

E MAIN ST (D3-1)

E = CITY OF EVANSTON W = VILLAGE OF WILMETTE

(D9-2) 30" × 30" MP, 1B

30" x 30" MP, 1B

(R1-2) 36" × 36" × 36" MP, 2A 13.5'

(R2-1) 30" × 36" MP, 1B 13.5

(R3-1) 24" × 24" MP. 1A

24" x 24" MP. 1A

(R3-8) 30" × 30" MP, 1B

12.5'

2

(STOP)

3

SPEED

30

(5)

6

1

24" x 36" MP, 1B 14'



Ø₩

10



(13)

14)

(15)

NO Parking Any Time

(16)

NO PARKING ANY TIME

17

NO PARKING ANY TIME

18

(R5-1) 30" × 30" MP, 1B 13.5'

(R3-17) 30" x 24" MP, 1B 13'

(R3-17A) 30" × 12"

(R3-17B) 30" × 12"







12" x 18" MP, 1A

12" × 18" MP. 1A

(R7-1R) 12" × 18"

11.5

11.5

11.5





(S2-1) 30" × 30" MP, 1B

(R7-201) 12" x 6" MP, 1A 11'

(R8-3A) 24" × 24" MP, 1A

(R10-15)

30" x 36" MP, 2A

21" x 15" MP, 1A

(S1-1) 30" × 30" MP, 1B

YOW-AWAY ZONE

(21)

TURNING TRAFFIC MUST YIELD TO PEDESTRIAN

(22)

23















(W10-1) 36" DIA MP, 2A 13.5"

36" × 36" MP. 1B

(W11A-2) 36" x 36" MP, 1B

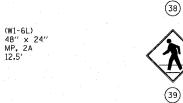
(W11-11)

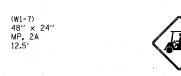
40

36" x 36" MP, 1B

(W13-1) 18" X 18" MP, 1A 12.0"









(W2-2R) 36" × 36" MP, 1B 13.5'

(W2-2L)

36" × 36" MP, 1B

(W3-3) 36" × 36" MP, 2A

36" × 36" MP. 1B

(28)

29

(30)

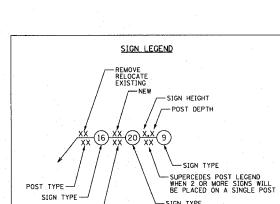
(31)

(32)

(33)

(34)





CONTRACT NO. 83964 COUNTY TOTAL SHEET NO.

246 118

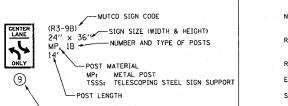
COOK

TO STA.

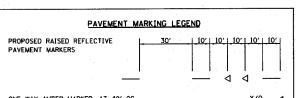
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT

RTE. SECTION 3509 00-00173-00-FP

STA.



NUMBER OF SIGN AS INDICATED ON PLANS



ONE WAY AMBER MARKER, AT 40' OC ONE-WAY CRYSTAL MARKER, AT 40' OC (UNLESS OTHERWISE NOTED) W/O TWO-WAY AMBER MARKER, AT 40' OC Y/Y

NOTES: 1. THERMOPLASTIC PAVEMENT MARKINGS SHALL BE USED ON ALL HMA SURFACES. 2. FOR ADDITIONAL DETAILS SEE DISTRICT ONE DETAILS TC-11 AND TC-13. POST TYPE

NEW SIGN PANEL -TYPE 1 NEW POST (TYPE AND LENGTH SPECIFIED IN LEGEND)

RELOCATE SIGN PANEL ASSEMBLY -TYPE A NEW POST (TYPE AND LENGTH SPECIFIED IN LEGEND)

REM REMOVE SIGN PANEL ASSEMBLY -TYPE A

EXISTING SIGN TO REMAIN

NON STANDARD SIGN

(W14-1) 36" × 36" MP. 1B

36" × 36" MP, 1B

18" × 24" MP, 1A

DEAD END

(42)

NO.

OUTLET

43

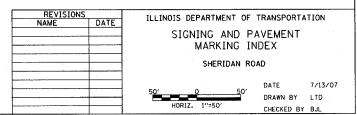
SHARE THE ROAD

44)

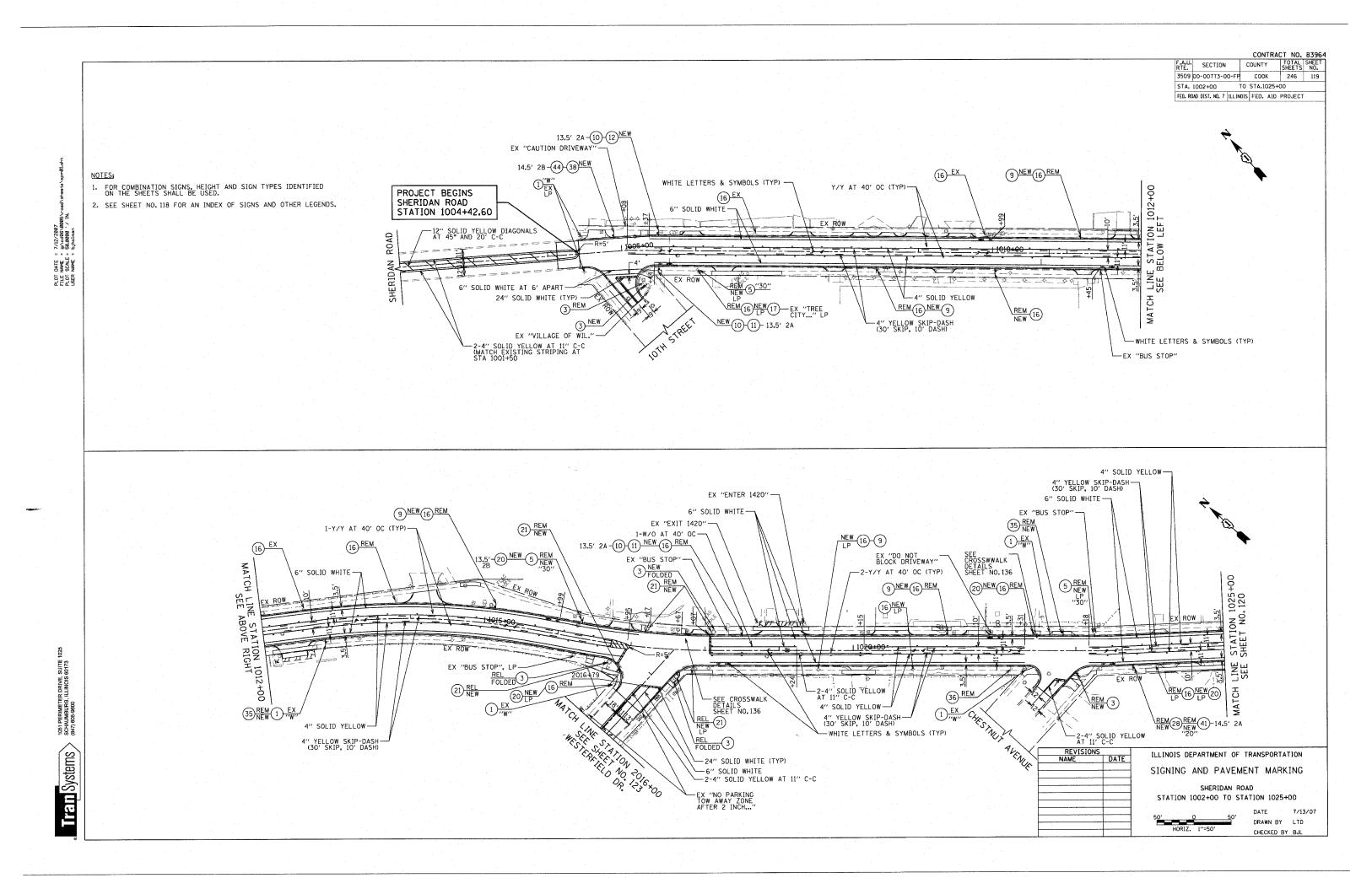
SIGN HUNG ON LIGHT POLE

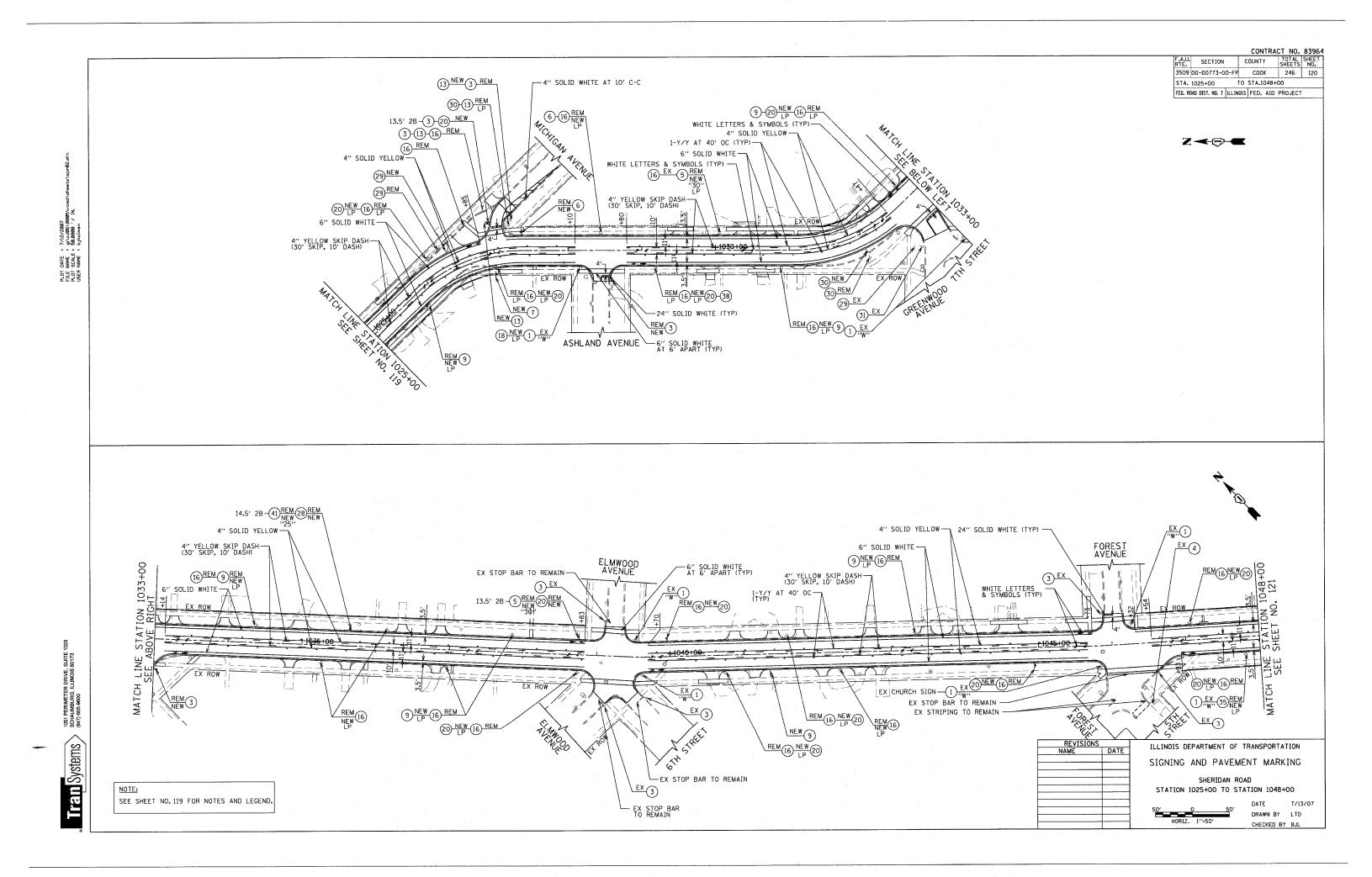
SIGN HUNG ON UTILITY POLE

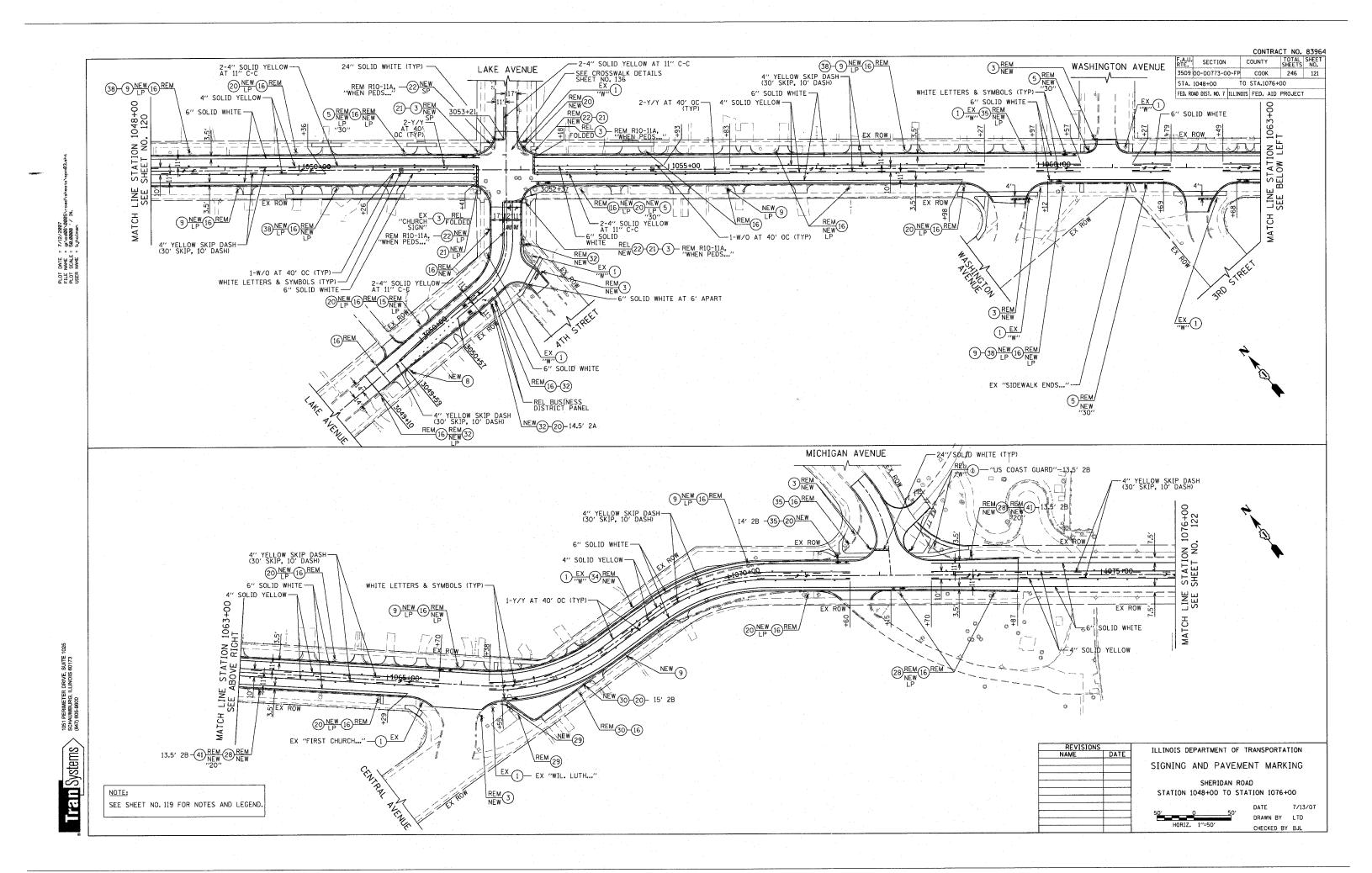
CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER AT (773) 685-8386 PRIOR TO INSTALLATION OF PERMANENT PAVEMENT MARKINGS AND SIGNS.

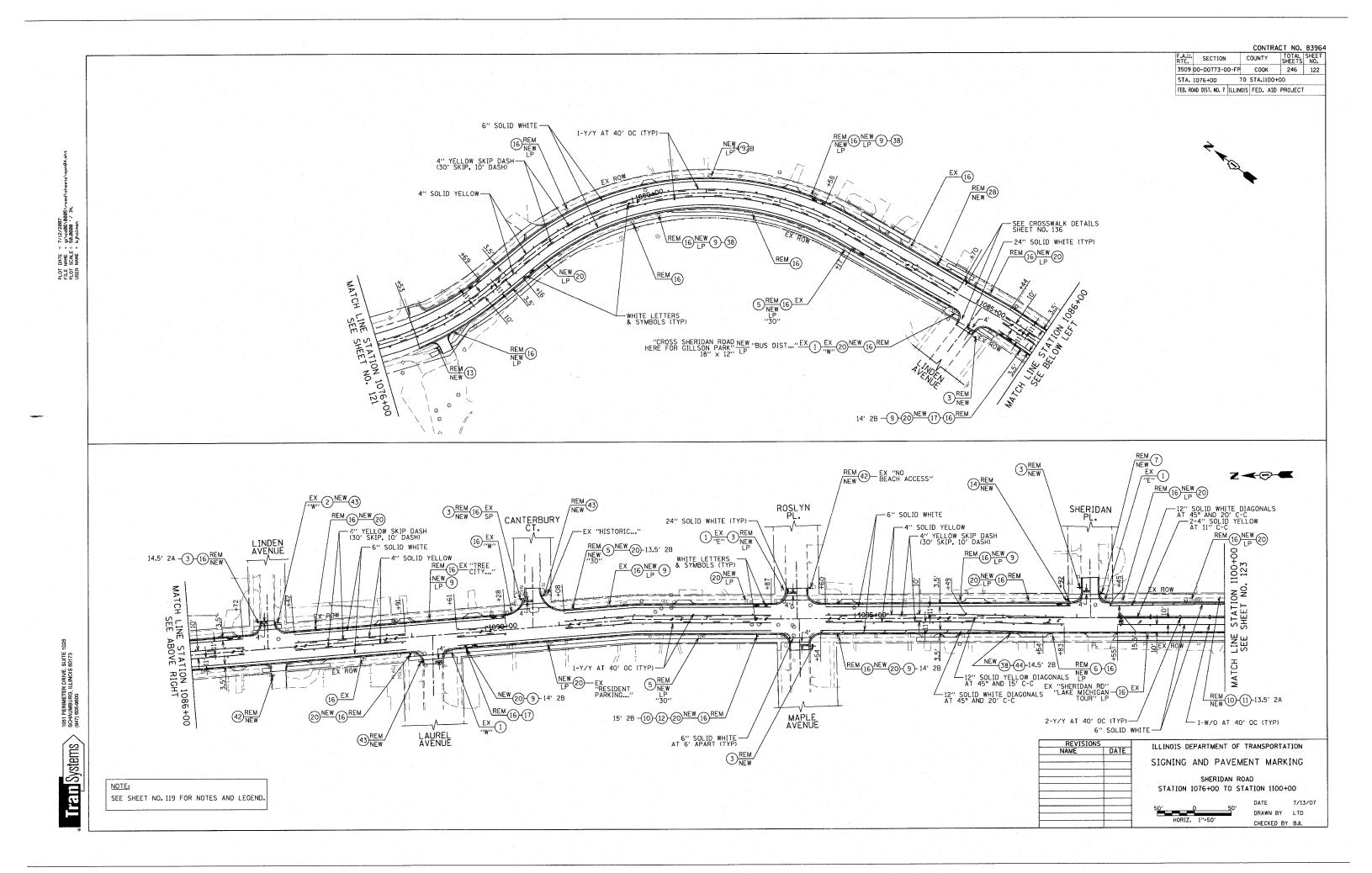


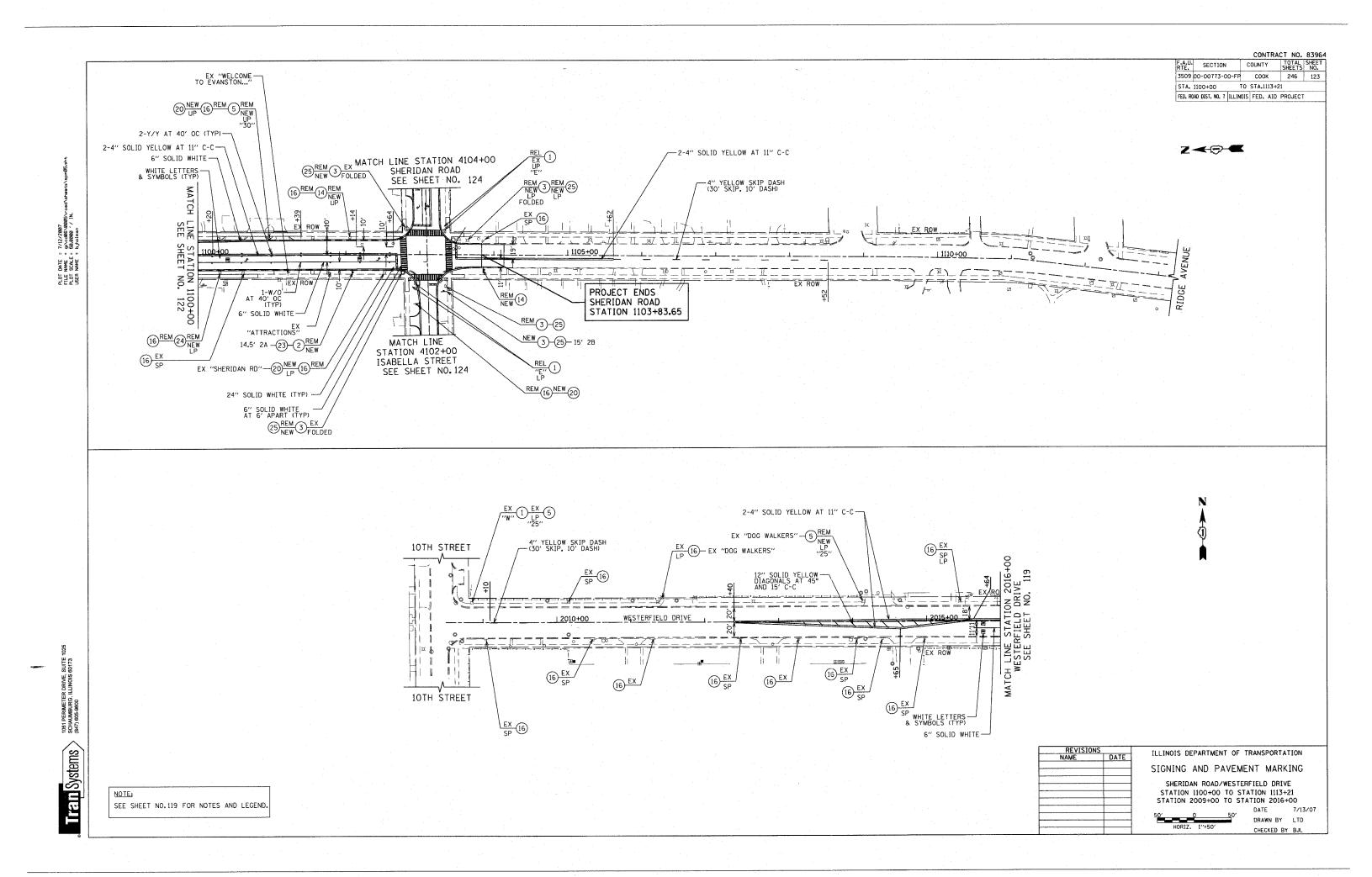


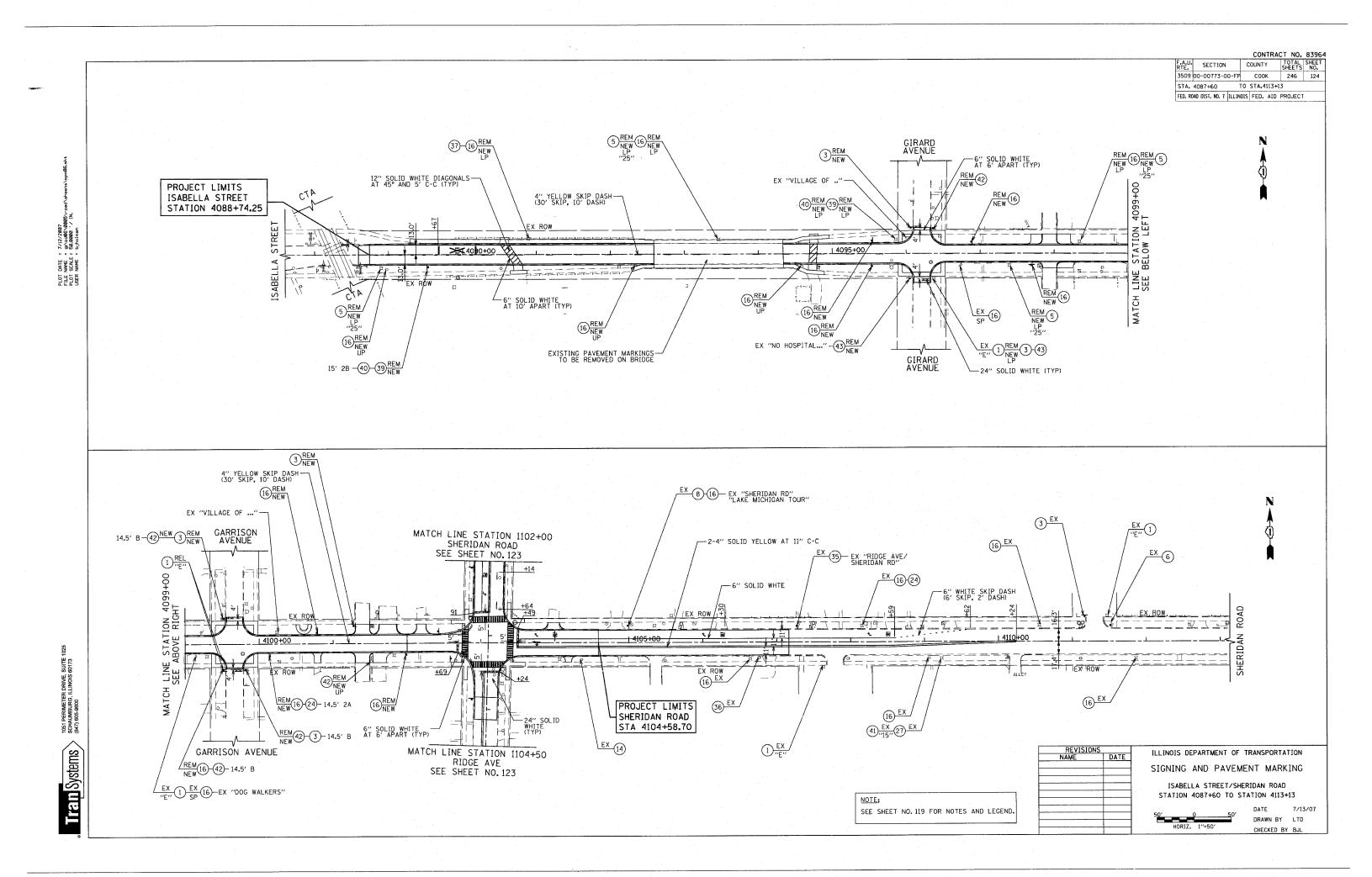


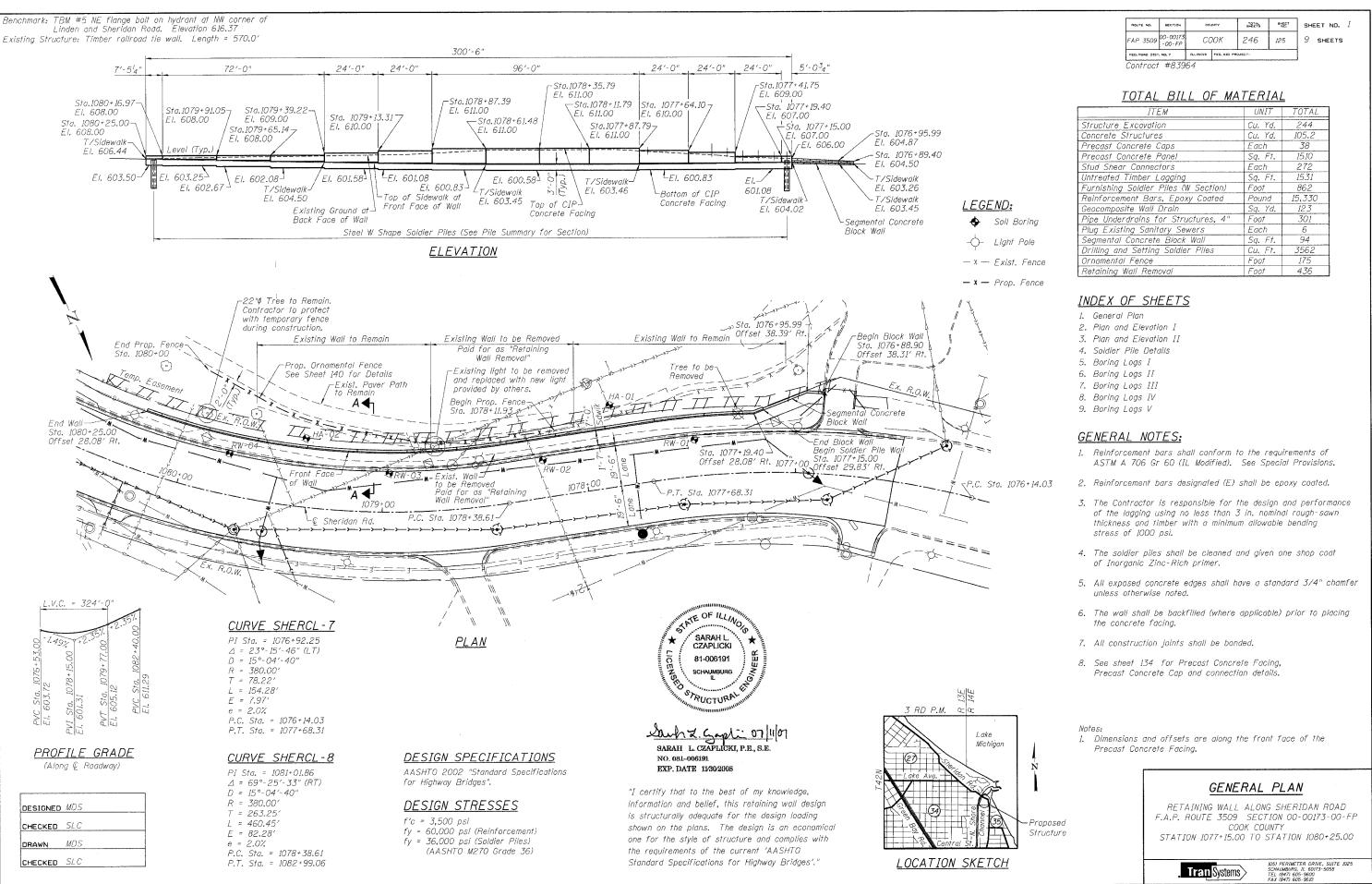




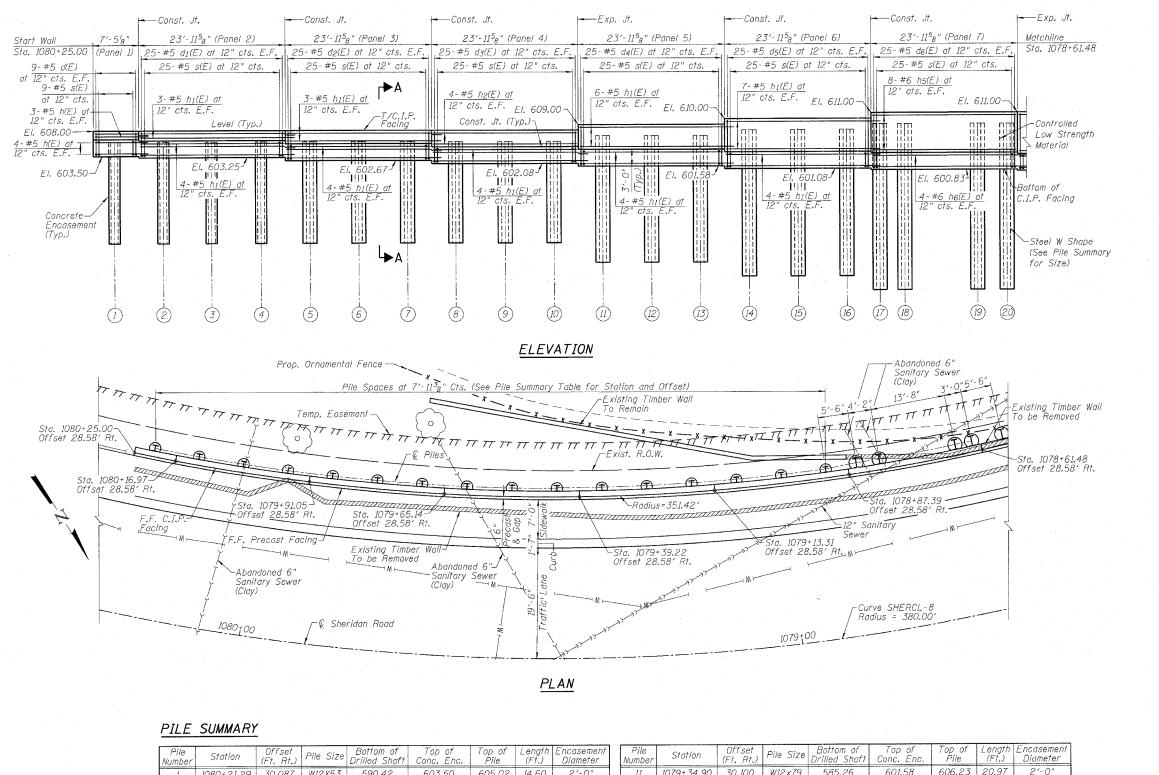








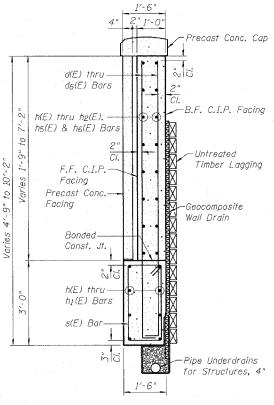
13/07



Pile Number	Station	Offset (Ft, Rt.)	Pile Size	Bottom of Drilled Shaft	Top of Conc. Enc.	Top of Pile	Length (Ft.)	Encasement Diameter
1	1080+21.29	30.087	W12X53	590.42	603.50	605.02	14.60	2'-0"
2	1080+12.65	30.087	W12X53	590.17	603.25	605.22	15.05	2'-0"
3	1080+04.01	30.087	W12X53	590.17	603.25	605.42	15.25	2'-0"
4	1079+95.37	30.087	W12X53	590.17	603.25	605.57	15.40	2'-0"
5	1079+86.73	30.087	W12X53	589.59	602.67	605.66	16.07	2'-0"
6	1079+78.10	30,087	W12X53	589.59	602.67	605.75	16.16	2'-0"
7	1079+69.46	30.087	W12X53	589.59	602.67	605.83	16.24	2'-0"
8	1079+60.82	30.087	W12X53	589.00	602.08	605.93	16.92	2'-0"
9	1079+52.18	30.087	W12X53	589.00	602.08	606.02	17.01	2'-0"
10	1079+43,54	30.087	W12X53	589.00	602.08	606.12	17.12	2'-0"

Pile Number	Station	Offset (Ft. Rt.)	Pile Size	Bottom of Drilled Shaft	Top of Conc. Enc.	Top of Pile	Length (Ft.)	Encasement Diameter
11	1079+34.90	30.100	W12x79	585.26	601.58	606.23	20.97	2'-0"
12	1079+26.27	30.100	W12x79	585.26	601.58	606.34	21.08	2'-0"
13	1079+17.63	30.100	W12x79	585.26	601.58	606.45	21.19	2'-0"
14	1079+08.99	30.121	W12x106	582.75	601.08	606.56	23.81	2'-0"
15	1079+00.35	30.121	W12x106	582.75	601.08	606,67	23.92	2'-0"
16	1078+91.71	30.121	W12x106	582.75	601.08	607.10	24.35	2'-0"
17	1078+85.74	30.475	W21x101	580.00	600.83	607.54	27.54	2'-6"
18	1078+81.23	30,475	W21x101	580.00	600.83	. 607.98	27.98	2'-6"
19	1078+66.41	30.475	W21x101	580.00	600.83	607.98	27.98	2'-6"
20	1078+63.13	30,475	W21x101	580.00	600.83	608,42	28.42	2'-6"

TOTAL SHEETS SHEET NO. SHEET NO. 2FAP 3509 00-00173 COOK 246 126 9 SHEETS FED. ROAD DISY, NO. 7 ILLINOIS FED. AID PROJE Contract #83964



# SECTION A-A

#### LEGEND:

Timber Wall Removal paid for as "Retaining Wall Removal".

