB | REVISED - TRB 12/20/18
DATE - 5/1/18 | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	3
		CONTRACT NO. 61F03		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING
26TH STREET

PLAN SCALE
HORZ: 1"=40'

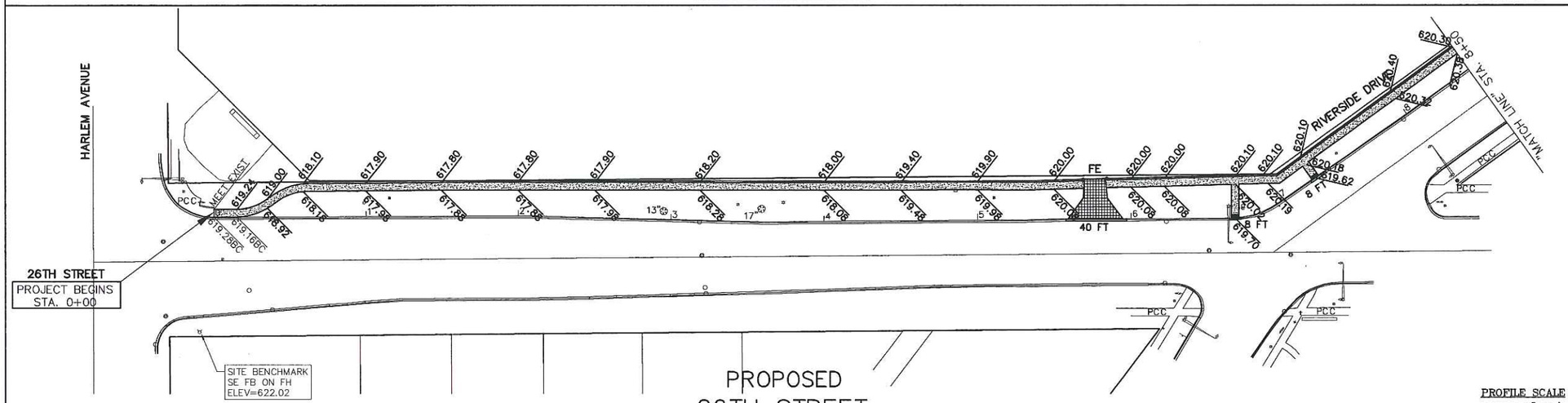
FOR CONTINUATION
SEE SHEET 5

N

1"=40'
GRAPHIC SCALE
IN FEET
40 0 40 80

REMOVAL LEGEND

- DENOTES **EARTH EXCAVATION**
- DENOTES **DRIVEWAY PAVEMENT REMOVAL**
- 8 FT — DENOTES **COMBINATION CURB AND GUTTER REMOVAL**
- X — DENOTES **TREE REMOVAL (OVER 15 UNITS DIAMETER)**

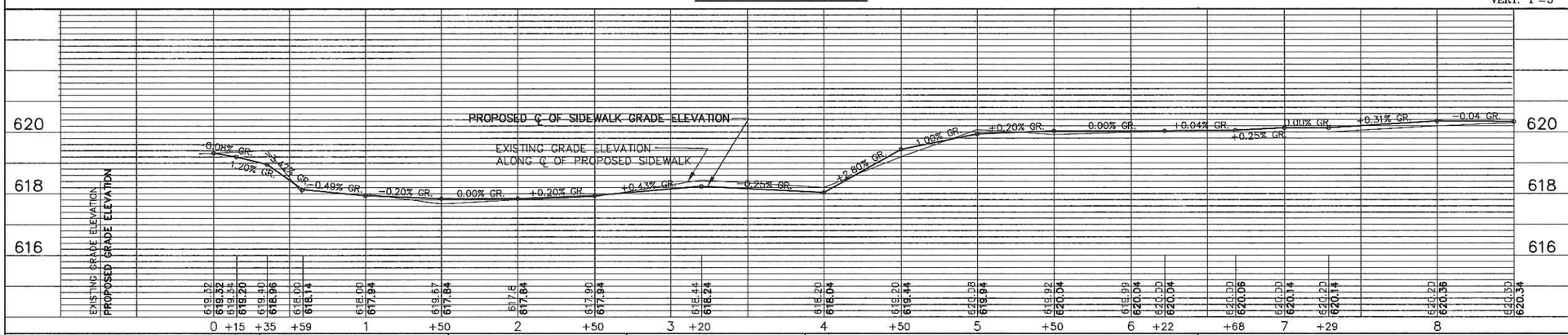


PROPOSED
26TH STREET

PROPOSED PAVEMENT LEGEND

- DENOTES **PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH ON SUBBASE GRANULAR MATERIAL, TYPE B, 4"**
- DENOTES **PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH ON SUBBASE GRANULAR MATERIAL, TYPE B, 4"**
- 8 FT — DENOTES **COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12**
- DENOTES **PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH WITH DETECTABLE WARNINGS** PER I.D.O.T. STANDARDS FOR HANDICAP RAMPS (WHERE APPLICABLE) SEE CONSTRUCTION HIGHWAY STANDARDS
- FE — DENOTES **FIELD ENTRANCE**

PROFILE SCALE
HORZ: 1"=40'
VERT: 1"=5'



ALL SAW CUTS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

FOR TYPICAL SECTIONS
OF NEW SIDEWALK WORK
SEE SHEET 6

IMPORTANT!

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

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FILE NAME: CITY OF BERWYN FAU 1459 (26th STREET) / FAU 3569 (RIVERSIDE DRIVE) FAP 0348 (HARLEM AVENUE) TO HOME AVENUE #14471 SIDEWALK	USER NAME =	DESIGNED – AMS	REVISED – TRB 5/22/18
		DRAWN – JFP	REVISED – TRB 7/18/18
	PLOT SCALE =	CHECKED – TRB	REVISED –
	PLOT DATE =	DATE – 4/18	REVISED –

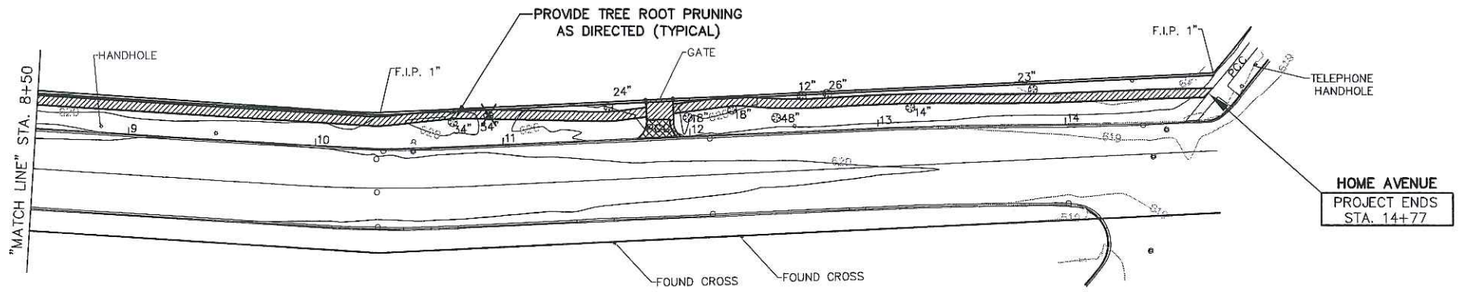
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN: FAU 1459 (26th STREET) -
FAP 0348 (HARLEM AVENUE) TO RIVERSIDE DRIVE

SCALE: 1"=40' | SHEET NO. OF SHEETS | STA. 0+00 TO STA. 8+50

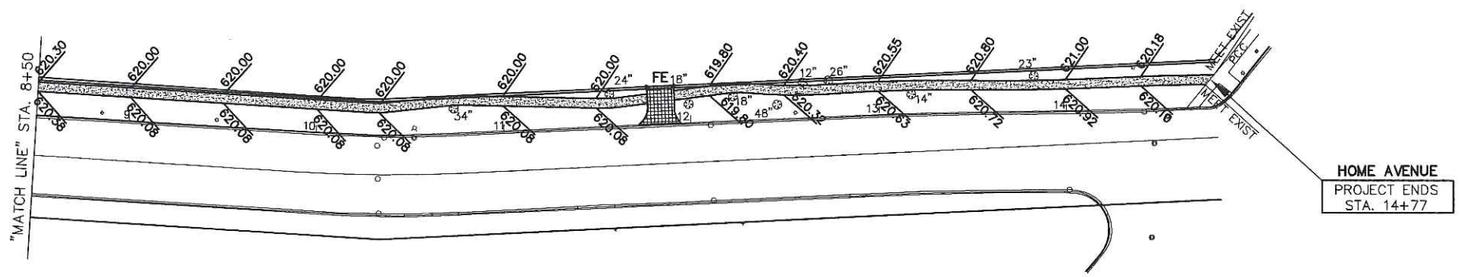
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	20	4
		CONTRACT NO. 61F03		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN SCALE
HORZ: 1"=40'



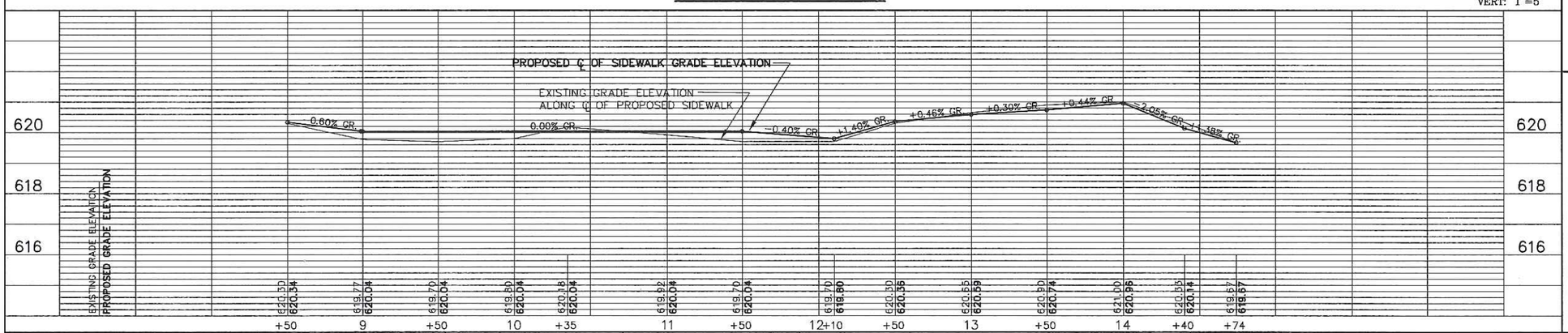
EXISTING
RIVERSIDE DRIVE

FOR CONTINUATION
SEE SHEET 4



PROPOSED
RIVERSIDE DRIVE

PROFILE SCALE
HORZ: 1"=40'
VERT: 1"=5'



1"=40'
GRAPHIC SCALE
IN FEET
40 0 40 80

REMOVAL LEGEND

- DENOTES **EARTH EXCAVATION**
- DENOTES **DRIVEWAY PAVEMENT REMOVAL**
- 8 FT — DENOTES **COMBINATION CURB AND GUTTER REMOVAL**
- X — DENOTES **TREE REMOVAL (OVER 15 UNITS DIAMETER)**

