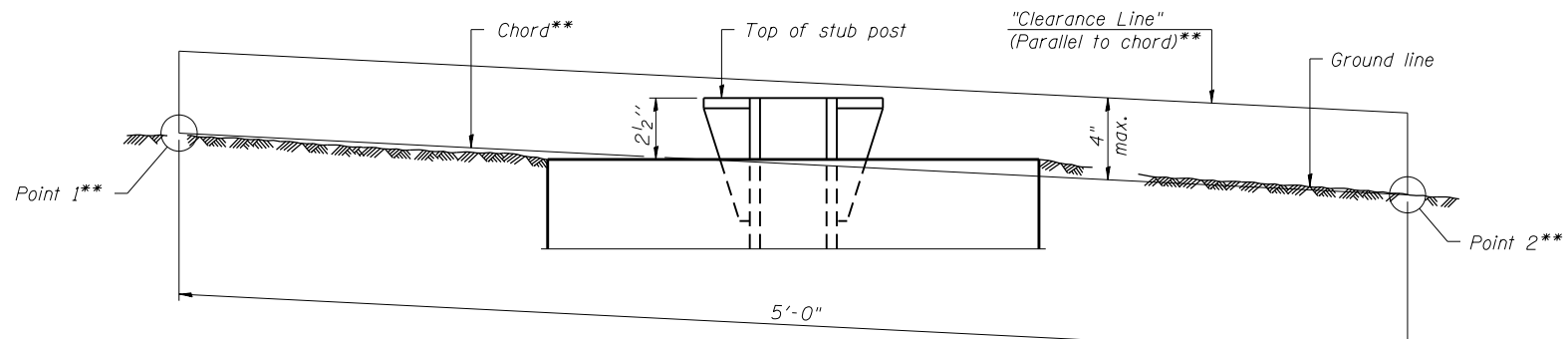


POST	CONCRETE FOUNDATION TABLE								POST TO STUB POST CONNECTION DATA								FUSE PLATE DATA					
	Foundation			Reinforcement				Stub Post	Bolt Size	A	B	C	D	E	t ₁	t ₂	R	W	J	K	L	t ₃
	Diameter	* Minimum Depth	Concrete (cu. yds.)	Vertical Bars Length	Bar Spirals Diameter	Bar Spirals Length	lbs. (2)	Length														
W6x9	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-3"	5/8" x 3/4"	6"	2 1/4"	1 1/4"	3/2"	1 1/4"	3/4"	1/2"	1 1/2"	1/4"	4"	2 1/4"	7/8"	1/4"
W6x15	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	5/8" x 3/4"	6"	2 1/4"	1 1/4"	3/2"	1 1/4"	3/4"	1/2"	1 1/2"	1/4"	6"	3 1/2"	1 1/4"	3/8"
W8x18	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3/4"	1 3/8"	1"	1/2"	1 3/2"	5/16"	5 1/4"	2 3/4"	1 1/4"	3/8"
W10x22	2'-6"	6'-6"	1.18	6'-3"	2'-2 1/2"	105'-0"	92	3'-0"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3/4"	1 3/8"	1"	1/2"	1 3/2"	5/16"	5 3/4"	2 3/4"	1 1/2"	1/2"
W10x26	2'-6"	7'-0"	1.27	6'-9"	2'-2 1/2"	112'-0"	98	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	1 5/2"	3/8"	5 3/4"	2 3/4"	1 1/2"	5/8"
W12x26	2'-6"	7'-9"	1.41	7'-6"	2'-2 1/2"	119'-0"	107	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	1 5/2"	3/8"	6 1/2"	3 1/2"	1 1/2"	5/8"
W14x30	3'-0"	7'-3"	1.90	7'-0"	2'-8 1/2"	145'-0"	113	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	1 5/2"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W14x38	3'-0"	8'-0"	2.09	7'-9"	2'-8 1/2"	153'-0"	122	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	1 7/2"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W16x45	3'-0"	8'-6"	2.23	8'-3"	2'-8 1/2"	162'-0"	130	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	1 7/2"	3/8"	7"	3 1/2"	1 3/4"	1/2"

*Dimensional changes required for varying site conditions shall be approved by the Engineer.

POST	FUSE PLATE BOLT SIZE																					
	Sign Height																					
	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"	22'-0"	23'-0"	24'-0"	
W6x9	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
W6x15	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	—	—	—	—	—	—	—	—	—	—	—	—	
W8x18	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	—	—	—	—	—	—	—	—	—	—	—	—	
W10x22	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	—	—	—	—	—	—	—	—	
W10x26	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	—	—	—	—	—	—	—	—	
W12x26	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	—	—	—	—	—	—	—	—	
W14x30	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	—	—	—	—	—	—	—	—	
W14x38	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"
W16x45	—	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"



**ELEVATION
GROUND LINE & STUB POST**

** For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

- ① Quantity includes all concrete necessary for one foundation.
- ② Includes reinforcement bars and spiral hooping for one foundation.

BAW-A-2

6-1-12

(Sheet 2 of 2)



D160W26-sht-Sign-Det-16	DESIGNED -	REVISED -
USER NAME = auyeungh	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 8/18/2013	DATE - 8/20/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

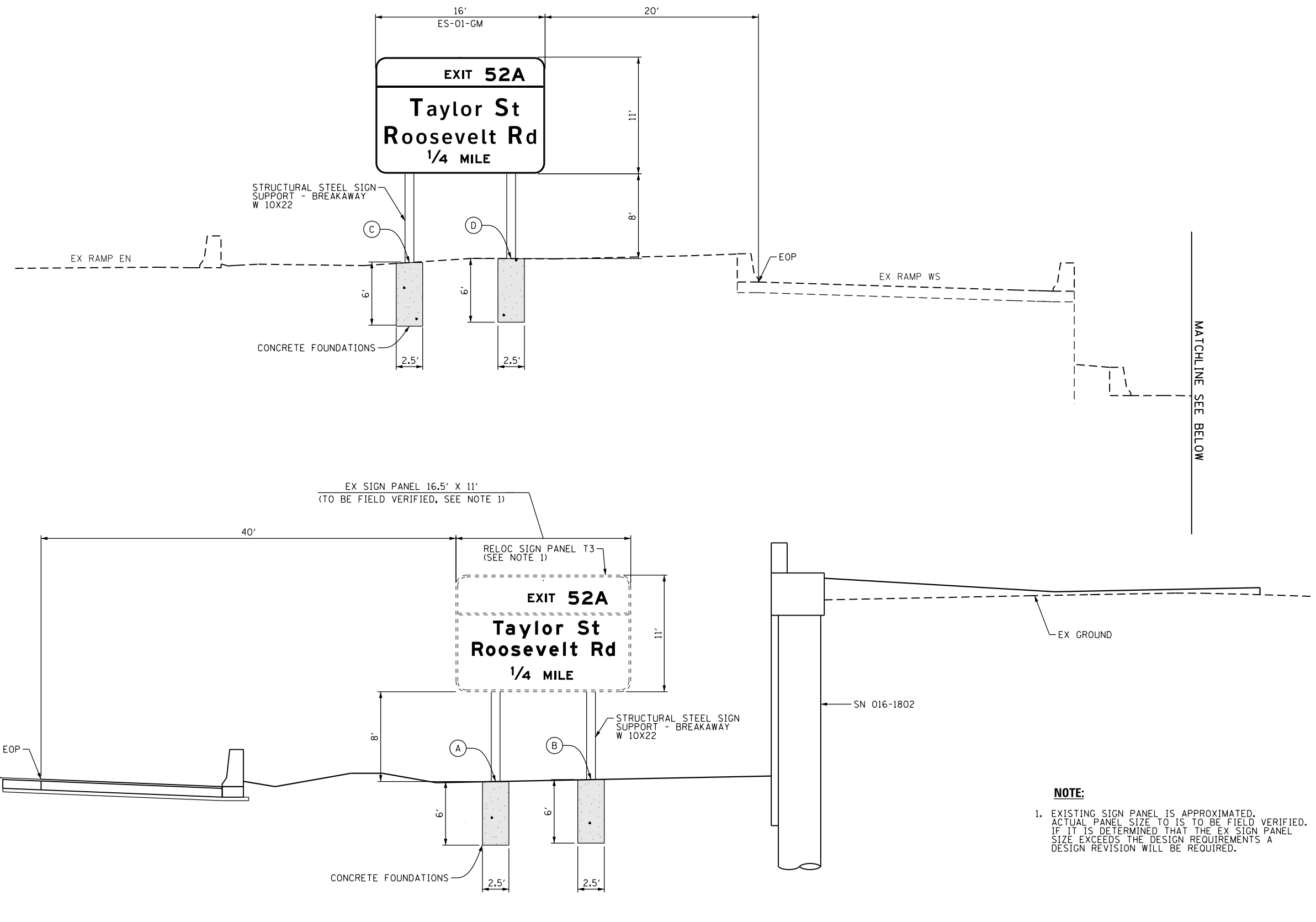
**BREAK-AWAY WIDE FLANGE
STEEL SIGN POST TABLES**

SCALE: 1"=10' SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	201
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

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GROUND MOUNTED SIGN
STA 7308 + 50 (PR BL TAYLOR EXIT RAMP)
LOOKING SOUTH

NOTE:
 1. EXISTING SIGN PANEL IS APPROXIMATED. ACTUAL PANEL SIZE TO IS TO BE FIELD VERIFIED. IF IT IS DETERMINED THAT THE EX SIGN PANEL SIZE EXCEEDS THE DESIGN REQUIREMENTS A DESIGN REVISION WILL BE REQUIRED.

LOCATION	TOP OF FOUNDATION ELEVATION
A	576.12
B	576.30
C	589.93
D	590.30



DI60W26-sht-Sign-Det-03.dgn
 USER NAME = chitua
 PLOT SCALE = 5.0000' / 1" =
 PLOT DATE = 9/12/2013

DESIGNED -
 DRAWN -
 CHECKED -
 DATE - 9/15/13

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

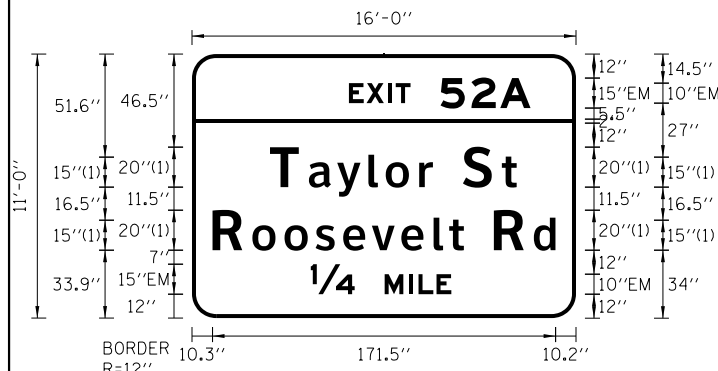
SIGNING DETAILS

SCALE: NONE SHEET 3 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	202
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

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SIGN DETAIL
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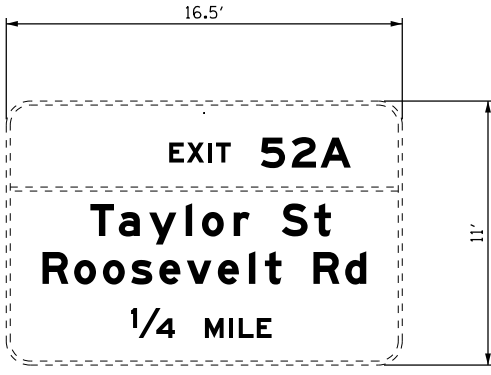


Panel Style: **guide_exp_advance_a.ssi**
 Dimensions are in **inches.tenths**
 Letter locations are panel edge to lower left corner

SIGN NUMBER	ES-01-GM
WIDTH x HGHT.	16'-0" x 11'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: ZZ Retro Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

LETTER POSITIONS (X)								LENGTH	SERIESSIZE			
E	X	I	T	5	2	A			EM 2000			
78.5	87.3	98.1	101.9	124.3	139.7	154.1		90.8	10,15			
T	a	y	l	o	r	S	t		ClearviewHwy-5-W			
39	58.5	72.6	88.2	96.9	113.6	135.5	155	123.3	20,15/12.2			
R	o	o	s	e	v	e	l	t	ClearviewHwy-5-W			
10.3	30.2	46.3	61.8	75.6	90	104.7	120.9	128.6	151	170.9	171.5	20,15/12.2
14	M	I	L	E					EM 2000			
59.4	96.3	108.4	113.2	122.2					15,10			



RELOCATE SIGN PANEL - TYPE 3
 STA 7308+50, 32.8' RT (CENTER OF PANEL)

NOTE:
 1. EXISTING SIGN PANEL IS APPROXIMATED.
 ACTUAL PANEL SIZE TO IS TO BE FIELD VERIFIED.

SIGN PANEL - TYPE 3
 STA 7308+50, 148.3' RT (CENTER OF PANEL)



DI60W26-sht-Sign-Det-06
 USER NAME = chitua
 PLOT SCALE = 10.0000 / in.
 PLOT DATE = 9/12/2013

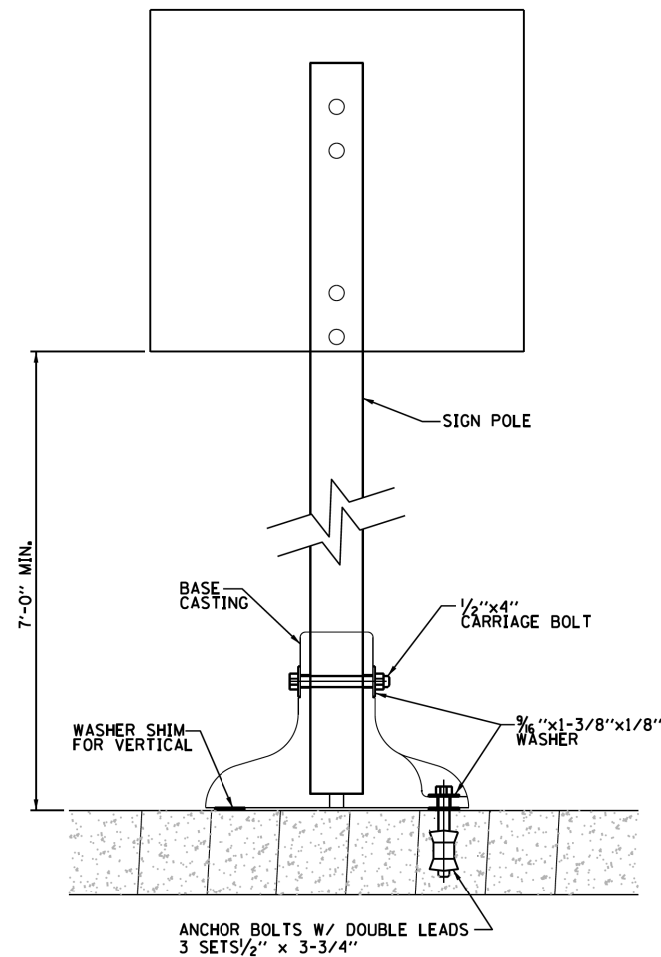
DESIGNED - OPS	REVISED -
DRAWN - OPS	REVISED -
CHECKED - DBM	REVISED -
DATE - 9/15/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

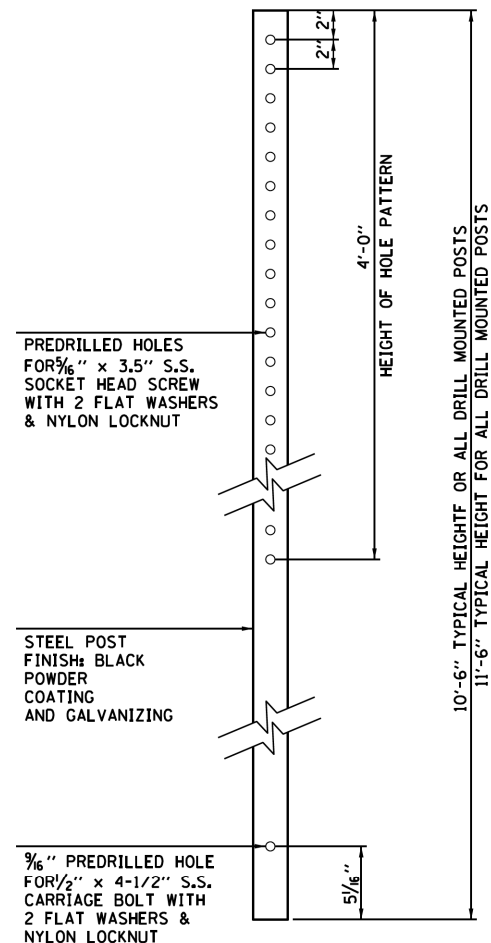
SIGNING DETAILS

SCALE: NONE SHEET ***-DET-00S-DEPT03 STA. TO STA.

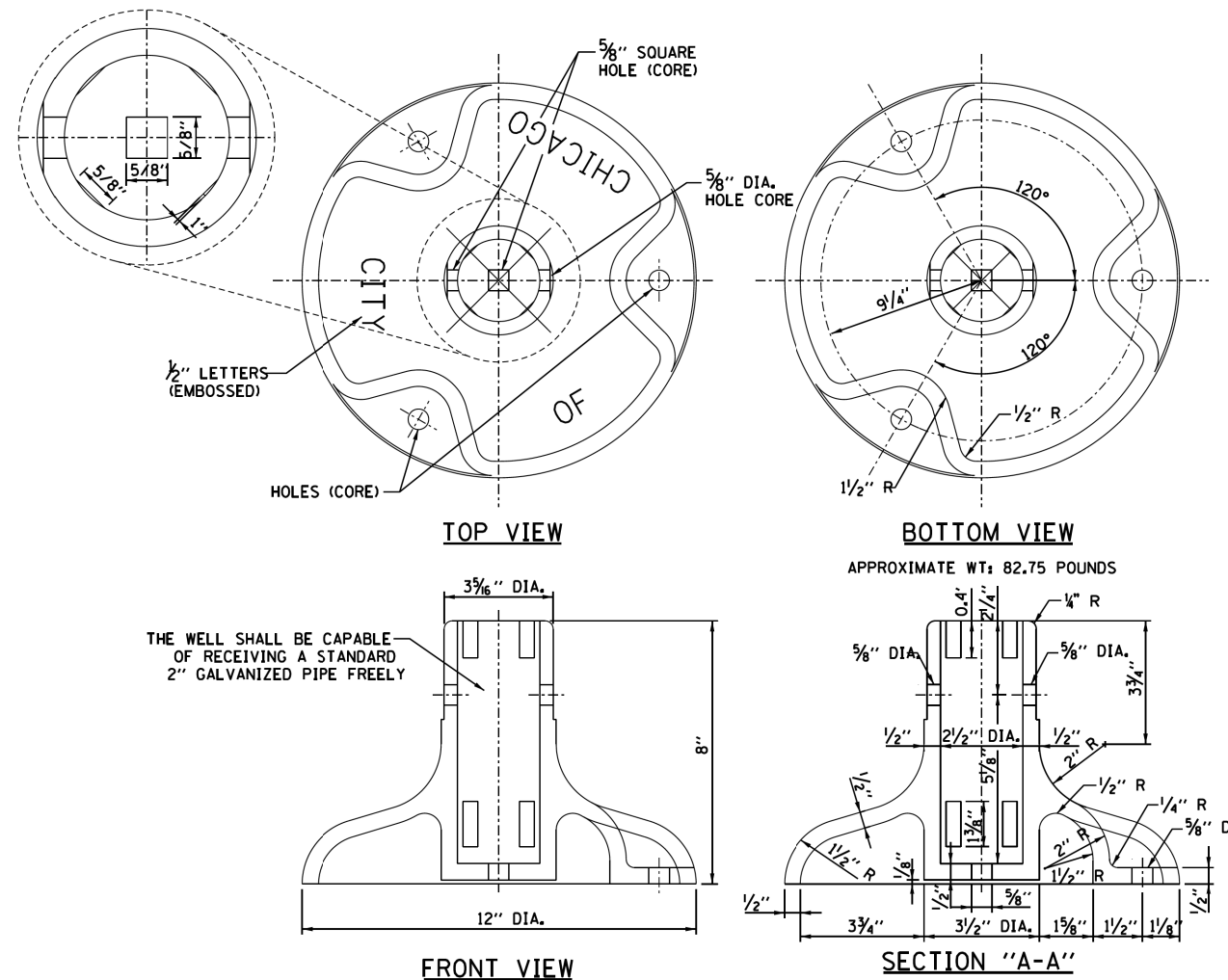
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	203
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



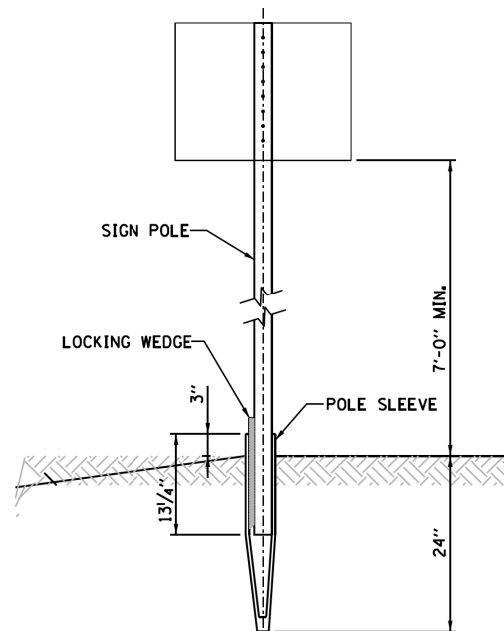
DRILL MOUNTED INSTALLATION DETAIL
NOT TO SCALE



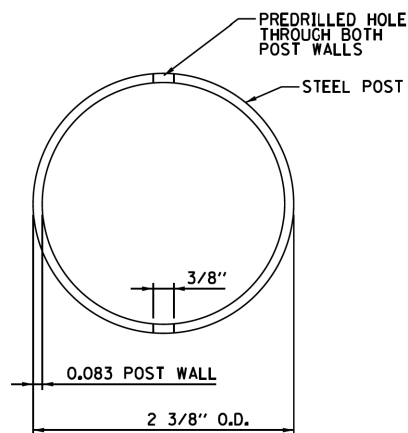
1 ELEVATION: DRILLED SIGN POST
NOT TO SCALE



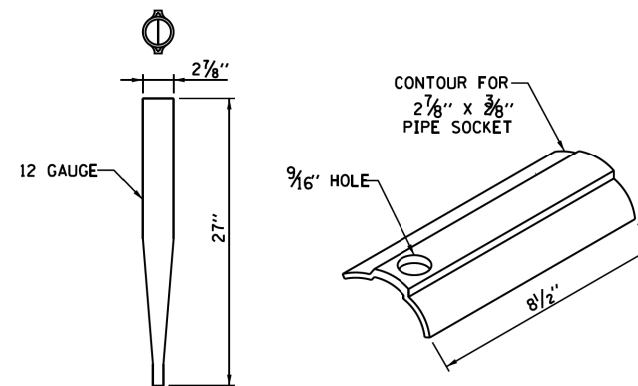
SIGN POLE BASE DETAIL
NOT TO SCALE



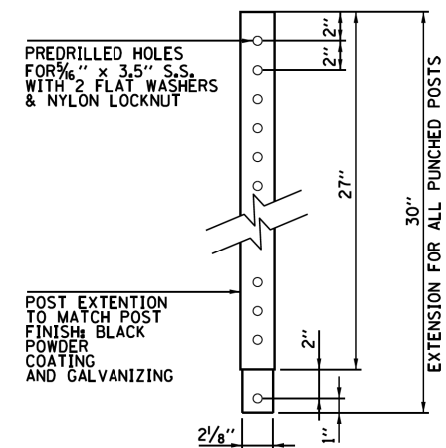
GROUND DIG INSTALLATION DETAIL
NOT TO SCALE



2 ELEVATION: DRILLED POST
NOT TO SCALE



PIPE SOCKET AND WEDGE DETAIL
NOT TO SCALE



SECTION: DRILLED POST EXTENSION
NOT TO SCALE

NOTE:
PROVIDE ADDITIONAL TWO SETS OF PREDRILLED HOLES ON EXTENSION. HOLES SHALL BE LOCATED AT 30° ANGLE TO HOLES SHOWN IN SECTION 3. HOLES SHALL ACCOMMODATE 5/16" x 3.5" S.S. SOCKET HEAD SCREW WITH 2 FLAT WASHERS AND NYLON LOCKNUT.

FILE PATH = c:\pwworking\lms\lmscom\0204535\0160W26-sht-Sign-Det-17.dgn



DI60W26-sht-Sign-Det-17.dgn
USER NAME = kolorenz
PLOT SCALE = 10.0000 / in.
PLOT DATE = 8/18/2013

DESIGNED - KAL
DRAWN - BAW
CHECKED - JLV
DATE - 8/20/13

REVISED -
REVISED -
REVISED -
REVISED -

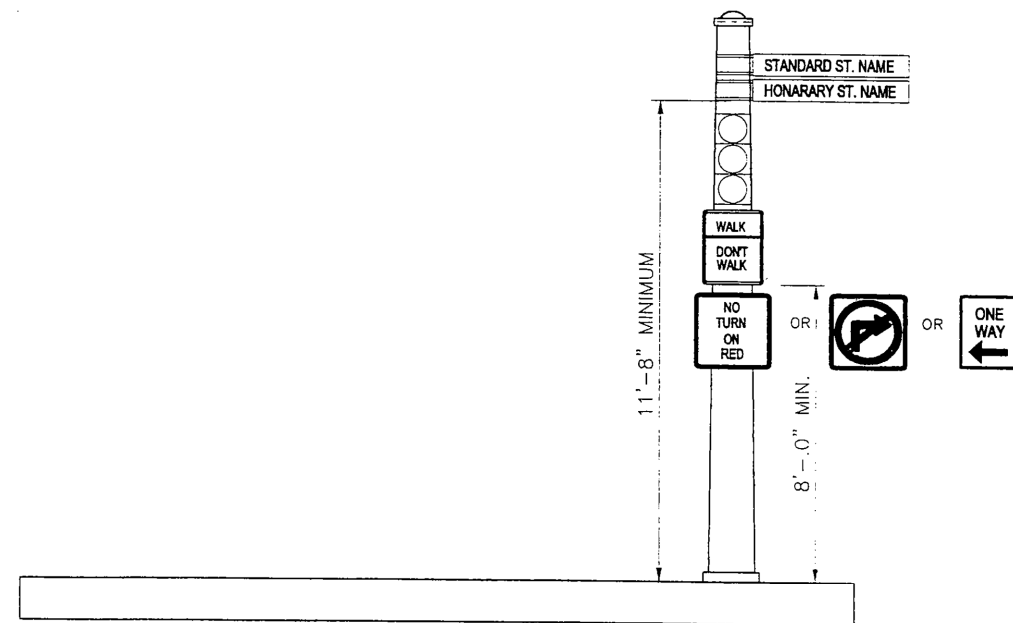
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING DETAILS

SCALE: N.T.S. SHEET 1 OF 4 SHEETS STA. TO STA.

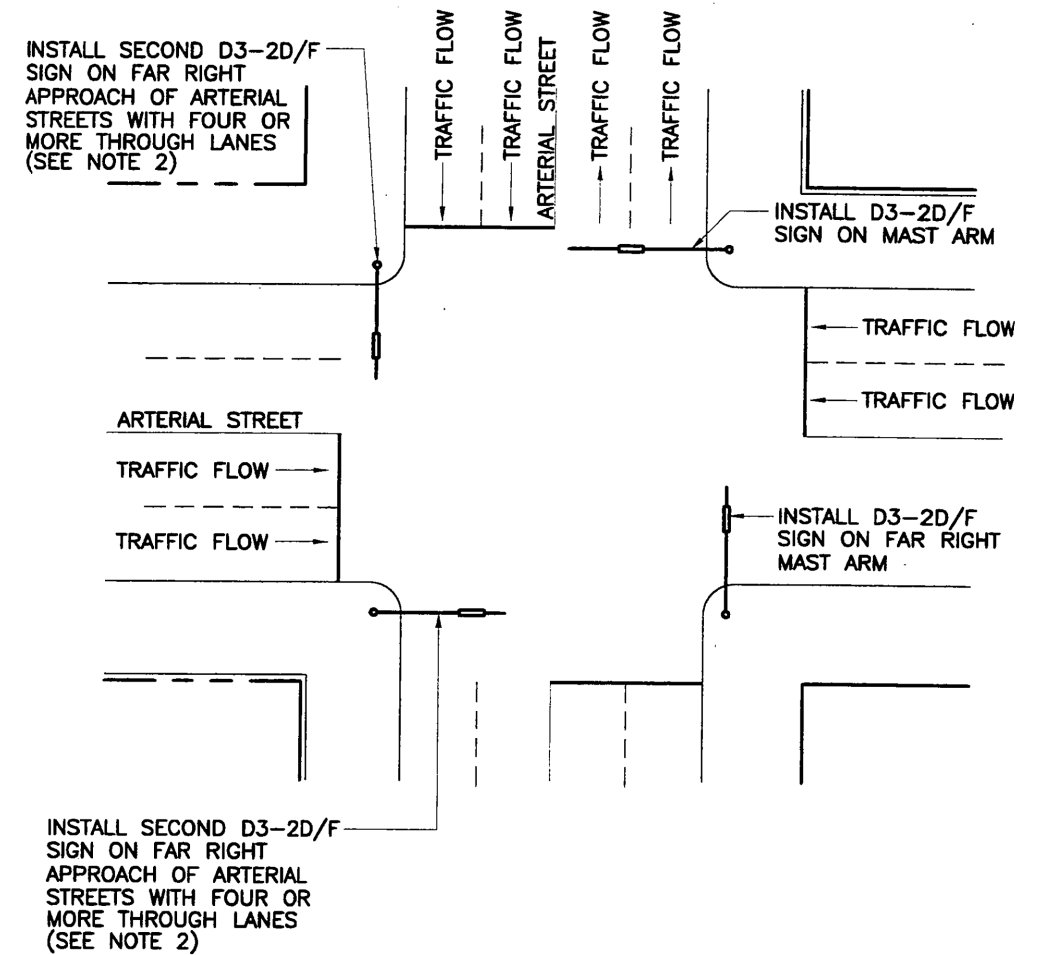
F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	204
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

REGULATORY TRAFFIC SIGNS
TRAFFIC SIGNAL CONTROL SERIES (SIGNAL POST)



TYPICAL LAYOUT
NOT TO SCALE

GUIDE SIGNS
STREET NAME LOCATION AT SIGNALIZED
INTERSECTIONS OF TWO ARTERIAL STREETS



NOTES:

1. WHERE MORE THAN ONE MAST ARM IS PROVIDED, INSTALL FIRST SET OF D3-2D/F SIGNS ON FAR NORTH (FOR NORTH-SOUTH STREETS) OR FAR EAST (FOR EAST-WEST STREETS) CORNER OF INTERSECTION.
2. USE OF SINGLE STREET NAME SIGN ON TWO LANE ARTERIALS PROPOSED AS PILOT PROGRAM. A SECOND SIGN MAY BE INSTALLED ON PRINCIPAL ARTERIALS WHEN REQUESTED BASED ON REVIEW BY TRAFFIC ENGINEER.

TYPICAL LAYOUT

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PLOT DATE = 8/18/2013	DATE - 8/20/13	REVISED -

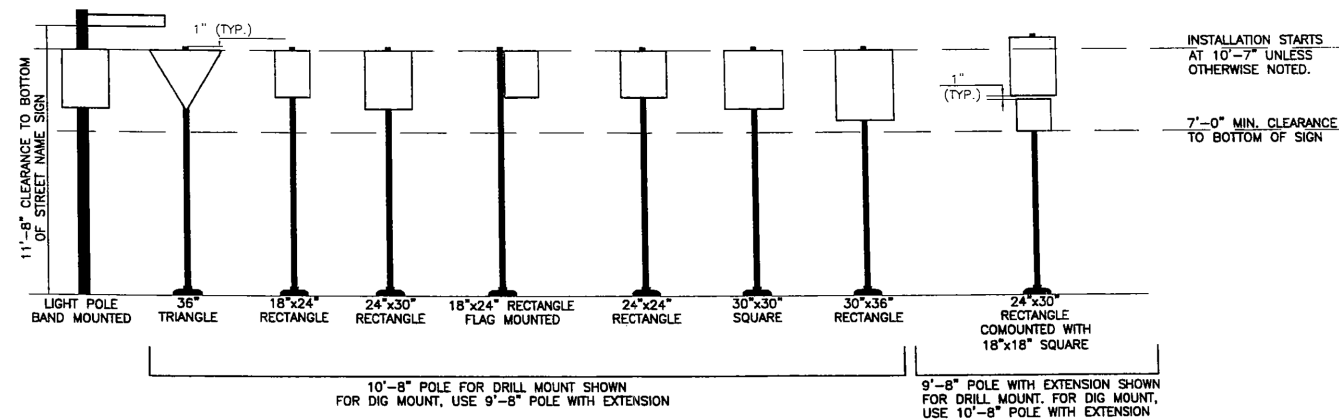
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING DETAILS

SCALE: N.T.S. SHEET 3 OF 4 SHEETS STA. TO STA.

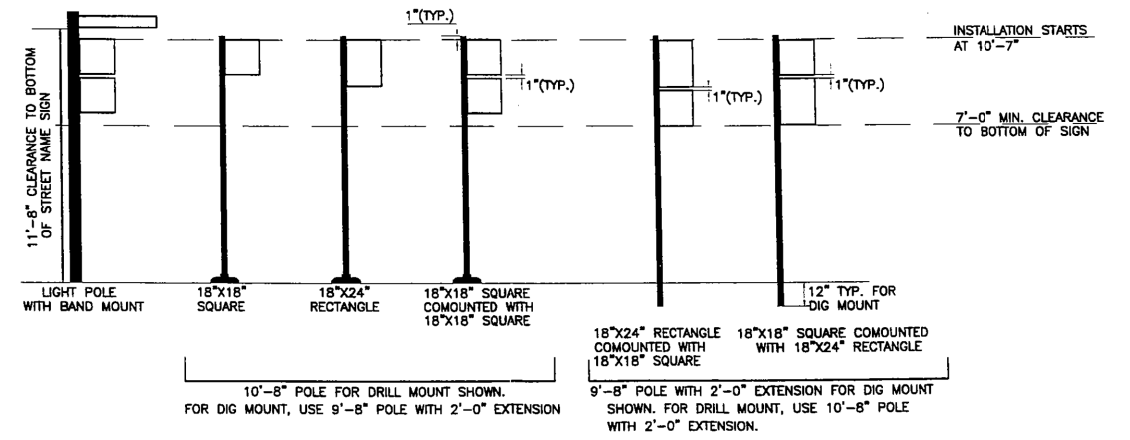
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90/94/290	2013-008R	COOK	559	206
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

REGULATORY TRAFFIC SIGNS
(CHICAGO STYLE)



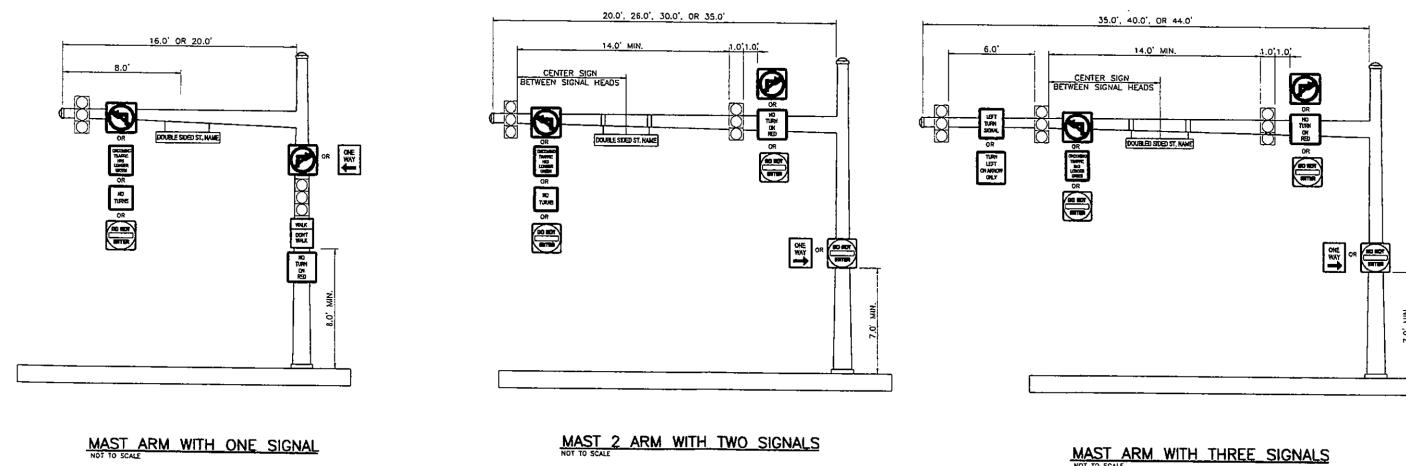
TYPICAL LAYOUT
NOT TO SCALE

REGULATORY PARKING SIGNS
(CHICAGO STYLE)



TYPICAL LAYOUT
NOT TO SCALE

REGULATORY TRAFFIC SIGNS
TRAFFIC SIGNAL CONTROL SERIES (MAST ARMS)



TYPICAL LAYOUT

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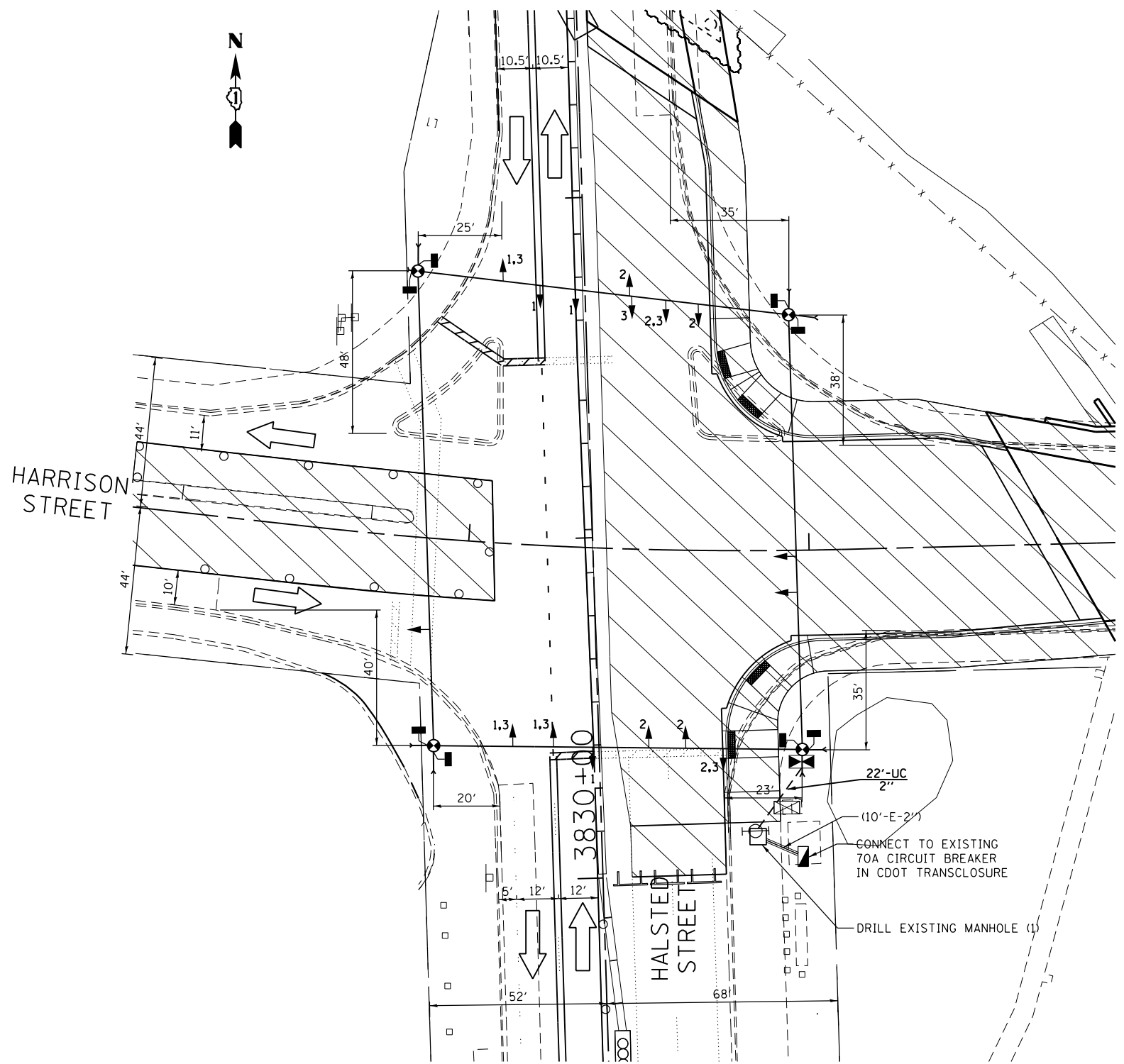
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PLOT DATE = 8/18/2013	DATE - 8/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING DETAILS

SCALE: N.T.S. SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	207
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



NOTES FOR TEMPORARY TRAFFIC SIGNALS:

1. ALL CONTROL EQUIPMENT AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTABLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL. TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. CONTRACTOR MUST CONTACT FRANK KELLY AT THE OFFICE OF EMERGENCY MANAGEMENT AND COMMUNICATIONS (OEMC) PRIOR TO THE REMOVAL OF ANY SIGNAL EQUIPMENT TO COORDINATE THE REMOVAL AND REINSTALLATION OF OEMC EQUIPMENT AT THIS LOCATION BY OEMC STAFF. FRANK KELLY'S CONTACT IS PROVIDED BELOW.

FRANK KELLY
312-746-9238
Frank.Kelly@cityofchicago.org
11. REFER TO SHEET 210 FOR REMOVAL OF EXISTING SIGNAL EQUIPMENT.
12. NUMBERS NEXT TO SIGNAL HEADS INDICATE CONSTRUCTION STAGE LOCATION

CONSTRUCTION NOTES

THE EAST LEG OF HARRISON ST WILL BE CLOSED TO TRAFFIC FOR THE DURATION OF THE HARRISON ST BRIDGE CONSTRUCTION. THE EXISTING TRAFFIC SIGNAL MUST REMAIN OPERATIONAL PRIOR TO THE CLOSURE OF THE EAST LEG OF HARRISON ST TO TRAFFIC. THE TEMPORARY TRAFFIC SIGNAL MUST BE DEACTIVATED AND THE PROPOSED SIGNAL MUST BE OPERATIONAL PRIOR TO THE REOPENING OF THE EAST LEG OF HARRISON ST TO TRAFFIC.

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

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EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

D160W26-sht-Ts-01.dgn	DESIGNED - GG	REVISED -
USER NAME = ggedemer	DRAWN - GG	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JW	REVISED -
PLOT DATE = 9/6/2013	DATE - 09/15/13	REVISED -

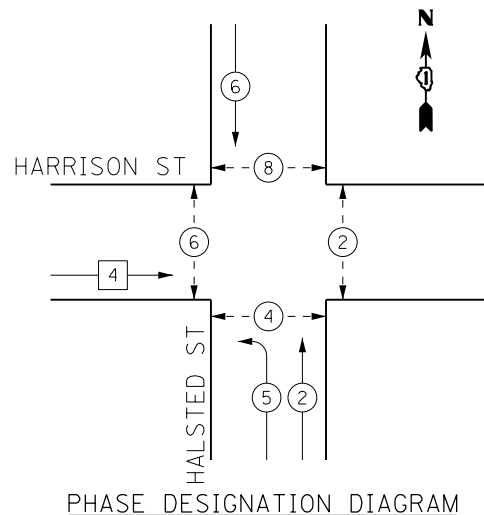
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL PLAN (ALL STAGES)
HALSTED ST AND HARRISON ST**

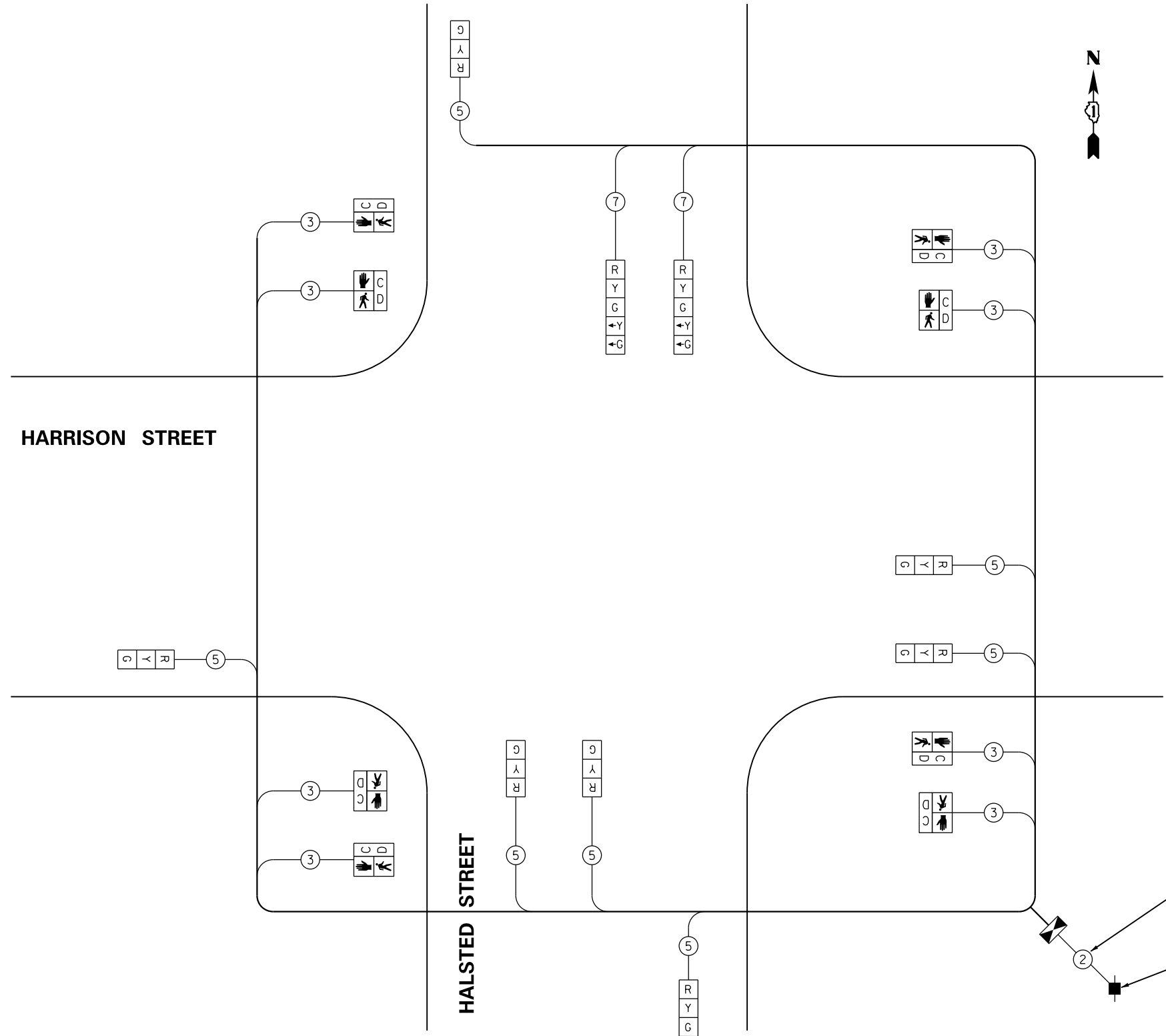
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	208
				CONTRACT NO. 60W26
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE



HARRISON STREET



I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	9	135	17	0.50	76.50
(YELLOW)	9	135	25	0.25	56.25
(GREEN)	9	135	15	0.25	33.75
ARROW	4	135	12	0.10	4.80
PED. SIGNAL	8	90	25	1.00	200.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN			25	0.50	
VIDEO SYSTEM		150		1.00	

ENERGY COSTS TO: TOTAL = 471.30

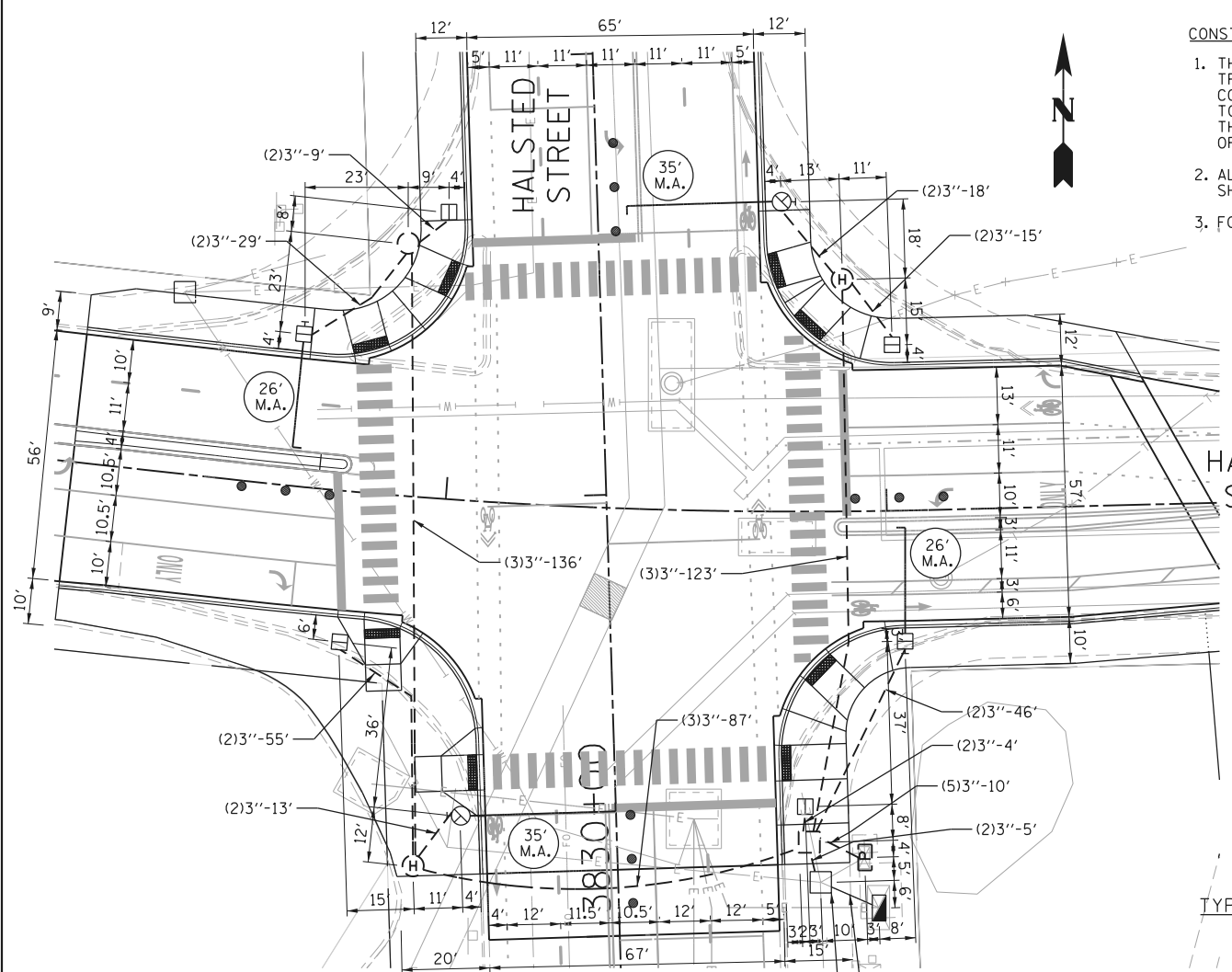
ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: _____
PHONE: _____
COMPANY: COM ED

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

NOTE:
CONTRACTOR SHALL INSTALL CDOT APPROVED SIGNAL TIMING FOR TEMPORARY SIGNAL OPERATION AT THIS LOCATION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY AND SHALL BE CONSIDERED INCLUDED IN "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

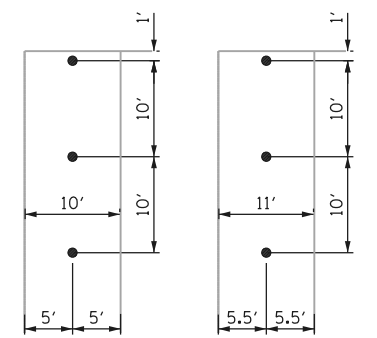
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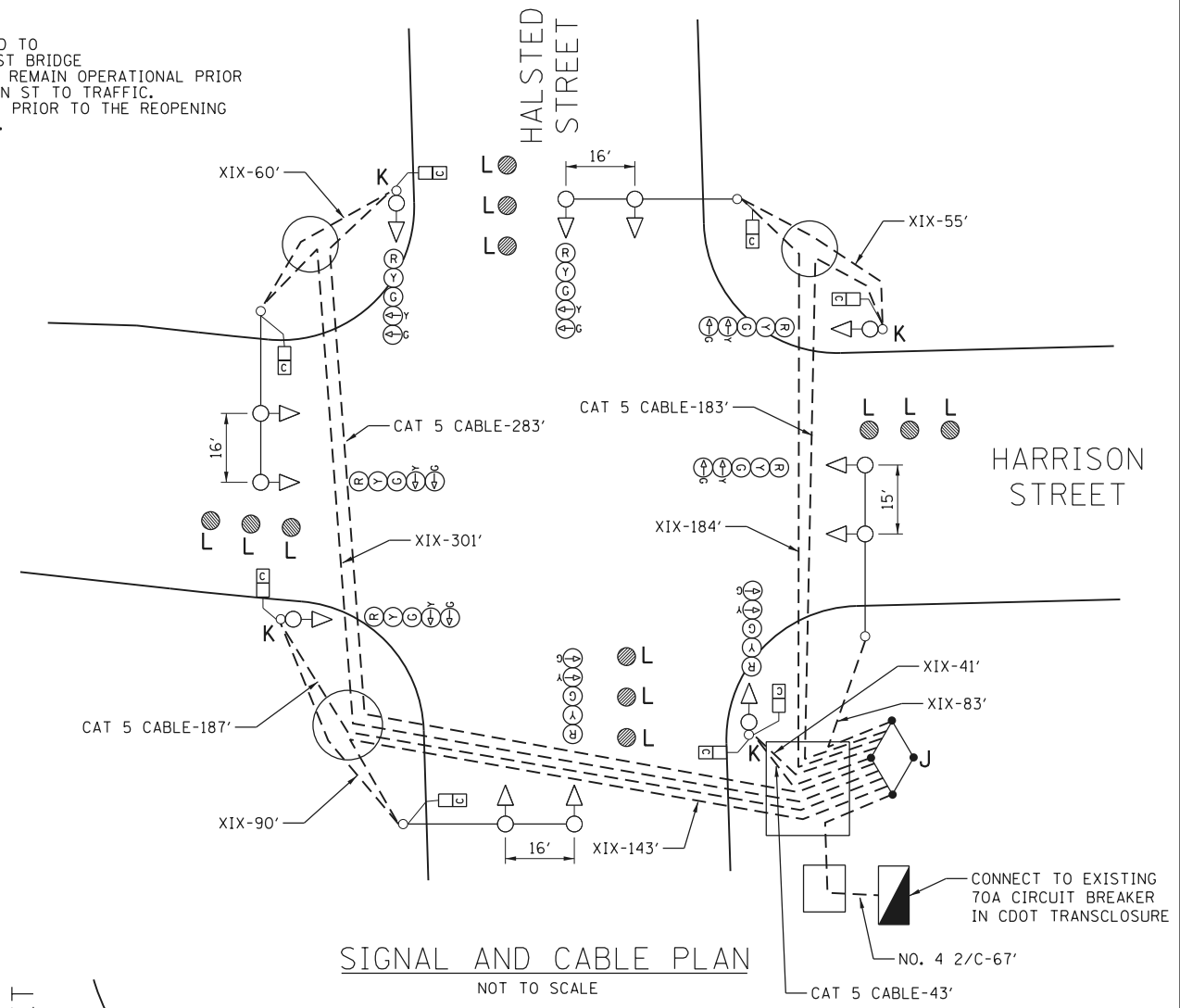
FOUNDATION AND CONDUIT PLAN
SCALE: 1"=20'

CONSTRUCTION NOTES

1. THE EAST LEG OF HARRISON ST WILL BE CLOSED TO TRAFFIC FOR THE DURATION OF THE HARRISON ST BRIDGE CONSTRUCTION. THE WESTBOUND SIGNALS MUST REMAIN OPERATIONAL PRIOR TO THE CLOSURE OF THE EAST LEG OF HARRISON ST TO TRAFFIC. THE WESTBOUND SIGNALS MUST BE OPERATIONAL PRIOR TO THE REOPENING OF THE EAST LEG OF HARRISON ST TO TRAFFIC.
2. ALL CONDUITS PLACED UNDER PAVEMENT SHALL BE SCHEDULE 80
3. FOR LEGEND SEE DEO DRAWING NO. 826