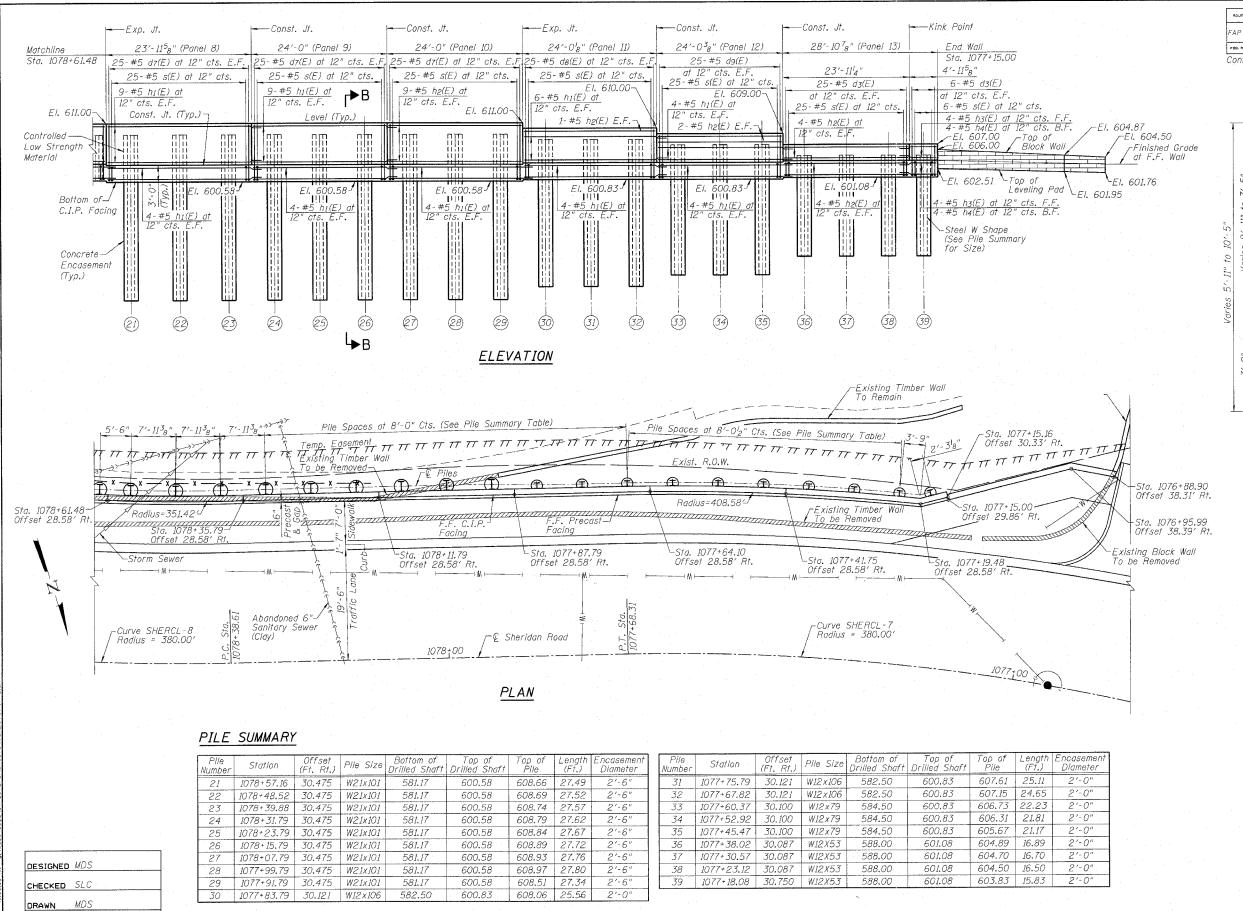
- 1. Stations and offsets are along the front face of the Cast-in-Place facing.
- 2. Panel lengths are measured along the front face of the Cast-In-Place facing.
- 3. In the Pile Summary table, stations and offsets are given at the center of pile.
- 4. See Sheet 4 of 9 for Construction and Expansion Joint details, Pipe Underdrain details, Bar Bends and Bill of Material.
- 5. See Sheet 134 for Precast Concrete Facing, Precast Concrete Cap and connection details.
- 6. Cost of removing any conflicting portions of the abandoned pipes shall be paid for as "Plug Existing Sanitary Sewers".

#### PLAN AND ELEVATION I

RETAINING WALL ALONG SHERIDAN ROAD F.A.P. ROUTE 3509 SECTION 00-00173-00-FP COOK COUNTY. STATION 1077+15.00 TO STATION 1080+25.00

Tran Systems

1051 PERIMETER DRIVE, SUITE 1025 SCHAUMBURG, IL 60173-5058 TEL (847) 605-9600 FAX (847) 605-9610



TOTAL SHEET NO. SHEET NO. 3 FAP 3509 00-00173 COOK 246 127 9 SHEETS Contract #83964 Precast Conc. Cap d3(E), d7(E)thru dg(E) Bars —B.F. C.I.P. Facing hi(E) thruh4(E) Bars -Untreated Timber Lagging F.F. C.I.P. Facina Precast Conc. Wall Drain Bonded-Const. Jt. h1(E) thruh4(E) Bars s(E) Bai

### SECTION B-B

1'-6"

-Pine Underdrains

for Structures, 4'

#### LEGEND:

Timber Wall Removal paid for as "Retaining Wall Removal".

Segmental Block Wall Removal paid for as "Retaining Wall Removal".

#### Note

- 1. Stations and offsets are along the front face of the Cast-in-Place facing.
- 2. Panel lengths are measured along the front face of the Cast-In-Place facing.
- 3. In the Pile Summary table, stations and offsets are given at the center of pile.
- 4. See Sheet 4 of 9 for Construction and Expansion Joint details, Pipe Underdrain details, Bar Bends and Bill of Material.
- 5. See Sheet 134 for Precast Concrete Facing, Precast Concrete Cap and connection details.
- 6. Cost of removing any conflicting portions of the abandoned pipes shall be paid for as "Plug Existing Sanitary Sewers".

#### PLAN AND ELEVATION II

RETAINING WALL ALONG SHERIDAN ROAD F.A.P. ROUTE 3509 SECTION 00-00173-00-FP COOK COUNTY STATION 1077+15.00 TO STATION 1080+25.00

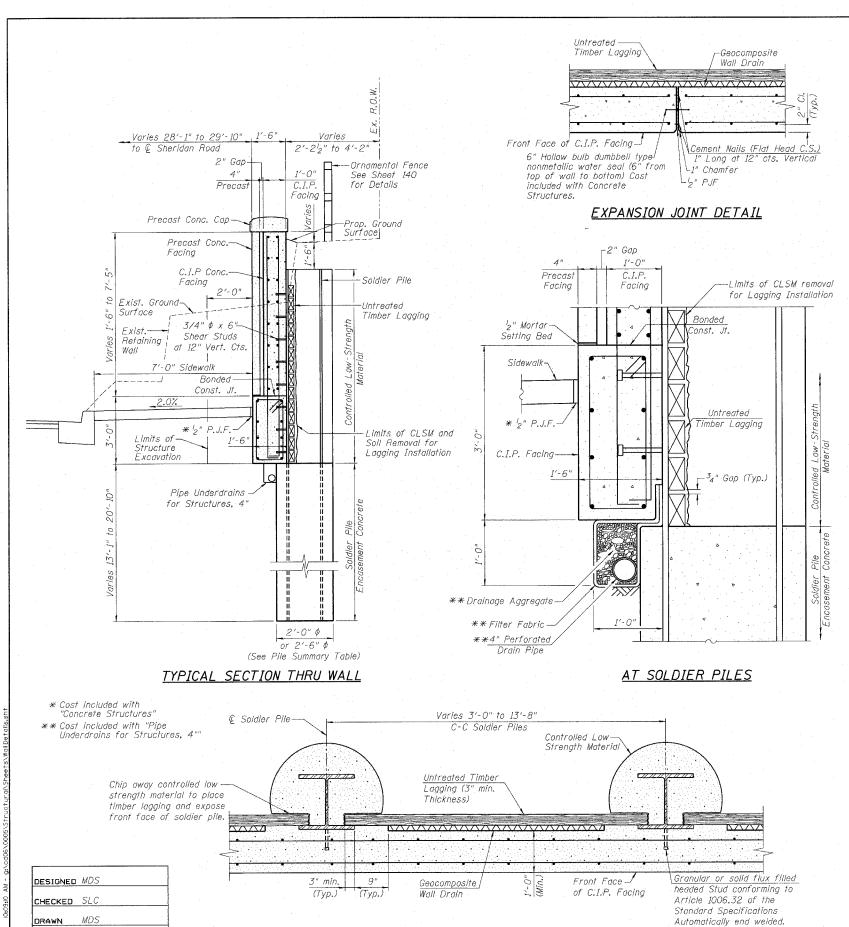


1051 PERIMETER DRIVE, SUITE 10 SCHAUMBURG, IL 60173-5058 TEL (847) 605-9600

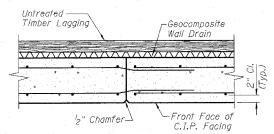
Jholman 71272007

CHECKED SLC

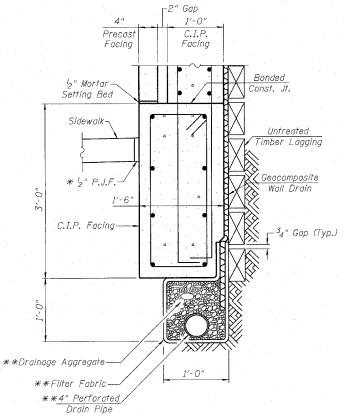
7/13/0



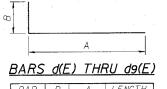
SECTION THRU DRILLED SOLDIER PILE WALL



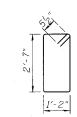
#### CONSTRUCTION JOINT DETAIL



# BETWEEN SOLDIER PILES



DANS	<u>UL</u>	./ [[[	IU USIL
BAR	В	Α	LENGTH
d(E)	10"	4'-1"	4'-11"
d1(E)	10"	4'-4"	5'-2"
d2(E)	10"	4'-11"	5′-9"
d3(E)	10"	5′-6"	6'-4"
d4(E)	10"	7′-0"	7'-10"
d5(E)	10"	8'-6"	9'-4"
d6(E)	10"	9'-9"	10'-7"
d7(E)	10"	10'-0"	10'-10"
d8(E)	10"	8'-9"	9'-7"
d9(E)	10"	7′-9"	8′-7"



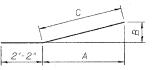
BARS s(E)

ROUTE NO.		MTY	TOTAL SHEETS	SHEET NO.	SHE	EET	ND.	
FAP 3509	00-00173 -00-FP	CC	OCK	246	128	9	SHI	EETS
FEO. ROAD DIST	NO. 7	ILLINOIS	FED. AID PR	OJECT-				

Contract #83964

## BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
d(E)	18	#5	4'-11"	
d1(E)	50	#5	5′-2"	
'd2(E)	50	#5	5′-9"	
d3(E)	112	#5	6'-4"	
d4(E)	50	#5	7'-10"	
d5(E)	50	#5	9'-4"	
- d6(E)	50	#5	10'-7"	
d7(E)	150	#5	10'-10"	
d8(E)	50	#5	9'-7"	
d9(E)	50	#5	8'-7"	
h(E)	14	#5	9′-7"	
h1(E)	174	#5	26'-2"	
h2(E)	48	#5	23'-7"	
h3(E)	8	#5	6'-11"	
h4(E)	- 8	#5	6'-10"	
h5(E)	16	#6	23'-7"	
h6(E)	8	. #6	26′-2"	***************************************
s(E)	315	#5	8'-5"	ß
DES	SCRIPTION		UNIT	QUANTITY
Structure	Excavation		Cu. Yd.	244
Concrete	Structures		Cu. Yd.	38
Stud Shed	ar Connecto	 ГЅ	Each	272
Untreated	Timber Lag	gging	Sq. Ft.	1531
	Soldier Pi		Foot	862
(W Section	7)			İ
Reinforce	ment Bars,		Pound	15,330
Ероху Со				
Geocompo	site Wall Dr	ain	Sq. Yd.	123
Pipe Unde	erdrains for	•	Foot	301
Structure	5, 4"			
	nd Setting		Cu. Ft.	3562
Soldier Pi	les			



#### BARS h3(E) AND h4(E)

BAR	Α	В	С	LENGTH
h3(E)	4'-5 <sup>5</sup> 8"	1'-712"	4'-9"	6'-11"
h4(E)	4'-4 <sup>5</sup> 8"	1'-7 <sup>l</sup> 8"	4'-8"	6'-10"

Notes:

See Sheet 134 for details of Precast Concrete Facing, Precast Concrete Cap and connection details.

### SOLDIER PILE DETAILS

RETAINING WALL ALONG SHERIDAN ROAD F.A.P. ROUTE 3509 SECTION 00-00173-00-FP COOK COUNTY STATION 1077+15.00 TO STATION 1080+25.00



1051 PERIMETER DRIVE, SUITE 102 SCHAUMBURG, IL 60173-5058 TEL (847) 605-9600

b]holman 77/27/2007

CHECKED SLC

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Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No. SPT Values (blw/6 in)	Ou (†sf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (#sf)	Moisture Content (%)
1441 1441	2-inch thick ASPHALT 7-inch thick REINFORCED 599.4 CONCRETEPAVEMENT- Very loose to loose, black SANDFILL	~ <del> </del>  \	3 1 2 2	NP	40				-		2 7 3 4	1,80 B	18
		5	2 2 1	ΝP	24				20_/		2 3 4	1.56 B	19
	594.7 Stiff to hard, brown SILTY CL	AY -	3 3 4.	2,38 B	19				-		2 9 3 4	1,15 B	20
		10	2 5 7	5.00 S	16		and a single-property of		25		2 10 4 4	1.56 B	21
			3 5 6 7	3.69 B	19			ilum dense, gray SANDY M with gravel			4 11 8 6	0.74 B	15
ENG.GDT 5/22/07		15	6 3 4	2.38 B	20		512.2 Sof	t to medium stiff, gray	30	$\bigwedge$	2 12 3 4	0.75 P	.21
Dr. Dr.	CENERA   GENERA   G	lling DC	Drilling Drill Ri	ig iecked	CME-	-75	TMR	WATER While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines represented by	NA NA esent the	28	DRY .00 ft	oundary Jual.	

Wang Engineering, INC Consulting Contention and Environmental Engineers wangeng@wangeng.com		BORING LOG RW-01  WEI Job No.: 790-17-01  TranSystems Corporation	Datum: NGVD Elevation: 600.17 ft North: 1970638.52 ft	Page :	2 of	2
Lombard, IL 60148 Telephone: 630 953-9928 Fax: 630 953-9938	Project Location	Sheridan Road Improvements Wilmette, IL	East: 1160444.62 ft Station: 1077+47.13 Offset: 17.56 RT			

	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Bepth (ft)	Sample No.	SPT Values (blw/6 in)	Ou (†sf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery.	Sample No.	SPT Values (blw/6 in)	Ou (tsf)	Moisture Content (2)
										553.7 Med	ium stiff, gray SILTY CLAY	- - -					
					13	0	0.25	40				· -		16	1 2	0.66	21
		563.7 Soft	to stiff, gray SIL	35		1	В			550.2 Borii	ng terminated at 50.00 ft	50	/\		2	В	
		3011	TO STILL, GLOY SIE									-					
				40_/	14	3 3	0.33 B	18				55_					
		558.2 Soft,	gray CLAY													-	
6.GD1 5/22/07				45	15	0 0 2	0.41 B	. 21				60_					
KANGENGINC . 7901701.GPJ WANGEN	Dri Dri	iller		on Drilling er <u>D</u>	ete Dr	Drill Ri	g ecked		75	MR	WATER L While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines represented between soil types; the octual	NA NA NA	e appr	0.85 mixo	)RY O ft	undary	

# BORING LOGS I

RETAINING WALL ALONG SHERIDAN ROAD F.A.P. ROUTE 3509 SECTION 00-00173-00-FP COOK COUNTY STATION 1077+15.00 TO STATION 1080+25.00



1051 PERIMETER DRIVE, SUITE 1025 SCHAUMBURG, IL 60173-5058 TEL (847) 605-9600

DESIGNED MDS

CHECKED SLC

DRAWN MDS

CHECKED SLC

7/12/2007 10:08

7/13/07

ROUTE NO. TOTAL SHEET NO. SHEET NO. 6 FAP 3509 00-00173 -00-FP COOK 246 9 SHEETS

Page 2 of 2

Contract #83964

Wang Engineering, INC Consulting Geotechnical and Environmental Engineers BORING LOG RW-02 Datum: NGVD WEI Job No.: 790-17-01 Elevation: 599.85 ft wangeng3@wangeng.com North: 1970620.32 ft 1145 Main Street TranSystems Corporation East: 1160515.91 ft Lombard, IL 60148 Sheridan Road Improvements Project Station: 1078+15.51 Offset: 17.95 RT Telephone: 630 953-9928 Fax: 630 953-9938 Wilmette, Il

SOIL AND ROCK SOIL AND ROCK DESCRIPTION DESCRIPTION 2-inch thick ASPHALT 7-inch thick CONCRETE --PAVEMENT--4-inch thick CRUSHED STONE --BASE COURSE--, Loose, black SANDY LOAM --FILL--Medium stiff to very stiff, gray Soft, gray CLAY GENERAL NOTES WATER LEVEL DATA Begin Drilling 10-05-2006 Complete Drilling 10-05-2006 While Drilling Drilling Contractor <u>Precon Drilling</u> Drill Rig <u>CME-75 TMR</u> 30.00 ft At Completion of Drilling 🔻 Time After Drilling NA Driller J&R Logger DC Checked by BC Depth to Water Y NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual. Drilling Method 3.25" HSA; backfilled upon completion

Wang Engineering, INC Consulting Getechnical and Convictoreered Engineers rangeng3@wangeng.com		BORING LOG RW-02 WEI Job No.: 790-17-01	Datum: NGVD Elevation: 599.85 ft
145 Main Street ombard, IL 60148 elephone: 630 953-9928 ax: 630 953-9938	Client Project _ Location	TranSystems Corporation Sheridan Road Improvements Wilmette, IL	North: 1970620.32 ft East: 1160515.91 ft Station: 1078+15.51 Offset: 17.95 RT
1	1		Φ

	Profile	SOIL AND ROCK SEED DESCRIPTION	Sample Type	Sample No.	SPT Values (blw/6 in)	0∪ (†s†)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Uepth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Ou (†sf)	Moisture Content (%)
		564.9 35		13	0 0 1	0.41 B	38							-	
		Boring terminated at 35.00 ft													
							·	٠							
			-				٠								
												-			
.GDT 5/22/07		45													
WANGENG, GD		GENERAL N	IOTE:	S S	I		I	_		WATER LEV	EL I	TAC	\		L
7901701.GPJ WA	Dri	gin Drilling 10-05-2006 Co Iling Contractor <u>Precon Drilling</u>	mple†e	Dri		]	10-0! CME	75	ſMR	While Drilling  At Completion of Drilling  Time After Drilling  N			DRY 00 ft		
WANGENGING		lling Method 3.25" HSA; backfilled u	pon	con	nple†i	on		··········		Depth to Water Y N The stratification lines represent between soil types; the actual tra	the constition	pproxi	mate bo be grad	undar y ual.	

## BORING LOGS II

RETAINING WALL ALONG SHERIDAN ROAD F.A.P. ROUTE 3509 SECTION 00-00173-00-FP COOK COUNTY STATION 1077+15.00 TO STATION 1080+25.00



TOTAL SHEET NO. 7 FAP 3509 00-00173 COOK 24
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT-246 131 Contract #83964

9 SHEETS

WEI Job No.: 790-17-01 TranSystems Corporation Client Sheridan Road Improvements Project \_\_\_ Wilmette, IL

Wang Engineering, INC Consulting Geotechnical and Environmental Engineers

wangeng3@wangeng.com 1145 Main Street

Lombard, IL 60148 Telephone: 630 953-9928 Fax: 630 953-9938

BORING LOG RW-03

Datum: NGVD Elevation: 599.63 ft North: 1970598.42 ft East: 1160586.71 ft Station: 1078+96.57 Offset: 18.55 RT

Profile	Elevation (ft)	SOIL DES	AND ROCK CRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (†sf)	Moisture Content (%)	Profile .	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Sample No.	SPT Values (blw/6 In)	Ou (tsf)	Moisture Content (%)
***		2-inch thick 1-inch thick	CONCRETE							7	584.1 · Ve	ry soft to soft, gray CLAY	$\prod$			
<i>[22</i> ]		Medium stiff CLAY LOAM	PAVE , black SANDY		$\bigvee$	1	1	NP	26				7	0 2	0.33	24
		Loose, gray	SAND		$\triangle$		3							2	В	
					\ /	-										
				-	$\setminus$	2	2 2	NP	22			20	8	2 2	0.33 B	26
	594.1		to hard, brow	n and									1			
		gray CLAY			$\bigvee$	3	1 4 8	3.12 B	18				9	0 1 2	0.33 B	25
				-												-
				10	$\bigvee$	4	4 5 6	5 <b>.</b> 82 B	. 17			25	10	1 2 3	0.41 B	16
				-	$\bigvee$	5	2 6 7	3.94 B	18			1	11	0	0.25 B	40
				_									786			
3.601 5/22/07				- 1 <u>5</u>	$\bigvee$	6	1 2 2	0.82 B	23			30	12	0 0 1	0.25 B	40
WANGENG, GDT	1		GEN	VERAL NO	TE	S.					1	WATER LEVEL C	ATA			L
⊋ Beg	-	411.7	0-06-2006	Com	plete	e Dri			10-0			While Drilling   \qu		)RY		
2	-	Contractor .	Precor Logger	n <u>Drilling</u>			Orill Riq	J	CME-	75	<u>FMR</u>	At Completion of Drilling  Time After Drilling NA	D	<u>PRY</u>		
ا الا	ller Illing		Logger 25" HSA; bac						υу			Time After Drilling NA  Depth to Water W NA  The stratification lines represent the appearance of the stratification lines represent the appearance of the stratification lines represent the appearance of the stratification lines represent the stratification lin	proxim may b	ate bo	undary	

Wang Engineering, INC		BORING LOG RW-03	Page 2 of 2
Consulting Geotechnical and Environmental Engineers rangeng3@wangeng.com		WEI Job No.: 790-17-01	Datum: NGVD Elevation: 599.63 ft
145 Main Street	Clien†	TranSystems Corporation	North: 1970598.42 ft
ombard, IL 60148	Project	Sheridan Road Improvements	East: 1160586.71 ft Station: 1078+96.57
elephone: 630 953-9928 ax: 630 953-9938	Location	Wilmette, IL	Offset: 18.55 RT
ੈ ਜੁੰ⊋ SOIL AND ROCK	pth th 3 Type bvery le No.	Soll and Education (Circle) and the Circle (Circle) an	ppth Fth very le No. Volues Volues Volues Sth sth

	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Somple No.	SPT Values (blw/6 in)	Qu (fsf)	Moisture Content (%)	. Profile	Elevation (f†)		SOIL AND DESCRIP	ROCK TION	Depth (£4)	Sample Type	Sample No.	SPT Values (blw/6 ln)	Ou (†sf)	Moisture
/																	
		4		ł													
	568.1																
ij	Stiff, gray CLAY	_											ŀ				
		4	1										1				ļ
													-				
H		1		2.		-											
ľ		· ] X	13	. 3	1.15	15							1				
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1		1															
1		-														ľ	
ľ		+	7														
		-4\/	1	2													
		-4/	14	3	1.15 B	21											
1	559.6	40	7														
	Boring terminated at 40.00 ft	4	-												İ		
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		45		1		<u> </u>								L		L	<u> </u>
_	GENERAL	. NOTI	ES_			10.01	- 00	0.0	1		WATER		_ DA				
		Complet								thile Drilling at Completion	of Dellite	Ā			DRY DRY		
	illing Contractor <u>Precon Drill</u> iller J&R Logger	ing DC								it Completion Time After Dri	-	NA NA			וווו		
	illing Method 3.25" HSA: backfilled					J _		· <u>~</u>	1	epth to Wate	_	NA.					
	SEEN HOUSE CAROLINAX								Ī	he stratificati etween soil typ	on lines repr	resent th	e app	roxin	mate bo	undar:	/

## BORING LOGS III

RETAINING WALL ALONG SHERIDAN ROAD F.A.P. ROUTE 3509 SECTION 00-00173-00-FP COOK COUNTY STATION 1077+15.00 TO STATION 1080+25.00



1051 PERIMETER DRIVE, SUITE 1025 SCHAUMBURG, IL 60173-5058 TEL (847) 605-9610 FAX (847) 605-9610

TOTAL SHEET NO. SHEET NO. 8FAP 3509 00-00173 COOK 24
FED. ROAD DIST. NO. 7 ILLENDIS FED. AID PROJECT-246 9 SHEETS 132

Page 2 of 2

Contract #83964

Datum: NGVD

Elevation: 601.02 ft North: 1970560.80 ft

East: 1160654.35 ft

Wang Engineering, INC. Consutting Geotechnical and Environmental Engineers BORING LOG RW-04 Datum: NGVD WEI Job No.: 790-17-01 Elevation: 601.02 ft North: 1970560.80 ft wangeng3@wangeng.com 1145 Main Street TranSystems Corporation Client East: 1160654.35 ft Station: 1079+78.34 Offset: 19.45 RT Lombard, IL 60148 Project Sheridan Road Improvements Telephone: 630 953-9928 Fax: 630 953-9938 Location Wilmette, IL

Profile	SOIL AND ROCK E	(ft) Sample Type cessvery	Sample No.	SPT Values (biw/6 in)	Qu (†sf)	Moisture Content (%)	Profile	Eleyation (+t)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	On (†sf)	Moisture Content (%)
	2-inch thick ASPHALT 660.3 -inch thick CONCRETEPAVEMENT 660.3PAVEMENT 660.3BASE COURSE Loose, black SILTY LOAMFILL-		e-el	3 2 2	NP	39		585.5 Sof CLA	t to stiff, brown and c	ray -		7	2 2 4	1.23 B	16
	Loose, brown fine SAND	- - - - - -	2	3 6 6	NP	25				20_		8	2 2 2	0.98 B	22
	995.5 Very stiff, gray CLAY		3	2 3 7	2.38 B	18				- - -		9	3 3 3	0.75 P	23
			4	4 5 7	3.94 B	18				25_		10	3 . 3 . 3	1.56 S	14
	Stiff to vey stiff, gray SILTY CLAY		5	3 6 7	3,50 P	11						11	0 0 3	0.74 B	21
SENG,GDT 5/22/07			6	3 3 5	1.31 B	15				30_		12	1 2 3	0.49 B	40
Orill Drill	ling Contractor <u>Precon Drillin</u>	omplete g DC	Orii _ C	)r∭ Rio Che	ecked	CME-	75	MR ·	WATER While Drilling At Completion of Drilling Time After Drilling Depth to Water The straffication lines rep between soil types; the act	▼ NA NA	ne gpp	roxin	ORY ORY	undar y	

Lombard, IL 60148 Telephone: 630 953-9928 Fax: 630 953-9938	Project Location _			ridan R	oad	d Improvements	East: 1160654.35 ft Station: 1079+78.34 Offset: 19.45 RT	
SOIL AND ROCK DESCRIPTION	Depth (f1) Sample Type	Sample No.	SPI Values (blw/6 in) 0u	(fsf) Moisture Content (%)	Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery Sample No. SPT Values (blw/6 In)	(tsf) (fsf) Woisture
		13	0	66 21				
Boring terminated at 35.00	35 /\ ) ft _		3 · E					
	-		-					
	40 <u> </u>							
		-						
					27			

BORING LOG RW-04

WEI Job No.: 790-17-01

TranSystems Corporation

Wang Engineering, INC.
Consulting Geotechnical and
Environmental Engineers

Client

Begin Drilling 10-09-2006 Complete Drilling 10-09-2006

Drilling Contractor <u>Precon Drilling</u> Drill Rig <u>CME-75 TMR</u>

Driller J&R Logger DC Checked by WW

Drilling Method 3.25" HSA; backfilled upon completion

wangeng3@wangeng.com

1145 Main Street

BORING LOGS IV

RETAINING WALL ALONG SHERIDAN ROAD F.A.P. ROUTE 3509 SECTION 00-00173-00-FP COOK COUNTY STATION 1077+15.00 TO STATION 1080+25.00

. Tran Systems

Time After Drilling NA
Depth to Water Y NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

While Drilling

At Completion of Drilling 🔻

TOTAL SHEET NO. SHEET NO. 9 FAP 3509 00-00173 COOK 2
FED. RICAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 246 133 9 SHEETS Contract #83964

Page 1 of

Datum: NGVD

Wang Engineering, INC.
Consulting Geotechnical and
Environmental Engineers BORING LOG HA-01 Datum: NGVD Elevation: 604.82 ft North: 1970607.85 ft WEI Job No.: 790-17-01 wangeng3@wangeng.com 1145 Main Street TranSystems Corporation East: 1160476.35 ft Lombard, IL 60148 Sheridan Road Improvements Project Station: 1077+84.05 Telephone: 630 953-9928 Fax: 630 953-9938 Wilmette, IL Offset: 39.29

SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Ou (†sf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	0u (†s†)	Moisture (Content (Z)
SANDY LOAM  SOLUTION  SANDY LOAM FI  Medium stiff, black SILTY CL  with sand interbeds FI	AY. / ] \	1		0.90 B	22								
Medium stiff, brown SANDY  602.3 CLAY to SANDY CLAY LOAM  801.8FI  Brown SANDY LOAM with  construction debris FI		2		0.66 B	19								
Brown, fine to medium SAND with silty loam and hard cla lenses	<u>LL</u> 5	3		0.90 B	21								
FI		4		NP	16		Auditoria II						
Medium stiff, black SILTY CL	- in / \	5		7.46 B	15		i i i i i i i i i i i i i i i i i i i						-
Boring terminated at 10.00 f	I												-
SV22/07	15							WATED	LEVE	DAT			
GENERAL GENERA	rilling JK	e Dr	Drill Ri	g P <u>ne</u> ecked	by_	tic F	lammei IW	Time After Drilling	▼ NA NA	e approx	DRY DRY	oundary tual.	