PROPOSED PAVEMENT LEGEND

- DENOTES **PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH ON SUBBASE GRANULAR MATERIAL, TYPE B, 4"**
- DENOTES **PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH ON SUBBASE GRANULAR MATERIAL, TYPE B, 4"**
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- FE — DENOTES FIELD ENTRANCE

ALL SAW CUTS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

FOR TYPICAL SECTIONS
OF NEW PAVEMENT WORK
SEE SHEET 6

IMPORTANT!
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

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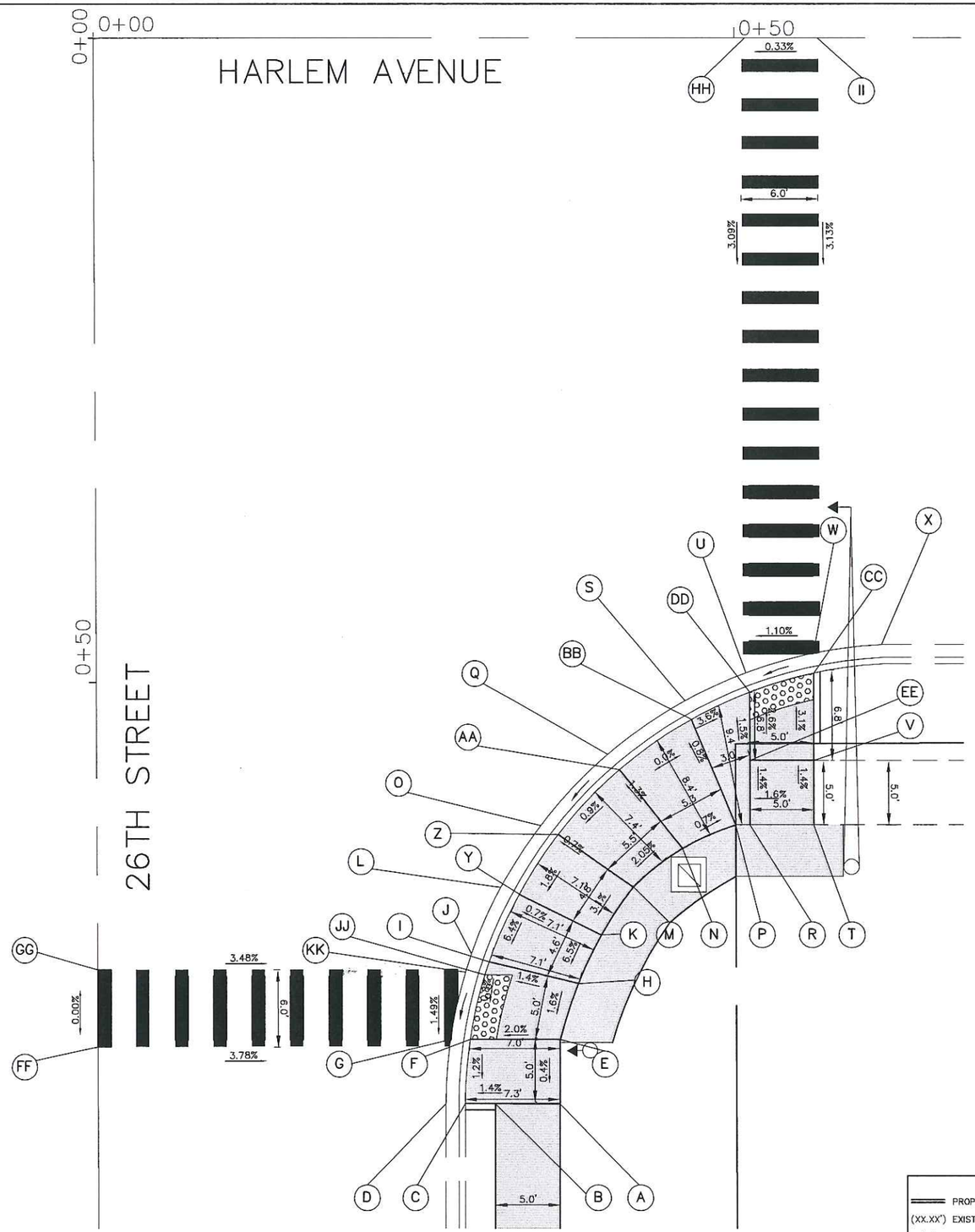
FILE NAME: CITY OF BERWYN FAU 1459 (26th STREET) / FAU 3569 (RIVERSIDE DRIVE) FAP 0348 (HARLEM AVENUE) TO HOME AVENUE #14471 SIDEWALK	USER NAME =	DESIGNED – AMS	REVISED – TRB 5/22/18	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	**PLAN: RIVERSIDE DRIVE -** **FAU 1459 (26th STREET) TO HOME AVENUE** SCALE: 1"=40' SHEET NO. OF SHEETS STA. 8+50 TO STA. 14+77
	PLOT SCALE =	DRAWN – JFP	REVISED –		
	PLOT DATE =	CHECKED – TRB	REVISED –		
		DATE – 4/18	REVISED –		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	20	5
		CONTRACT NO. 61F03		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NORTHEAST CORNER
26TH STREET AND IL ROUTE 43 (HARLEM AVENUE)

	STATION	OFFSET	ELEVATION		STATION	OFFSET	ELEVATION
A	0+82.64	36.04' RT	618.90	O	0+61.04	34.60' RT	618.90
B	0+82.64	31.04' RT	618.83	P	0+61.14	49.83' RT	619.52
C	0+82.64	28.69' RT	618.80	Q	0+55.62	39.87' RT	618.95
D	0+82.64	27.19' RT	618.70	R	0+61.04	50.92' RT	619.52
E	0+77.77	36.08' RT	618.92	S	0+51.35	46.43' RT	619.00
F	0+77.77	29.08' RT	618.78	T	0+61.27	55.94' RT	619.60
G	0+77.77	27.58' RT	618.79	U	0+49.45	50.68' RT	619.28
H	0+73.28	37.18' RT	619.00	V	0+56.27	55.94' RT	619.53
I	0+71.70	30.60' RT	618.90	W	0+47.96	55.96' RT	619.33
J	0+71.10	29.22' RT	618.83	X	0+47.17	61.22' RT	619.37
K	0+69.47	38.97' RT	619.30	Y	0+66.00	33.18' RT	619.30
L	0+65.92	31.50' RT	618.86	Z	0+61.08	36.48' RT	619.40
M	0+65.92	41.78' RT	619.45	AA	0+55.76	42.09' RT	619.45
N	0+62.95	45.65' RT	619.55	BB	0+52.56	46.72' RT	619.45
				CC	0+49.48	55.96' RT	619.32
				DD	0+50.96	50.94' RT	619.27
				EE	0+56.27	50.94' RT	619.45
				FF	0+77.69	0.00' RT	619.83
				GG	0+72.72	0.00' RT	619.83
				HH	0+00.00	50.83' RT	620.81
				II	0+00.00	56.39' RT	620.83
				JJ	0+72.60	30.35' RT	618.89
				KK	0+72.60	28.77' RT	618.83

IMPORTANT!
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

GRAPHIC SCALE
IN FEET
5 0 5 10

LEGEND

- PROPOSED SIDE CURB
- (XX.XX') EXISTING LENGTH/ELEVATION
- (%) SLOPE
- PROPOSED SIDEWALK
- PROPOSED TURNING SPACE
- PROPOSED TOPSOIL & SOD
- PROPOSED HOT-MIX ASPAHLT
- PROPOSED DETECTABLE WARNINGS
- PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 24"

NOVOTNY ENGINEERING
Illinois Professional Design Firm No. 184-000928
545 Plainfield Road, Suite A
Willowbrook, IL 60527
T: (630) 887.8640
F: (630) 887.0132

FILE NAME	CITY OF BERWYN FAU 1459 (26TH STREET) FAP 348 (HARLEM AVE.) TO HOME AVE. SIDEWALK		
USER NAME =		DESIGNED – TRB	REVISED – 1/16/18
		DRAWN – TRB	REVISED – 4/06/18
PLOT SCALE =		CHECKED – JEF	REVISED – 7/18/18
PLOT DATE =		DATE – 5/28/17	REVISED – 12/20/18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

26TH STREET AND IL ROUTE 43 (HARLEM AVENUE)
ADA RAMP DETAILS

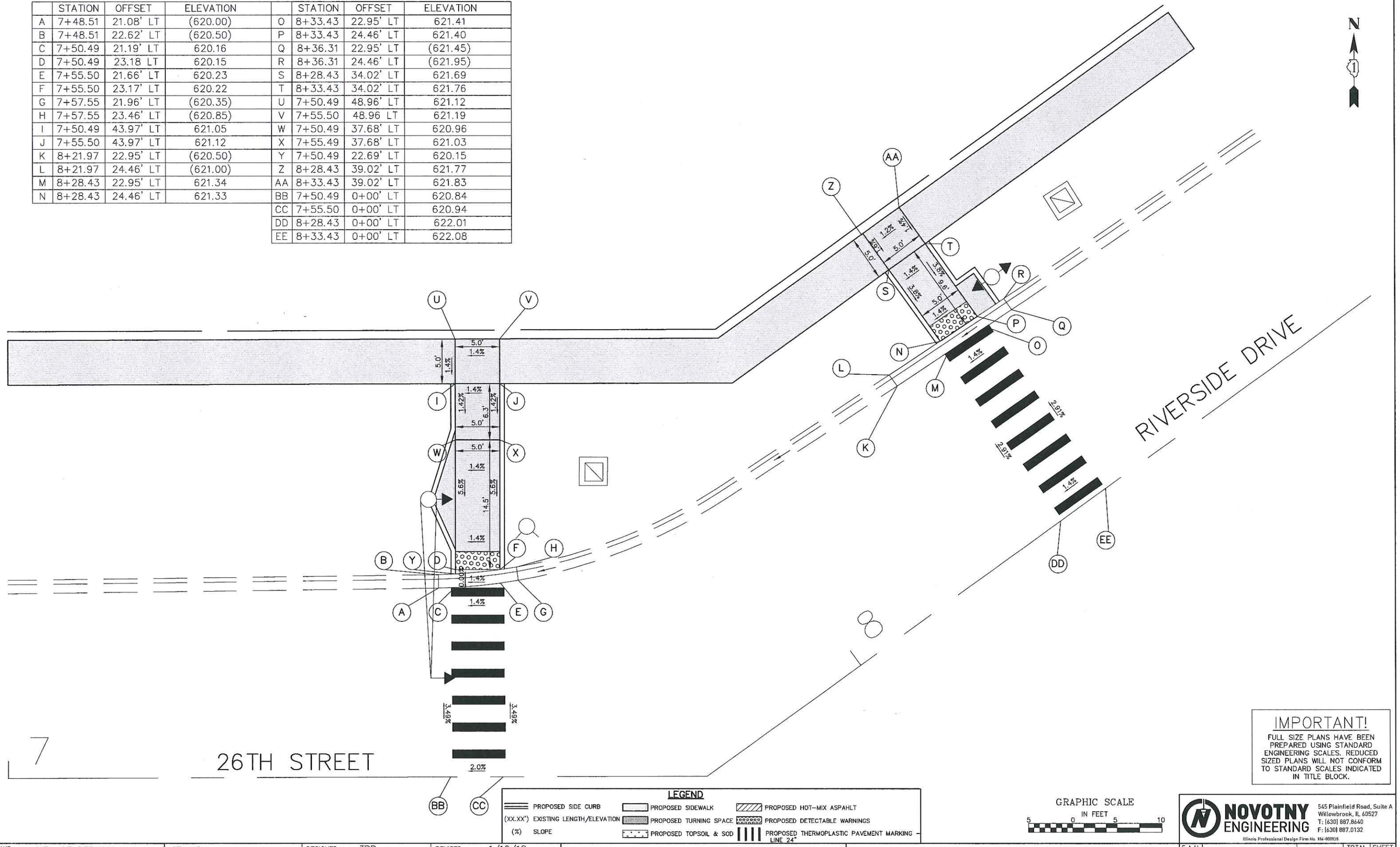
SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	6
		CONTRACT NO. 61F03		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