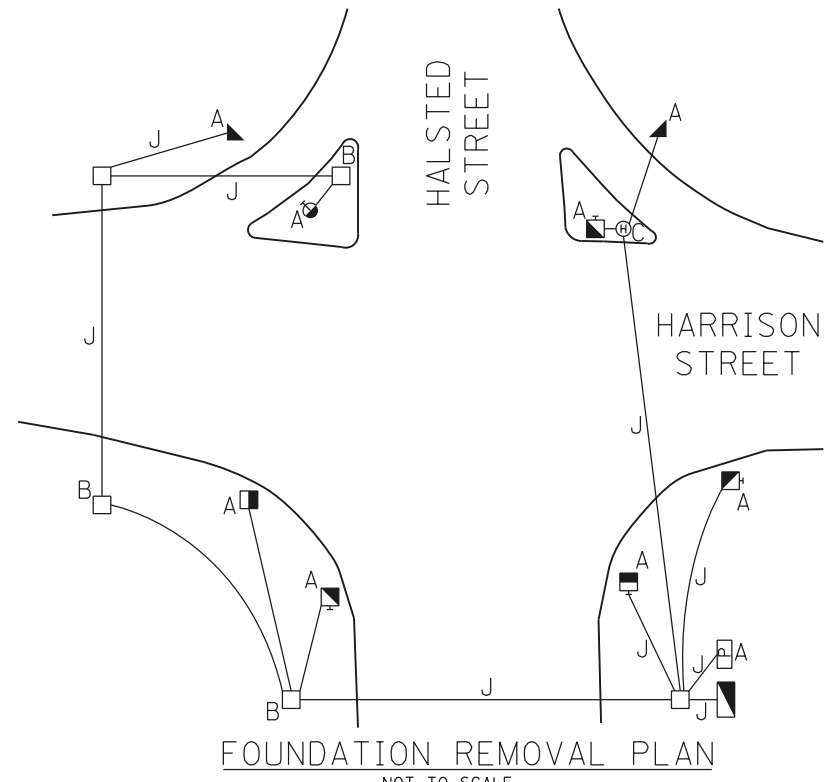


TYPICAL WIRELESS DETECTION LAYOUT



SIGNAL AND CABLE PLAN
NOT TO SCALE

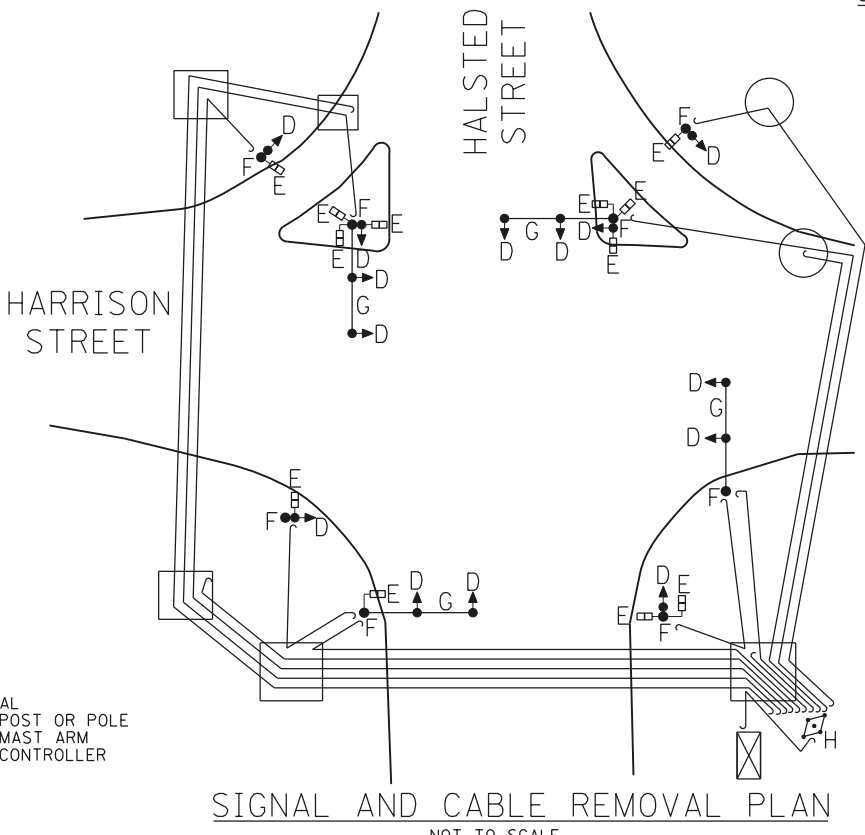
- SIGNAL AND CABLE LEGEND:**
- J - INSTALL WIRELESS DETECTION PACKAGE IN TRAFFIC CONTROLLER
 - K - INSTALL RADIO RECEIVER ON POLE
 - L - INSTALL WIRELESS SENSOR IN PAVEMENT
 - C - LED PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER
 - - WIRELESS SENSOR IN PAVEMENT



FOUNDATION REMOVAL PLAN
NOT TO SCALE

REMOVAL LEGEND

- A - BREAKDOWN FOUNDATION
- B - BREAKDOWN MANHOLE
- C - BREAKDOWN HANDHOLE
- D - REMOVE TRAFFIC SIGNAL
- E - REMOVE PEDESTRIAN SIGNAL
- F - REMOVE TRAFFIC SIGNAL POST OR POLE
- G - REMOVE TRAFFIC SIGNAL MAST ARM
- H - REMOVE TRAFFIC SIGNAL CONTROLLER
- J - ABANDON CONDUIT
- - CABLE TO BE REMOVED



SIGNAL AND CABLE REMOVAL PLAN
NOT TO SCALE

DATE		REVISION	
SUPERSEDES DRAWING NO.: 14737 DATED: 3-28-07			
TRAFFIC CONTROL SIGNALS HALSTED ST AND HARRISON ST			
CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION DIVISION OF ELECTRICAL OPERATIONS			
DRAFTSMAN:	CHIEF DRAFTSMAN:	ENGINEER:	
		G. GEDEMER	
SUPERVISING ENGINEER:	ELEC. DESIGN ENGR.	DWG. NO.	
ENGINEER OF ELECTRICITY:		14737	
GEN'L SUPT. OF ELECTRICITY:			
DEPUTY COMMISSIONER:			
SIZE:	SCALE: AS NOTED	DATE:	09/15/13

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D160W26-sht-Ts-03.dgn
USER NAME = ggedemer
PLOT SCALE = 20.0000' / in.
PLOT DATE = 9/11/2013

DESIGNED - GG
DRAWN - GG
CHECKED - JW
DATE - 09/15/13

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SIGNALS
HALSTED ST AND HARRISON ST

SCALE: AS NOTED SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	210
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

DESIGNED BY: GG

DATE: 08/20/13

CHECKED BY: JW

DATE: 08/20/13

APPROVED:

TRAFFIC ENGINEER:

CITY TRAFFIC ENGINEER:

PAGE 1 OF 1

SENT: _____ INSTALLED: _____

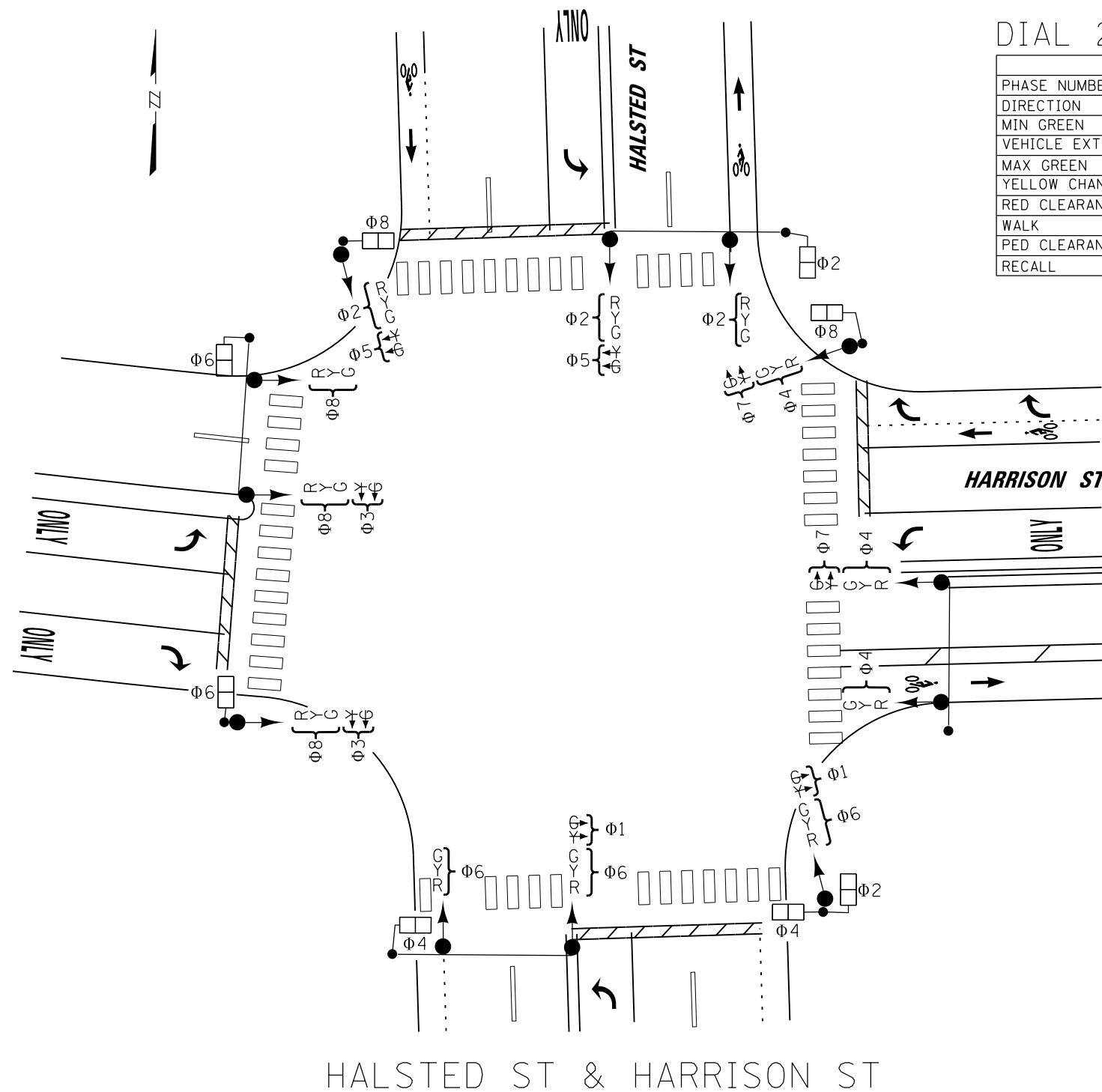
DIAL	CYCLE LENGTH	OFFSET	TIMES OF OPERATION	FLASH OPERATION
1	100"	86"	ALL OTHER TIMES	R02, R04, R06, R08
2	100"	59"	6:00 AM TO 10:00 AM, MON-FRI.	ALL ARROWS AND WALK/DON'T WALK OFF
3	100"	59"	3:00 PM TO 7:00 PM, MON-FRI.	
4				

DIAL 1

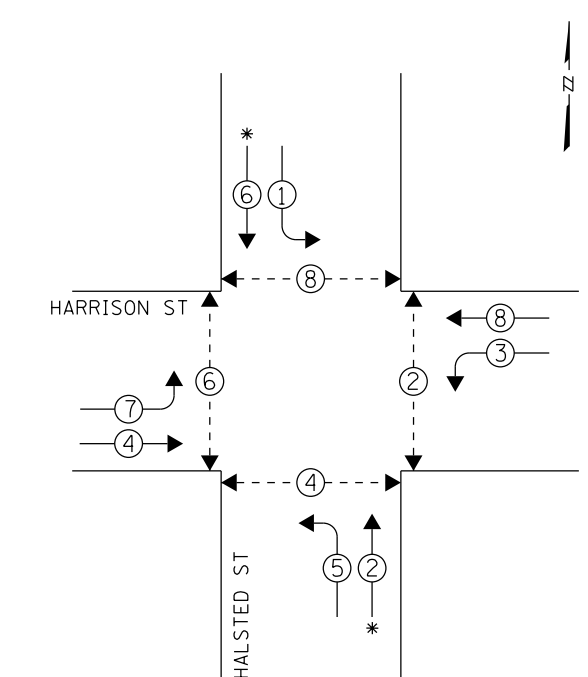
PHASE NUMBER	PHASE							
	1	2	3	4	5	6	7	8
DIRECTION	SBLT	NB	WBLT	EB	NBLT	SB	EBLT	WB
MIN GREEN	6	44	6	30	6	44	6	30
VEHICLE EXT.	0		0		0		0	
MAX GREEN	6	53	6	39	6	53	6	39
YELLOW CHANGE	3	3	3	3	3	3	3	3
RED CLEARANCE	0	1	0	1	0	1	0	1
WALK		23		10		23		10
PED CLEARANCE		21		20		21		20
RECALL		COORD		MIN		COORD		MIN

DIAL 2 & 3

PHASE NUMBER	PHASE							
	1	2	3	4	5	6	7	8
DIRECTION	SBLT	NB	WBLT	EB	NBLT	SB	EBLT	WB
MIN GREEN	6	39	6	35	6	33	6	35
VEHICLE EXT.	0		0		3		0	
MAX GREEN	6	48	6	44	12	48	6	44
YELLOW CHANGE	3	3	3	3	3	3	3	3
RED CLEARANCE	0	1	0	1	0	1	0	1
WALK		23		10		23		10
PED CLEARANCE		21		20		21		20
RECALL		COORD		MIN		COORD		MIN



CONTROLLER SEQUENCE



- LEGEND**
- ⊕ → DUAL ENTRY PHASE
 - ⊞ → SINGLE ENTRY PHASE
 - ⊞^{OL} → OVERLAP
 - ⊕ → PEDESTRIAN PHASE
 - # → NUMBER REFERS TO ASSOCIATED PHASE
 - *

DEO/BOE DRAWING NUMBER: 14737

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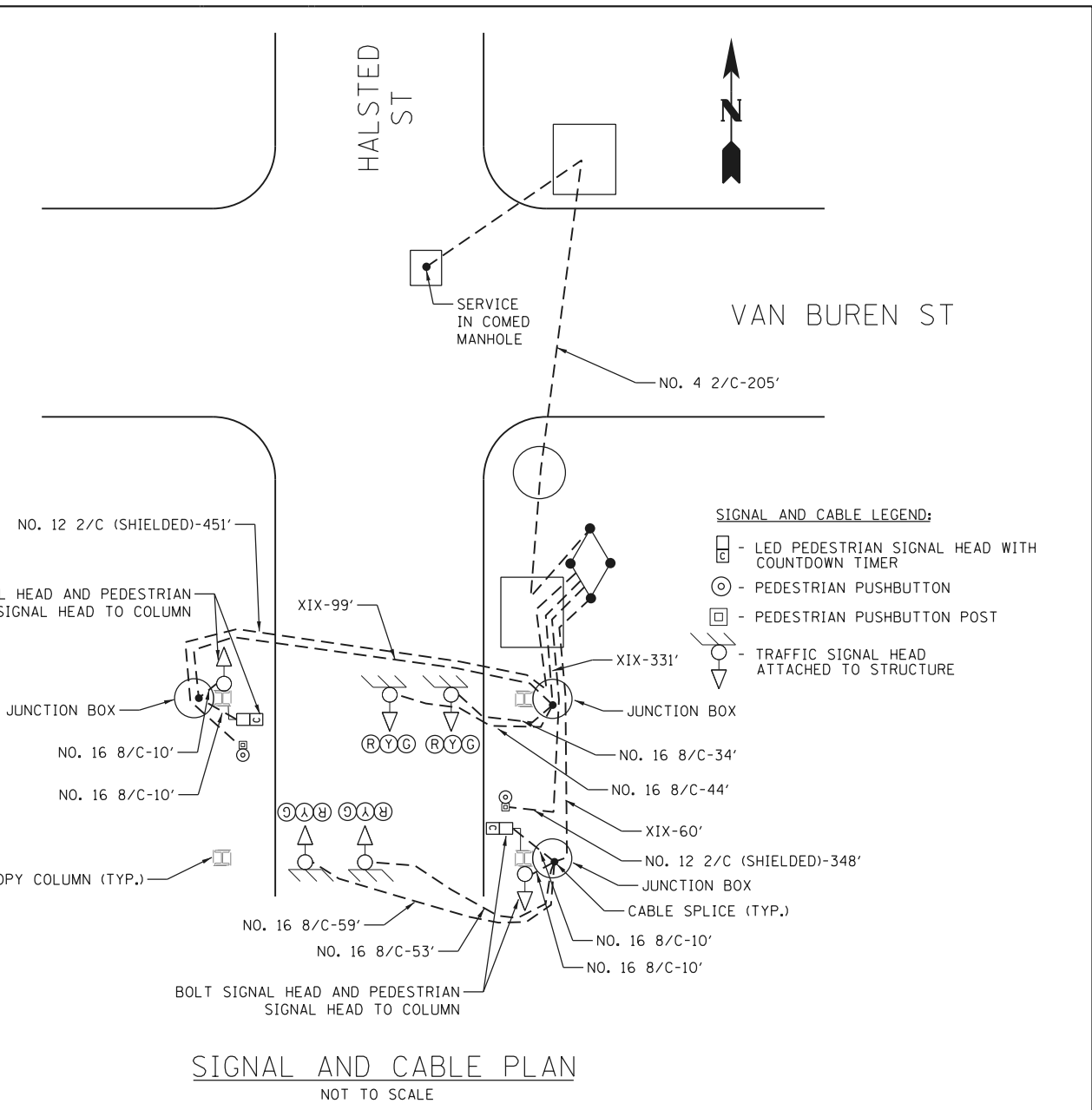
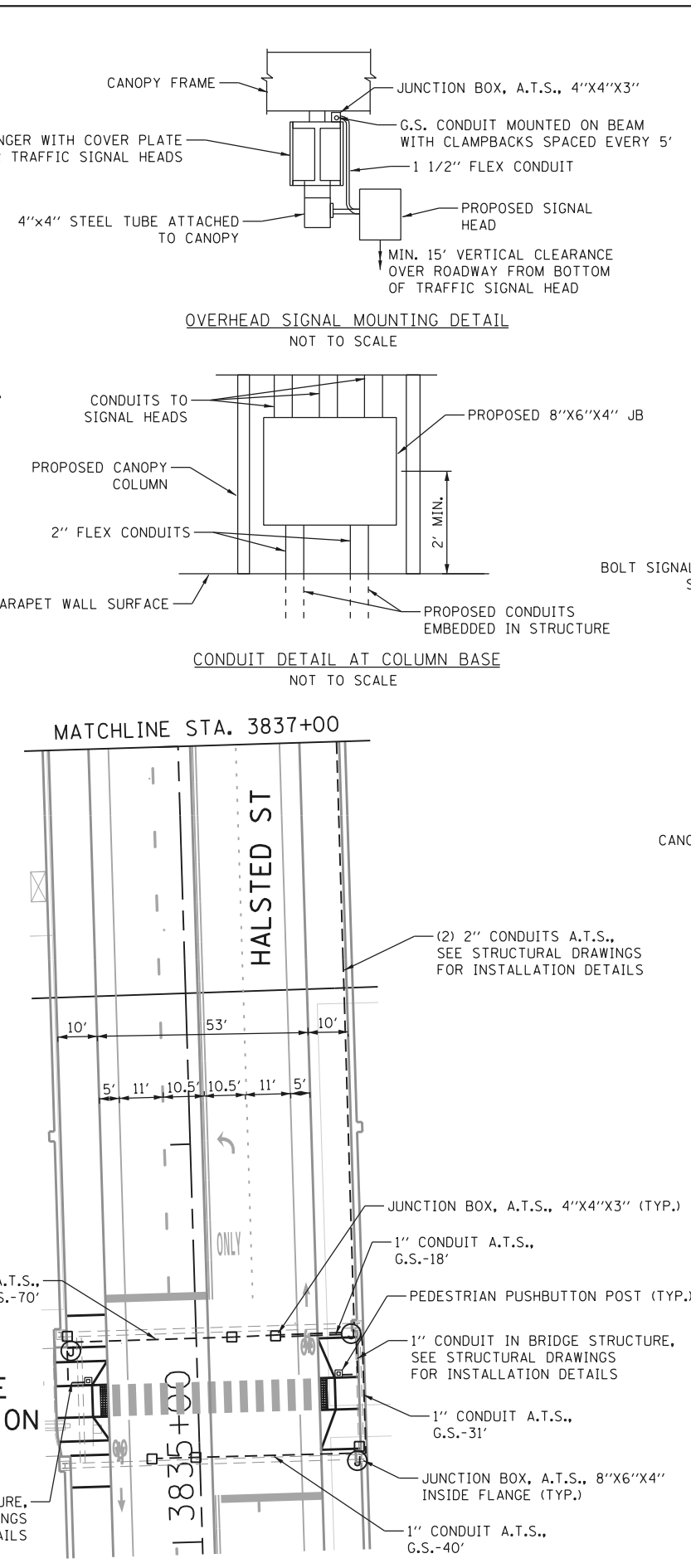
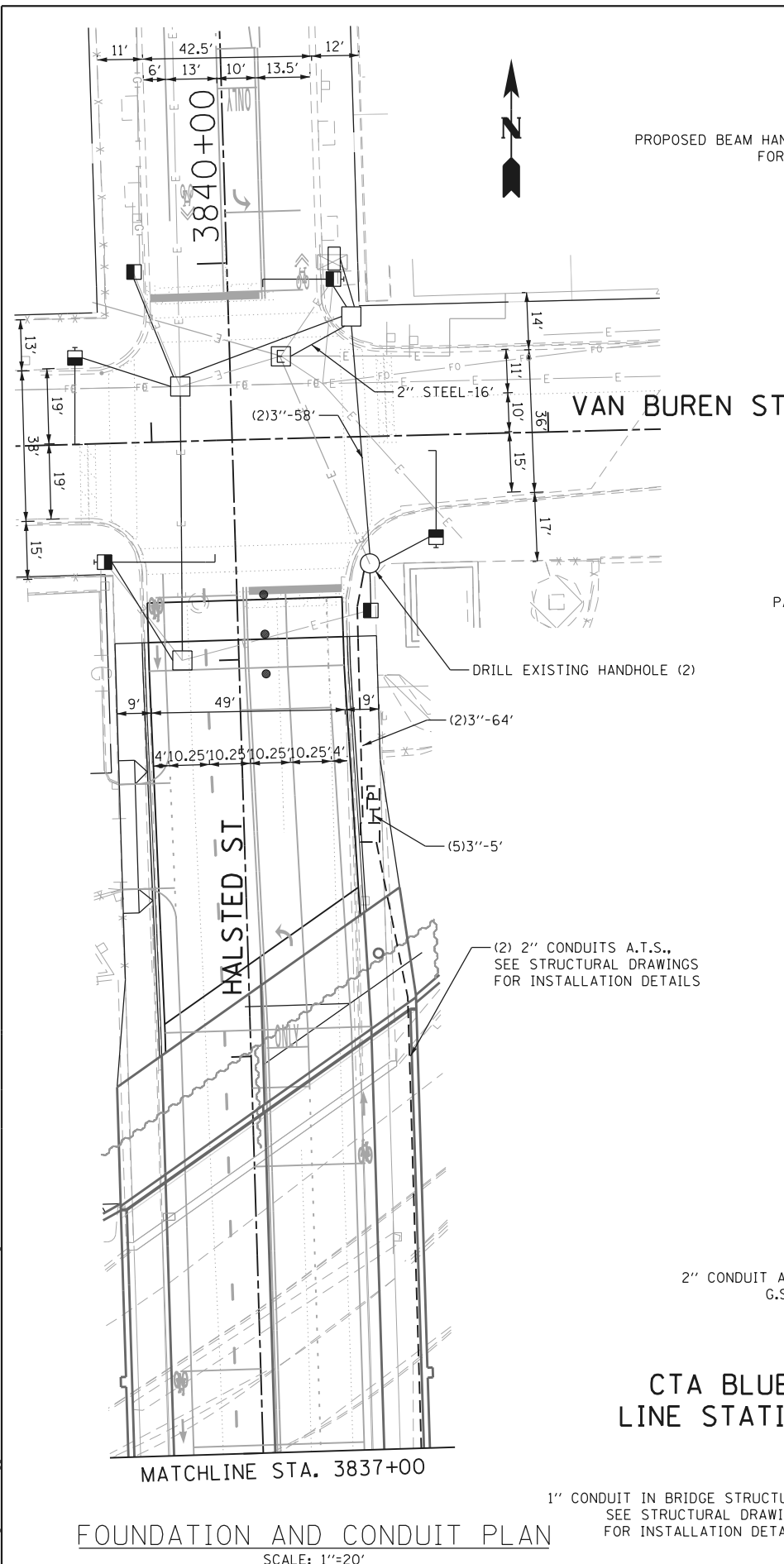
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL TIMING SCHEDULE
HALSTED ST AND HARRISON ST

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	211
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



- CONSTRUCTION NOTES**
- ALL TRAFFIC SIGNALS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS SET BY THE CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION
 - USE CLAMP BACKS SPACED EVERY 5' FOR ALL CONDUITS MOUNTED ON CANOPY BEAMS
 - HORIZONTALLY MOUNTED SIGNAL HEADS SHALL BE CENTERED IN EACH LANE.
 - FOR LEGEND SEE DEO DRAWING NO. 826

DATE		REVISION	
SUPERSEDES DRAWING NO.:		DATED:	
TRAFFIC CONTROL SIGNALS HALSTED ST AND EISENHOWER EXWY			
CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION DIVISION OF ELECTRICAL OPERATIONS			
DRAFTSMAN:	CHIEF DRAFTSMAN:	ENGINEER: G. GEDEMER	
SUPERVISING ENGINEER:	ELEC. DESIGN ENGR.		
ENGINEER OF ELECTRICITY:	DWG. NO. 23993		
GEN'L SUPT. OF ELECTRICITY:			
DEPUTY COMMISSIONER:			
SIZE:	SCALE: AS NOTED	DATE: 09/15/13	

DIAL	CYCLE LENGTH	OFFSET	TIMES OF OPERATION	FLASH OPERATION
1	75"	0"	ALL OTHER TIMES	RØ2, RØ6
2	100"	59"	6:00 AM TO 10:00 AM - MON-FRI.	WALK/DON'T WALK OFF
3	100"	59"	3:00 PM TO 7:00 PM - MON-FRI.	
4				

DIAL 1

PHASE NUMBER	PHASE							
	1	2	3	4	5	6	7	8
DIRECTION		NB		PED		SB		
MIN GREEN		44		26		44		
VEHICLE EXT.								
MAX GREEN				26				
YELLOW CHANGE		3				3		
RED CLEARANCE		1		1		1		
WALK				10				
PED CLEARANCE				16				
RECALL		COORD				COORD		

DIAL 2 & 3

PHASE NUMBER	PHASE							
	1	2	3	4	5	6	7	8
DIRECTION		NB		PED		SB		
MIN GREEN		59		36		59		
VEHICLE EXT.								
MAX GREEN				36				
YELLOW CHANGE		3				3		
RED CLEARANCE		1		1		1		
WALK				20				
PED CLEARANCE				16				
RECALL		COORD				COORD		

DESIGNED BY: GG

DATE: 08/20/13

CHECKED BY: JW

DATE: 08/20/13

APPROVED:

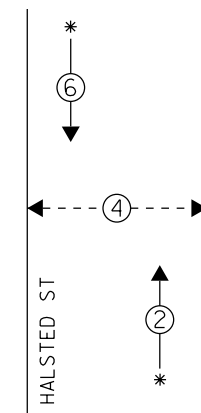
TRAFFIC ENGINEER:

CITY TRAFFIC ENGINEER:

PAGE 1 OF 1

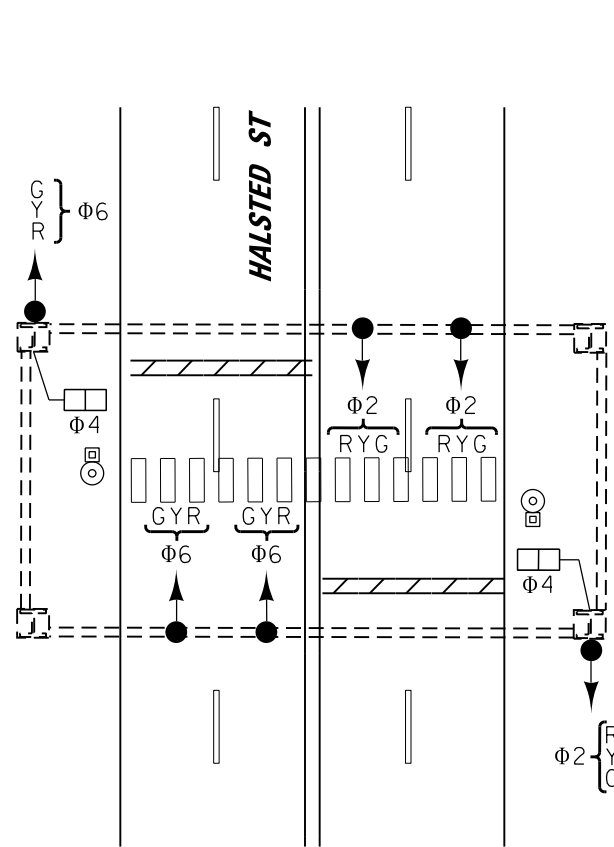
SENT: _____ INSTALLED: _____

CONTROLLER SEQUENCE



LEGEND

- ⊕ → DUAL ENTRY PHASE
- ⊞ → SINGLE ENTRY PHASE
- ◊ OL → OVERLAP
- ⊕ → PEDESTRIAN PHASE
- # → NUMBER REFERS TO ASSOCIATED PHASE
- * → COORDINATED PHASE



HALSTED ST & EISENHOWER EXPRESSWAY

DEO/BOE DRAWING NUMBER: 23993

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DI160W26-sht-Ts-06.dgn
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PLOT DATE = 8/14/2013

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DRAWN - GG
CHECKED - JW
DATE - 08/20/13

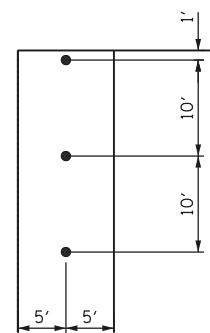
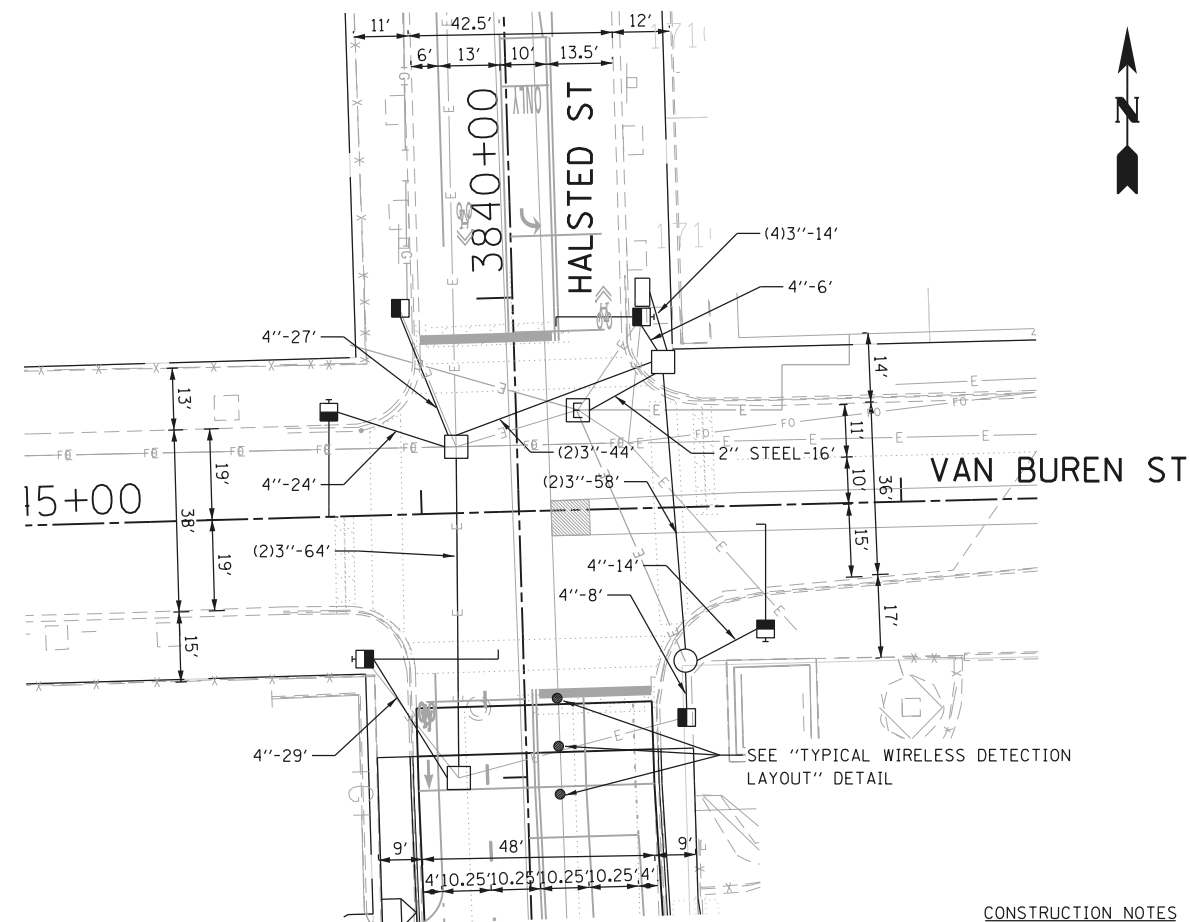
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL TIMING SCHEDULE
HALSTED ST AND EISENHOWER EXPRESSWAY

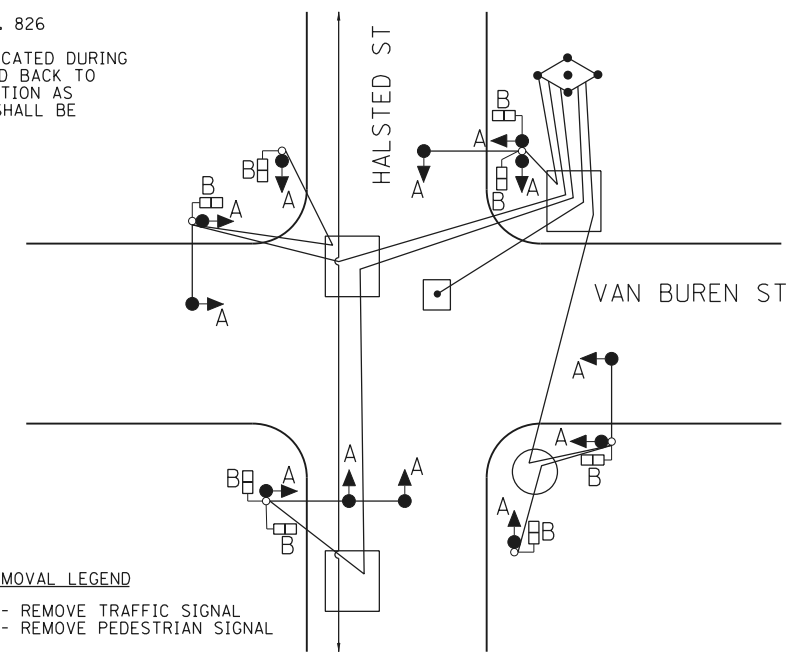
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	213
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



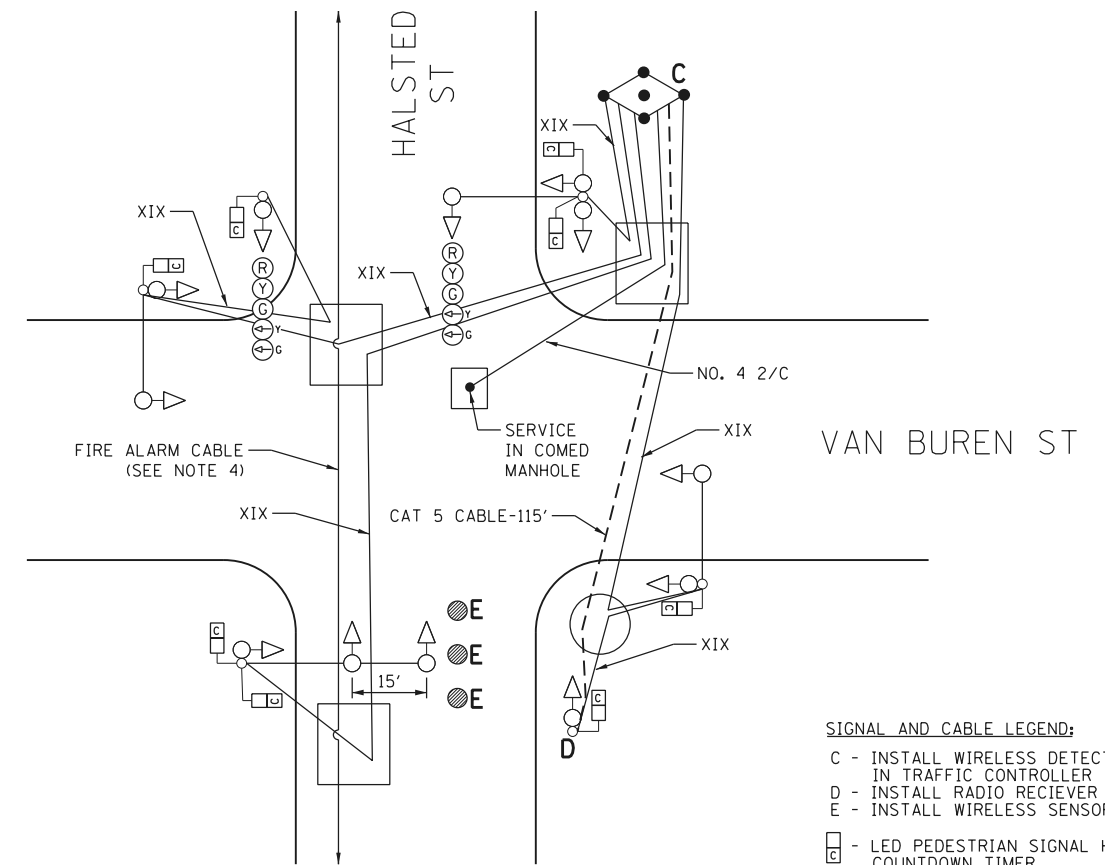
CONSTRUCTION NOTES

1. SIGNALS TO REMAIN IN OPERATION DURING CONSTRUCTION
2. MISSING CABLE RACKS SHALL BE ADDED TO ALL MANHOLES AND HANDHOLES AND SHALL BE CONSIDERED AS INCIDENTAL TO THE ELECTRIC CABLE PAY ITEMS
3. FOR LEGEND SEE DEO DRAWING NO. 826
4. EXISTING FIRE ALARM CABLE RELOCATED DURING CONSTRUCTION SHALL BE RETURNED BACK TO ORIGINAL LOCATION OR IN A LOCATION AS DIRECTED BY OEMC. THIS WORK SHALL BE DONE BY OTHERS.



REMOVAL LEGEND

- A - REMOVE TRAFFIC SIGNAL
- B - REMOVE PEDESTRIAN SIGNAL



SIGNAL AND CABLE LEGEND:

- C - INSTALL WIRELESS DETECTION PACKAGE IN TRAFFIC CONTROLLER
- D - INSTALL RADIO RECEIVER ON POLE
- E - INSTALL WIRELESS SENSOR IN PAVEMENT
- [Symbol] - LED PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER
- [Symbol] - WIRELESS SENSOR IN PAVEMENT

DATE		REVISION	
SUPERSEDES DRAWING NO.: 13887 DATED: 2-28-59			
TRAFFIC CONTROL SIGNALS HALSTED ST AND VAN BUREN ST			
CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION DIVISION OF ELECTRICAL OPERATIONS			
DRAFTSMAN:	CHIEF DRAFTSMAN:	ENGINEER: G. GEDEMER	
SUPERVISING ENGINEER:	ELEC. DESIGN ENGR.		DWC. NO.
ENGINEER OF ELECTRICITY:			13887
GEN'L SUPT. OF ELECTRICITY:			
DEPUTY COMMISSIONER:			
SIZE:	SCALE: AS NOTED	DATE: 09/15/13	

FILE PATH = c:\pwworking\escom00\ggedemer\2014\13887\13887-01\13887-01-07.dgn

<p>EJM ENGINEERING, INC. 411 South Wells Street Suite 1000 Chicago, Illinois 60607</p>	D160W26-sht-Ts-07.dgn	DESIGNED - GG	REVISED -
	USER NAME = ggedemer	DRAWN - GG	REVISED -
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	PLOT DATE = 9/6/2013	DATE - 09/15/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SIGNALS
HALSTED ST AND VAN BUREN ST

SCALE: AS NOTED SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	214
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

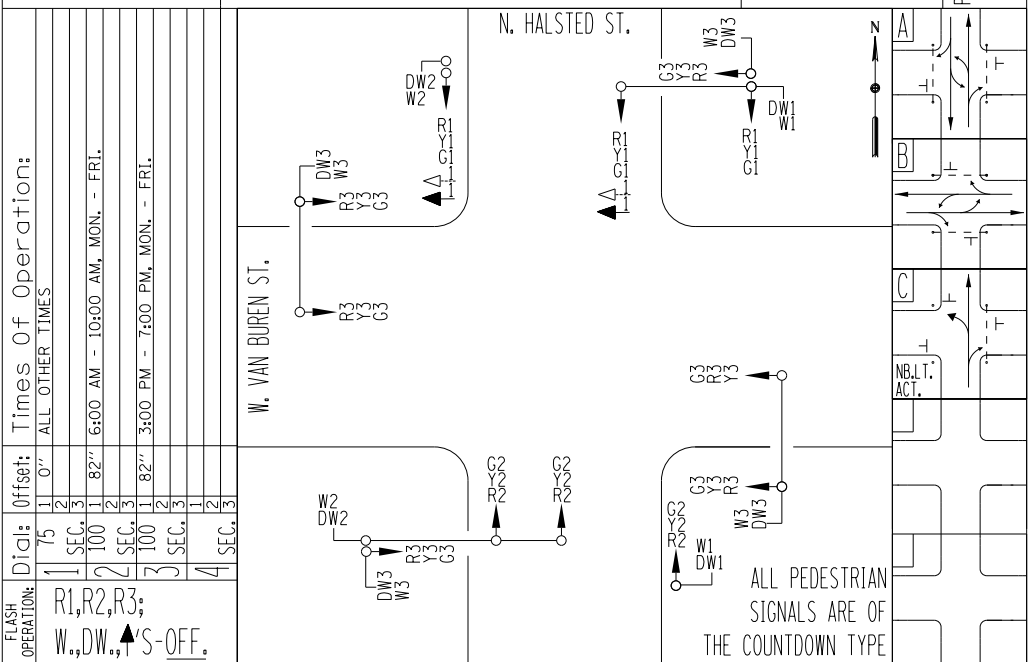
DRAWN: GG
 DATE: 08/20/13
 CHECKED: JW
 DATE: 08/20/13

CITY OF CHICAGO
 DEPARTMENT OF TRANSPORTATION
 TRAFFIC SIGNAL TIMING SCHEDULE

400 S. / 800 W.
 APPROVED: _____
 TRAFFIC ENGINEER
 CITY TRAFFIC ENGINEER

N. HALSTED ST. & W. VAN BUREN ST.

PAGE 1 OF 1
 8 1/2" X 14"



BoEi, Drwg. No. 13887

DATE
SENT:
INSTALLED:

FILE PATH = c:\pwworking\escom00\ggedemer\2013\4536\160w26-sht-Ts-08.dgn



D160w26-sht-Ts-08.dgn
 USER NAME = Ggedemer
 PLOT SCALE = 1.0000' / 1"
 PLOT DATE = 8/14/2013

DESIGNED - GG
 DRAWN - GG
 CHECKED - JW
 DATE - 08/20/13

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL TIMING SCHEDULE
 HALSTED ST AND VAN BUREN ST**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	215
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

PROPOSED PRESENT

		SIGNAL, TRAFFIC 3 SECTION 1-WAY ADJUSTABLE, 12" OR AS NOTED
		SIGNAL, TRAFFIC 3 SECTION 2-WAY ADJUSTABLE, 12" OR AS NOTED
		SIGNAL OPTICALLY PROGRAMMED
		SIGNAL, PEDESTRIAN, DON'T WALK/WALK
		SIGNAL FACE ARROW, 12" COLOR AS NOTED
		SIGNAL FACE, 1 SECTION YELLOW/GREEN ARROW DUAL INDICATION
		PUSH BUTTON, PEDESTRIAN
		SIGN, ILLUMINATED, WITH MESSAGE OR SYMBOL AS INDICATED
		MAST ARM, MONOTUBE, STEEL. SIZE AS INDICATED (SEE DWG. #870)
		MAST ARM, TRUSS, ALUMINUM. SIZE AS INDICATED
		CONTROLLER, TRAFFIC SIGNAL. PEDESTAL OR BASE MOUNTED AS INDICATED
		CONTROLLER, STREET LIGHTING. PEDESTAL OR BASE MOUNTED. (DWG. 876 or 880)
		CONTROLLER, STREET LIGHTING. POLE MOUNTED (DWG. #11940)
		POLE, WOOD. COMMONWEALTH EDISON COMPANY, SERVICE
		POLE, CITY STEEL, ANCHOR BASE, 34'-6", 7 GA. 10" DI A. AND 15" B.C. 24"X7" FND. W/1 1/4" ANCHOR RODS DRG. #818.
		POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA. 10" DIA. AND 15" B.C. 24"X9" FND. W/1 1/4" ANCHOR RODS DRG. #818 (16", 20" or 26" M.A.)
		POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA., 11" DIA. AND 17 1/4" B.C. 30"X9" FND. W/1 1/4" ANCHOR RODS DRG. #816. (30" M.A.)
		POLE, CITY STEEL, ANCHOR BASE 34'-6", 3 GA. 12 1/2" DIA. AND 16 1/2" B.C. 30"X11" FND. W/1 1/2" ANCHOR RODS DRG. #817. (35", 40" or 44" M.A.)
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA. 10" DIA., WITH 3 GA. BAL. HSG. BASE AND 17 1/4" B. C. ON 30"X9" FND. W/ 11/4" ANCHOR RODS DRG. #816.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 7 GA. WITH STEEL BAL. HSG. BASE AND FND. W/10" D. B.C. AND 1" ANCHOR RODS DRG. #716.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 3 GA., WITH STEEL BAL. HSG. BASE AND FND. W/10" D. B.C. AND 1" ANCHOR RODS DRG. #719.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 7 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 3 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 7 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753.
		POLE, CITY STEEL, ANCHR BASE, 32'-6", 3 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6" 7 GA., ALUM. BHB AND FND. WITH 15" B.C.-24"X7" WITH 1" ANCHOR RODS DRG. #691.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., ALUM. BHB AND FND. WITH 15" B.C. 24"X7" WITH 1" ANCHOR RODS DRG. #691.
		POLE, CITY ALUMINUM, WITH ROUND BAL. HSG. BASE, 25', 28', or 30' ON FND. WITH 14" B.C., ACQUIRED FROM CHICAGO PARK DISTRICT.
		POLE, CITY STEEL, EMBEDDED, 4"X 9"X 35' 7 GA., TAPERED TUBULAR. (DWG. #658)
		POLE, CITY STEEL, EMBEDDED, 4"X 9"X 35' 3 GA., TAPERED TUBULAR. (DWG. #658)
		POLE, CITY STEEL, EMBEDDED. (ACQUIRED FROM CTA)
		COLUMN, ELEVATED STRUCTURE
		POLE, WOOD. (SIZE AS NOTED)
		POLE, FOUNDATION WITH ELBOWS AS INDICATED. (SIZE AS NOTED)
		POLE, ORNAMENTAL OR OTHER, AS INDICATED ON THE PLANS

PROPOSED PRESENT

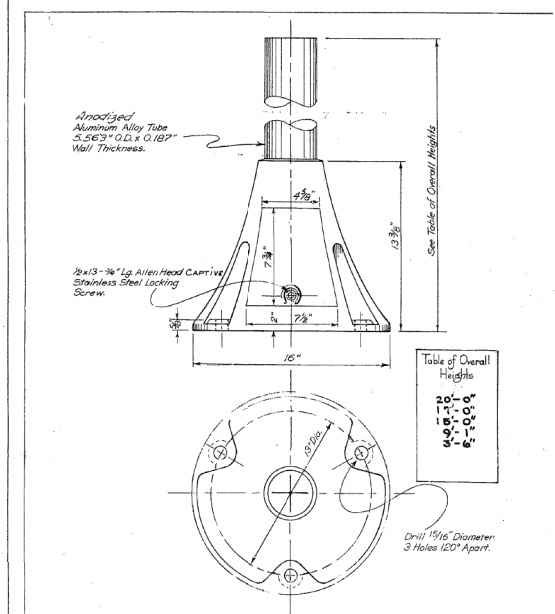
		HANDHOLE, HEAVY DUTY, 36" I.D. (DWG.#866)
		HANDHOLE, CIRCULAR WITH 24"FRAME & COVER, 30" I.D. (#867)
		MANHOLE, CITY 3'X4'X4' DWG. #729 or 730; 4'X6'X6' DWG. #732 or 733.
		FOUNDATION, CONTROLLER OR PEDESTAL, 13" B.C., 20"X5' (DWG. #709)
		FOUNDATION, TRAFFIC CONTROLLER DWG. #854. F.A. TERMINAL FND. DWG. #11972
		FOUNDATION, TRAFFIC TYPE "P", BASE MOUNT. (DWG. #888)
		FOUNDATION, CONTROLLER STREET LIGHT, SPECIAL, 100A & 200A. (DWG.#876 & # 880)
		FOUNDATION, TRANSCLOSURE; TRANSCLOSURE HOUSING. (DWG.# 583 & #891)
		CONTROLLER, UNDERPASS LIGHTING 120V. & 240V. (DWG. #860 & #861)
		MANHOLE, UTILITY, E=COMMONWEALTH EDISON; T=ILL. BELL TEL.; G=PEOPLES GAS; W=CITY WATER; P=CHGO PARK DISTRICT; CTA=C.T.A.; S= SEWER
		JUNCTION BOX, IN PAVEMENT (DWG. #815)
		DETECTOR LOOP IN PAVEMENT
		CONDUIT or P.V.C., NUMBER, SIZE & TYPE. (AS NOTED)
		CONDUIT or P.V.C. ENCASED IN CONCRETE. (SECTION or NUMBER OF CONDUIT INDICATED)
		LUMINAIRE, H.P.S.V. 400W LAMP, 240V, SEMI-CUTOFF
		LUMINAIRE, H.P.S.V. 400W LAMP, 240V, CUTOFF
		LUMINAIRE, H.P.S.V. 310W LAMP, 240V
		LUMINAIRE, H.P.S.V. 310W LAMP 240V, CUTOFF
		LUMINAIRE, H.P.S.V. 150W LAMP, 240V
		LUMINAIRE, H.P.S.V. 150W LAMP, 120V
		LUMINAIRE, H.P.S.V. 250W LAMP, 120V, (ALLEY LIGHT)
		LUMINAIRE, H.P.S.V. 250W LAMP, 120V
		TERMINAL, CABINET F.A. & P.C.
		FIRE ALARM BOX, MOUNTED
		FIRE ALARM BOX, POLE MOUNTED
		CABLE, TRAFFIC SIGNAL, COMMUNICATION, 1-PAIR #14 SHIELDED, IN CONDUIT
		CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C-#4, 600 V. EPR. IN CONDUIT
		CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2 1/C-#2 or #1/0 600V. EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C-#10 or #6, 600V NSRI, IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 7/C-#12 or #14, 600V, EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 10/C-#12 or #14, 600V, EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 14/C-#12 600V. EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 19/C-#12 or #14, 600V, EPR IN CONDUIT
		CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN PARKWAY
		CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN CONDUIT
		CABLE, STREET LIGHT, 2 1/C-#6 EPRN 600V. & 1 1/C-#8 GREEN, TRIPLEXED, IN CONDUIT
		CABLE, STREET LIGHT, 3 1/C-#1/0, or #2/0, or #4, 600V. EPR IN CONDUIT
		WIRE, STREET LIGHT, 2 1/C-#6, HDNS. AERIAL
		WIRE, STREET LIGHT, 2 1/C-#6 & 1 1/C #8, HDNS. AERIAL
		CABLE, STREET LIGHT AERIAL, 3 1/C-#4 or #2 SELF SUPPORTING, 600V EPR
		WIRE, F.A. & P.C. AERIAL, 1/C-#10, NUMERAL DENOTES QUANTITY
		CABLE, F.A. & P.C. AERIAL, W/ MESSENGER #19-(NUMBER OF PAIRS AS INDICATED)
		CABLE, F.A. & P.C. AERIAL, SELF SUPPORTING, #19-(NUMBER OF PAIRS AS INDICATED)
		CABLE, F.A. & P.C., IN CONDUIT, #19-(NUMBER OF PAIRS AS INDICATED)
		DOWNLIGHT ASSEMBLY. (DWG. #850)
		LIGHT, TRAFFIC SAFETY ISLAND
		FLASHING BEACON & DOWNLIGHT

ORNAMENTAL LUMINAIRES
PROPOSED EXISTING

		310W PENDANT (240V)
		400W PENDANT (240V)
		250W PENDANT (240V)
		150W ACORN (120V)
		150W ACORN (240V)
		50W ACORN (240V)
		100W ACORN (240V)
		150W GLOBE (240V)
		100W GLOBE (240V)
		50W GLOBE (240V)

C 04-01-02	REVISED/REDRAW	R. POOL/B.I.
B 12-4-01	ADDED ORNAMENTAL SYMBOLS	
A 8-6-96	REDRAWN	
DATE	REVISION	
STANDARD CODE FOR TRAFFIC SIGNALS/ STREET LIGHTING		
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING		
DRAFTSMAN: R. IVY	CHIEF DRAFTSMAN: R. CARTER	ENGINEER: R. POOL/R.C/W.T.
SUPERVISING ENGINEER: ELEC. DESIGN ENGR.		DWG. NO. 826
ENGINEER OF ELECTRICITY: GEN'L. SUPT. OF CONSTRUCTION: DEPUTY COMMISSIONER: PLAN		DATE:
SIZE: 22" X 36"	SCALE:	

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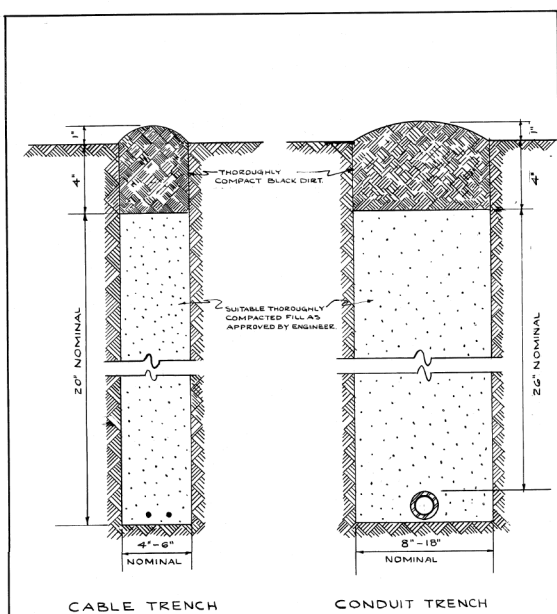
ALUMINUM PEDESTAL BASE WITH HANDHOLE
for
Street Lighting Control, Traffic Signal
Control and Traffic Signal Head

REVISED	DESCRIPTION	DATE
A	CHANGED OVERALL HEIGHTS 2'-22"	5-3-60
B	Revised Table of Overall Heights	6-30-60
C	Revised G.D. of Pedestal	12-21-60
D	Revised Specification Number	9-13-62
E	Revised Table of Overall Heights	6-4-64
F	Revised Door Dimensions	7-14-70
G	Revised Overall Heights	8/21/76
H	Revised Overall Heights	5-4-79

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
DIVISION OF ELECTRICAL ENGINEERING

DRG. NO. 526

DATE 4-13-81



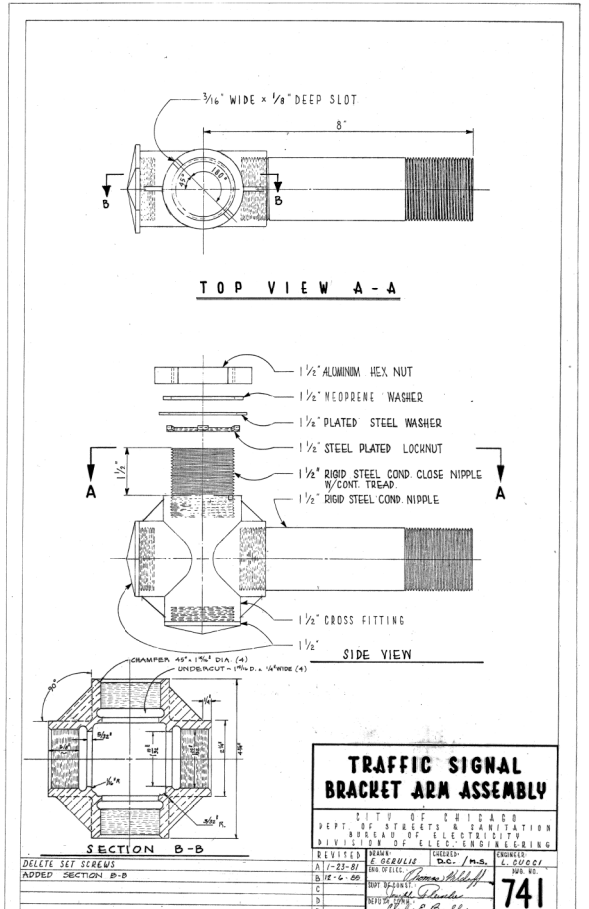
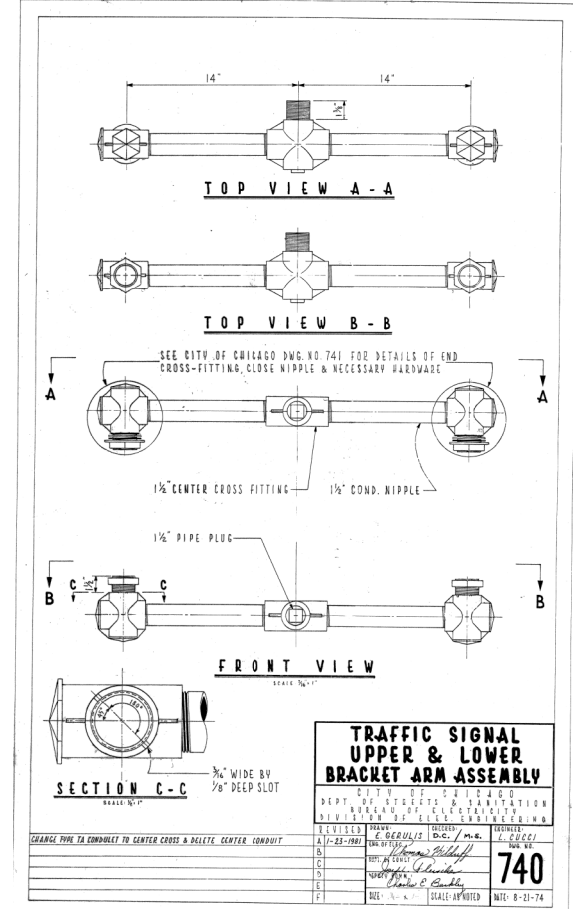
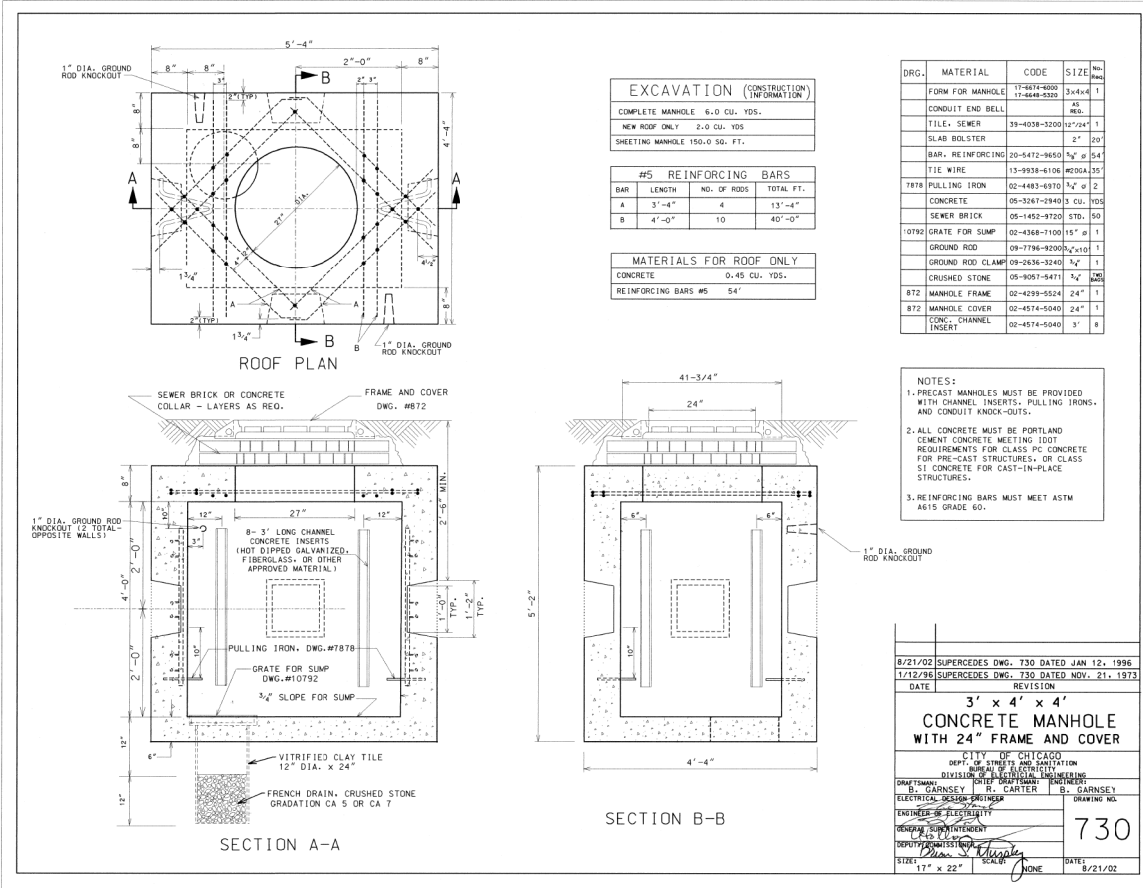
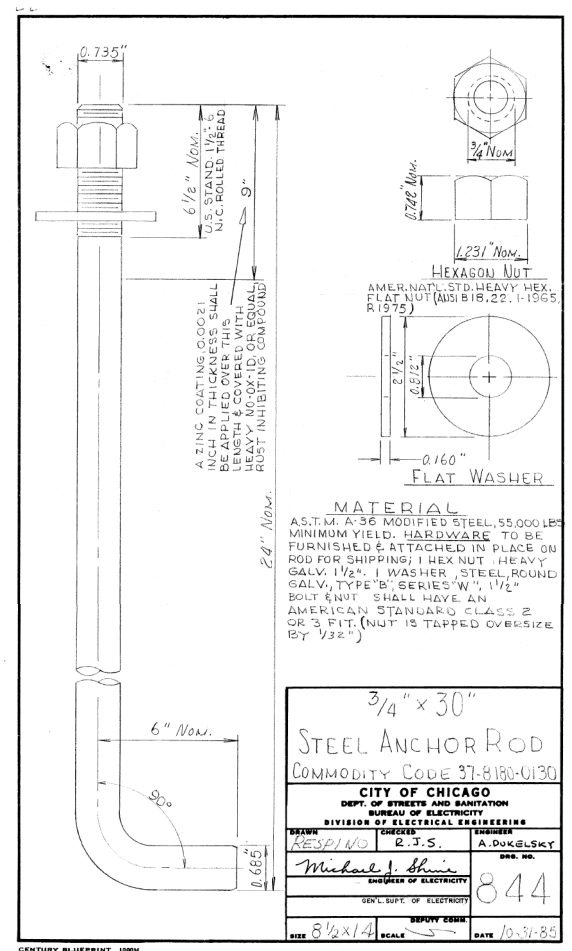
NOTE
EXCESS SOIL FROM TRENCH TO BE COMPLETELY REMOVED FROM SITE AS SOON AS PRACTICABLE.
BLACK DIKE TO BE TAMPED & THOROUGHLY COMPACTED AS SHOWN.