Consulting Coercepting and awangeng Sewangeng, com 1145 Main Street Lombard, IL 60148 Telephone: 630 953-9928 Fax: 630 953-9938	Client Project Location		[rans	syste Ian R	ems oad	: 790- Corpor Improv te, IL		Datum: NG Elevation: North: 197 East: 1160 Station: 1 Offset: 3	600,81 ft 70567,82 ft 617,36 ft 079+40,45	· · · · · · · · · · · · · · · · · · ·	
SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery	SPT Values (blw/6 in)	Qu (†sf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (f+)	Sample Type recovery Sample No.	SPT Values (blw/6 In) Qu	(fsf) Moisture
Medium stiff, brown SILTY CLAY with sand interbeds	SOIL	1	0.90 S	22							0.0
Brown, medium SAND with h brown siity clay loam lense 		2	NP	8							
596.3 Black SILTY LOAM with sand interbedsBURIED TOP	5 <b>4 X II</b> 3	3	NP	36							
Brown, fine SAND	<u> </u>	4	ΝP	34							
@9'0" - 0.5-inch thick   591.1 organic lense - possible	peat -	5	ΝP	25							
Ranting descrimated at 10.00	) f†										
0.00											
Begin Drilling 10-25-2006  Drilling Contractor Precon		Drill Ric	Pne		ic F	ammer	WAT While Drilling At Completion of Drill Time After Drilling	ER LEVEL	DATA 6.75 5.83		
Driller J&R Logger Drilling Method 2" x 2' split_sp								▼ NA represent th	e approxima	ate bound e gradual	iary

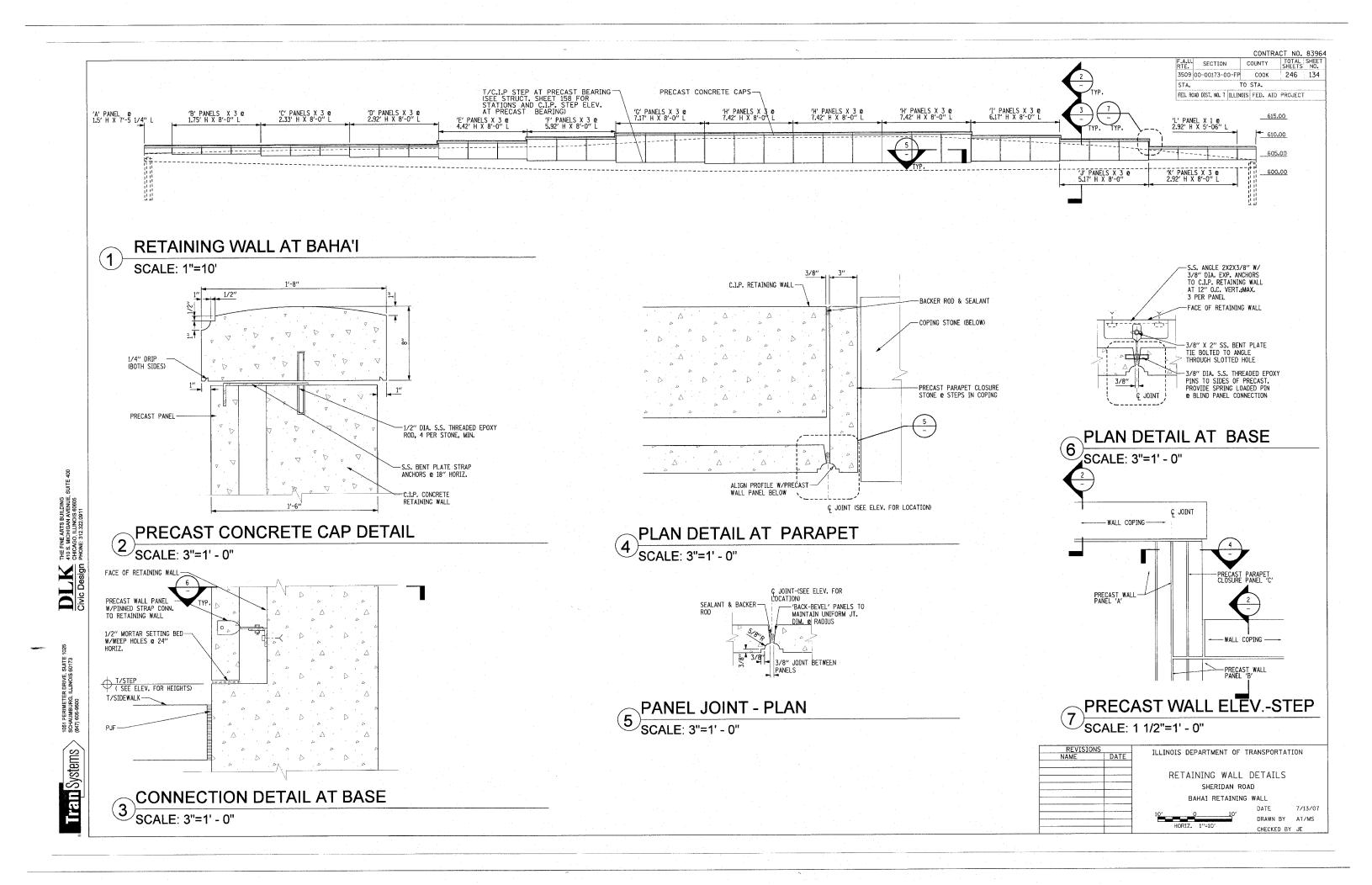
BORING LOG HA-02

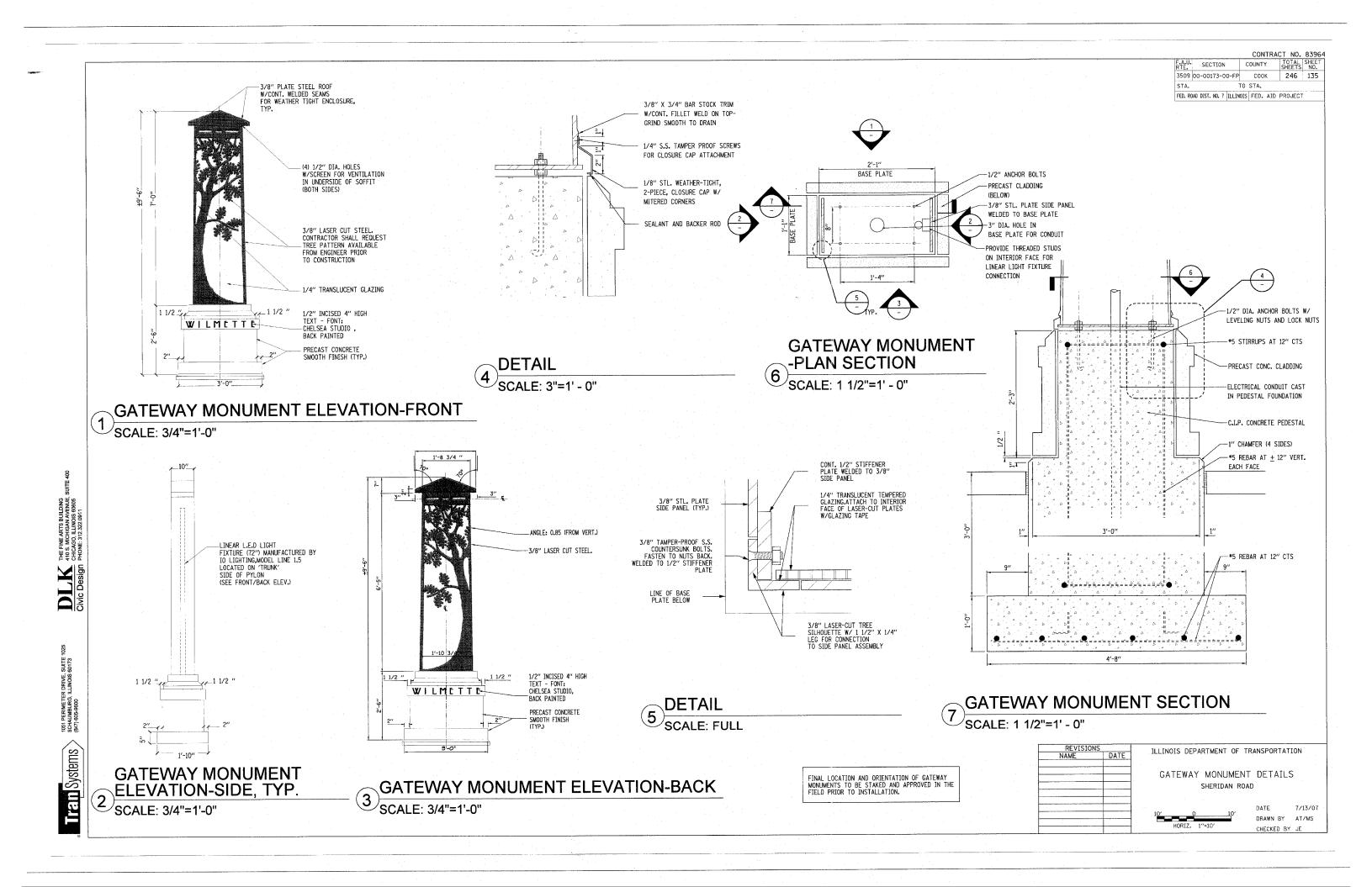
Wang Engineering, INC.
Consulting Georechical and
Environmental Engineers
wangeng3@wangeng.com

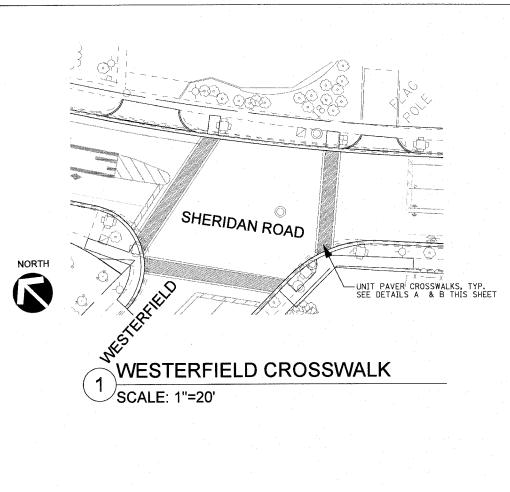
DESIGNED MDS CHECKED SLC DRAWN MDS CHECKED SLC BORING LOGS V

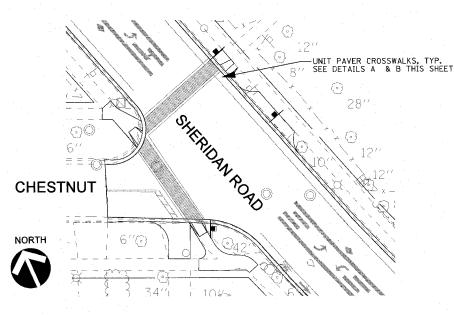
RETAINING WALL ALONG SHERIDAN ROAD F.A.P. ROUTE 3509 SECTION 00-00173-00-FP COOK COUNTY STATION 1077+15.00 TO STATION 1080+25.00

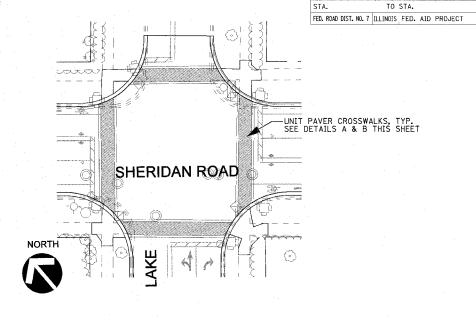
Tran Systems











COUNTY TOTAL SHEET NO.

SECTION

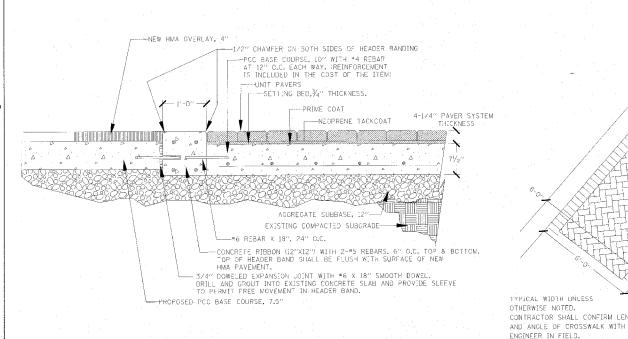
3509 00-00173-00-FP COOK 246 136

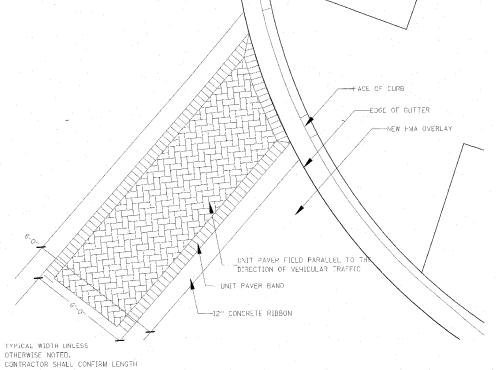
2 CHESTNUT CROSSWALK
SCALE: 1"=20'

В

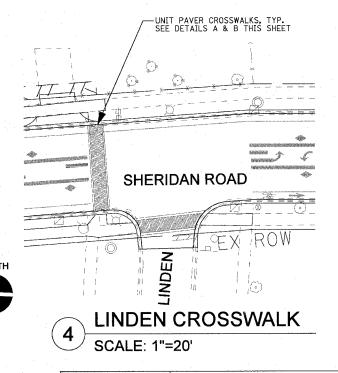
<sup>/</sup>SCALE: 1"=10'

3 LAKE CROSSWALK SCALE: 1"=20'





CROSSWALK DETAIL, TYP.



REVISIONS
NAME
DATE

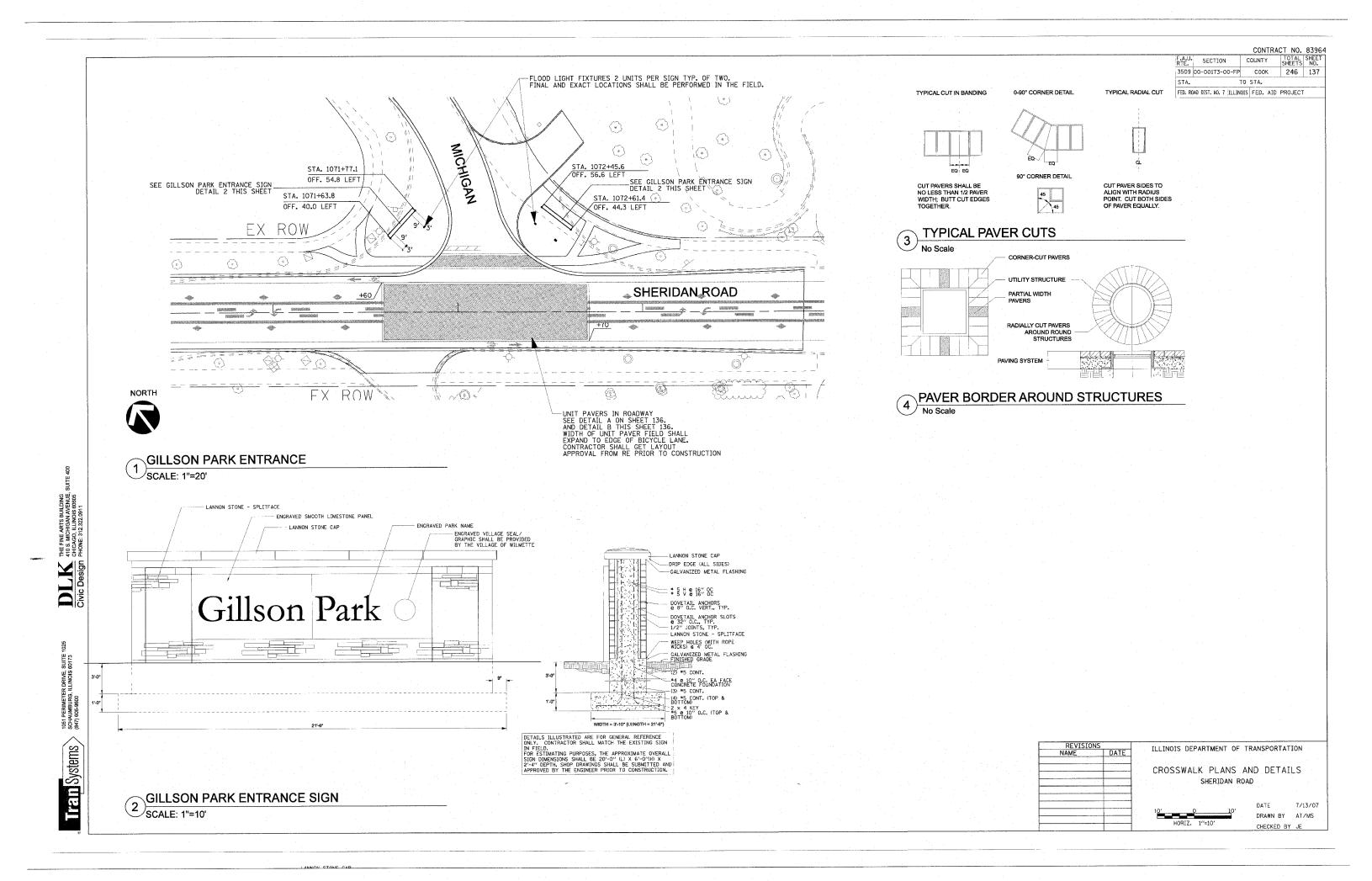
ILLINOIS DEPARTMENT OF TRANSPORTATION

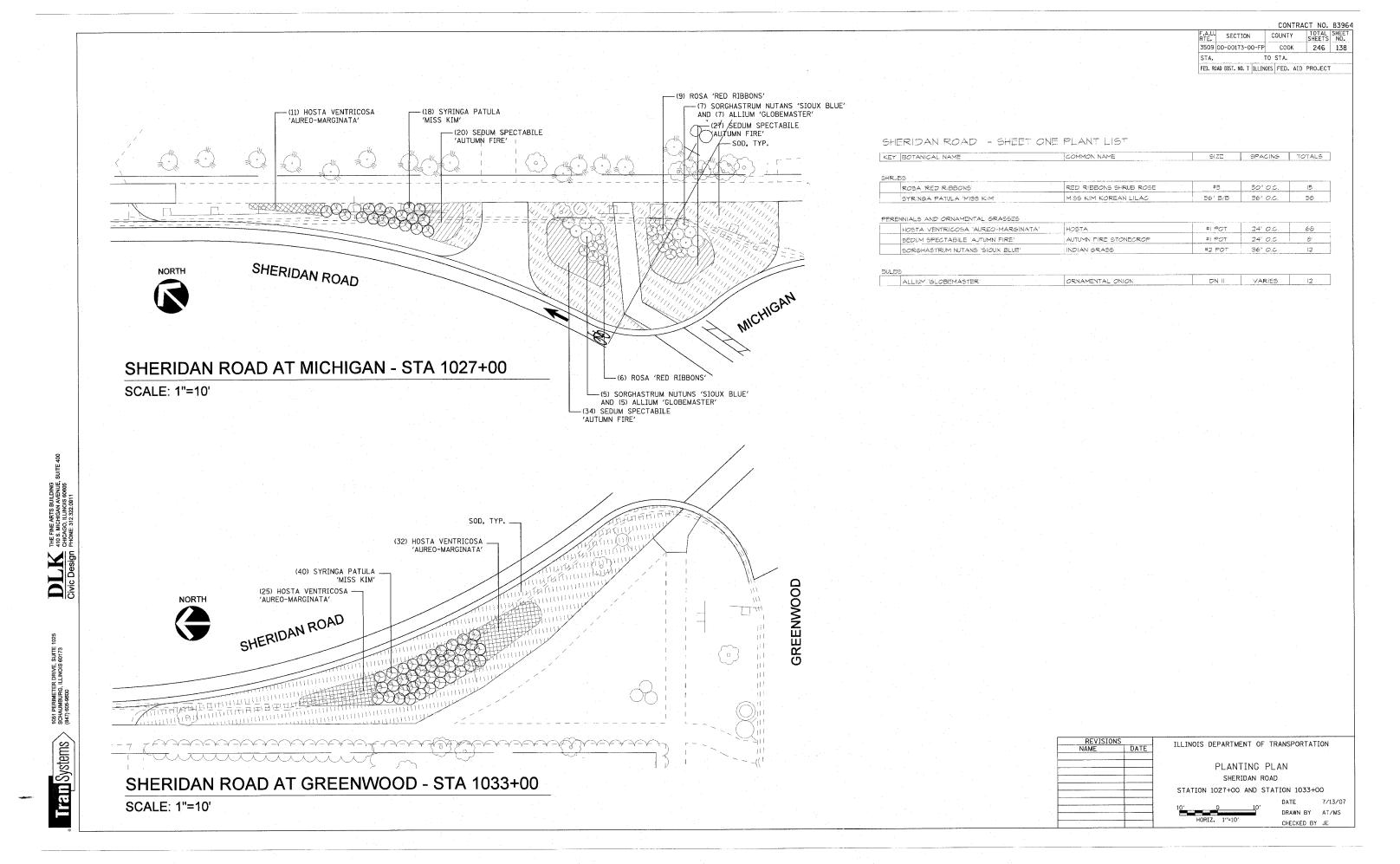
CROSSWALK PLANS AND DETAILS
SHERIDAN ROAD

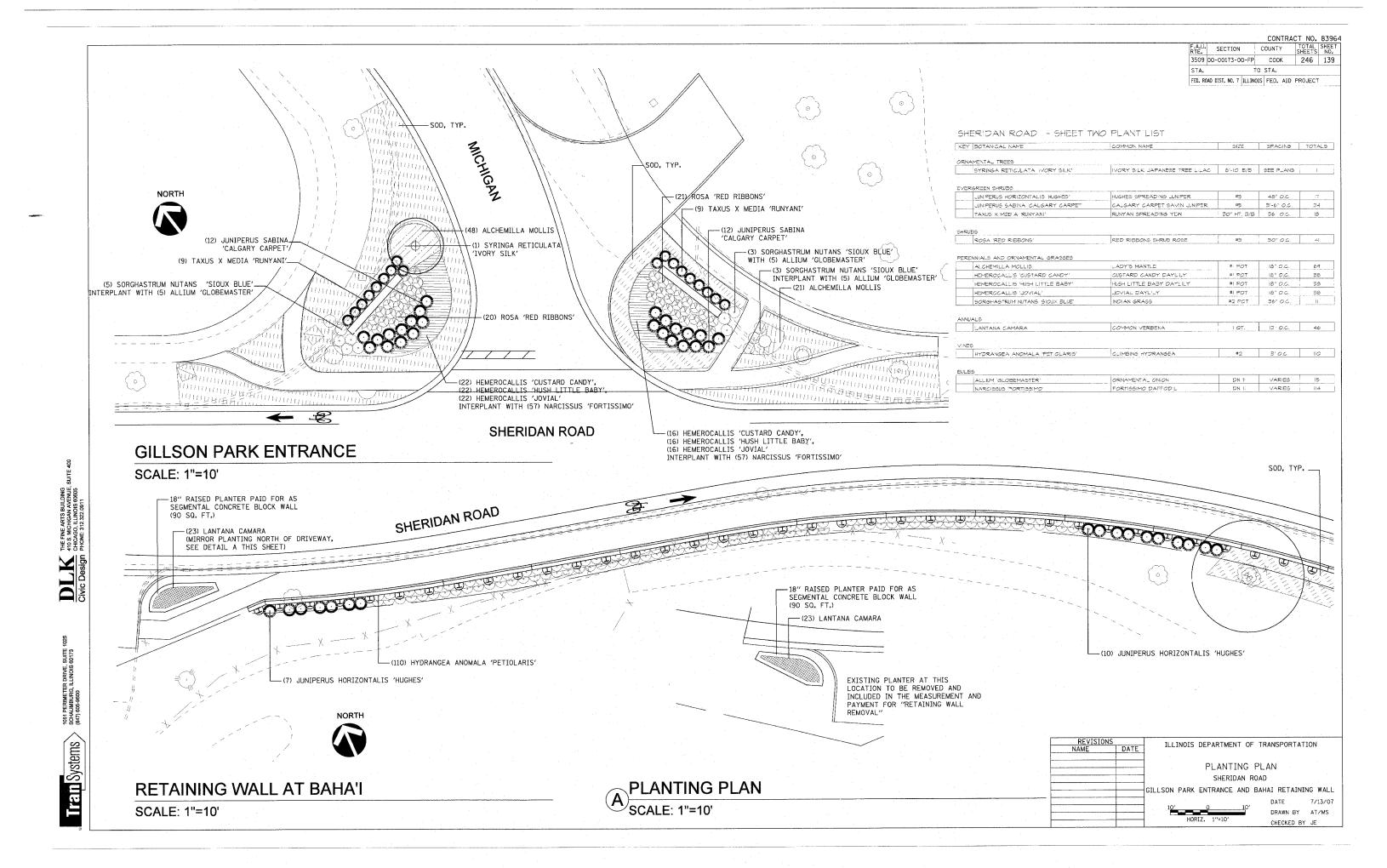
10' 0 10' DATE 7/13/07
DRAWN BY AT/MS
HORIZ. 1"=10' CHECKED BY JE

CROSSWALK SECTION

A SCALE: 1"=20'

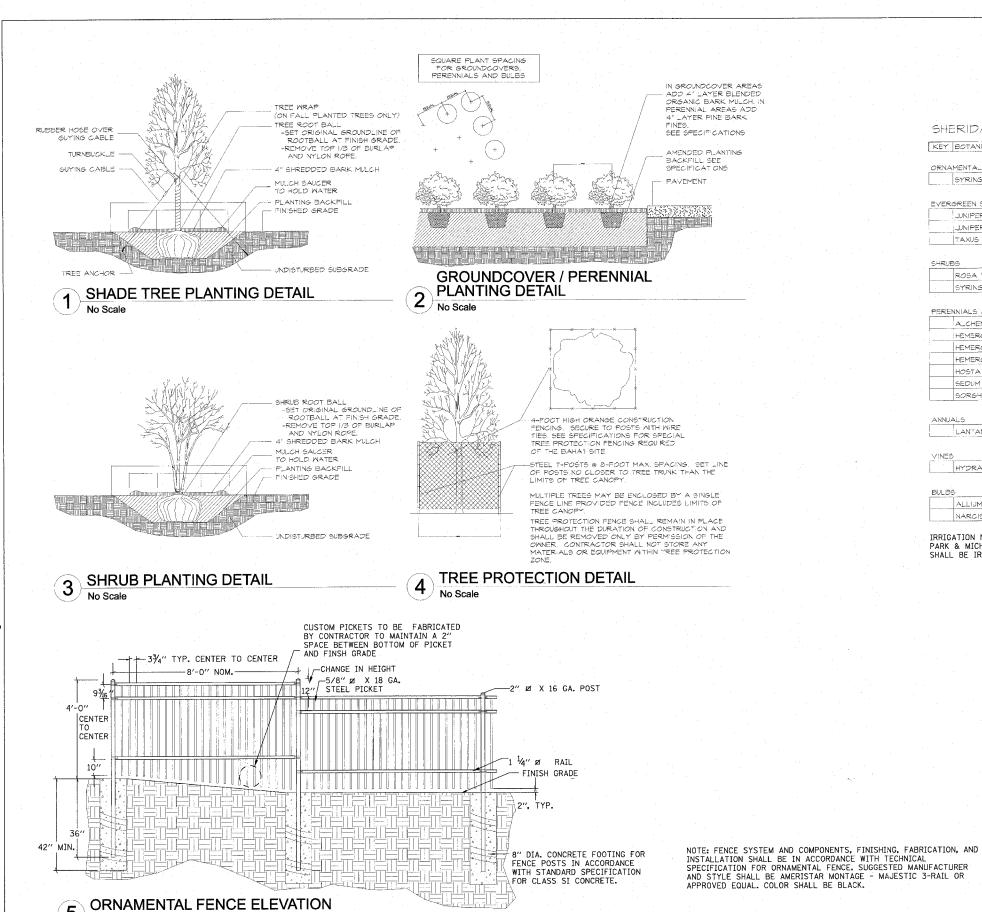








5

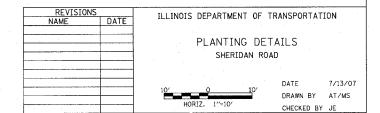


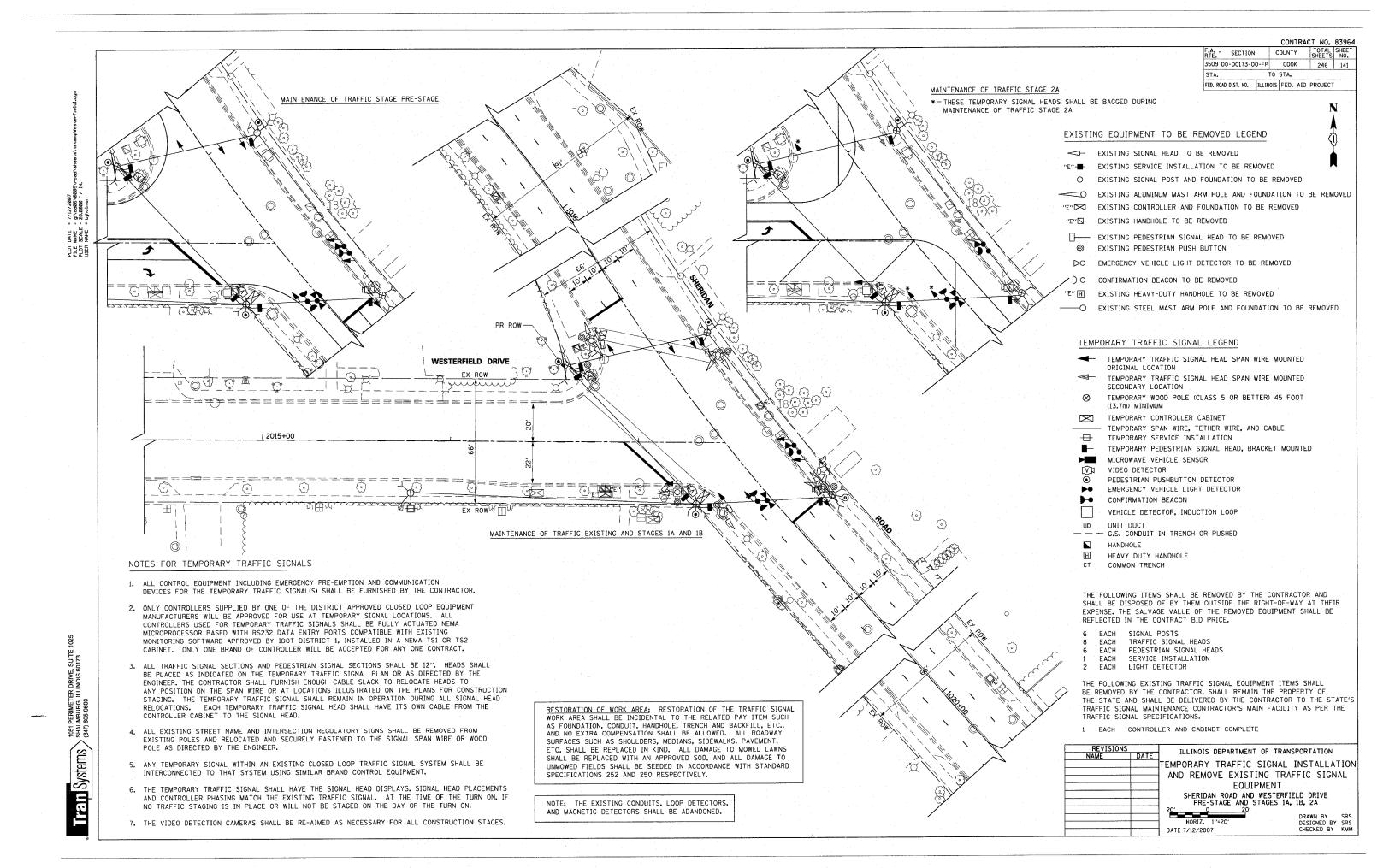
CONTRACT NO. 83964 COUNTY TOTAL SHEET NO. RTE. SECTION 3509 00-00173-00-FP COOK 246 140 TO STA. FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT

#### SHERIDAN ROAD - MASTER PLANT LIST

KEY BOTANICAL NAME	COMMON NAME	SIZE	SPACING	TOTALS
ORNAMENTAL TREES				
SYRINGA RETICULATA IVORY SILK'	VORY SILK JAPANESE TREE LILAC	8'-10' B/B	SEE PLANS	
EVERGREEN SHRUBS				
JUNIPERUS HORIZONTALIS HUGHES!	HUGHES SPREADING JUNIPER	#5	48" O.C.	17
JUNIPERUS SABINA 'CALGARY CARPET'	CALGARY CARPET SAVIN JUNIPER	<b>=</b> 5	3'-6" O.C.	24
TAXUS X MEDIA 'RUNYANI'	RUNYAN SPREADING YEM	30" HT. B/B	36" O.C.	8
SHRUBS				A. (C. 10 A. ) . 3 P. 10 P. 10 A. (S. 10 P.
ROSA 'RED RIBBONS'	RED RIBBONS SHRUB ROSE	#3	30" O.C.	56
SYRINGA PATULA 'MISS KIM'	MISS KIM KOREAN LILAC	36" B/3	36" O.C.	58
PERENNIALS AND ORNAMENTAL GRASSES				
ALCHEMILLA MOLLIS	LADY'S MANTLE	#! POT	18" O.C.	69
HEMEROCALLIS CUSTARD CANDY	CUSTARD CANDY DAYLILY	#I POT	18" O.C.	. 38
HEMEROCALLIS 'HUSH LITTLE BABY'	HUSH LITTLE BABY DAYLILY	#I POT	18" O.C.	38
HEMEROCALLIS 'JOV'AL'	JOVIAL DAYLILY	#I POT	18" 0.0.	38
HOSTA VENTRICOSA 'AUREO-MARGINATA'	HOSTA .	#I POT	24" O.C.	68
SEDUM SPECTABILE 'AUTUMN FIRE'	AUTUMN FIRE STONECROP	#I PO~	24" O.C.	81
SORGHASTRUM NUTANS 'SIOUX BLUE'	INDIAN GRASS	#2 POT	36" O.C.	23
SORGHASTRUM NUTANS 'SIOUX BLUE'	INDIAN GRASS	#2 POT	36" 0.0.	23
SORGHASTRUM NUTANS 'SIOUX BLUE'	INDIAN GRASS	#2 POT	36" O.C.	25
	INDIAN GRASS  COMMON VERBENA	#2 POT	12" 0.6.	23
ANNUALS				
ANNUALS				
ANNUALS LANTANA CAMARA				
ANNUALS LANTANA CAMARA  VINES	COMMON VERBENA	I at.	12" 0.0.	46
ANNUALS LANTANA CAMARA  VINES	COMMON VERBENA	I at.	12" 0.0.	46
ANNUALS  LANTANA CAMARA  VINES  HYDRANGEA ANOMALA 'PET OLARIS'	COMMON VERBENA	I at.	12" 0.0.	46

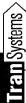
IRRIGATION NOTE: THE PLANTING AREA AT THE ENTRANCE TO GILLSON PARK & MICHIGAN, AND THE PLANTING AREA AT 7TH AND GREENWOOD SHALL BE IRRIGATED AND PAID FOR AS IRRIGATION SYSTEM.