#14471

NORTHEAST CORNER
RIVERSIDE DRIVE AND 26TH STREET

	STATION	OFFSET	ELEVATION
A	7+48.51	21.08' LT	(620.00)
B	7+48.51	22.62' LT	(620.50)
C	7+50.49	21.19' LT	620.16
D	7+50.49	23.18 LT	620.15
E	7+55.50	21.66' LT	620.23
F	7+55.50	23.17' LT	620.22
G	7+57.55	21.96' LT	(620.35)
H	7+57.55	23.46' LT	(620.85)
I	7+50.49	43.97' LT	621.05
J	7+55.50	43.97' LT	621.12
K	8+21.97	22.95' LT	(620.50)
L	8+21.97	24.46' LT	(621.00)
M	8+28.43	22.95' LT	621.34
N	8+28.43	24.46' LT	621.33
O	8+33.43	22.95' LT	621.41
P	8+33.43	24.46' LT	621.40
Q	8+36.31	22.95' LT	(621.45)
R	8+36.31	24.46' LT	(621.95)
S	8+28.43	34.02' LT	621.69
T	8+33.43	34.02' LT	621.76
U	7+50.49	48.96' LT	621.12
V	7+55.50	48.96 LT	621.19
W	7+50.49	37.68' LT	620.96
X	7+55.49	37.68' LT	621.03
Y	7+50.49	22.69' LT	620.15
Z	8+28.43	39.02' LT	621.77
AA	8+33.43	39.02' LT	621.83
BB	7+50.49	0+00' LT	620.84
CC	7+55.50	0+00' LT	620.94
DD	8+28.43	0+00' LT	622.01
EE	8+33.43	0+00' LT	622.08



LEGEND

- PROPOSED SIDE CURB
- (XX.XX') EXISTING LENGTH/ELEVATION
- (%) SLOPE
- PROPOSED SIDEWALK
- PROPOSED TURNING SPACE
- PROPOSED TOPSOIL & SOD
- PROPOSED HOT-MIX ASPAHLT
- PROPOSED DETECTABLE WARNINGS
- PROPOSED THERMOPLASTIC PAVEMENT MARKING – LINE 24"

GRAPHIC SCALE
IN FEET
5 0 5 10

IMPORTANT!
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

NOVOTNY ENGINEERING
545 Plainfield Road, Suite A
Willowbrook, IL 60527
T: (630) 887.8640
F: (630) 887.0132
Illinois Professional Design Firm No. 184-000928

FILE NAME: CITY OF BERWYN FAU 1459 (26TH STREET) FAP 348 (HARLEM AVE.) TO HOME AVE. #14471 SIDEWALK	USER NAME =	DESIGNED – TRB	REVISED – 1/16/18
		DRAWN – TRB	REVISED – 4/06/18
	PLOT SCALE =	CHECKED – JEF	REVISED – 7/18/18
	PLOT DATE =	DATE – 5/28/17	REVISED – 12/20/18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIVERSIDE DRIVE AND 26TH STREET
ADA RAMP DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	7
		CONTRACT NO. 61F03		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

RELOCATION NOTES:

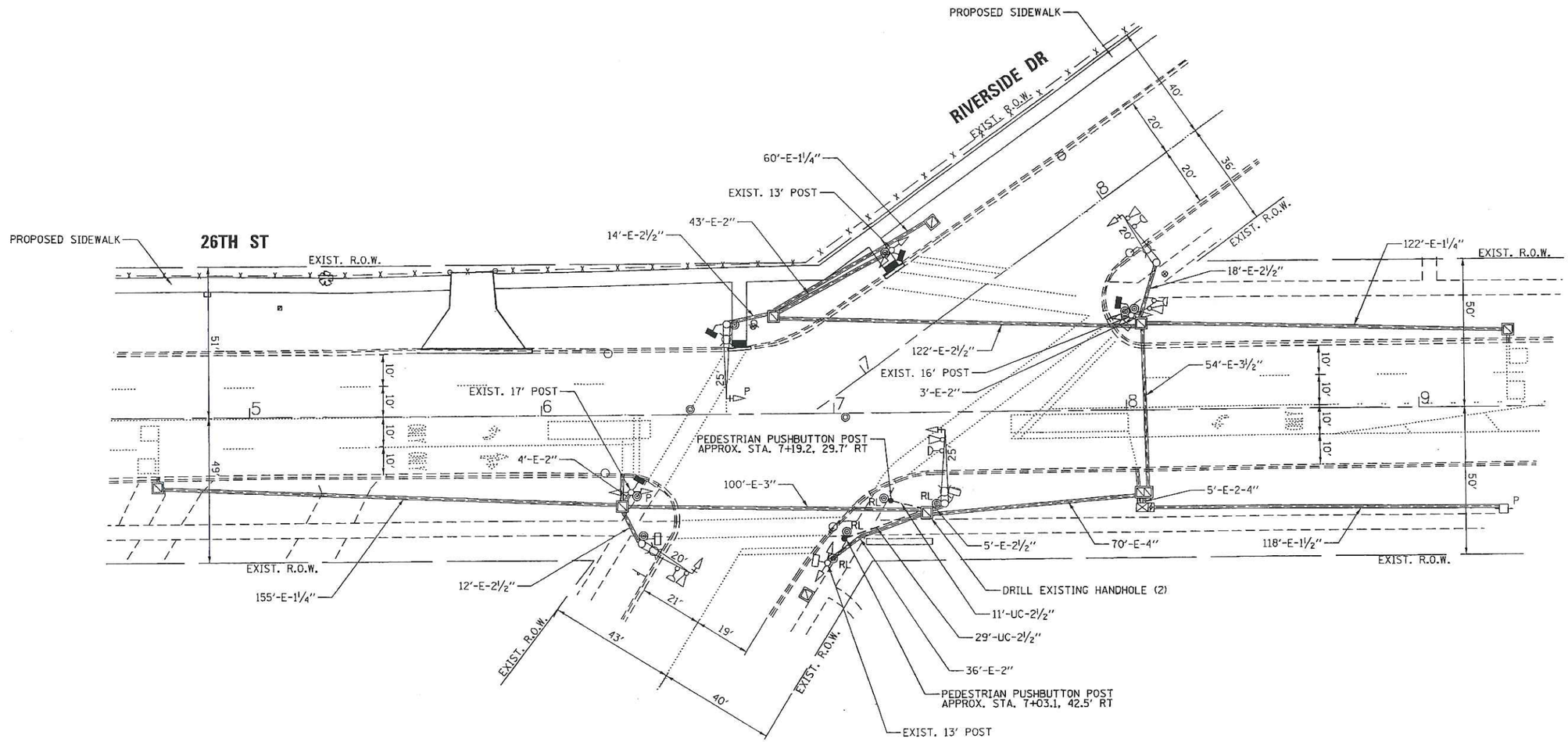
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED SIGNAL POSTS:

2 EACH PEDESTRIAN PUSH BUTTON

NOTES:

1. THIS PLAN IS FOR THE ADDITION/MODIFICATION OF PEDESTRIAN SIGNAL EQUIPMENT. ALL OTHER ITEMS ARE FOR INFORMATION ONLY.

N



TS 7910

TS SHT NO. 1

FILE NAME = 08 - Signal 26th Riverside.dgn	USER NAME = dschnobel	DESIGNED - MD	REVISED -
		DRAWN - MD	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - DMS	REVISED -
	PLOT DATE = 6/5/2018	DATE - 06/05/2018	REVISED -

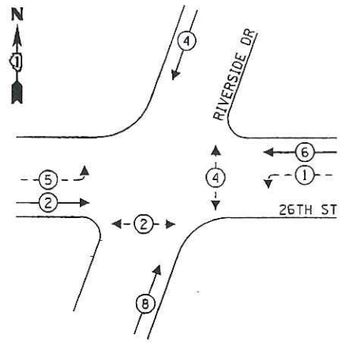
KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
9575 West Higgins Road, Suite 400
Rosemont, Illinois 60018
P: (847) 518-9990 F: (847) 518-9987
PROJECT # 18-048

TRAFFIC SIGNAL MODIFICATION PLAN
26TH ST AND RIVERSIDE DR

SCALE: 1'=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	8
		CONTRACT NO. 61F03		
	ILLINOIS FED. AID PROJECT			

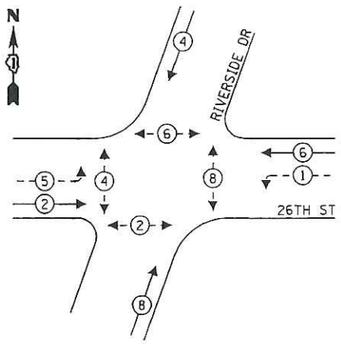
EXISTING CONTROLLER SEQUENCE



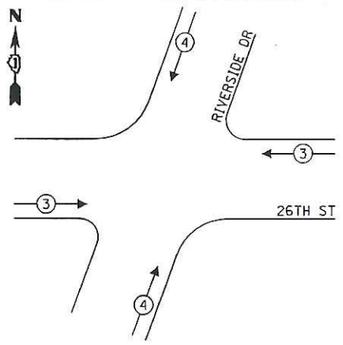
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	435.8

ENERGY COSTS TO:

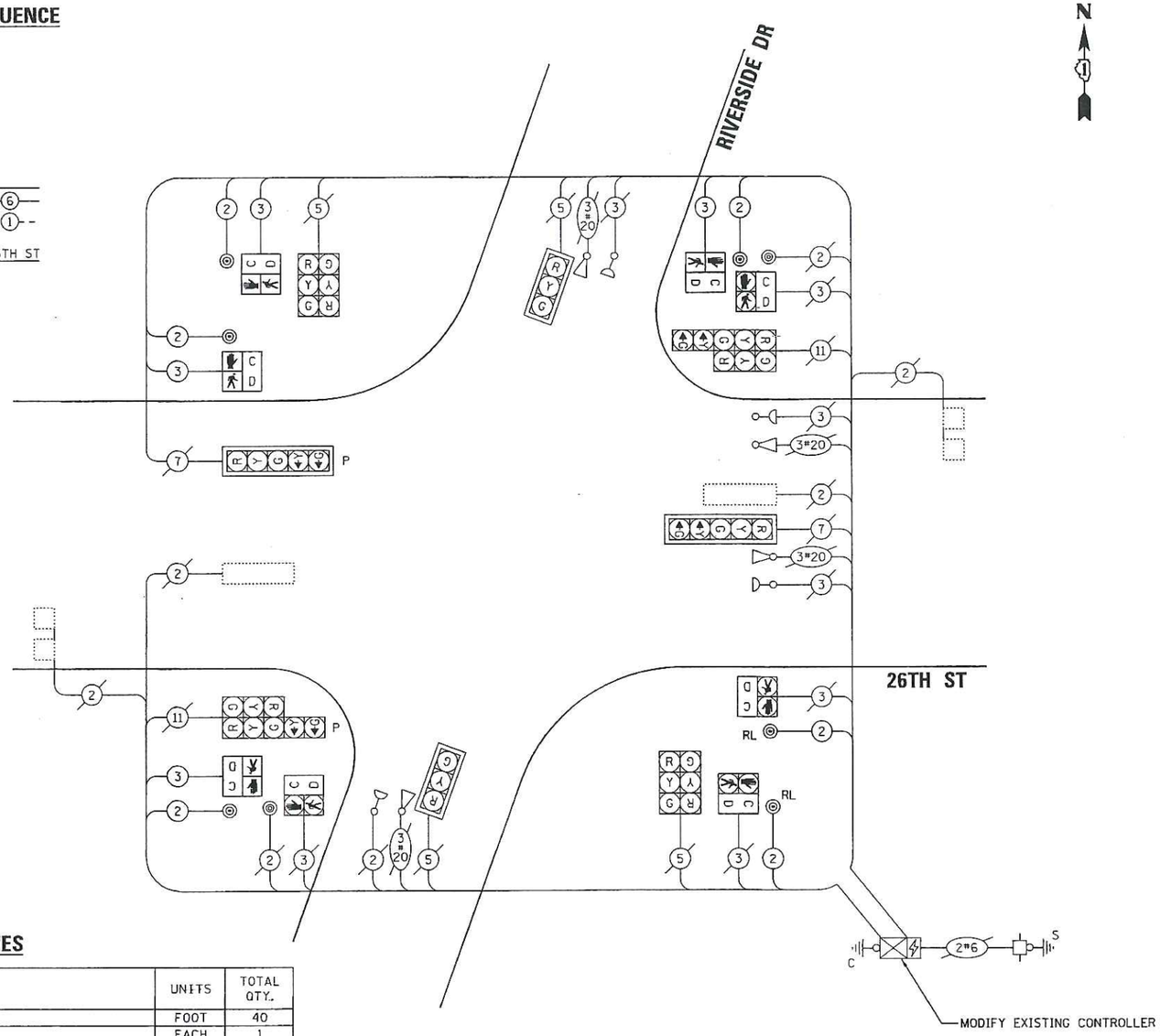
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: -
PHONE: -
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 2

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	40
MAINTENANCE OF EXISTING TRAFFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1080
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	848
CONCRETE FOUNDATION, TYPE A	FOOT	8
DRILL EXISTING HANDHOLE	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	4
RELOCATED EXISTING PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	261
PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	2



CABLE PLAN
(NOT TO SCALE)

TS 7910

FILE NAME = 09 - Cable 26th Riverside.dgn	USER NAME = dschnabel	DESIGNED - MD	REVISED -
		DRAWN - MD	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - DMS	REVISED -
	PLOT DATE = 6/5/2018	DATE - 06/05/2018	REVISED -

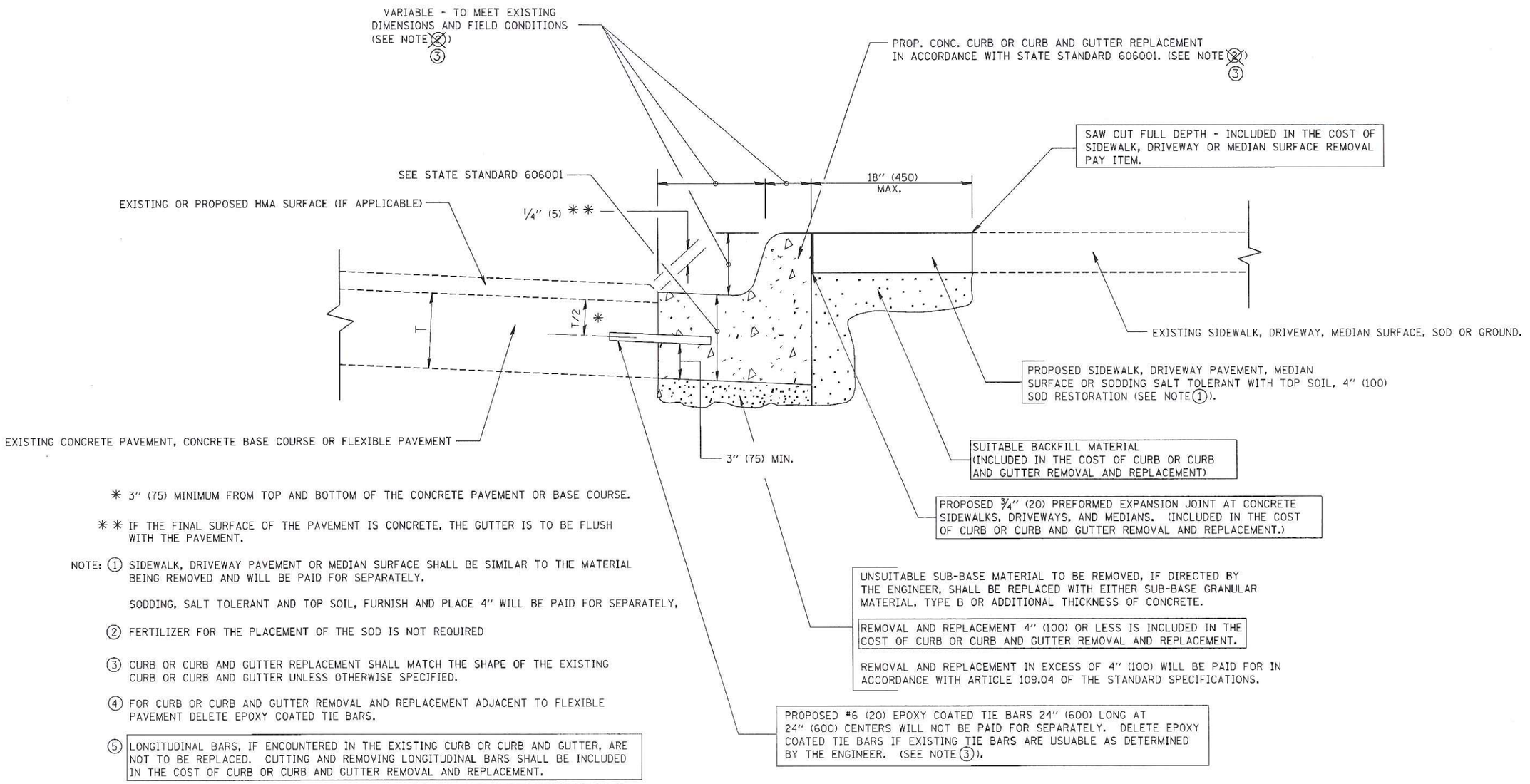
KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

9575 West Higgins Road, Suite 400
Rosemont, Illinois 60018
P: (847) 518-9990 F: (847) 518-9987
PROJECT # 18-048

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE, AND SCHEDULE OF QUANTITIES
26TH ST AND RIVERSIDE DR

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	9
		CONTRACT NO. 61F03		
		ILLINOIS FED. AID PROJECT		



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

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

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.

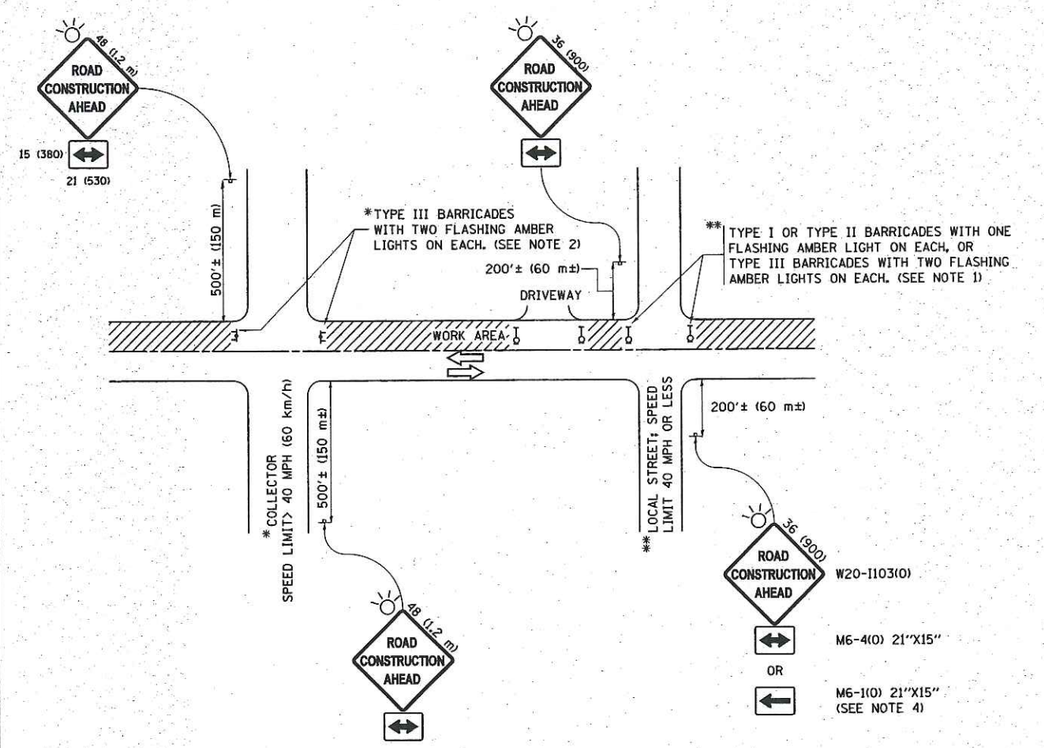
BASIS OF PAYMENT:

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 = c:\pw_work\pwidot\drivekosgn\d0108315\bd24.dgn	USER NAME = drivekosgn	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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - A. ABBAS 03-21-97				1459/3569	15-00173-00-SW	COOK	21	10
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01					BD600-06 (BD-24)	CONTRACT NO. 61F03		
	PLOT DATE = 12/15/2009	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	