STANDARD METHOD FOR BACKFILLING CABLE & CONDUIT TRENCHES IN TODDED PARKWAY & LAWNS

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
DIVISION OF ELECTRICAL ENGINEERING

DRG. NO. 579

DATE 7-14-81



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EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

USER NAME	DESIGNED	REVISIONS
Ggedemer	PWF	-
	PWF	-
	GG	-
		-

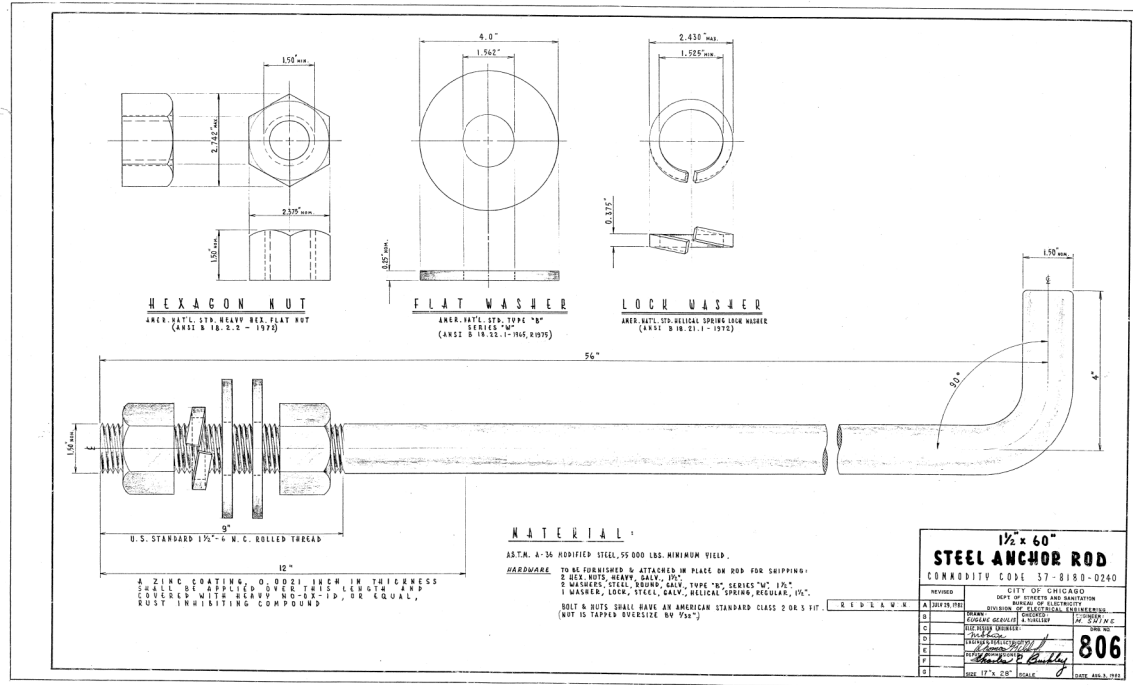
DATE 08/20/13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CDOT STANDARD DRAWINGS

SCALE: NONE SHEET 2 OF 8 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	217
				CONTRACT NO. 60W26
ILLINOIS FED. AID PROJECT				



MATERIAL:

ASTM A-36 ROLLED STEEL, 55,000 LBS. MINIMUM YIELD.

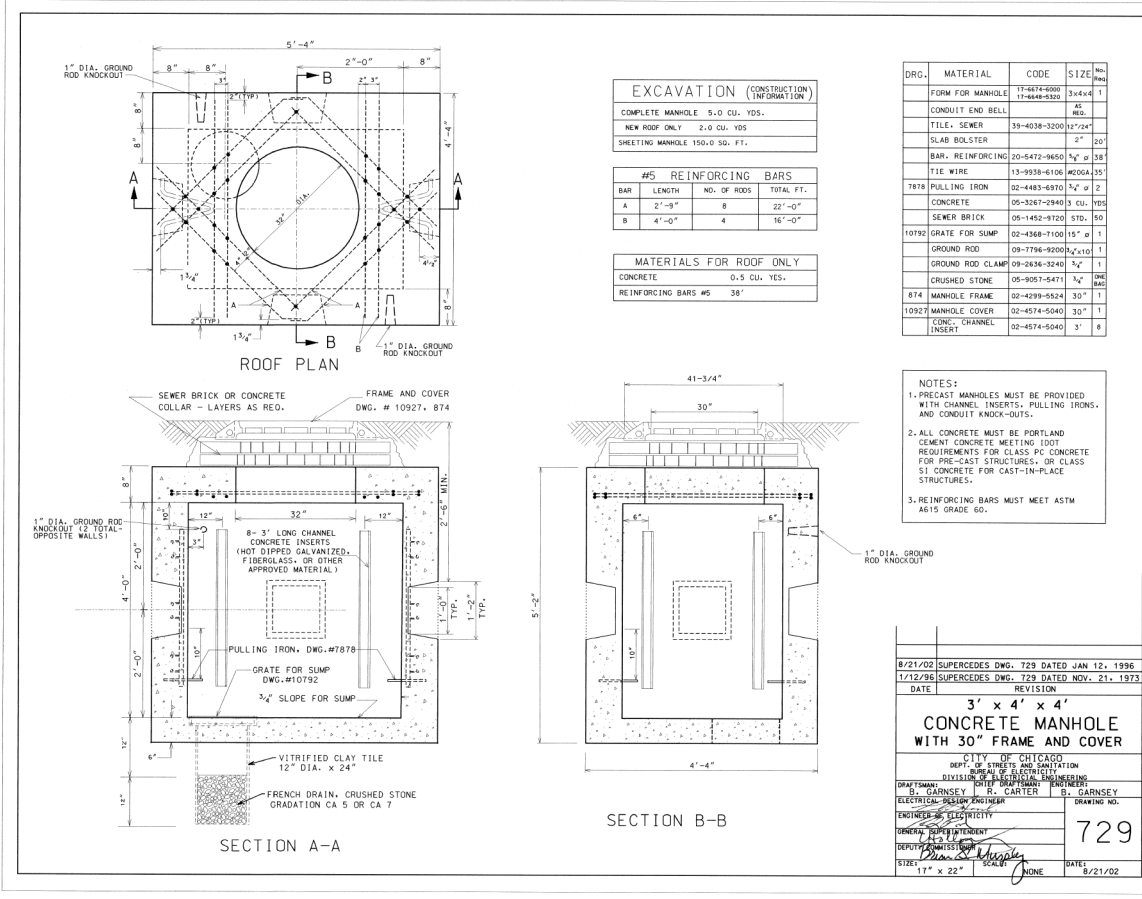
ASSEMBLY: TWO WASHERS TO BE ATTACHED IN PLACE OR 800-100 SHIPPING. 2 HEX. NUTS, HEAVY, GALV. 1/2". 1 WASHER, STEEL, REGULAR, TYPE "M", SERIES "M", 1/2". 1 WASHER, LOCK, STEEL, GALV., HEAVY SPRING LOCK WASHER (CLASS. B IN 10.3.1 - 1972).

NOTE: ALL BOLTS SHALL HAVE AN AMERICAN STANDARD CLASS 2 OR 5 FIT (NOT TO TAPED OVERSIZE BY 1/64").

REVISED	DATE	BY	CHKD.
1	11/24/92	J.P.B.	J.P.B.

1 1/2" x 60" STEEL ANCHOR ROD
COMMODITY CODE 37-8188-0240

806



EXCAVATION (CONSTRUCTION) (IN CUBIC YDS.)

COMPLETE MANHOLE	5.0 CU. YDS.
NEW ROOF ONLY	2.0 CU. YDS.
SHEETING MANHOLE	150.0 SQ. FT.

#5 REINFORCING BARS

BAR	LENGTH	NO. OF BARS	TOTAL FT.
A	2'-9"	8	22'-0"
B	4'-0"	4	16'-0"

MATERIALS FOR ROOF ONLY

CONCRETE	0.5 CU. YDS.
REINFORCING BARS #5	38'

DRG.	MATERIAL	CODE	SIZE	QTY.
	FORM FOR MANHOLE	17-4474-000	3x4x4	1
	CONDUIT END BELL	17-4448-000	3"	1
	TILE, SEWER	33-4038-3200	12"x12"	2
	SLAB BOLSTER	20-5472-9650	1/2" x 20"	2
	BAR, REINFORCING	20-5472-9650	1/2" x 38'	1
	TIE WIRE	13-9938-6106	#10x4x35'	1
7878	PULLING IRON	02-4493-8970	1/2" x 2'	2
	CONCRETE	02-3243-3840	3 CU. YDS.	1
	SEWER BRICK	05-1452-8720	STL. 50	1
10792	GRATE FOR SUMP	02-4368-1100	15" x 15"	1
	GROUND ROD	09-7794-9200	1/2" x 10'	1
	GROUND ROD CLAMP	09-2636-3240	1/2" x 1"	1
	CRUSHED STONE	05-9057-5471	1/2" x 1"	1
874	MANHOLE FRAME	02-4299-5624	30" x 1"	1
10927	MANHOLE COVER	02-4574-5040	30" x 1"	1
	CONC. CHANNEL	02-4574-5040	3" x 8'	1

NOTES:

1. PRECAST MANHOLES MUST BE PROVIDED WITH CHANNEL INSERTS, PULLING IRONS, AND CONDUIT KNOCK-OUTS.
2. ALL CONCRETE MUST BE PORTLAND CEMENT CONCRETE MEETING 100% REQUIREMENTS FOR CLASS FC CONCRETE FOR PRE-CAST STRUCTURES, OR CLASS S1 CONCRETE FOR CAST-IN-PLACE STRUCTURES.
3. REINFORCING BARS MUST MEET ASTM A615 GRADE 60.

8/21/02 SUPERCEDES DWG. 729 DATED JAN. 12, 1996
1/12/96 SUPERCEDES DWG. 729 DATED NOV. 21, 1973

DATE: 8/21/02

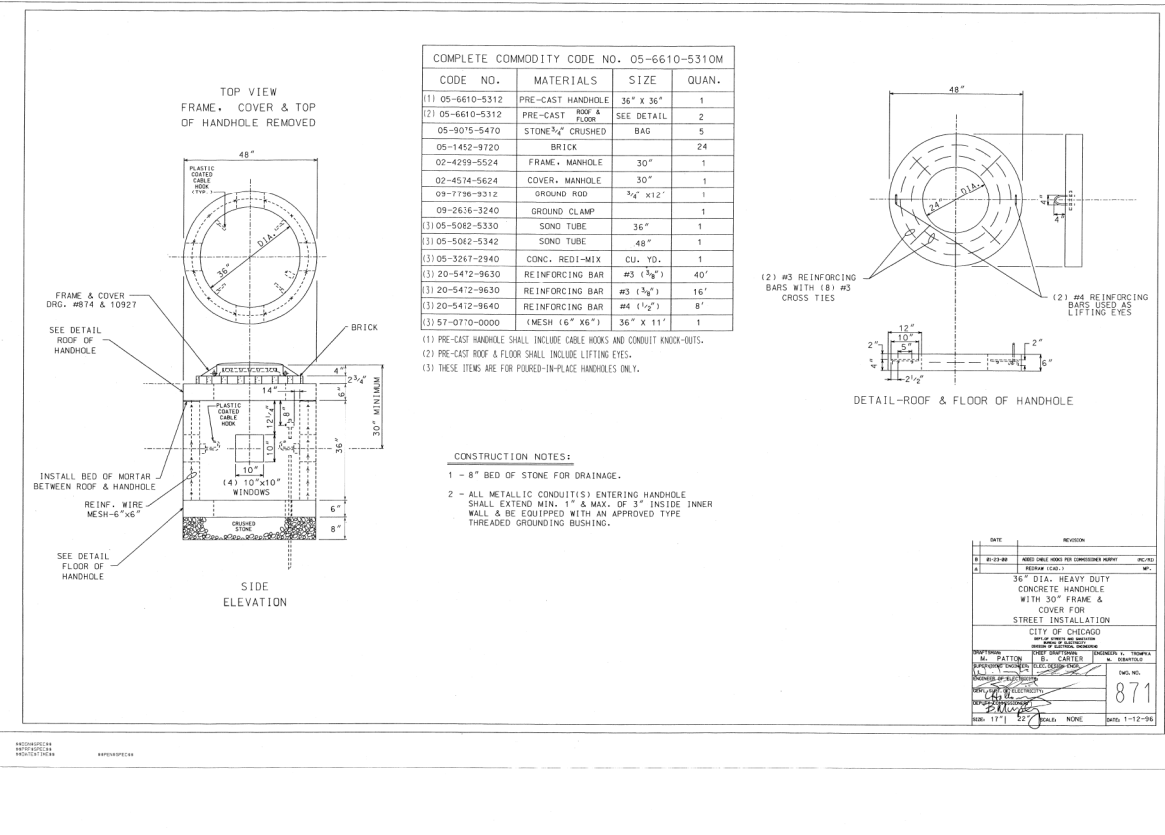
REVISION:

3' x 4' x 4' CONCRETE MANHOLE WITH 30" FRAME AND COVER

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
DIVISION OF ELECTRICAL ENGINEERING

DESIGNED BY: B. GARNSEY
CHECKED BY: R. CARTER
DRAWING NO. 729

DATE: 8/21/02

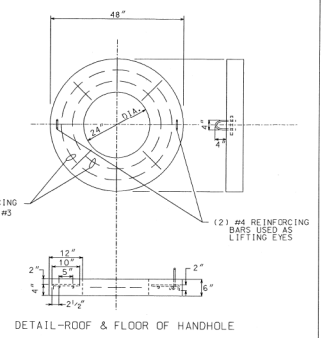


COMPLETE COMMODITY CODE NO. 05-6610-5310M

CODE NO.	MATERIALS	SIZE	QUAN.
(1) 05-6610-5312	PRE-CAST MANHOLE	36" X 36"	1
(2) 05-6610-5312	PRE-CAST ROOF & FLOOR	SEE DETAIL	2
05-905-5470	STONE 3/4" CRUSHED	BAG	5
05-1452-9720	BRICK		24
02-4299-5524	FRAME, MANHOLE	30"	1
02-4574-5624	COVER, MANHOLE	30"	1
09-7790-9312	GROUND ROD	1/2" x 12'	1
09-2626-3240	GROUND CLAMP		1
(3) 05-5082-5330	SOND TUBE	36"	1
(3) 05-5082-5342	SOND TUBE	48"	1
(3) 05-3247-2940	CONC. REDI-MIX	CU. YD.	1
(3) 20-5472-9630	REINFORCING BAR	#3 (1 1/2")	40'
(3) 20-5472-9630	REINFORCING BAR	#3 (1 1/2")	16'
(3) 20-5472-9640	REINFORCING BAR	#4 (1 1/2")	8'
(3) 57-0770-0000	(MESH 16" X 6")	36" X 11"	1

CONSTRUCTION NOTES:

- 1 - 8" BED OF STONE FOR DRAINAGE.
- 2 - ALL METALLIC CONDUIT(S) ENTERING HANDHOLE SHALL EXTEND MIN. 1" & MAX. OF 3" INSIDE INNER WALL & BE EQUIPPED WITH AN APPROVED TYPE THREADED GROUNDING BUSHING.
- 3 - THESE ITEMS ARE FOR POURED-IN-PLACE MANHOLES ONLY.

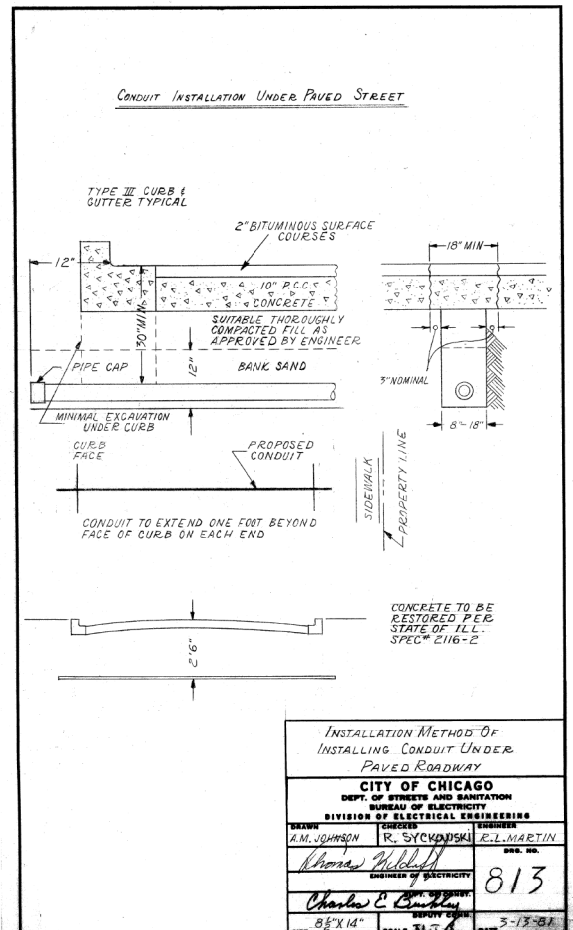


DATE	REVISION
11/24/92	REVISED

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICAL ENGINEERING

DESIGNED BY: B. GARNSEY
CHECKED BY: R. CARTER
DRAWING NO. 871

DATE: 8/21/02

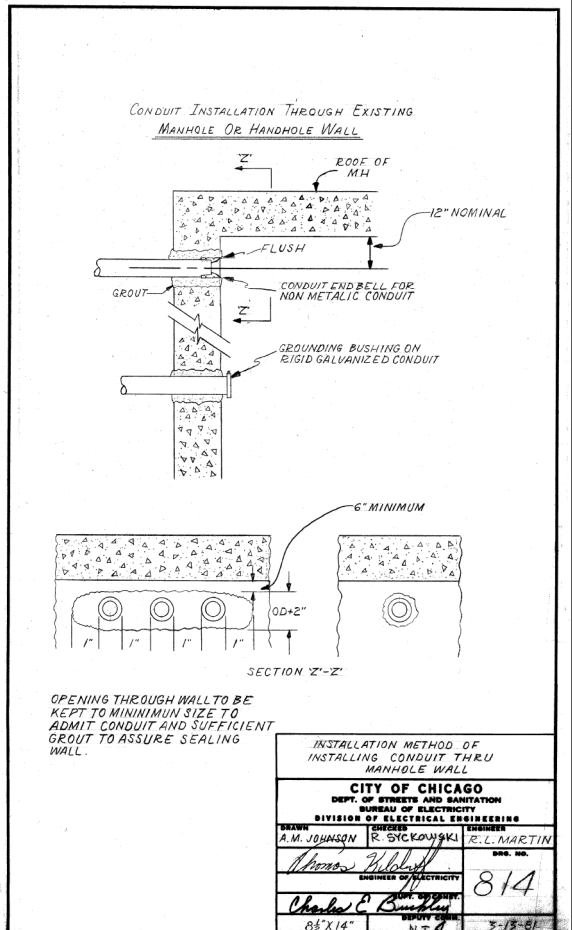


INSTALLATION METHOD OF INSTALLING CONDUIT UNDER PAVED ROADWAY

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICAL ENGINEERING

DESIGNED BY: B. GARNSEY
CHECKED BY: R. CARTER
DRAWING NO. 813

DATE: 8/21/02



INSTALLATION METHOD OF INSTALLING CONDUIT THROUGH MANHOLE WALL

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICAL ENGINEERING

DESIGNED BY: B. GARNSEY
CHECKED BY: R. CARTER
DRAWING NO. 814

DATE: 8/21/02

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EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

DESIGNED - PWF	REVISED -
DRAWN - PWF	REVISED -
CHECKED - GG	REVISED -
DATE - 08/20/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

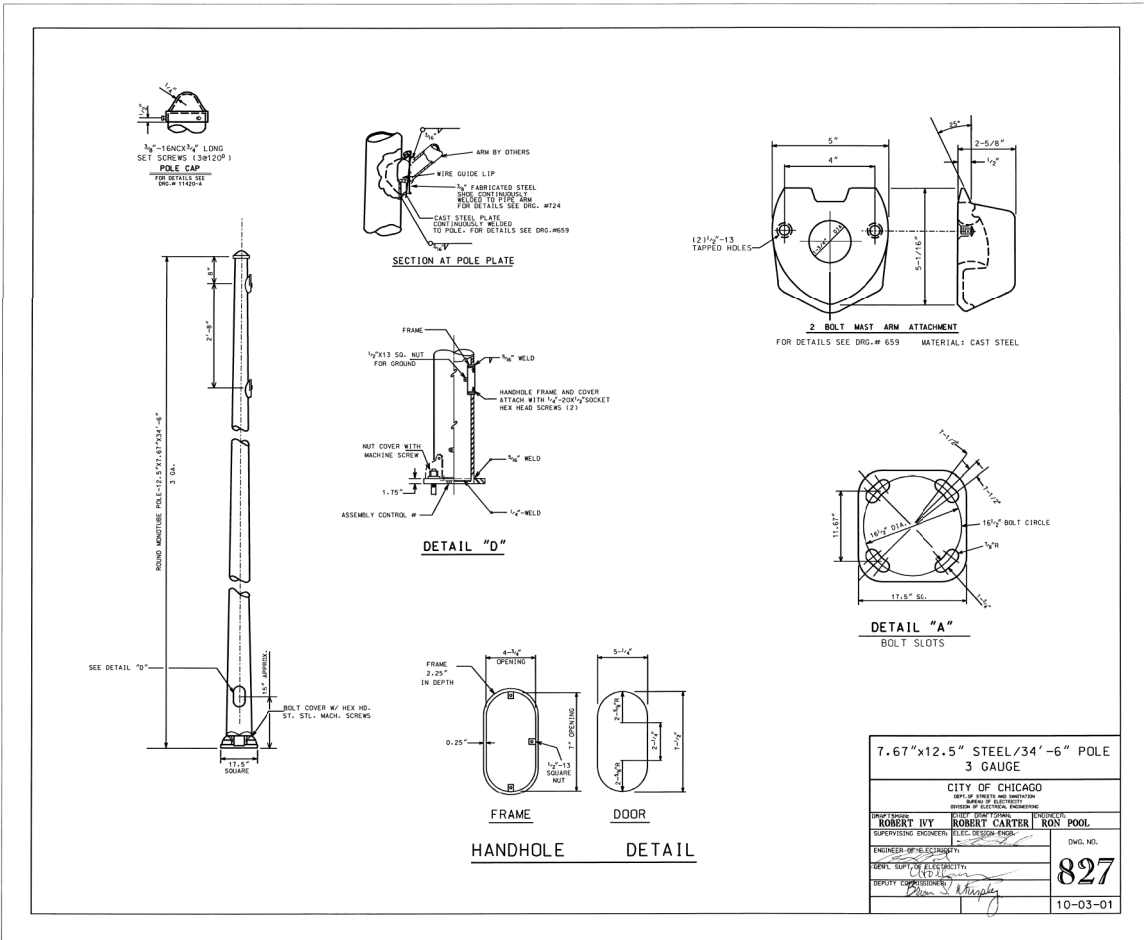
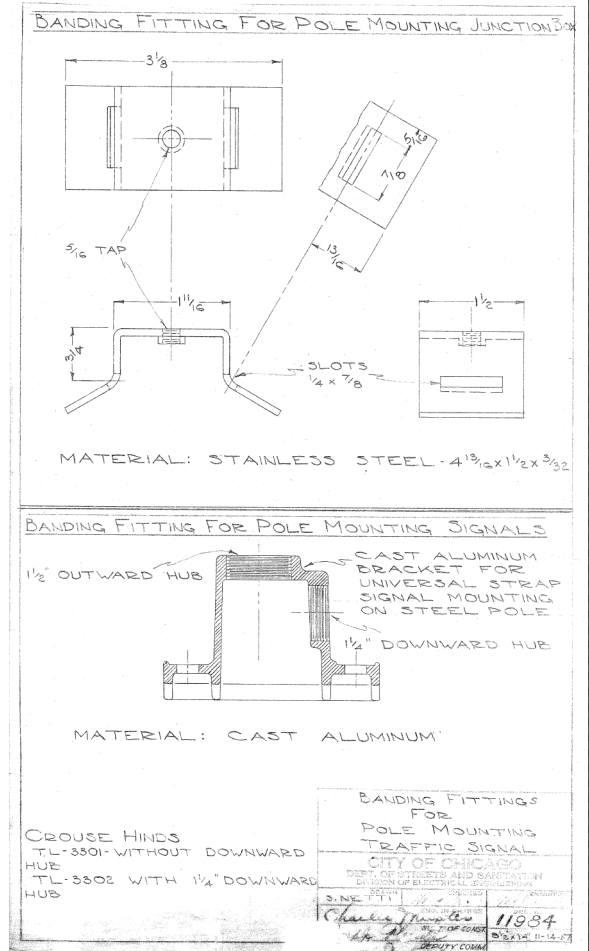
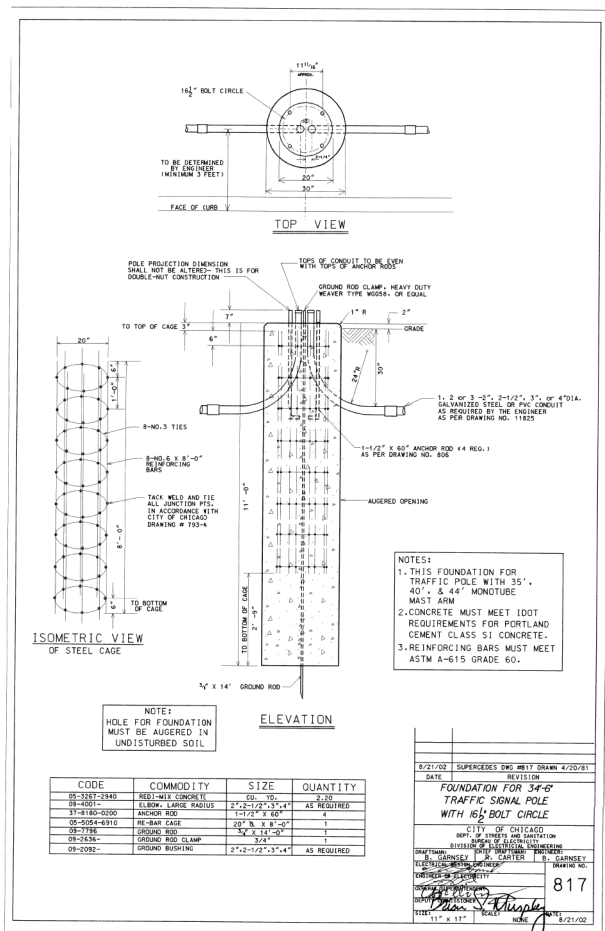
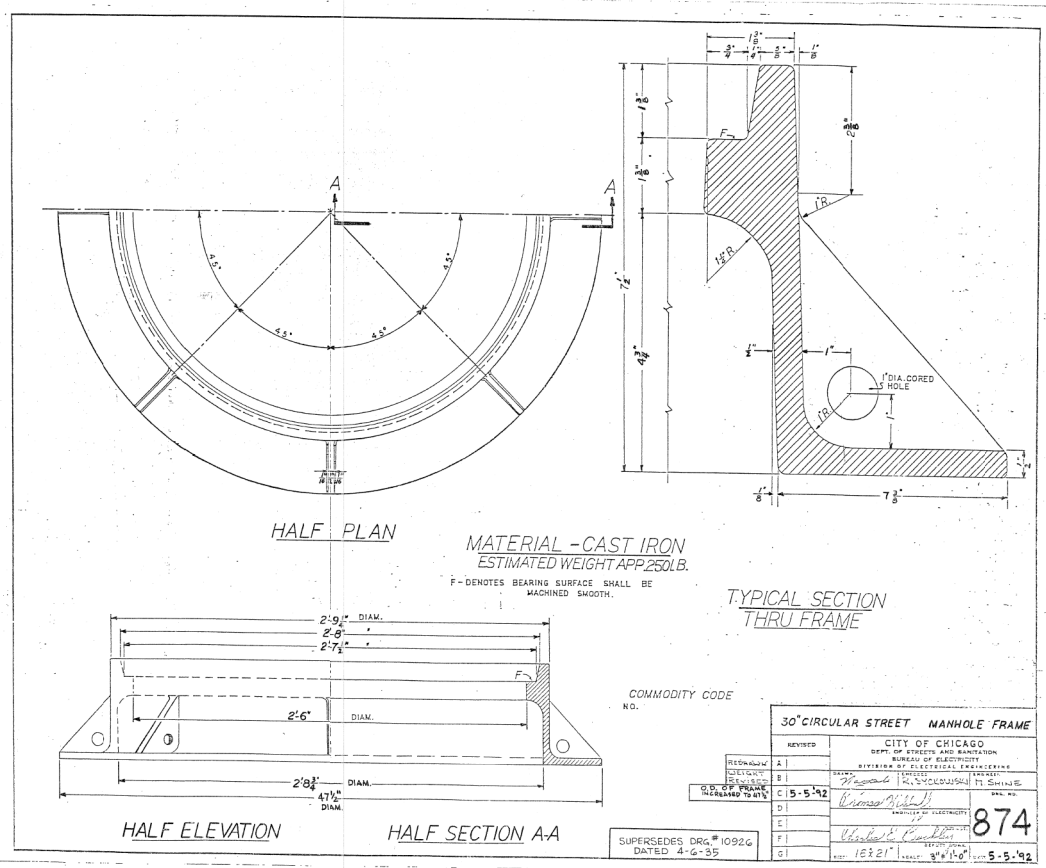
CDOT STANDARD DRAWINGS

SCALE: NONE SHEET 3 OF 8 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	218

CONTRACT NO. 60W26

ILLINOIS FED. AID PROJECT



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EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

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DESIGNED - PWF
DRAWN - PWF
CHECKED - GG
DATE - 08/20/13

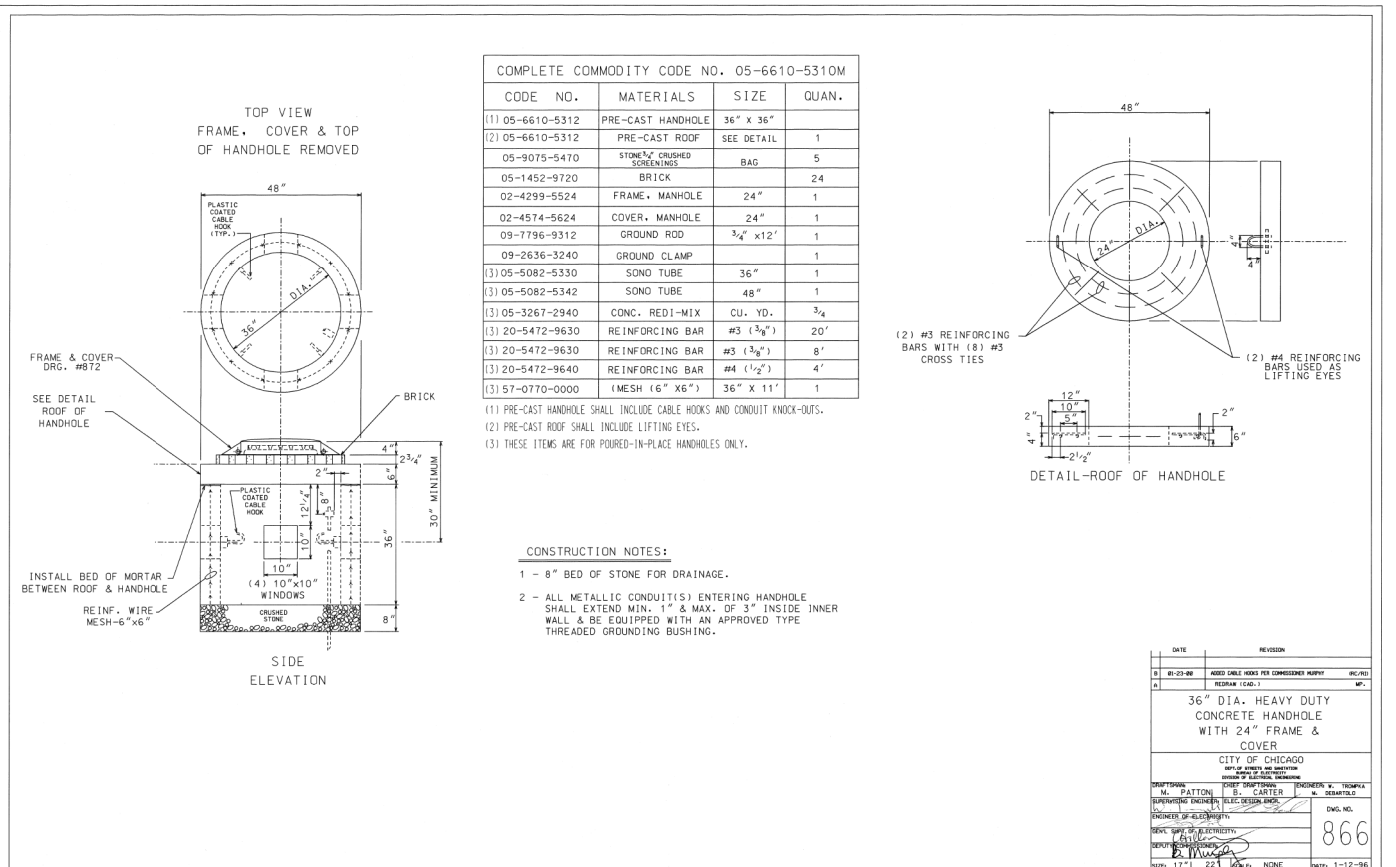
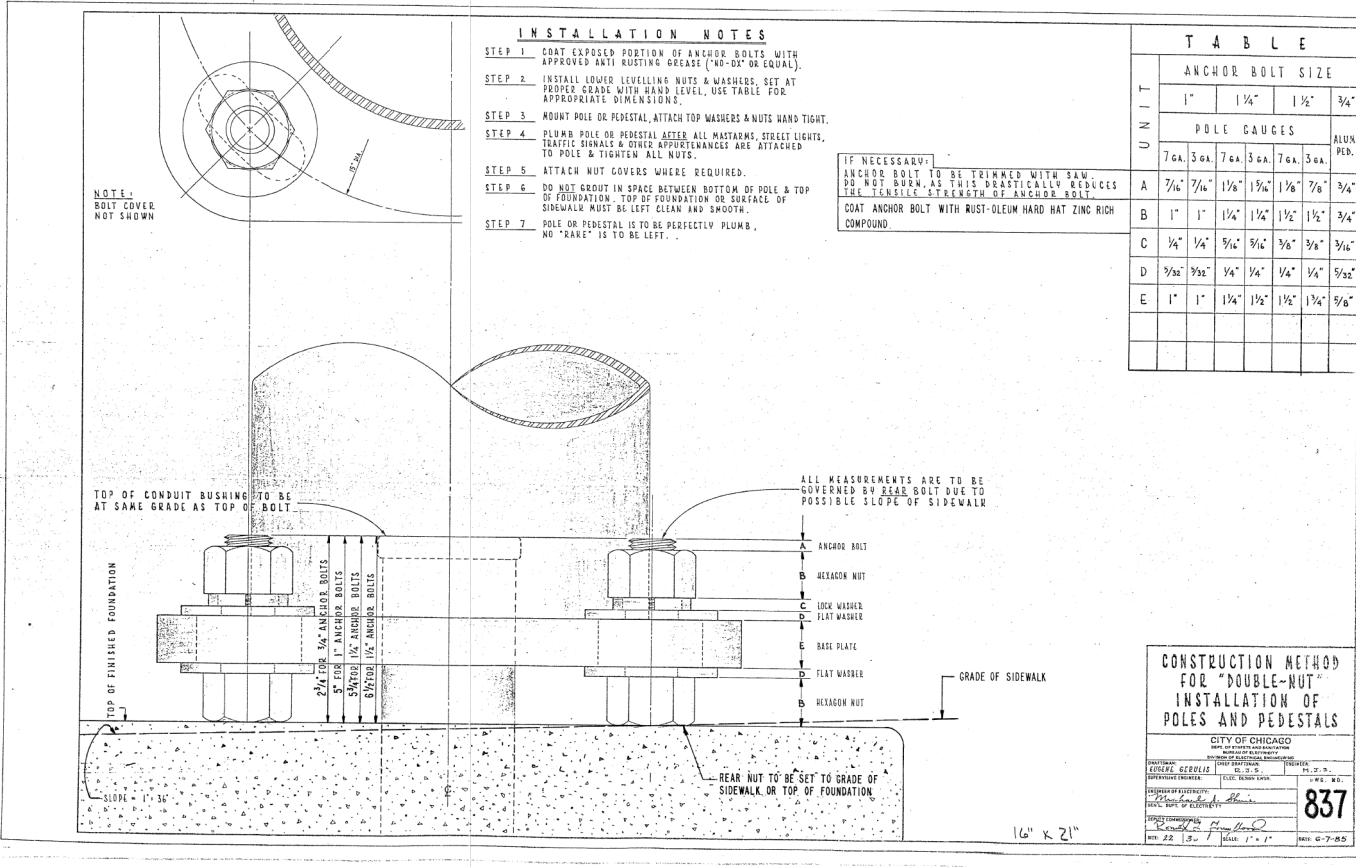
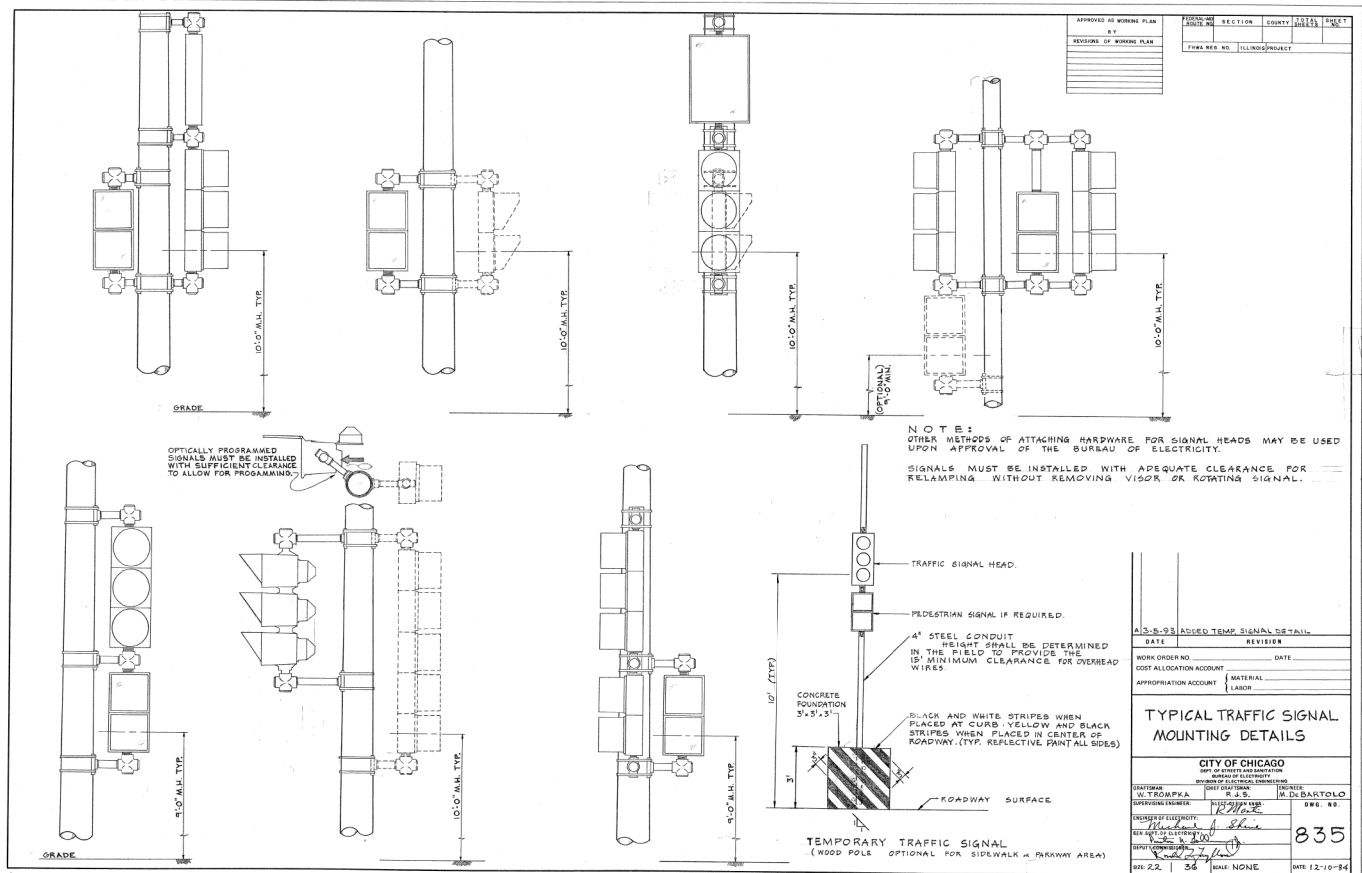
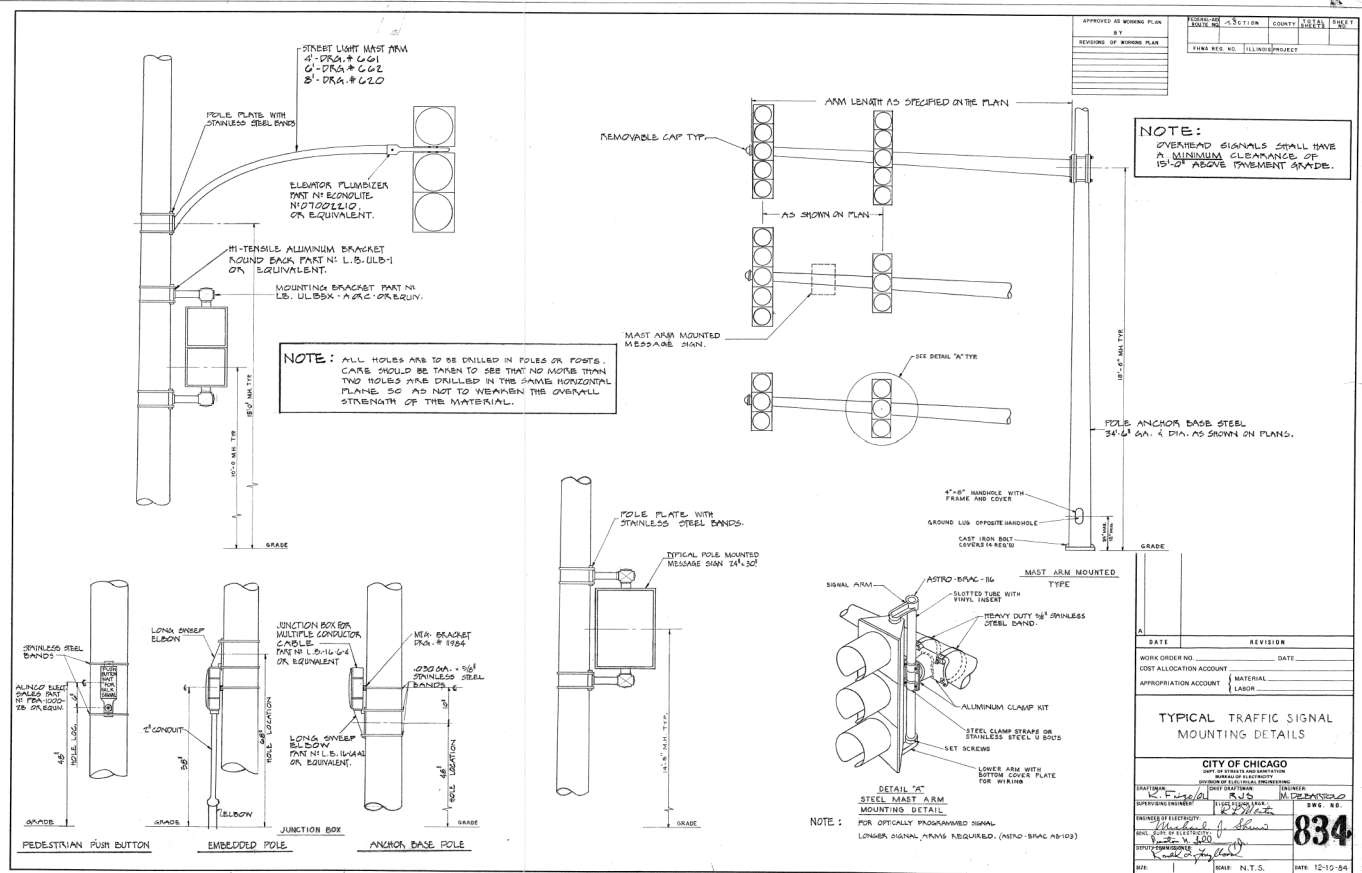
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CDOT STANDARD DRAWINGS

SCALE: NONE SHEET 4 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	219
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



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EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

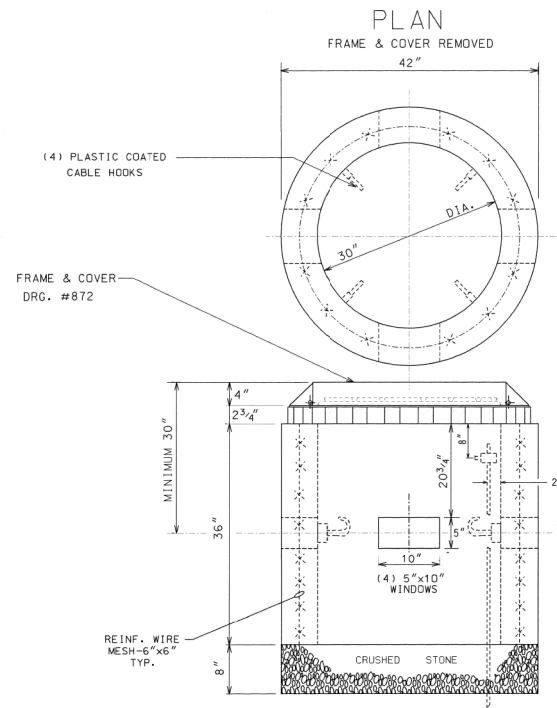
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PLOT DATE = 8/14/2013	DATE - 08/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CDOT STANDARD DRAWINGS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 220
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET 5 OF 8 SHEETS STA. TO STA.



COMPLETE COMMODITY CODE NO. 05-6610-5310M

CODE NO.	MATERIALS	SIZE	QUAN.
(1) 05-6610-5310	PRE-CAST HANDHOLE	30"X36"	1
(2) 05-9075-5470	STONE 3/4" CRUSHED	BAG	5
(2) 05-5082-5330	SOND TUBE	30"	1
(2) 05-5082-5342	SOND TUBE	42"	1
(2) 05-3267-2940	CONC. REDI-MIX	CU. YD.	1/2
(2) 57-0770-0000	6" X 6" MESH	36"X10'	1
05-1452-9720	BRICK		24
02-4299-5524	FRAME MANHOLE	24"	1
02-4574-5040	COVER, MANHOLE	24"	1
09-7796-9312	GROUND ROD	3/4"X12'	1
09-2630-3240	GROUND CLAMP		1

- (1) PRE-CAST HANDHOLE SHALL INCLUDE CABLE HOOKS AND CONDUIT KNOCKOUTS.
 (2) THESE ITEMS ARE FOR POURED-IN-PLACE HANDHOLES ONLY.

- CONSTRUCTION NOTES:**
- 8" BED OF STONE FOR DRAINAGE.
 - ALL METALLIC CONDUITS ENTERING HANDHOLE SHALL EXTEND MINIMUM 1" & MAXIMUM 3" INSIDE INNER WALL AND BE EQUIPPED WITH AN APPROVED TYPE OF THREADED GROUNDING BUSHING.

30" DIA. CONCRETE HANDHOLE

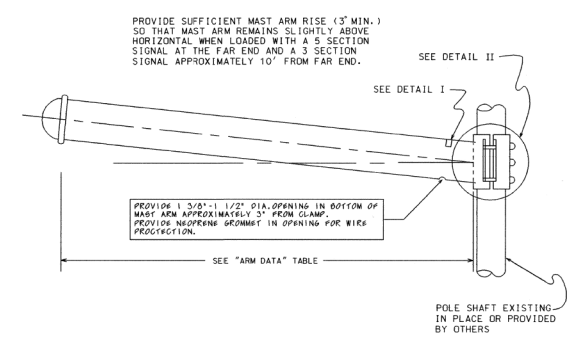
CITY OF CHICAGO

DATE: 12-22-08

REVISION: 867

DATE: 12-18-08

DATE: 12-18-08



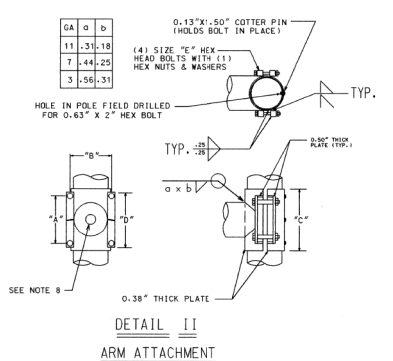
SIGNAL ARM ATTACHMENT DATA

CLAMP RANGE	"A"	"B"	"C"	"D"	"E"
7.45" - 7.95"	7.25"	9.92"	10.80"	10.32"	1.00" X 7.50"
8.45" - 8.95"	9.00"	10.66"	13.06"	12.50"	1.00" X 8.00"
9.95" - 10.45"	10.25"	12.66"	15.30"	13.50"	1.25" X 8.50"

ARM DATA

CLAMP RANGE (FEET)	POLE END (INCHES)	SIGNAL END (INCHES)	LENGTH (FEET)	GUAGE	WEIGHT (POUNDS)	TEST LOAD (POUNDS)	MAX. DEFLECTION (INCHES)
7.45-7.95	7.0	4.76	16	7	241	1700	6.5
7.45-7.95	7.0	4.20	20	7	274	1300	12.0
7.45-7.95	7.0	3.36	26	7	315	1000	24.0
8.45-8.95	8.0	3.80	30	7	409	1100	29.0
9.95-10.45	9.0	4.10	35	7	539	1200	36.0
9.95-10.45	9.0	3.40	40	7	559	1000	52.0
9.95-10.45	10.0	3.84	44	7		1200	57.0

- NOTES:**
- TRAFFIC SIGNAL ARM SHAFT ASTM DESIGNATION: A595 GRADE C, 60,000 PSI MINIMUM YIELD STRENGTH WITH A LINEAR TAPER -0.14"/FT.
 - TRAFFIC SIGNAL ARM END CAP SECURED IN PLACE WITH 3 SET SCREWS AND 1 THRU ARM END BOLT. (PLATED HARDWARE)
 - ALL THREADED FASTENERS TO BE GALVANIZED TO ASTM DESIGNATION: A153
 - ALL VEHICULAR AND/OR PEDESTRIAN SIGNAL LIGHTS AND NECESSARY HARDWARE FOR ATTACHMENT TO BE FIELD LOCATED AND FURNISHED BY OTHERS.
 - ALL ARM END CAPS AND ARM CLAMPS TO BE FULLY ASSEMBLED AND ATTACHED TO THE ARM PRIOR TO SHIPPING.
 - ARM ASSEMBLY TO BE DEGREASED, CLEANED, CHEMICALLY PRETREATED, GIVEN AN EXTERIOR THERMOSETTING POLYESTER POWDER COAT, AND AN INTERIOR THERMOPLASTIC HYDROCARBON RESIN POWDER COAT. ALL PAINTING TO BE IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 8, "PAINTING".
 - MAST ARM SHALL BE TESTED IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 9 WITH TEST VALUES AS SHOWN ON THE "ARM DATA" TABLE.
 - HOLE IN CLAMP TO BE 4.0" (MIN.). HOLE TO BE GROUND SMOOTH AND DEBURRED TO PROVIDE A SMOOTH WIRE ENTRY FROM POLE TO MAST ARM.