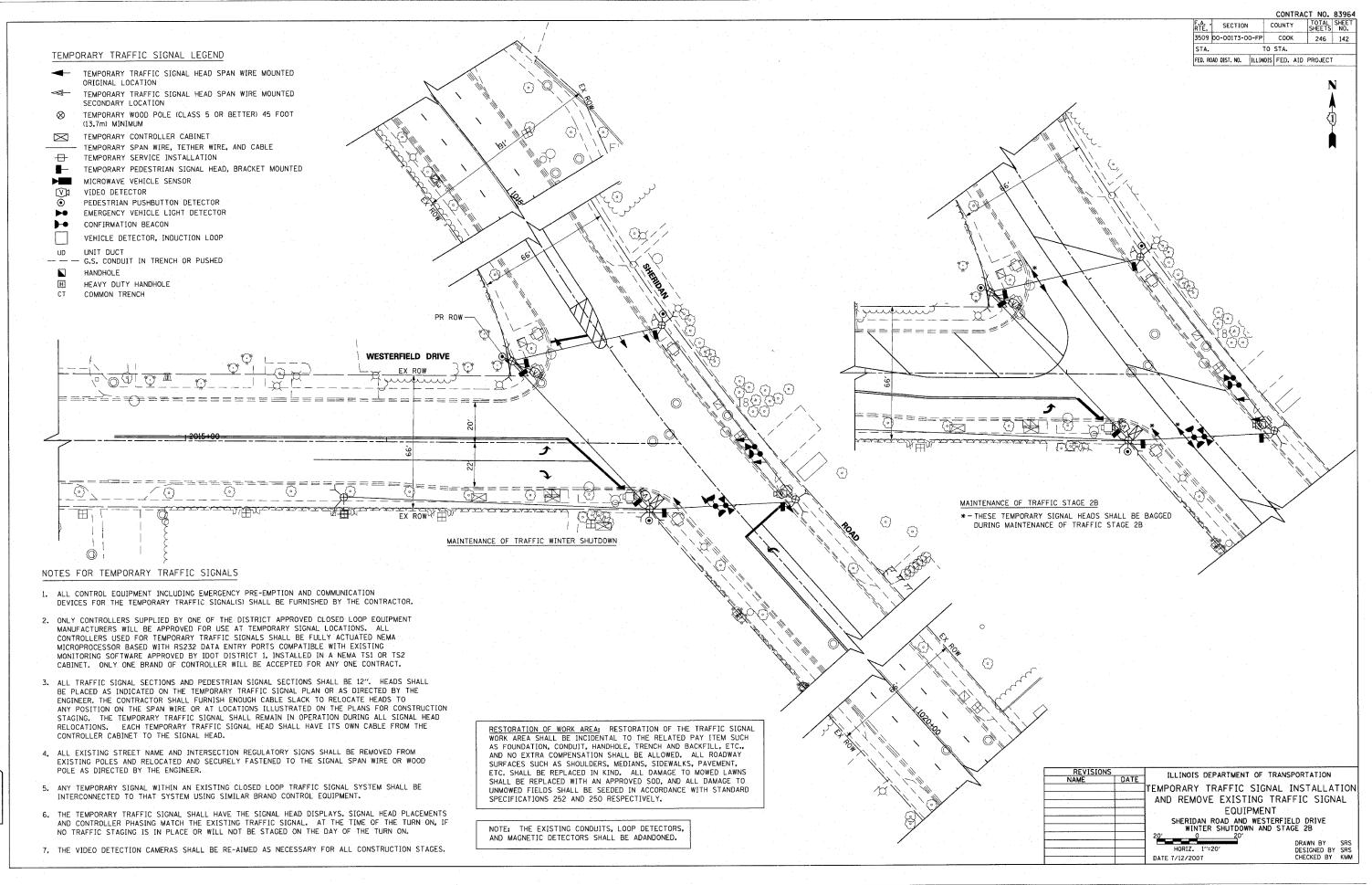


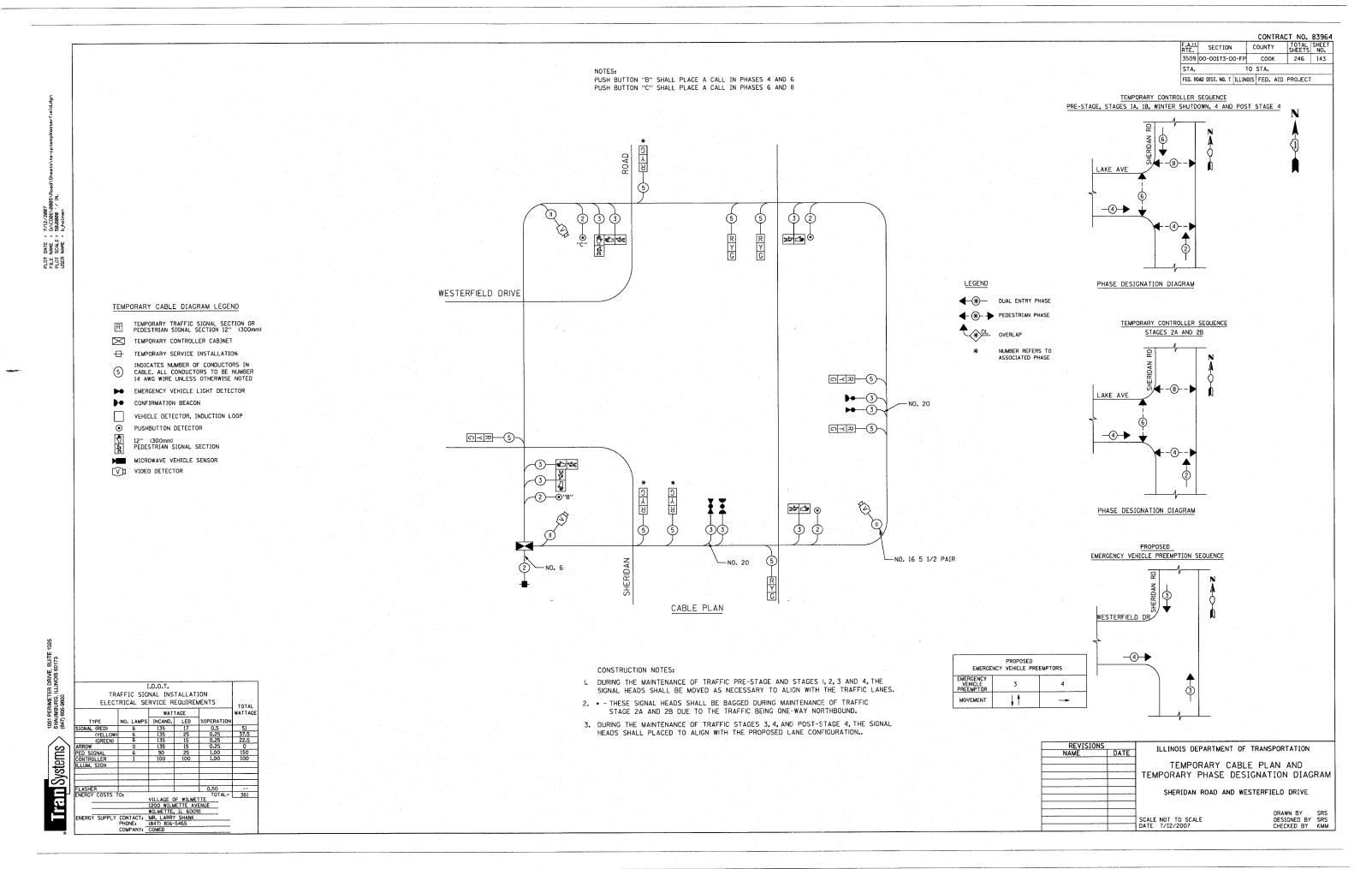


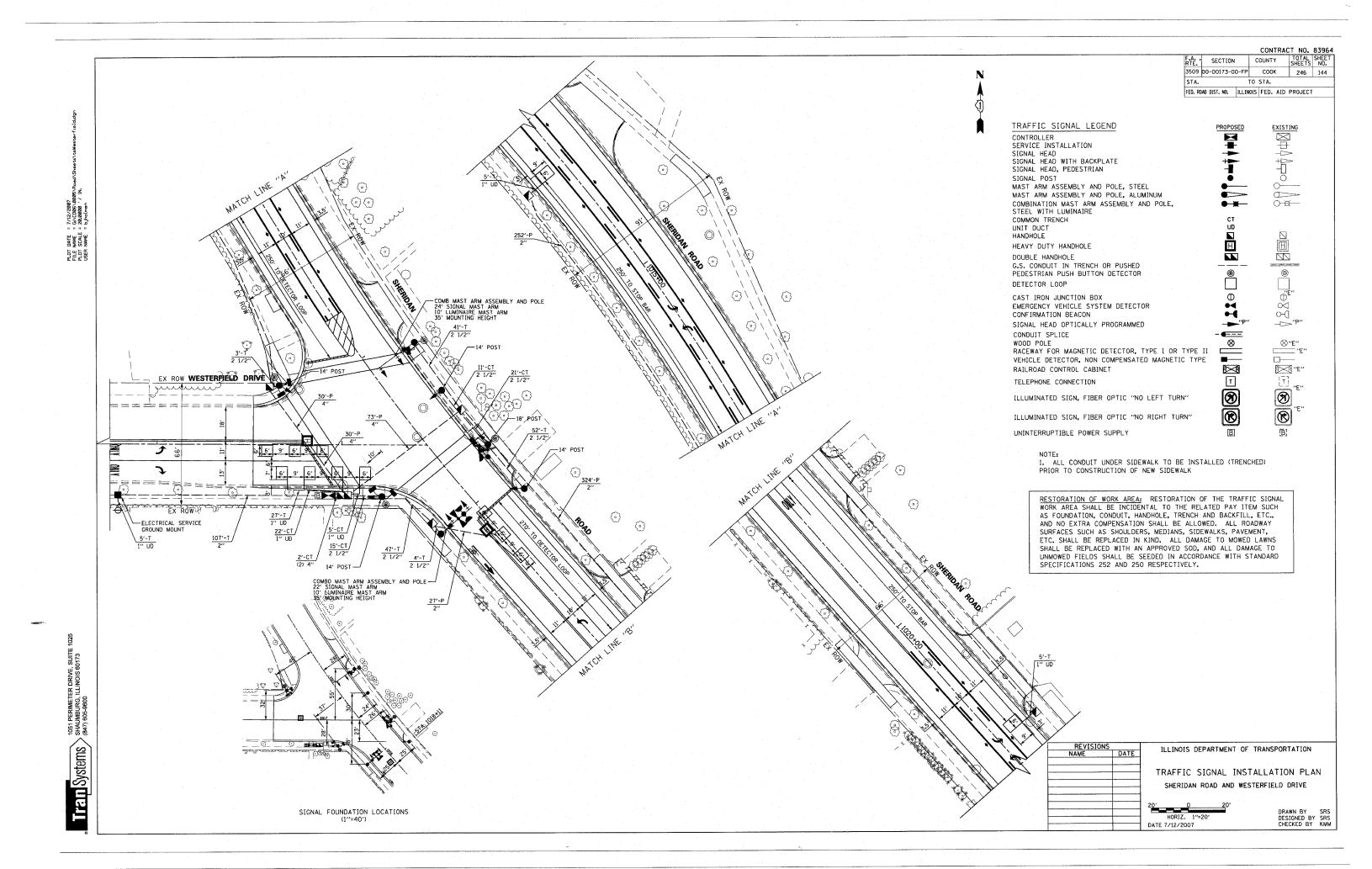


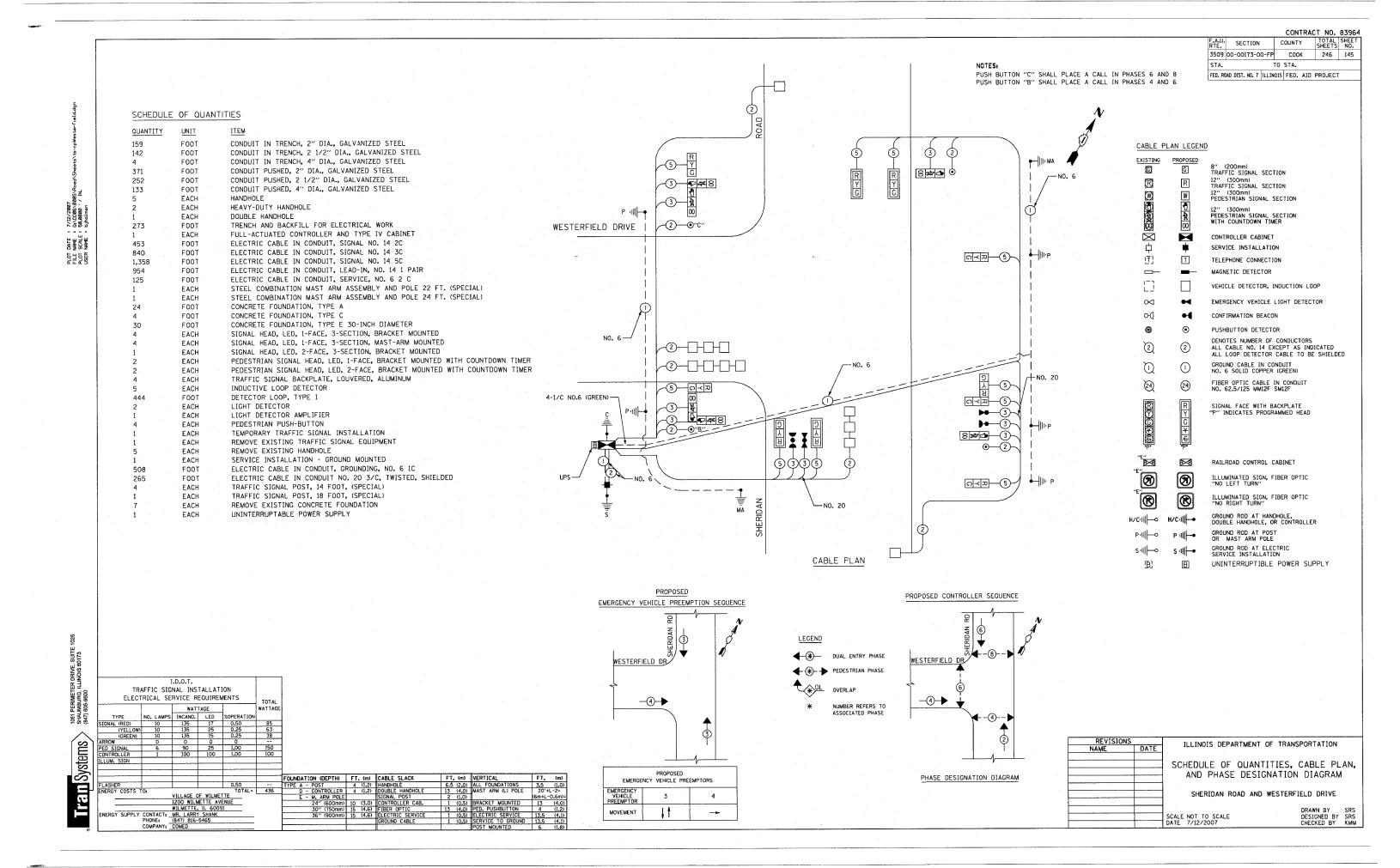


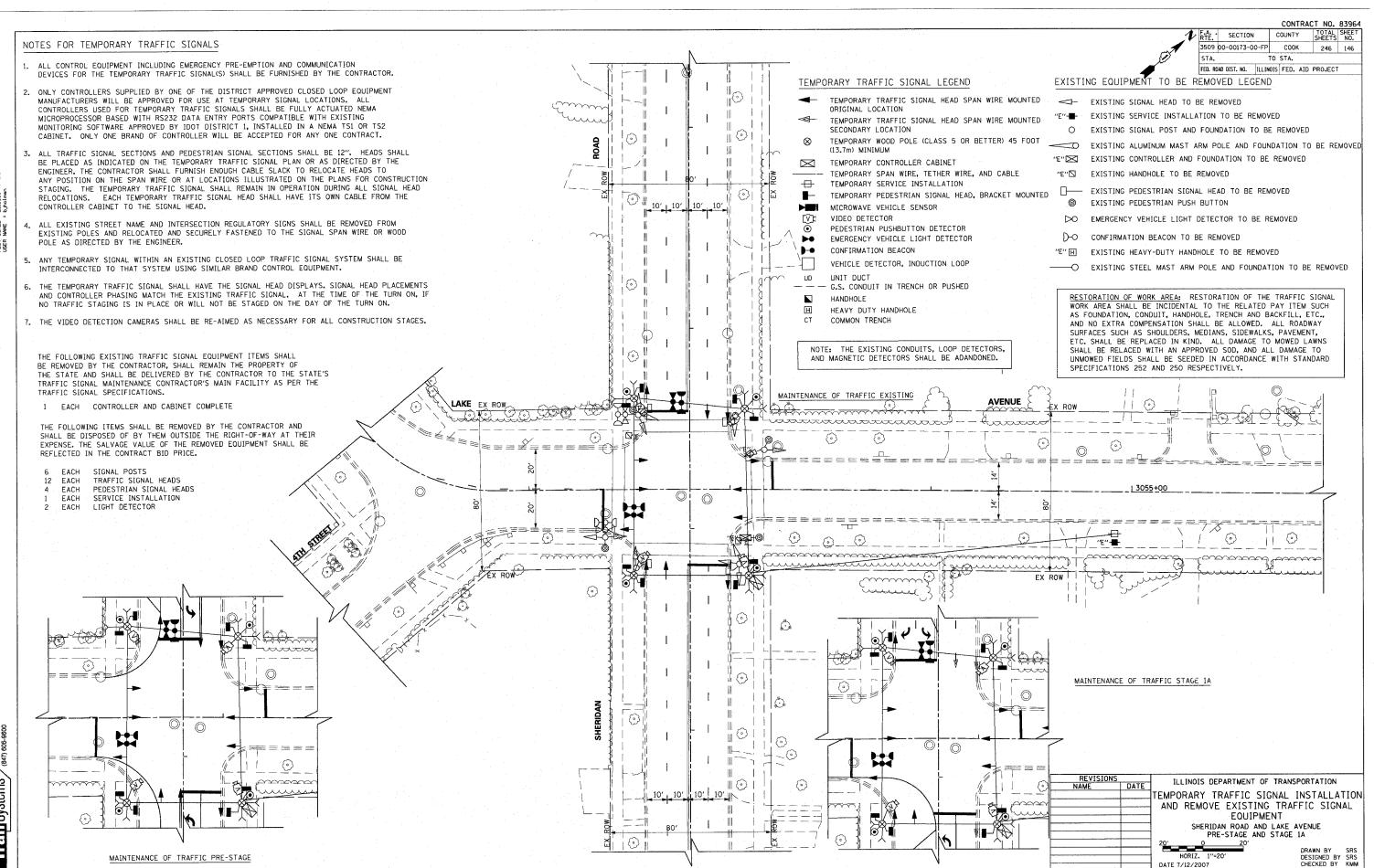






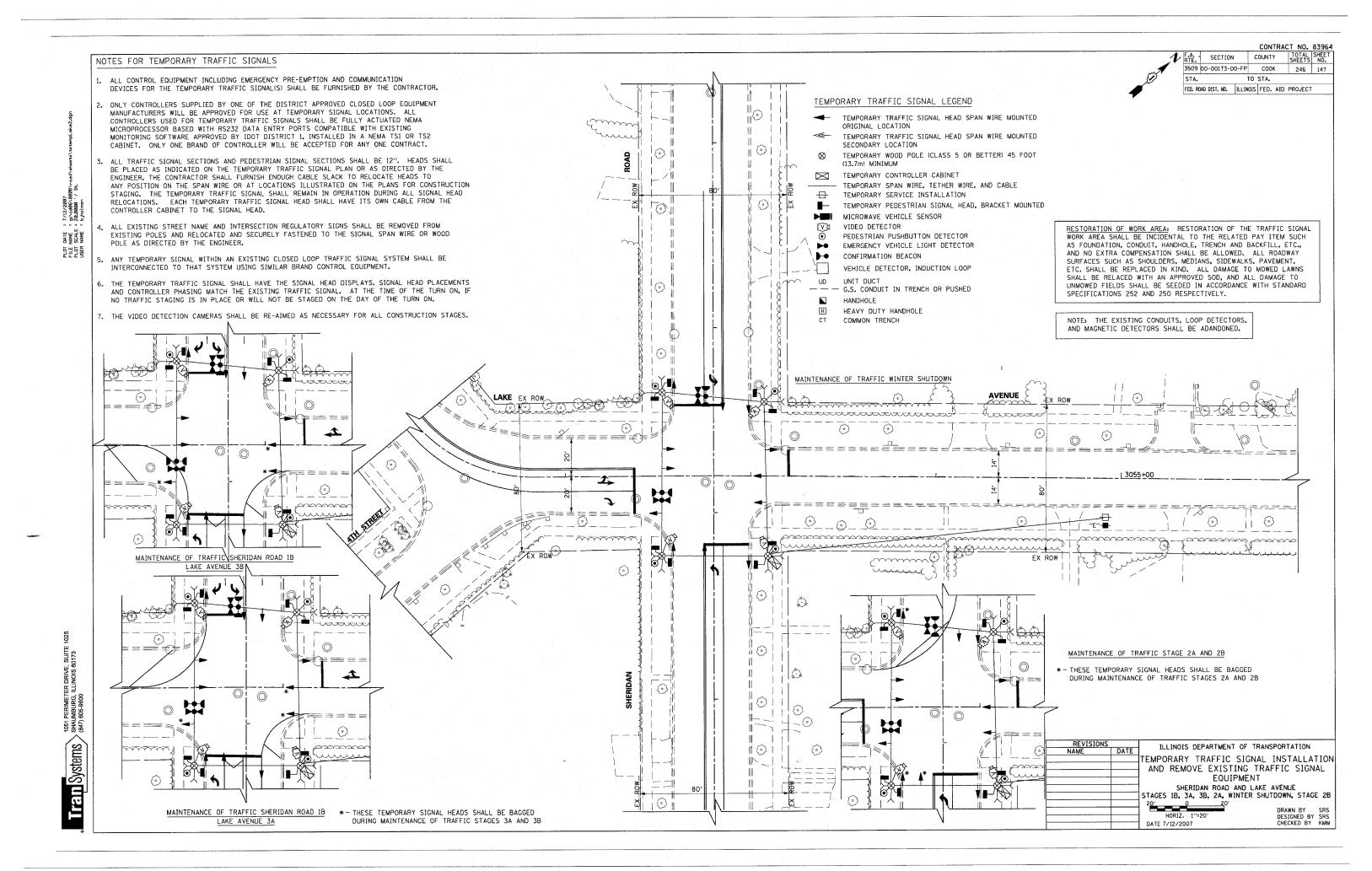






1051 PERIMETER DRIVE, SUITE 1025 SHAUMBURG, ILLINOIS 60173 (847) 605-9600

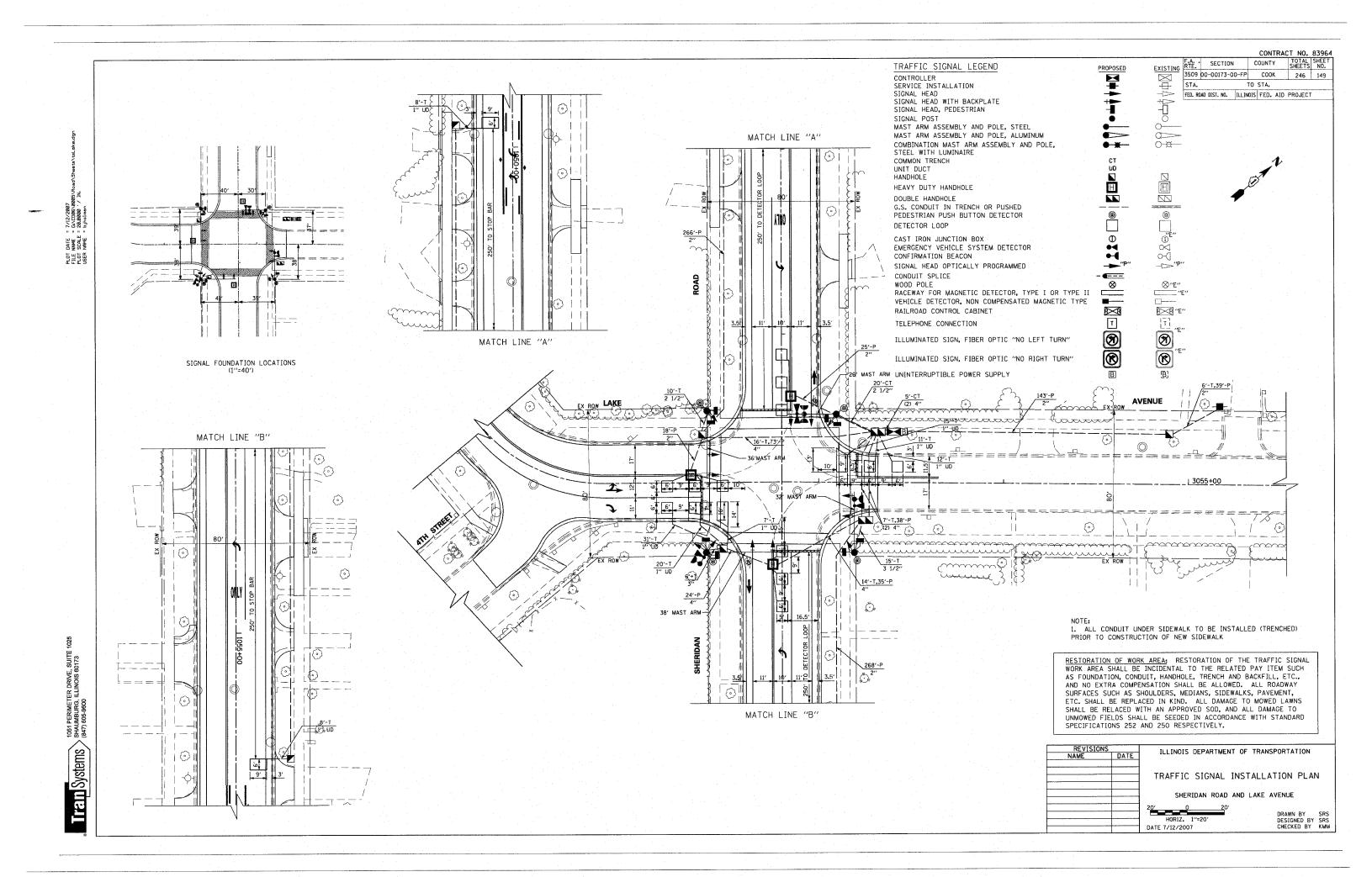
Ten Systems

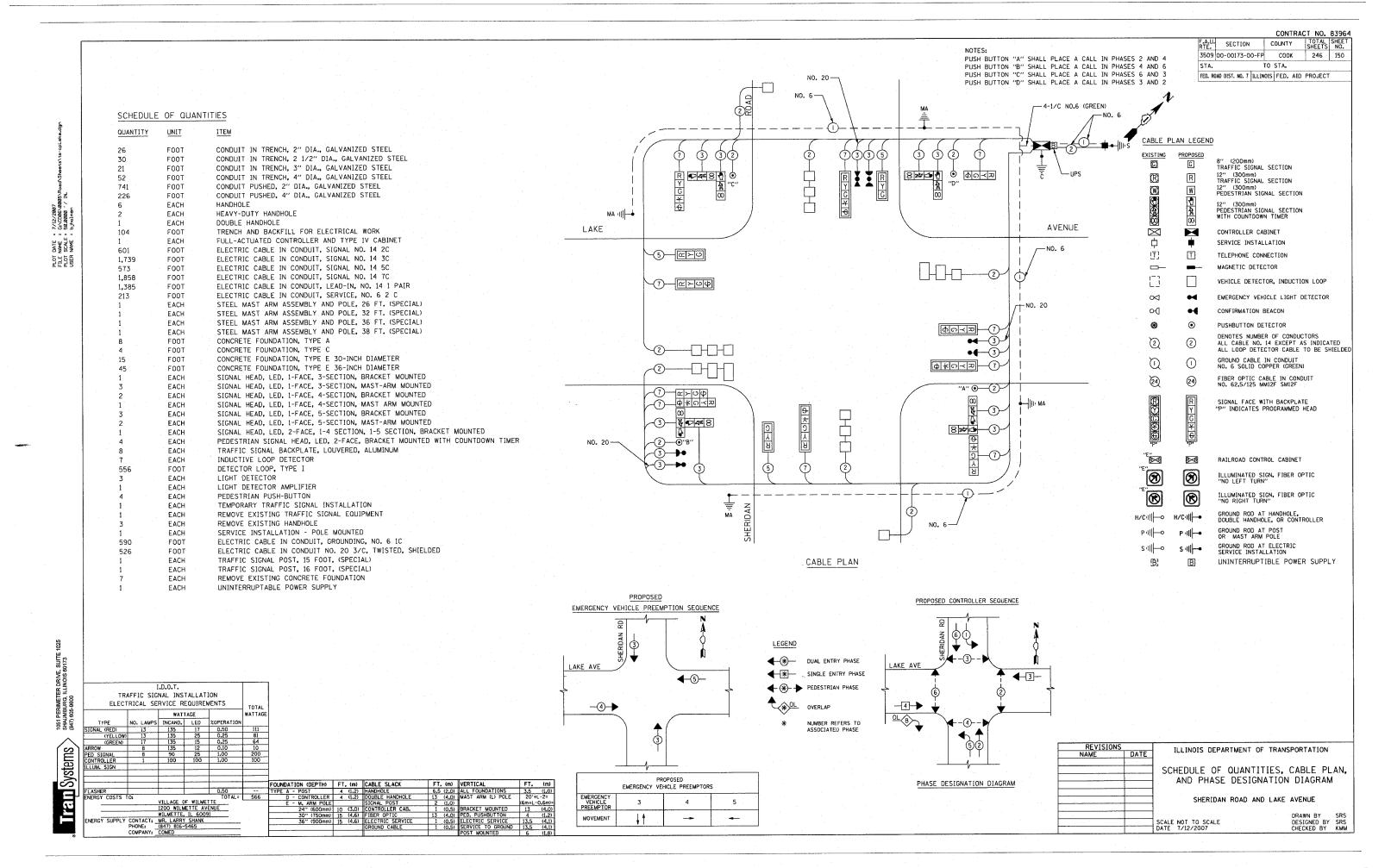


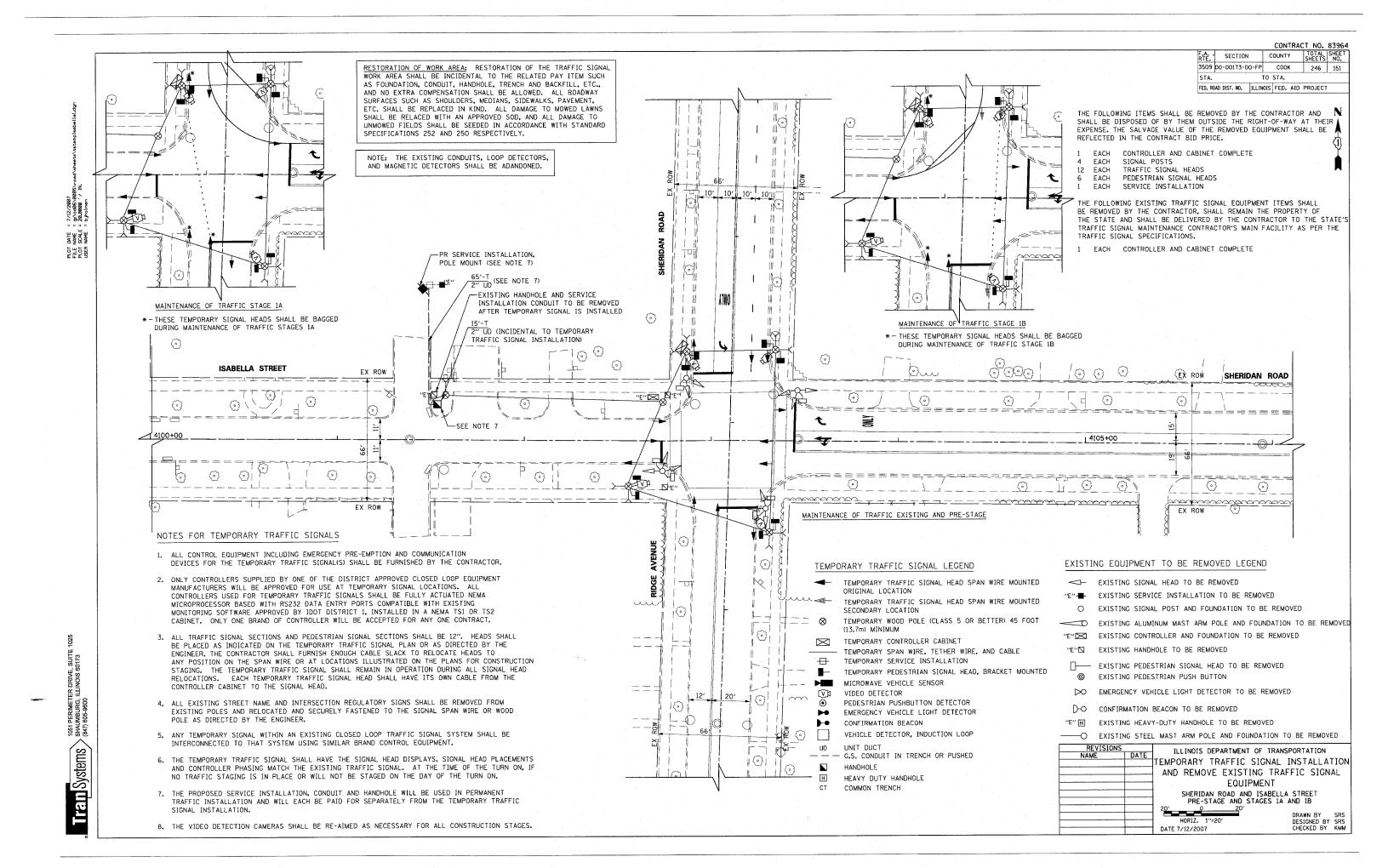
1051 PERIMETER DRIVE, SUITE 1026
SHAUMBURG, ILLINOIS 60173
(8427) 695,0600

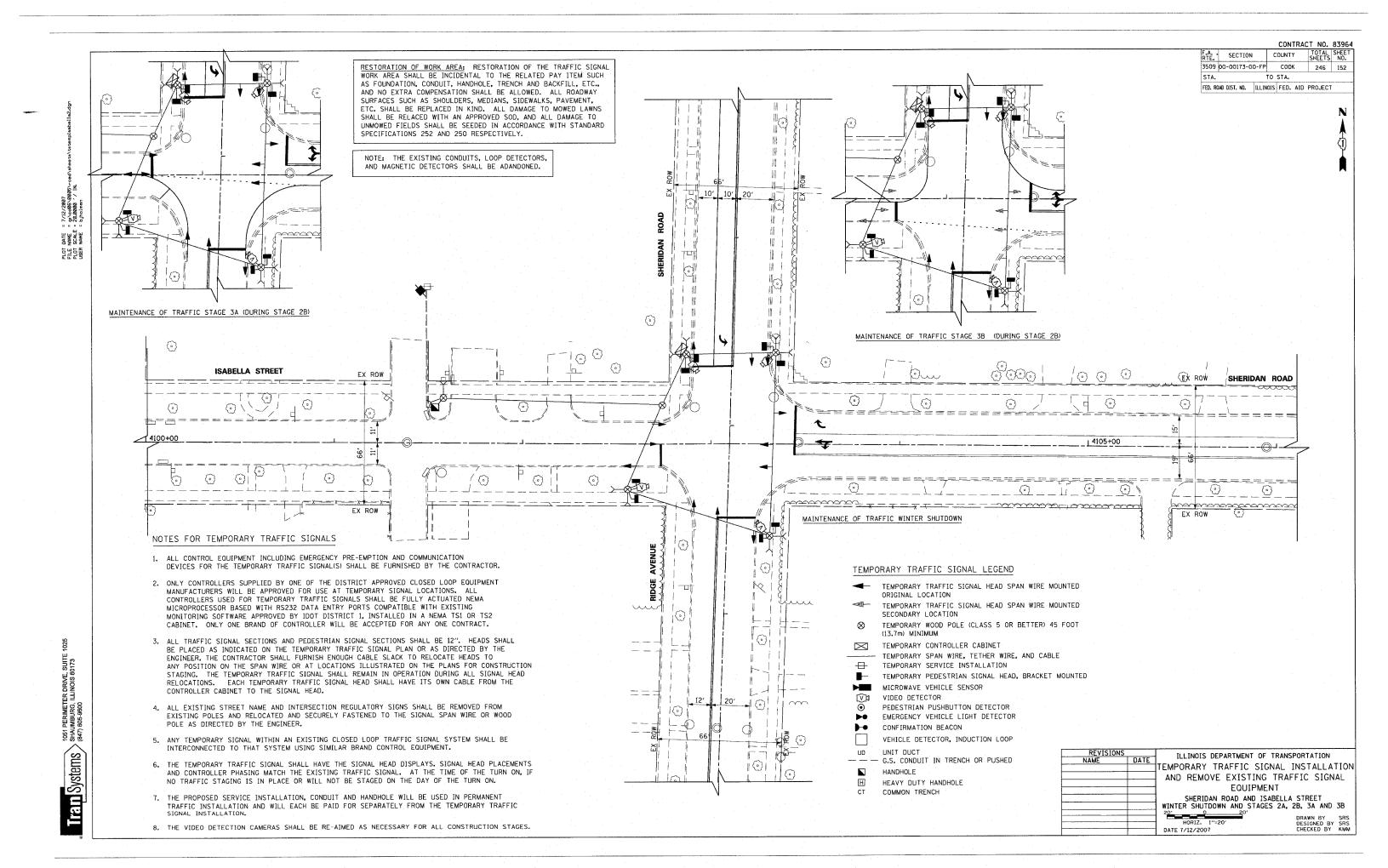
PLOT DATE = 7 FILE NAME = 6 PLOT SCALE = 5 USER NAME = b

ren Systems

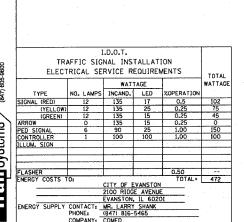












TEMPORARY CABLE DIAGRAM LEGEND

TEMPORARY CONTROLLER CABINET

TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm

TEMPORARY SERVICE INSTALLATION INDICATES NUMBER OF CONDUCTORS IN CABLE, ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED

► EMERGENCY VEHICLE LIGHT DETECTOR

VEHICLE DETECTOR, INDUCTION LOOP

CONFIRMATION BEACON

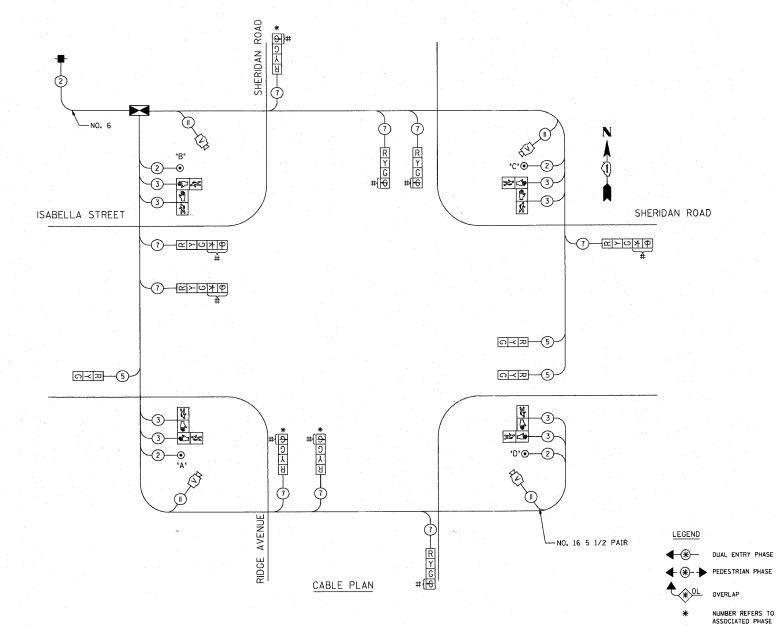
VI VIDEO DETECTOR

PUSHBUTTON DETECTOR

12" (300mm) PEDESTRIAN SIGNAL SECTION MICROWAVE VEHICLE SENSOR

 $\odot$ 

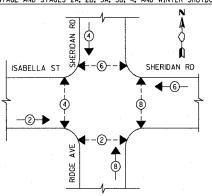
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4 PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8 (3) PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 8 (3) AND 2



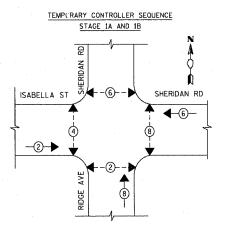
- I. DURING THE MAINTENANCE OF TRAFFIC PRE-STAGE AND STAGES 1, 2, 3 AND 4, THE SIGNAL HEADS SHALL BE MOVED AS NECESSARY TO ALIGN WITH THE TRAFFIC LANES.
- 2. - THESE SIGNAL HEADS SHALL BE BAGGED DURING MAINTENANCE OF TRAFFIC STAGE IA AND IB DUE TO THE TRAFFIC BEING ONE-WAY NORTHBOUND.
- 3. \* THESE SIGNAL LENSES SHALL BE DISPLAYED AFTER STAGE 4 IS COMPLETED
  IN CASE THE PERMANENT SIGNALS ARE NOT OPERATIONAL. DURING MAINTENANCE
  OF TRAFFIC PRE-STAGE AND STAGES ITHROUGH 4, THEY SHALL BE BAGGED AND REMAIN INACTIVE, THE PROPOSED CONTROLLER SEQUENCE POST STAGE 4 SHALL BE USED FOR PHASING.