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

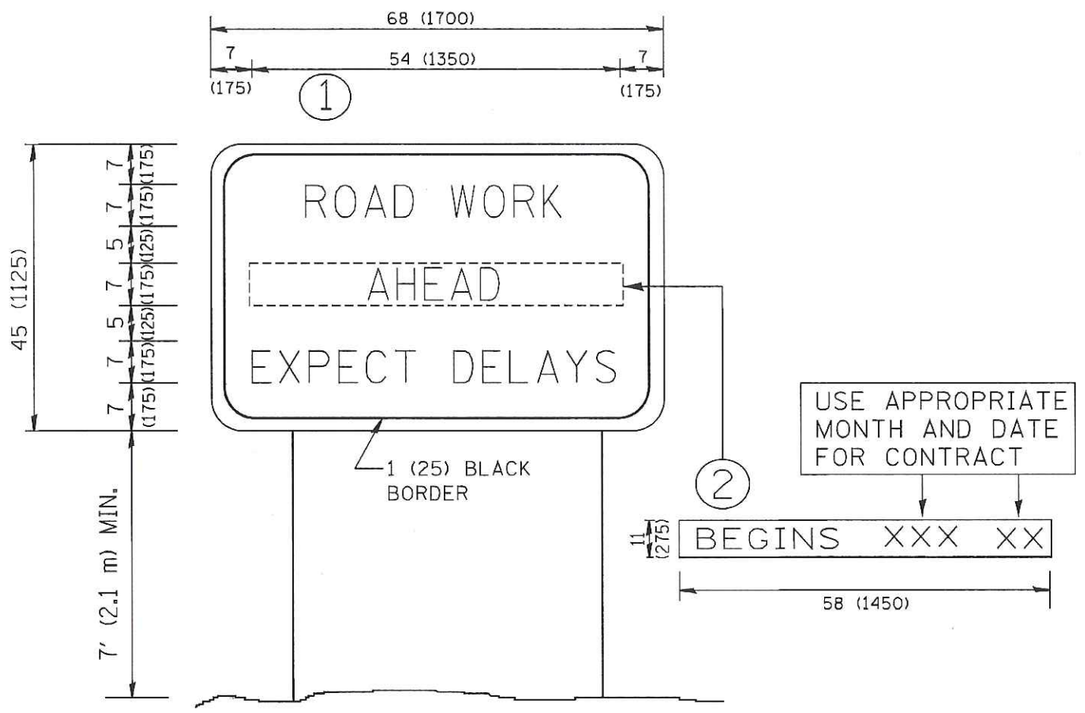
FILE NAME = pw:\\IL884EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\DRAWN\CADData\CADsheets\tc10.dgn	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 01-06-00
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
			REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	11
	TC-10	CONTRACT NO. 61F03		
	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 = W:\diatstd\22x34\ts22.dgn	USER NAME = gegliensbt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3589	15-00173-00-SW	COOK	21	12
	TC-22	CONTRACT NO. 61F03		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED
CONTROLLER CABINET		
COMMUNICATION CABINET	ECC	CC
MASTER CONTROLLER	EMC	MC
MASTER MASTER CONTROLLER	EMMC	MMC
UNINTERRUPTABLE POWER SUPPLY		
SERVICE INSTALLATION -(P) POLE MOUNTED	P	P
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	G GM	G GM
TELEPHONE CONNECTION	ET	T
STEEL MAST ARM ASSEMBLY AND POLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY		BM
WOOD POLE		
GUY WIRE		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD OPTICALLY PROGRAMMED	P P	P P
FLASHER INSTALLATION -(FS) SOLAR POWERED	F FS F FS	F FS F FS
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	APS	APS
RADAR DETECTION SENSOR	R	R
VIDEO DETECTION CAMERA	V	V
RADAR/VIDEO DETECTION ZONE		
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIMATION BEACON		
WIRELESS INTERCONNECT		
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR

ITEM	EXISTING	PROPOSED
HANDHOLE -SQUARE -ROUND		
HEAVY DUTY HANDHOLE -SQUARE -ROUND	H	H
DOUBLE HANDHOLE		
JUNCTION BOX	J	J
RAILROAD CANTILEVER MAST ARM		
RAILROAD FLASHING SIGNAL		
RAILROAD CROSSING GATE		
RAILROAD CROSSBUCK		
RAILROAD CONTROLLER CABINET		
UNDERGROUND CONDUIT (UC), GALVANIZED STEEL		
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		
SYSTEM ITEM	S	SP
INTERSECTION ITEM	I	IP
REMOVE ITEM		R
RELOCATE ITEM		RL
ABANDON ITEM		A
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF
MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF
SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF
DETECTOR LOOP, TYPE I		
PREFORMED DETECTOR LOOP	P	P
SAMPLING (SYSTEM) DETECTOR	S	S
INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS	IS
QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS	QS
WIRELESS DETECTOR SENSOR	W	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	P	P
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	P RB	P RB
PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED	5	5
GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	1#6
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	1	1
COAXIAL CABLE	C	C
VENDOR CABLE	V	V
COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	6#18
FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	12F 24F 36F	12F 24F 36F
GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	C M P S	C M P S

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 1 OF 7 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	13
	TS-05	CONTRACT NO. 61F03		
	ILLINOIS FED. AID PROJECT			

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.

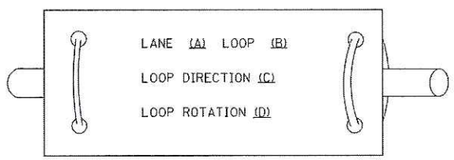
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

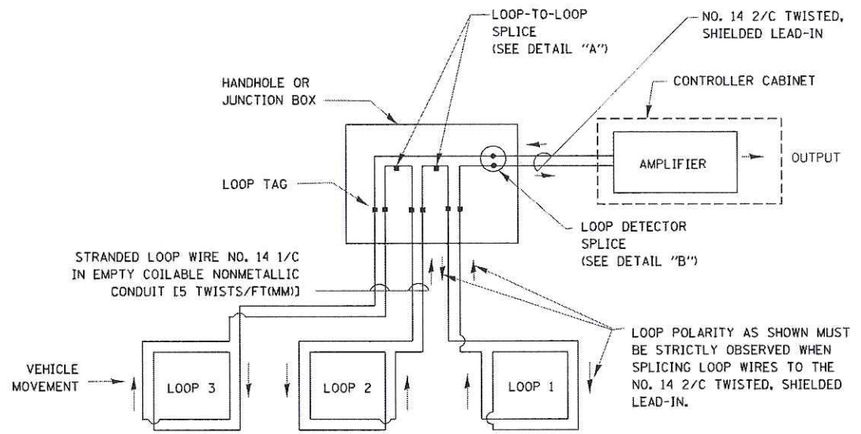


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

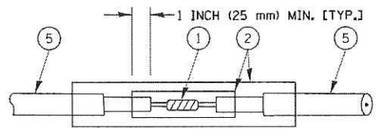
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

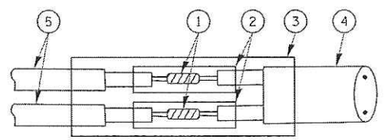


DETECTOR LOOP WIRING SCHEMATIC

- 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.

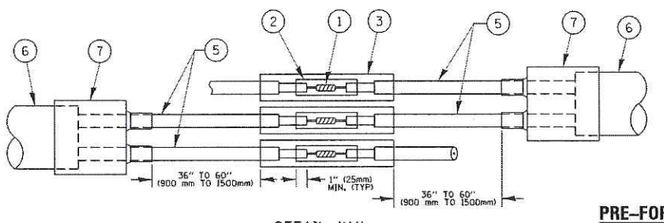


DETAIL "A"
LOOP-TO-LOOP SPLICE



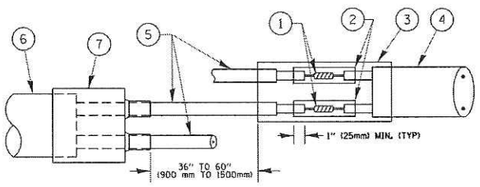
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 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

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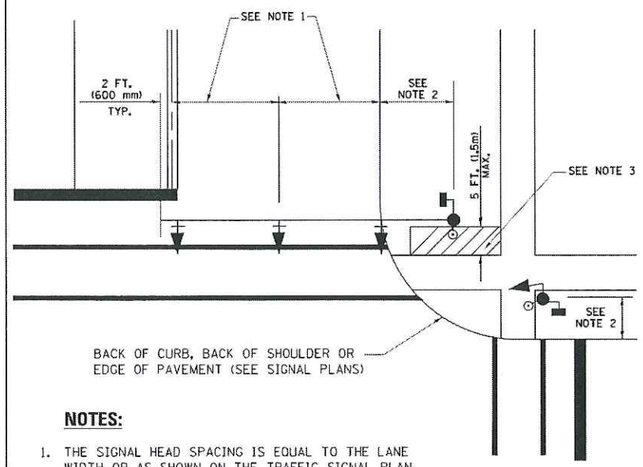
		DRAWN - BCK	REVISED -					1459/3569	15-00173-00-SW	COOK	21	14
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -					TS-05		CONTRACT NO. 61F03		
	PLOT DATE = 3/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

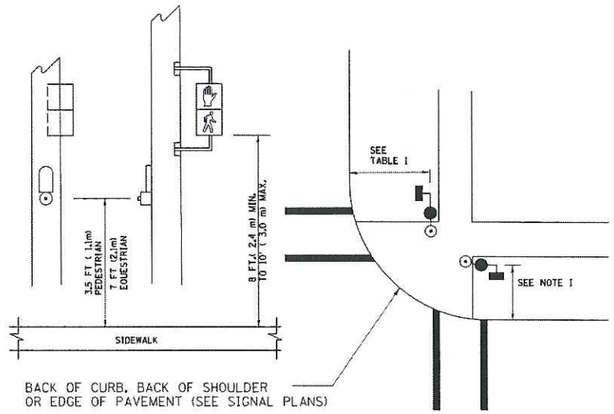
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

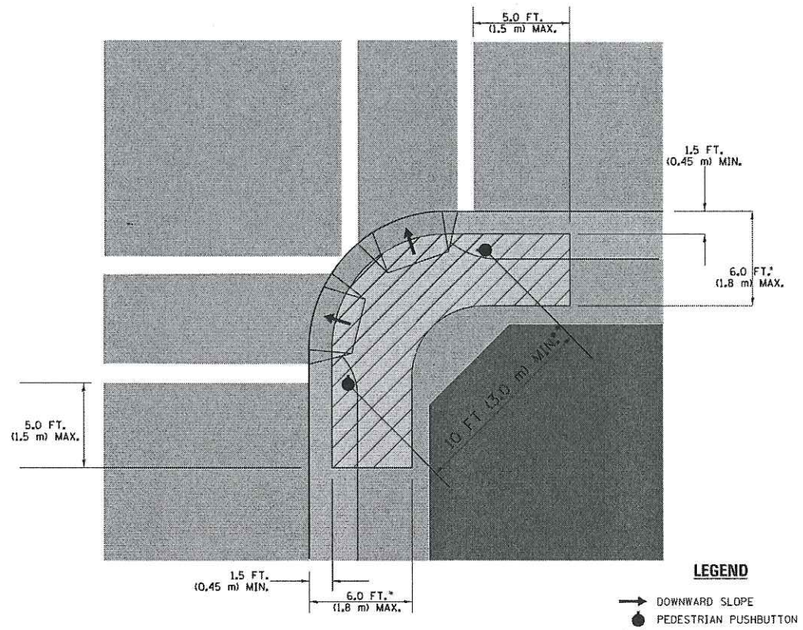
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT. IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE 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.