10-29-02 REFERENCES SPEC. 1454

8-4-93 WIRE OPENING ON MAST ARM

DATE: 12-18-08

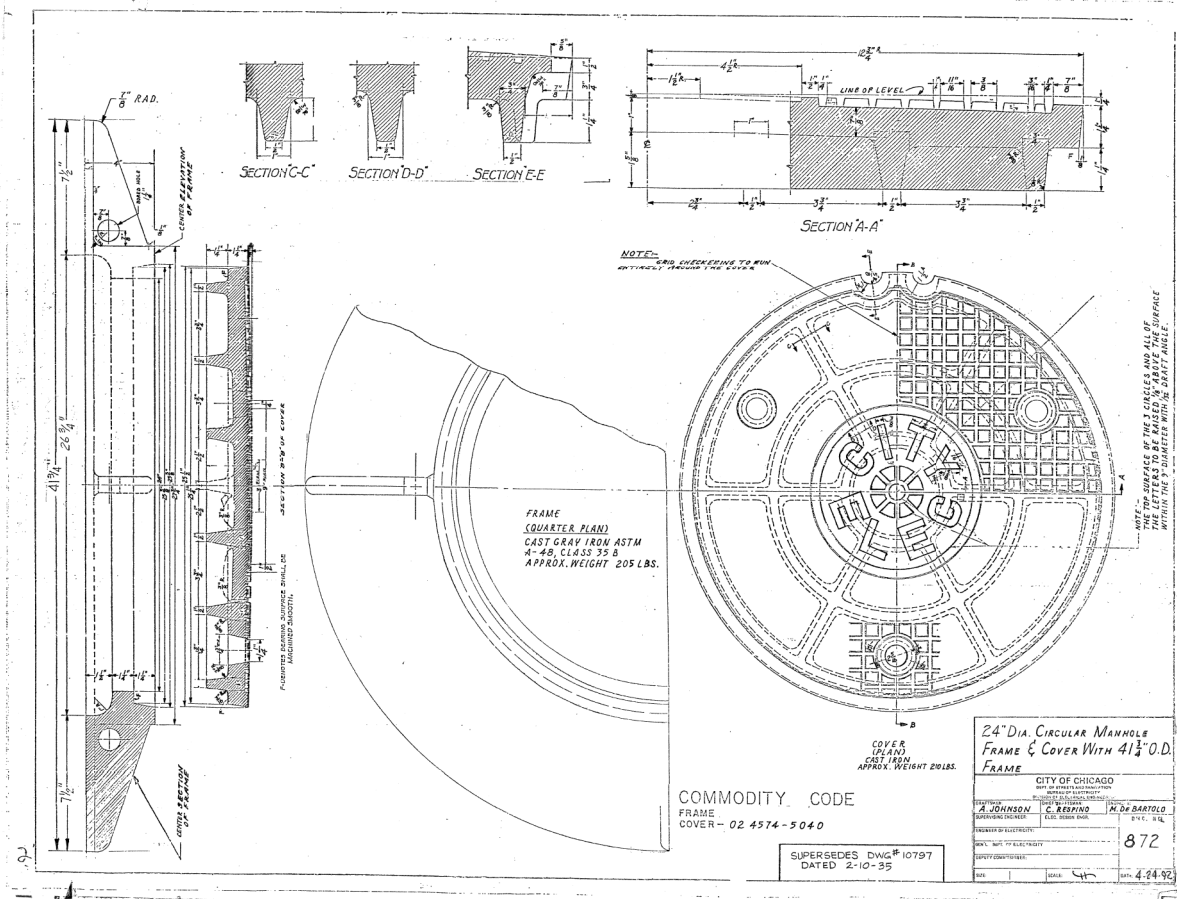
REVISION: 870

STEEL TRAFFIC SIGNAL MAST ARM-MONOTUBE

CITY OF CHICAGO

DATE: 12-18-08

SCALE: 1/8" = 1'-0"



24" DIA. CIRCULAR MANHOLE

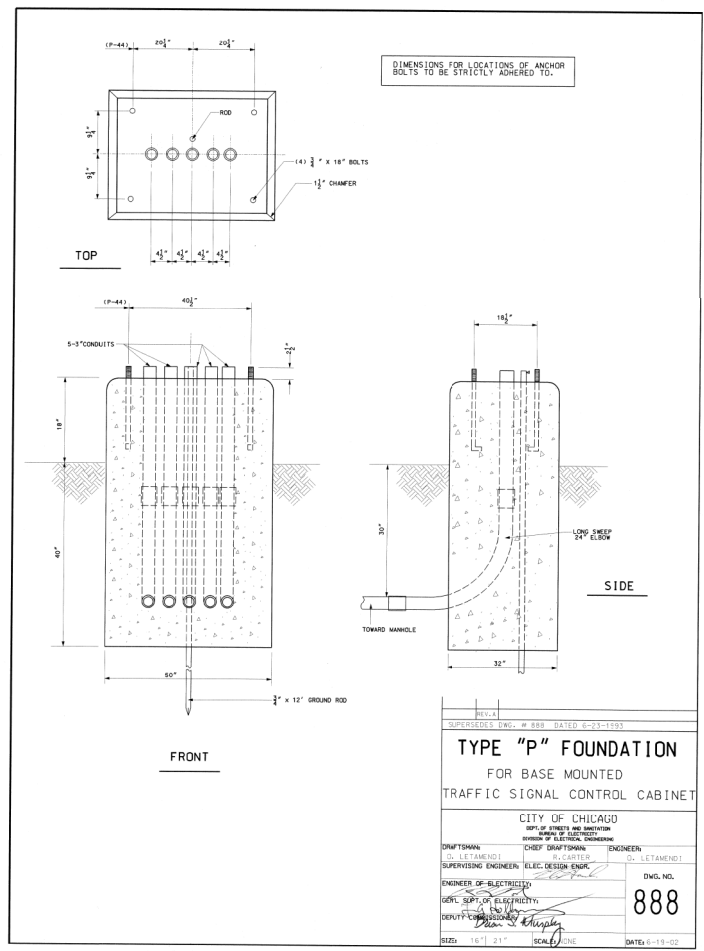
FRAME & COVER WITH 4 1/2" O.D. FRAME

CITY OF CHICAGO

DATE: 2-10-55

REVISION: 872

DATE: 2-10-55



TYPE "P" FOUNDATION

FOR BASE MOUNTED TRAFFIC SIGNAL CONTROL CABINET

CITY OF CHICAGO

DATE: 6-23-1993

REVISION: 888

DATE: 6-23-1993

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EJM ENGINEERING, INC.

411 South Wells Street Suite 1000

Chicago, Illinois 60607

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DRAWN - PWF	REVISED -
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DATE - 08/20/13	REVISED -

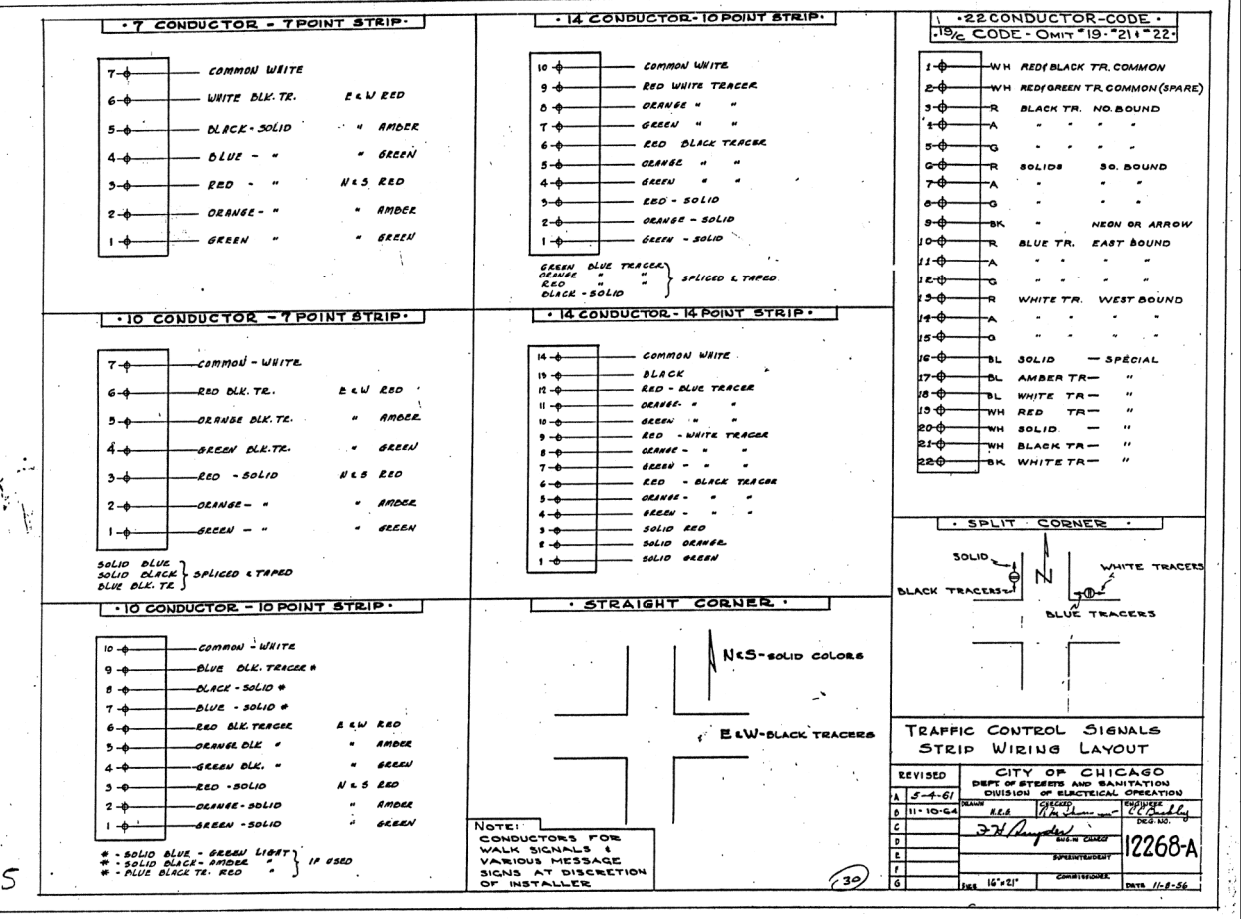
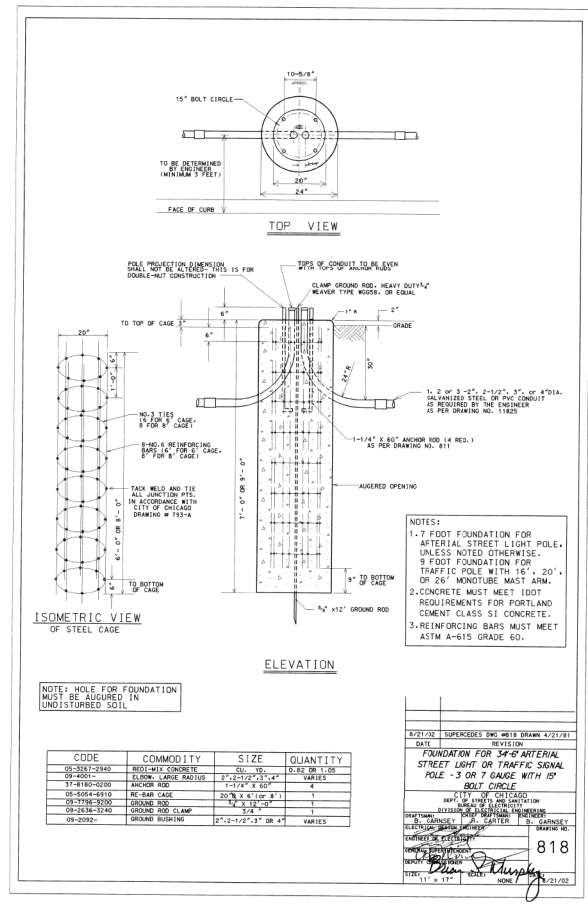
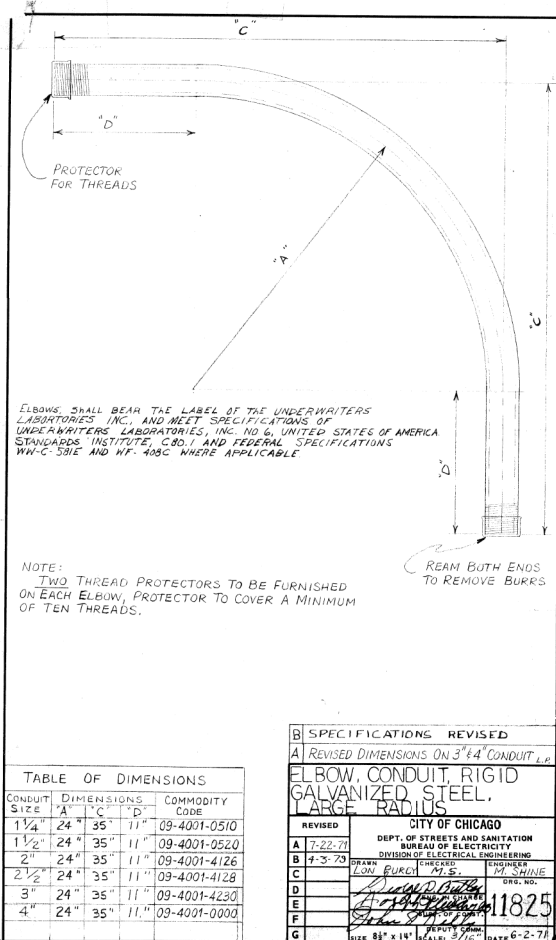
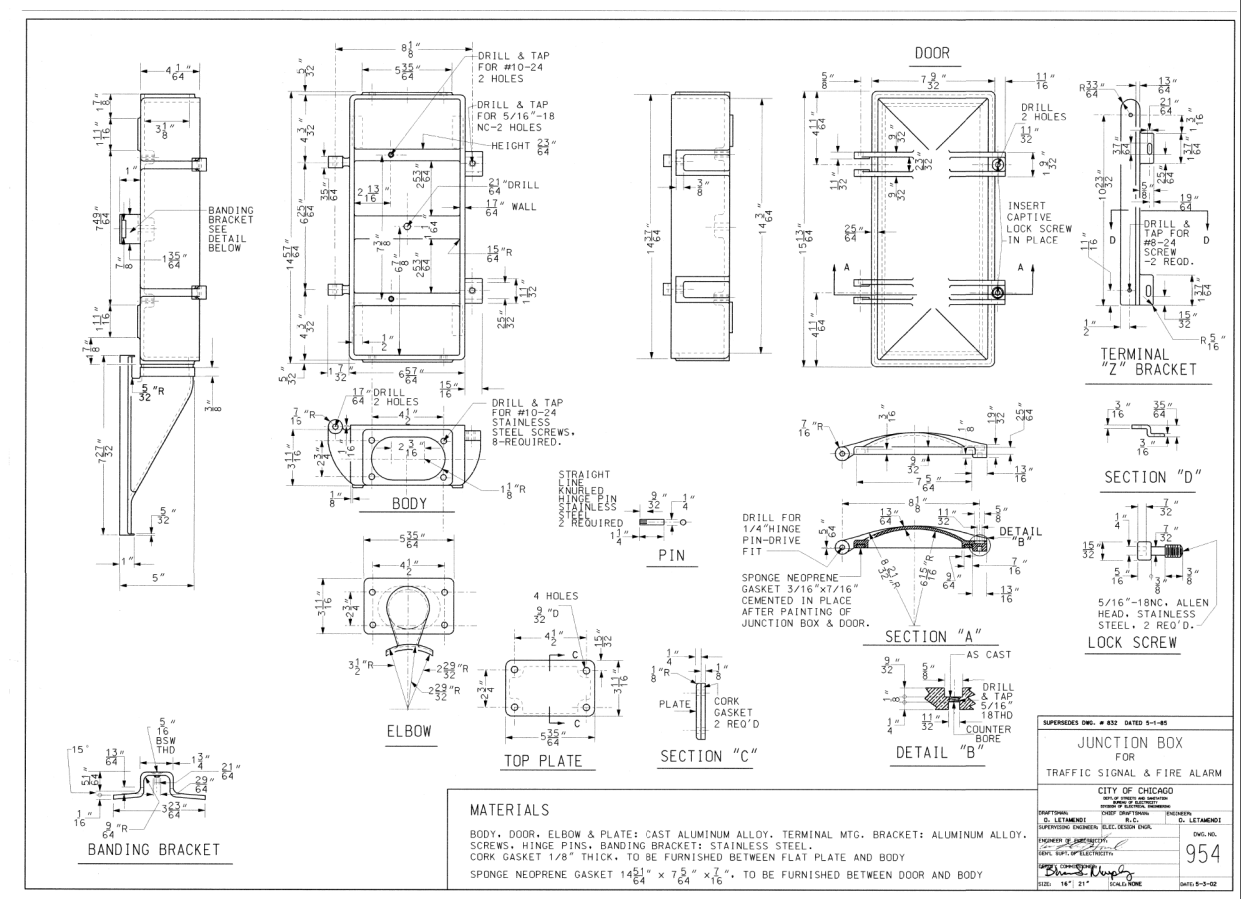
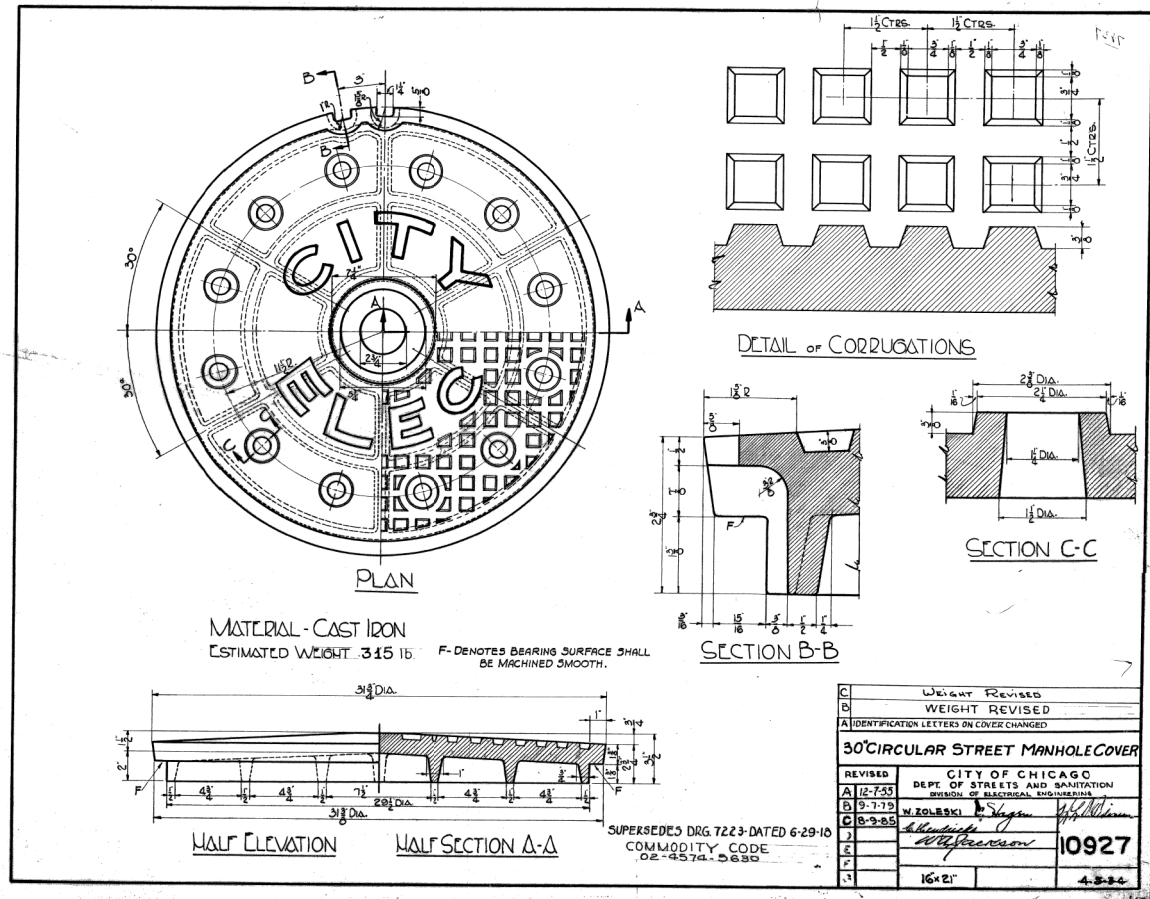
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

CDOT STANDARD DRAWINGS

SCALE: NONE SHEET 6 OF 8 SHEETS STA. TO STA.

F.A.I. R.E. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 221
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



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411 South Wells Street Suite 1000
Chicago, Illinois 60607

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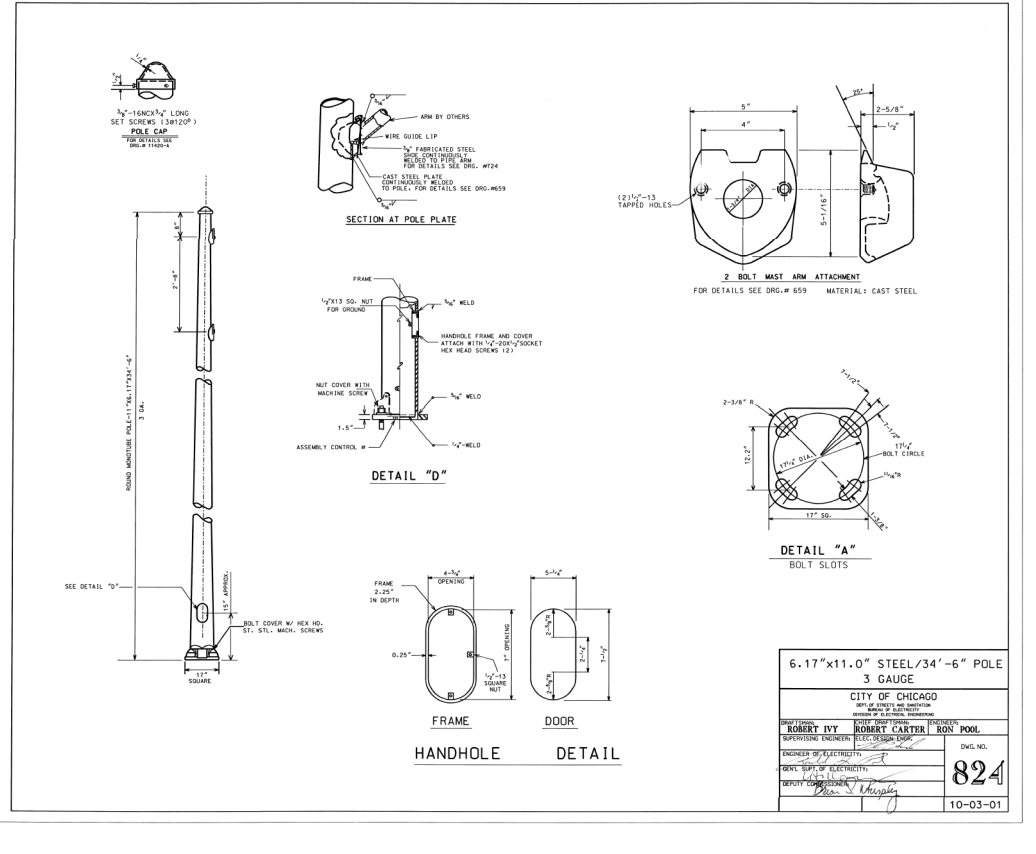
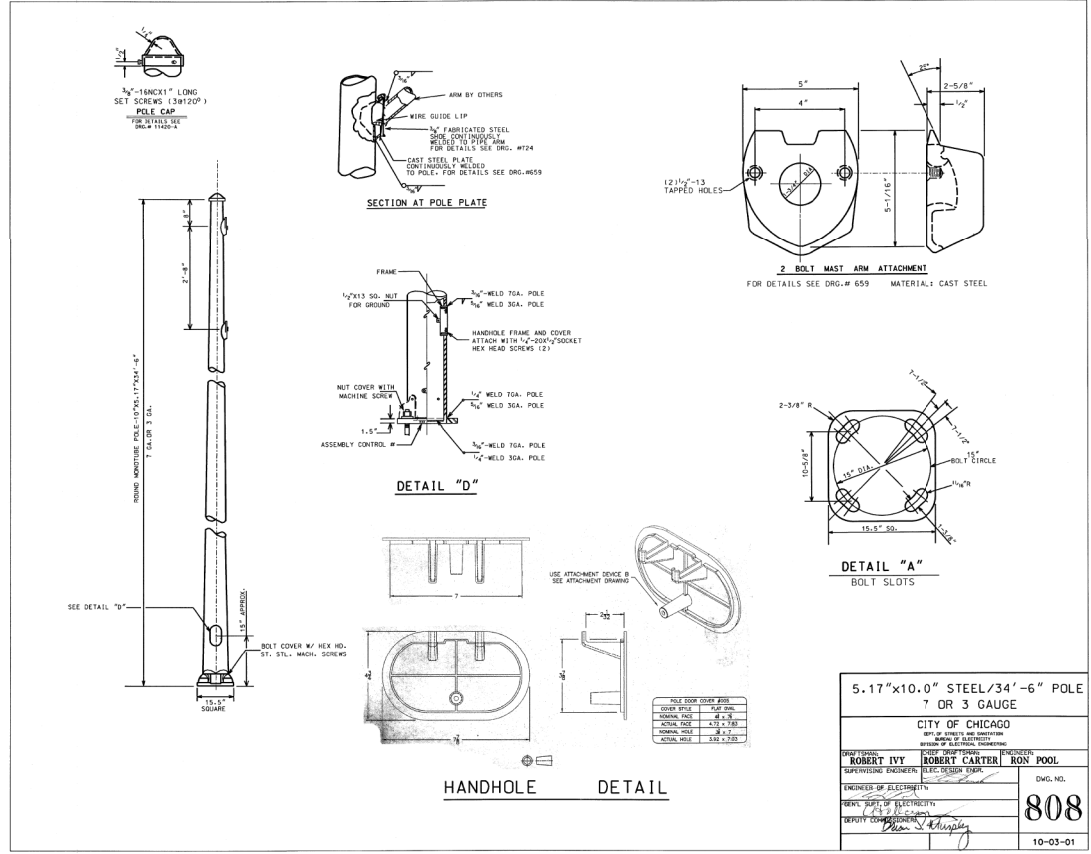
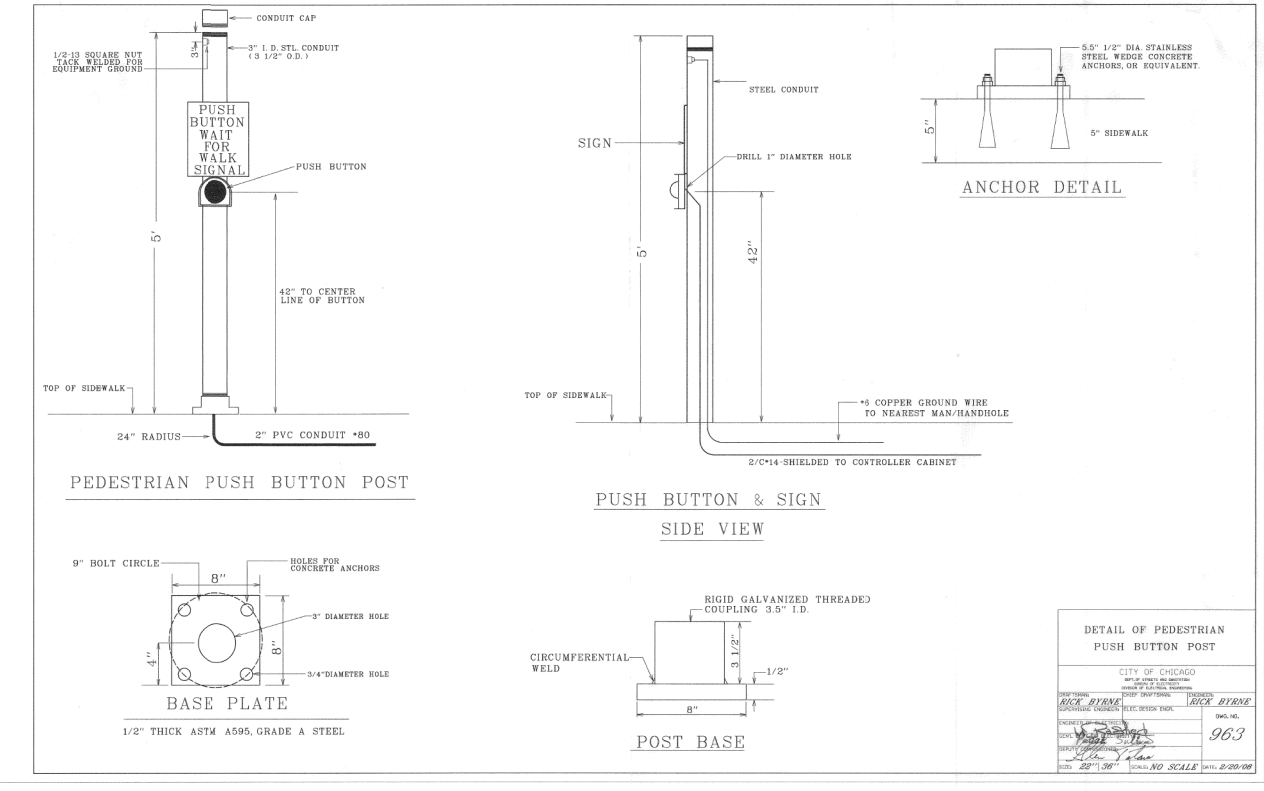
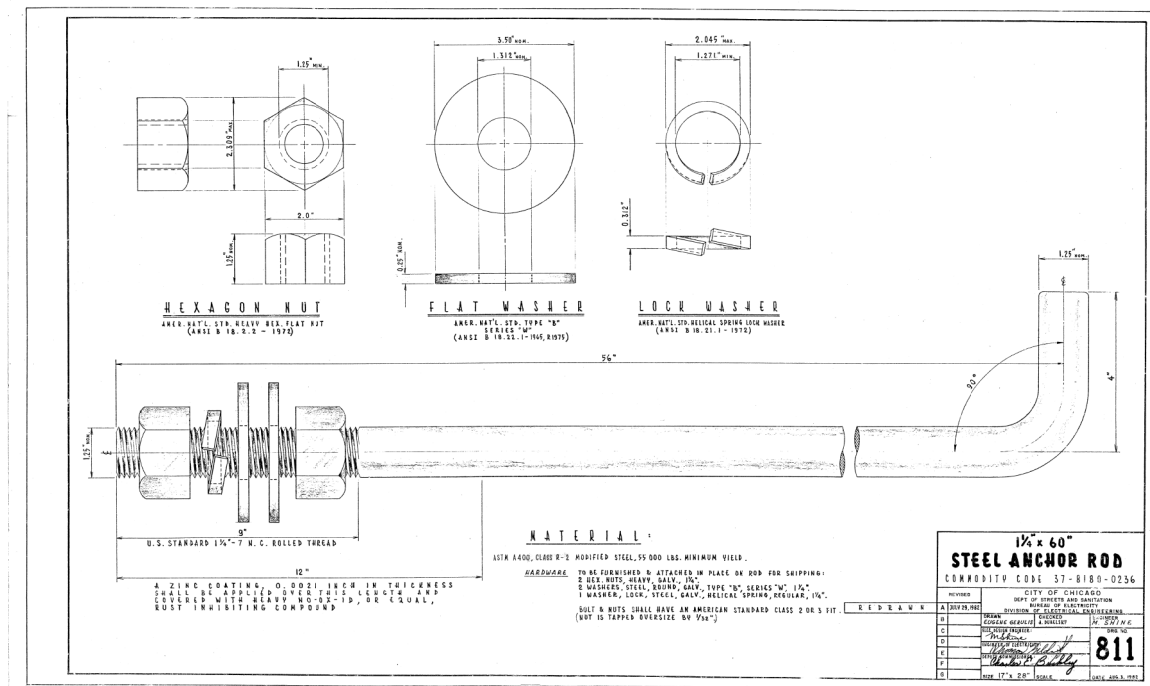
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REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CDOT STANDARD DRAWINGS

SCALE: NONE SHEET 7 OF 8 SHEETS STA. TO STA.

F.A.I. R.T.E. 90/94/290
SECTION 2013-008R
COUNTY COOK
TOTAL SHEETS 559
SHEET NO. 222
CONTRACT NO. 60W26
ILLINOIS FED. AID PROJECT



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Chicago, Illinois 60607

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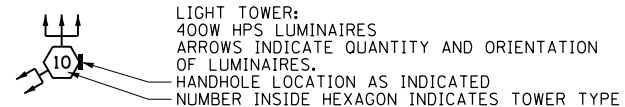
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CDOT STANDARD DRAWINGS

SCALE: NONE SHEET 8 OF 8 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 223
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

ELECTRICAL SYMBOLS FOR PROPOSED WORK

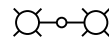


LIGHT TOWER:
400W HPS LUMINAIRES
ARROWS INDICATE QUANTITY AND ORIENTATION OF LUMINAIRES.
HANDHOLE LOCATION AS INDICATED
NUMBER INSIDE HEXAGON INDICATES TOWER TYPE

TYPE	TOWER HEIGHT
10	- 100 FEET
11	- 110 FEET
12	- 120 FEET



LIGHTING UNIT: TYPE AS INDICATED



47'-6" M.H., 15 FT. DAVIT ARM
400W HPS M-C-III LUMINAIRE.
BREAKAWAY TRANSFORMER BASE



47'-6" M.H., 2-15 FT. DAVIT ARM
2-400W HPS M-C-III LUMINAIRE.
BREAKAWAY TRANSFORMER BASE



TEMPORARY LUMINAIRE AND POLE



UNDERPASS LUMINAIRE:
HPS, WATTAGE AS SHOWN ON PLANS (PRIMARY DISTRIBUTION PATTERN DIRECTION AS INDICATED BY ARROW)



MANHOLE

ELECTRIC HANDHOLE: TYPE AS INDICATED

TYPE E1: PRECAST CONCRETE, 21.5"x21.5"x30",
IDOT STANDARD 814001

TYPE E2: PRECAST CONCRETE-HEAVY DUTY,
22"x22"x30", IDOT STANDARD 814001

TYPE C1: COMMUNICATIONS VAULT, 49 5/8"x32 1/8"x57"

TYPE S1: PRECAST CONCRETE-HEAVY DUTY,
22"x22"x36"

TYPE S2: PRECAST CONCRETE-HEAVY DUTY SPECIAL,
30"x30"x36"



JUNCTION BOX: TYPE AND SIZE AS INDICATED ON PLANS



PULL BOX: TYPE AND SIZE AS INDICATED ON PLANS



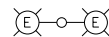
TELEPHONE CONNECTION



FIBER OPTIC COMMUNICATIONS HUT



EXISTING LIGHT TOWER



EXISTING LIGHTING UNIT, TWIN LUMINAIRE



EXISTING LIGHTING UNIT



EXISTING TEMPORARY LIGHTING UNIT



EXISTING CDOT LIGHTING UNIT



EXISTING UNDERPASS LUMINAIRE



EXISTING ELECTRIC MANHOLE



EXISTING ELECTRIC HANDHOLE



EXISTING JUNCTION BOX



EXISTING PULL BOX



EXISTING TELEPHONE CONNECTION



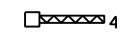
EXISTING FIBER OPTIC COMMUNICATIONS HUT



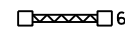
EXISTING ELECTRIC HANDHOLE/MANHOLE



EXISTING CDOT SURVEILLANCE CABINET



LIGHTED SIGN STRUCTURE-CANTILEVER TYPE
(NUMBER OF FLUORESCENT FIXTURES AS INDICATED - TYP.)



LIGHTED SIGN STRUCTURE-TRUSS TYPE



LIGHTED SIGN STRUCTURE-BRIDGE MOUNT TYPE



DYNAMIC MESSAGE SIGN



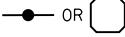
FLASHING BEACON SIGN



CLOSED CIRCUIT TELEVISION CAMERA



MICROWAVE DETECTOR



DETECTOR LOOP



CONTROLLER CABINET: LIGHTING, RADIO CONTROL DUPLEX TYPE WITH SCADA (DOOR SIDE AS INDICATED)



CONTROLLER CABINET: SURVEILLANCE



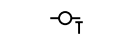
CONTROLLER CABINET: SURVEILLANCE, TYPE 334



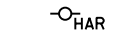
RAMP METER SIGNAL POLE/HEAD



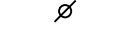
RAMP METER FLASHER POST



TEMPORARY WOOD POLE, 50 FOOT LENGTH
(10 FOOT BURIED, 40 FOOT INSTALLED HEIGHT)



HIGHWAY ADVISORY RADIO ANTENNA



ELECTRIC UTILITY POLE



CCTV CAMERA POLE

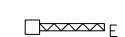


POLE MOUNTED ELECTRIC UTILITY TRANSFORMER(S)

ELECTRICAL SYMBOLS FOR EXISTING CONDITIONS



EXISTING CDOT ELECTRIC HANDHOLE/MANHOLE



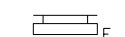
EXISTING LIGHTED SIGN STRUCTURE-CANTILEVER TYPE



EXISTING LIGHTED SIGN STRUCTURE-TRUSS TYPE



EXISTING LIGHTED SIGN STRUCTURE-BRIDGE MOUNT TYPE



EXISTING DYNAMIC MESSAGE SIGN



EXISTING FLASHING BEACON SIGN



EXISTING CLOSED CIRCUIT TELEVISION CAMERA



EXISTING MICROWAVE DETECTOR



EXISTING DETECTOR LOOP



EXISTING LIGHTING CONTROLLER, DUPLEX



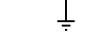
EXISTING CONTROLLER CABINET



EXISTING RAMP METER SIGNAL POLE/HEAD



PAD MOUNTED ELECTRIC UTILITY TRANSFORMER



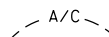
GROUND ROD



MAIN SERVICE FUSED DISCONNECT SWITCH
(RATING AS INDICATED)



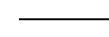
PHOTOCELL



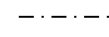
AERIAL CABLE



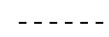
FLEXIBLE CONDUIT



RACEWAY EMBEDDED IN STRUCTURE



EXPOSED CONDUIT



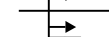
RACEWAY OR DIRECT BURIAL CABLE
UNDERGROUND WITHOUT ENCASEMENT



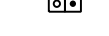
RIGID GALVANIZED STEEL CONDUIT
SLEEVE, INSTALLED BELOW PAVEMENT



UNDERGROUND REINFORCED CONCRETE ENCASED
CONDUIT DUCTBANK, UNLESS NOTED OTHERWISE.
(NUMBER, TYPE, AND SIZE OF DUCTS AS SHOWN)

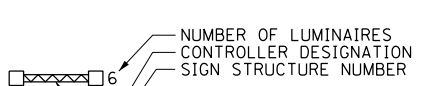
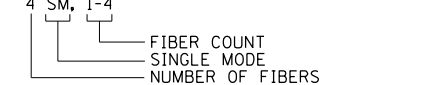
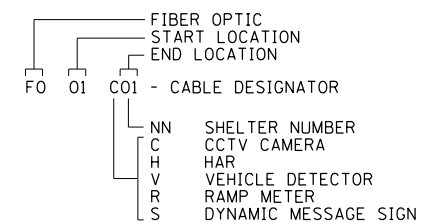
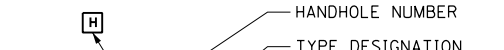
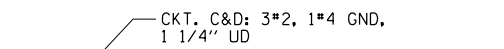
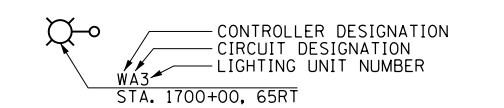
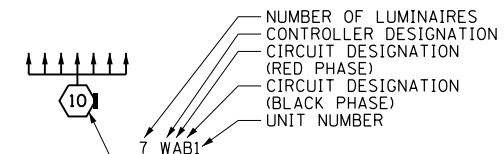


CONDUIT TURNED DOWN



CONDUIT TURNED UP

GENERAL ELECTRICAL CALLOUTS



TYPICAL EXISTING TO BE REMOVED SYMBOLS

- EXISTING LIGHTING UNIT TO BE REMOVED
- EXISTING UNDERPASS LUMINAIRE TO BE REMOVED
- EXISTING JUNCTION BOX TO BE REMOVED
- EXISTING LIGHTED SIGN STRUCTURE-CANTILEVER TYPE TO BE REMOVED
- EXISTING DYNAMIC MESSAGE SIGN TO BE REMOVED
- EXISTING FLASHING BEACON SIGN TO BE REMOVED
- EXISTING LIGHTING CONTROLLER, DUPLEX TO BE REMOVED
- EXISTING CONTROLLER CABINET TO BE REMOVED
- EXISTING DETECTOR LOOP TO BE REMOVED
- EXISTING RAMP METER SIGNAL POLE/HEAD TO BE REMOVED
- EXISTING RAMP METER FLASHER TO BE REMOVED
- EXISTING POLE MOUNTED UTILITY SERVICE CONNECTION TO BE REMOVED

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REVISOR -	REVISION -
PLOT SCALE = 1:0000' / 1"	CHECKED - WDS
DATE - 8/15/2013	REVISOR -
	REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT ELECTRICAL SYMBOLS

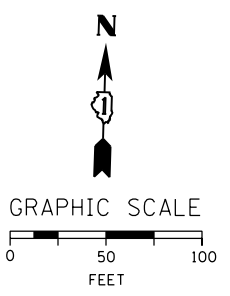
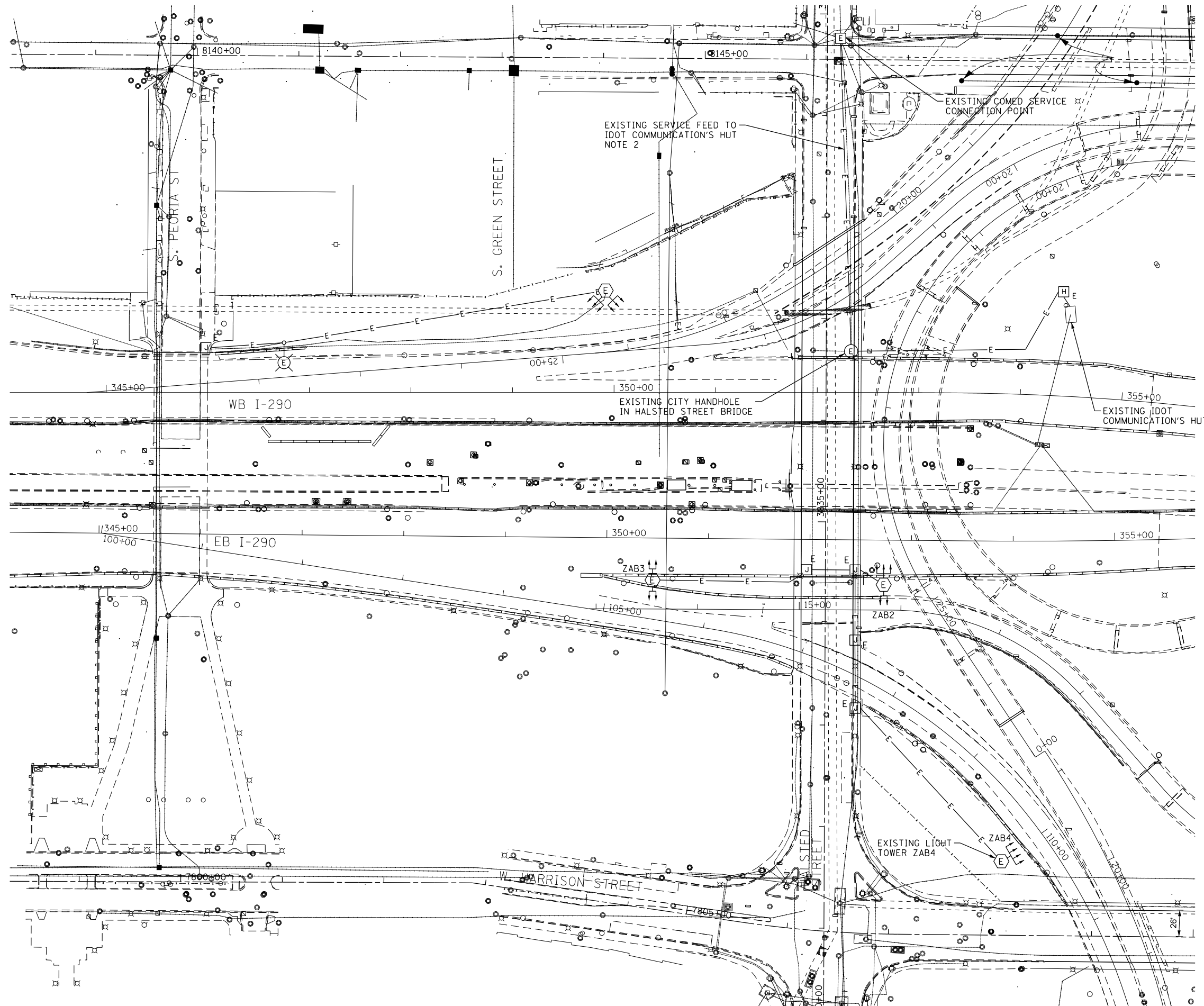
SCALE: N.T.S. SHEET 1 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	224
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

E-01

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. THE EXISTING UTILITY SERVICE TO THE IDOT COMMUNICATIONS HUT SHALL BE REMOVED. THE SERVICE SHALL NOT BE DISCONNECTED AND THE BRIDGE DEMOLITION WORK STARTED UNTIL THE PROPOSED TEMPORARY SERVICE FEED TO THE HUT HAS BEEN INSTALLED, ENERGIZED, TESTED AND APPROVED BY IDOT. THE PROPOSED TEMPORARY SERVICE FEED WORK IS SHOWN ON DRAWING E-03.



E-02

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D160W26-sht-Light-02
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 PLOT DATE = 8/15/2013

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DATE - 8/20/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

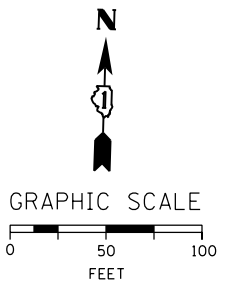
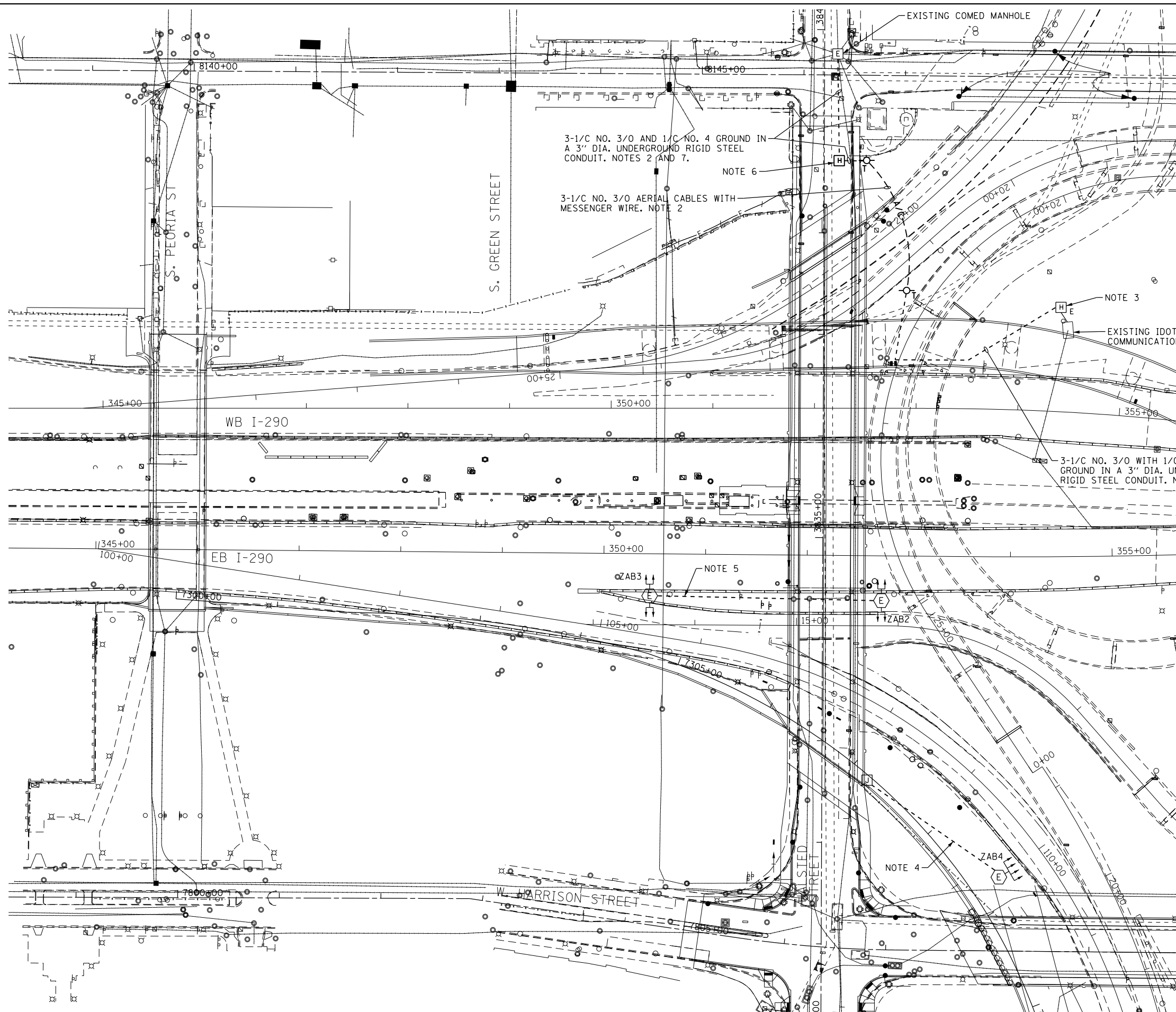
**I-290 EXISTING/DEMOLITION
 LIGHTING PLAN**

SCALE: 1"=50' SHEET 2 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	225
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. PROVIDE A TEMPORARY UTILITY SERVICE FEED FOR THE EXISTING IDOT COMMUNICATIONS HUT. THE TEMPORARY FEED SHALL BE INSTALLED FROM THE EXISTING COMED MANHOLE TO THE EXISTING IDOT COMMUNICATIONS HUT AS SHOWN. ALL WORK SHALL BE COORDINATED WITH AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ELECTRIC UTILITY SERVICE PROVIDER, COMED.
3. ROUTE THE TEMPORARY UTILITY SERVICE FEED THROUGH THE EXISTING IDOT HANDHOLE TO THE EXISTING POWER PANEL LOCATED INSIDE THE COMMUNICATIONS HUT.
4. PROVIDE A TEMPORARY POWER FEED FOR THE ROADWAY LIGHTING CIRCUITS LOCATED IN EXISTING HIGH MAST LIGHT TOWER ZAB4. THE FEED SHALL BE 3-1/C NO. 2 WITH 1/C NO. 4 GROUND XLP TYPE USE CABLES IN A 1 1/2" UNIT DUCT INSTALLED IN GRADE. ALLOW 175 FT. OF CABLES IN UNIT DUCT FOR BIDDING PURPOSES. SEE DRAWING E-05 FOR CONTINUATION OF THIS TEMPORARY FEED.
5. PROVIDE A TEMPORARY POWER FEED FOR THE ROADWAY LIGHTING CIRCUITS FROM EXISTING TOWER ZAB2 TO TOWER ZAB3. THE FEED SHALL BE 3-1/C NO. 2 WITH 1/C NO. 4 GROUND XLP TYPE USE IN A 1 1/2" UNIT DUCT INSTALLED IN GRADE. ALLOW 240 FT. OF CABLES IN UNIT DUCT FOR BIDDING PURPOSES. THE FEED SHALL BE PROTECTED FROM DAMAGE FOR THE DURATION OF THE CONTRACT.
6. PROVIDE A PRECAST CONCRETE HEAVY DUTY HANDHOLE.
7. SAW CUT AND REMOVE THE EXISTING PAVEMENT TO INSTALL THE SERVICE CONDUIT. THE PAVEMENT SHALL BE RESTORED AND THE TRENCH FILLED PER CDOT STANDARD A-2-2A. THE WORK TO REMOVE AND RESTORE THE EXISTING PAVEMENT INCLUDING ALL MATERIALS, DISPOSAL AND BACKFILLING WILL NOT BE PAID FOR SEPARATE AND SHALL BE INCLUDED IN THE COST OF THE "UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA." PAY ITEM.



E-03

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D160W26-sht-Light-03
 USER NAME = myersc
 PLOT SCALE = 50.0000' / in.
 PLOT DATE = 8/15/2013

DESIGNED - WDS	REVISED -
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DATE - 8/20/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

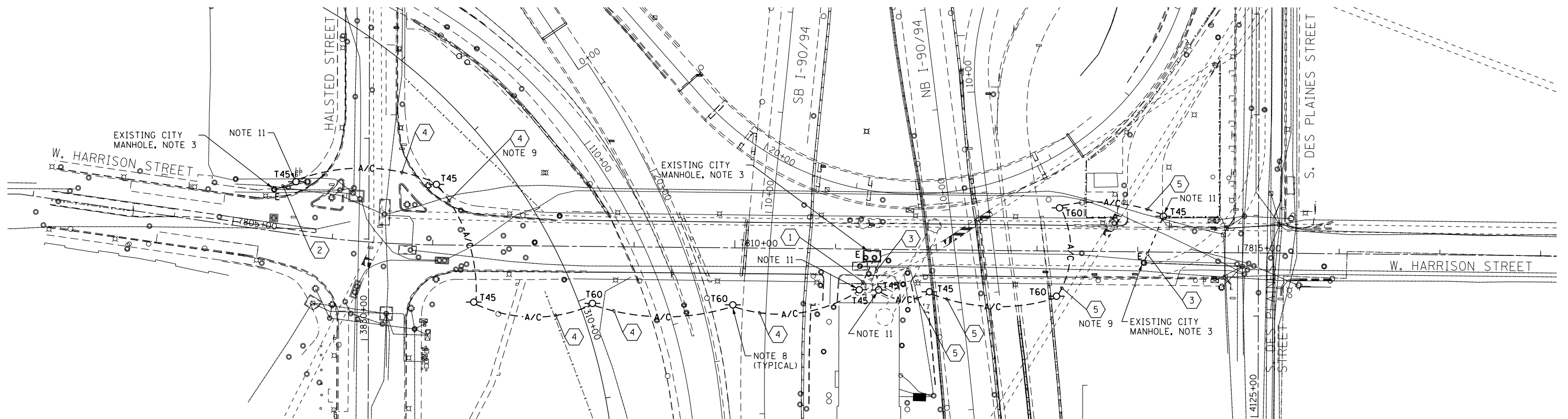
I-290 TEMPORARY POWER PLAN

SCALE: 1"=50' SHEET 3 OF 22 SHEETS STA. TO STA.



F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 226
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

NOTES:






1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING WILL BE COORDINATED WITH THE CITY OF CHICAGO'S OFFICE OF EMERGENCY MANAGEMENT AND COMMUNICATIONS (OEMC). OEMC CONTACT: FRANK KELLY 312-746-9238
3. ALL SPlicing OF PROPOSED OEMC CABLES IN EXISTING CITY MANHOLES WILL BE DONE BY OTHERS.
4. DRILL EXISTING MANHOLE TO ROUTE THE TEMPORARY OEMC CONDUITS INTO THE MANHOLE.
5. SAWCUT THE EXISTING PAVEMENT TO INSTALL THE TEMPORARY OEMC CONDUIT. THE PAVEMENT SHALL BE RESTORED AND THE TRENCH FILLED PER CDOT STANDARD A-2-2A. THE WORK TO REMOVE AND RESTORE THE EXISTING PAVEMENT INCLUDING MATERIALS, DISPOSAL AND BACKFILLING WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF THE "UNDERGROUND CONDUIT, PVC, 4" DIA. SCHEDULE 80 (CDOT)" PAY ITEM.
6. REMOVE AND RESTORE THE EXISTING SIDEWALK AS NEEDED TO INSTALL THE TEMPORARY OEMC CONDUIT. THE SIDEWALK SHALL BE RESTORED AND THE TRENCH FILLED PER CDOT STANDARDS. THE WORK TO REMOVE AND RESTORE THE EXISTING SIDEWALK INCLUDING ALL MATERIALS, DISPOSAL AND BACKFILLING WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF THE "UNDERGROUND CONDUIT, PVC, 4" DIA. SCHEDULE 80 (CDOT)" PAY ITEM.
7. THE 4-INCH DIAMETER SCHEDULE 80 PVC CONDUIT SHALL BE INSTALLED 10 FEET UP THE TEMPORARY WOOD POLE. THIS CONDUIT ATTACHED TO WOOD POLE SHALL BE MEASURED AND PAID FOR UNDER THE "UNDERGROUND CONDUIT, PVC, 4" DIA. SCHEDULE 80 (CDOT)" PAY ITEM.
8. PROVIDE 25 FEET OF SLOPE FOR EACH CABLE ON EACH TEMPORARY WOOD POLE TO ALLOW FOR FUTURE RELOCATION OF WOOD POLES DURING CONSTRUCTION.
9. INSTALL THE AERIAL CABLES A MINIMUM OF 45 FEET ABOVE FINISHED PAVEMENT AS MEASURED FROM THE LOWEST POINT OF THE CABLES' SAG.
10. SEE IDOT STANDARD DRAWING BE-800 FOR TEMPORARY LIGHT POLE INSTALLATION DETAILS. THE DETAILS FOR THE INSTALLATION OF THE TEMPORARY WOOD POLES AND AERIAL CABLES SHOWN ON THIS DRAWING ARE SIMILAR TO THE INSTALLATION DETAILS SHOWN ON BE-800.
11. THE COMMUNICATION CABLES SHALL BE SECURED TO THE WOOD POLES AT THE END OF EACH AERIAL CABLE RUN WITH A TETHER WIRE AND CLAMP AS DIRECTED BY THE ENGINEER AND OEMC.
12. CABLES INSTALLED IN CONDUIT WILL BE MEASURED AND PAID FOR UNDER THE "ELECTRIC CABLE AERIAL SUSPENDED, COMMUNICATION, NO. 19 100 PAIR" PAY ITEM.

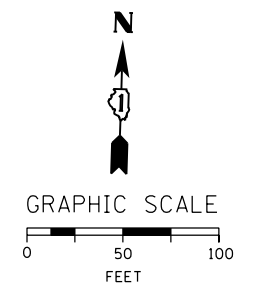


SYMBOLS (THIS DRAWING ONLY)

-  T45 TEMPORARY 45 FOOT WOOD POLE
-  T60 TEMPORARY 60 FOOT WOOD POLE

CABLE SCHEDULE

-  3-100 PAIR, 19 AWG, AERIAL COMMUNICATIONS CABLE INSTALLED IN 2-4" PVC (SCH. 80) CONDUITS UNDER PAVEMENT. SEE NOTES 5, 7 AND 12.
-  3-100 PAIR, 19 AWG, AERIAL COMMUNICATIONS CABLE INSTALLED IN 2-4" PVC (SCH. 80) CONDUITS UNDER SIDEWALK. SEE NOTES 6, 7 AND 12.
-  5-100 PAIR, 19 AWG, AERIAL COMMUNICATIONS CABLE INSTALLED IN 3-4" PVC (SCH. 80) CONDUITS UNDER PAVEMENT. SEE NOTES 5, 7 AND 12.
-  3-100 PAIR, 19 AWG, AERIAL COMMUNICATIONS CABLE INSTALLED ON TEMPORARY WOOD POLES AS SHOWN. SEE NOTE 10.
-  5-100 PAIR, 19 AWG, AERIAL COMMUNICATIONS CABLE INSTALLED ON TEMPORARY WOOD POLES AS SHOWN. SEE NOTE 10.