COUNTY TOTAL SHEET NO. COOK 246 153 SECTION 3509 00-00173-00-FP COOK TO STA. FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT

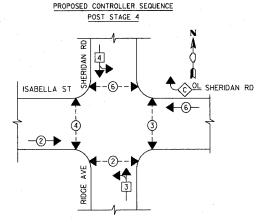
TEMPORARY CONTROLLER SEQUENCE PRE-STAGE AND STAGES 2A, 2B, 3A, 3B, 4, AND WINTER SHUTDOWN



PHASE DESIGNATION DIAGRAM

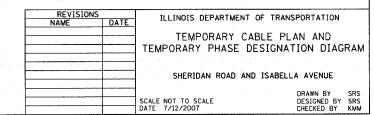


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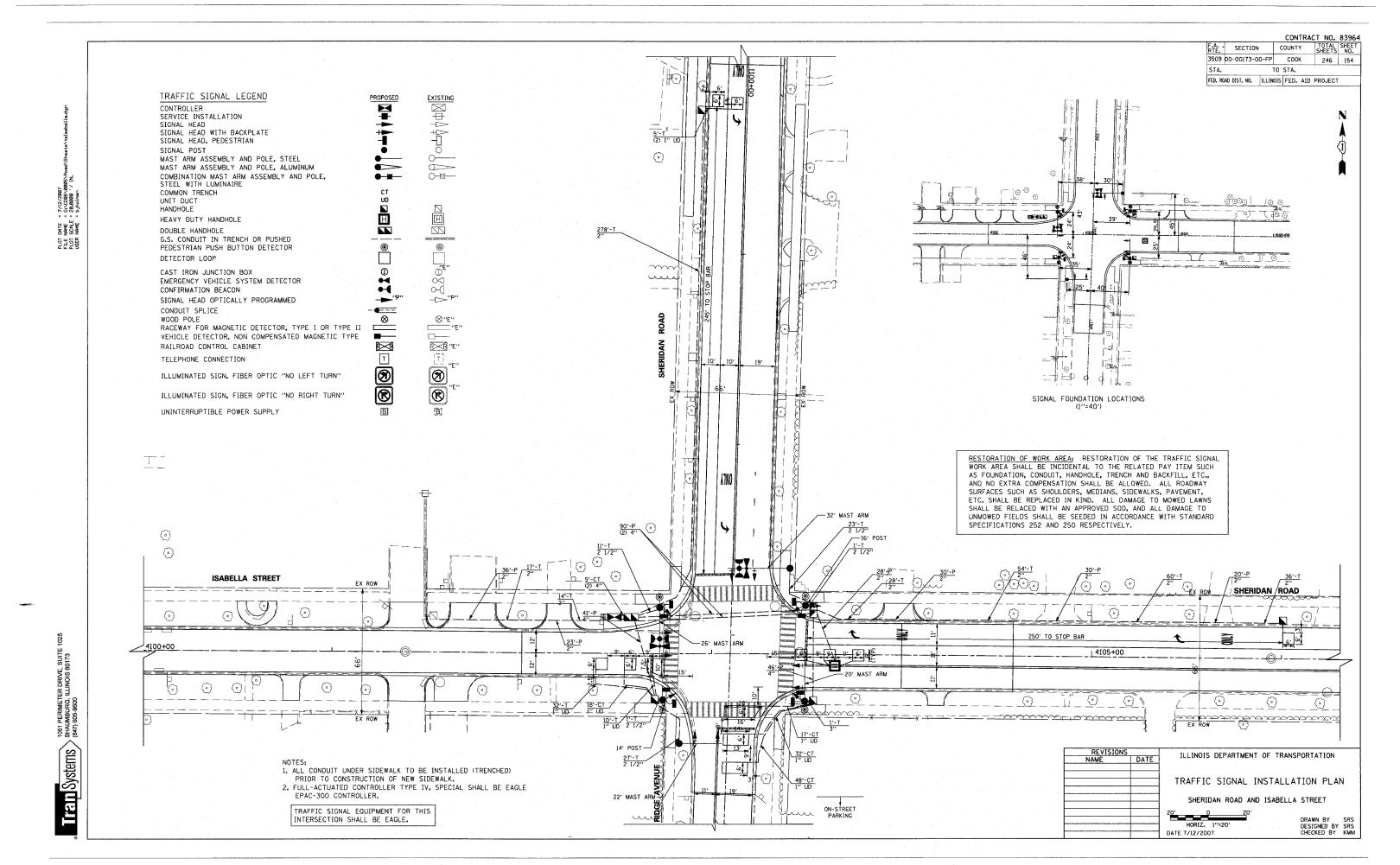


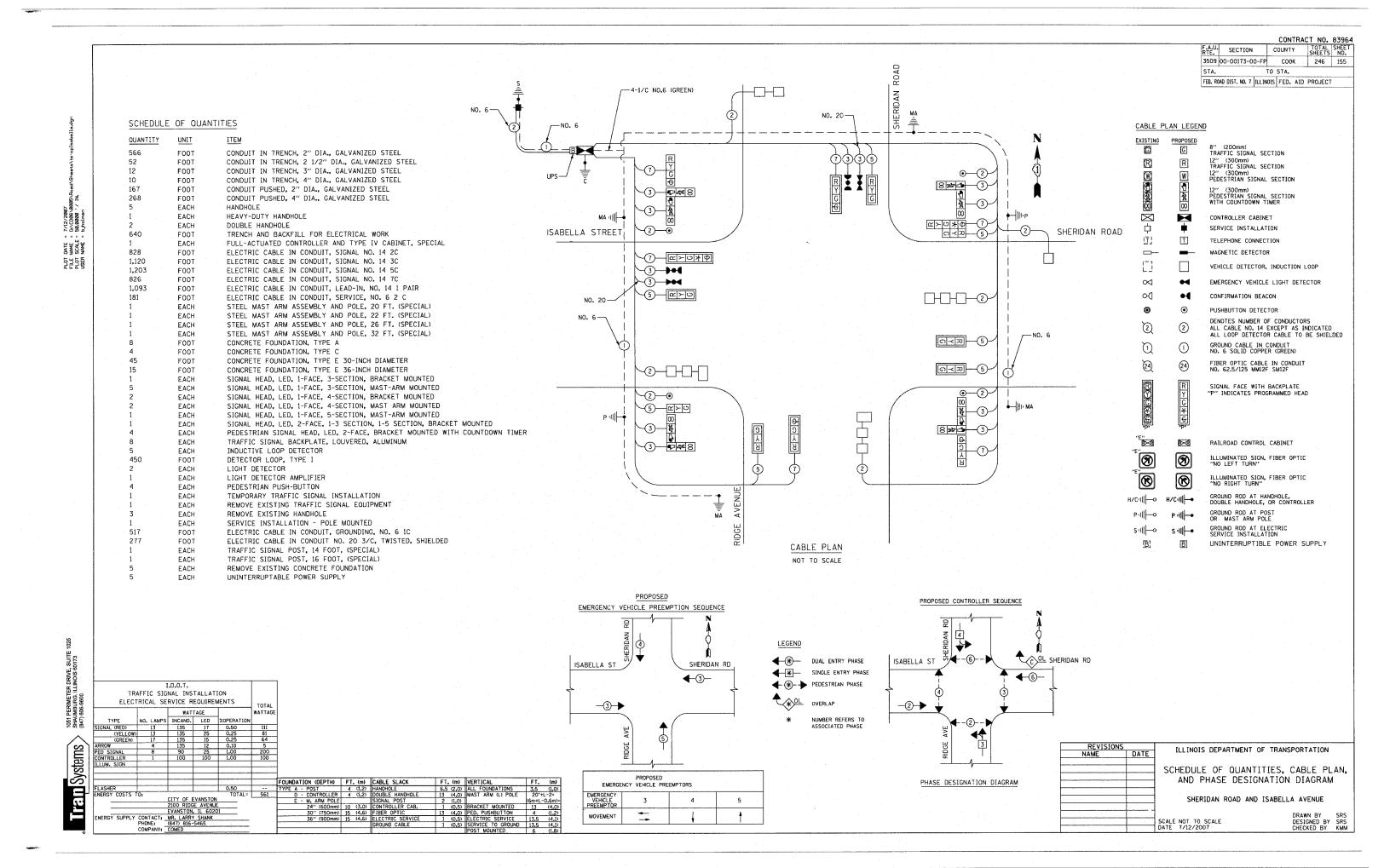
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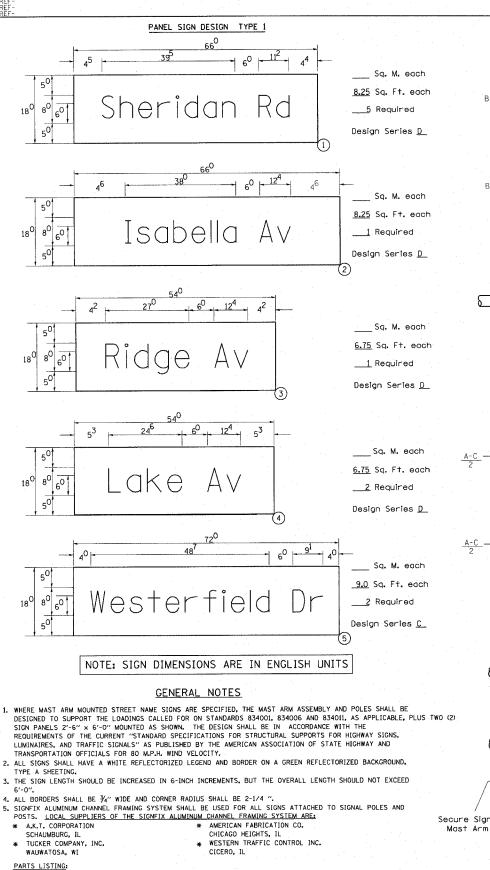
NUMBER REFERS TO ASSOCIATED PHASE



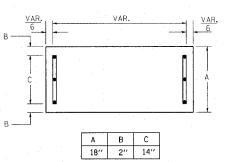
Systems 

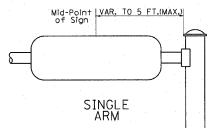




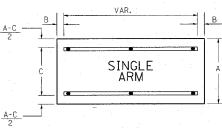


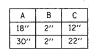
## SUPPORTING CHANNELS

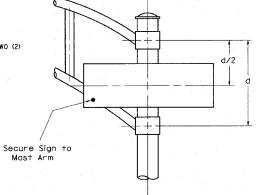




#### SUPPORTING CHANNELS







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

DUAL

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

											-						
							SEC	ONE	L	ETT	ER						
			d e	b h m n f	ikl	f	w	j	1	s	†	>	У	<b>&gt;</b>	ζ	Z	<u>z</u>
	SERIES	C	D	С	D	U,	ם	C	О	O	D	C	D	C	D	C	D
	AWX	12	14	14	15	12	14	06	10	1 <sup>1</sup>	14	06	10	11	12	12	14
	В	14	15	20	21	14	15	1 <sup>1</sup>	12	14	1 <sup>5</sup>	12	14	12	14	16	17
	CEG	1.4	15	20	21	12	14	06	10	12	14	12	14	14	1 <sup>5</sup>	14	1 <sup>5</sup>
F	D 0. Q R	14	15	20	21	14	15	06	10	12	14	12	14	14	1 <sup>5</sup>	14	1 <sup>5</sup>
F I R	F	05	0.6	14	15	06	10	05	06	06	10	06	10	Og	10	11	12
S T	HIMN	20	21	22	24	20	21	14	1 <sup>5</sup>	16	17	16	17	20	21	20	21
	JU	2 0	2 <sup>1</sup>	20	21	16	17	14	15	16	17	16	17	16	17	20	21
Ē.	K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
LETTER	Р	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
E R	S	1 <sup>2</sup>	14	16	17	12	14	06	10	12	14	12	14	1 <sup>2</sup>	14	12	14
	Т	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14

15 11 12 06 10 12 14 12 14 12 14 12 14

15 06 10 05 06 05 07 05 06 06 10 11 12

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

						-	SE	CON	ND	LET	TEF	7					
		a c g (		рh		f	W		1	s	†	٧	У	,	<	2	Z
	SERIES	С	D	С	D	С	D	С	D	C	D	С	D	С	۵	С	D
F	adhgij Imnqu	16	1 <sup>7</sup>	2 <sup>2</sup>	24	16	17	12	14	14	15	14	15	16	17	16	17
Ř S	bfkops	12	14	16	17	11	12	O <sup>5</sup>	06	11	12	11	12	12	14	12	14
Τ.	се	12	14	16	17	12	14	0e	10	12	14	12	14	12	14	12	14
L E T	r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	Оe	10
Ī	† z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
Ė R	νу	11	12	14	15	11	12	05	06	06	10	06	10	11	12	1 <sup>1</sup>	12
П	w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
	×	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

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

											SE	CO	ΝD	NU	MB	ER							
.				(	)		1	2	2	- 3	3	4	1	5	5	6	3	•	7	8	}	,	3
		SE	RIES	С	D	С	D	С	D	С	D	С	D	С	D	С	D	U	D	С	۵	С	D
	F	0	9	16	17	1 <sup>6</sup>	17	14	1 <sup>5</sup>	12	14	14	1 <sup>5</sup>	14	1 <sup>5</sup>	16	17	12	14	16	17	1 <sup>6</sup>	17
	R	1		2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	21	2 <sup>0</sup>	21	16	17	14	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	20	21	14	1 <sup>5</sup>	20	21	20	2 <sup>1</sup>
	T	2	3 4	14	15	14	15	14	1 <sup>5</sup>	12	14	12	14	14	15	14	1 <sup>5</sup>	11	12	1 <sup>6</sup>	17	14	15
	N U	5		14	15	14	15	14	1 <sup>5</sup>	1 <sup>1</sup>	12	11	1 <sup>2</sup>	14	1 <sup>5</sup>	14	15	1 <sup>1</sup>	1 <sup>2</sup>	14	1 <sup>5</sup>	14	1 <sup>5</sup>
	M B	6		1 <sup>6</sup>	17	14	15	14	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	12	14	14	1 <sup>5</sup>	14	1 <sup>5</sup>	11	12	14	1 <sup>5</sup>	14	1 <sup>5</sup>
	Ē R	- 7		12	14	12	14	14	1 <sup>5</sup>	12	1 <sup>5</sup>	0 <sup>5</sup>	06	12	14	14	1 <sup>5</sup>	11	1 <sup>2</sup>	14	1 <sup>5</sup>	12	14
		8		16	17	1 <sup>6</sup>	17	14	1 <sup>5</sup>	1 <sup>2</sup>	15	1 <sup>2</sup>	14	14	15	16	17	12	14	16	17	14	1 <sup>5</sup>

EXAMPLE,  $2^{3}$  DENOTES  $\frac{3''}{8}$ 

COUTTACT NO: 8396A

COUNTY TOTAL SHEET NO. SECTION COUNTY COOK 3509 00-00173-00-FP 246 156 TO STA. STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

#### UPPER AND LOWER CASE LETTER WIDTHS

E T E R S	6 INCH UPPER CASE LETTERS			H UPPER LETTERS	L E T		LOWER ETTERS
T E	SER	RIES	SEI	RIES	T T E_	SEF	RIES
R S	С	D	С	D	T E R S	C _	D
Α	36	50	50	6 <sup>5</sup>	ď	35	42
В	32	40	43	5 <sup>3</sup>	b	35	42
С	32	40	43	53	С	35	4 <sup>1</sup>
D	32	40	43	53	d	3 <sup>5</sup>	42
E	30	35	40	47	е	35	42
F	30	35	40	47	f	2 3	26
G	3 <sup>2</sup>	40	43	53	g	35	42
Н	3 <sup>2</sup>	40	43	- 53	ħ	35	42
1	0 7	07	11	12	Ī	1 1	1 1
J	30	36	40	50	J	20	22
к	32	41	43	54	k	35	42
L	3 0	35	40	47	1	1 1	- 1 <sup>1</sup>
М	37	45	51	6 <sup>1</sup>	m	60	70
N	32	40	43	53	n	35	42
0	34	42	45	5 <sup>5</sup>	. 0	36	43
P	.32	40	4 3	53	Р	35	42
٥	34	42	45	55	q.	3 <sup>5</sup>	42
R	3 <sup>2</sup>	40	43	5 3	r	26	32
S	3 <sup>2</sup>	40	43	5 <sup>3</sup>	s	36	42
Т	30	35	40	47	†	27	32
U	32	40	43	53	U	35	. 42
٧	35	44	47	60	٧	42	47
w	44	52	60	70	w	5 <sup>5</sup>	64
X	34	40	45	53	×	44	5 <sup>1</sup>
Y	36	50	50	66	У	46	53
Z	3 <sup>2</sup>	40	43	53	z	36.	43

N <sub>U</sub>	6 INCH	SERIES	8 INCH	SERIES
N <sub>UMBER</sub>	С	D	С	D
1	12	14	15	20
2	32	40.	43	53
3	32	40	43	5 3
- 4	35	43	4 7	57
5	32	40	43	53
6	32	40	43	53
7	3 <sup>2</sup>	40	43	53
8	32	40	4 <sup>3</sup>	53
9	3 2	40	43	53
0	34	42	45	5 <sup>5</sup>

REVISIONS	;
NAME	DATE
D.A.Z./D.A.G.	11/90
	6/98
CADD	10/00

Illinois Department of Transportation
DISTRICT 1

MAST ARM MOUNTED STREET NAME SIGNS

DATE: 7/13/07

DRAWN BY: RDB
DESIGNED BY: JHE
CHECKED BY: DAD

SIGN CHANNEL

SIGN SCREWS

PART #HPN053 (MED. CHANNEL)

PART #HPN034 (UNIVERSAL)

1/4" × 14 × 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER

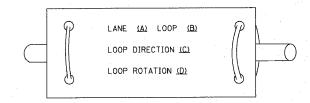
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

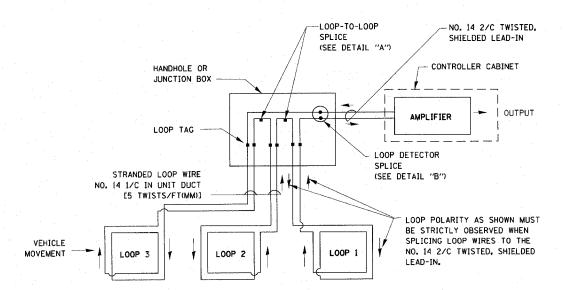
## LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP
- 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

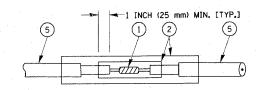


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

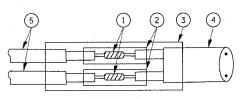


#### DETECTOR LOOP WIRING SCHEMATIC

- . 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

## LOOP DETECTOR SPLICE

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

REVISIONS		ILLINOIS DEPARTMENT	OF TRANSPORTATION
NAME	DATE	ILLINOIS DEPARTMENT	DI TRANSPORTATION
CADD	5/30/00	DICTRIC	T ONE
ADD NOTE NO. 8	11/12/01	DISTRIC	I ONE
BUREAU OF TRAFFIC	1-01-02	STANDARD TRA	FFIC SIGNAL
	-	DESIGN D	ETAILS
	1	20' 0 20'	
		HORIZ. 1"=20"	DRAWN BY: RWP DESIGNED BY: DAD
	-	DATE 7/12/2007	CHECKED BY: DAZ

TOTAL SHEET SHEETS NO.

246 157

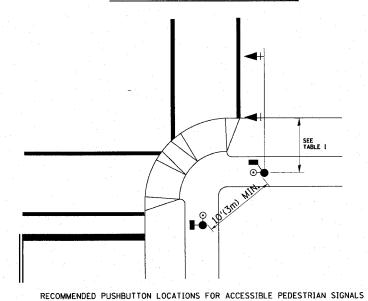
COUNTY

COOK

TO STA.

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

RTE. SECTION 3509 00-00173-00-FP PEDESTRIAN SIGNAL PUSHBUTTON



SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCO (SEE NOTE 1). TO MEET MUTCO REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE

MOUNTED ON A SEPARATE POST.

NOTES:

 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION. EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

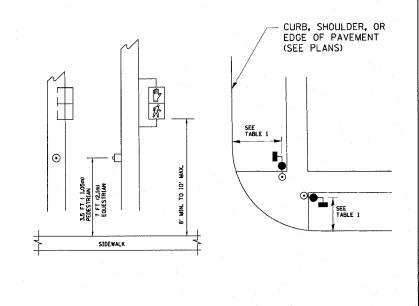
AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:

- A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
- B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
- C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
- E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2,4m) NOR MORE THAN 10 FT (3,0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- 3. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- 4. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION



1051 PERIMETER DRIVE, SUITE SHAUMBURG, ILLINOIS 60173 (847) 605-9600

Tram Systems

TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS
NAME DATE
CADD 5/30/00
ADD NOTE NO. 8 11/12/01
BUREAU OF TRAFFIC 1-01-02

STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

20' 0 20'

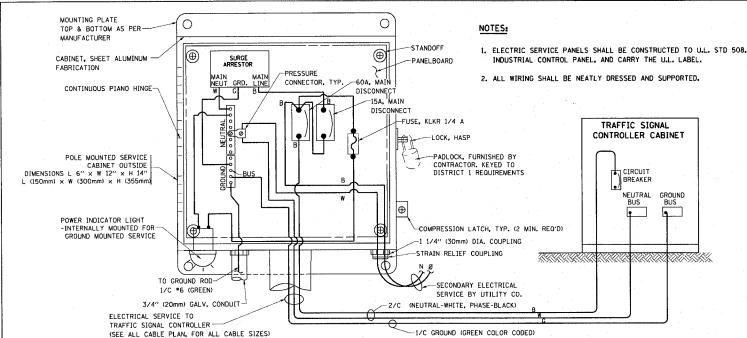
DRAWN BY: RWP

HORIZ. 1"=20"
DATE 7/12/2007

DRAWN BY: RWP DESIGNED BY: DAD CHECKED BY: DAZ SHEET 2 OF 4

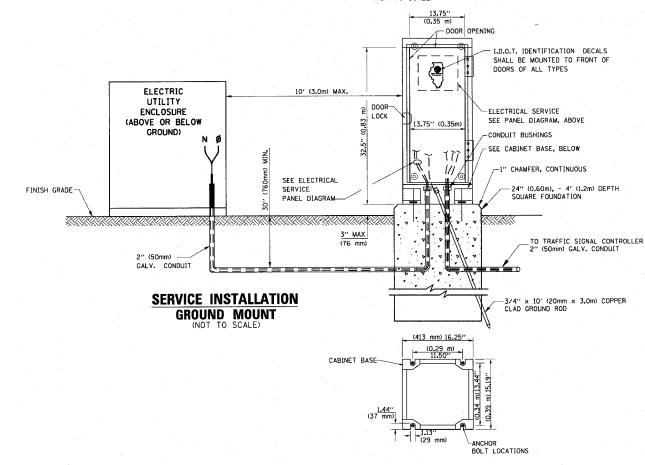






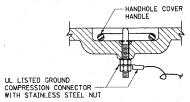
## ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

## SERVICE INSTALLATION POLE MOUNT (SHOWN)

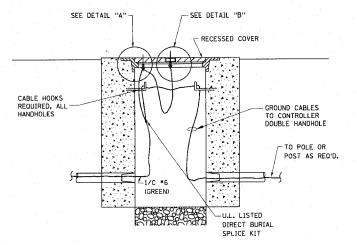


**CABINET - BASE BOLT PATTERN** (NOT TO SCALE)

- HANDHOLE COVER CAST CORNER FRAME WEB UL LISTED GROUND COMPRESSION CONNECTOR ANTI-CORROSION COMPOUND
SHALL BE APPLIED ON ALL
BOLT/ CONNECTION ASSEMBLIES. **DETAIL "A"** -STAINLESS STEEL NUT AND 2 STAINLESS

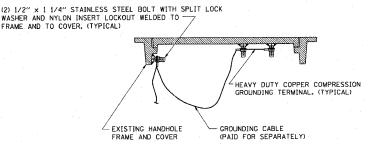


DETAIL "B"



#### HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)



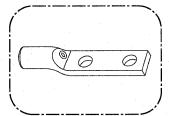
### **EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL**

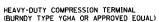
(NOT TO SCALE)

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.







CONTRACT NO. 8396

246 159

COUNTY

COOK

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

SECTION

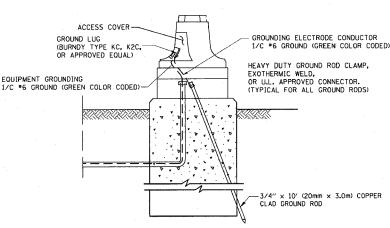
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STA.

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

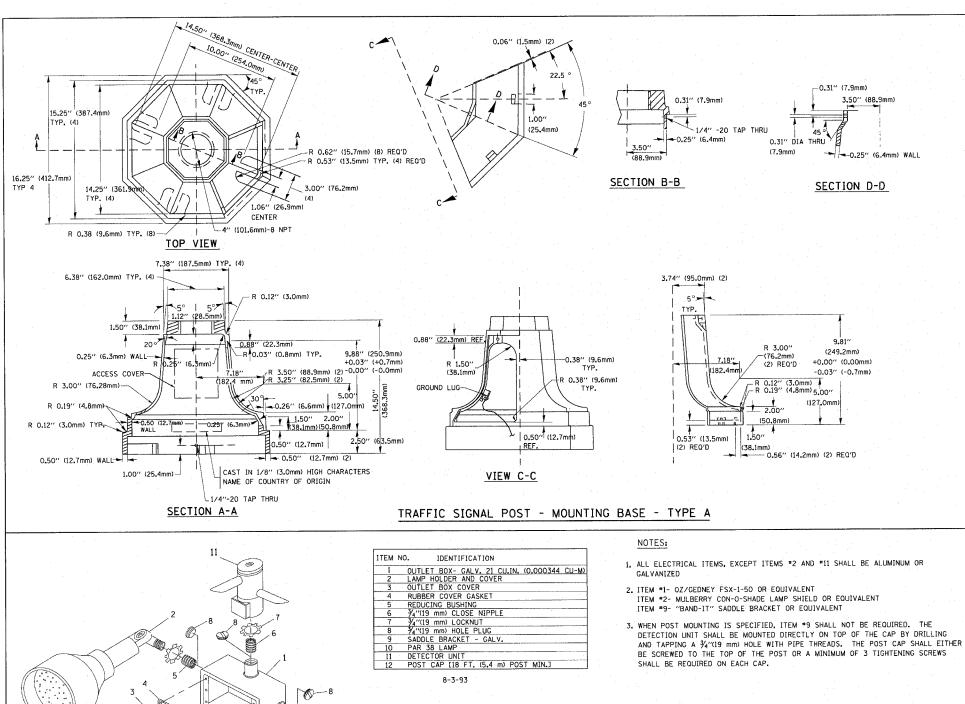
#### NOTES:

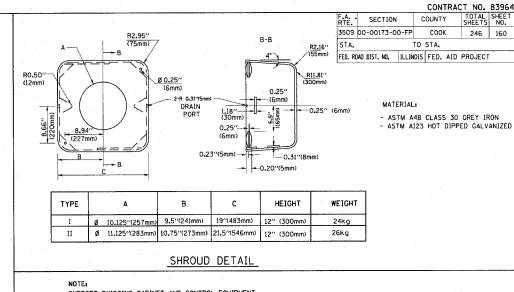
. ALL CLAMPS SHALL BE BRONZE OR COPPER. UL APPROVED. GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

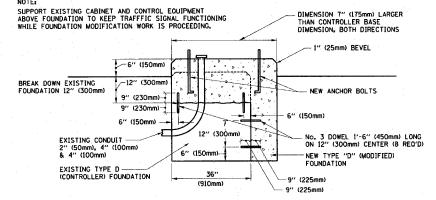


#### MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)

REVISIONS		ILLINOIS DEPARTMENT O	F TRANSPORTATION
NAME	DATE	ILLINOIS DEI ARTIMENT O	TRANSFORTATION
CADD	5/30/00	DISTRICT	ONE
ADD NOTE NO. 8	11/12/01	DISTRICT	UNE
BUREAU OF TRAFFIC	1-01-02	STANDARD TRAF	FIC SIGNAL
		•	
		DESIGN DE	ETAILS
		20' 0 20'	
	+	20' 0 20'	DRAWN BY: RWP
		HORIZ. 1"=20"	DESIGNED BY: DAD
		DATE 7/12/2007	CHECKED BY: DAZ

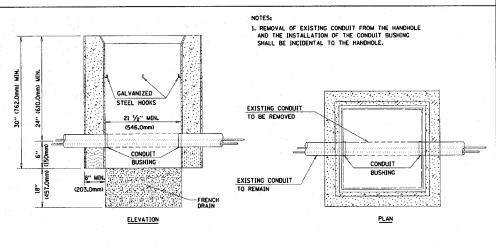


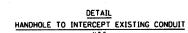




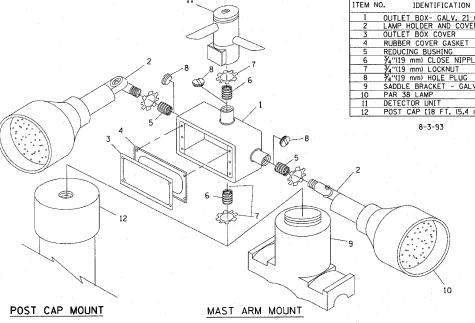
MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)





REVISIONS		THE INOIS DEPARTMENT	OF TRANSPORTATION
NAME	DATE	TEETHOIS BEI ANTIMEN	or mansi omanion
CADD	5/30/00	DICTOR	OT ONE
ADD NOTE NO. 8	11/12/01	DISTRIC	JI UNE
BUREAU OF TRAFFIC	1-01-02	STANDARD TR	AFFIC SIGNAL
		DESIGN	DETAILS
		20' 0 20' HORIZ. 1''=20' DATE 7/12/2007	DRAWN BY: RWP DESIGNED BY: DAD CHECKED BY: DAZ SHEET 4 OF 4

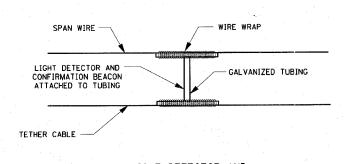


EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

DATE = NAME = SCALE = NAME =

1051 PERIMETER DRIVE, SUITE SHAUMBURG, ILLINOIS 60173 (847) 805-9600

Train Systems



CONFIRMATION BEACON MOUNTING
FOR TEMPORARY TRAFFIC SIGNALS
(NOT TO SCALE)

# SCHEDULE OF QUANTITIES

QTY.	UNIT	ITEM
2	EACH	GROUND ROD, 5%" DIA. X 10 FT.
1,544	FOOT	CONDUIT IN TRENCH, 21/2" DIA., GALVANIZED STEEL
120	FOOT	CONDUIT PUSHED, 21/2" DIA., GALVANIZED STEEL
131	EACH	HANDHOLE, COMPOSITE CONCRETE, SPECIAL
23,005	FOOT	UNIT DUCT, 600V, 2-10 NO.6, 1/C NO.6 GROUND, (EPR-TYPE RHW), 1" DIA. POLYETHYLENE
15,275	FOOT	AERIAL CABLE, 2-1/C NO. 6 WITH MESSENGER WIRE
21,035	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
75	EACH	LIGHT POLE, WOOD, 30 FOOT, CLASS 3
16	FOOT	LIGHT POLE FOUNDATION, 24" DIAMETER
27	EACH	POLE FOUNDATION, METAL
11	EACH	REMOVAL OF EXISTING LIGHTING UNIT, NO SALVAGE
15	EACH	LIGHTING FOUNDATION REMOVAL
15	EACH	RELOCATE EXISTING LIGHTING UNIT
12	EACH	REMOVE EXISTING HANDHOLE
1	L SUM	MAINTENANCE OF EXISTING LIGHTING SYSTEM COMPLETE
15	EACH	LUMINAIRE, METAL HALIDE, HORIZONTAL MOUNT, 250 WATT
13	EACH	LIGHT POLE, ALUMINUM, 35 FT. M.H., 10 FT. DAVIT ARM (SPECIAL)

#### GENERAL NOTES

- 1. AERIAL CABLE SHALL BE CONNECTED TO THE INGROUND JUNCTION BOX OR HANDHOLE TO MAINTAIN CIRCUIT CONTINUITY & TO ENSURE STREET LIGHTS ARE OPERATIONAL DURING NIGHT HOURS FROM DUSK TO DAWN THROUGHOUT CONSTRUCTION.
- 2. AERIAL CABLE IS SHOWN TO BE INSTALLED ON THE WEST SIDE OF SHERIDAN ROAD. FOR STAGE CONSTRUCTION OF SOUTH BOUND SHERIDAN ROAD. CONTRACTOR WILL BE REQUIRED TO REUSE AERIAL CABLE ON THE EAST SIDE TO MAINTAIN LIGHTING SYSTEM OPERATION DURING CONSTRUCTION OF NORTH BOUND SHERIDAN ROAD, THE COST FOR THIS WORK SHALL NOT BE PAID FOR SEPARTELY BUT SHALL BE INCLUDED IN THE UNIT COST OF AERIAL CABLE.
- 3. DO NOT CONNECT WILMETTE STREET LIGHTS TO EVANSTON STREET LIGHTS. SEE PLANS FOR LIGHTING BOUNDARY LIMITS.
- 4. SPLICE AT INGROUND JUNCTION BOX (HANDHOLES) LOCATED ADJACENT TO EXISTING LIGHT POLES. THE SPLICE SHALL BE WATERPROOF USING 3M-EPOXY SPLICE KIT.
- 5. CABLE DUCT WITH CONDUCTORS SHALL BE PLACED AT 2' MINIMUM DEPTH IMMEDIATELY BEHIND CURB AND GUTTER.
- 6. CABLE DUCT SHALL BE PULLED THROUGH RIGID CONDUIT UNDER ALL ROADWAYS AND AS INDICATED ON THE PLANS.
- 7. CONTRACTOR MAY BE ALLOWED WITH THE ENGINEER'S APPROVAL TO BYPASS JUNCTION BOX/HANDHOLES LOCATED ADJACENT TO EXISTING LIGHT STANDARDS AND SPLICE UNDERGROUND FEEDER CABLES IN DUCT VIA TAP IN LIGHT STANDARD POLE HANDHOLE ABOVE GROUND.
- 8. RELOCATED POLES SHALL BE 3' FROM THE FACE OF CURB TO FACE OF POLE AND 3' MIN. FROM FROM DRIVEWAY APRONS. PROPOSED POLES SHALL BE 6.5' FROM THE FACE OF CURB TO THE FACE OF POLE.
- 9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES FOR EXAMINATION AND CONFIRMATION WITH THE RESIDENT ENGINEER. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO AUGURING FOR LIGHT POLE FOUNDATIONS. THE EXACT LOCATIONS OF ALL ITEMS SHALL BE CONFIRMED WITH THE RESIDENT ENGINEER PRIOR TO STARTING WORK.
- 10. A GROUND ROD SHALL BE PROVIDED FOR EACH CONCRETE FOUNDATION (CITY OF EVANSTON POLES ONLY). GROUNDING CONNECTIONS MADE TO THE FOUNDATION SHALL BE EXOTHERMICALLY WELDED, AS SPECIFIED IN THE PLAN DETAILS, AND SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING, AS APPLICABLE.
- 11. PARALLEL UNIT DUCT RUNS SHOWN ON THE PLANS SHALL BE PLACED IN A COMMON TRENCH (CT).
- 12. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE SPECIFIED REQUIREMENTS FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED BY THE ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF THE FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATIONS WITH THE TOP OF THE FOUNDATION HEIGHTS REMAINS WITH THE CONTRACTOR.
- 14. A COMPOSITE CONCRETE HANDHOLE SHALL BE FURNISHED AND INSTALLED AT EACH WILMETTE OWNED LIGHTING UNIT FOR SPLICING THE PROPOSED UNIT DUCT WIRING. THE HANDHOLE SHALL BE PLACED APPROX. ONE (1) FOOT HORIZONTALLY FROM THE POLE BASE. UNIT DUCT AND WIRING SHALL BE INTALLED FROM HANDHOLE TO POLE BASE. CABLES SHALL BE SPLICED TO POLE WIRE IN POLE HANDHOLE. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE UNIT DUCT.