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 3 OF 7 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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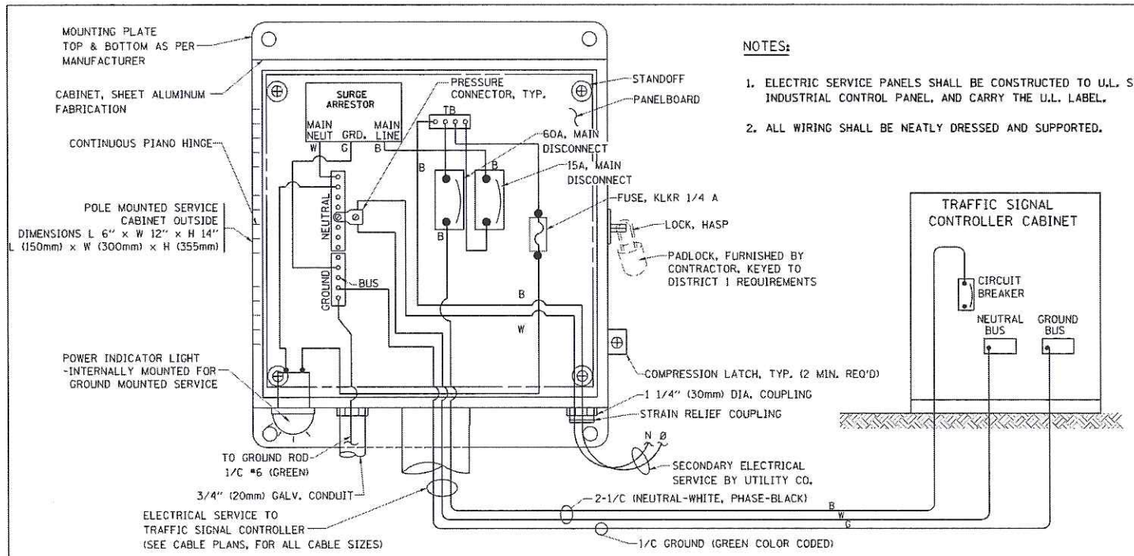
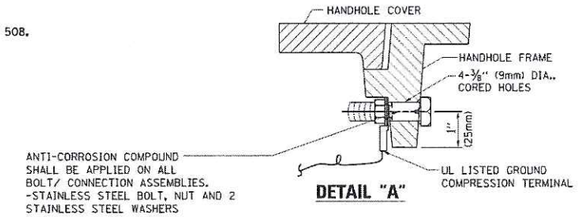


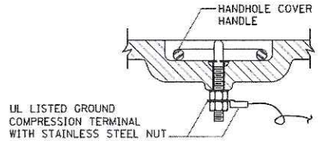
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)

NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



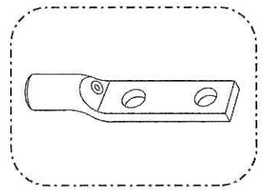
DETAIL "A"



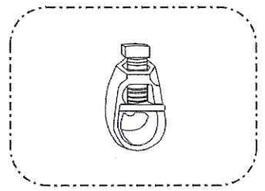
DETAIL "B"

NOTES:
GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. 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.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



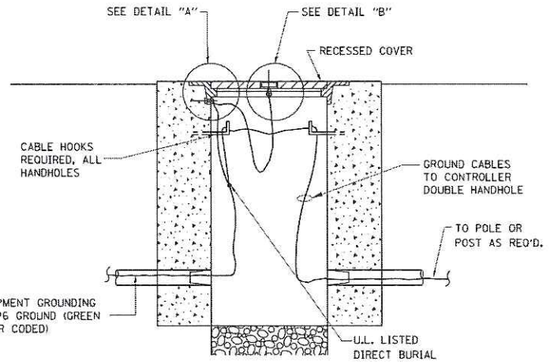
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



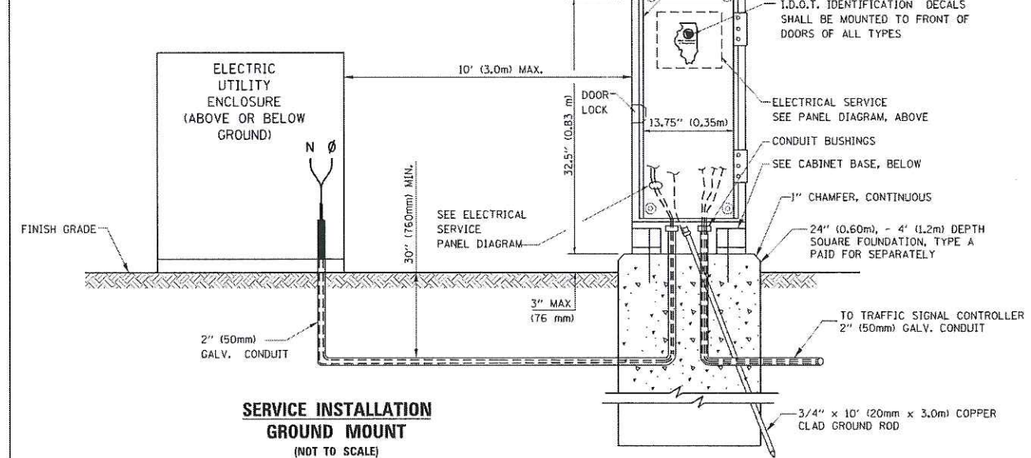
3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

NOTES:

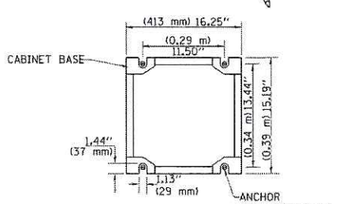
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
  6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
  13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
  5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)



SERVICE INSTALLATION GROUND MOUNT
(NOT TO SCALE)



CABINET – BASE BOLT PATTERN
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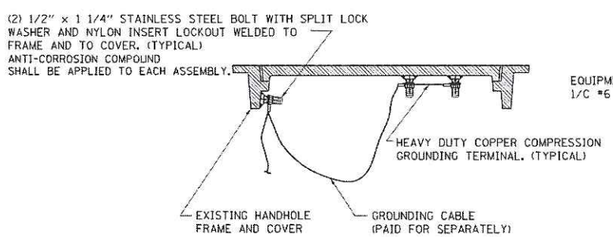
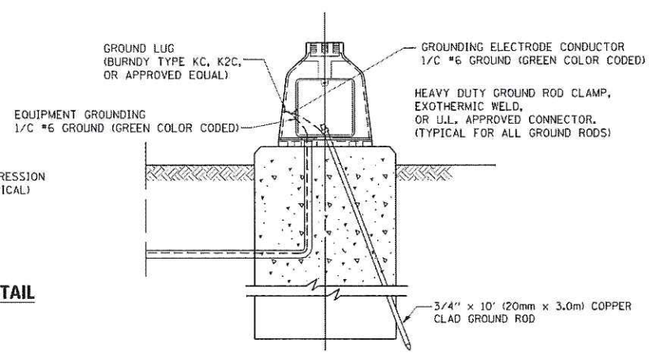


EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)



MAST ARM POLE / POST–GROUNDING DETAIL
(NOT TO SCALE)

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STATE OF ILLINOIS
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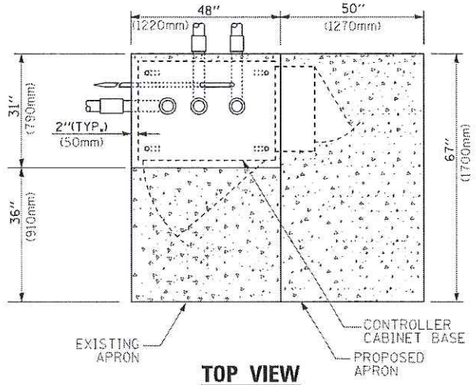
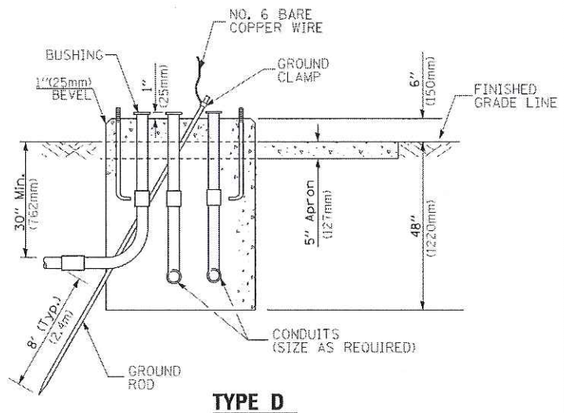
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

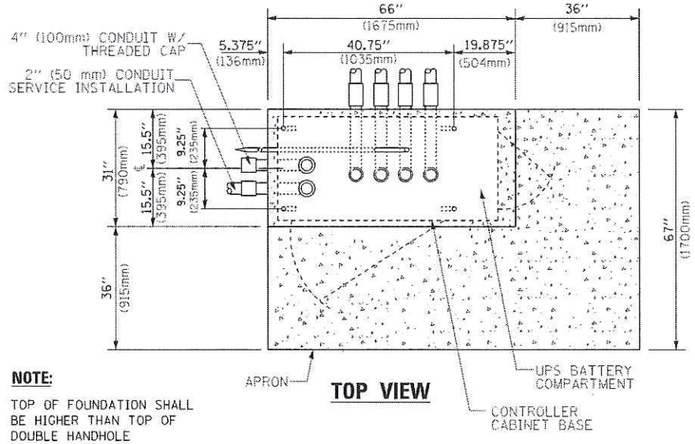
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	16
	TS-05	CONTRACT NO. 61F03		
	ILLINOIS FED. AID PROJECT			



TOP VIEW



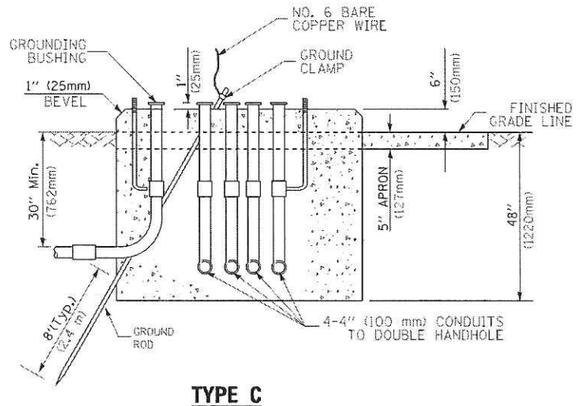
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



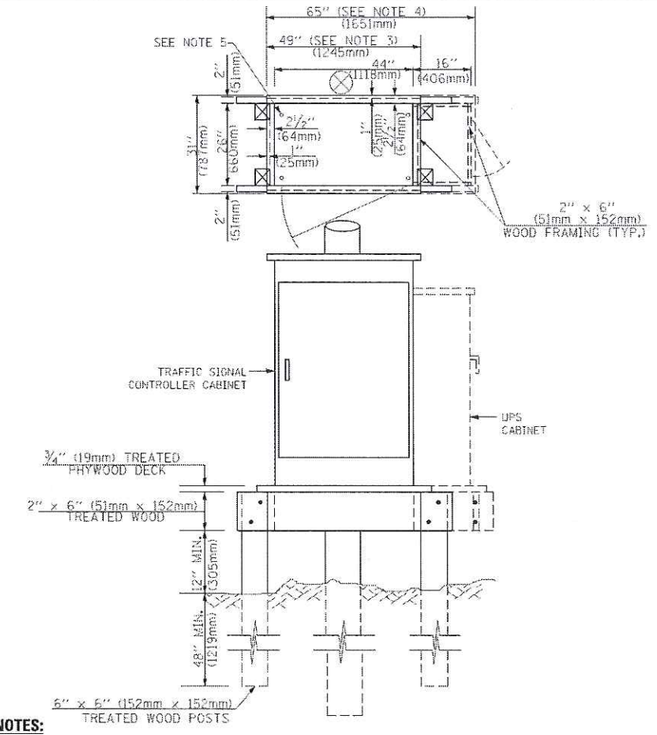
NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