E-03A

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D160W26-sht-Light-03A
 USER NAME = myersc
 PLOT SCALE = 50.0000' / in.
 PLOT DATE = 9/12/2013

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DATE - 9/15/13	REVISED -

**STATE OF ILLINOIS
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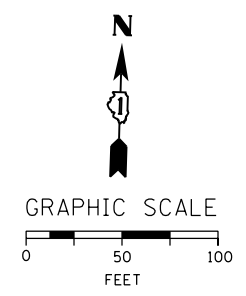
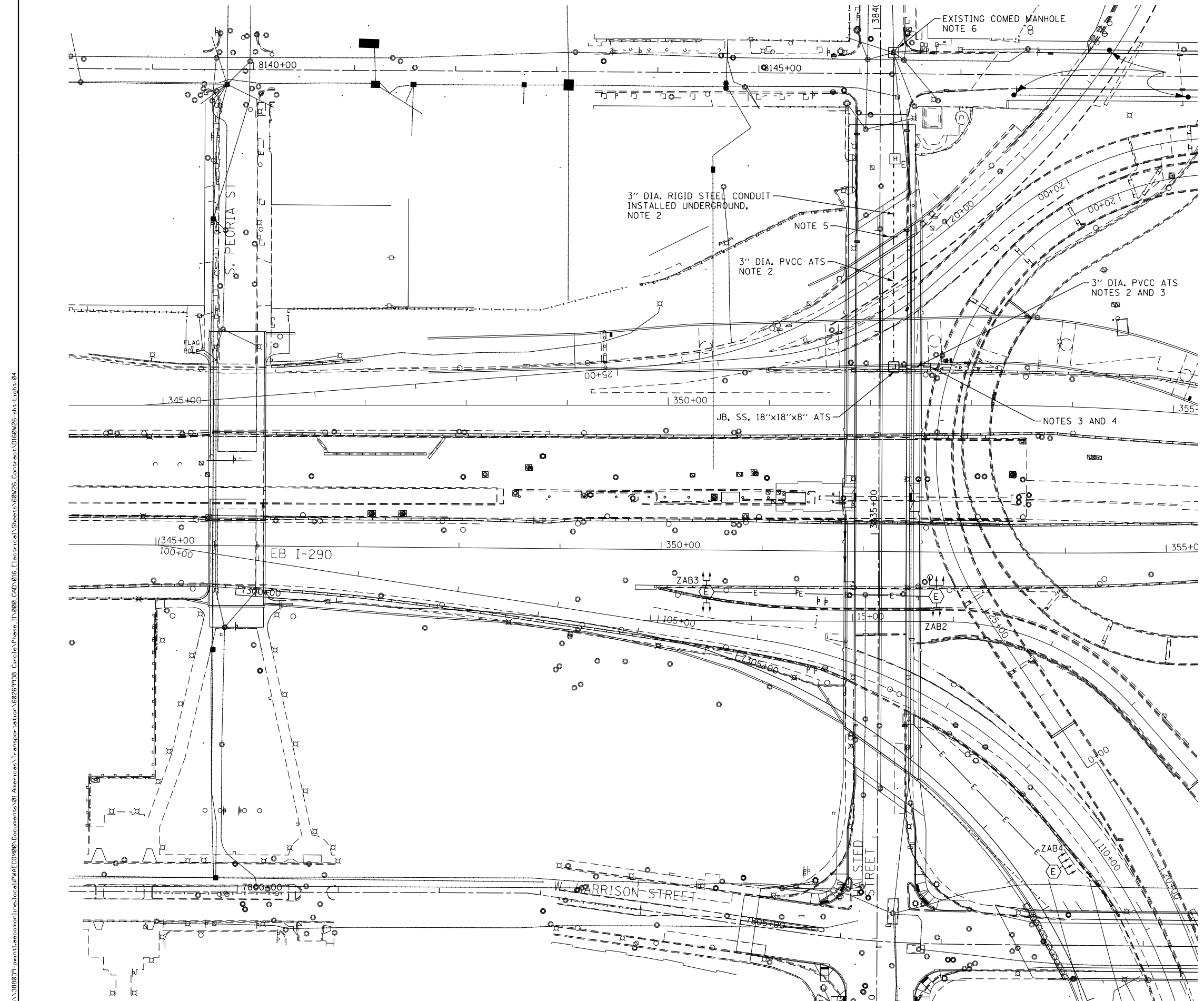
OEMC TEMPORARY WIRING PLAN - HARRISON STREET

SCALE: 1"=50' SHEET 3A OF 22 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 226A
CONTRACT NO. 60W26				ILLINOIS FED. AID PROJECT

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. PROVIDE AN EMPTY CONDUIT RUN FOR FUTURE USE.
3. ROUTE THE CONDUIT RUN DOWN THE BRIDGE PIER AND TERMINATE BELOW GRADE WITH PVC ELBOW ENCASED IN NON-REINFORCED CONCRETE AS SHOWN ON IDOT STANDARD DRAWING BE-902. THE CONDUIT SHALL BE STUBBED OUT OF THE ENCASEMENT AND CAPPED FOR FUTURE USE. THE CONCRETE ENCASED CONDUIT TRANSITION SHALL BE INCLUDED IN THE COST OF THE GALVANIZED RIGID STEEL CONDUIT PAY ITEMS.
4. ALL VERTICAL CONDUIT RUNS ROUTED DOWN THE PIERS SHALL BE INSTALLED ON THE INSIDE OF THE PIER FACING AWAY FROM TRAFFIC.
5. DEMARCATION POINT FOR TRANSITION FROM RIGID STEEL CONDUIT INSTALLED UNDERGROUND TO PVC COATED RIGID STEEL CONDUIT ATTACHED TO STRUCTURE SHALL BE AT THE BRIDGE ABUTMENT. SEE STRUCTURAL PLANS FOR LOCATION OF CONDUIT SLEEVES IN ABUTMENT WALL.
6. ALL WORK SHALL BE COORDINATED AND COMPLY WITH THE ELECTRIC UTILITY (COMED) STANDARDS.



E-04

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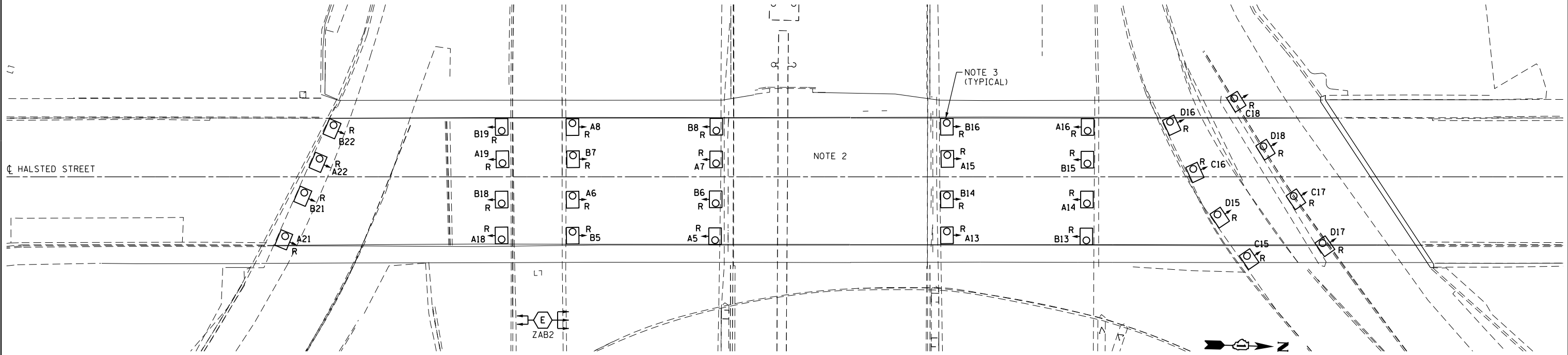
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DATE - 8/20/13	REVISED -

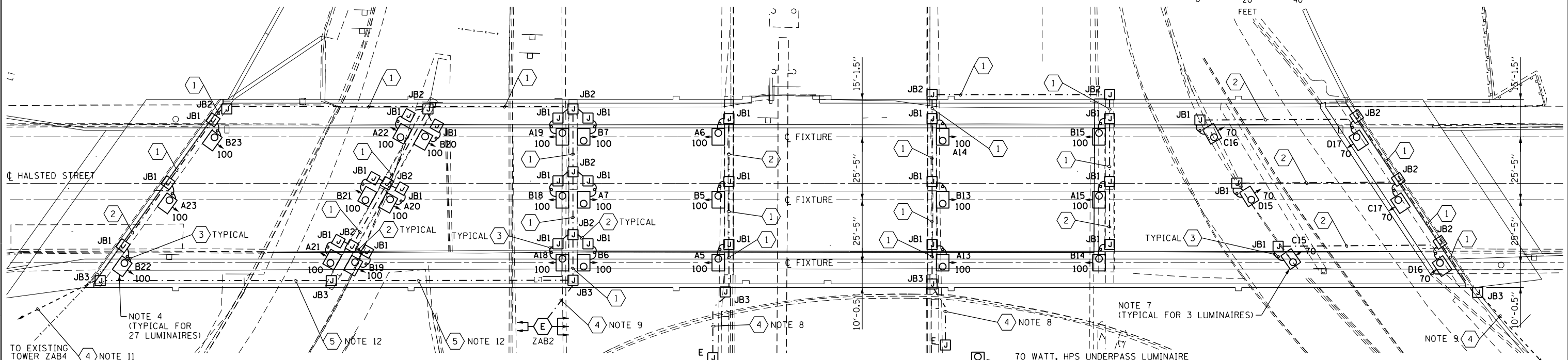
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

I-290 PROPOSED LIGHTING PLAN
 SCALE: 1"=50' SHEET 4 OF 22 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 227
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



EXISTING UNDERPASS LIGHTING PLAN
NOTES 2 AND 3



PROPOSED UNDERPASS LIGHTING PLAN

NOTES:

- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES, CONDUIT, JUNCTION BOXES, AND HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVAL OF LIGHTING UNIT, SALVAGE" PAY ITEM.
- SEE IDOT STANDARD DRAWING BE-902 FOR ADDITIONAL INSTALLATION DETAILS FOR PROPOSED PIER/ABUTMENT WALL MOUNTED UNDERPASS LUMINAIRES.
- SEE IDOT STANDARD DRAWING BE-900 FOR ADDITIONAL INSTALLATION DETAILS FOR PROPOSED SUSPENDED MOUNT UNDERPASS LUMINAIRES.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM EXISTING IDOT LIGHTING CONTROLLER "Z".
- SUSPENDED MOUNT UNDERPASS LUMINAIRES SETBACK FROM THE EDGE OF PAVEMENT SHALL BE 2 FEET.
- ROUTE NEW CABLES IN UNIT DUCT FROM THE PROPOSED JUNCTION BOX ON HALSTED ST. BRIDGE TO THE EXISTING LIGHTING CIRCUITS LOCATED IN THE EXISTING LIGHT TOWER ZC02. ALLOW 200 FEET OF CABLES IN UNIT DUCT FOR BIDDING PURPOSES.
- ROUTE NEW CABLES IN UNIT DUCT FROM THE PROPOSED JUNCTION BOX ON HALSTED ST. BRIDGE TO THE EXISTING LIGHTING CIRCUITS LOCATED IN THE LIGHT TOWER ZAB4 TO PROVIDE A TEMPORARY POWER CONNECTION AS SHOWN. SEE DRAWING E-03 FOR CONTINUATION.
- TEMPORARY ROADWAY LIGHTING POWER FEED FROM TOWER ZAB2 TO TOWER ZAB4.

70 WATT, HPS UNDERPASS LUMINAIRE WITH TYPE 3 DISTRIBUTION

100 WATT, HPS UNDERPASS LUMINAIRE WITH TYPE 4 DISTRIBUTION

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB3	18"X18"X8"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE / CONDUIT SCHEDULE	
1	3-1/2"X10, 1-1/2"X10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/2"X10, 1-1/2"X10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/2"X10, 1-1/2"X10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)
4	3-1/2"X2, 1-1/2"X4 GND XLP TYPE USE CABLES IN A 1 1/2" UNIT DUCT (CKTS AS INDICATED ON THIS DRAWING)
5	3-1/2"X2, 1-1/2"X4 GND XLP TYPE USE CABLES IN A 3" DIA. PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)



D160W26-sht-Light-05
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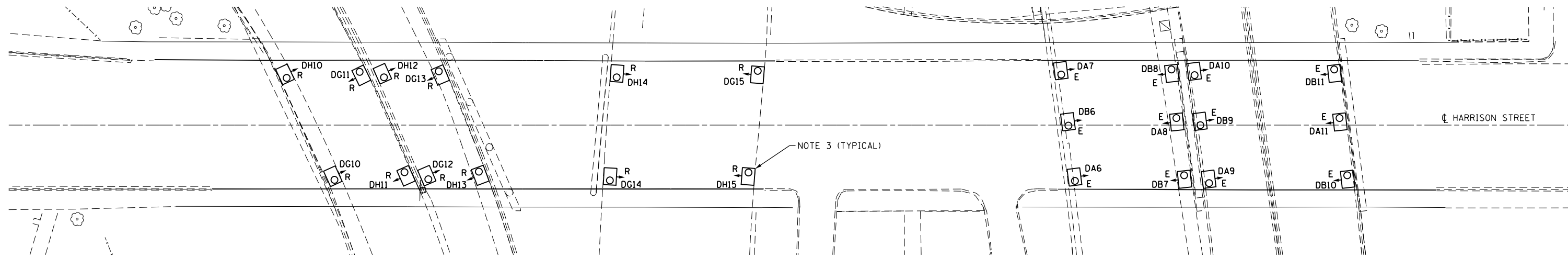
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HALSTED STREET UNDERPASS LIGHTING PLAN

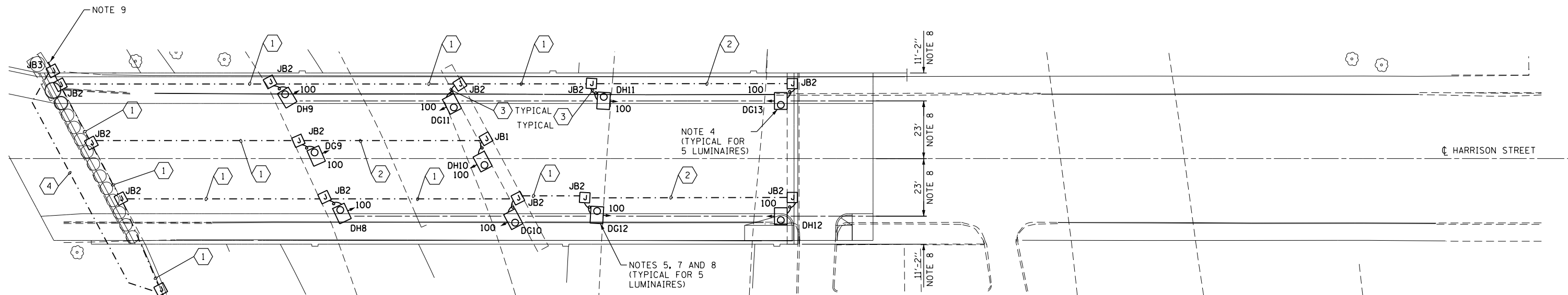
SCALE: 1"=20' SHEET 5 OF 22 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 228
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



EXISTING UNDERPASS LIGHTING PLAN

NOTE 2



PROPOSED UNDERPASS LIGHTING PLAN

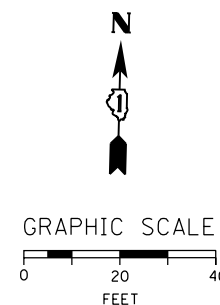
NOTES:

- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES, CONDUIT, JUNCTION BOXES, AND HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVAL OF LIGHTING UNIT, SALVAGE" PAY ITEM.
- PROPOSED PIER/ABUTMENT WALL MOUNTED UNDERPASS LUMINAIRES. SEE IDOT STANDARD DRAWING BE-902 FOR PIER/ABUTMENT MOUNTED UNDERPASS LUMINAIRE INSTALLATION DETAILS.
- PROPOSED SUSPENDED MOUNT UNDERPASS LUMINAIRES. SEE IDOT STANDARD DRAWING BE-900 FOR ADDITIONAL INSTALLATION DETAILS.
- PROVIDE A TEMPORARY POWER CONNECTION FOR THE UNDERPASS LIGHTING SYSTEM FROM EXISTING LIGHT TOWER D-GH-2. ALLOW 350 FEET OF CABLES IN UNIT DUCT FROM THE JUNCTION BOX TO THE EXISTING LIGHT TOWER FOR BIDDING PURPOSES.
- SUSPENDED MOUNT UNDERPASS LUMINAIRE SETBACK FROM THE EDGE OF PAVEMENT SHALL BE 2 FEET, UNLESS NOTED OTHERWISE.
- DIMENSIONS SHOWN ARE APPROXIMATE, THE CONTRACTOR SHALL CENTER THE SUSPENDED MOUNT LUMINAIRES BETWEEN THE BRIDGE GIRDERS.
- STUB AND CAP 3" DIAMETER RIGID STEEL PVC COATED (PVCC) CONDUIT FOR FUTURE USE.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "D".

100 100 WATT, HPS UNDERPASS LUMINAIRE WITH TYPE 4 DISTRIBUTION

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB3	18"X18"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE / CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)
4	3" DIA PVCC RGC ATTACHED TO STRUCTURE (EMPTY) FOR FUTURE USE
5	3-1/C*2, 1-1/C*4 GND XLP TYPE USE CABLES IN A 1 1/2" UNIT DUCT IN GRADE (CKTS AS INDICATED ON THIS DRAWING)



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


HARRISON STREET UNDERPASS LIGHTING PLAN

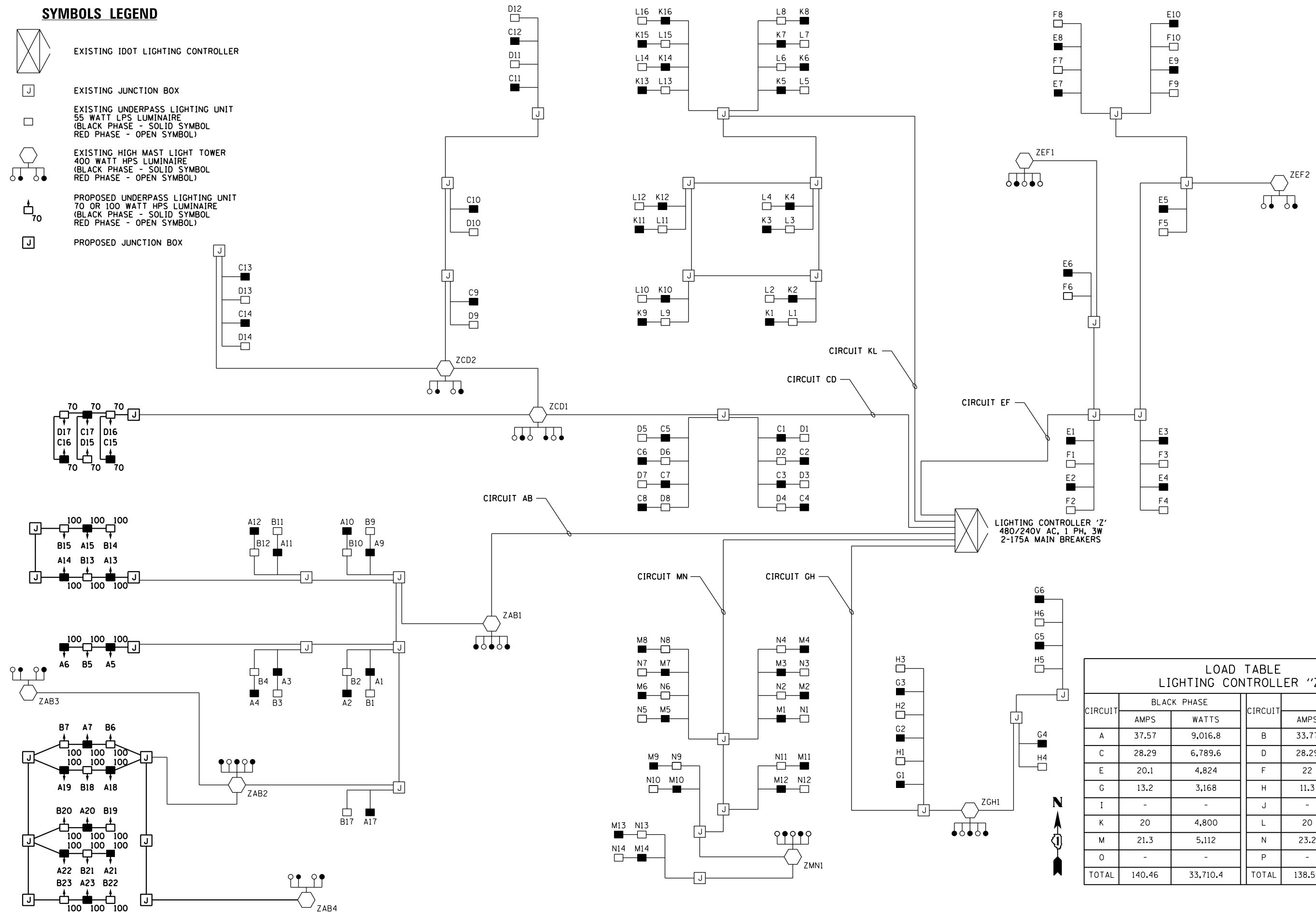
SCALE: 1"=20' SHEET 6 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	229
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

E-06

SYMBOLS LEGEND

-  EXISTING IDOT LIGHTING CONTROLLER
-  EXISTING JUNCTION BOX
-  EXISTING UNDERPASS LIGHTING UNIT
55 WATT LPS LUMINAIRE
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)
-  EXISTING HIGH MAST LIGHT TOWER
400 WATT HPS LUMINAIRE
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)
-  PROPOSED UNDERPASS LIGHTING UNIT
70 OR 100 WATT HPS LUMINAIRE
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)
-  PROPOSED JUNCTION BOX



**LOAD TABLE
LIGHTING CONTROLLER "Z"**

CIRCUIT	BLACK PHASE		RED PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	37.57	9,016.8	B	33.77	8,104.8
C	28.29	6,789.6	D	28.29	6,789.6
E	20.1	4,824	F	22	5,280
G	13.2	3,168	H	11.3	2,712
I	-	-	J	-	-
K	20	4,800	L	20	4,800
M	21.3	5,112	N	23.2	5,568
O	-	-	P	-	103.2
TOTAL	140.46	33,710.4	TOTAL	138.56	33,357.6



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D160W26-sht-Light-06A
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 PLOT SCALE = 20.0000' / in.
 PLOT DATE = 9/5/2013

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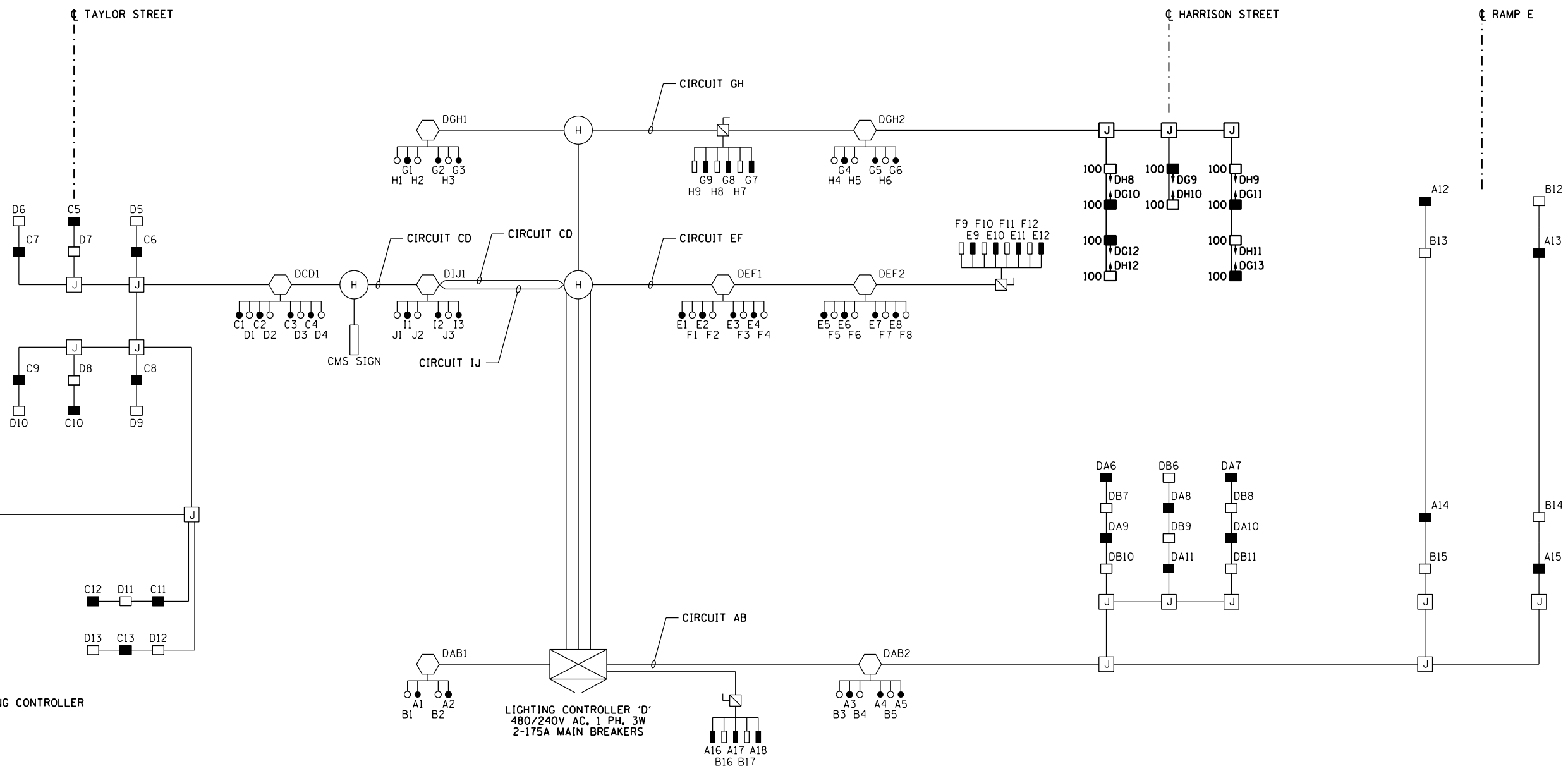
**IDOT LIGHTING CONTROLLER 'Z'
WIRING DIAGRAM**

SCALE: N.T.S. SHEET 6A OF 22 SHEETS STA. TO STA.











F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 229A
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

E-06A

FILE PATH = p:\388035\pmt\l\ecom\line\local\p\AECD\000\Documents\01_Americas\Transportation\60269938_Circle\Phase_1\1000_CAD\016_Electrical\Sheets\60W26_Contract\0160W26-sht-Light-06B



SYMBOLS LEGEND

-  EXISTING IDOT LIGHTING CONTROLLER
-  EXISTING HANDHOLE
-  EXISTING JUNCTION BOX
-  HANDHOLE
-  EXISTING CMS SIGN
-  EXISTING UNDERPASS LIGHTING UNIT
55 WATT HPS LUMINAIRE
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)
-  EXISTING HIGH MAST LIGHT TOWER
400 WATT HPS LUMINAIRE
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)
-  LIGHTED OVERHEAD SIGN STRUCTURE
WITH 170 WATT FLUORESCENT
LUMINAIRES, QUANTITY OF
LUMINAIRES AS REQUIRED
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)
-  PROPOSED UNDERPASS LIGHTING UNIT
70 OR 100 WATT HPS LUMINAIRE
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)
-  PROPOSED JUNCTION BOX

LOAD TABLE LIGHTING CONTROLLER "D"					
CIRCUIT	BLACK PHASE		CIRCUIT	RED PHASE	
	AMPS	WATTS		AMPS	WATTS
A	23.5	5,640	B	23	5,520
C	30.35	7,284	D	19.85	4,764
E	17.2	4,128	F	17.2	4,128
G	15.95	3,828	H	15.95	3,828
I	5.7	1,368	J	5.7	1,368
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	92.7	22,248	TOTAL	81.7	19,608



E-06B



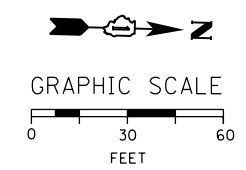
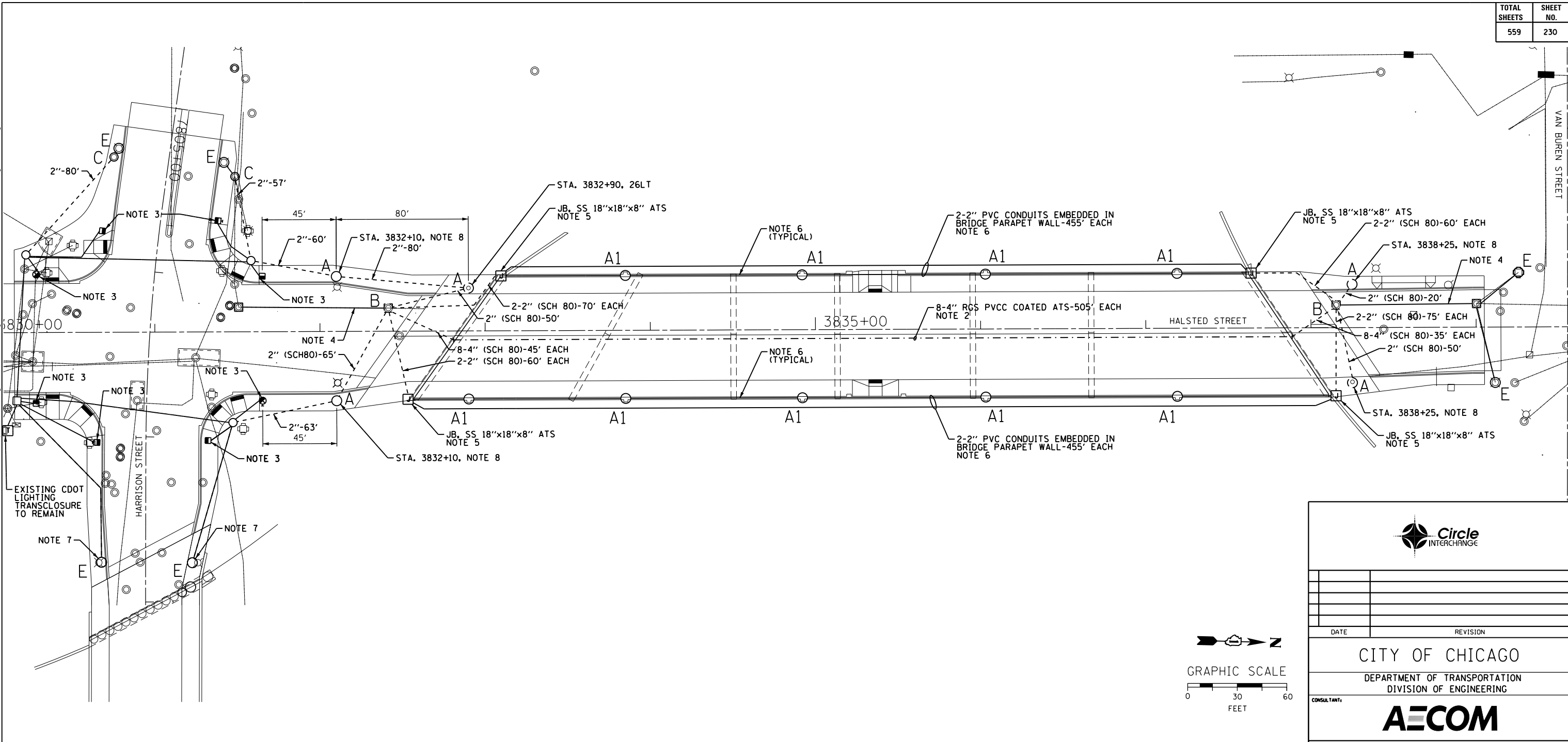
D160W26-sht-Light-06B	DESIGNED - WDS	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 20.0000' / 1"	CHECKED - WDS	REVISED -	
PLOT DATE = 9/5/2013	DATE - 9/15/13	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

IDOT LIGHTING CONTROLLER 'D' WIRING DIAGRAM			
SCALE: N.T.S.	SHEET 6B OF 22 SHEETS	STA.	TO STA.

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 229B
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

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"A"	PROVIDE 28"x7', 1-1/4" A.R., 15" B.C. FOUNDATION FOR LIGHT POLE, PER DWG. NOS. 953 AND 837.
"A1"	LIGHT POLE FOUNDATION IS INTEGRAL TO THE BRIDGE STRUCTURE PARAPET WALL. SEE STRUCTURAL PLANS FOR DETAILS AND FINAL LOCATION OF FOUNDATION.
"B"	PROVIDE 3'x4'x4' CONCRETE MANHOLE PER DWG. NO. 730 WITH 24" FRAME AND COVER.
"C"	DRILL EXISTING MANHOLE/HANDHOLE.
"E"	EXISTING TO REMAIN.

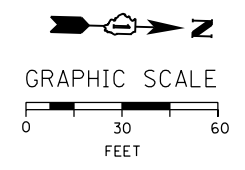
NOTES:

- INTERCEPT EXISTING LIGHTING CONDUIT TO EXISTING LIGHT POLE. CUT CONDUIT AND EXTEND END OF EXISTING CONDUIT TO NEW FOUNDATION.
- PROVIDE EIGHT 4-INCH RIGID GALVANIZED STEEL PVC COATED CONDUITS ATTACHED TO STRUCTURE. THE CONDUITS SHALL BE MOUNTED UNDER THE BRIDGE DECK. SEE STRUCTURAL PLANS FOR LOCATION OF CONDUITS.
- SEE THE TRAFFIC SIGNAL PLANS FOR LOCATION OF COMBINATION TRAFFIC SIGNAL/LIGHT POLE FOUNDATION. COORDINATE ALL WORK WITH TRAFFIC SIGNAL WORK.
- INTERCEPT EXISTING CONDUITS AND CONNECT TO PROPOSED MANHOLE.
- SEE DRAWING NO. E-13 FOR EMBEDDED CONDUIT EXITING PARAPET WALL DETAILS.
- PROVIDE TWO 2-INCH SCHEDULE 40 PVC CONDUITS IN BOTH BRIDGE PARAPET WALLS; ONE FOR THE LIGHTING CIRCUITS AND ONE SPARE. SEE STRUCTURAL PLANS FOR LOCATIONS, DETAILS AND INSTALLATION OF CONDUITS.
- SEE DRAWING E-10 FOR CONTINUATION OF CONDUIT RUN TO THE NEXT LIGHT POLE FOUNDATION ON HARRISON STREET.
- INSTALL LIGHT POLE FOUNDATION IN THE SIDEWALK 3 FEET FROM THE FACE OF CURB TO CENTER OF FOUNDATION.

FOR LIGHTING CABLE AND EQUIPMENT INSTALLATION PLANS SEE DRAWING NO. E-08.
 FOR LIGHTING REMOVAL PLANS SEE DRAWING NO. E-09.

DATE	REVISION	
CITY OF CHICAGO		
DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING		
AECOM		
WORK ORDER NO.	DATE	
COST ALLOCATION ACCOUNT		
APPROPRIATION ACCOUNT	MATERIAL	LABOR
HALSTED STREET LIGHTING CONDUIT AND FOUNDATION PLAN		
CITY OF CHICAGO DEPT. OF TRANSPORTATION DIVISION OF ELECTRICAL OPERATIONS		
DRAFTSMAN: CAM	CHIEF DRAFTSMAN: WDS	ENGINEER: WDS
SUPERVISING ENGINEER/ELEC. DESIGN ENGR. WDS		E-07
ENGINEER OF ELECTRICITY:		
GEN'L SUPT. OF ELECTRICITY:		
DEPUTY COMMISSIONER:		
SIZE: 22" 34"	SCALE: 1" = 30'	DATE: 8/20/13
DATE: 08/20/13		DWG. NO.: 7 OF 22
C.D.O.T. PROJECT NO.:		

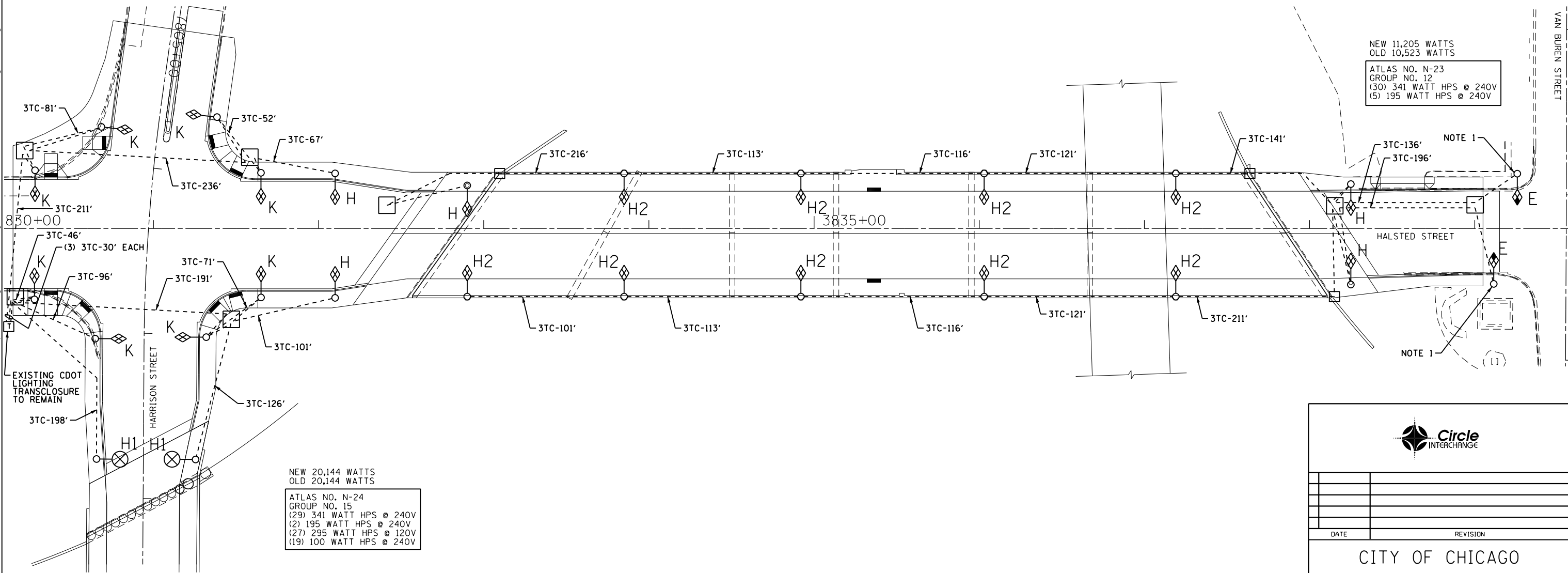
TOTAL SHEETS	SHEET NO.
559	231



NEW 11,205 WATTS
 OLD 10,523 WATTS

ATLAS NO. N-23
 GROUP NO. 12
 (30) 341 WATT HPS @ 240V
 (5) 195 WATT HPS @ 240V

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NEW 20,144 WATTS
 OLD 20,144 WATTS

ATLAS NO. N-24
 GROUP NO. 15
 (29) 341 WATT HPS @ 240V
 (2) 195 WATT HPS @ 240V
 (27) 295 WATT HPS @ 120V
 (19) 100 WATT HPS @ 240V

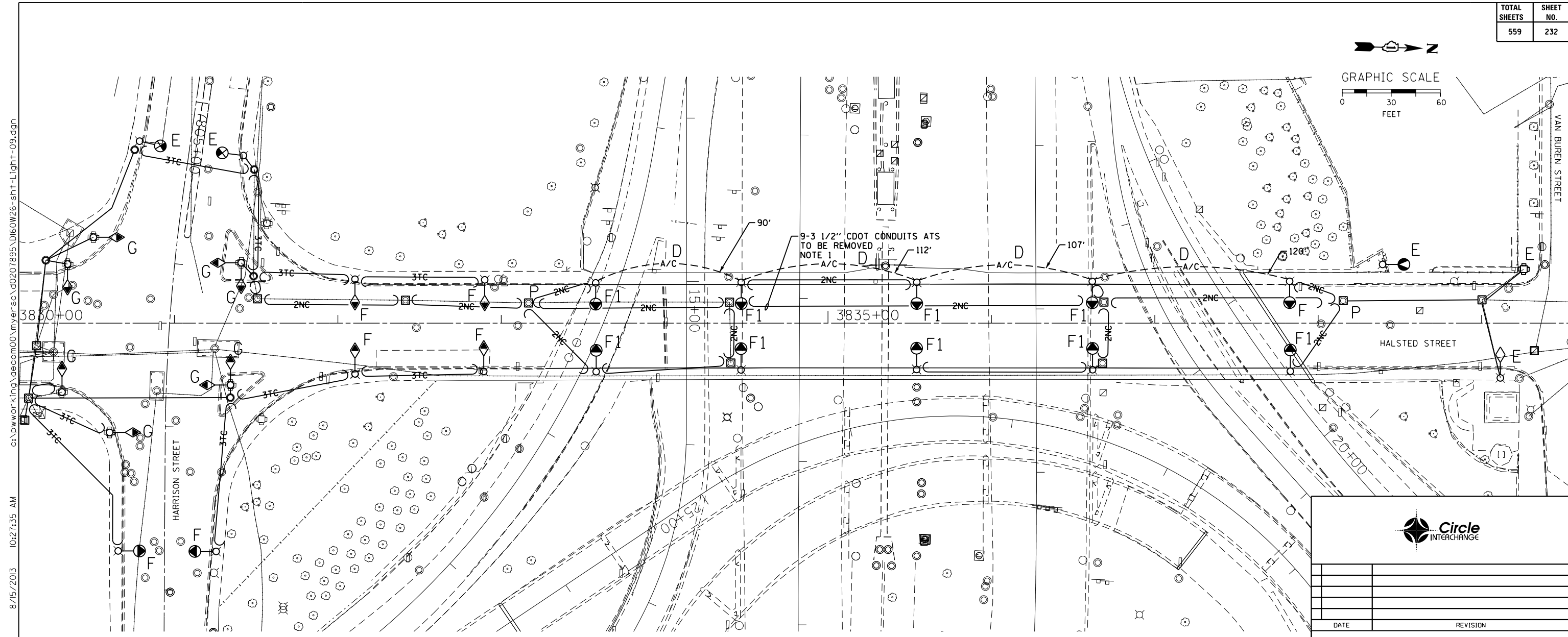
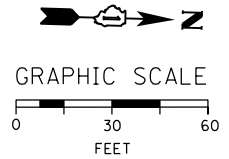
NOTES:

1. SPLICE NEW CABLES TO EXISTING LIGHTING CIRCUITS LOCATED IN EXISTING POLE.

- "H" INSTALL CDOT FURNISHED STEEL POLE, LUMINAIRE, MAST ARM, POLE BASE, FINIAL AND ALL ASSOCIATED COMPONENTS PER DRAWING NOS. 930, 930A, 930B, 930C AND 931.
- "H1" INSTALL CDOT FURNISHED STEEL POLE, LUMINAIRE, MAST ARM AND BALLAST HOUSING BASE PER DRAWING NOS. 808 AND 785.
- "H2" INSTALL CDOT FURNISHED "RETROFIT" LIGHTING UNIT INCLUDING STEEL POLE, MAST ARM, LUMINAIRE AND ALL ASSOCIATED COMPONENTS PER DRAWING NOS. 762, 837 AND 931.
- "K" INSTALL CDOT FURNISHED MAST ARM AND LUMINAIRE ON A TRAFFIC SIGNAL/LIGHT COMBINATION POLE PER DRAWING NOS. 930, 930C AND 931. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

FOR CONDUIT AND FOUNDATION PLANS SEE DRAWING NOS. E-07 AND E-10.
 FOR LIGHTING REMOVAL PLANS SEE DRAWING NO. E-09.

DATE	REVISION
CITY OF CHICAGO	
DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING	
AECOM	
WORK ORDER NO. _____	DATE _____
COST ALLOCATION ACCOUNT _____	
APPROPRIATION ACCOUNT _____	MATERIAL _____ LABOR _____
HALSTED STREET LIGHTING CABLE AND EQUIPMENT INSTALLATION PLAN	
CITY OF CHICAGO DEPT. OF TRANSPORTATION DIVISION OF ELECTRICAL OPERATIONS	
DRAFTSMAN: CAM	ENGINEER: WDS
SUPERVISING ENGINEER: WDS	ELEC. DESIGN ENGR. WDS
ENGINEER OF ELECTRICITY:	
GEN'L SUPT. OF ELECTRICITY:	
DEPUTY COMMISSIONER:	
SIZE: 22" 34"	SCALE: 1" = 30'
DATE: 08/20/13	DATE: 8/20/13
C.D.O.T. PROJECT NO.:	DWG. NO.: E-08
8 OF 22	



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- "D" PROVIDE 3-1/2" NO. 6 AERIAL CABLES WITH MESSENGER WIRE. SEE NOTE 2
- "E" EXISTING TO REMAIN
- "F" REMOVE AND SALVAGE EXISTING STEEL POLE, LUMINAIRE, MAST ARM AND BALLAST HOUSING. BREAKDOWN CONCRETE FOUNDATION COMPLETE.
- "F1" REMOVE AND SALVAGE EXISTING LIGHT POLE, LUMINAIRE AND MAST ARM COMPLETE.
- "G" REMOVE LUMINAIRE(S) AND MAST ARM(S). ANCHOR BASE STEEL POLE AND CONCRETE FOUNDATION TO BE REMOVED WITH TRAFFIC SIGNAL WORK.
- "P" REMOVE EXISTING MANHOLE COMPLETE

NOTES:

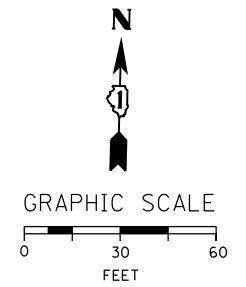
1. THE EXISTING CDOT CONDUITS ATTACHED TO THE UNDERSIDE OF THE BRIDGE STRUCTURE MAY CONTAIN ASBESTOS MATERIALS. THE CONDUITS SHALL BE REMOVED AND DISPOSED OF PROPERLY PRIOR TO THE BRIDGE DEMOLITION. CONDUITS TESTED AND CONFIRMED TO CONTAIN ASBESTOS MUST BE REMOVED IN ACCORDANCE WITH THE SPECIAL PROVISION "REMOVAL OF ASBESTOS CEMENT CONDUIT". ASBESTOS CONDUIT REMOVAL SHALL BE PAID FOR UNDER THE "REMOVAL OF ASBESTOS CEMENT CONDUIT" PAY ITEM.
2. THE LIGHTING ON THE WEST SIDE OF THE BRIDGE MUST BE KEPT OPERATIONAL DURING STAGE I OF THE BRIDGE RECONSTRUCTION. IF REQUIRED, INSTALL TEMPORARY AERIAL CABLES TO PROVIDE TEMPORARY POWER TO THE LIGHTING CIRCUITS ALONG THE WEST SIDE OF THE HALSTED STREET BRIDGE DURING STAGED CONSTRUCTION. THE ENGINEER SHALL DETERMINE IF THE TEMPORARY AERIAL CABLES ARE REQUIRED. THE CONTRACTOR SHALL NOT INSTALL THE AERIAL CABLES WITHOUT PRIOR APPROVAL FROM THE ENGINEER. THE AERIAL CABLES SHALL BE REMOVED WHEN THE LIGHTING UNITS ON THE WEST SIDE ARE REMOVED AND SALVAGED. THE COST TO REMOVE AND DISPOSE OF THE TEMPORARY AERIAL CABLES WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE "AERIAL CABLE, 3-1/2" NO. 6 WITH MESSENGER WIRE" PAY ITEM.

FOR CONDUIT AND FOUNDATION PLANS
SEE DRAWING NO. E-07.

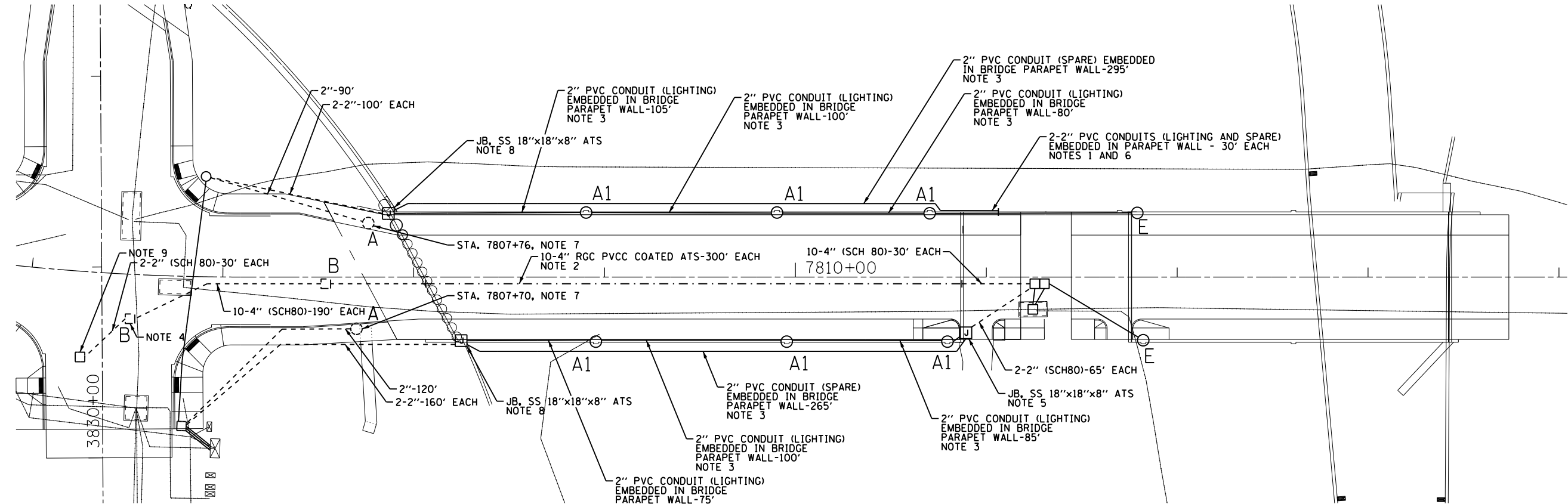
FOR LIGHTING CABLE AND EQUIPMENT
INSTALLATION PLANS SEE DRAWING NO. E-08.

CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING	
AECOM	
WORK ORDER NO. _____	DATE _____
COST ALLOCATION ACCOUNT _____	
APPROPRIATION ACCOUNT _____	MATERIAL _____
	LABOR _____
HALSTED STREET LIGHTING REMOVAL PLAN	
CITY OF CHICAGO DEPT. OF TRANSPORTATION DIVISION OF ELECTRICAL OPERATIONS	
DRAFTSMAN: CAM	ENGINEER: WDS
SUPERVISING ENGINEER: WDS	ELEC. DESIGN ENGR. WDS
ENGINEER OF ELECTRICITY:	
GEN'L SUPT. OF ELECTRICITY:	
DEPUTY COMMISSIONER:	
SIZE: 22" 34"	SCALE: 1" = 30'
DATE: 08/20/13	DATE: 8/20/13
C.D.O.T. PROJECT NO.:	DWG. NO.:
	9 OF 22

E-09



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"A"	PROVIDE 24"x7", 1-1/4" A.R., 15" B.C. FOUNDATION FOR LIGHT POLE, PER DWG. NOS. 818 AND 837.
"A1"	LIGHT POLE FOUNDATION IS INTEGRAL TO THE BRIDGE STRUCTURE PARAPET WALL. SEE STRUCTURAL PLANS FOR DETAILS AND FINAL LOCATION OF FOUNDATION.
"B"	PROVIDE 3'x4'x4' CONCRETE MANHOLE PER DWG. NO. 730 WITH 24" FRAME AND COVER.
"C"	DRILL EXISTING MANHOLE/HANDHOLE.
"E"	EXISTING TO REMAIN.

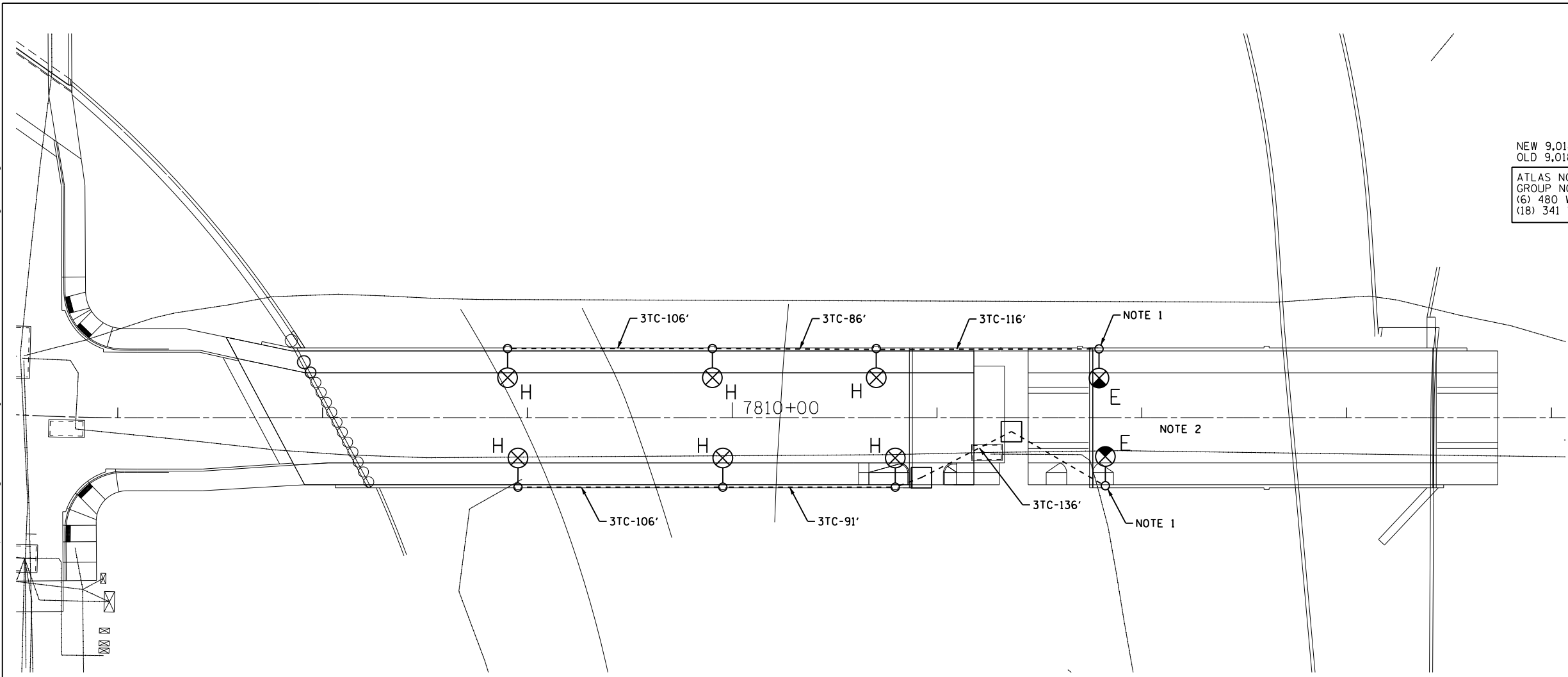
NOTES:

- INTERCEPT EXISTING LIGHTING CONDUIT EMBEDDED IN PARAPET WALL AND CONNECT TO NEW LIGHTING CONDUIT.
- PROVIDE TEN 4-INCH RIGID GALVANIZED STEEL PVC COATED CONDUITS ATTACHED TO STRUCTURE. THE CONDUITS SHALL BE MOUNTED UNDER THE BRIDGE DECK. SEE STRUCTURAL PLANS FOR LOCATION OF CONDUITS.
- PROVIDE TWO 2-INCH SCHEDULE 40 PVC CONDUITS IN BOTH BRIDGE PARAPET WALLS; ONE FOR THE LIGHTING CIRCUITS AND ONE SPARE. SEE STRUCTURAL PLANS FOR LOCATION OF CONDUITS.
- INTERCEPT EXISTING CONDUITS AND CONNECT TO NEW CONDUITS ROUTED TO PROPOSED MANHOLE.
- SEE EMBEDDED BRIDGE CONDUIT DETAIL-A ON DRAWING NO. E-13 FOR CONDUIT EXITING PARAPET WALL INSTALLATION DETAILS.
- PROVIDE A CAPPED STUB OUT WITH COUPLING AT THE END OF THE SPARE CONDUIT RUN EMBEDDED IN THE NEW PARAPET WALL FOR CONNECTION AND CONTINUATION OF THE CONDUIT RUN IN A FUTURE CONTRACT.
- INSTALL LIGHT POLE FOUNDATION IN THE SIDEWALK 3 FEET FROM FACE OF CURB TO CENTER OF FOUNDATION.
- SEE EMBEDDED BRIDGE CONDUIT DETAIL-B ON DRAWING NO. E-13 FOR CONDUIT EXITING PARAPET WALL INSTALLATION DETAILS.
- PROVIDE NEW CONDUITS (EMPTY) FROM AN EXISTING AT&T MANHOLE TO THE NEW CITY MANHOLE.

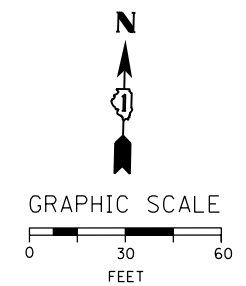
FOR LIGHTING CABLE AND EQUIPMENT INSTALLATION PLANS SEE DRAWING NO. E-11.
 FOR LIGHTING REMOVAL PLANS SEE DRAWING NO. E-12.