LEGEND		FED. ROAD DIST. NO.	7 ILLINOIS FED.	AID PROJECT		
X AND	EXISTING STREET LIGHTING UNIT TO REMAIN					
AC	AERIAL CABLE 2-1/C *6 AND STEEL MESSENGER AS GROUND	CONDUCTOR				
$\otimes$	TEMPORARY WOOD POLE WITHOUT LUMINAIRE FOR AERIAL CA	ABLE SUPPORT				
, 🛛	EXISTING INGROUND JUNCTION BOX OR HANDHOLE					
ER 💥	EXISTING STREET LIGHTING UNIT TO BE RELOCATED			<u>.</u>		
ESLX	EXISTING STREET LIGHTING UNIT FOR EVANSTON					
$\bowtie$	EXISTING STREET LIGHTING CONTROLLER					
	PROPOSED 1" CABLE DUCT WITH 2-1/C #6 & 1-1/C #6 INSU	JLATED GROUND	IN TRENCH			
P or T 	PROPOSED 2 1/2" RIGID GALVANIZED STEEL CONDUIT (P-PUS	HED), (T-TRENCH	), (L-LENGTH)	AS NOTED		
•	CABLE SPLICE					
RLD	RELOCATED STREET LIGHTING UNIT					
×	PROPOSED INGROUND JUNCTION BOX/HANDHOLE WITH SPLICE					
-	EXISTING STREET LIGHT ON BRIDGE TO REMAIN					
REM	EXISTING STREET LIGHTING UNIT TO BE REMOVED					
PR	PROPOSED STREET LIGHTING UNIT, FLUTED POLE WITH					
•	10' DAVIT ARM, 35' MH, 250 WATT, METAL HALIDE, 240V, M	M-C-111 LUMINAIF	RE			
c	PROPOSED COMBINATION TRAFFIC SIGNAL/LIGHT POLE, FLUT 10' DAVIT ARM, 35' MH, 250 WATT, METAL HALIDE, M-C-111.		RE.			
STA -		~				
* *	STATION LIGHT POLE CIRCUIT AND POLE NUMBER					
- CONTROLLER						
DESIGNATION POLE NUMBER						



ILLINOIS DEPARTMENT OF TRANSPORTATION LIGHTING SCHEDULE OF QUANTITIES, GENERAL NOTES, & LEGEND SHERIDAN ROAD

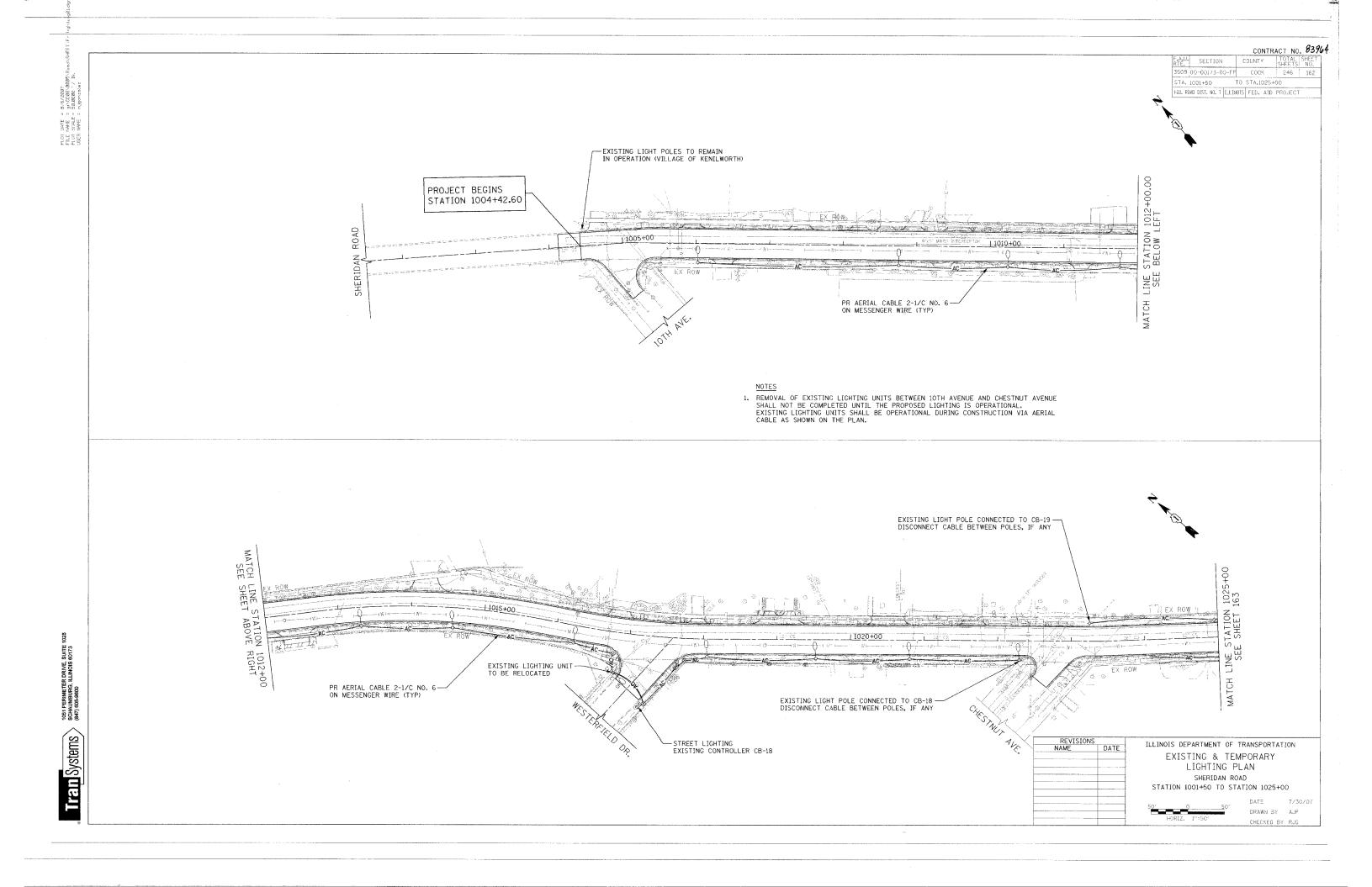


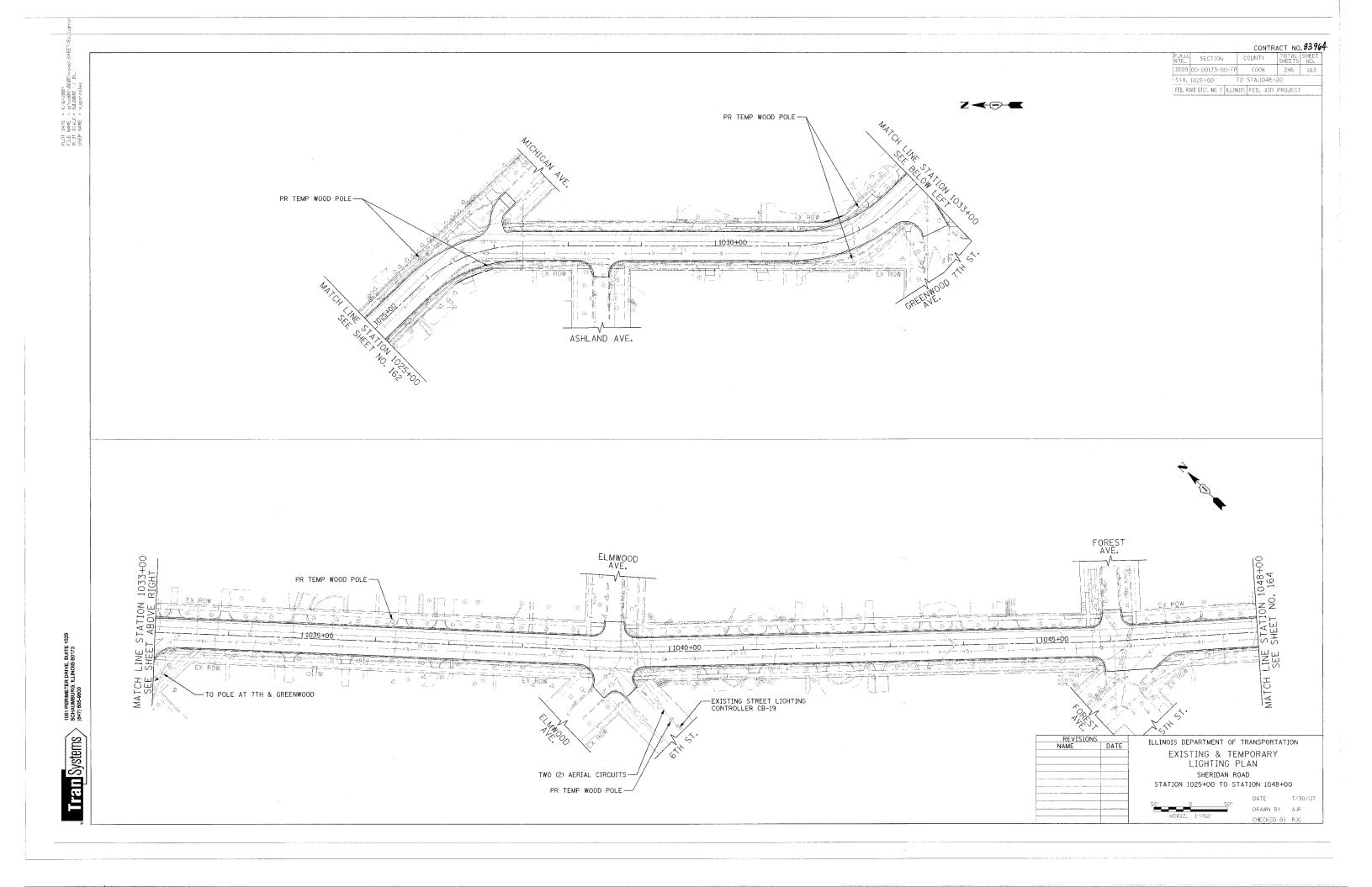
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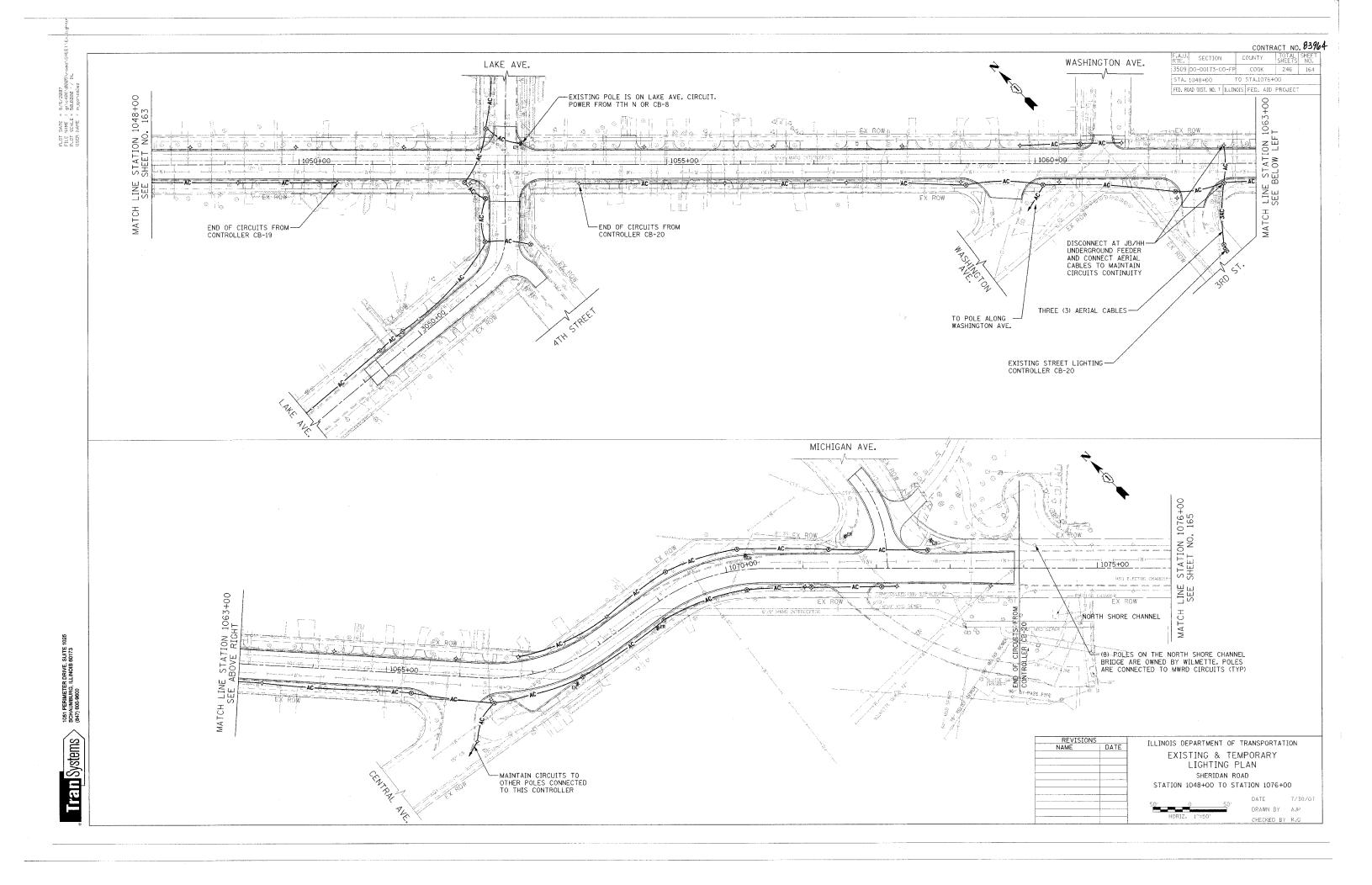
CONTRACT NO. 83964

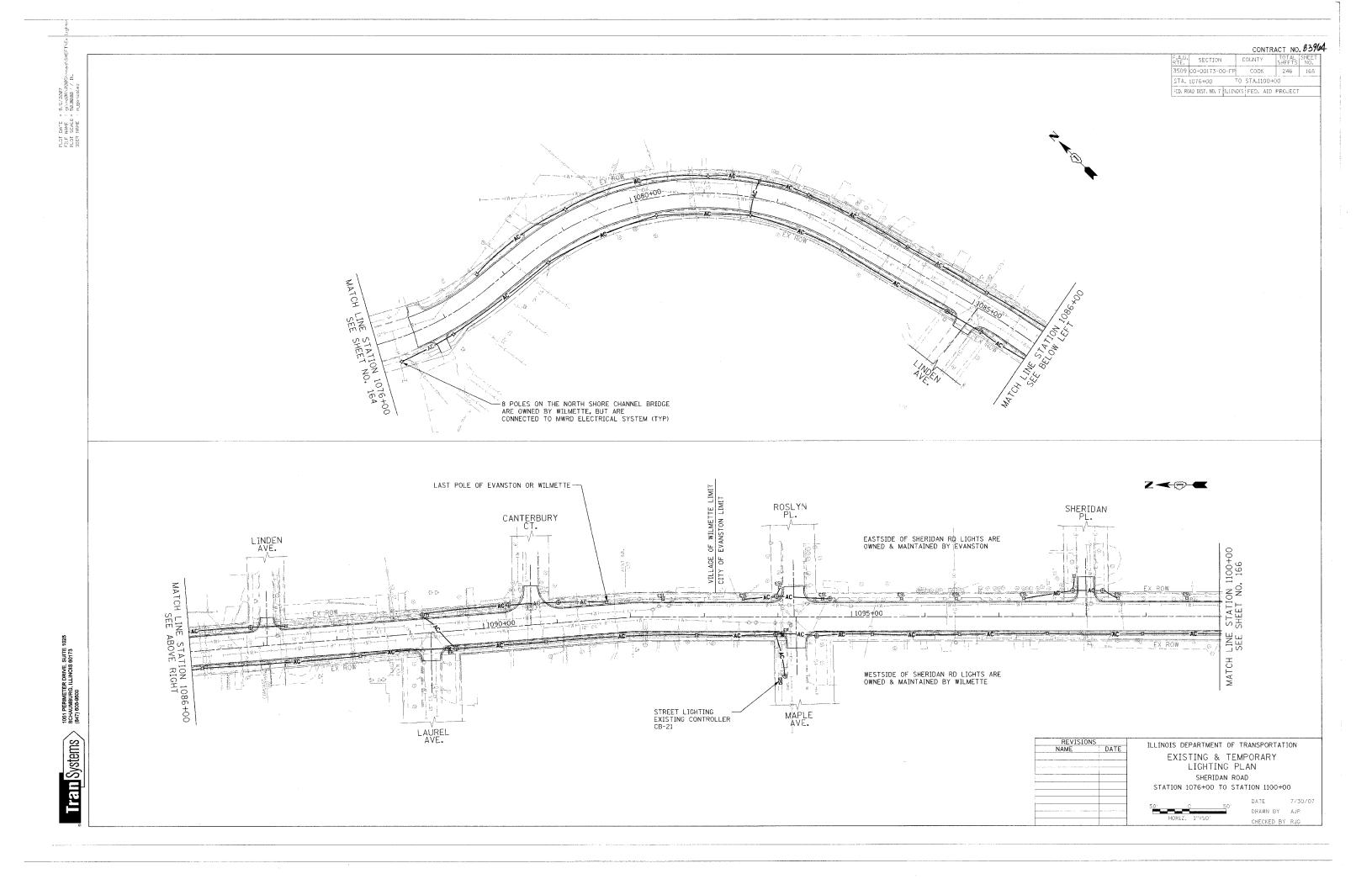
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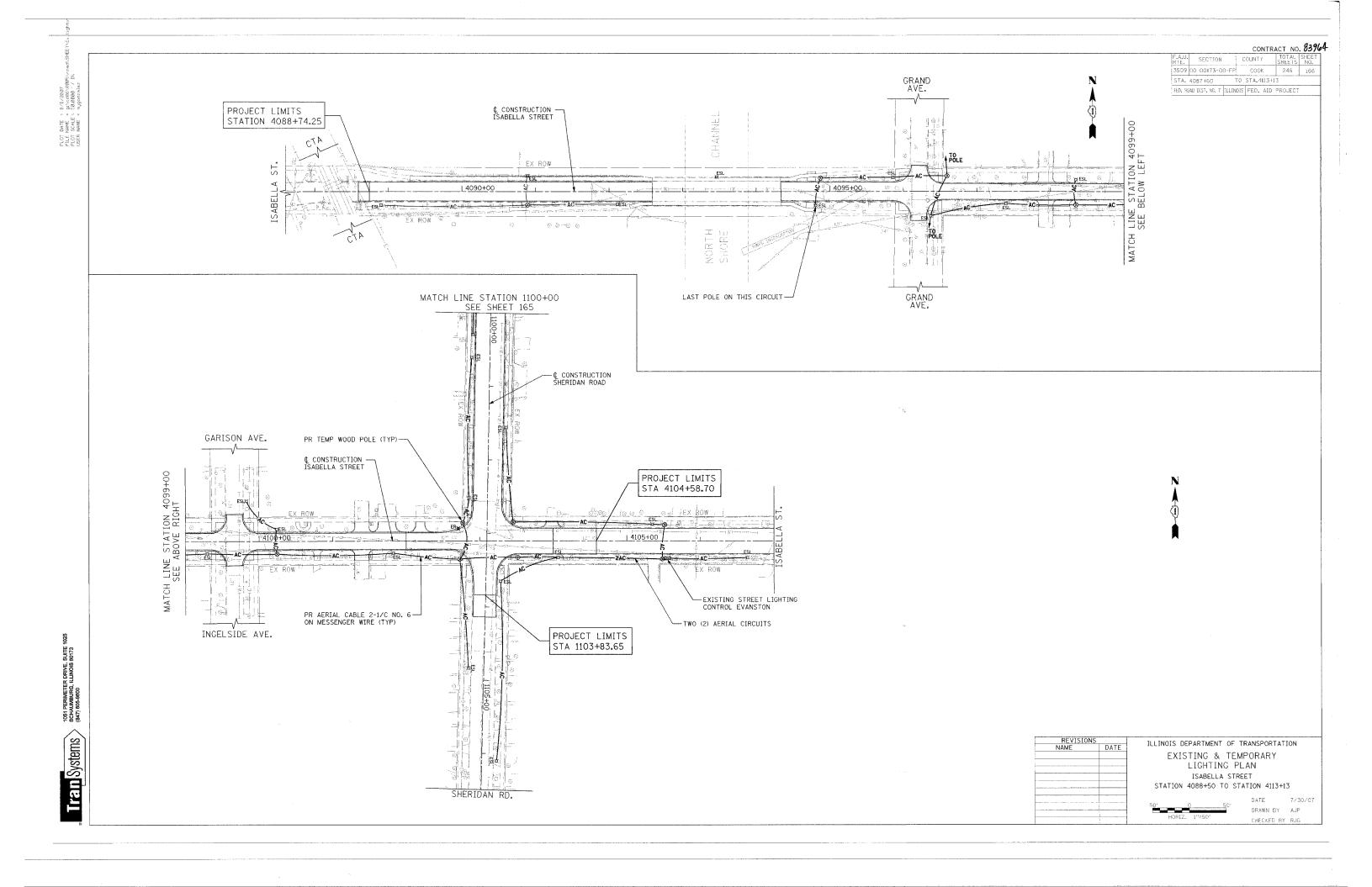
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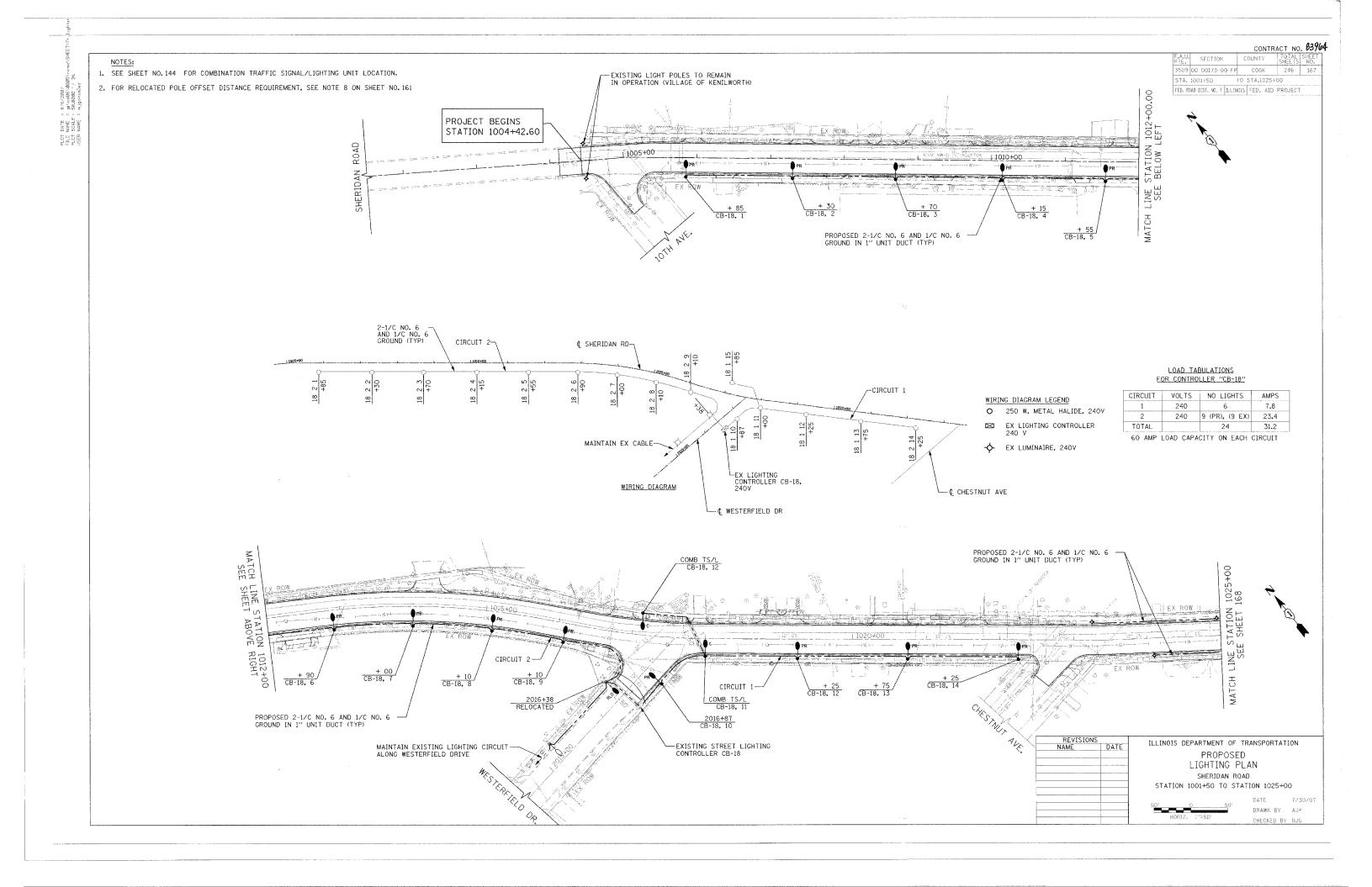