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)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	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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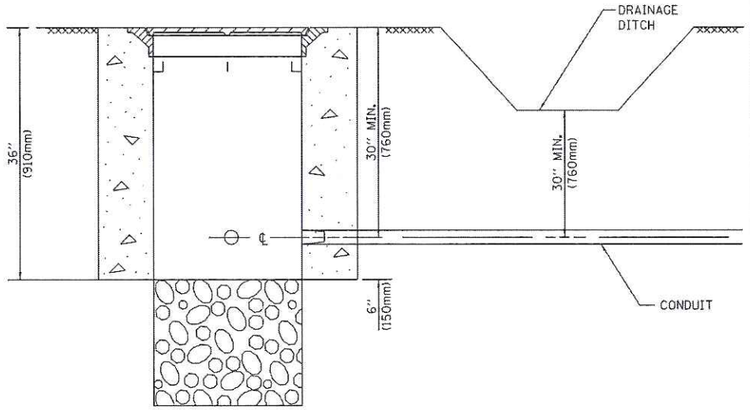
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 5 OF 7 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	17
	TS-05	CONTRACT NO. 61F03		
	ILLINOIS FED. AID PROJECT			

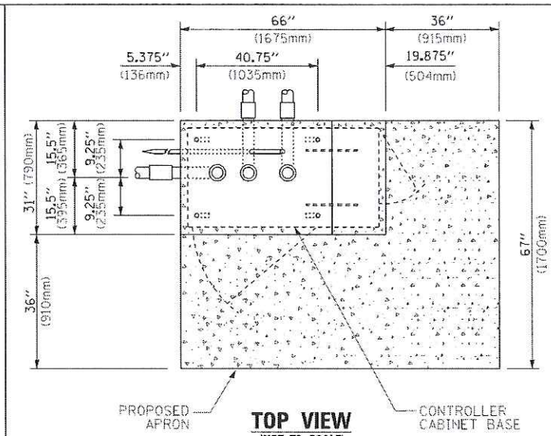


NOTES:

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.

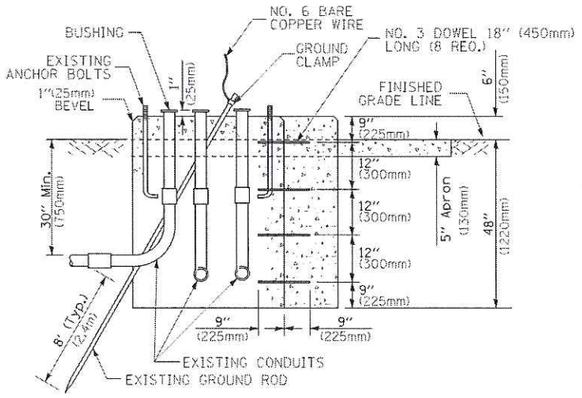
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



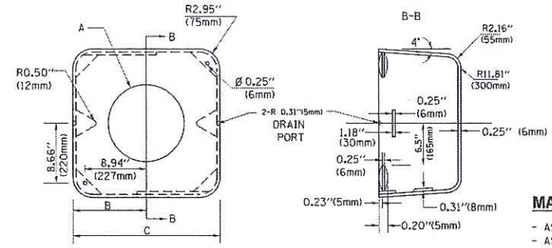
TOP VIEW

(NOT TO SCALE)



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)



MATERIAL:

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

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

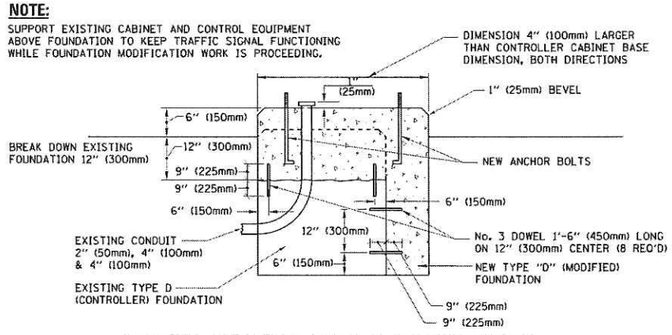
SHROUD

NOTES:

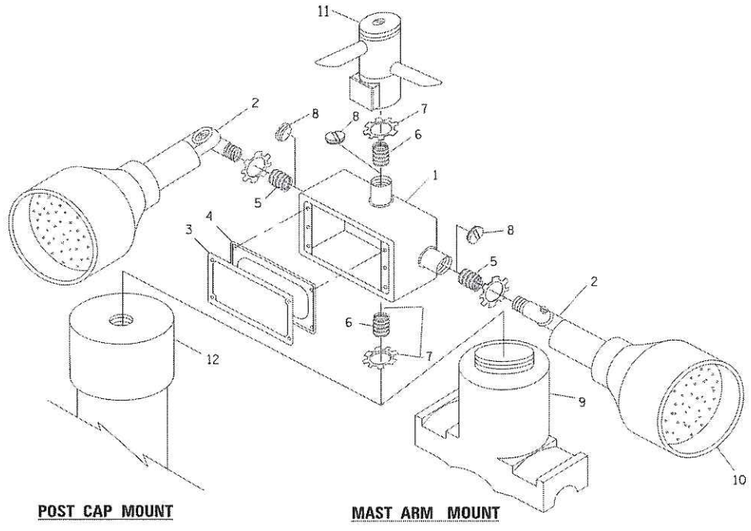
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

NOTE:

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



MODIFY EXISTING TYPE "D" FOUNDATION



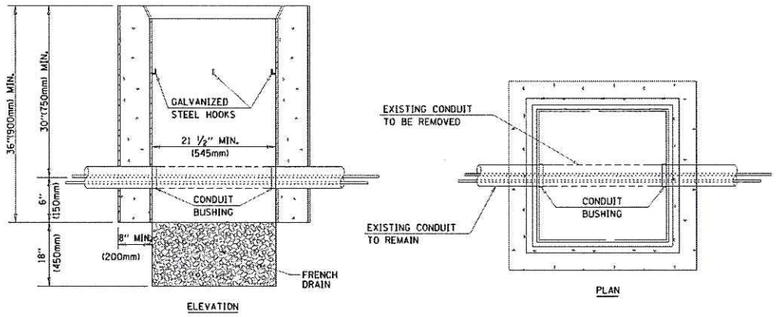
POST CAP MOUNT **MAST ARM MOUNT**

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(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.



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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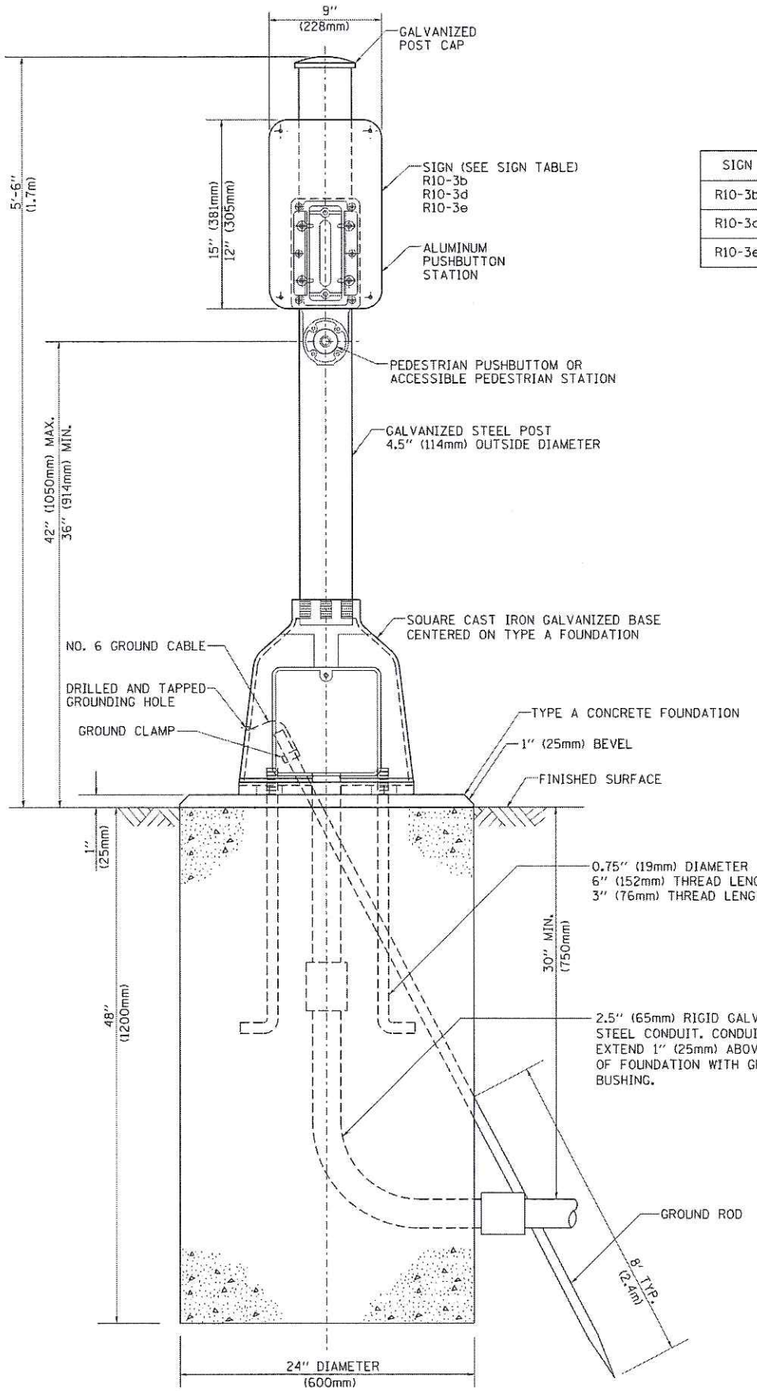
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