DATE	REVISION
CITY OF CHICAGO	
DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING	
CONSULTANT: AECOM	
WORK ORDER NO. _____	DATE _____
COST ALLOCATION ACCOUNT _____	
APPROPRIATION ACCOUNT _____	MATERIAL _____ LABOR _____
HARRISON STREET LIGHTING CONDUIT AND FOUNDATION PLAN	
CITY OF CHICAGO DEPT. OF TRANSPORTATION DIVISION OF ELECTRICAL OPERATIONS	
DRAFTSMAN: CAM	CHIEF DRAFTSMAN: WDS
SUPERVISING ENGINEER: WDS	ENGINEER: WDS
ENGINEER OF ELECTRICITY:	E-10
GEN'L SUPT. OF ELECTRICITY:	
DEPUTY COMMISSIONER:	
SIZE: 22" 34"	SCALE: 1" = 30'
DATE: 09/15/13	DATE: 9/15/13
C.D.O.T. PROJECT NO.:	DWG. NO.: 10 OF 22

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NEW 9,018 WATTS
 OLD 9,018 WATTS
 ATLAS NO. 0-24
 GROUP NO. 6
 (6) 480 WATT @ 240V
 (18) 341 WATT @ 240V



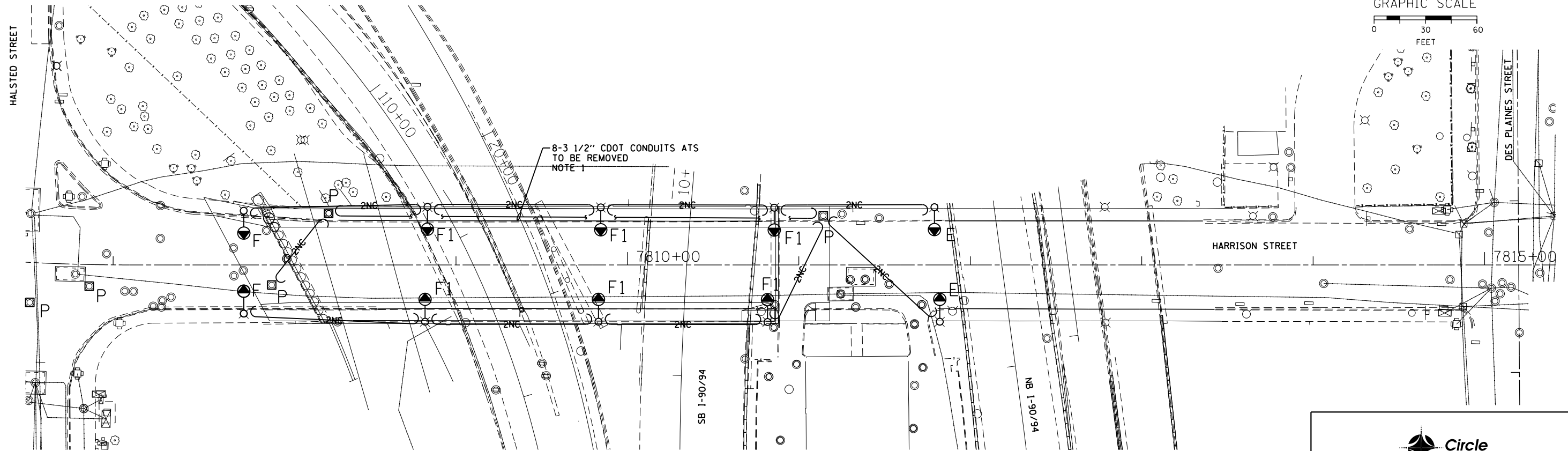
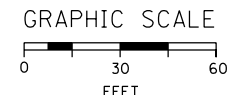
NOTES:

1. SPLICE NEW CABLES TO EXISTING LIGHTING CIRCUITS LOCATED IN EXISTING POLE.
2. ALL LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM EXISTING CDOT LIGHTING CONTROLLER GROUP NO. 6 LOCATED ON THE SW CORNER OF HALSTED AND DES PLAINES.

"H" INSTALL CDOT FURNISHED STEEL POLE, LUMINAIRE AND MAST ARM PER DRAWING NOS. 620, 762 AND 837.

DATE	REVISION	
CITY OF CHICAGO		
DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING		
AECOM		
WORK ORDER NO. _____	DATE _____	
COST ALLOCATION ACCOUNT _____		
APPROPRIATION ACCOUNT _____	MATERIAL _____	LABOR _____
HARRISON STREET LIGHTING CABLE AND EQUIPMENT INSTALLATION PLAN		
CITY OF CHICAGO DEPT. OF TRANSPORTATION DIVISION OF ELECTRICAL OPERATIONS		
DRAFTSMAN: CAM	CHIEF DRAFTSMAN: WDS	ENGINEER: WDS
SUPERVISING ENGINEER: WDS	ELEC. DESIGN ENGR.	
ENGINEER OF ELECTRICITY:		
GEN'L SUPT. OF ELECTRICITY:		
DEPUTY COMMISSIONER:		
SIZE: 22" 34"	SCALE: 1" = 30'	DATE: 8/20/13
DATE: 08/20/13		DWG. NO.: E-11
C.D.O.T. PROJECT NO.:		11 OF 22

FOR CONDUIT AND FOUNDATION PLANS
 SEE DRAWING NO. E-10.
 FOR LIGHTING REMOVAL PLANS SEE
 DRAWING NO. E-12.



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"E"	EXISTING TO REMAIN
"F"	REMOVE AND SALVAGE EXISTING STEEL POLE, LUMINAIRE, MAST ARM AND BALLAST HOUSING. BREAKDOWN CONCRETE FOUNDATION COMPLETE.
"F1"	REMOVE AND SALVAGE EXISTING STEEL POLE, LUMINAIRE AND MAST ARM.
"G"	REMOVE LUMINAIRE AND MAST ARM, ANCHOR BASE STEEL POLE AND CONCRETE FOUNDATION TO BE REMOVED WITH TRAFFIC SIGNAL WORK.
"P"	REMOVE EXISTING MANHOLE COMPLETE

NOTES:

1. THE EXISTING CDOT CONDUITS ATTACHED TO THE UNDERSIDE OF THE BRIDGE STRUCTURE MAY CONTAIN ASBESTOS MATERIALS. THE CONDUITS SHALL BE REMOVED AND DISPOSED OF PROPERLY PRIOR TO THE BRIDGE DEMOLITION. CONDUITS TESTED AND CONFIRMED TO CONTAIN ASBESTOS MUST BE REMOVED IN ACCORDANCE WITH THE SPECIAL PROVISION "REMOVAL OF ASBESTOS CEMENT CONDUIT". ASBESTOS CONDUIT REMOVAL SHALL BE PAID FOR UNDER THE "REMOVAL OF ASBESTOS CEMENT CONDUIT" PAY ITEM.



DATE	REVISION

CITY OF CHICAGO
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING



WORK ORDER NO. _____ DATE _____
 COST ALLOCATION ACCOUNT _____
 APPROPRIATION ACCOUNT _____ MATERIAL _____ LABOR _____

**HARRISON STREET
 LIGHTING REMOVAL PLAN**

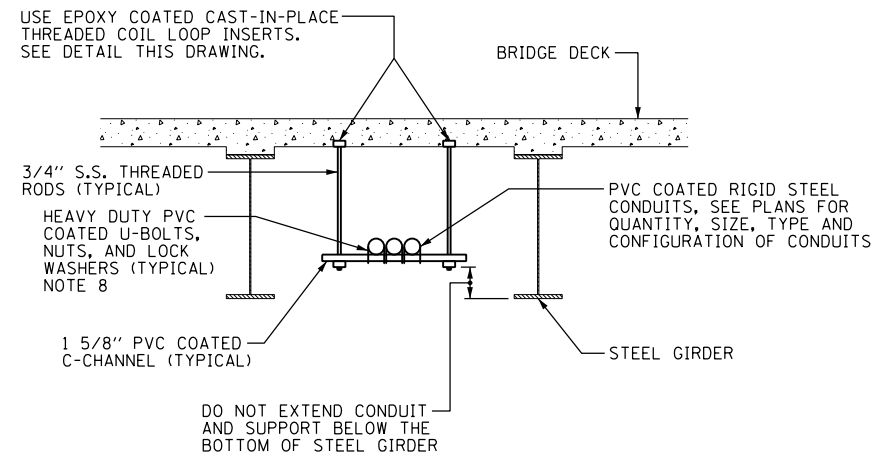
CITY OF CHICAGO
 DEPT. OF TRANSPORTATION
 DIVISION OF ELECTRICAL OPERATIONS

DRAFTSMAN: CAM	CHIEF DRAFTSMAN: WDS	ENGINEER: WDS
SUPERVISING ENGINEER/ELEC. DESIGN ENGR. WDS		

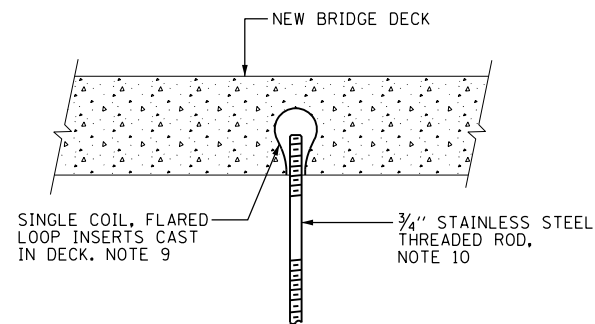
ENGINEER OF ELECTRICITY:	E-12
GEN'L SUPT. OF ELECTRICITY:	
DEPUTY COMMISSIONER:	

FOR CONDUIT AND FOUNDATION PLANS
 SEE DRAWING NO. E-10.

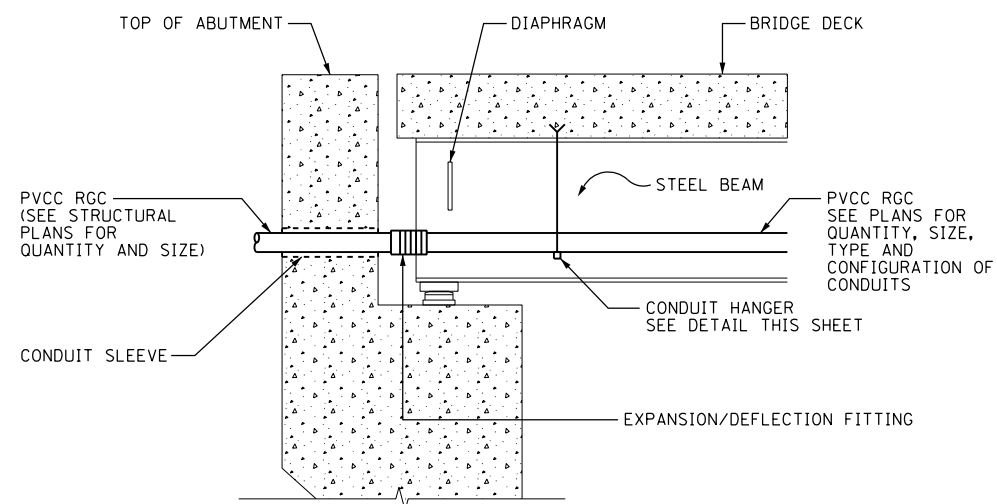
 FOR LIGHTING CABLE AND EQUIPMENT
 INSTALLATION PLANS SEE DRAWING NO. E-11.



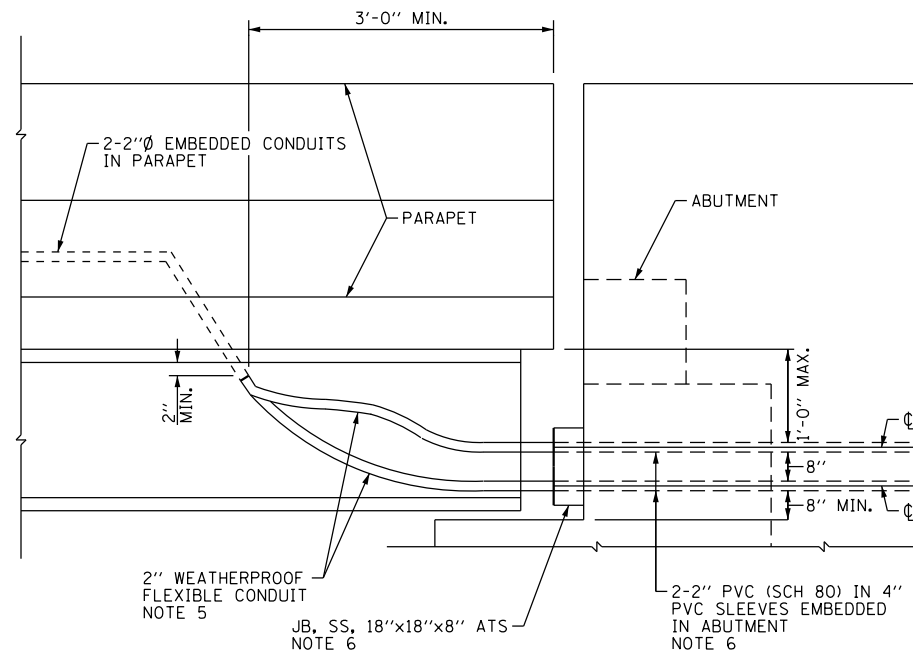
TYPICAL CONDUIT SUPPORT ATTACHED TO BRIDGE DECK DETAIL
SCALE: NOT TO SCALE
NOTE 11



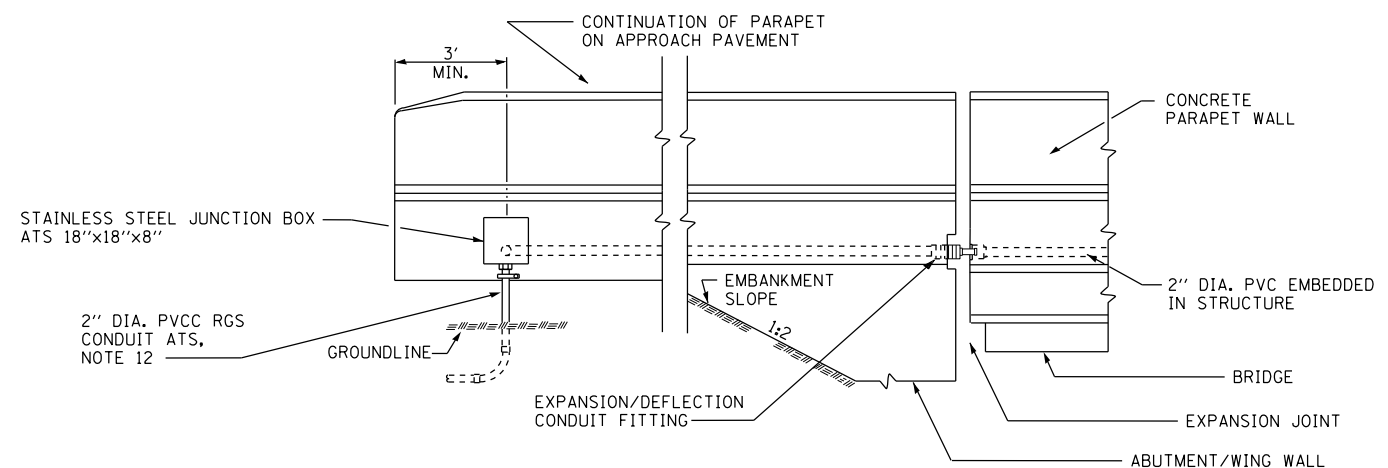
BRIDGE DECK THREADED ROD INSTALLATION ANCHOR DETAILS
SCALE: NOT TO SCALE



TYPICAL CONDUIT INSTALLATION THROUGH ABUTMENT WALL
SCALE: NOT TO SCALE



EMBEDDED BRIDGE CONDUIT DETAIL-A
SCALE: NOT TO SCALE



EMBEDDED BRIDGE CONDUIT DETAIL-B
SCALE: NOT TO SCALE

NOTES:

- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
- 2" PVCC CONDUITS SHALL HAVE A MINIMUM BENDING RADIUS OF 10".
- SEE STRUCTURAL PLANS FOR LOCATION OF EMBEDDED CONDUITS.
- JUNCTION BOXES SHALL HAVE A 1 1/2" WIRE MESH DRAIN IN THE BOTTOM.
- WEATHERPROOF FLEXIBLE CONDUIT WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE PRICE FOR "CONDUIT EMBEDDED IN STRUCTURE" PAY ITEM. COST OF 4" SLEEVES IS INCLUDED WITH CONCRETE STRUCTURES.
- COORDINATE THE LOCATION OF THE JUNCTION BOX AND CONDUITS ROUTED THROUGH THE ABUTMENT WITH THE LOCATION OF THE CONDUIT SLEEVE OPENINGS SHOWN ON THE STRUCTURAL PLANS.
- SEE PLAN DRAWINGS FOR THE PROPOSED CONDUIT ROUTING.
- ALL MOUNTING HARDWARE FOR CONDUIT SUPPORTS AND PVCC RGC MUST BE PVC COATED.
- THE CONTRACTOR MUST USE APPROVED SINGLE COIL FLARED LOOP INSERTS WHEN PENDANT MOUNTING THREADED RODS TO A NEW BRIDGE DECK. THE FLARED LOOP INSERTS MUST BE CAST INTO THE CONCRETE DECK. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING THE INSERT LOCATIONS WITH THE BRIDGE DECK CONTRACTOR.
- THE CONTRACTOR MUST COORDINATE THREADED ROD END SIZES WITH THE C-CHANNEL AND FLARED LOOP INSERT MANUFACTURERS.
- THE CONDUIT SUPPORT SYSTEM ATTACHED TO THE BRIDGE DECK, INCLUDING THE INSERTS, WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE PRICE FOR THE "CONDUIT ATTACHED TO STRUCTURE" PAY ITEM.

FILE PATH = p:\388035\pmt\secomon\me\local\p\AECOM\00\Documents\01_Americas\Transportation\62629938_Circle\Phase_1\000_CAD\016_Electrical\Sheets\60W26_Contract\160W26-sht-Light-13



D160W26-sht-Light-13
USER NAME = myersc
PLOT SCALE = 1:8000 / in.
PLOT DATE = 8/15/2013

DESIGNED - WDS	REVISED -
DRAWN - CAM	REVISED -
CHECKED - WDS	REVISED -
DATE - 8/20/13	REVISED -

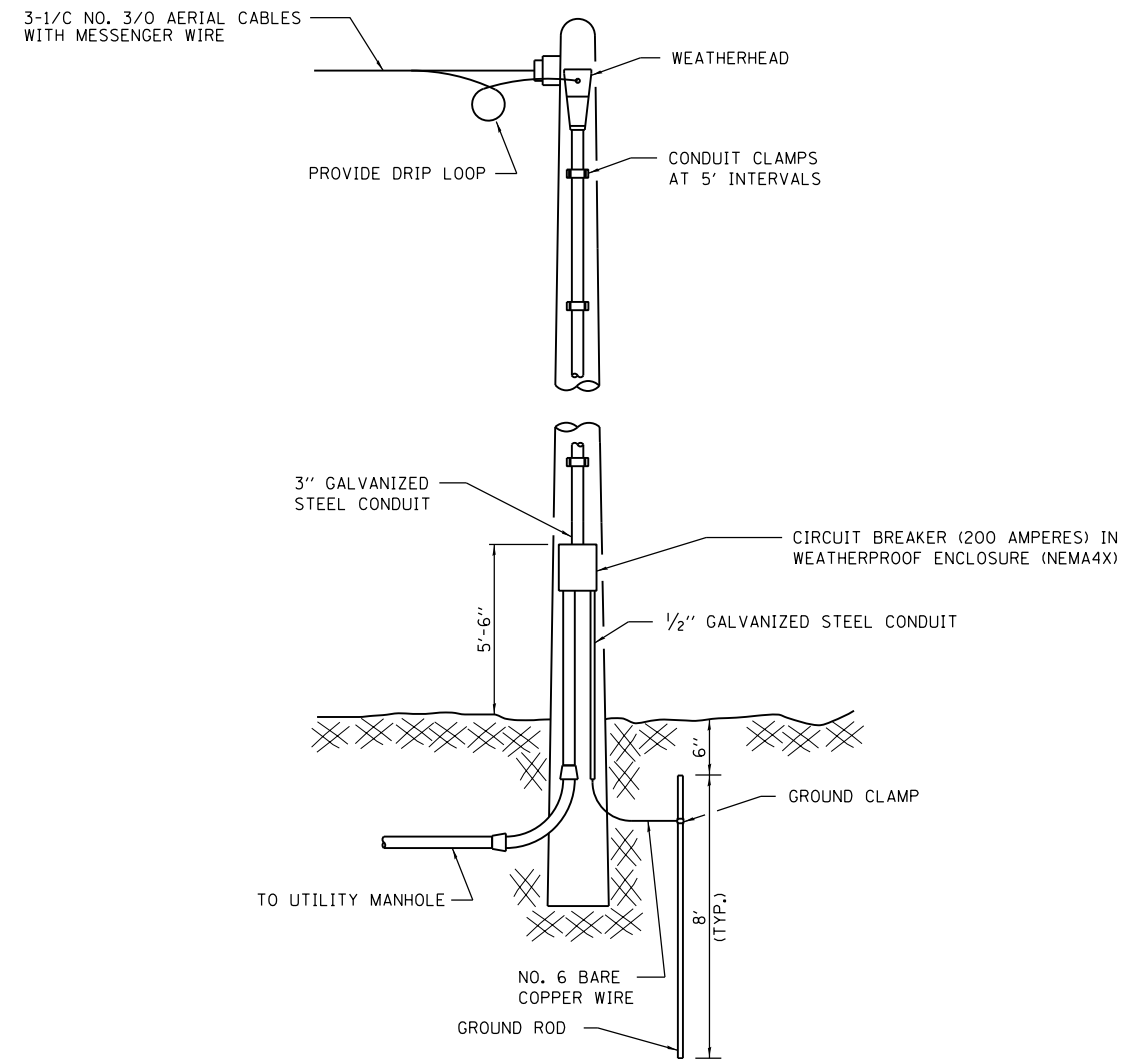
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

MISCELLANEOUS ELECTRICAL DETAILS

SCALE: N.T.S. SHEET 13 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	236
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\388035\pmt\escomonline\local\AECOM\Documents\01_Americas\Transportation\6269938_Circle\Phase_1\000_CAD\01E_Electrical\Sheets\60W26_Contract\0160W26-sht-Light-14



TEMPORARY ELECTRICAL SERVICE
 INSTALLATION DETAILS
 SCALE: NOT TO SCALE



DI60W26-sht-Light-14	DESIGNED - WDS	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 1:8000' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 8/15/2013	DATE - 8/20/13	REVISED -

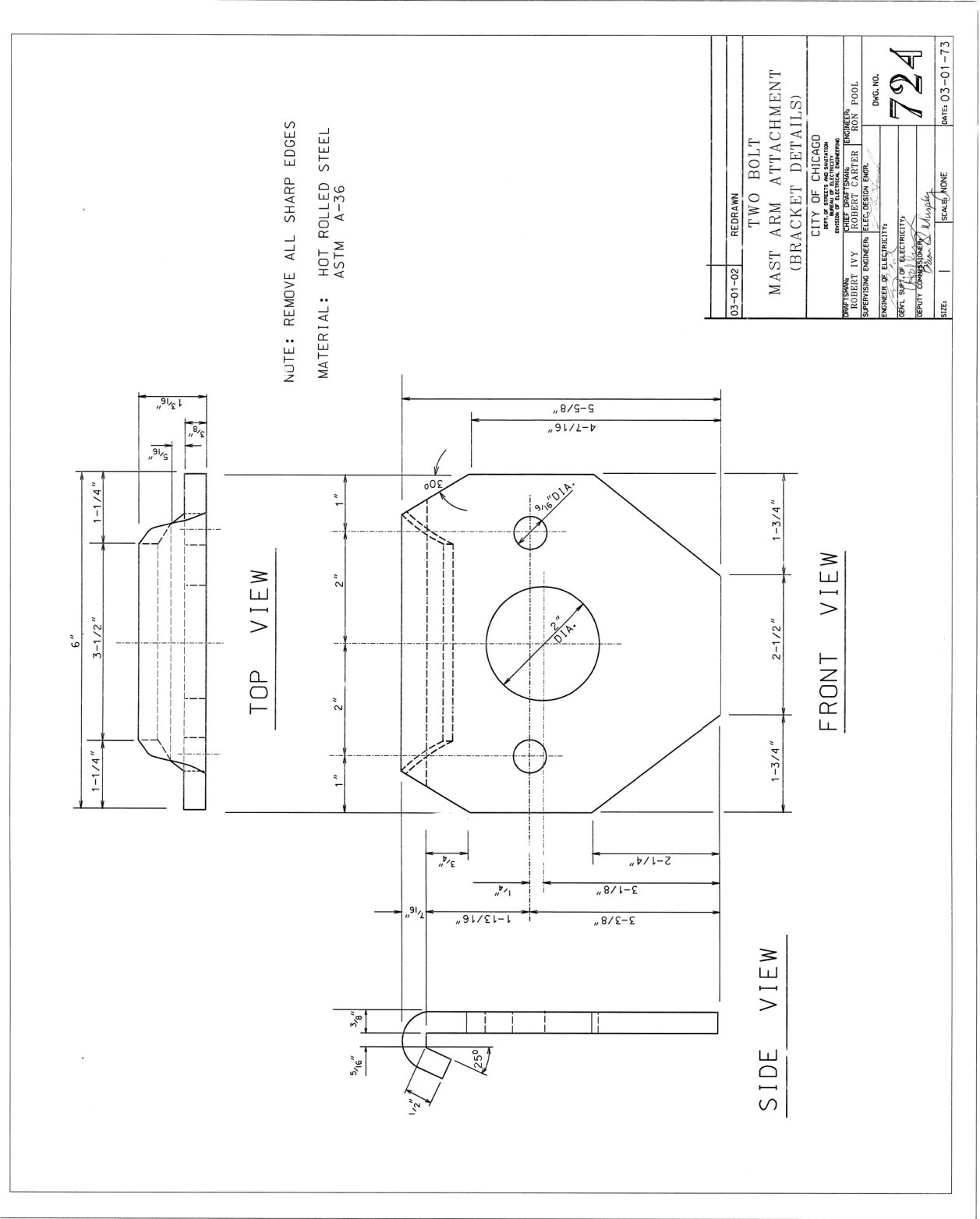
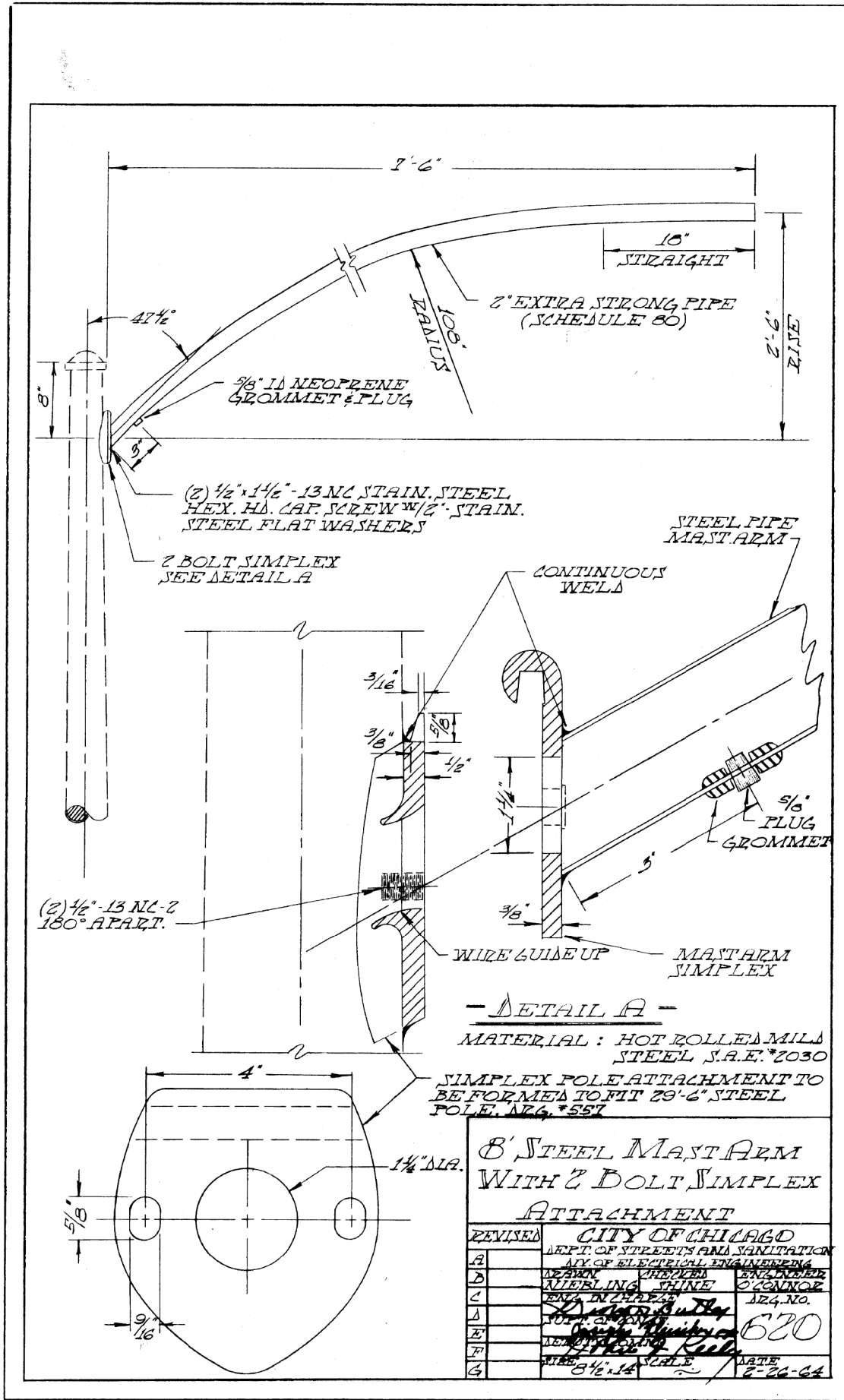
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS

SCALE: N.T.S. SHEET 14 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	237
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

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03-01-02	REDRAWN	TWO BOLT MAST ARM ATTACHMENT (BRACKET DETAILS)	DWG. NO.	DATE: 03-01-73
			72A	
			CITY OF CHICAGO	
DESIGNED BY	CHECKED BY	ENGINEER	SCALE	
DRAWN BY	IN CHARGE	PROJECT		
SUPERVISING ENGINEER	REGISTERED ELECTRICAL ENGINEER			
ENGINEER OF ELECTRICITY				
DEPT. OF ELECTRICITY				
SEBURY COMPANY				
SCALE	NONE			



D160W26-sht-Light-15
 USER NAME = myersc
 PLOT SCALE = 1:8000 / 1" = 80'
 PLOT DATE = 8/15/2013

DESIGNED - WDS
 DRAWN - CAM
 CHECKED - WDS
 DATE - 8/20/13

REVISED -
 REVISED -
 REVISED -
 REVISED -

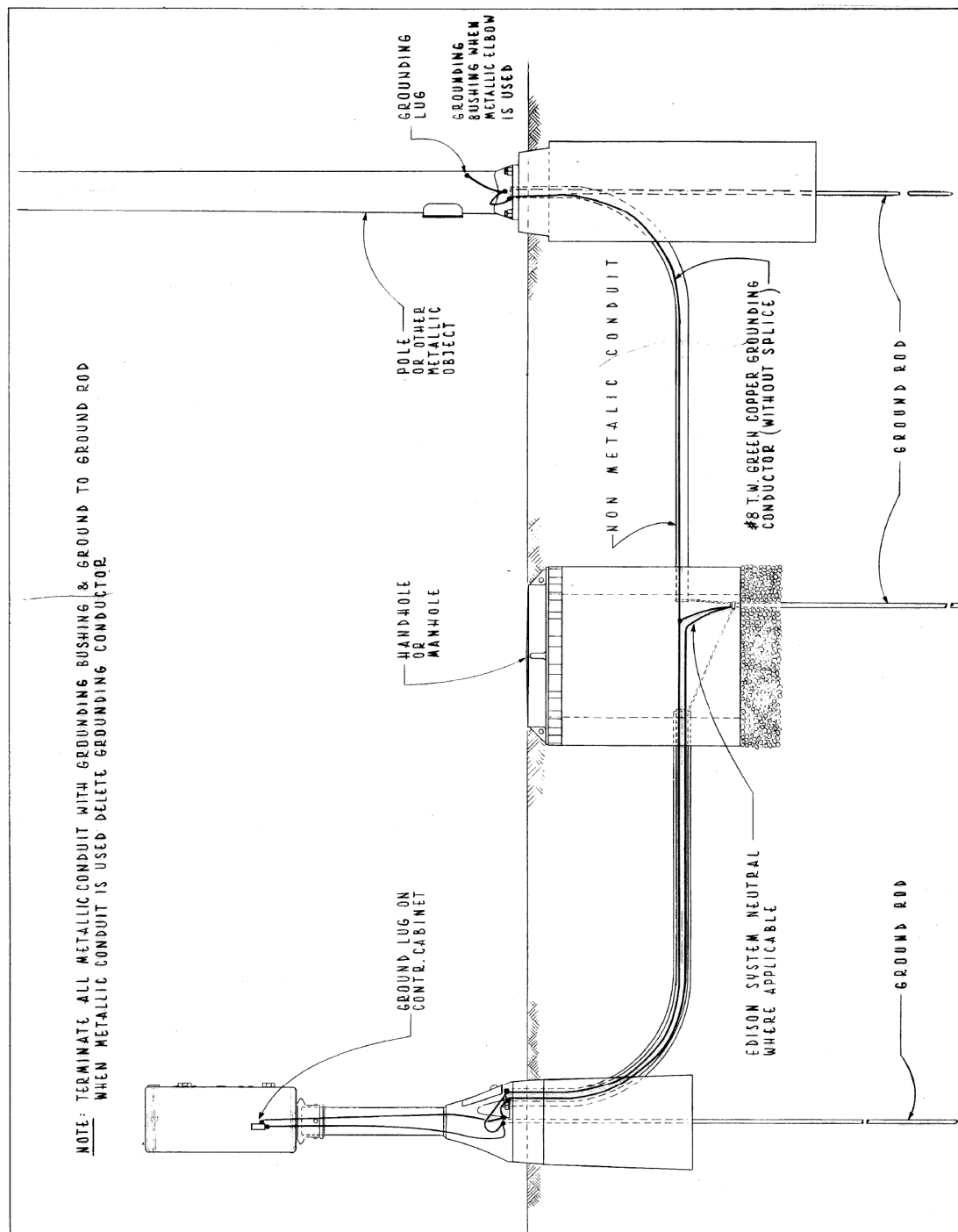
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS

SCALE: N.T.S. SHEET 15 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	238
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

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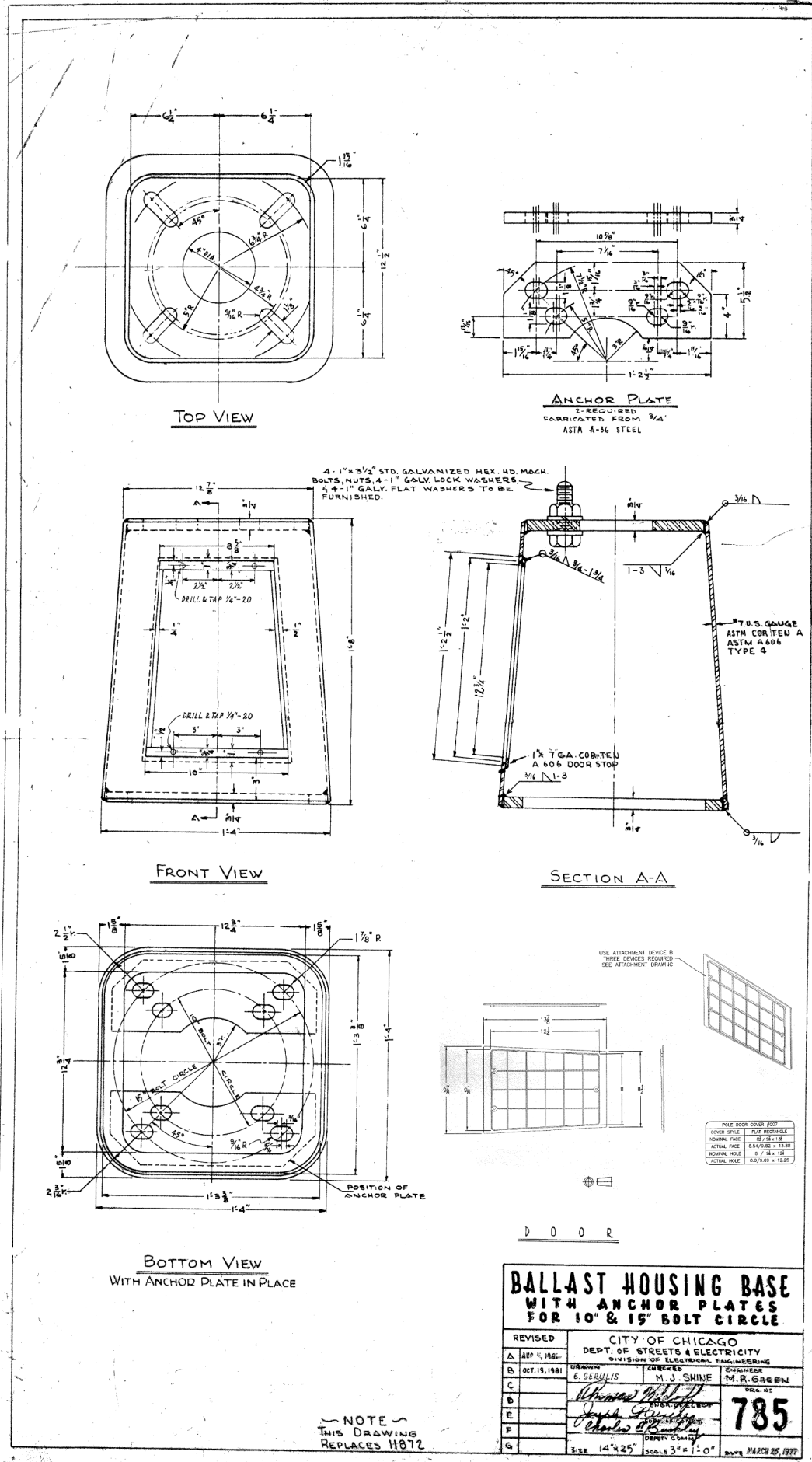
TYPICAL GROUNDING METHODS FOR BUREAU OF ELECTRICITY EQUIPMENT

CITY OF CHICAGO
DEPT. OF STREETS & SANITATION
BUREAU OF ELECTRICITY
DIVISION OF ELEC. ENGINEERING

REVISED	DRAWN: E. GERULIS	CHECKED: M. SHINE	ENGINEER: J. O'CONNOR
A			
B			
C			
D			
E			
F			

SIZE: 8 1/2" x 14" SCALE: 1" = 10' DATE: 5-12-70

736



D160W26-sht-Light-16
USER NAME = myersc
PLOT SCALE = 1:8000 / 1"
PLOT DATE = 8/15/2013

DESIGNED - WDS
DRAWN - CAM
CHECKED - WDS
DATE - 8/20/13

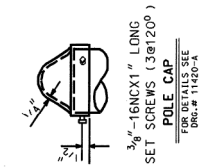
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

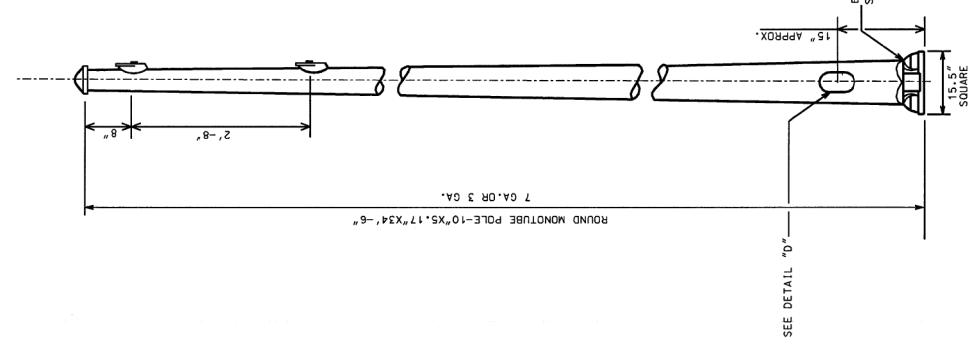
MISCELLANEOUS ELECTRICAL DETAILS

SCALE: N.T.S. SHEET 16 OF 22 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 239
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

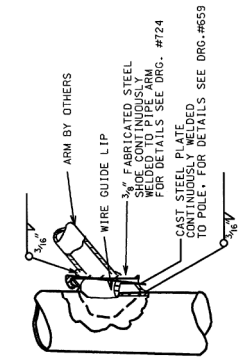


3/8" - 16NC(1" LONG)
SET SCREWS (301207)
POLE CAP
FORM # 114202A

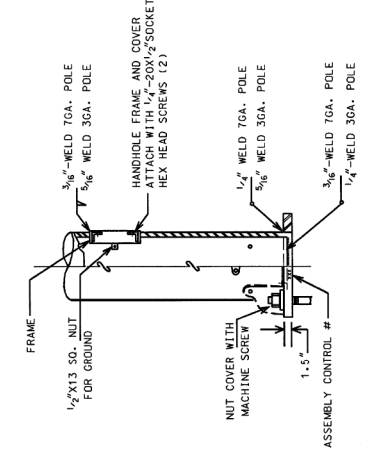


ROUND MONITUBE POLE-10"x5.17"x34'-6"

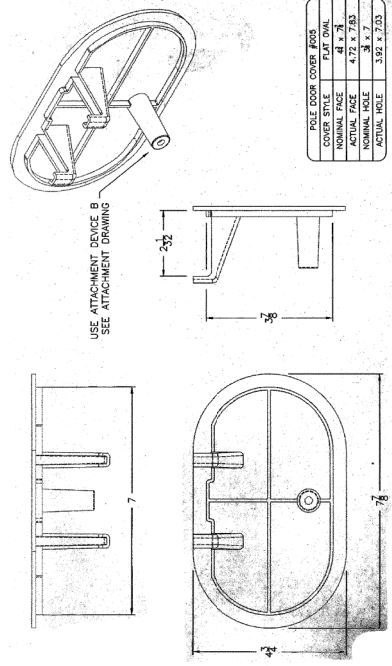
SEE DETAIL "D"
BOLT COVER W/ HEX HD.
ST. STL. MACH. SCREWS



SECTION AT POLE PLATE

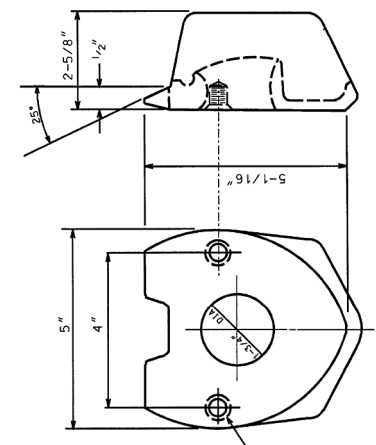


DETAIL "D"

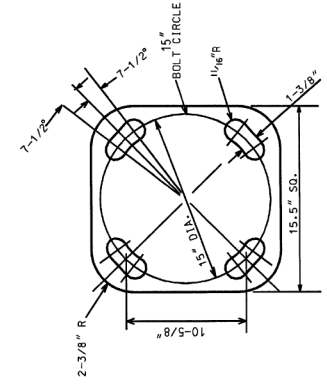


HANDHOLE DETAIL

POLE COVER FOR	3.92	7.23
COVER STYLE	4.1	4.3
ACTUAL HOLES	3.7	3.7
NOMINAL HOLES	3.92	7.23

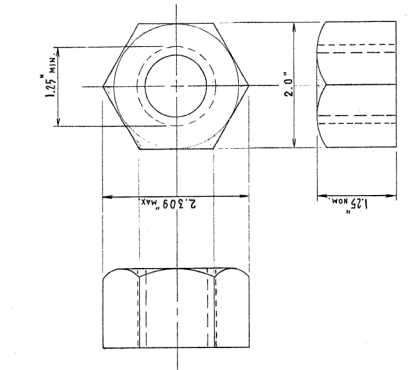


2 BOLT MAST ARM ATTACHMENT
FOR DETAILS SEE DRG.# 659 MATERIAL: CAST STEEL

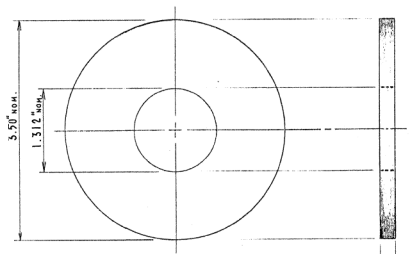


DETAIL "A"
BOLT SLOTS

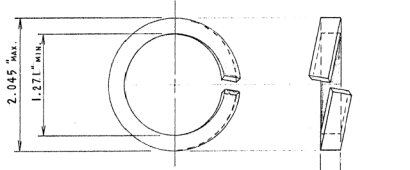
5.17"x10.0" STEEL/34'-6" POLE 7 OR 3 GAUGE	
CITY OF CHICAGO DEPT. OF PUBLIC WORKS DIVISION OF ELECTRICITY OFFICE OF ENGINEERING	
DRAFTSMAN: ROBERT IVY	ENGINEER: ROBERT CARTER
SUPERVISING ENGINEER:	ELEC. DESIGN ENGR.
ENGINEER OF ELECTRICITY:	
PERM. SALT OF ELECTRICITY:	
DEPUTY COMMISSIONER:	
DWG. NO.	808
	10-03-01



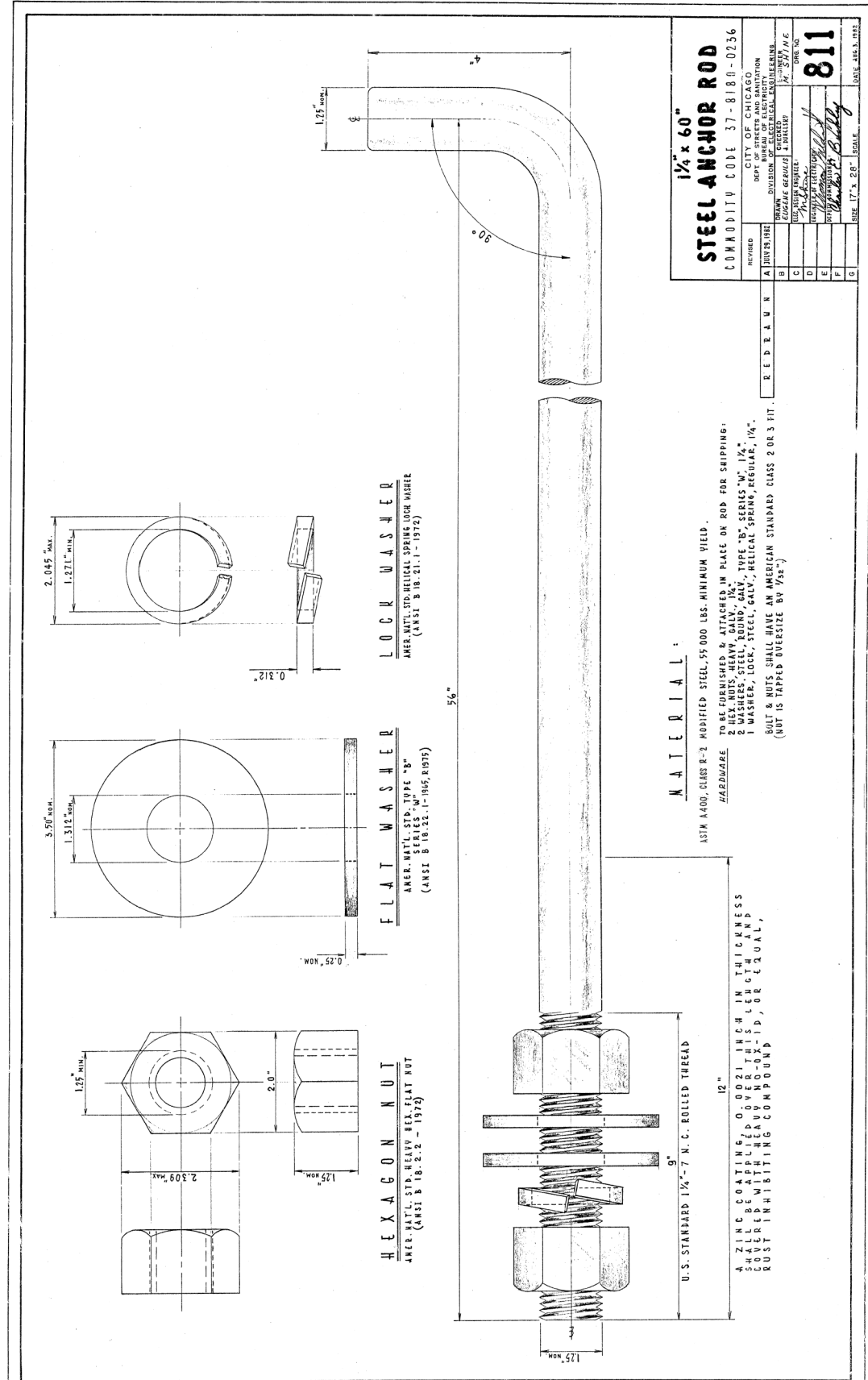
HEXAGON NUT
AMER. NAT'L STD. HEAVY HEX. FLAT NUT
(ANSI B 18.2.2 - 1975)



FLAT WASHER
AMER. NAT'L STD. TYPE "B"
(ANSI B 18.2.1 - 1975)



LOCK WASHER
AMER. NAT'L STD. HELICAL SPRING LOCK WASHER
(ANSI B 18.21.1 - 1972)



MATERIAL:
ASTM A490, CLASS 8-2 MODIFIED STEEL, 55 000 LBS. MINIMUM YIELD.

TO BE FURNISHED & ATTACHED IN PLACE ON ROD FOR SHIPPING:
2 HEX. NUTS, HEAVY, GALV., 1/4", TYPE "B", CLASS "B", 1/4"
2 WASHERS, LOCK, STEEL, GALV., HELICAL SPRING, REGULAR, 1/4"
BOLT & NUTS SHALL HAVE AN AMERICAN STANDARD CLASS 8 OR 3 FIT.
(NUT IS TAPPED UNLESS OTHERWISE NOTED)

U.S. STANDARD 1/4"-7 N.C. ROLLED THREAD
18"
ZINC COATING: 0.0021 INCH IN THICKNESS
SHALL BE APPLIED OVER THIS LENGTH AND SHALL
COVERED WITH HEAVY NON-DX-19, OR EQUAL,
RUST INHIBITING COMPOUND

1/4" x 60"	
STEEL ANCHOR ROD	
COMMUNITY CODE 37-8180-0256	
REVISION	CITY OF CHICAGO DEPT. OF PUBLIC WORKS DIVISION OF ELECTRICITY OFFICE OF ENGINEERING
A	DATE: 10/17/94
B	DATE: 10/17/94
C	DATE: 10/17/94
D	DATE: 10/17/94
E	DATE: 10/17/94
F	DATE: 10/17/94
G	DATE: 10/17/94
DRAWN BY: [Signature]	
CHECKED BY: [Signature]	
DATE: 10/17/94	
SCALE: 17" x 28" ISOMETRIC	
SHEET NO. 811	



D160W26-sht-Light-17
USER NAME = myersc
PLOT SCALE = 1:8000 / 1"
PLOT DATE = 8/15/2013

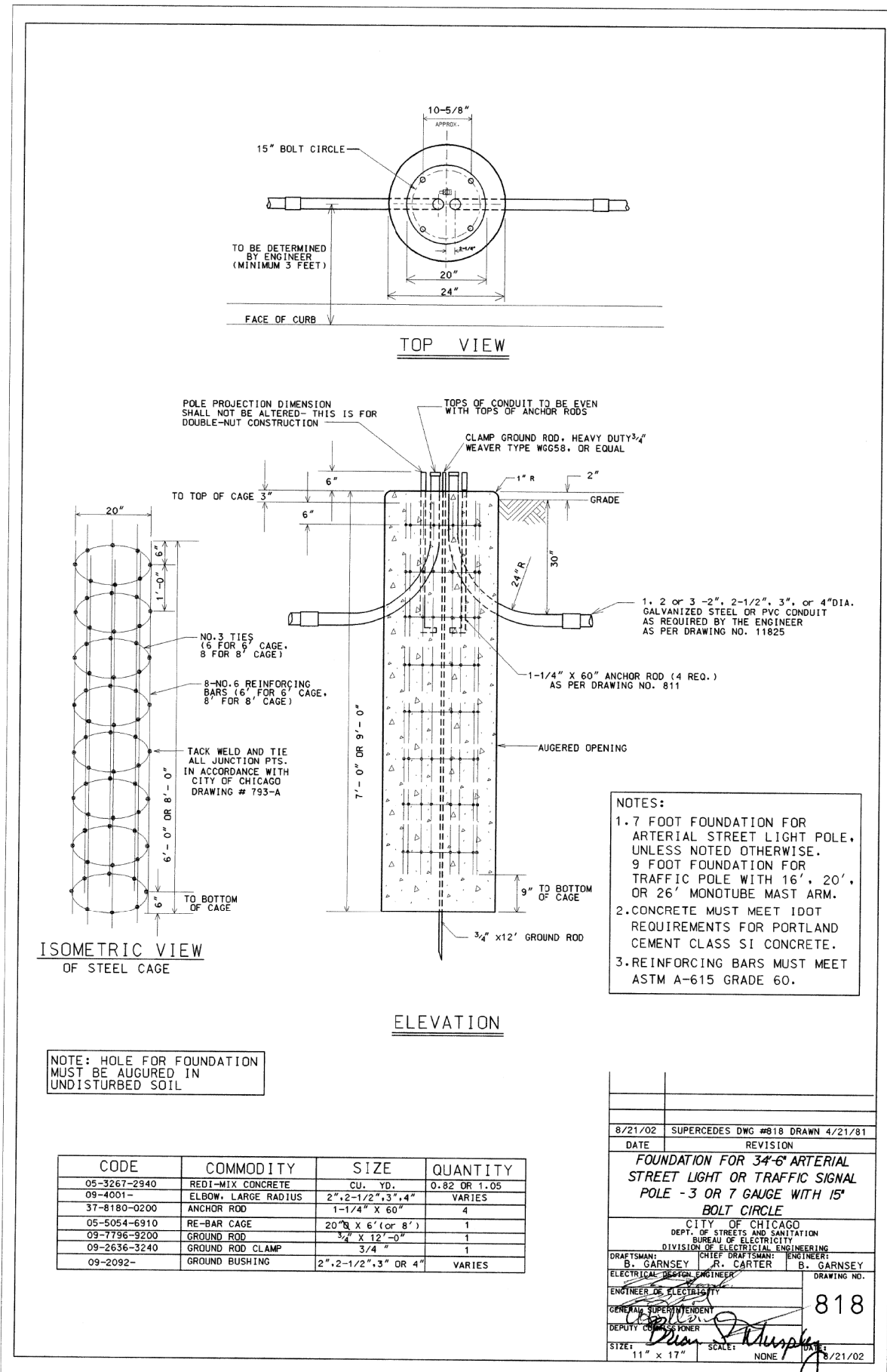
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DRAWN -	CAM	REVISED -	
CHECKED -	WDS	REVISED -	
DATE -	8/20/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS
SCALE: N.T.S. SHEET 17 OF 22 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	240
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

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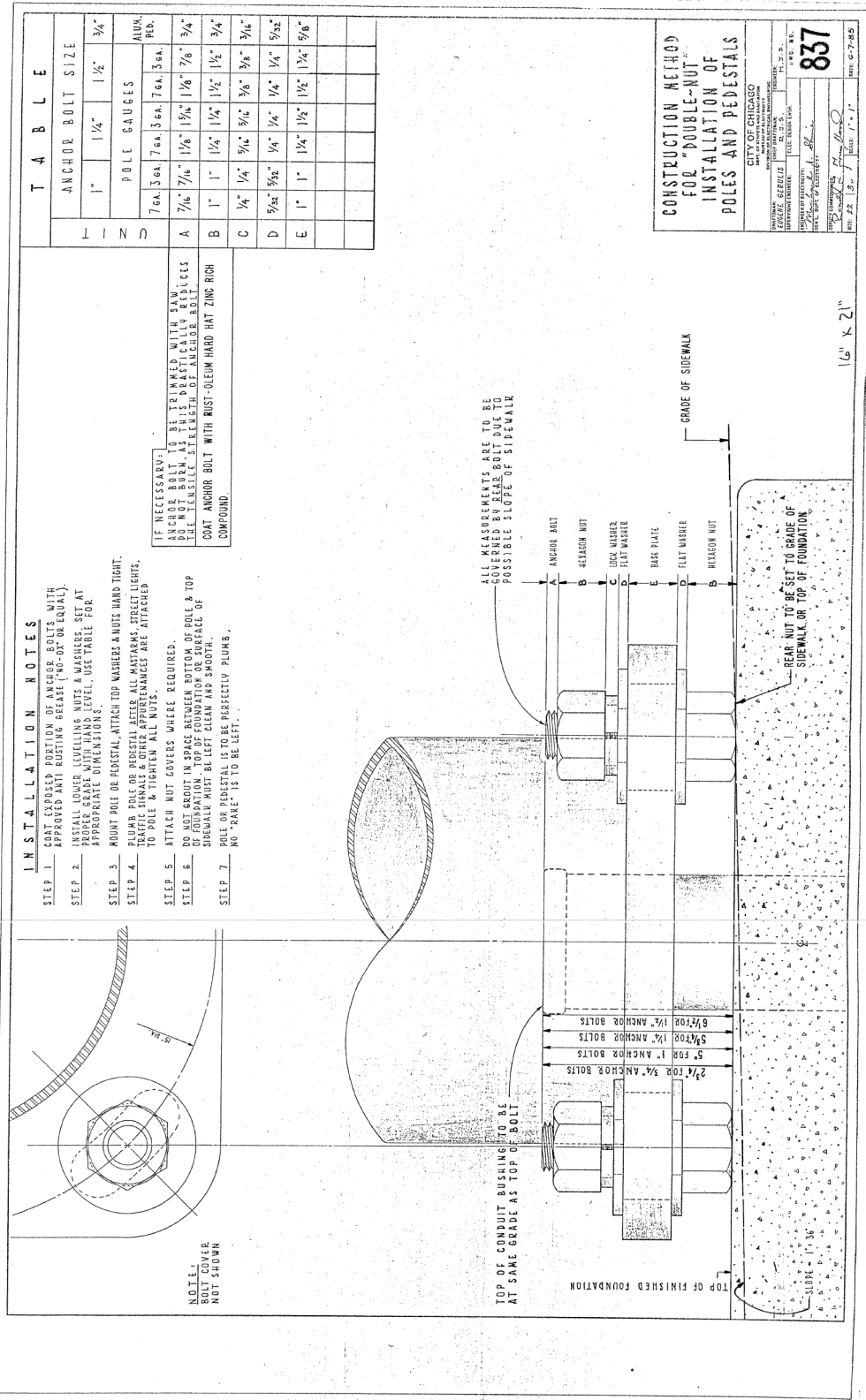


NOTE: HOLE FOR FOUNDATION MUST BE AUGURED IN UNDISTURBED SOIL

CODE	COMMODITY	SIZE	QUANTITY
05-3267-2940	REDI-MIX CONCRETE	CU. YD.	0.82 OR 1.05
09-4001-	ELBOW, LARGE RADIUS	2", 2-1/2", 3", 4"	VARIES
37-8180-0200	ANCHOR ROD	1-1/4" X 60"	4
05-5054-6910	RE-BAR CAGE	20" X 6' (OR 8')	1
09-7796-9200	GROUND ROD	3/4" X 12'-0"	1
09-2636-3240	GROUND ROD CLAMP	3/4"	1
09-2092-	GROUND BUSHING	2", 2-1/2", 3" OR 4"	VARIES

NOTES:
 1. 7 FOOT FOUNDATION FOR ARTERIAL STREET LIGHT POLE, UNLESS NOTED OTHERWISE.
 9 FOOT FOUNDATION FOR TRAFFIC POLE WITH 16', 20', OR 26' MONOTUBE MAST ARM.
 2. CONCRETE MUST MEET IDOT REQUIREMENTS FOR PORTLAND CEMENT CLASS SI CONCRETE.
 3. REINFORCING BARS MUST MEET ASTM A-615 GRADE 60.