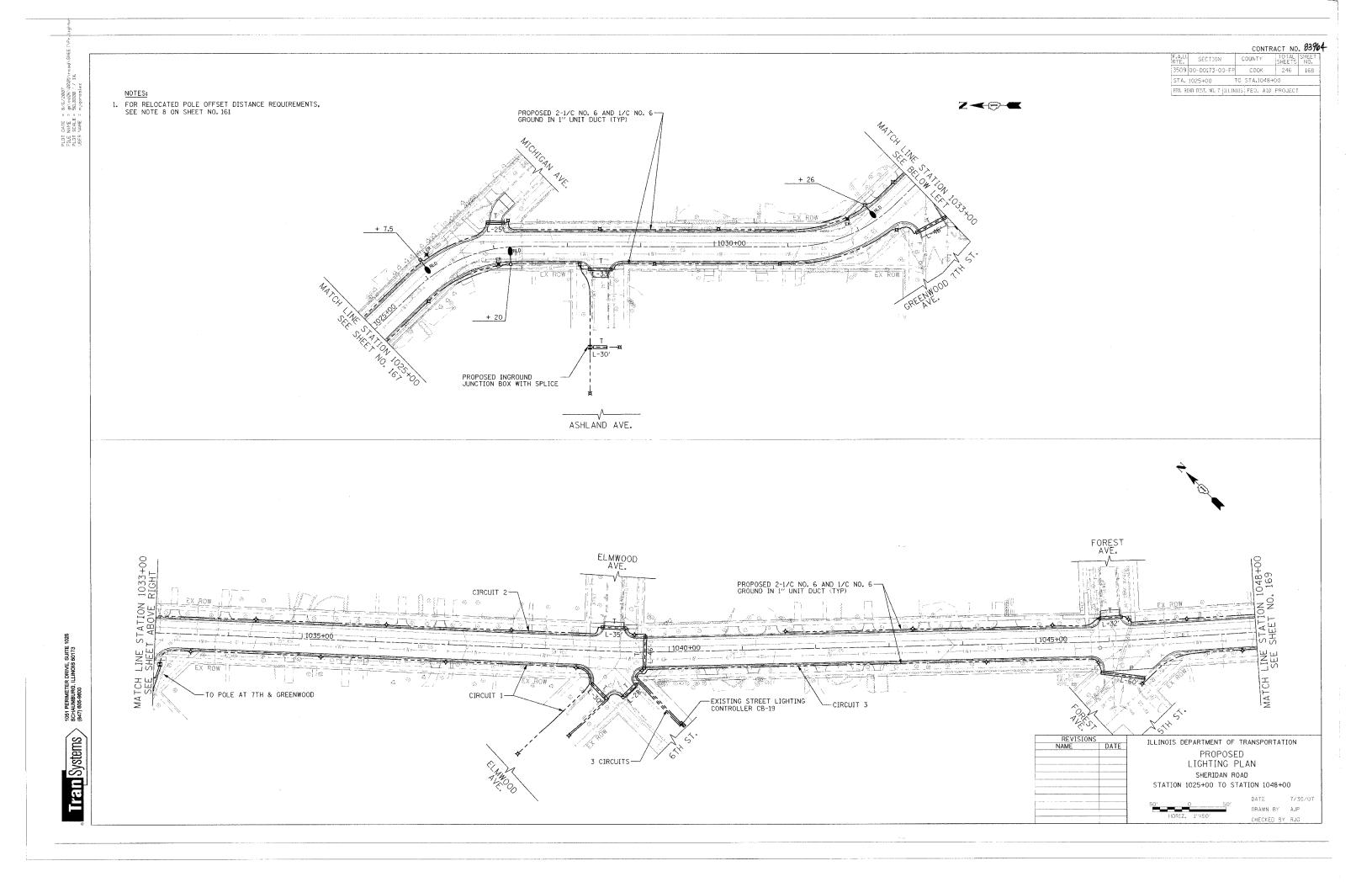


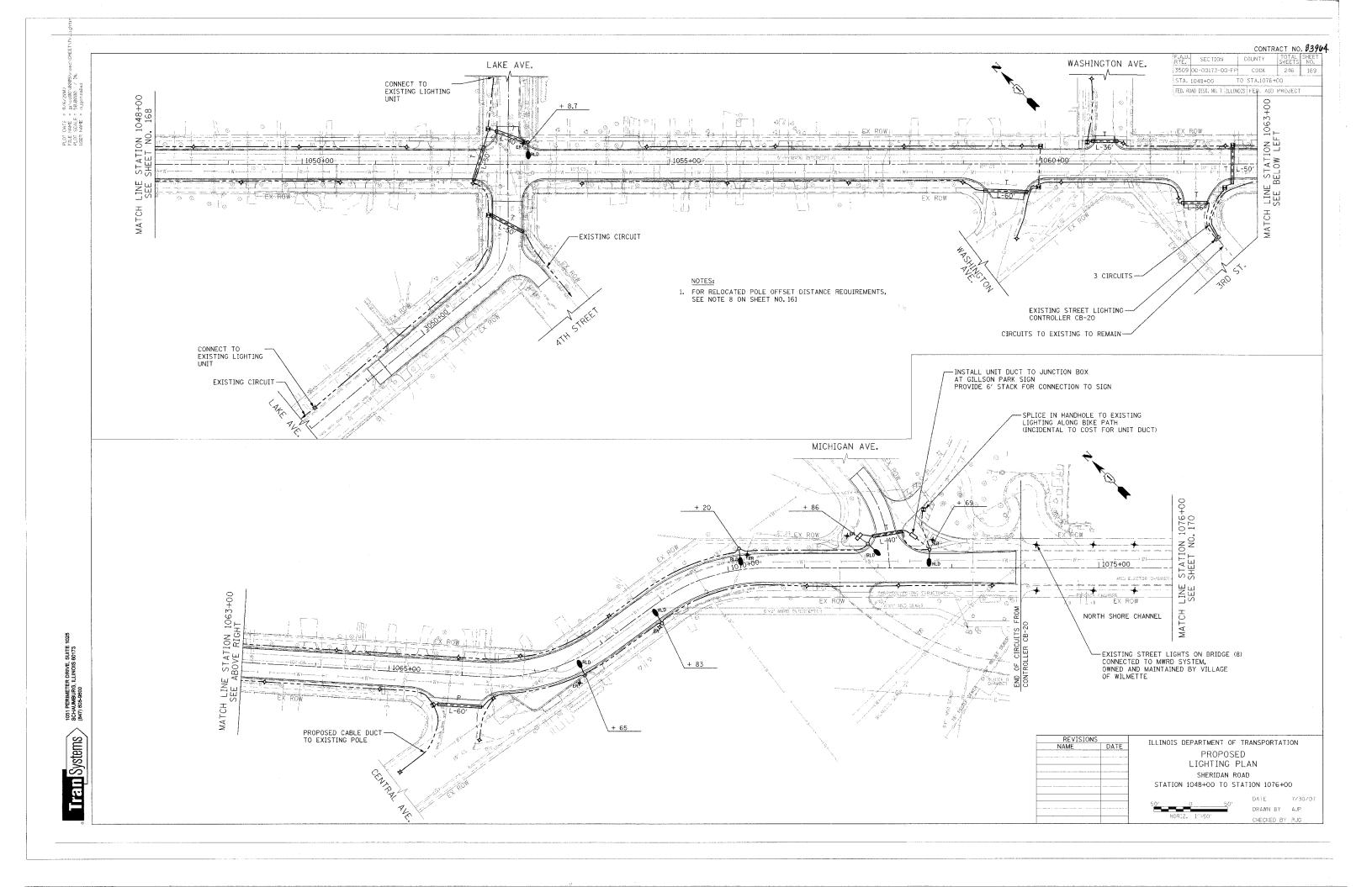


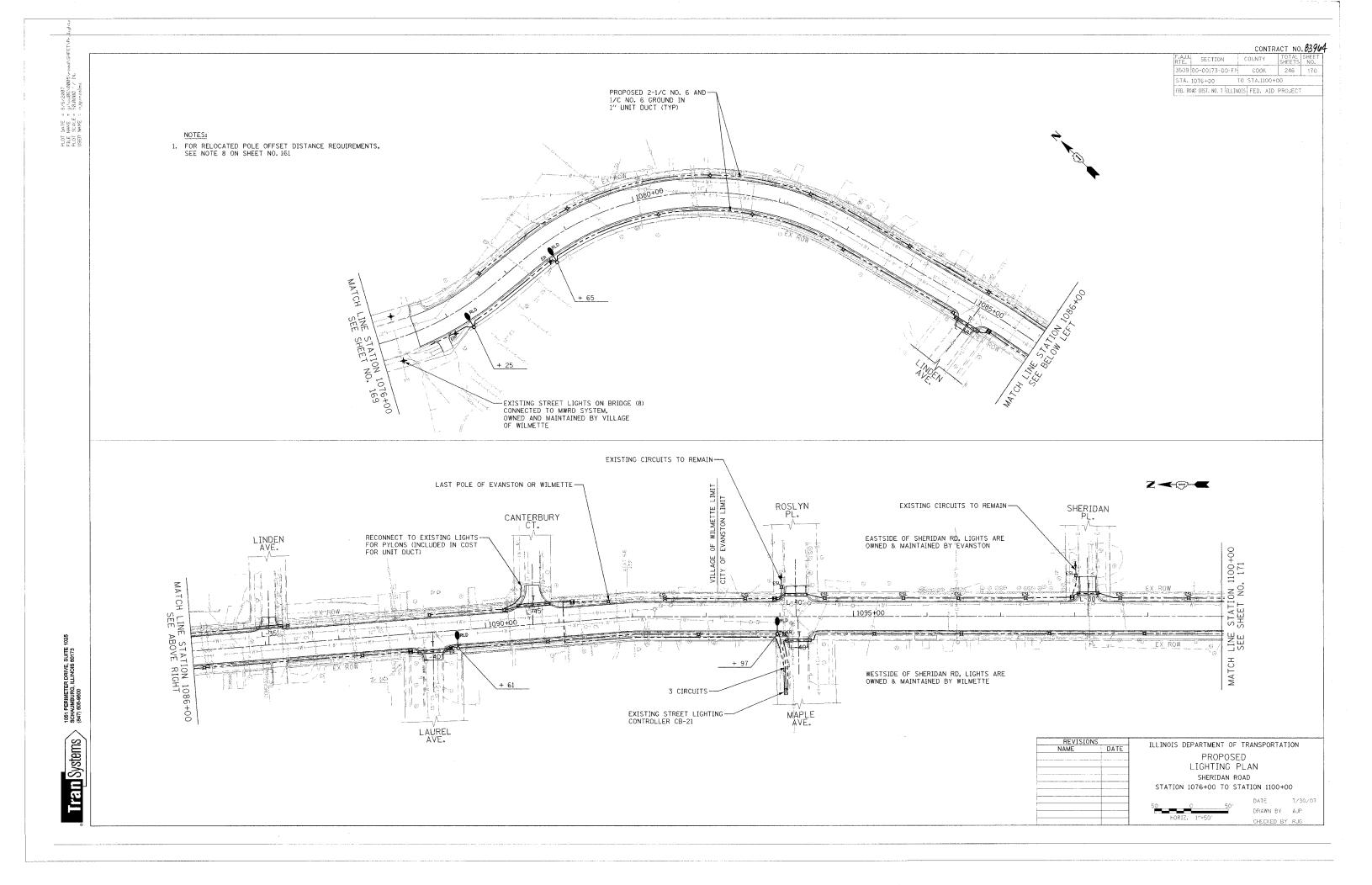


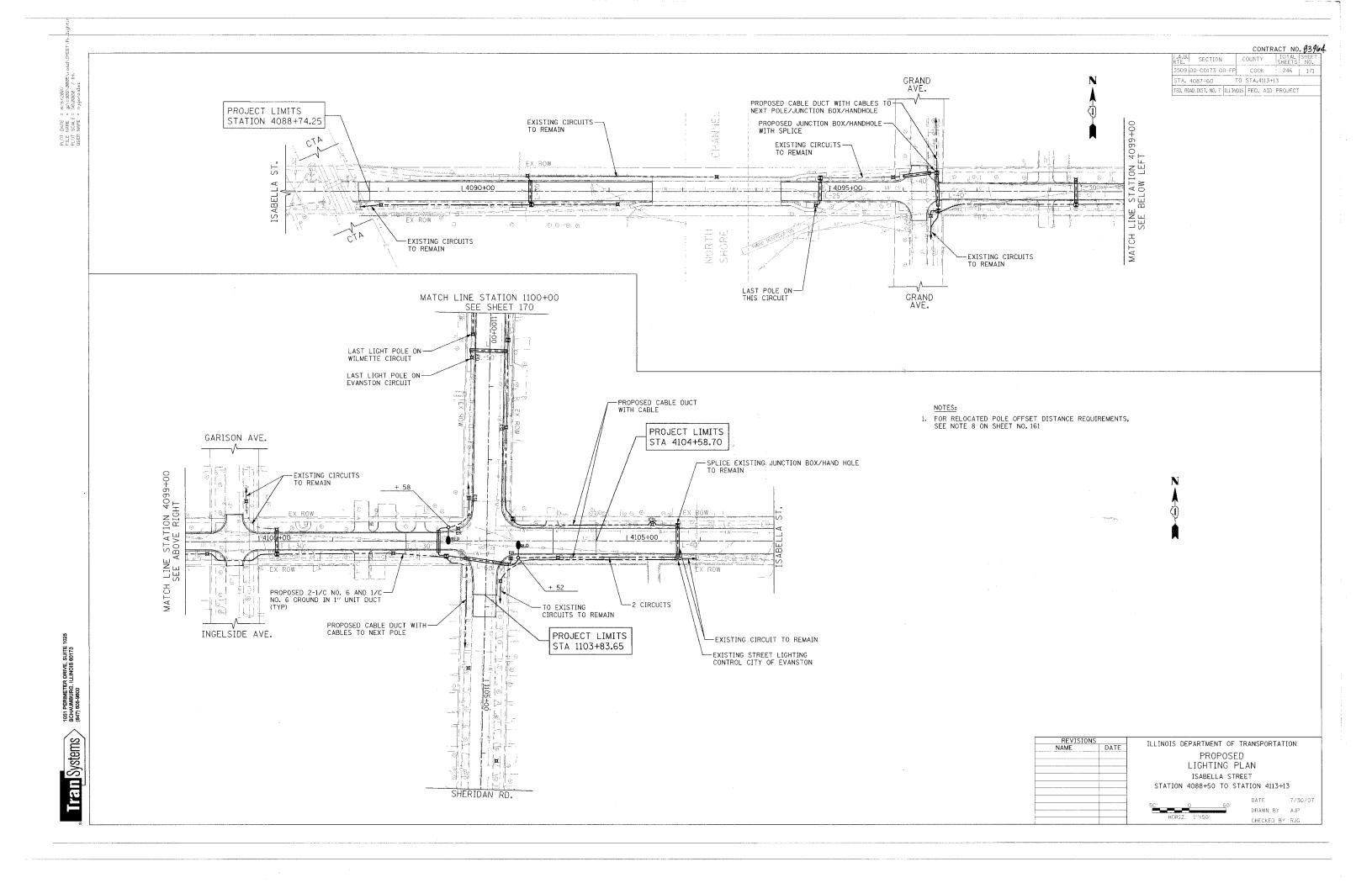








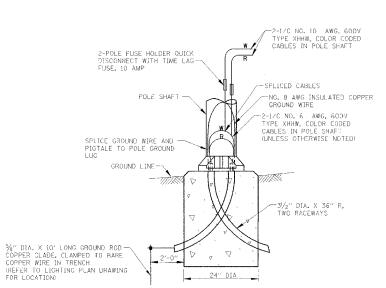




COVER

4 3/8-16 UNC STAINLESS STEE

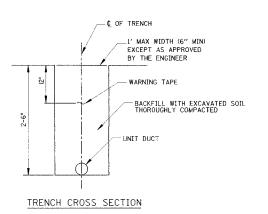
BOX



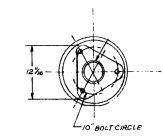
## POLE BASE WIRING DETAIL

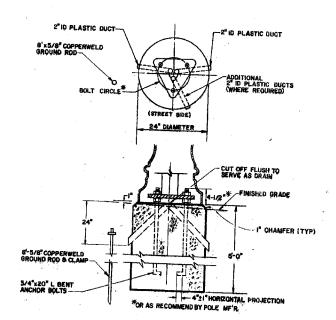
COMPRESSION TYPE COPPER SLEEVE. (SIZE FOR ACTUAL NUMBER OF CABLES AND TRIMMED CABLE -MFR. SUGGESTED CRIMP TOOL USED) HEAT-SHRINKABLE CAP -WITH FACTORY APPLIED WATERPROOF SEALANT. (SIZE TO ACCOMMODATE NUMBER OF CABLES). SEALANT TAPE OR INSERT. (AROUND AND THROUGH ELECTRIC FEEDER CABLES, SUCH AS UNET DUCT (SIZE AS NOTED ON PLANS). EXPOSED SEALANT NOTE THAT NUMBER OF CABLES IN ELECTRIC CABLE TO LUMINAIRE (SIZE AS NOTED ELSEWHERE IN THESE PLANS). SPLICE MAY VARY.

## SPLICING ELECTRIC CABLE BASIC MATERIALS AND METHODS



COUNTY TOTAL SHEE SHEETS NO. RTE. SECTION 3509 00-00173-00-FP COOK 246 172 ISTA. TO STA. FED. ROAD DIST. NO. 7 ILLINOIS FED. ALD PROJECT



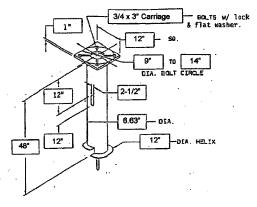


TALLMADGE POLE CONCRETE FOUNDATION DETAIL N.T.S (CITY OF EVANSTON)

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATIO	OF TRANSPORTATION		
NAME	DATE	TECHNOIS DELANTIMENT OF TRANSFORTATIO	.,		
		LIGHTING DETAILS			
		DATE T	/3		
	-	DRAWN BY A	JP		
		CHECKED BY F	₹JG		

7/30/07 AJP

# COMPOSITE CONCRETE HANDHOLE DETAIL (VILLAGE OF WILMETTE)



- 1/2" (13 mm) X 2 1/2" (84 mm) PULL SLOT

NOTES:

HANDHOLE SHALL BE 11"x18"x18" PC STYLE (STACKABLE) ASSEMBLY AS MANUFACTURED BY QUAZILE, OR APPROVED EQUAL.

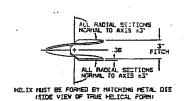
2. COVER LOGO SHALL SAY "LIGHTING". TWO STAINLESS STEEL BOLTS SHALL BE PROVIDED TO FASTEN THE COVER TO THE BOX.

MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.

3. ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:

HELIX: ASTM A635 (LATEST REVISION) 3/8 9/32 THICK HOT ROLLED STEEL PLATE OR COIL.

PILOT POINT: ASTM A575 (LATEST REVISION) STEEL BAR.



HELIX FOUNDATION DETAIL (VILLAGE OF WILMETTE)

NOTES:

FLAMECUT IRREGULARITIES PERMISSIBLE; (1) VALLEYS NOT TO EXCEED 3/32 9/32 BELOW NOMINAL SURFACE LEVEL, (2) PEAKS OR POSITIVE IRREGULARITIES NOT TO EXCEED 1/32 9/32 IN ABOVE NOMINAL SURFACE LEVEL OR INTERSECTIONS OF NOMINAL SURFACES.

BASEPLATE: ASTM A36 (LATEST REVISION) STRUCTURAL STEEL (CONFORM TO AASHTO TECH BUL 270)

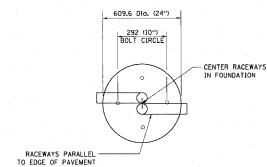
SHAFT: ASTM A252 (LATEST REVISION) GRADE 2, STEEL PIPE FILES. ALTERNATE MATERIAL: ASTM A53 (LASTEST REVISION): TYPE E OR S, GRADE B, STEEL PIPE OR ASTM A500 (LASTEST REVISION) GRADE B, STRUCTURAL STEEL TUBING.

BOLTS: CARRIAGE BOLT PER ANSI B-18.5, SAE J429 GRADE-5.

4. BASEPLATE IS PERMANENTLY STAMPED WITH MANUFACTURE 5/32 S IDENTIFICATION 7/32 ABC 9/32 IN 59/64 9/32 LEFFERS AND DATE CODE IN 1/4 9/32 LEFFERS.

# LIGHT POLE FOUNDATION DEPTH TABLE 9.144M (30 FT.) TO 10.668M (35 FT.) MOUNTING HEIGHT

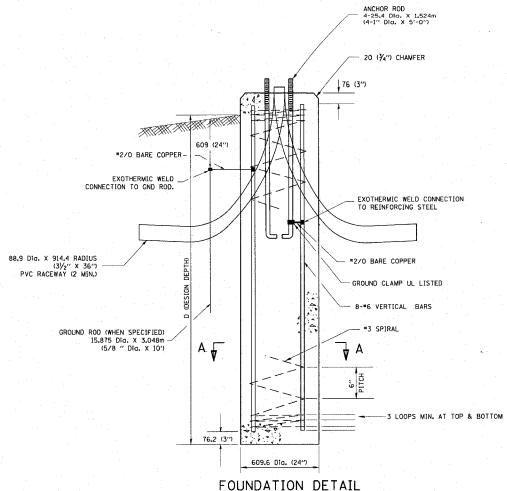
COLL CONDITIONS	DESIGN DEPTH "	DESIGN DEPTH "D" OF FOUNDATION		
SOIL CONDITIONS	SINGLE ARM POLE	TWIN ARM POLE		
SOFT CLAY	3.35	3.85M		
Qu = 0.375 TON/SQ. FT.	(11'-0'')	(12'-8'')		
MEDIUM CLAY	2.74M	4.52M		
Qu = 0.75 TON/SQ.FT	(9'-0'')	(14'-10'')		
STIFF CLAY	2.29M	2.61M		
Qu = 1.50 TON/SQ. FT.	(7'-6'')	(8'-7'')		
LOOSE SAND	2.90M	3,22M		
Ø = 34°	(9'-6'')	(10'-7'')		
MEDIUM SAND	2.74M	2.99M		
Ø = 37.5°	(9'-0'')	(9'-10'')		
DENSE SAND	2.51M	2.91M		
Ø = 40°	(8'-3'')	(9'-7'')		



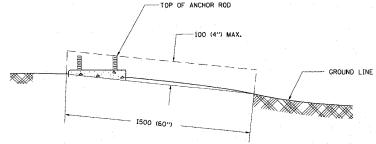
CONTRACTOR SHALL COORDINATE BOLT CIRCLE
WITH BOLT CIRCLE OF EXISTING LIGHTING UNIT

NOTE:

TOP VIEW







FOUNDATION EXTENSION DETAIL

THREADED

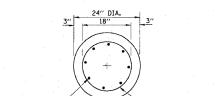
%" T. X 4" DIA. WASHER, TACK WELDED

152.4 (6")

DIA.

127.0 (5")

ANCHOR BOLT DETAIL



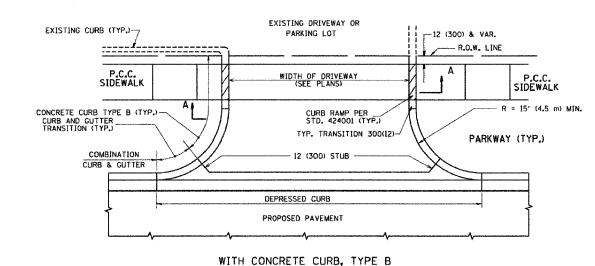
SECTION A-A

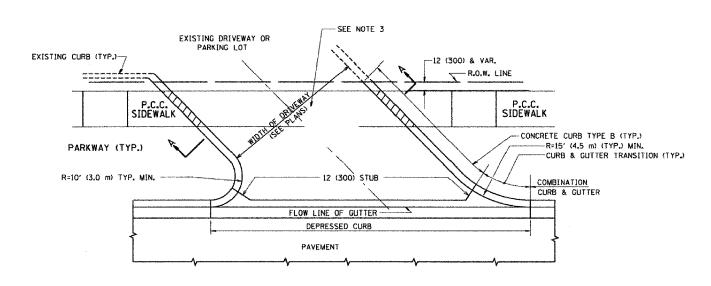
### NOTES:

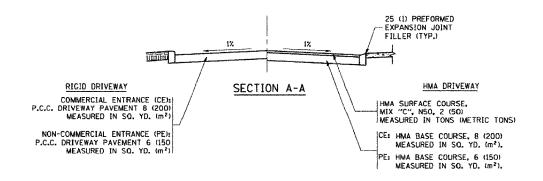
- 1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- 2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
- 3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 1.5M (60 IN.) CHORD ACROSS THE FOUNDATION, 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.
- 4. 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 20MM (3/4-IN.).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- 7. 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.
- 8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXACON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- 9. 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 ASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- 10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 150 MM (6 INCHES) WITH A MINIMUM OF 75 MM (3 INCHES) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- 11. ANCHOR RODS SHALL PROJECT 69.9MM (23/4") 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.
- 12. THE CONTRACTOR SHALL USE A \*3 SPIRAL AT 152.4MM (6") PITCH OR MAY SUBSTITUTE \*3 TIES AT 304.8MM (12") O.C. WITH THE APPROVAL OF THE ENGINEER.
- 13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- 14. THE RACEWAYS SHALL PROJECT 25.4MM (1") ABOVE THE TOP OF THE FOUNDATION.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION					
NAME	DATE	TELINOIS DEPARTMENT OF TRANSPORTATION					
		CONCRETE LIGHT POLE					
		CONCILLE FIGHT FOLE					
		FOUNDATION DETAIL					
		·					
		DATE 7/13/07					
		DRAWN BY LTD					
		CHECKED BY B II					

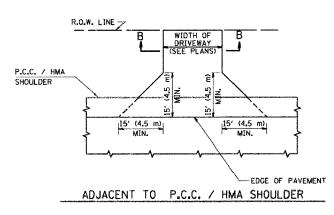
PLOT DATE = 7/12/2807 FILE NAME : ay.ca66/80265/voodvaheeta\LightÜset2.aht PLOT SALE = 56.8080 // IN. USER NAME : b.jholman

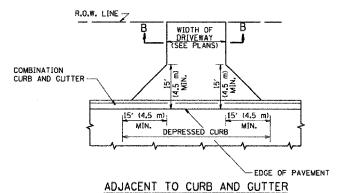


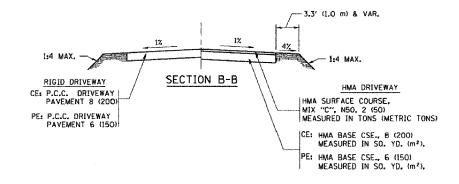




WITH CONCRETE CURB, TYPE B







RURAL FIELD ENTRANCE (FE) HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE A 8 (200) MEASURED IN SQ. YD. (m²).

### GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

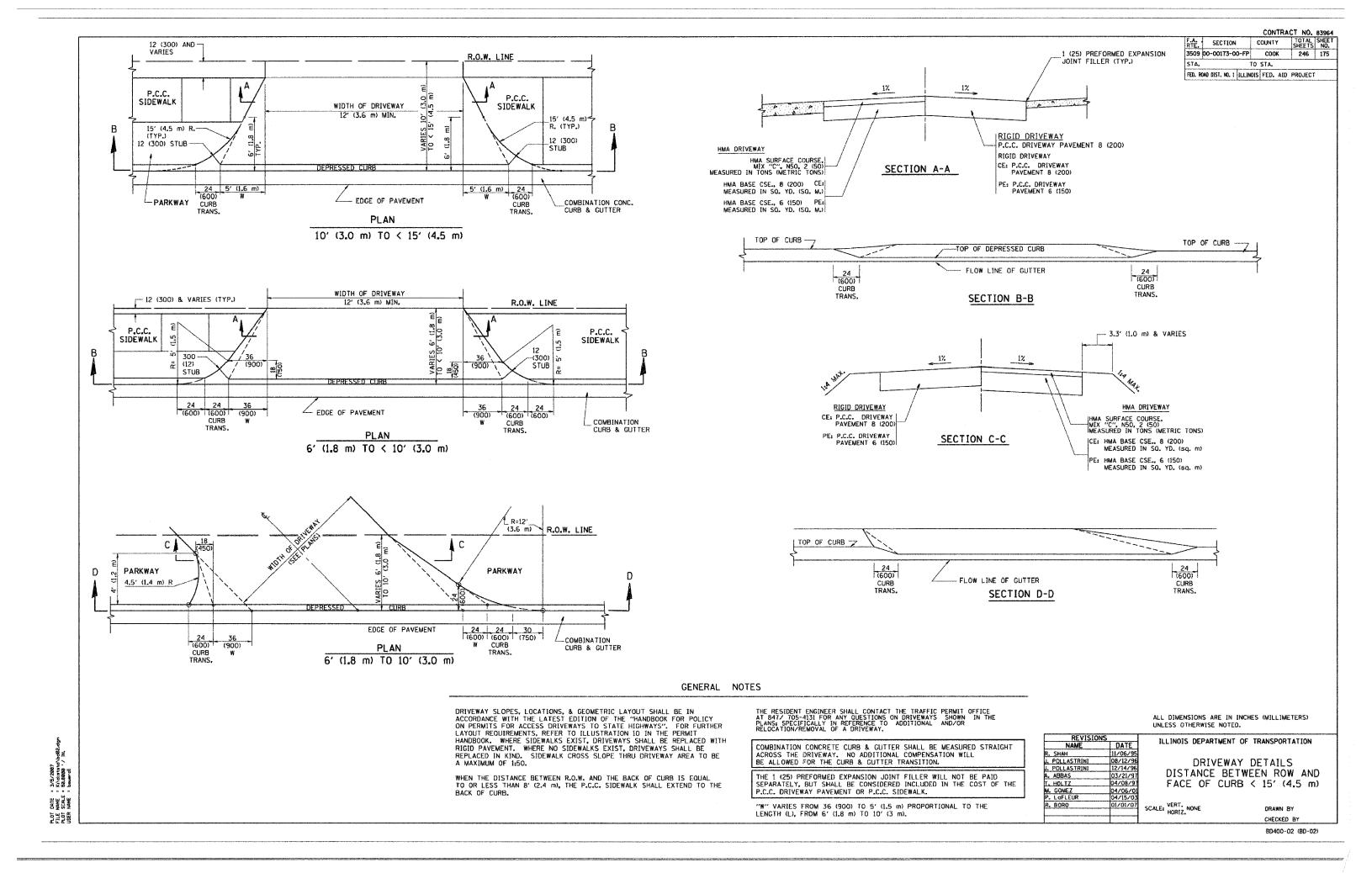
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REVISION	NS	
NAME	DATE	1
R. SHAH	11-04-95	1
J. POLLASTRINI	08-12-96	۱.,
J. POLLASTRINI	12-14-96	ו טו
A. ABBAS	03-21-97	-
T. HOLTZ	04-08-97	
M. GOMEZ	04-06-01	l
P. LoFLEUR	04-15-03	
R. BORO	01-01-07	Si
	T	31
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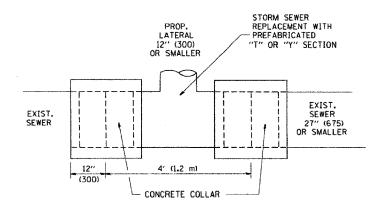
ILLINOIS DEPARTMENT OF TRANSPORTATION DRIVEWAY DETAILS ISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

SCALE: VERT. NONE

CHECKED BY

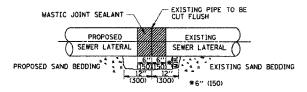
BD0156-07 (BD-01)

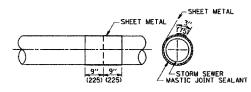


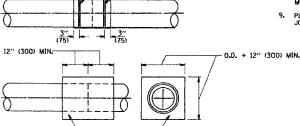


### DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER







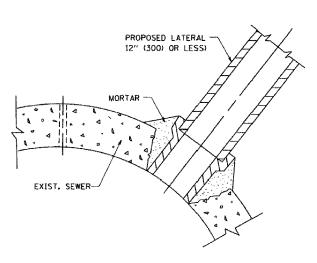
-CLASS SI CONCRETE-

METAL BINDING

DETAIL "B" CLASS SI CONCRETE COLLAR

### CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT, BRUSH AND CLEAN ALL PIPES.
- 2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- 4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
- 5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- 6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- 8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- 9. PLACE CLASS SI CONCRETE AROUND THE



### DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

## **NOTES**

### MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- 11. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS: A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
  - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. LL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

### BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE IEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

REVISI	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/92
M. DE YONG	05/08/92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	06/12/96

ILLINOIS DEPARTMENT OF TRANSPORTATION

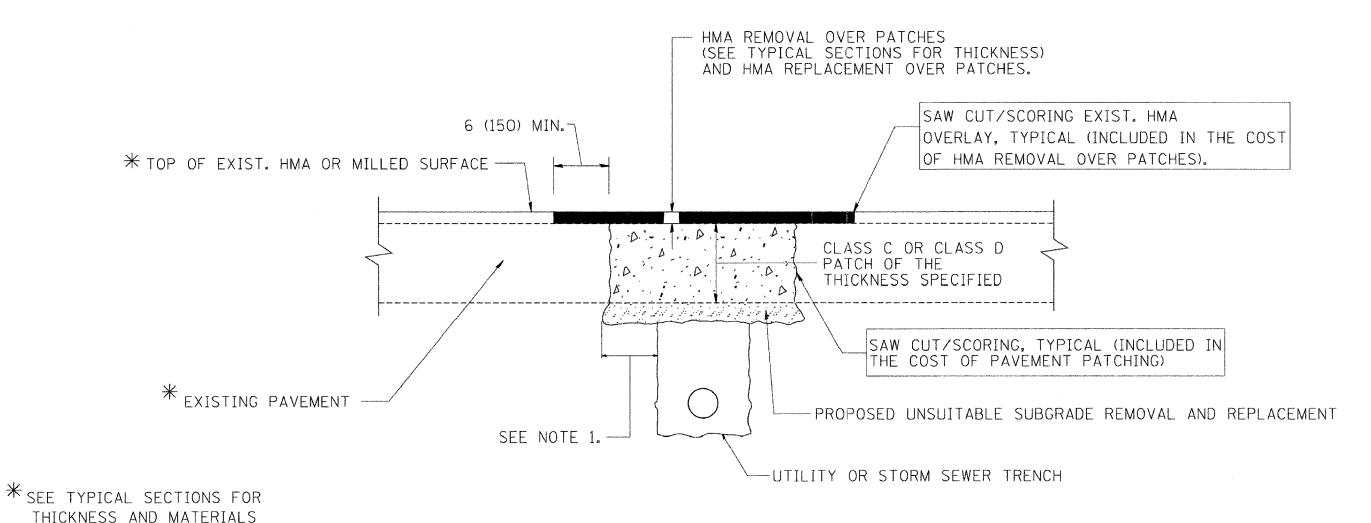
DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

SCALE: VERT. NONE

CHECKED BY

BD500-01 (BD-7)

| CONTRACT NO. 83964 | F.A. | SECTION | COUNTY | TOTAL SHEETS NO. 3509 | DO-00173-00-FP | COOK | 246 | 177 | STA. | TO STA. | TO STA. | FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID | PROJECT |



# 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

- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE FULL DEPTH PATCHES
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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

REVISION	ONS	
NAME	DATE	
R. SHAH	10/25/94	
R. SHAH	01/14/95	
R. SHAH	03/23/95	
R. SHAH	04/24/95	
A. HOUSEH	03/15/96	
A, ABBAS	03/21/97	
A. ABBAS	01/20/98	
ART ABBAS	04/27/98	
R. BORO	01/01/07	)

ILLINOIS DEPARTMENT OF TRANSPORTATION

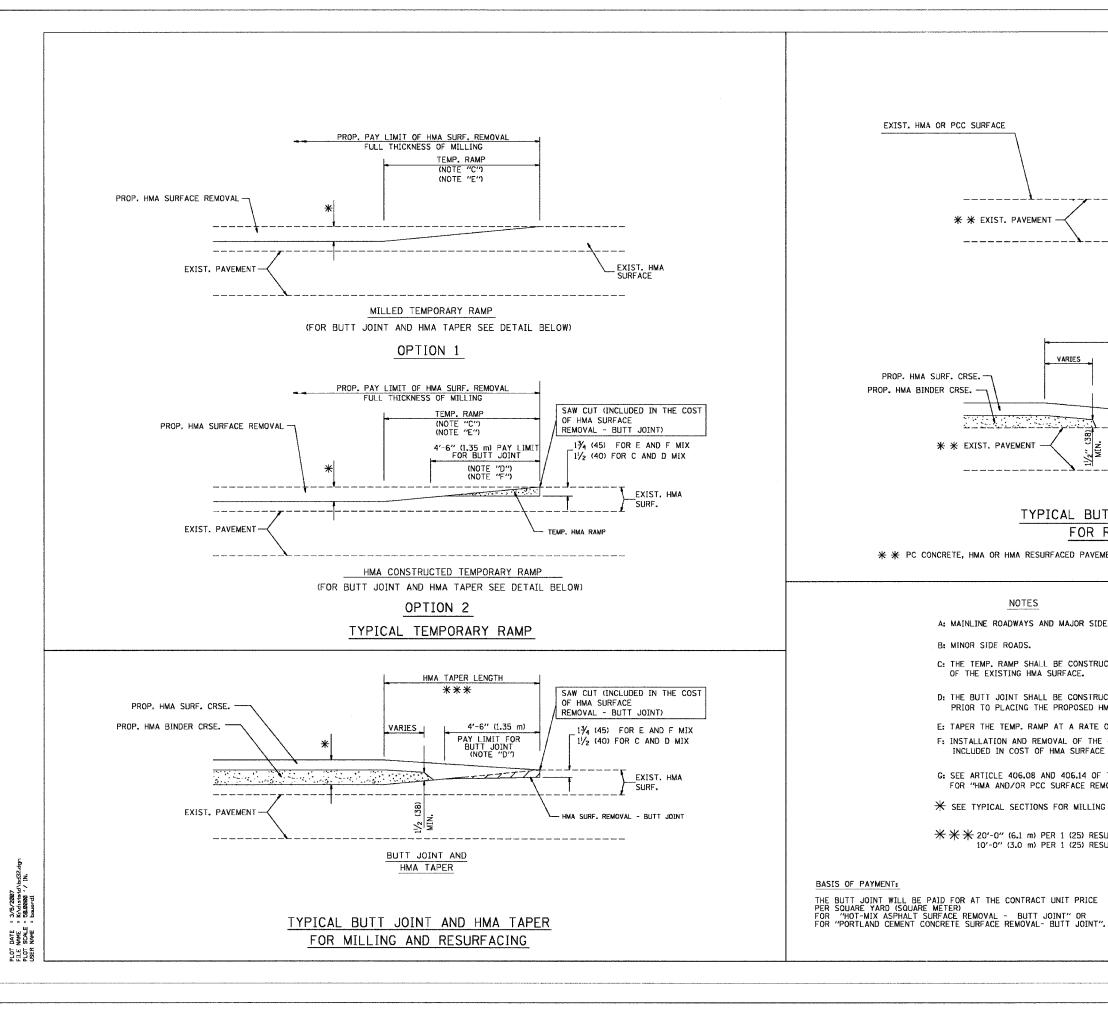
PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

SCALE: VERT. NONE

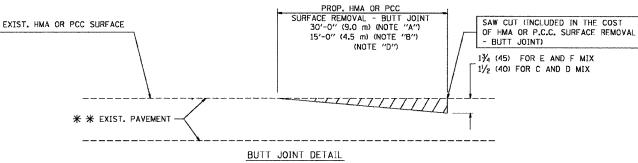
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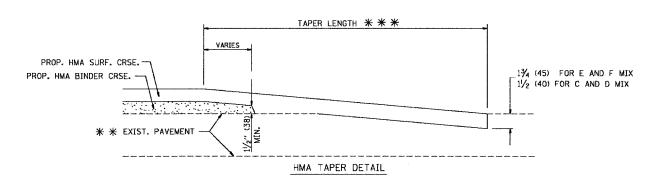
BD400-04 (BD-22)

OT DATE = 3/5/2007 LE NAME = Kivdiststd/bd22.dgn OT SCALE = 50.000 '/ IN.