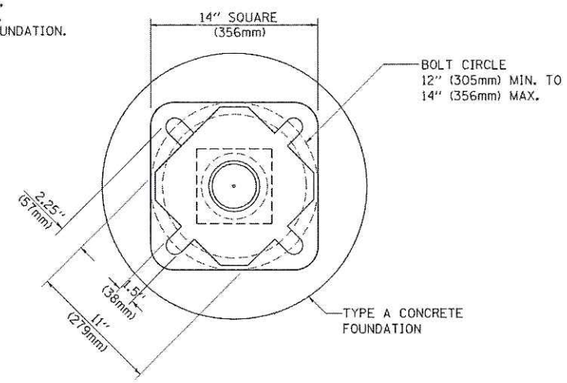
SCALE: NONE | SHEET NO. 6 OF 7 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	18
	TS-05	CONTRACT NO. 61F03		
	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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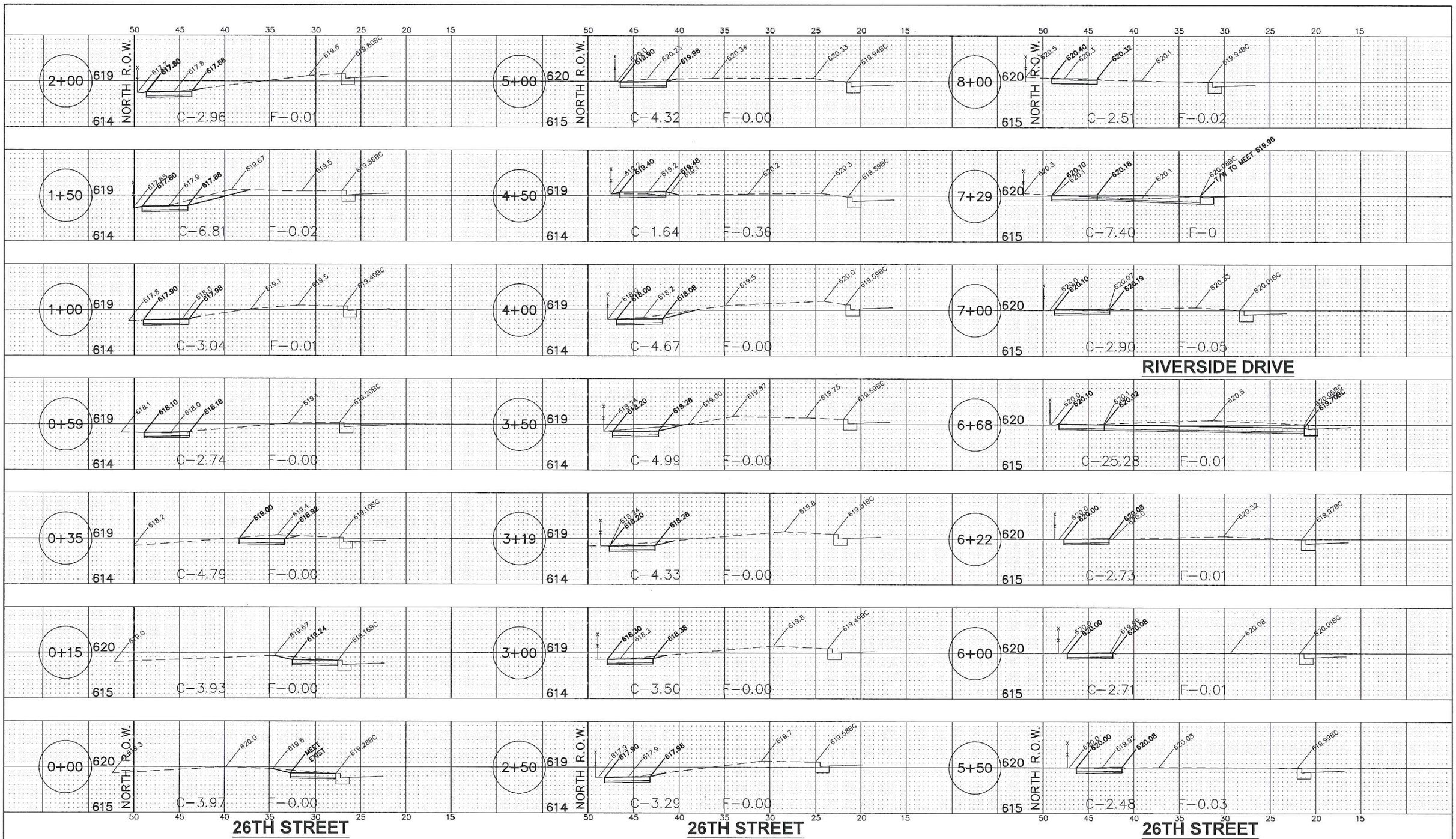
	PLOT DATE = 1/13/2014	DATE - 10/1/2012	REVISED -

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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	19
	TS-05	CONTRACT NO. 61F03		
	ILLINOIS FED. AID PROJECT			



IMPORTANT!

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

SECTION SCALE
HORZ: 1"=5'
VERT: 1"=5'

NOVOTNY ENGINEERING
545 Plainfield Road, Suite A
Willowbrook, IL 60527
T: (630) 887.8640
F: (630) 887.0132
Illinois Professional Design Firm No. 184-000928

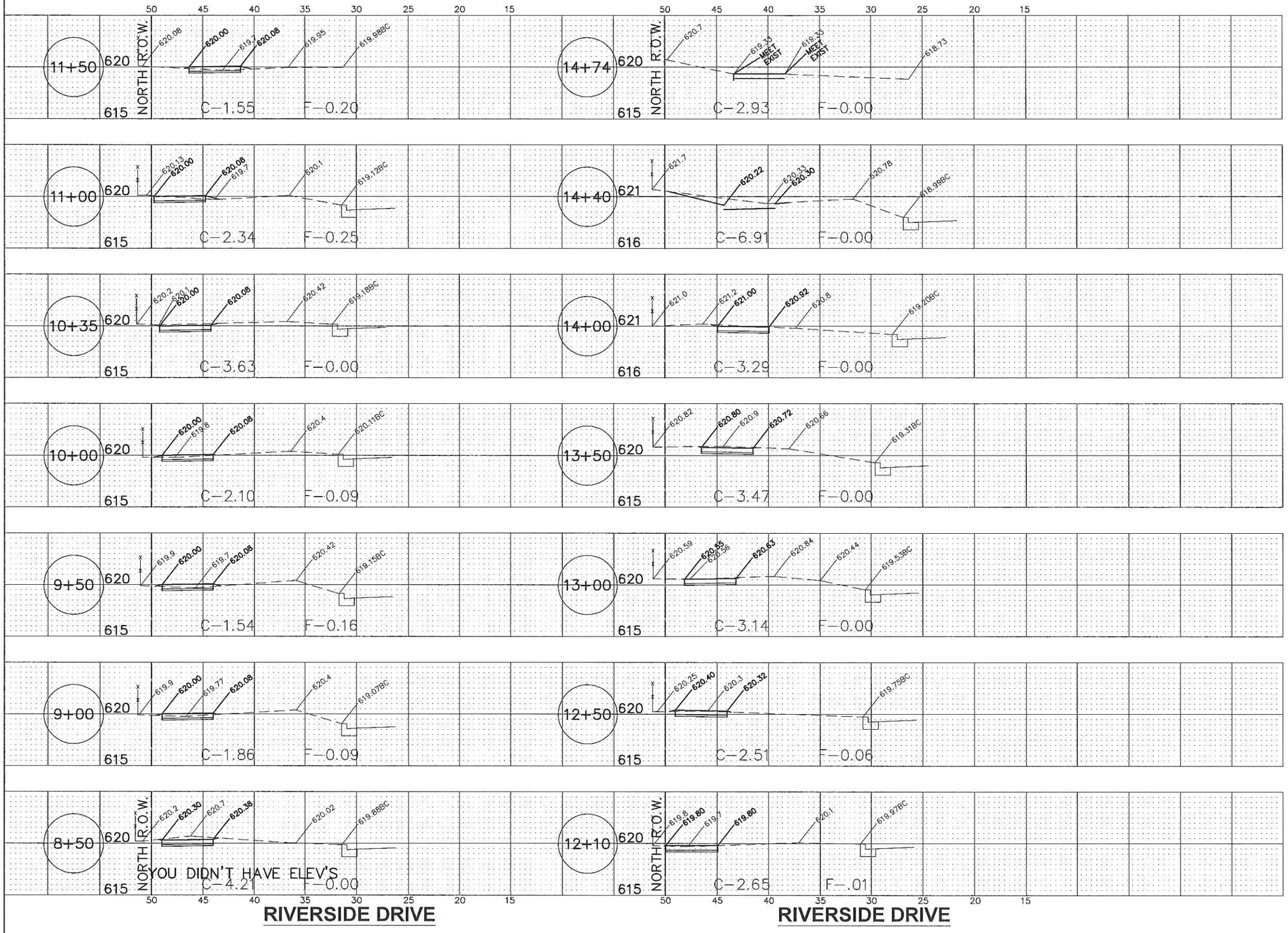
FILE NAME = CITY OF BERWYN FAU 1459 (26th STREET) / FAU 3569 (RIVERSIDE DRIVE) FAP 0348 (HARLEM AVENUE) TO HOME AVENUE #14471 SIDEWALK	USER NAME =	DESIGNED – AMS	REVISED – 7/18/18
		DRAWN – JFP	REVISED –
	PLOT SCALE =	CHECKED – TRB	REVISED –
	PLOT DATE =	DATE – 5/1/18	REVISED –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS:
26TH ST. & RIVERSIDE DR. - (STA. 0+00 TO STA. 8+00)

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 0+00 TO STA. 8+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	20
		CONTRACT NO. 61F03		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EARTH EXCAVATION SCHEDULE

STATION	TO STATION	CUT (CY)	SOD STRIPPING, 2" (CY)
0+00	0+15	2.7	0.6
0+15	0+35	3.8	0.9
0+35	0+59	4.1	1.2
0+59	1+00	5.7	2.1
1+00	1+50	10.7	2.5
1+50	2+00	10.7	0
2+00	2+50	7.4	2.5
2+50	3+00	7.9	2.5
3+00	3+19	3.4	0.8
3+19	3+50	6.3	1.4
3+50	4+00	10.5	1.9
4+00	4+50	7.4	2.5
4+50	5+00	7.1	2.5
5+00	5+50	7.9	2.5
5+50	6+00	6.4	2.5
6+00	6+22	2.9	1.1
6+22	6+68	9.3	2.3
6+68	7+00	4.4	1.6
7+00	7+29	5.7	1.6
7+29	8+00	9.3	3.6
8+00	8+50	7.8	2.5
8+50	9+00	7.2	2.5
9+00	9+50	4.7	2.5
9+50	10+00	4.9	2.5
10+00	10+35	4.8	1.8
10+35	11+00	9.2	3.3
11+00	11+50	5.2	2.5
11+50	12+10	6.5	3
12+10	12+50	5.1	2.3
12+50	13+00	6.8	2.5
13+00	13+50	7.7	2.5
13+50	14+00	7.8	2.5
14+00	14+40	8.8	2.3
14+40	14+74	5.1	1.2
TOTAL		**225.2**	**70.5**

IMPORTANT!
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES.
REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

SECTION SCALE
HORZ: 1"=5'
VERT: 1"=5'

NOVOTNY ENGINEERING
545 Plainfield Road, Suite A
Willowbrook, IL 60527
T: (630) 887.8640
F: (630) 887.0132
Illinois Professional Design Firm No. 184-000928

FILE NAME: CITY OF BERWYN FAU 1459 (26th STREET) / FAU 3569 (RIVERSIDE DRIVE) FAP 0348 (HARLEM AVENUE) TO HOME AVENUE #14471 SIDEWALK	USER NAME =	DESIGNED – AMS	REVISED – 7/18/18
		DRAWN – JFP	REVISED –
	PLOT SCALE =	CHECKED – TRB	REVISED –
	PLOT DATE =	DATE – 5/1/18	REVISED –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS:
26TH ST. & RIVERSIDE DR. - (STA. 8+50 TO STA. 14+74)
SCALE: 1"–5' | SHEET NO. OF SHEETS | STA. 8+50 TO STA. 14+74

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1459/3569	15-00173-00-SW	COOK	21	21
		CONTRACT NO. 61F03		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		