8/21/02 SUPERCEDES DWG #818 DRAWN 4/21/81
 DATE REVISION
FOUNDATION FOR 3'-6" ARTERIAL STREET LIGHT OR TRAFFIC SIGNAL POLE - 3 OR 7 GAUGE WITH 15" BOLT CIRCLE
 CITY OF CHICAGO
 DEPT. OF STREETS AND SANITATION
 BUREAU OF ELECTRICITY
 DIVISION OF ELECTRICAL ENGINEERING
 DRAFTSMAN: B. GARNSEY
 CHIEF DRAFTSMAN: R. CARTER
 ENGINEER: B. GARNSEY
 ELECTRICAL DESIGN ENGINEER
 ENGINEER OF ELECTRICITY
 GENERAL SUPERINTENDENT
 DEPUTY COMMISSIONER
 SIZE: 11" x 17" SCALE: NONE DATE: 8/21/02



INSTALLATION NOTES:
 STEP 1. COAT EXPOSED PORTION OF ANCHOR BOLTS WITH APPROVED ANTI RUSTING GREASE ("NO-OX" OR EQUAL).
 STEP 2. INSTALL LOWER LEVELLING NUTS & WASHERS. SET AT APPROXIMATE FINISH GRADE.
 STEP 3. MOUNT POLE OR PEDESTAL. ATTACH TOP WASHERS & NUTS HAND TIGHT.
 STEP 4. TACKLE DOWN POLE OR PEDESTAL. ALL MASTARMS, STREET LIGHTS, TO POLE & TIGHTEN ALL NUTS.
 STEP 5. ATTACH NUT COVERS WHERE REQUIRED.
 STEP 6. DO NOT SCREW IN SPACES BETWEEN BOTTOM OF POLE & TOP OF FOUNDATION. TOP OF FOUNDATION OR SURFACE OF SIDEWALK MUST BE LEFT CLEAN AND SMOOTH.
 STEP 7. POLE OR PEDESTAL IS TO BE PERFECTLY PLUMB. NO "KINK" IS TO BE LEFT.

T A B L E

ANCHOR BOLT SIZE	POLE GAUGES	ALUM. PEB.
1"	1 1/4"	3/4"
1 1/4"	1 1/2"	3/4"
1 1/2"	1 3/4"	3/4"
1 3/4"	2"	3/4"
2"	2 1/4"	3/4"
2 1/4"	2 1/2"	3/4"
2 1/2"	2 3/4"	3/4"
2 3/4"	3"	3/4"
3"	3 1/4"	3/4"
3 1/4"	3 1/2"	3/4"
3 1/2"	3 3/4"	3/4"
3 3/4"	4"	3/4"
4"	4 1/4"	3/4"
4 1/4"	4 1/2"	3/4"
4 1/2"	4 3/4"	3/4"
4 3/4"	5"	3/4"
5"	5 1/4"	3/4"
5 1/4"	5 1/2"	3/4"
5 1/2"	5 3/4"	3/4"
5 3/4"	6"	3/4"
6"	6 1/4"	3/4"
6 1/4"	6 1/2"	3/4"
6 1/2"	6 3/4"	3/4"
6 3/4"	7"	3/4"
7"	7 1/4"	3/4"
7 1/4"	7 1/2"	3/4"
7 1/2"	7 3/4"	3/4"
7 3/4"	8"	3/4"
8"	8 1/4"	3/4"
8 1/4"	8 1/2"	3/4"
8 1/2"	8 3/4"	3/4"
8 3/4"	9"	3/4"
9"	9 1/4"	3/4"
9 1/4"	9 1/2"	3/4"
9 1/2"	9 3/4"	3/4"
9 3/4"	10"	3/4"
10"	10 1/4"	3/4"
10 1/4"	10 1/2"	3/4"
10 1/2"	10 3/4"	3/4"
10 3/4"	11"	3/4"
11"	11 1/4"	3/4"
11 1/4"	11 1/2"	3/4"
11 1/2"	11 3/4"	3/4"
11 3/4"	12"	3/4"

CONSTRUCTION METHOD FOR "DOUBLE-NUT" INSTALLATION OF POLES AND PEDESTALS
 CITY OF CHICAGO
 DEPT. OF STREETS AND SANITATION
 BUREAU OF ELECTRICITY
 DIVISION OF ELECTRICAL ENGINEERING
 DRAWING NO. 818
 DATE 8/21/02



D160W26-sht-Light-18
 USER NAME = myersc
 PLOT SCALE = 1:0000 / 1"
 PLOT DATE = 8/15/2013

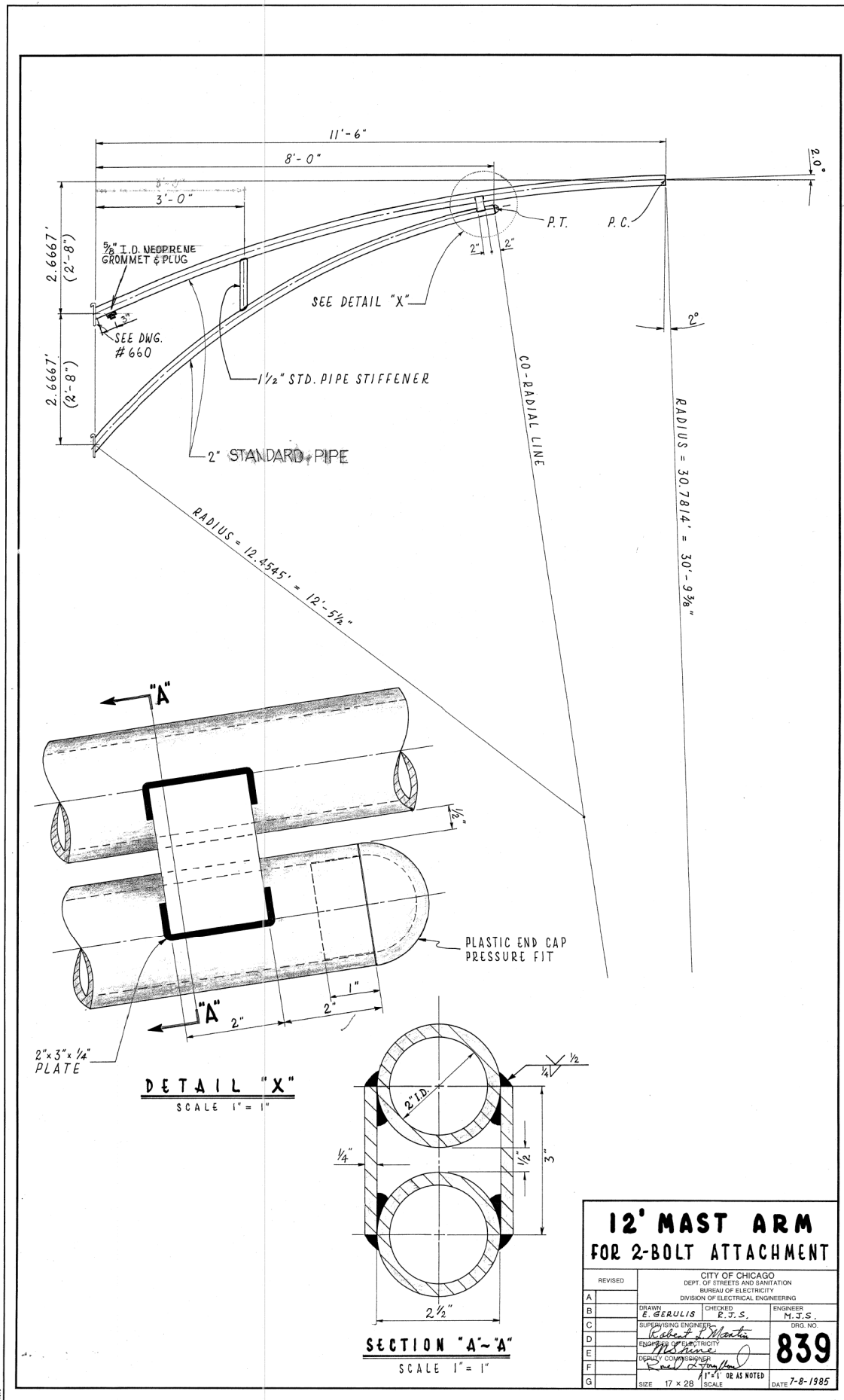
DESIGNED - WDS
 DRAWN - CAM
 CHECKED - WDS
 DATE - 8/20/13

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS
 SCALE: N.T.S. SHEET 18 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	241
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\388035\pmt\escomonline\local\pawecm\Documents\01_Americas\Transportation\66269938_Circle\Phase_1\1000_CAD\016_Electrical\Sheets\60W26_Contract\160W26-sht-Light-19



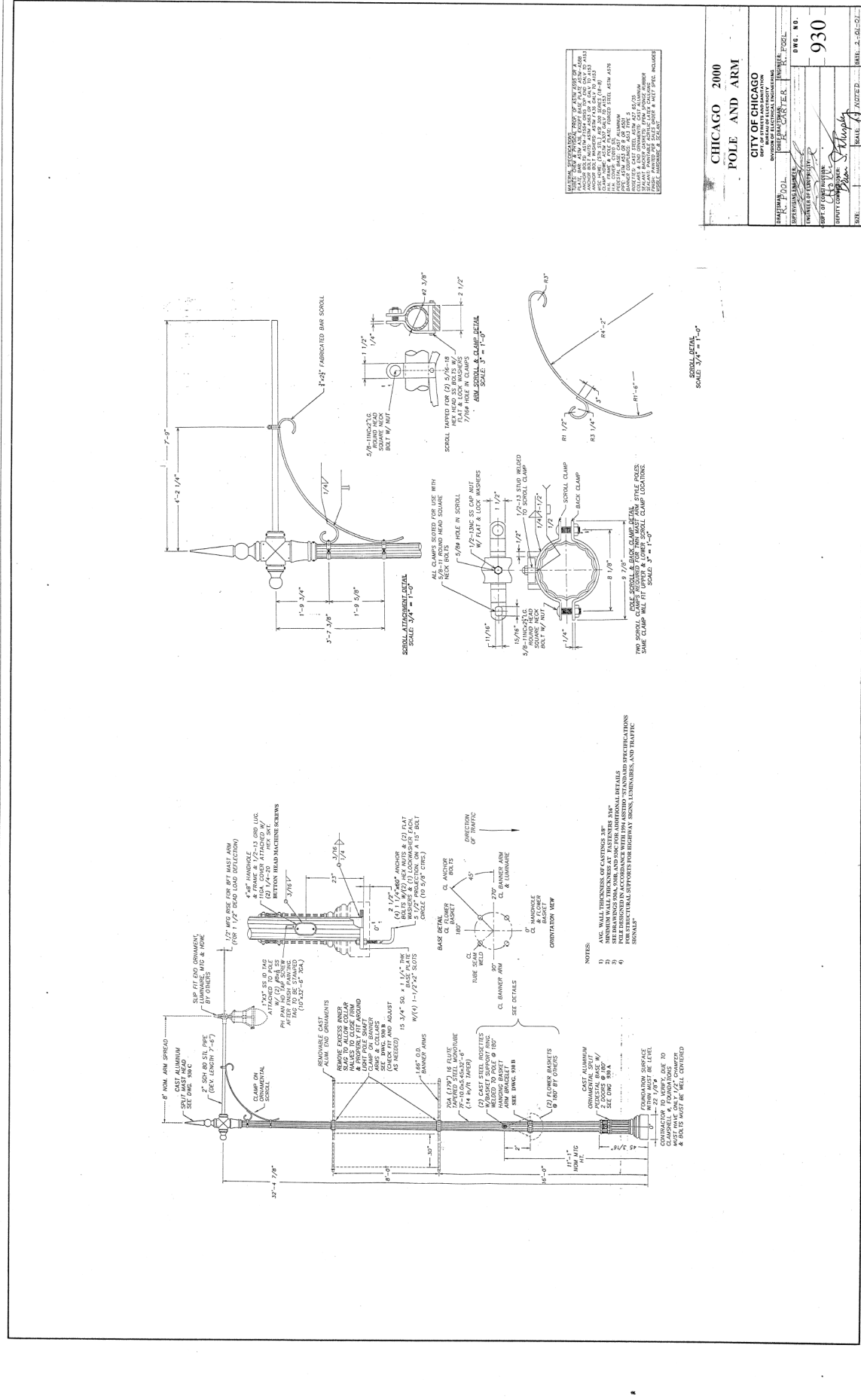
12' MAST ARM FOR 2-BOLT ATTACHMENT

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICITY
DIVISION OF ELECTRICAL ENGINEERING

DRAWN: E. GERULIS
CHECKED: E. J. S.
DESIGNING ENGINEER: Robert J. Martin
ELECTRICITY ENGINEER: [Signature]
DEPUTY COMMISSIONER: [Signature]

839

DATE: 7-8-1985



ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES AND DECIMALS THEREOF. DIMENSIONS IN PARENTHESES ARE IN FEET AND DECIMALS THEREOF. DIMENSIONS IN FEET AND DECIMALS THEREOF ARE TO BE CONSIDERED AS APPROXIMATE UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN FEET AND DECIMALS THEREOF ARE TO BE CONSIDERED AS APPROXIMATE UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN FEET AND DECIMALS THEREOF ARE TO BE CONSIDERED AS APPROXIMATE UNLESS OTHERWISE SPECIFIED.

CHICAGO 2000
POLE AND ARM

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICITY
DIVISION OF ELECTRICAL ENGINEERING

DRAWN: [Signature]
CHECKED: [Signature]
DESIGNING ENGINEER: [Signature]
ELECTRICITY ENGINEER: [Signature]
DEPUTY COMMISSIONER: [Signature]

839

DATE: 7-8-1985



D160W26-sht-Light-19
USER NAME = myersc
PLOT SCALE = 1:8000 / 1" = 80'
PLOT DATE = 8/15/2013

DESIGNED - WDS
DRAWN - CAM
CHECKED - WDS
DATE - 8/20/13

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS
SCALE: N.T.S. SHEET 19 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	242
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



USER NAME = myersc
 PLOT SCALE = 1:0000 / 1" = 10'-0"
 PLOT DATE = 8/15/2013

DESIGNED - WDS
 DRAWN - CAM
 CHECKED - WDS
 DATE - 8/20/13

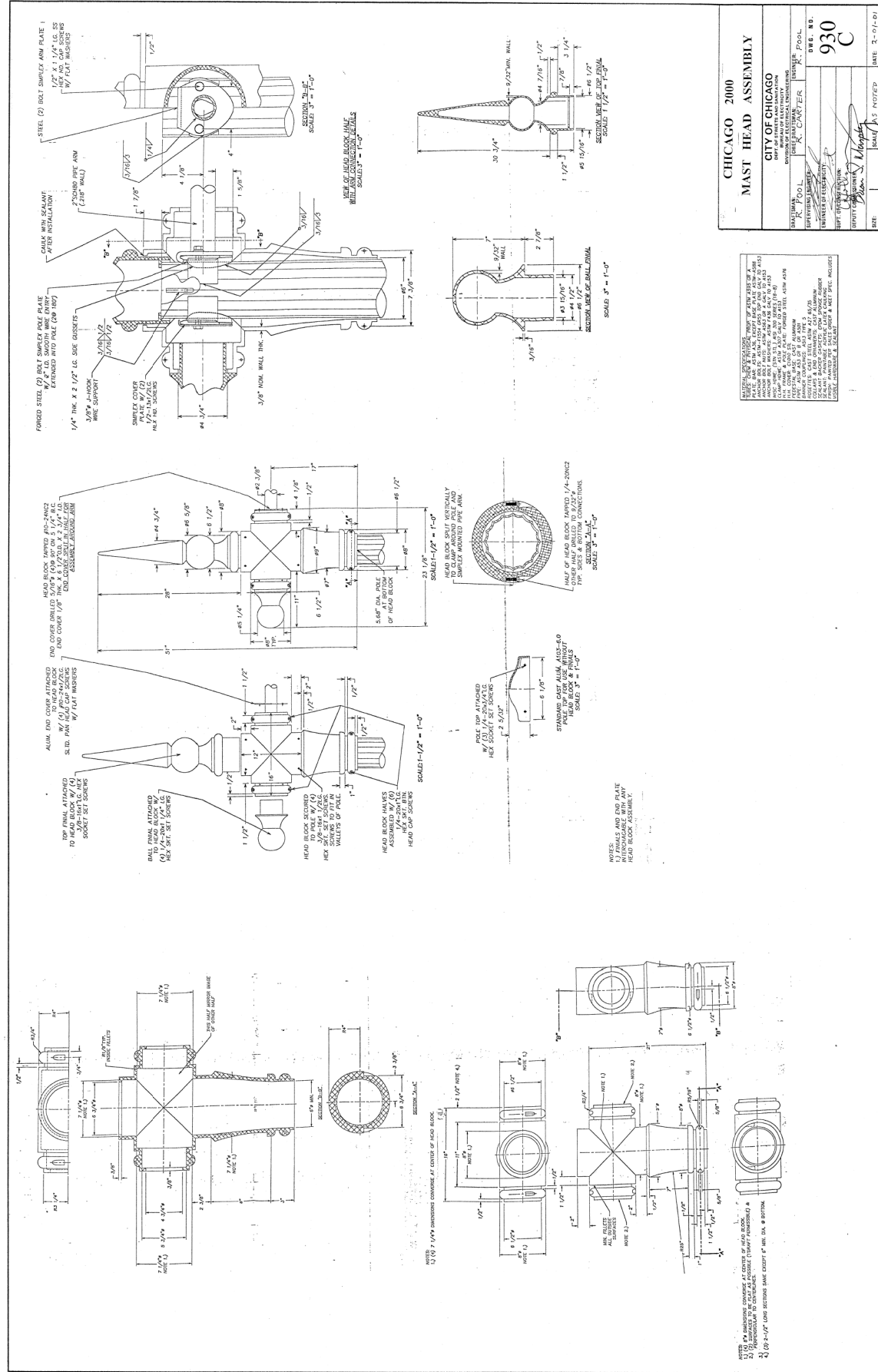
REVISED -
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 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS

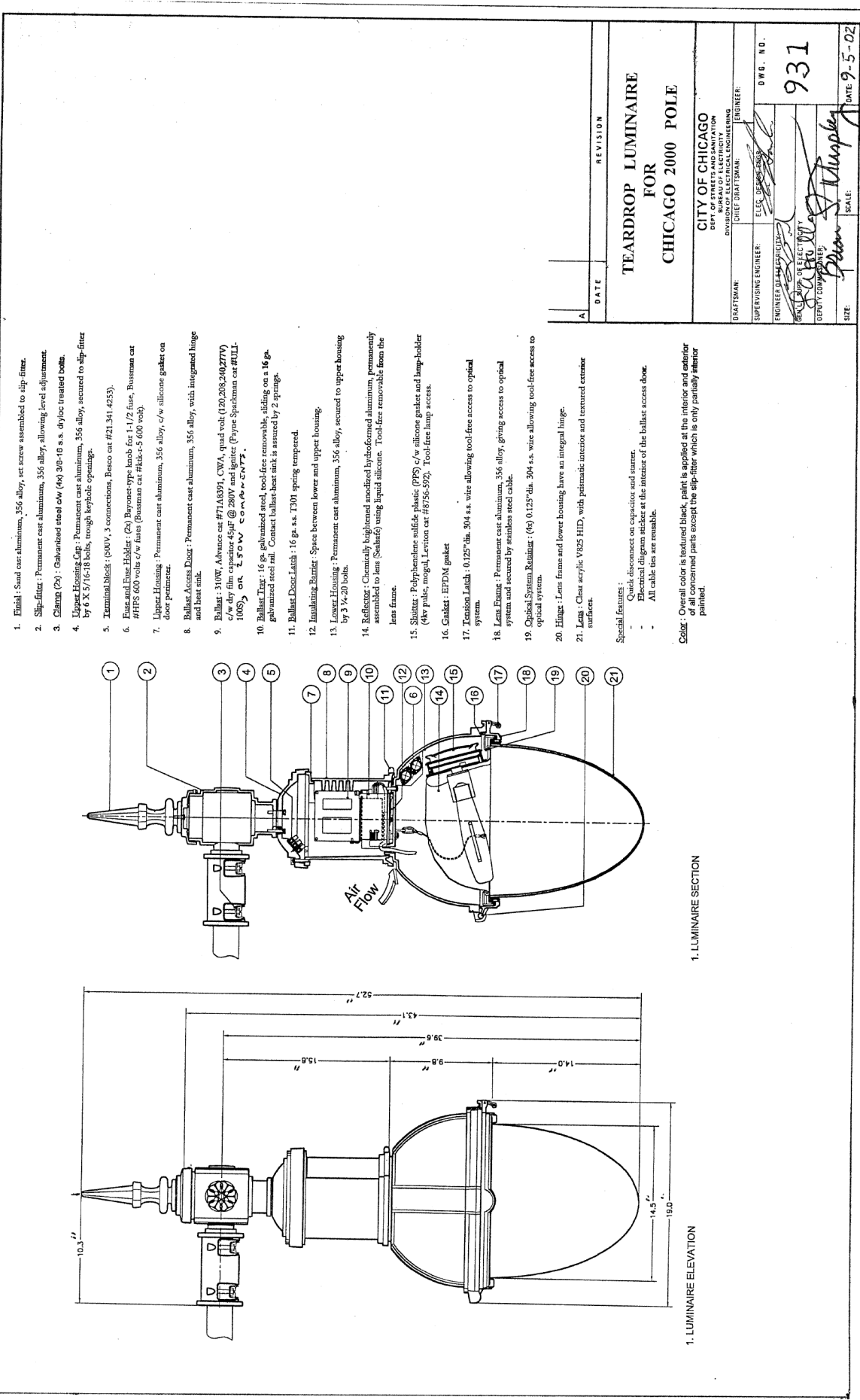
SCALE: N.T.S. SHEET 21 OF 22 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	244
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



CHICAGO 2000
 MAST HEAD ASSEMBLY
 CITY OF CHICAGO
 DEPARTMENT OF ELECTRICAL ENGINEERING
 DIVISION OF ELECTRICAL ENGINEERING
 CHIEF ELECTRICAL ENGINEER
 DATE: 8-20-13

D.W.G. NO. 930
 C
 DATE: 8-20-13



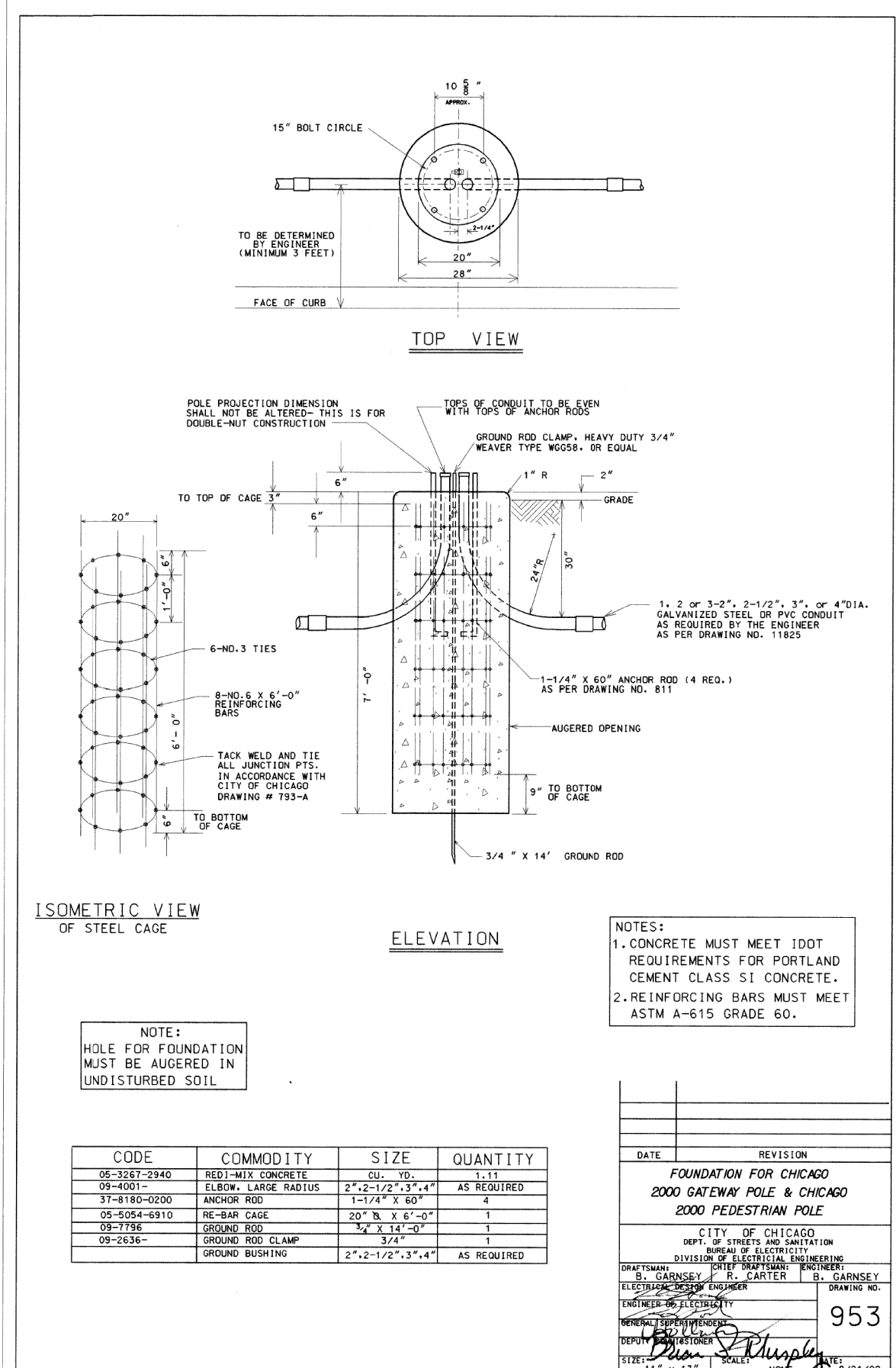
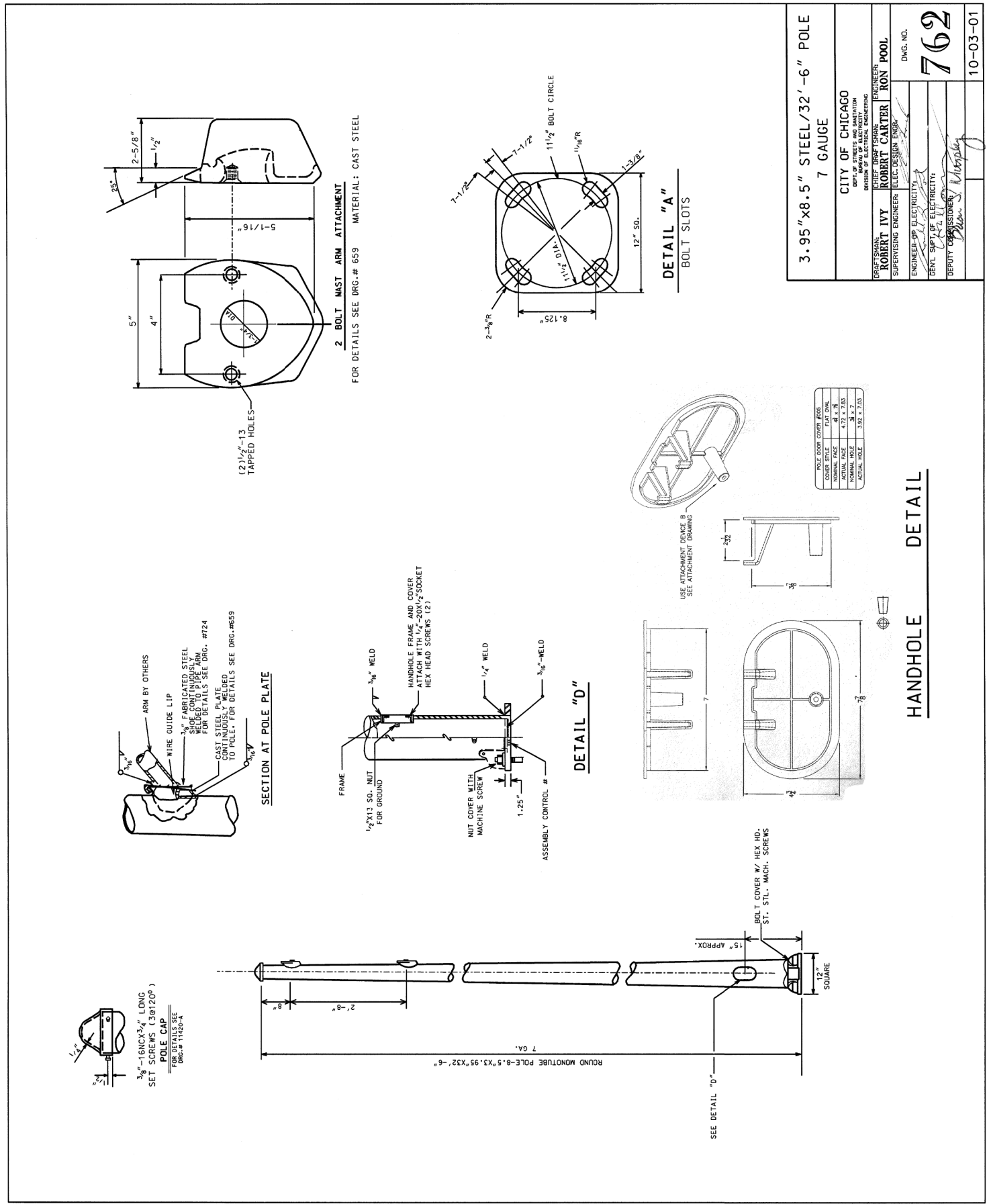
- Finish: Sand cast aluminum, 356 alloy, set screw assembled to slip filter.
- Slip filter: Permanent cast aluminum, 356 alloy, allowing level adjustment.
- Clamp (C): Galvanized steel (W) 30-10 s.s. dryloc treated bolts.
- Upper Housing Cap: Permanent cast aluminum, 356 alloy, secured to slip filter by 6 X 5/16-18 bolts, rough keyhole openings.
- Terminal block: 600V, 3 connections, Busco cat #21.341.4253.
- Fuse and Fuse Holder: (2x) Bayonet-type knob for 1-1/2 fuse, Busman cat #HPS 600 volts c/w fuses (Busman cat #HPS-5 600 vol).
- Upper Housing: Permanent cast aluminum, 356 alloy, c/w silicone gasket on door perimeter.
- Ballast Access Door: Permanent cast aluminum, 356 alloy, with integrated hinge and heat sink.
- Ballast: 310W, Advance cat #7148391, CWA, quad volt (120,208,240/277V) c/w dry film capacitor 45µF @ 280V and base (P-type spartan cat #DUL-100S), or 2.50W c/w #V-277.
- Ballast Tag: 16 ga. sub-zinc steel, tool-free removable, sliding on a 16 ga. galvanized steel rail. Contact ballast heat sink is assured by 2 springs.
- Ballast Door Latch: 16 ga. s.s. T201 spring tempered.
- Luminaire Hanger: Space between lower and upper housing.
- Lower Housing: Permanent cast aluminum, 356 alloy, secured to upper housing by 3 1/2-20 bolts.
- Reflector: Chemically brightened anodized hydroformed aluminum, permanently assembled to lens (Subalt) using liquid silicone. Tool-free removable from the lens frame.
- Subalt: Polyethylene sulfide plastic (PPS) c/w silicone gasket and lamp-holder (Key pins, mogul, Lenox cat #8756-592). Tool-free lamp access.
- Gasket: EPDM gasket.
- Tension Latch: 0.125" dia. 304 s.s. wire allowing tool-free access to optical system.
- Lens Frame: Permanent cast aluminum, 356 alloy, giving access to optical system and secured by stainless steel cable.
- Optical System Retainer: (4x) 0.125" dia. 304 s.s. wire allowing tool-free access to optical system.
- Hinge: Lens frame and lower housing have an integral hinge.
- Lens: Clear acrylic V825 HFD, with prismatic interior and textured exterior surfaces.

Special Features:
 - Quick disconnect on capacitor and starter.
 - Electrical diagram sticker at the interior of the ballast access door.
 - All cable ties are reusable.

Color: Overall color is textured black, paint is applied at the interior and exterior of all concealed parts except the slip filter which is only partially interior painted.

REVISION	
A	DATE
TEARDROP LUMINAIRE FOR CHICAGO 2000 POLE	
CITY OF CHICAGO DEPARTMENT OF ELECTRICAL ENGINEERING DIVISION OF ELECTRICAL ENGINEERING CHIEF ELECTRICAL ENGINEER	
SUPERVISING ENGINEER ELEC. ENGINEER	D.W.G. NO. 931
ENGINEER OF RECORD ELEC. ENGINEER	DATE 9-5-02
SUPPLY COMPANIES	SCALE

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D160W26-sht-Light-22
 USER NAME = myersc
 PLOT SCALE = 1:8000 / 1"
 PLOT DATE = 8/15/2013

DESIGNED - WDS
 DRAWN - CAM
 CHECKED - WDS
 DATE - 8/20/13

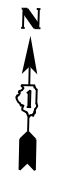
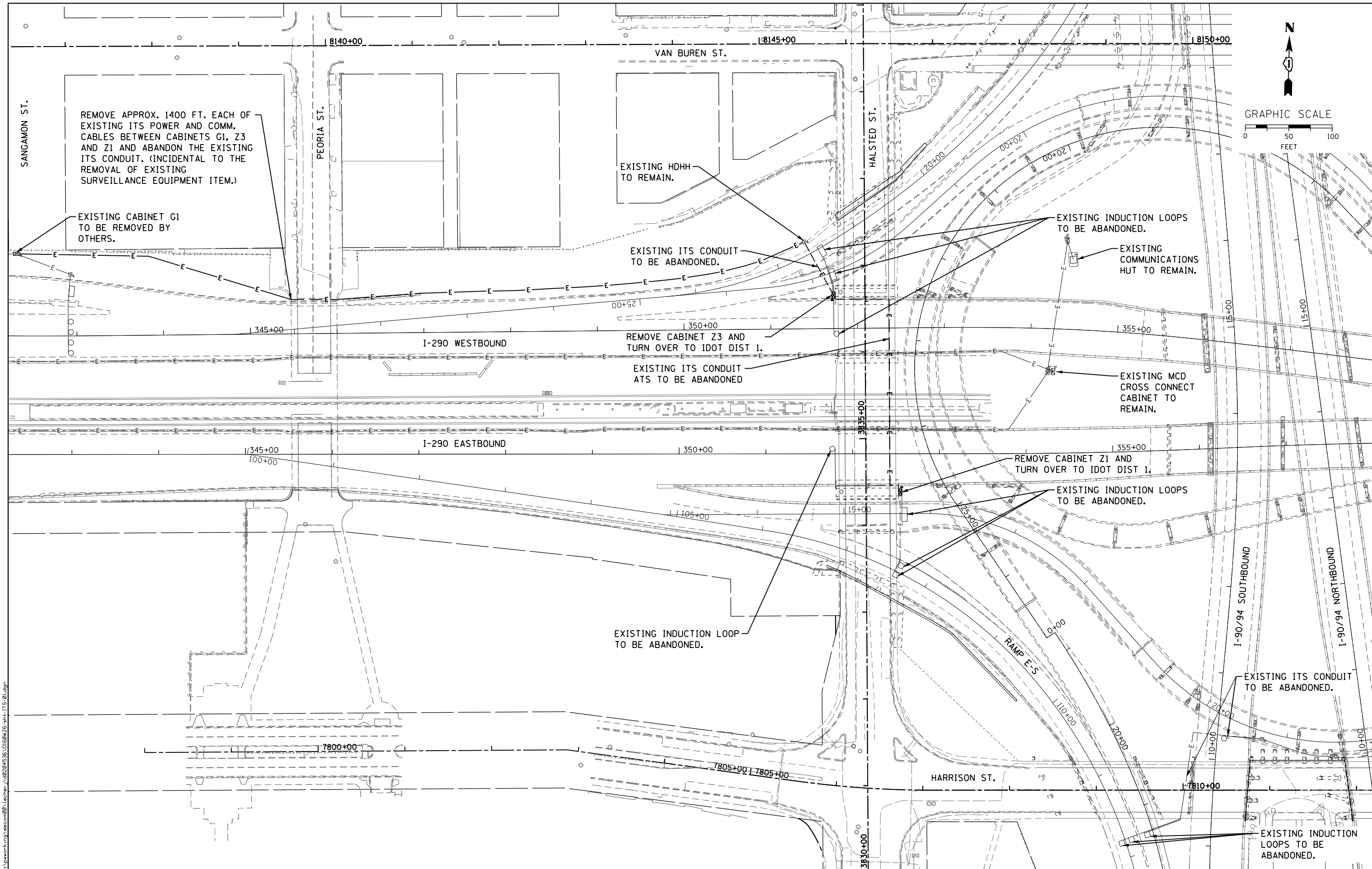
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS

SCALE: N.T.S. SHEET 22 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	245
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



REMOVE APPROX. 1400 FT. EACH OF EXISTING ITS POWER AND COMM. CABLES BETWEEN CABINETS G1, Z3 AND Z1 AND ABANDON THE EXISTING ITS CONDUIT. (INCIDENTAL TO THE REMOVAL OF EXISTING SURVEILLANCE EQUIPMENT ITEM.)

EXISTING CABINET G1 TO BE REMOVED BY OTHERS.

EXISTING HDHH TO REMAIN.

EXISTING ITS CONDUIT TO BE ABANDONED.

EXISTING INDUCTION LOOPS TO BE ABANDONED.

EXISTING COMMUNICATIONS HUT TO REMAIN.

REMOVE CABINET Z3 AND TURN OVER TO IDOT DIST 1.

EXISTING ITS CONDUIT ATS TO BE ABANDONED

EXISTING MCD CROSS CONNECT CABINET TO REMAIN.

REMOVE CABINET Z1 AND TURN OVER TO IDOT DIST 1.

EXISTING INDUCTION LOOPS TO BE ABANDONED.

EXISTING INDUCTION LOOP TO BE ABANDONED.

EXISTING ITS CONDUIT TO BE ABANDONED.

EXISTING INDUCTION LOOPS TO BE ABANDONED.

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 PLOT DATE = 9/11/2013

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CHECKED - WDS	REVISED -
DATE - 9/15/13	REVISED -

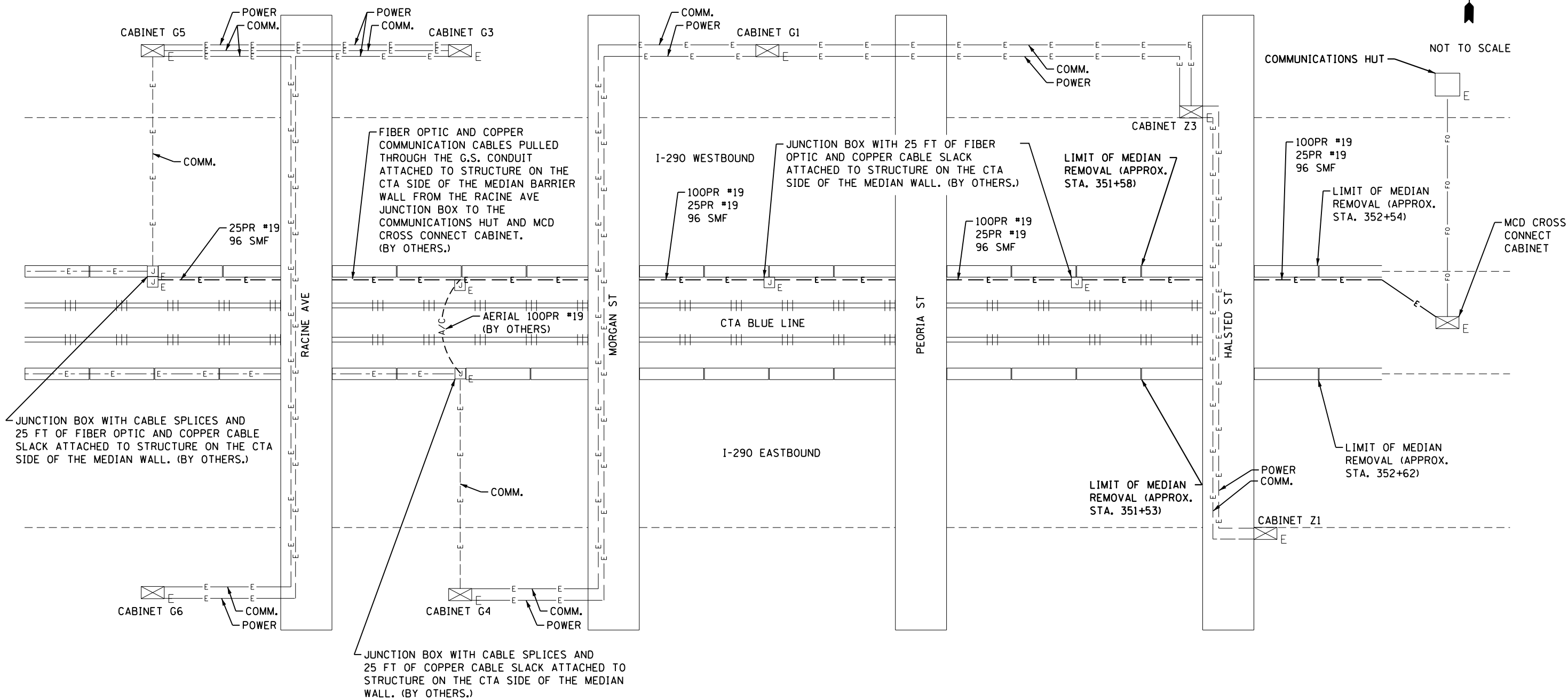
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ITS PLANS - HALSTED STREET AND HARRISON STREET
 ITS REMOVAL**

SCALE: 1" = 50' SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 246
CONTRACT NO. 60W26				

ILLINOIS FED. AID PROJECT



1. THE ITS COMMUNICATION CABLES HAVE BEEN REROUTED BY OTHERS TO ALLOW SUFFICIENT SLACK TO MAINTAIN THE ITS CONNECTIONS DURING PIER REMOVAL ACTIVITIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE REROUTED ITS INFRASTRUCTURE IN CONDUIT ATTACHED TO STRUCTURE.
3. THE CONTRACTOR MUST MAINTAIN THE ITS CONNECTION THROUGH THE PIER REMOVAL WORK ZONE. MAINTAINING THE CONDUIT ATTACHED TO STRUCTURE MAY NOT BE POSSIBLE IN THE PIER REMOVAL WORK ZONE. THE CONTRACTOR MAY REMOVE THE CONDUIT ATTACHED TO STRUCTURE AND PROTECT IT IN PLACE THROUGH THE WORK ZONE DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST REATTACH THE CONDUIT TO STRUCTURE ON THE CTA SIDE OF THE MEDIAN BARRIER ONCE PIER CONSTRUCTION ACTIVITIES ARE COMPLETE.
4. THE CONTRACTOR SHALL COORDINATE MAINTAINING ITS ACTIVITIES WITH ADJACENT IDOT PROJECTS.
5. SEE THE MAINTAINING ITS DURING CONSTRUCTION SPECIAL PROVISION FOR ADDITIONAL INFORMATION.
6. THIS DRAWING IS DIAGRAMMATICAL AND FOR INFORMATIONAL PURPOSES ONLY.

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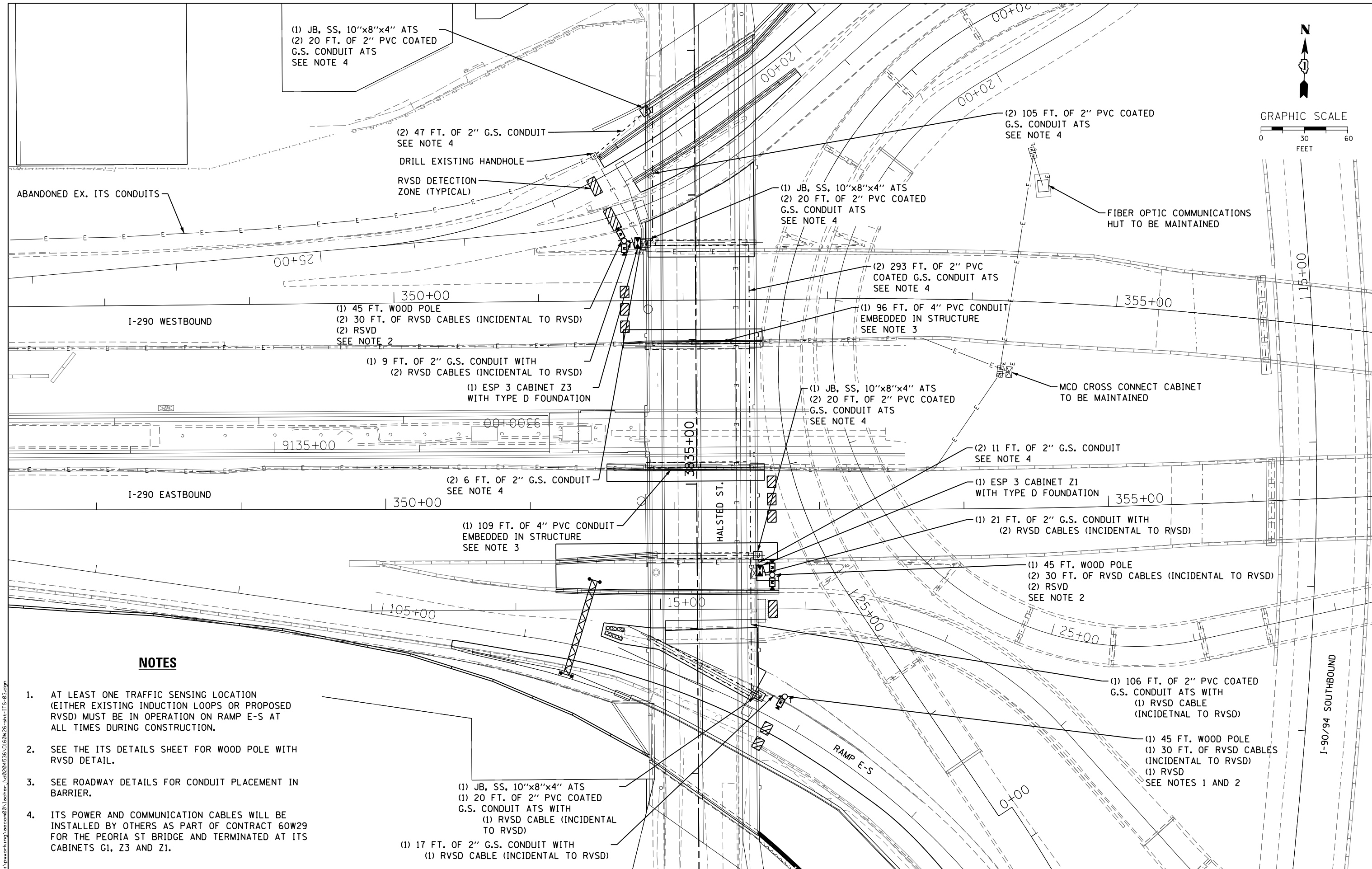
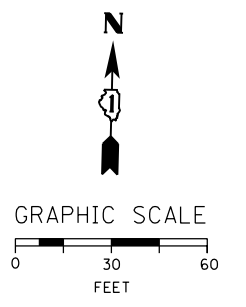
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PLOT DATE = 9/11/2013	DATE - 9/15/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ITS PLANS - HALSTED STREET AND HARRISON STREET MAINTAINING ITS DURING PIER REMOVAL		
SCALE: NO SCALE	SHEET 2 OF 5 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	247
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

(1) JB, SS, 10"x8"x4" ATS
 (2) 20 FT. OF 2" PVC COATED
 G.S. CONDUIT ATS
 SEE NOTE 4



NOTES

1. AT LEAST ONE TRAFFIC SENSING LOCATION (EITHER EXISTING INDUCTION LOOPS OR PROPOSED RVSD) MUST BE IN OPERATION ON RAMP E-S AT ALL TIMES DURING CONSTRUCTION.
2. SEE THE ITS DETAILS SHEET FOR WOOD POLE WITH RVSD DETAIL.
3. SEE ROADWAY DETAILS FOR CONDUIT PLACEMENT IN BARRIER.
4. ITS POWER AND COMMUNICATION CABLES WILL BE INSTALLED BY OTHERS AS PART OF CONTRACT 60W29 FOR THE PEORIA ST BRIDGE AND TERMINATED AT ITS CABINETS G1, Z3 AND Z1.

(1) JB, SS, 10"x8"x4" ATS
 (1) 20 FT. OF 2" PVC COATED
 G.S. CONDUIT ATS WITH
 (1) RVSD CABLE (INCIDENTAL
 TO RVSD)
 (1) 17 FT. OF 2" G.S. CONDUIT WITH
 (1) RVSD CABLE (INCIDENTAL TO RVSD)

(2) 105 FT. OF 2" PVC COATED
 G.S. CONDUIT ATS
 SEE NOTE 4

FIBER OPTIC COMMUNICATIONS
 HUT TO BE MAINTAINED

(2) 293 FT. OF 2" PVC
 COATED G.S. CONDUIT ATS
 SEE NOTE 4

(1) 96 FT. OF 4" PVC CONDUIT
 EMBEDDED IN STRUCTURE
 SEE NOTE 3

MCD CROSS CONNECT CABINET
 TO BE MAINTAINED

(2) 11 FT. OF 2" G.S. CONDUIT
 SEE NOTE 4

(1) ESP 3 CABINET Z1
 WITH TYPE D FOUNDATION

(1) 21 FT. OF 2" G.S. CONDUIT WITH
 (2) RVSD CABLES (INCIDENTAL TO RVSD)

(1) 45 FT. WOOD POLE
 (2) 30 FT. OF RVSD CABLES (INCIDENTAL TO RVSD)
 (2) RVSD
 SEE NOTE 2

(1) 106 FT. OF 2" PVC COATED
 G.S. CONDUIT ATS WITH
 (1) RVSD CABLE
 (INCIDENTAL TO RVSD)

(1) 45 FT. WOOD POLE
 (1) 30 FT. OF RVSD CABLES
 (INCIDENTAL TO RVSD)
 (1) RVSD
 SEE NOTES 1 AND 2

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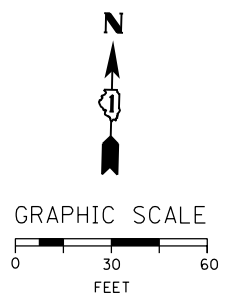
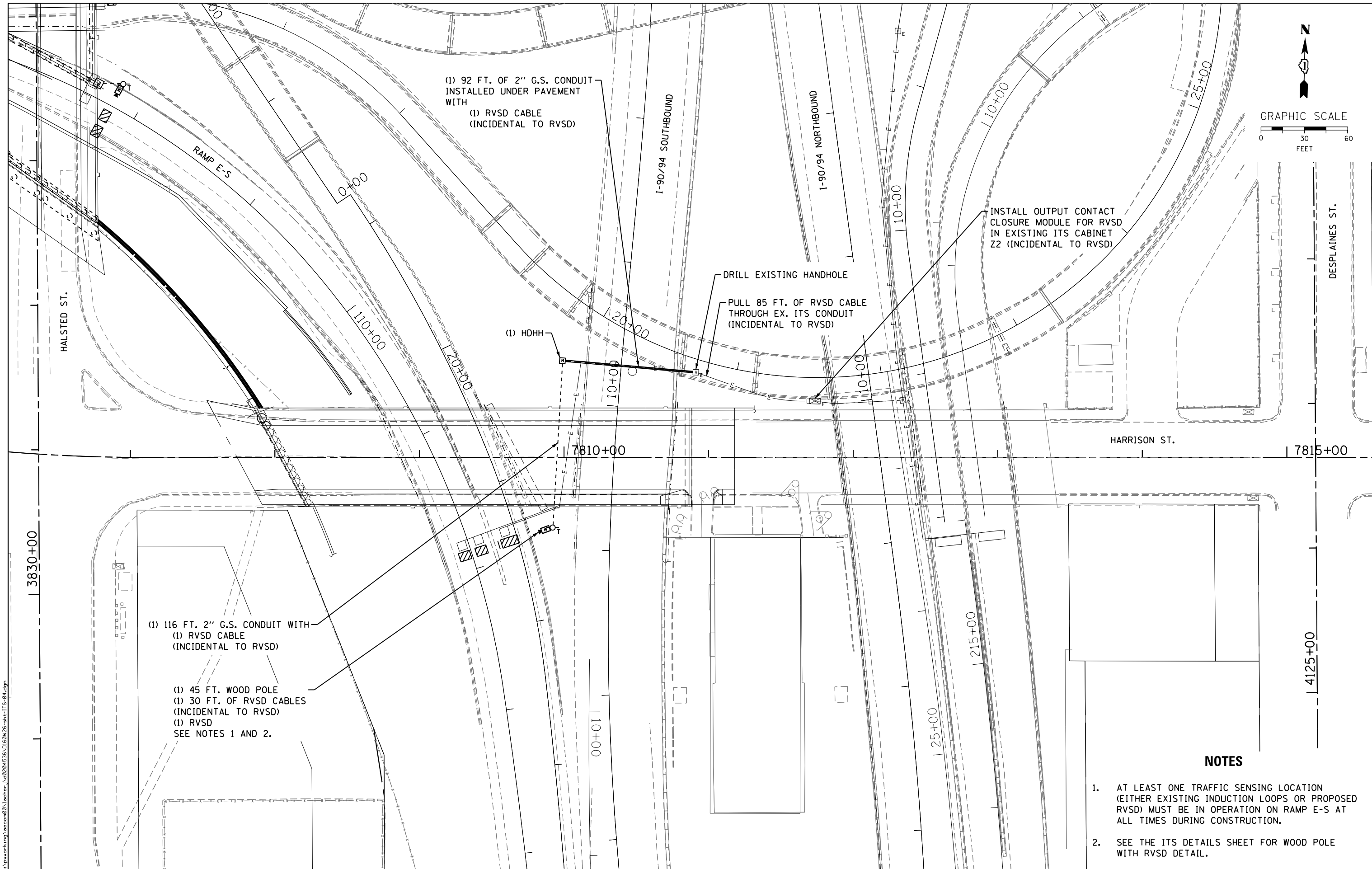
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DATE - 9/15/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ITS PLANS - HALSTED STREET
 PROPOSED ITS**

SCALE: 1" = 30' SHEET 3 OF 5 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 248
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



NOTES

1. AT LEAST ONE TRAFFIC SENSING LOCATION (EITHER EXISTING INDUCTION LOOPS OR PROPOSED RVSD) MUST BE IN OPERATION ON RAMP E-S AT ALL TIMES DURING CONSTRUCTION.
2. SEE THE ITS DETAILS SHEET FOR WOOD POLE WITH RVSD DETAIL.

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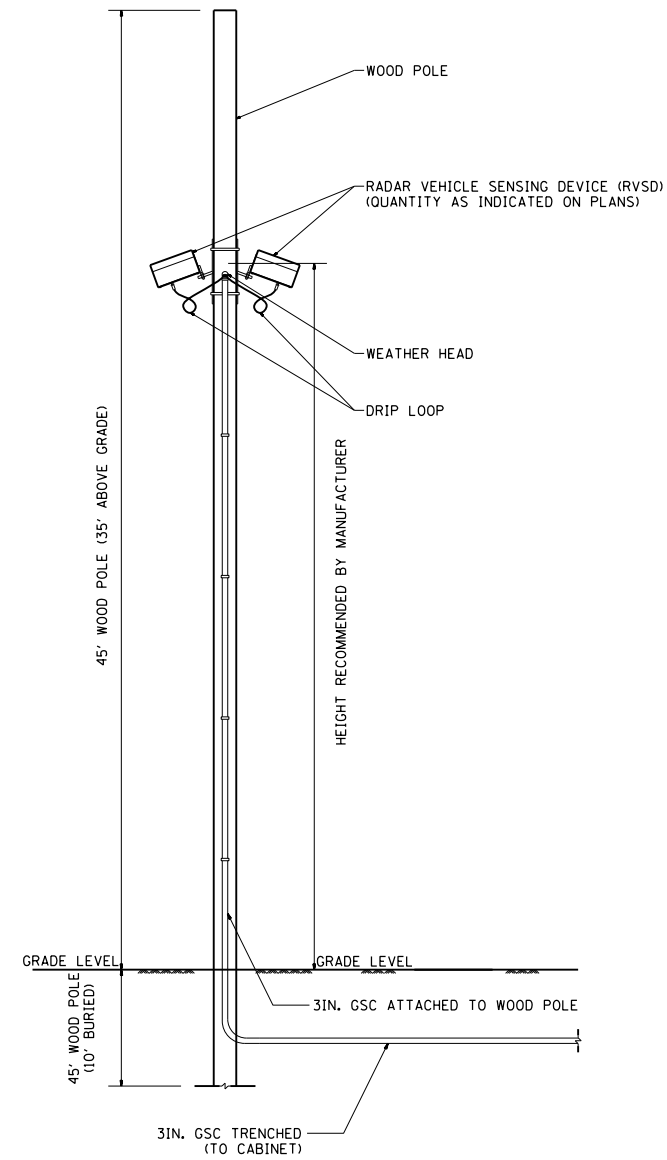
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DATE - 9/15/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**HALSTED STREET AND HARRISON STREET - ITS PLANS
 PROPOSED ITS**

SCALE: 1" = 30' SHEET 4 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	249
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



WOOD POLE WITH RVSD

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PLOT DATE = 8/15/2013	DATE - 8/20/13	REVISED -

DESIGNED - JML	REVISED -
DRAWN - JML	REVISED -
CHECKED - WDS	REVISED -
DATE - 8/20/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HALSTED STREET AND HARRISON STREET - ITS PLANS
ITS DETAILS**

SCALE: NO SCALE SHEET 5 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	250
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

Bench Mark: Cut square on southwest parapet wall over I-90 on west end, +2.5 A/G. Elevation 598.65.