COUNTY TOTAL SHEET NO. SECTION 3509 ¢0-00173-00-FP COOK 246 178 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

- 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")

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

R. SHAH 09/09/9

04/06/0

01/01/07

M. GOMEZ R. BORO

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE

CHECKED BY

BD400-05 (VI=BD32)

CONTRACT NO. 83964

(825) (300) 12 (300) STEEL PLATE BEAM GUARD RAIL (069) 21 BIRNESTI HMA SHOULDER 6 (150) (SEE NOTE 1) └ COMB. CONC. CURB & GUTTER L SUB-BASE PAVEMENT

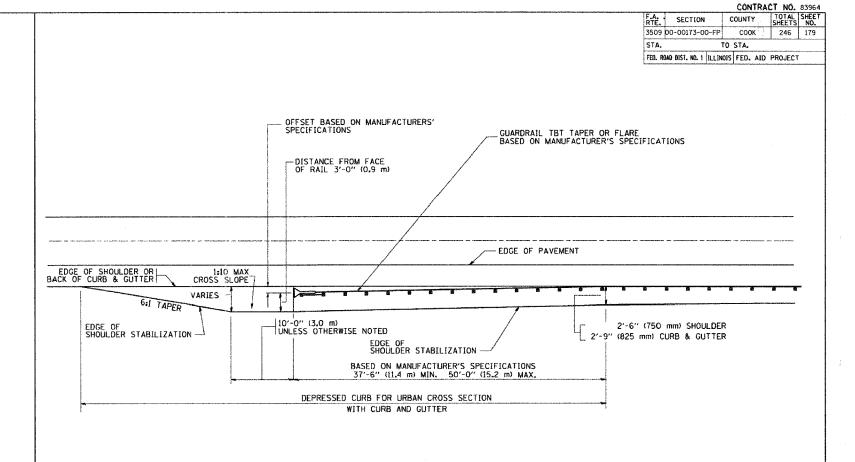
> NOTES: 1. THE HMA SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL

> > 2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: HMA SHOULDER 6 (150) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDER 6" (150 mm)".

> STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



STABILIZATION AT TBT TY. 1 SPL.

TBT = TRAFFIC BARRIER TERMINAL

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

REVISIONS		
NAME	DATE	
M. DE YONG	09-22-90	
M. DE YONG	07-14-92	
R. SHAH	09/09/94	
R. SHAH	10/25/94	
	02/23/95	
A. ABBAS	03/21/97	S
E. GOMEZ	08/28/00	_
R. BORO	01/01/07	sc
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ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.

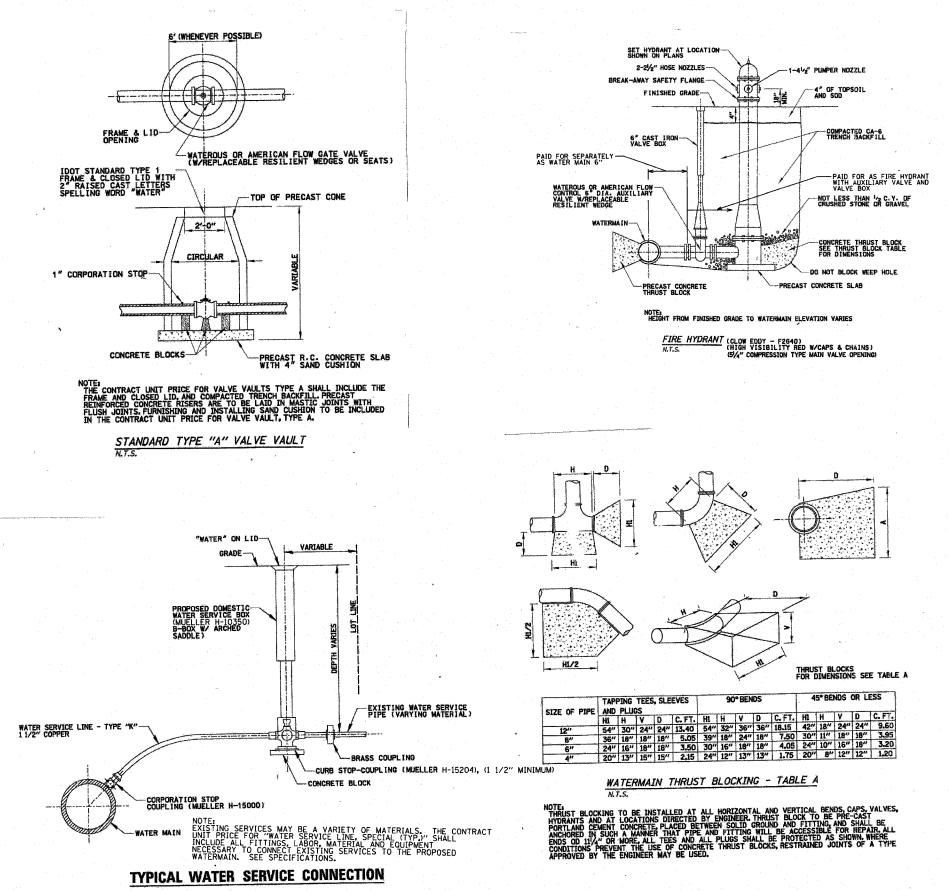
CALE: VERT. NONE

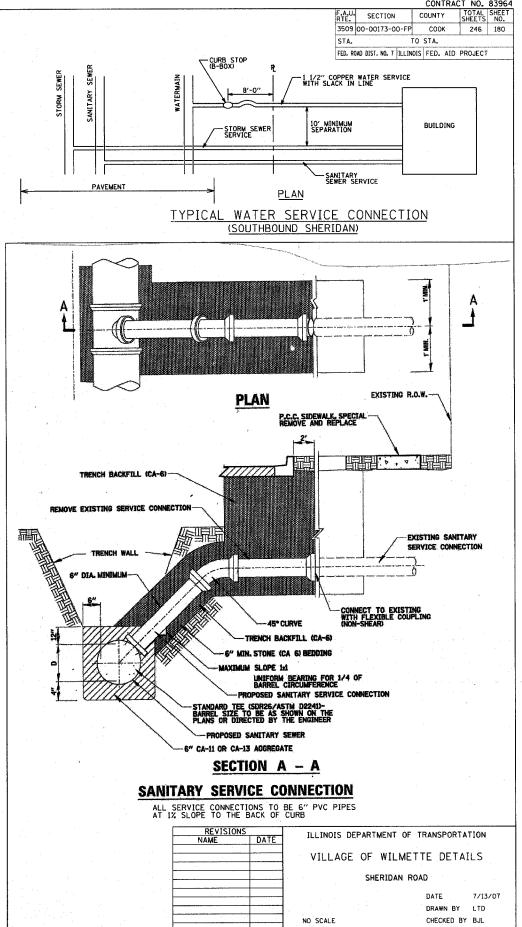
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BD600-10 (BD 34)









		CONTRAC	JI NO.	0220
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	
3509	00-00173-00-FP	соок	246	181
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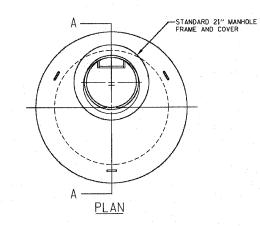
WATEROUS PACER #WB67-250 FIRE HYDRANT:
BREAK FLANGE
5" VALVE OPENING
2-2.5" HOSE CONNECTIONS
4" PUMPER NOPPLE
NATIONAL STANDARD THREADS LENGTH AS SHOWN ON DRAWINGS NOTE: CONTRACTOR SHALL PLACE
A MINIMUM OF ONE CUBIC
YARD (3'x3'x3') OF WASHED
GRAVELCA-I OR CA-II
AROUND EACH HYDRANT 6" CAST IRON VALVE BOX WATEROUS OR AMERICAN FLOW CONTROL 6" DIA. AUX. VALVE WITH RESILIENT WEDGE SHEET PLASTIC WASHED GRAVEL WATER MAIN. 6" EXISTING WATER MAIN
TO REMAIN EXISTING CONCRETE BLOCKING TO REMAIN RETAINER GLAND → APPROX. 2'-0" → CONCRETE BLOCKING
WITH MINIMUM WOOD WEDGING CONCRETE BLOCKING

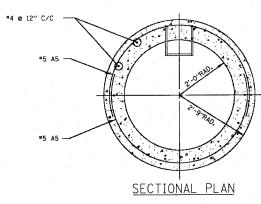
# FIRE HYDRANT DETAIL

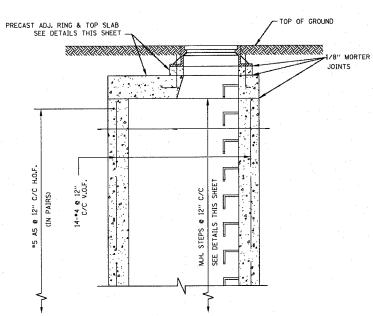
CITY OF EVANSTON WATER DEPARTMENT PAID FOR AS FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX

REVISIONS	ILLINOIS DEPARTMENT OF TRAF	USPORTATION
NAME D	ATE ILLINOIS DEPARTMENT OF TRAI	43i OKTATION
	CITY OF EVANST	
	FIRE HYDRANT DE	TAIL
	DA	TE 7/13/07
	DR	AWN BY LTD
	NO SCALE CH	ECKED BY BJL

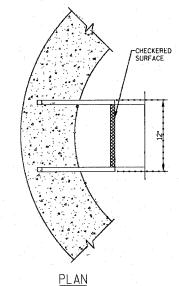
1051 PERIMETER DRIVE. SUITE : SCHAUMBURG, ILLINOIS 60173 (847) 605-8600

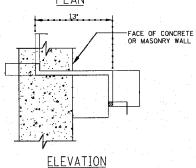






SECTION "A-A" STANDARD MANHOLE BARREL SCALE: 3/4" = 1'-0"

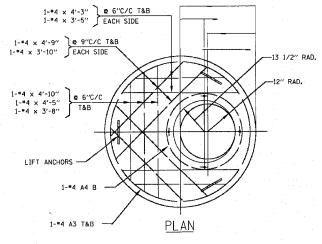


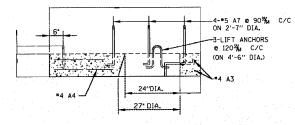


MANHOLE STEPS SCALE: 2"= 1'- 0"

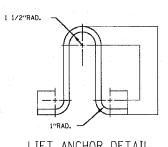
MATERIAL:

DUCTLE IRON GRADE 65-45-12 FULLY ANNEALED CONFORMING TO ASTM SPECIFICATIONS



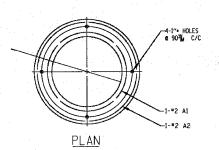


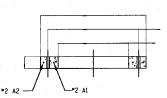
SECTION PRECAST TOP SLAB DETAIL SCALE: 3/4" = 1'-0"



LIFT ANCHOR DETAIL

MATERIAL: 5/8" DIA. x 2'-3"A-36 STEEL ROD GALVANIZED AFTER FABRICATION





SECTION PRECAST ADJUSTMENT RING DETAIL SCALE: 1" = 1'-0"

# NOTE:

9" THICK PRECAST CONCRETE RINGS WITH CAST IN PLACE RUNGS MAY BE USED IN PLACE OF CAST IN PLACE CONCRETE WHEN EXTENDING THE HEIGHT OF THE MANHOLE BARREL, ALL EXTENSION SHALL BE IN ONE PIECE AND IN INCREMENTS OF 12".

ALL JOINTS SHALL BE CLEANED, SQUARED AND GROUTED IN A MANNER TO PRECLUDE POSSIBILITY OF LEAKS AT JOINT.

THE PRECAST TOP SLAB SHALL BE REMOVED AND REPLACED AS REQUIRED.

ALL ELEMENTS OF THE MANHOLE DISTURBED OR DAMAGED DURING ALTERATION SHALL BE CORRECTED OR REPLACED TO MEET THE STANDARD HEREIN SHOWN AND SPECIFIED.

ALL CONCRETE SHALL BE CLASS "R".

ALL GROUT SHALL BE 1 PART CEMENT TO 3 PARTS SAND WITH MINIMUM WATER TO ACHIEVE A STIFF PLASTIC CONSISTANCY WITH ZERO SLUMP.

ALL WORKMANSHIP AND MATERIALS NOT SPECIFIED SHALL BE AS PER STANDARD PREPRINTED MWRDGC SPECIFICATIONS TITLED:
GENERAL SPECIFICATIONS - CONSTRUCTION CONTRACTS
GENERAL SPECIFICATIONS - SEWERS
GENERAL SPECIFICATIONS - CONCRETE

# PROCEDURE:

RE-BAR BENDING DETAIL

MARK SIZE LENGTH TYPE A B R

A1 =2 7'-6" ② - - 13 1/2"

A2 =2 9'-6" ② - - 17"

A3 =4 15'-0" ② - - 29 1/2"

A4 =4 9'-3" ② - - 16 1/2"

A5 =5 8'-9" ③ 8'-9" - 29 1/2"

A7 =5 2'-0" ① 6" 1'-6" -

A) TO RAISE ELEVATION O" TO 8" MAX., ADD 4" THICK ADJUSTMENT RINGS AS DETAILED. INCREMENTS OF LESS THAN 4" SHALL BE OBTAINED BY HAND PACKING A DRY CEMENT GROUT OVER 100% OF THE BEARING AREA.

( B--)

B) TO RAISE ELEVATION OVER 8" AND LESS THAN 12", REMOVE THE
4" ADJUSTMENT RING AND EXTEND THE 9" THICK MANHOLE BARREL
12" WITH CAST IN PLACE CONCRETE REINFORCED AS DETAILED
AND WITH LADDER RUNG AS DETAILED. TOP OF EXISTING CONCRETE
TO BE CLEANED AND ROUGHENED AND NEW CONCRETE PLACED IN A
MANNER TO INSURE BONDING AND NO LEXAGE. FOR INCREMENTS
BETWEEN 8" AND 12" PLACE GROUT FILLER AS IN (A) ABOVE.

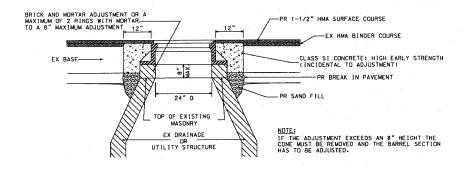
C) TO RAISE ELEVATION 12" AND ABOVE, ADD TO 9" THICK MANHOLE BARREL ONLY IN INCREMENTS OF 12" WITH RUNGS AT 12" O.C. AS DESCRIBED IN (B), FOR INCREMENTS BETWEEN 12" ADD OR REMOVE 4" ADJUSTMENT RINGS AND CROUT FILLER AS DESCRIBED

D) TO LOWER ELEVATION O" TO 4", REMOVE 4" THICK ADJUSTMENT RING AND FILL INCREMENTS OF O" TO 4" WITH GROUT AS DESCRIBED IN (A).

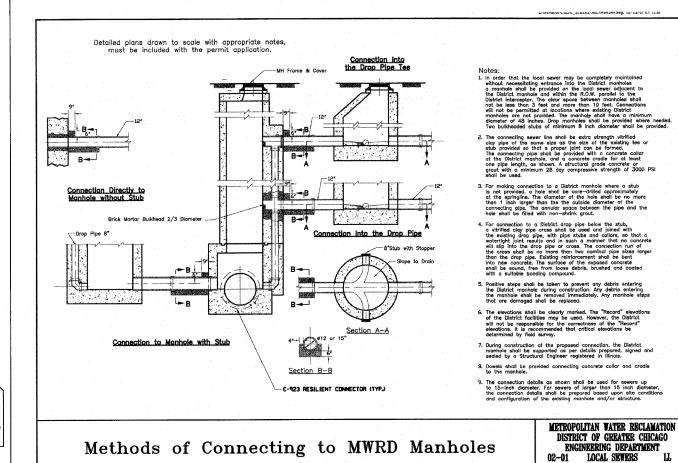
D TO LOWER ELEVATION MORE THAN 4", REMOVE 9" THICK MANHOLE BARREL ONLY IN INCREMENTS OF 12" AND ADD OR REMOVE 4" THICK ADJUSTMENT RINGS AND GROUT AS REQUIRED AND AS DESCRIBED IN (A) AND (B).

REVISION		ILLINOIS DEPARTMENT (	OF TRANSPORTA	TION	
NAME	DATE	ILLINOIS DEPARTMENT	DI TRANSFORTA	ITON	
		MWRDGC STANDARD NO. 8-121			
	-	PROCEDURE FOR			
		ELEVATION OF			
		48" DIA. STANDA	ARD MANHOLE		
			DATE	7/13/07	
			DRAWN BY	LTD	
		NOT TO SCALE	CHECKED BY	BJL	

SUITE 60173 1051 PERIMETER DRIVE, S SCHAUMBURG, ILLINOIS 60 (847) 605-9600 Tram Systems



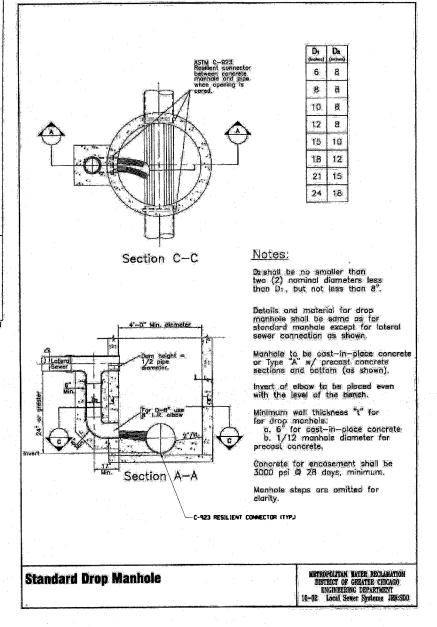
# DETAIL OF TYPE I FRAME ADJUSTMENT



SEE PLANS AND SPECIFICATIONS FOR SURFACE RESTORATION WIDTH OF PERMANENT PAVEMENT REMOVAL AND REPLACEMENT FOR PAYMENT PURPOSES IDENTIFICATION OF WHERE SELECT GRANULAR MATERIAL IS REQUIRED TERMINOLOGY, DIMENSIONS AND TYPE OF SELECT MATERIAL, WHEN REQUIRED EXISTING SURFACE J \*ALL CONDUITS LOCATED UNDER OR WITHIN 2' OF EXISTING OR FUTURE PAVED AREAS. 7, CA-9, CA-11, CA-FA-5, FA-10 PAVED AREAS INCLUDE STREETS, CURBS, GUTTERS SHOULDERS AND SIDEWALKS PROPOSED ALL NON RIGID CONDUITS
AND \*RIGID CONDUITS UNDER
OR WITHIN 2' OF EXISTING
OR PAVED AREAS ALL NON RIGID CONQUITS, AND ALL SEWERS, RIGID WATER MAINS AND FORCEMAINS WITHIN 2' OF EXISTING OR FUTURE PAVED AREAS 1/20.D. HAUNCHING WHERE SOIL CONDITIONS WARRANT: ++ VARIES FOUNDATION 6" ALLOWANCE FOR TRENCH-SHORING, BRACING OR BOX, TYPICAL BOTH SIDES. 2' + 0.0. MINIMUM INSIDE WIDTH \*INDICATES ÉLIGIBLE FOR PAYMENT AS SELECT GRANULAR BACKFILL OTHERMSE INCIDENTAL TO THE PIPE. \*\*INDICATES ELIGIBLE FOR PAYMENT AS SELECT FOUNDATION MATERIAL NON RIGID COMPUTS ARE DEFINED AS FLEXIBLE THERRIPOLASTIC PIPE AND/OR CORRUGATED METAL PIPE. STANDARD SPECIFICATION FOR WATER AND SEWER IN ILLINDIS NOTE: TRENCH BOX SHALL NOT EXTENC BELOW TOP OF PIPE, HOWEVER IT SHALL NOT EXCEED 2 FEET FROM THE BOTTOM OF THE TRENCH. DIV.V/STANDARD DRAWING NO.1

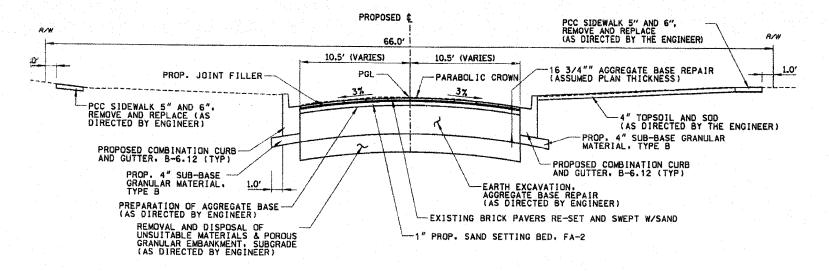
TRENCH DETAIL DIV: V PAGE: 126

CONTRACT NO. 83964 SECTION COUNTY TOTAL SHEET SHEETS NO. 3509 00-00173-00-FP COOK 246 182A STA. TO STA. FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT



REVISIONS		ILLINOIS DEPARTMENT	OF TRANSPORTA	TION
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			DATE	7/13/07
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		NOT TO SCALE	CHECKED BY	BJL

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PROPOSED TYPICAL BRICK PAVEMENT CROSS-SECTION

SCHAUMBURG, ILLINOIS 6017 (847) 605-9600

Tran Systems

REVISIONS
NAME
DATE

PROJECT DETAILS

DATE

DATE

T/13/07

NOT TO SCALE

DETAILS

DATE
T/13/07

CHECKED BY BJL

COUNTY TOTAL SHEET NO. RTE. SECTION 3509 00-00173-00-FP COOK 246 183 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT ROAD TYPE III BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH. AHEAD TYPE I OR TYPE II BARRICADES WITH ONE FLASHING AMBER LIGHT ON EACH, OR TYPE III BARRICADES WITH TWO FLASHING 200'± (60 m±)-AMBER LIGHTS ON EACH. DRIVEWAY 200'± (60 m±) 09) STREET; 40 MPH C COLLECTOR LOCAL W20-1(0) AHEAD M6~1(0)~2115

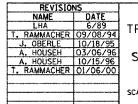
# TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

# NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
- d) ONE ROAD CONSTRUCTION AMEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200" (60 m) IN ADVANCE OF THE MATH ROLLE.
- 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:
- o) 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 ROLITE.
- 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. 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.



ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION
FOR

SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE

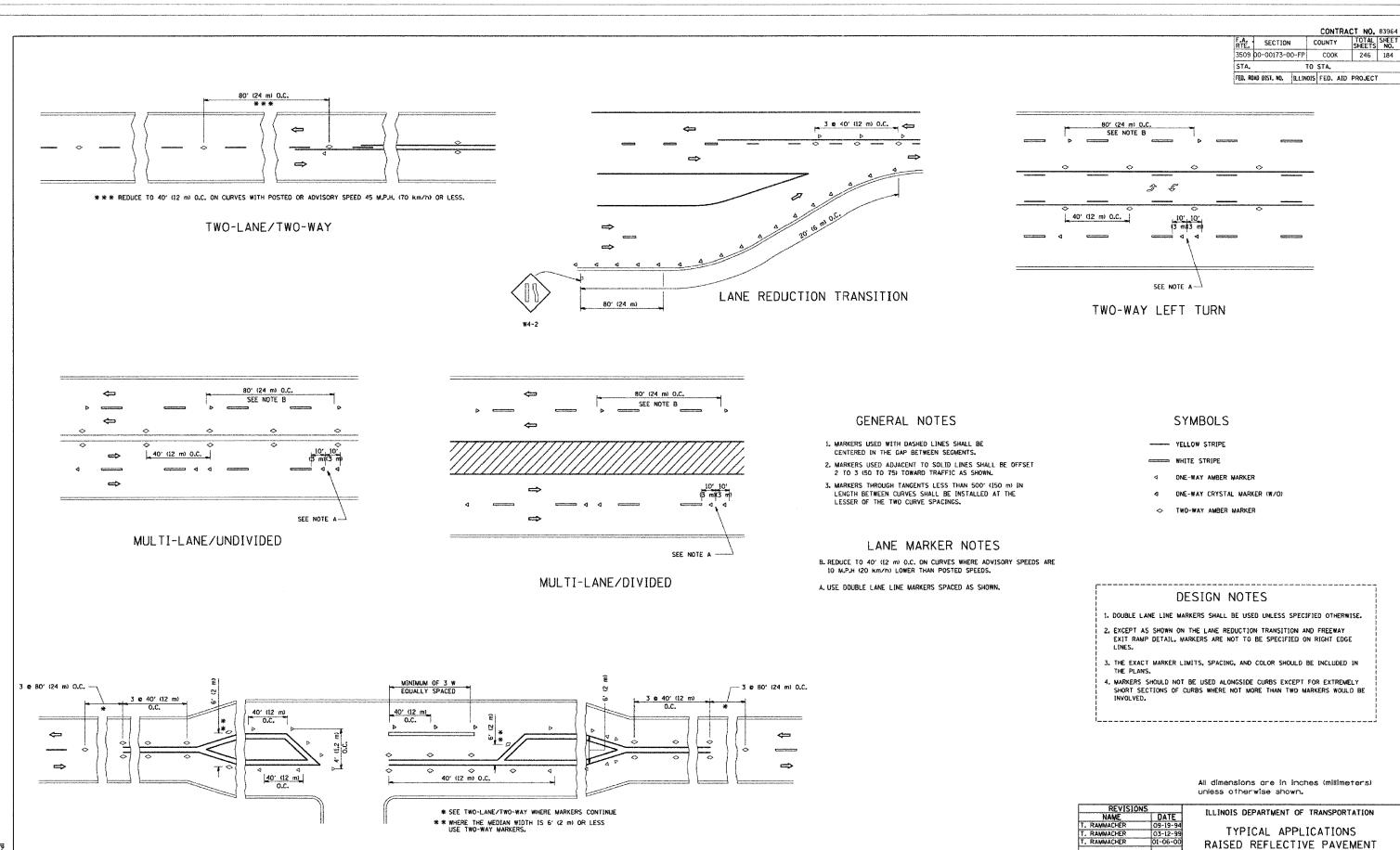
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CONTRACT NO. 83964

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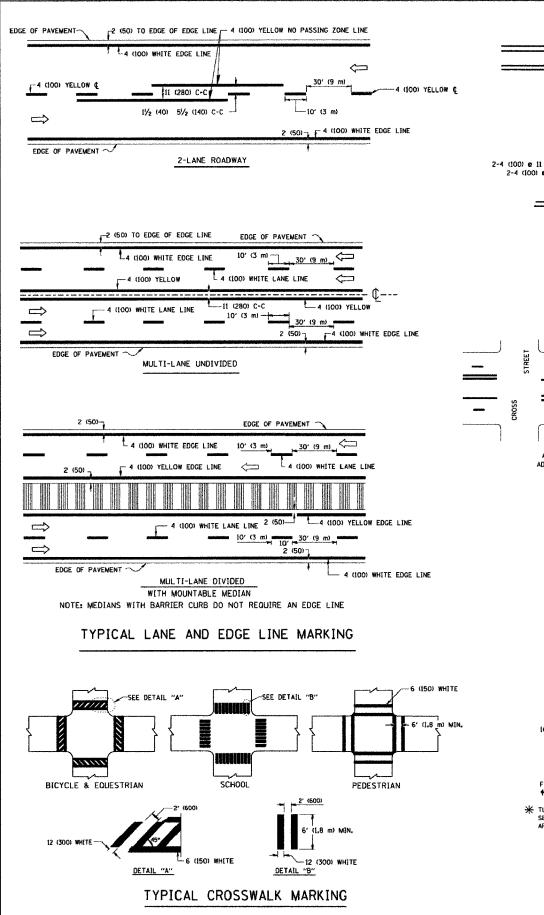
LEFT TURN

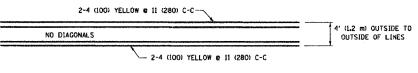
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SCALE: NONE

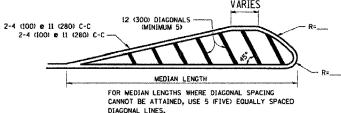
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MARKERS (SNOW-PLOW RESISTANT)



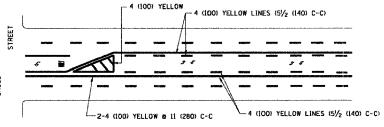


### 4' (1.2 m) WIDE MEDIANS ONLY



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

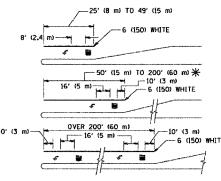


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED. WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

## TYPICAL PAINTED MEDIAN MARKING



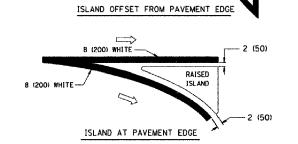
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m²) DNY AREA = 20.8 SO. FT. (1.9 m²)

\* 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

CONTRACT NO. 83964 RTE. SECTION COUNTY TOTAL SHEETS NO. 3509 00-00173-00-FP COOK 246 185 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



12 (300) WHITE DIAGONALS e 10' (3 m) OR LESS SPACING

# 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 UNDIVEDED PAVEMENT	2 & 4 (100)	SOL ID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>c</b> 4 (100)	SOL ID SOL ID	AETTOM AETTOM	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 1280) 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 0 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	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' (I.8 m) APART 2' (GOO) APART 2' (GOO) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARRALEL TO CROSSWALK, IF PRESENT. OTHERNISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE FOSSIBLE
PAINTED MEDIANS	2 0 4 (100) WITH 12 (300) DIAGONALS 0 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.
GDRE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIACONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"-3.6 SO. FT. (0.33 m²) EACH "X"-54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) <b>e</b> 45°	SOL ID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 175' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h) 150' (45 m) C-C (0VER 45MPH (70 km/h))

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

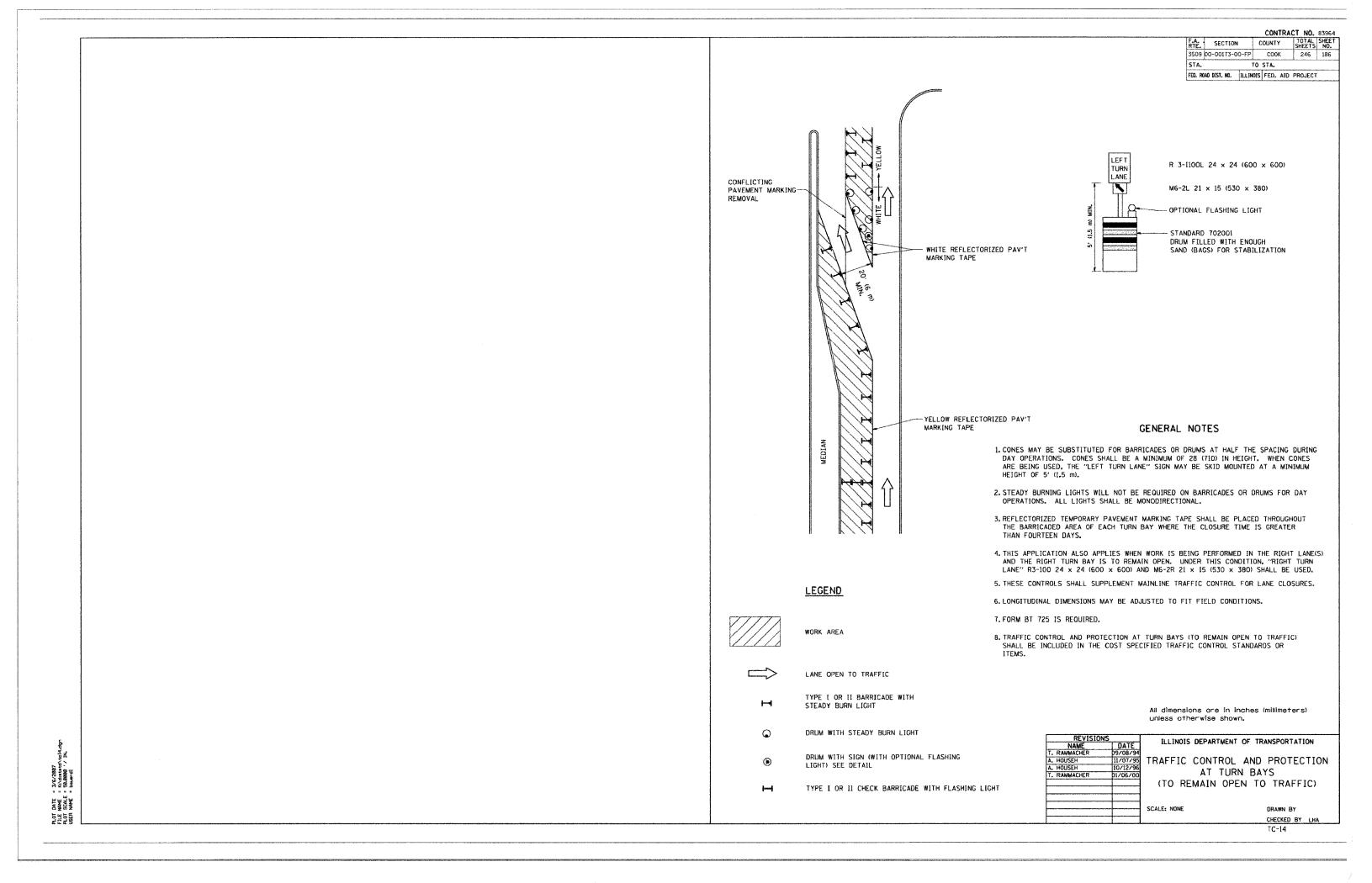
All dimensions are in inches (millimeters) unless otherwise shown.

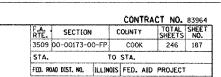
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
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VERS	03-19-90		
. RAMMACHER	10-27-94		DISTRICT ONE
LEX HOUSEH	10-09-96		
ILEX HOUSEH	10-17-96		TYPICAL PAVEMENT
. RAMMACHER	01-06-00		MARKINGS
			MAUVINGS
		SCALE: NONE	DRAWN BY CADD
		SCALES NONE	DRAIN DI CAUD

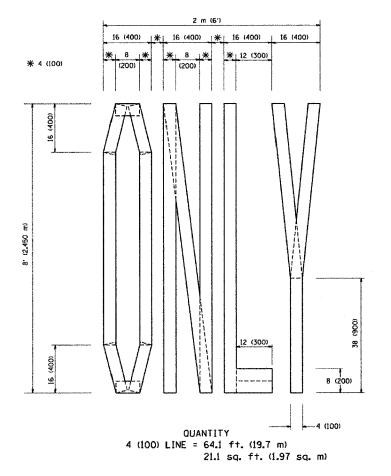
TC-13

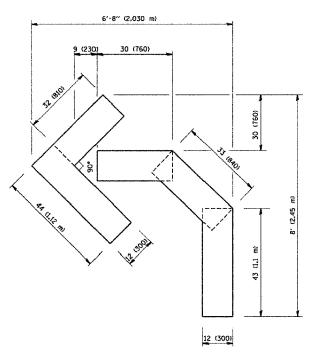
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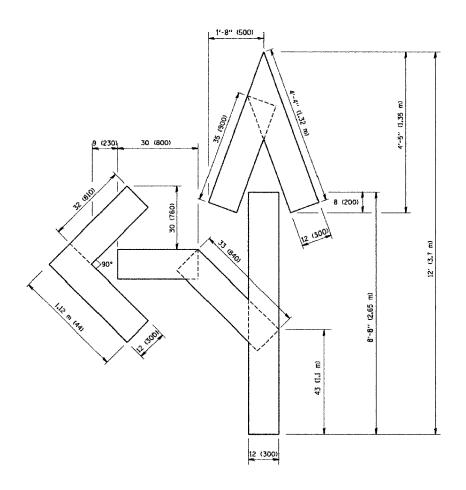








OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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

All dimensions are in inches (millimeters)

T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE

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