Existing Structure: SN 016-1087 was originally built in 1960 as part of the F.A.I. Route No. 4 Project, Section 5-2626.2-1B. The existing structure is a four (4) span bridge with a reinf. concrete deck supported on concrete T-Beams (Span 1) and steel WF beams (Spans 2-4). The existing substructure consists of reinforced concrete abutments and multi column piers founded on sub-piers (reinforced concrete caissons). The existing structure has an overall length of 231'-4 1/2" and an out-to-out deck width of 68'-4". The existing structure is to be removed and replaced. Harrison Street traffic will be detoured via local roads during construction and bridge will be closed. Local access to Cermak Pump Station provided via existing structure (SN 016-1088).

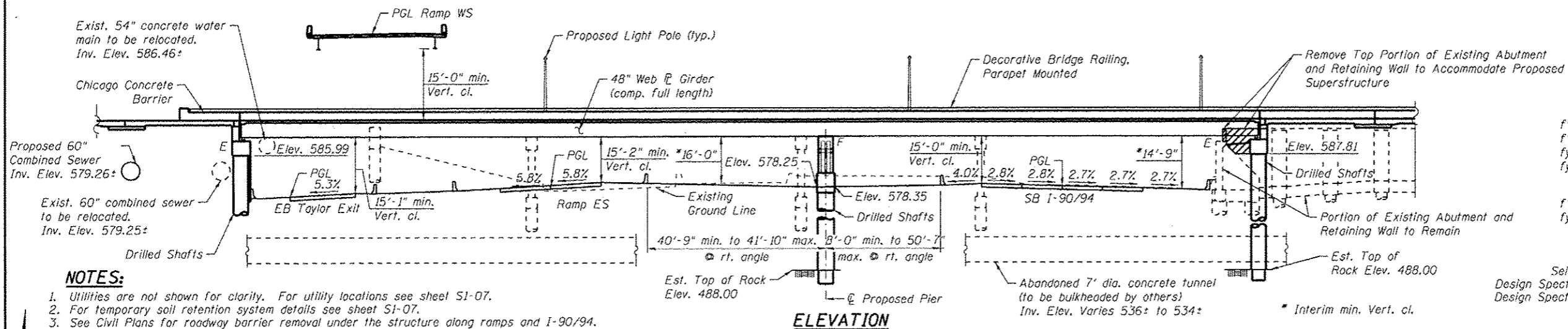
Salvage portion of existing East Abutment and North Retaining Wall.

APPROVED
For Structural Adequacy Only
D. Carl Loney, P.E.
Engineer of Bridges & Structures

DESIGN SPECIFICATIONS
2012 AASHTO LRFD Bridge Design Specifications,
6th Edition with 2013 Interim Revisions

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.



DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
f'c = 7,000 psi (West Abut.)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

EXISTING UNITS

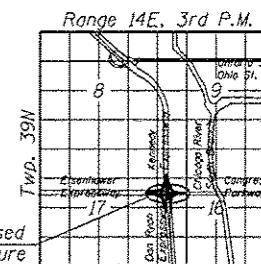
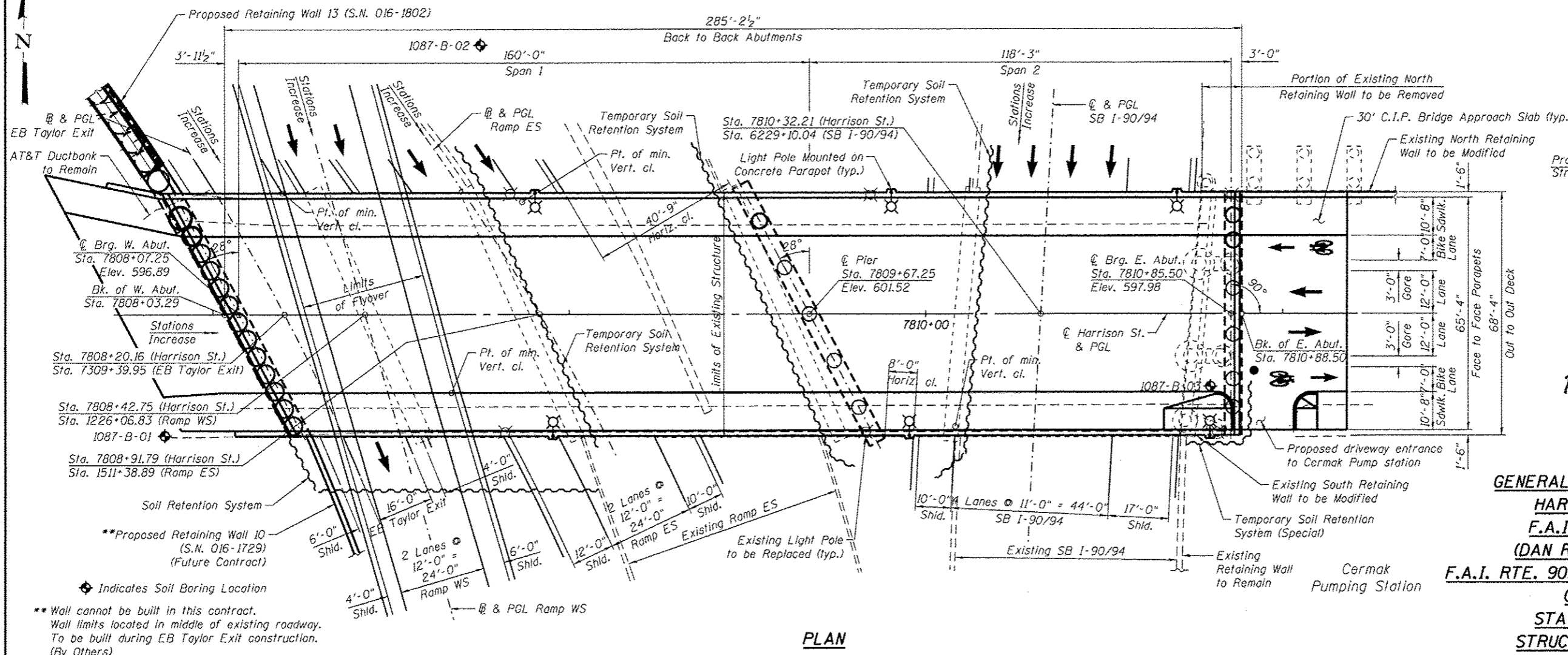
f'c = 3,000 psi
fy = 40,000 psi (Reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.085g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.144g
Soil Site Class = D

NOTES:

1. Utilities are not shown for clarity. For utility locations see sheet S1-07.
2. For temporary soil retention system details see sheet S1-07.
3. See Civil Plans for roadway barrier removal under the structure along ramps and I-90/94.



LOCATION SKETCH



Brad M. Radovich 8/19/2013

BRAD M. RADOVICH DATE
LICENSE EXPIRES 11/30/2014

GENERAL PLAN & ELEVATION

**HARRISON ST. OVER
F.A.I. RTE. SB 90/94
(DAN RYAN EXPRESSWAY)**

F.A.I. RTE. 90/94 - SECTION 2013-008R

COOK COUNTY

STATION 7810+32.21

STRUCTURE NO. 016-1713

0161713-60W26-S01-CPE



USER NAME: dunkerleyb	DESIGNED: EJO	REVISIONS:
PLOT SCALE: N.T.S.	CHECKED: ATB	REVISIONS:
PLOT DATE: 8/21/2013	DRAWN: MRK	REVISIONS:
	CHECKED: EJO	REVISIONS:

DESIGNED: EJO	REVISIONS:
CHECKED: ATB	REVISIONS:
DRAWN: MRK	REVISIONS:
CHECKED: EJO	REVISIONS:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016-1713

SHEET NO. S1-01 OF 51-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 251
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60W26

GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, hot-dipped galvanized bolts. Bolts $\frac{7}{8}$ " ϕ , holes $\frac{15}{16}$ " ϕ , unless otherwise noted. (see special provisions for hot-dipped galvanizing for structural steel)
- Calculated weight of structural steel
Grade 50 = 1,663,318 lbs.
Grade 36 = 0 lbs.
- All structural steel shall be hot dipped galvanized, cost included in Furnishing and Erecting Structural Steel pay item (see special provisions for hot-dipped galvanizing for structural steel).
- Expansion joint plates and attached bars shall be shop painted with inorganic zinc rich primer.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Existing plans are provided as part of this contract plan set for information only. See Existing As-Builts SN 016-1087 sheets.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- Concrete Sealer shall be applied to the designated areas of the abutments and pier.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Slipforming of the parapets is not allowed.
- For the Conduit Attached to Structure and Embedded in Structure quantities and details, see Civil and Electrical Plans.
- The Contractor shall exercise extreme caution during construction to make certain that construction activities, live load surcharge and other loads applied to the structures will not have detrimental effects on the adjacent building foundations.
- For drilled shaft locations where permanent casing is required as shown on the plans, the casing will be paid for under the Permanent Casing pay item. If contractor elects to use permanent casing for ease of construction in locations where permanent casing is not required on the plans the casing will not be paid for separately and is included in the Drilled Shaft in Soil pay item.
- Abandoned 7' dia. concrete tunnel to be bulkheaded by others in a separate contract. Drilled shaft construction shall not start until tunnel bulkheading is complete. Several drilled shaft foundations will be placed thru the tunnel. Drilling operations must account for the presence of debris, soil and other expected materials.

INDEX OF SHEETS

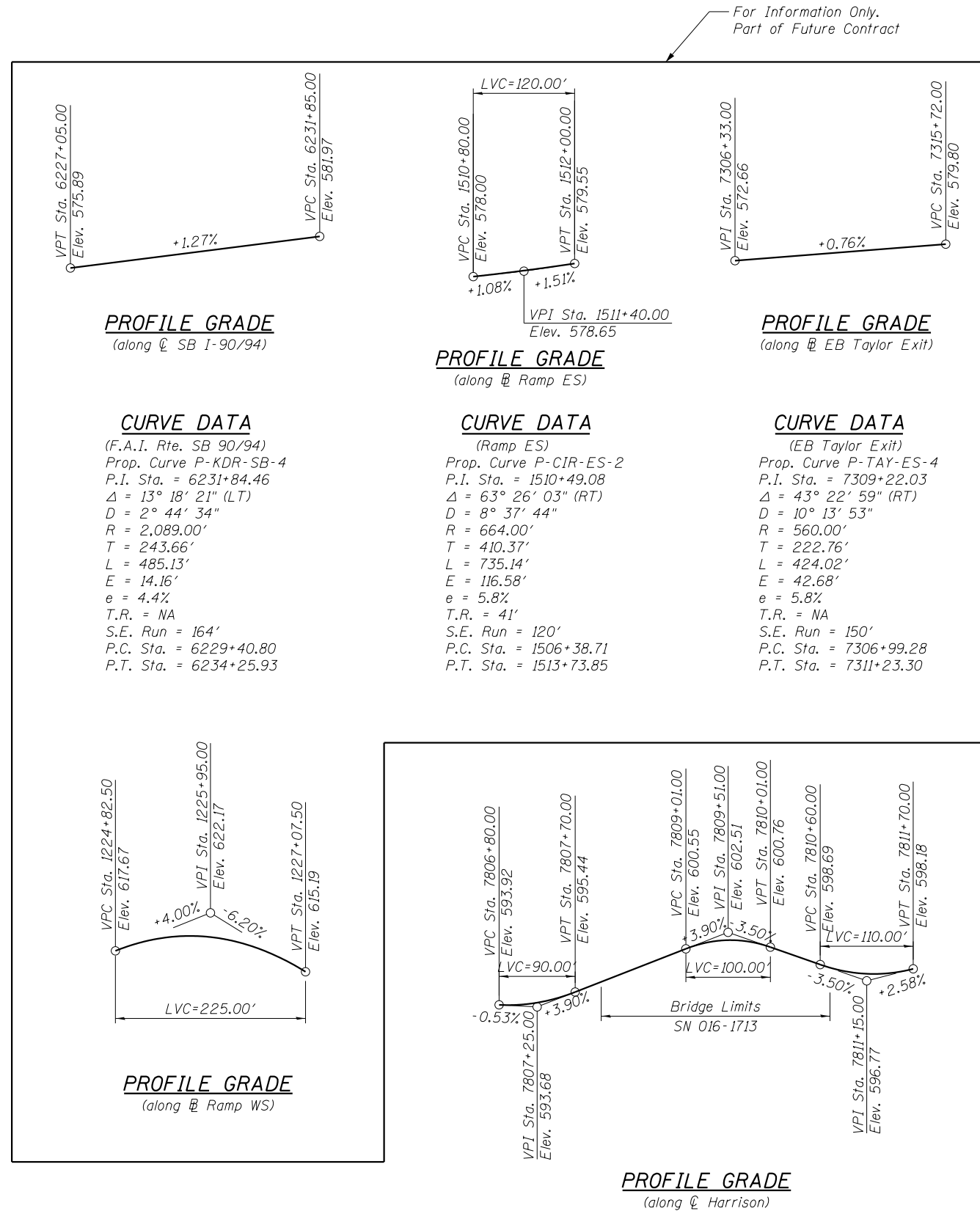
- S1-01 General Plan and Elevation
- S1-02 General Notes and Index of Sheets
- S1-03 Total Bill of Material and Abutment Sections
- S1-04 Existing Structural Removal (1 of 3)
- S1-05 Existing Structural Removal (2 of 3)
- S1-06 Existing Structural Removal (3 of 3)
- S1-07 Substructure Layout
- S1-08 Top of Slab Elevation Plan
- S1-09 Top of Slab Elevations - I
- S1-10 Top of Slab Elevations - II
- S1-11 Top of Slab Elevations - III
- S1-12 Top of Slab Elevations - IV
- S1-13 Top of Slab Elevations - V
- S1-14 Top of West Approach Slab Elevation
- S1-15 Top of East Approach Slab Elevation
- S1-16 Deck Plan I
- S1-17 Deck Plan II
- S1-18 Deck Cross Section
- S1-19 Parapet Elevations
- S1-20 Deck Details
- S1-21 Parapet and Decorative Railing Parapet Mounted Details
- S1-22 Deck Pouring Sequence
- S1-23 West Approach Slab Plan
- S1-24 West Approach Slab Details
- S1-25 East Approach Slab Plan
- S1-26 East Approach Slab Details
- S1-27 Expansion Joint Details
- S1-28 Girder Framing Plan
- S1-29 Girder Camber and Top of Web Elevations
- S1-30 Girder Bolted Field Splice Details
- S1-31 Girder Diaphragm Details and Moment Tables
- S1-32 Elastomeric Bearing Details
- S1-33 Fixed Bearing Details
- S1-34 West Abutment Plan and Elevation
- S1-35 West Abutment Section
- S1-36 West Abutment Details
- S1-37 West Abutment Architectural Details
- S1-38 East Abutment Plan and Elevation
- S1-39 East Abutment Section and Details
- S1-40 East Abutment Repair Details (1 of 2)
- S1-41 East Abutment Repair Details (2 of 2)
- S1-42 Pier Plan and Elevation
- S1-43 Pier Details
- S1-44 Pier Architectural Details
- S1-45 Bar Splicer Assembly
- S1-46 Boring Logs - I
- S1-47 Boring Logs - II
- S1-48 Boring Logs - III

AS-01 thru Existing As-Builts SN 016-1087
AS-62

STATION 7810+32.21
BUILT BY
STATE OF ILLINOIS
F.A.I. RTE. 90/94-SEC. 2013-008R
LOADING HL - 93
STRUCTURE NO. 016-1713

NAME PLATE
See Std. 515001

Locate Name Plate at the front face of Parapet at Southwest corner.



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED
PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND INDEX OF SHEETS
STRUCTURE NO. 016-1713

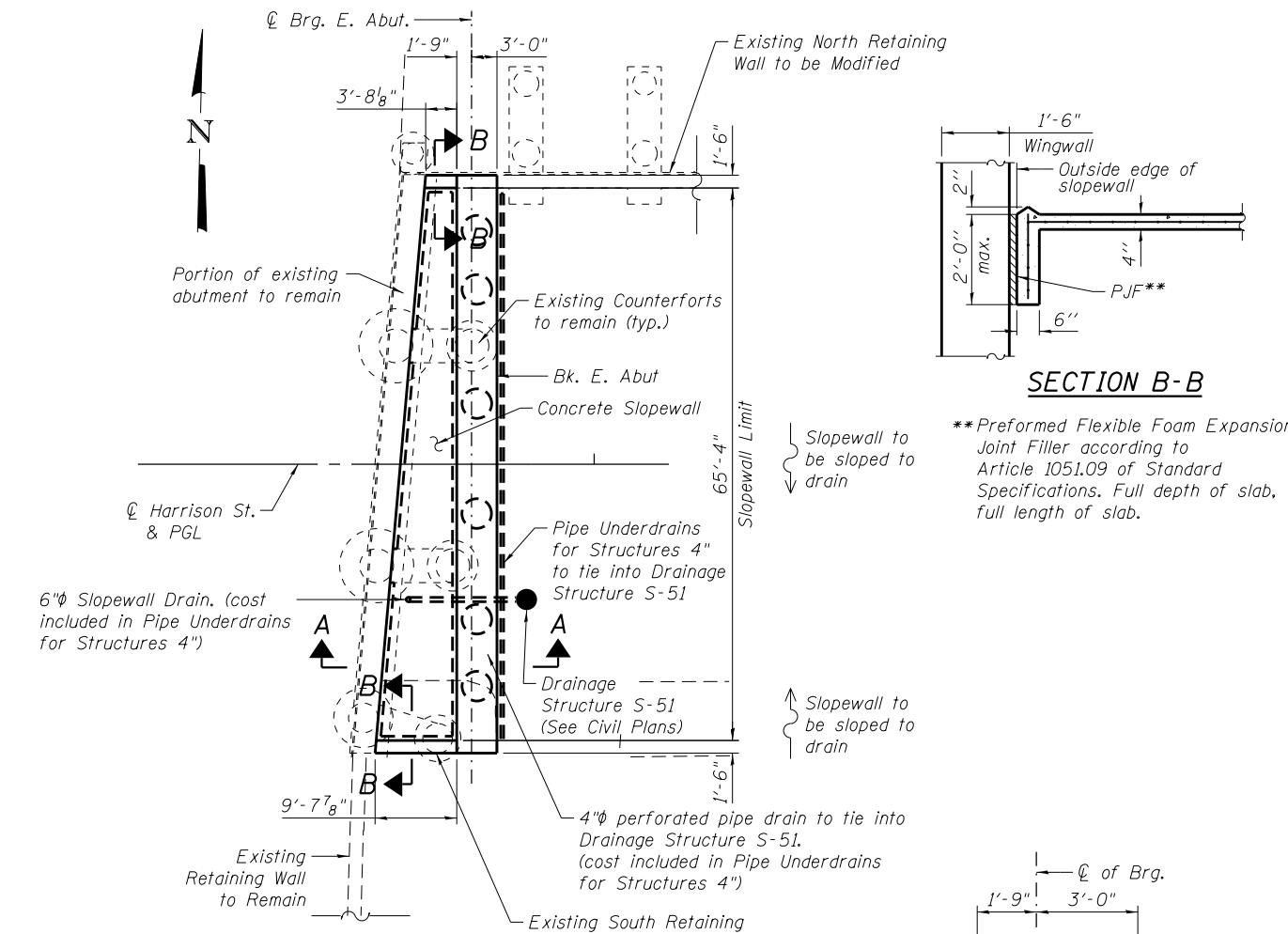
SHEET NO. S1-02 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 252
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

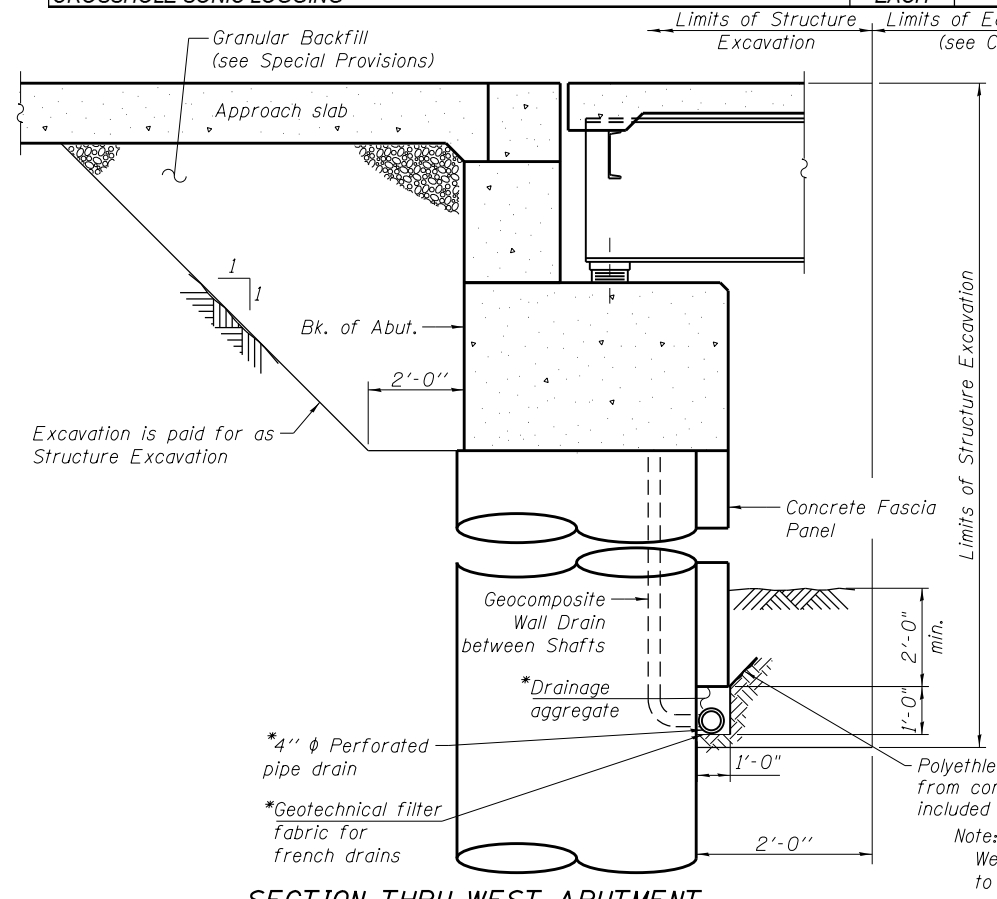
0161713-60W26-S02-GenNote

TOTAL BILL OF MATERIALS

DESCRIPTION	UNIT	S.N. 016-1713		TOTAL
		SUPER	SUB	
GRANULAR BACKFILL FOR STRUCTURES	CU. YD.		381	381
REMOVAL OF EXISTING STRUCTURES, NO. 1	EACH	1		1
PROTECTIVE SHIELD	SQ. YD.	1431		1431
STRUCTURE EXCAVATION	CU. YD.		1529	1529
CONCRETE STRUCTURES	CU. YD.		426	426
CONCRETE SUPERSTRUCTURE	CU. YD.	1076		1076
BRIDGE DECK GROOVING	SQ. YD.	1643		1643
FORM LINER TEXTURED SURFACE	SQ. FT.		1244	1244
PROTECTIVE COAT	SQ. YD.	3079		3079
FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	0.51		0.51
STUD SHEAR CONNECTORS	EACH	8622		8622
REINFORCEMENT BARS	POUND		614360	614360
REINFORCEMENT BARS, EPOXY COATED	POUND	194700	346430	541130
BAR SPLICERS	EACH	144		144
MECHANICAL SPLICERS	EACH		1368	1368
SLOPE WALL 4 INCH	SQ. YD.		50	50
NAME PLATES	EACH	1		1
PERMANENT CASING	FOOT		460	460
DRILLED SHAFT IN SOIL	CU. YD.		1403	1403
DRILLED SHAFT IN ROCK	CU. YD.		12	12
PREFORMED JOINT STRIP SEAL	FOOT	143		143
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24		24
ANCHOR BOLTS, 1 1/4"	EACH	48		48
ANCHOR BOLTS, 1 1/2"	EACH	24		24
CONCRETE SEALER	SQ. FT.		7472	7472
EPOXY CRACK INJECTION	FOOT		14	14
GEOCOMPOSITE WALL DRAIN	SQ. YD.		62	62
CHAIN LINK FENCE, 4'	FOOT		99	99
STRUCTURAL REPAIR OF CONCRETE (Depth equal or less than 5")	SQ. FT.		154	154
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT		182	182
CLASS SI CONCRETE MISCELLANEOUS	CU. YD.		41	41
DECORATIVE RAILING (PARAPET MOUNTED)	FOOT	620		620
SOIL RETENTION SYSTEM	SQ. FT.		2297	2297
TEMPORARY SOIL RETENTION SYSTEM	SQ. FT.		2525	2525
TEMPORARY SOIL RETENTION SYSTEM (SPECIAL)	SQ. FT.		303	303
CROSSHOLE SONIC LOGGING	EACH		3	3

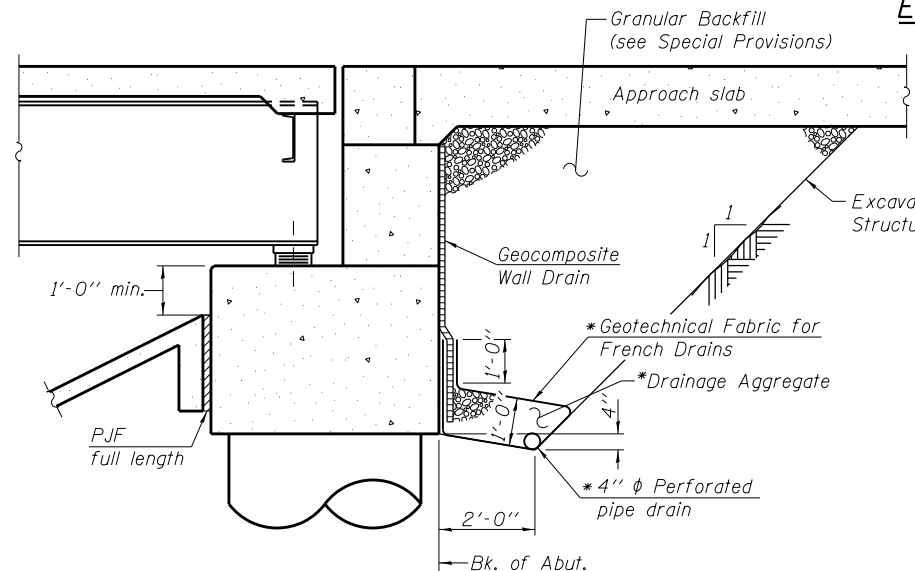


EAST ABUTMENT PLAN



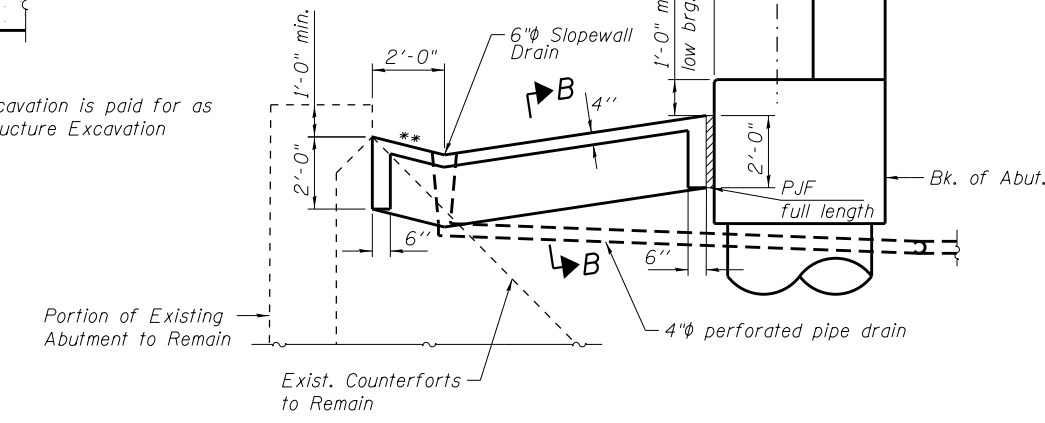
SECTION THRU WEST ABUTMENT

*Included in the cost of Pipe Underdrains for Structures 4".



SECTION THRU EAST ABUTMENT

Note:
West abutment drainage system components shall extend to the soil retention system to the south and tie into the retaining wall (SN 016-1802) underdrain to the north.
East abutment drainage system components shall extend the full width of the abutment and tie to drainage structure S-51.



SECTION A-A THRU CONCRETE SLOPEWALL EAST ABUTMENT

NOTES:

- Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft. Cost included in Slope Wall 4 Inch pay item.
 - Work this sheet with sheets S1-38 and S1-39.
- **1:4 (V:H)

0161713-60W26-S03-GenNote



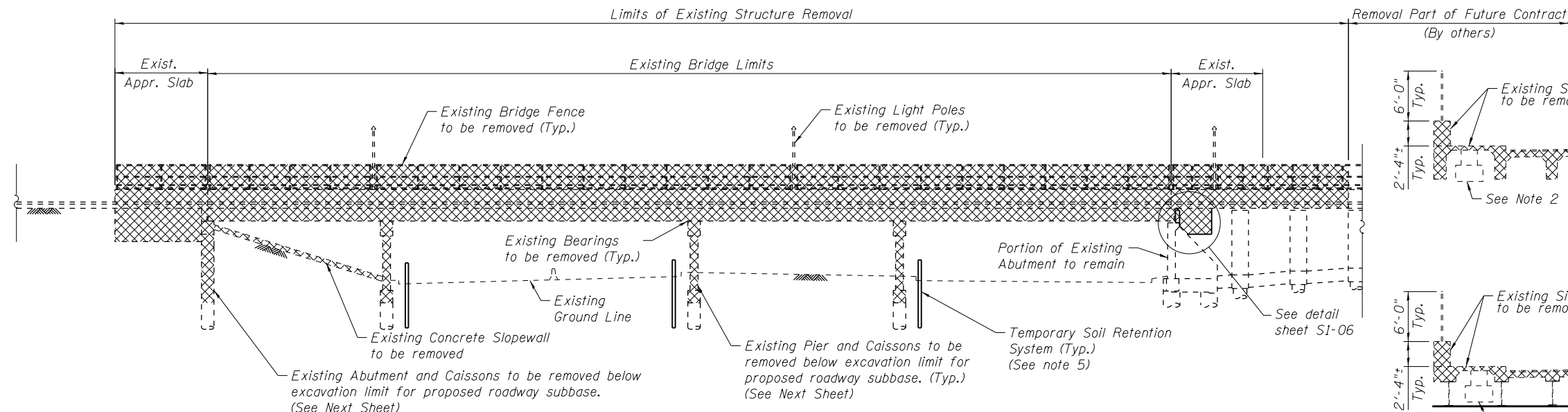
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PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

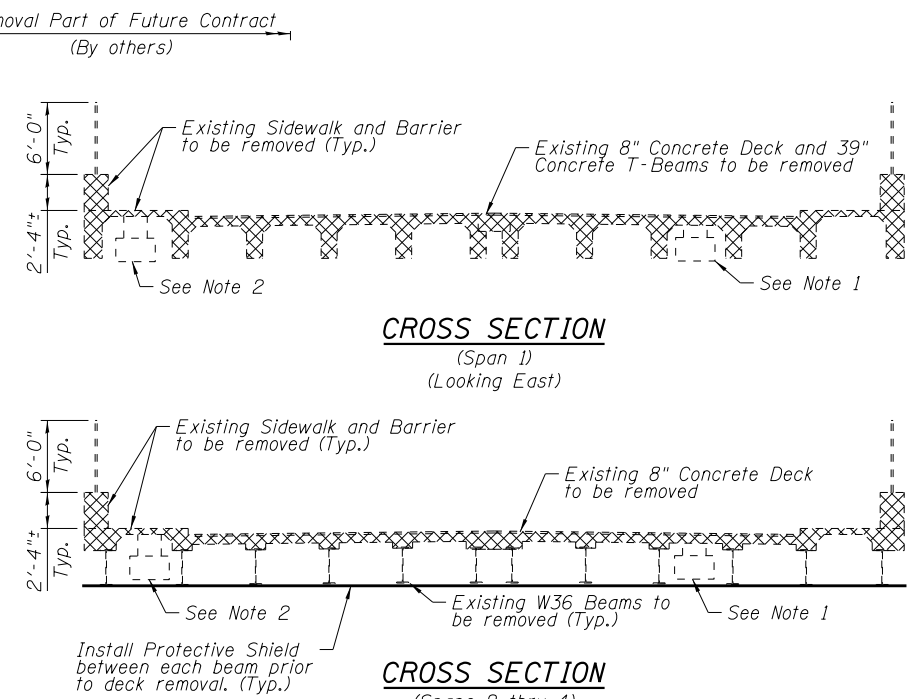
**TOTAL BILL OF MATERIAL AND ABUTMENT SECTIONS
STRUCTURE NO. 016-1713**

SHEET NO. S1-03 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 253
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



ELEVATION

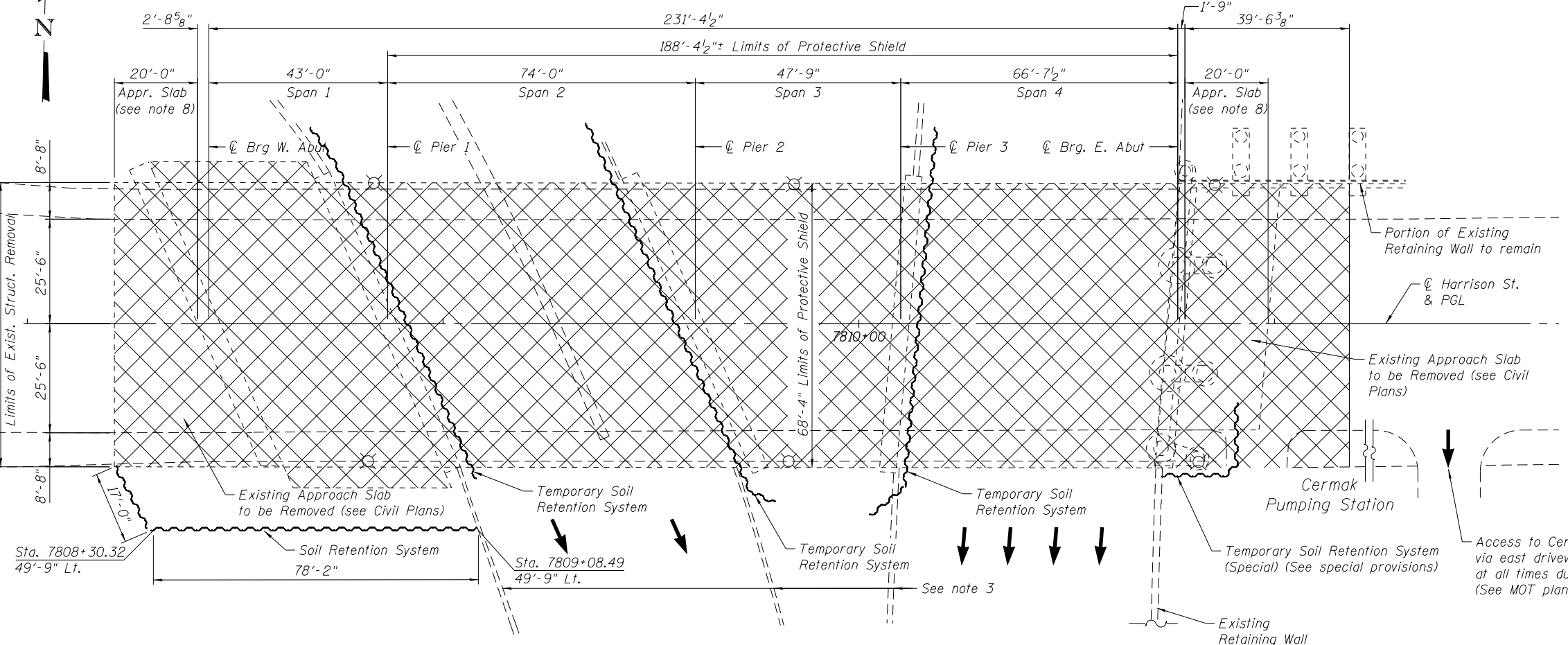


CROSS SECTION
(Span 1)
(Looking East)

CROSS SECTION
(Spans 2 thru 4)
(Looking East)

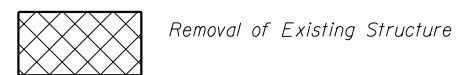
NOTES:

1. Existing Utility between girders to be relocated (By Others) prior to bridge demolition. Utility to be placed back on proposed bridge (By Others).
2. Existing Utility to be removed and replaced as part of this contract. (See Electrical Plans for details)
3. See Civil Plans for roadway barrier removal under the structure, along ramps and I-90/94.
4. Work this sheet with sheets S1-05 and S1-06.
5. For Temporary Soil Retention and Soil Retention System limits see sheet S1-07.
6. Reference sheets AS-1 thru AS-62 for existing bridge dimensions and details.
7. The Contractor shall take precautions to protect existing utilities and foundations during construction of the bridge. The utilities were located based on SUE and utility supplier information available at design.
8. The approach slab removal will be included in civil pay item "Pavement Removal", see Civil Plans for details.



PLAN

LEGEND:



0161713-60W26-S04-Removal



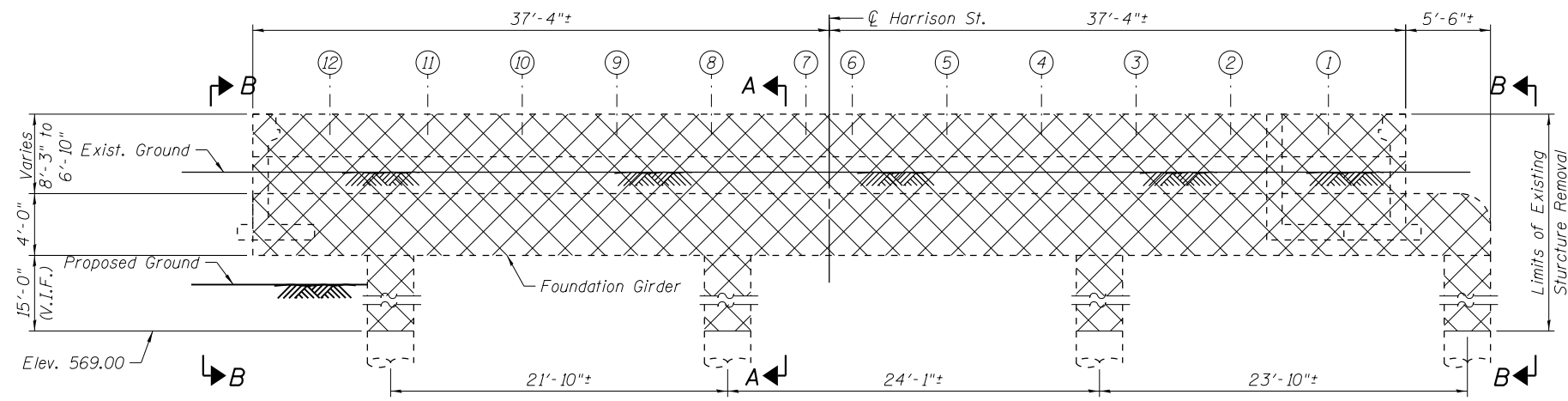
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	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - MRK	REVISED
PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

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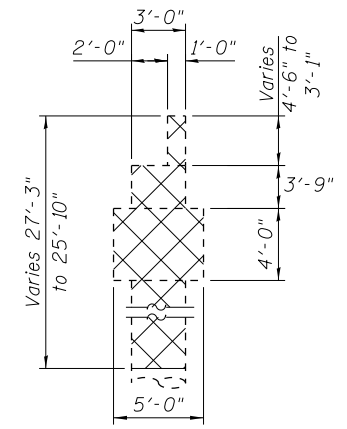
**EXISTING STRUCTURAL REMOVAL (1 OF 3)
STRUCTURE NO. 016-1713**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-00BR	COOK	559	254
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

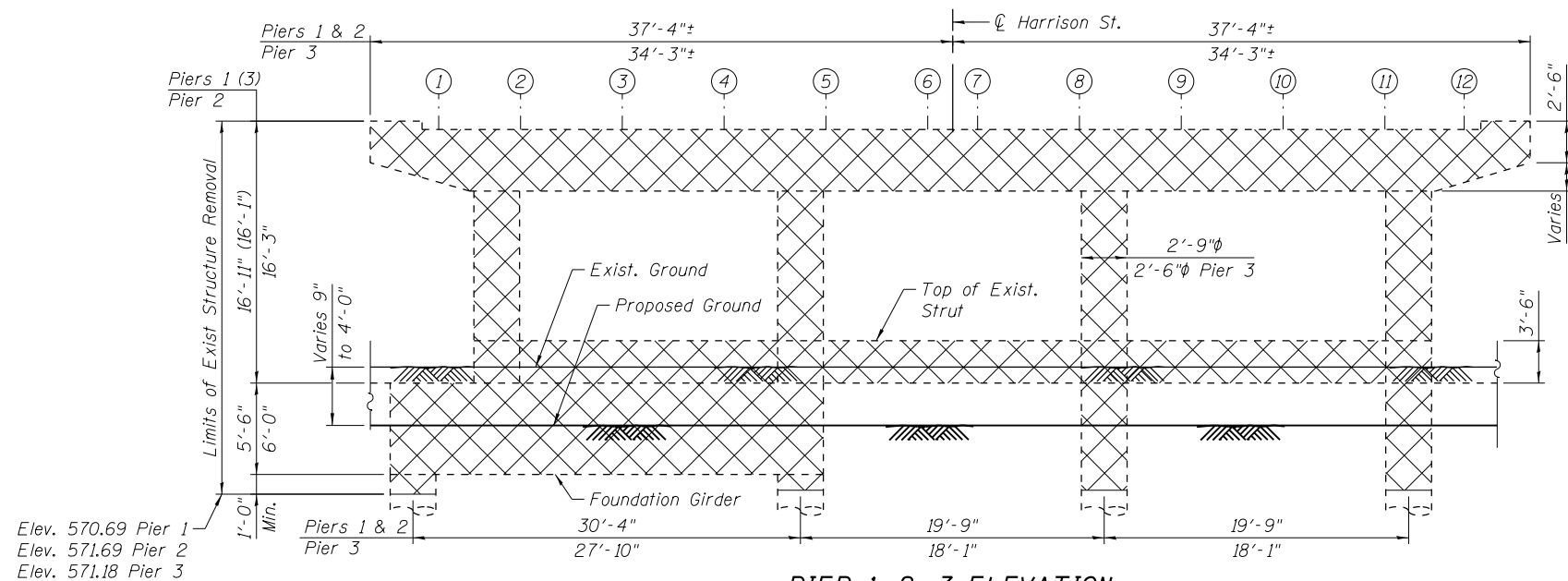
SHEET NO. S1-04 OF S1-48 SHEETS



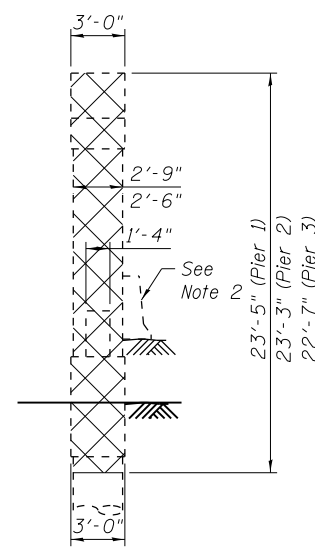
WEST ABUTMENT ELEVATION
(Looking West)



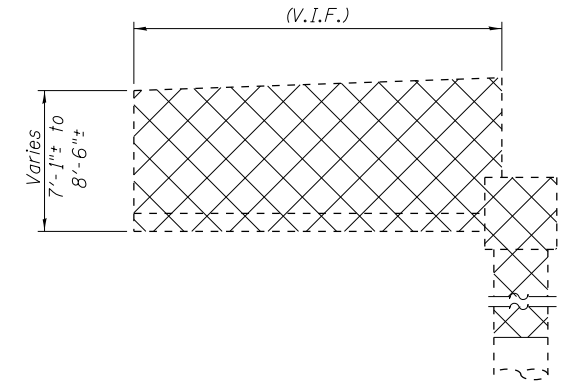
SECTION A-A



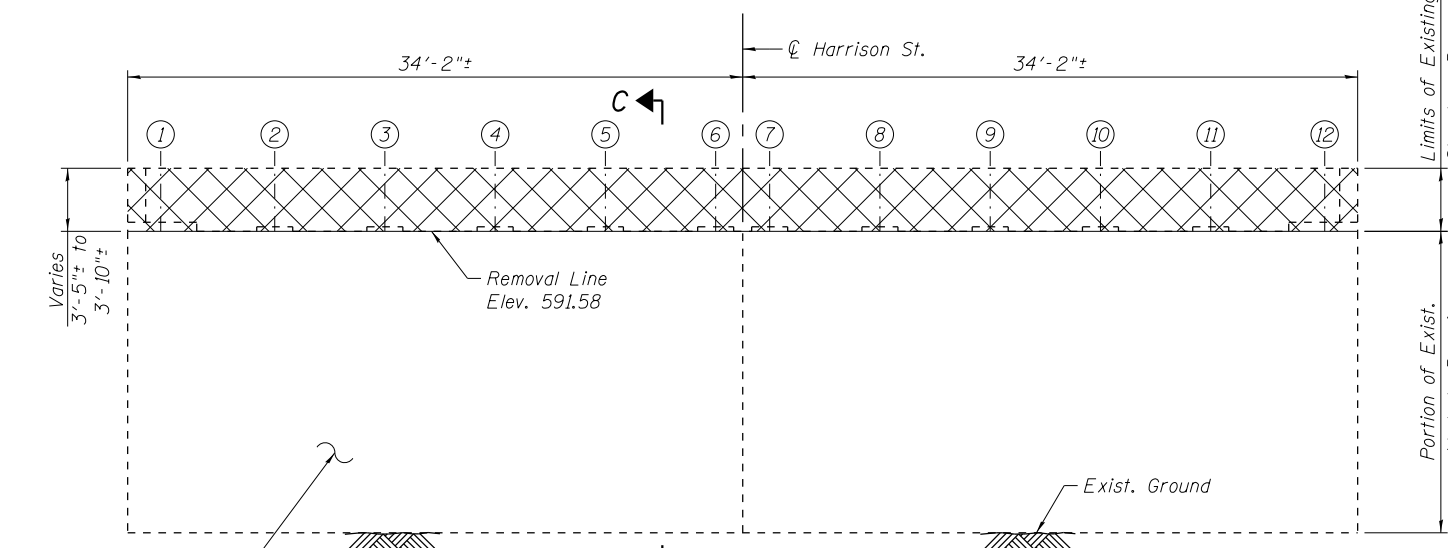
PIER 1, 2, 3 ELEVATION
(Looking East)



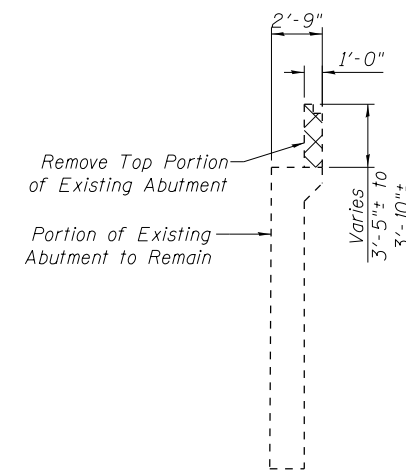
END VIEW



VIEW B-B



EAST ABUTMENT ELEVATION
(Looking East)



SECTION C-C

NOTES:

1. Work this sheet with sheets S1-04 and S1-06.
2. See Civil Plans for Existing Roadway Barrier Removal under structure, along ramps and I-90/94.
3. V.I.F. indicates Verify In Field.

LEGEND:

- Removal of Existing Structure
- Existing Girder Locations

0161713-60W26-S05-Removal



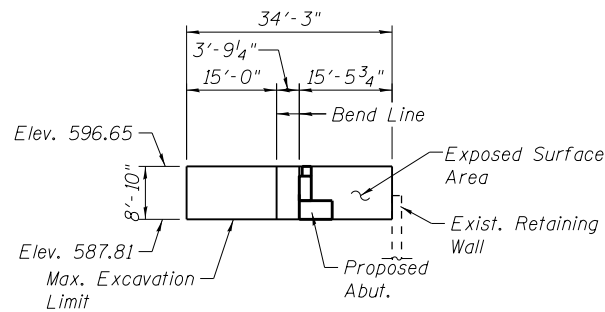
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PLOT DATE = 9/15/2013	DRAWN - MRK	REVISED
	CHECKED - EJO	REVISED

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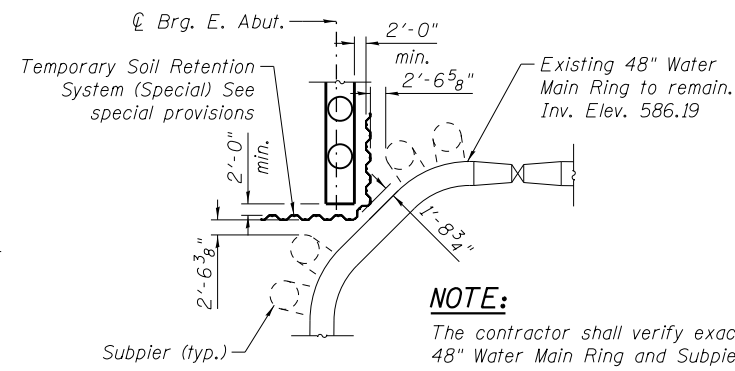
EXISTING STRUCTURAL REMOVAL (2 OF 3)
STRUCTURE NO. 016-1713

SHEET NO. S1-05 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 255
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

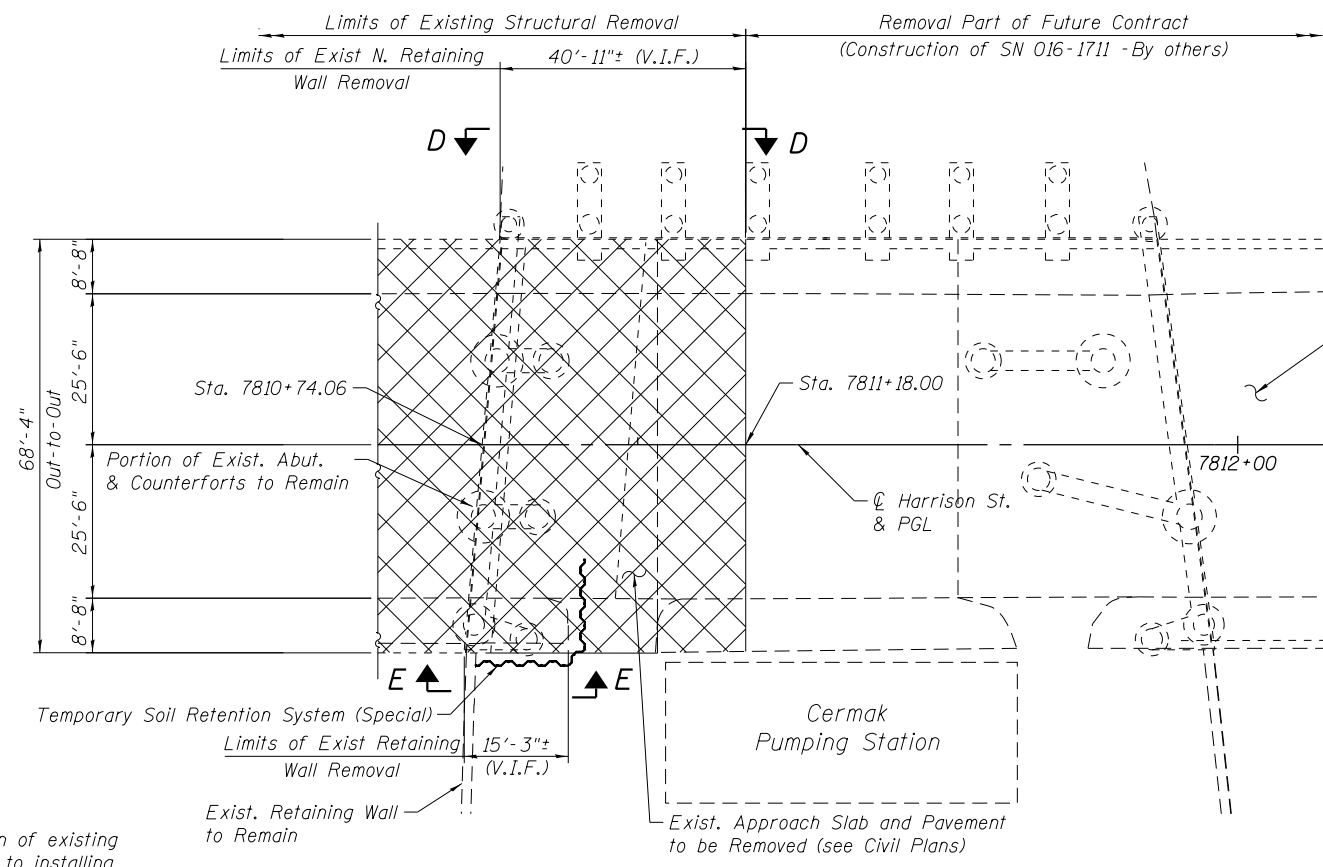


ELEVATION - TEMPORARY SOIL RETENTION SYSTEM (SPECIAL) AT EAST ABUTMENT
(Looking South)



PLAN - TEMPORARY SOIL RETENTION SYSTEM (SPECIAL) AT EAST ABUTMENT

NOTE:
The contractor shall verify exact location of existing 48" Water Main Ring and Subsiders prior to installing Temporary Soil Retention System (Special).



PLAN

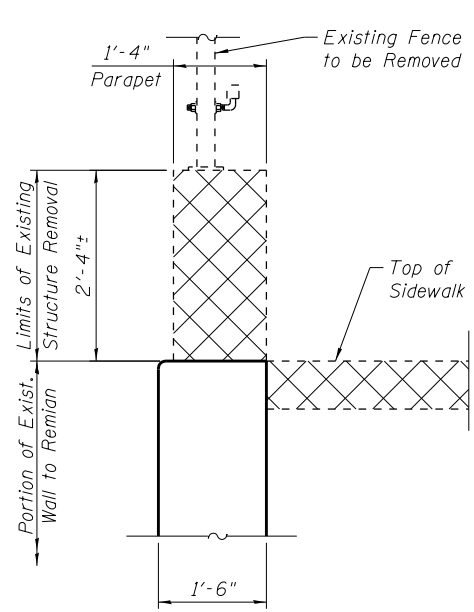
NOTES:

1. Work this sheet with sheets S1-04 and S1-05.
2. V.I.F. indicates Verify in Field.
3. A cantilever sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system (special) design including plan details and calculations for review and acceptance by the Engineer.

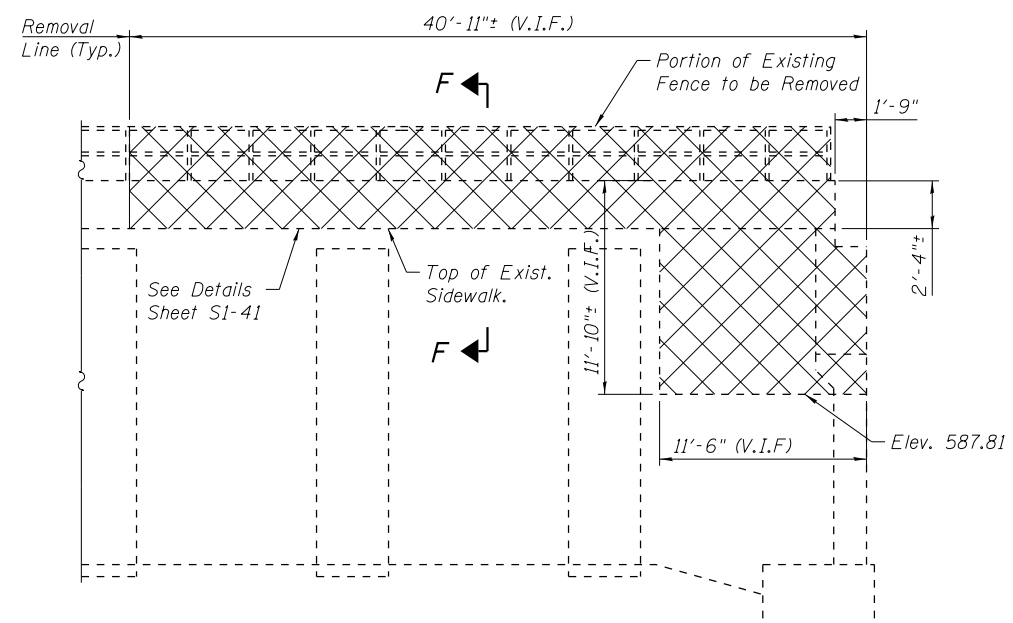
BILL OF MATERIAL

Item	Unit	Total
Removal of Existing Structures, No. 1	Each	1
Protective Shield	Sq. Yd.	1431
Temporary Soil Retention System (Special)	Sq. Ft.	303

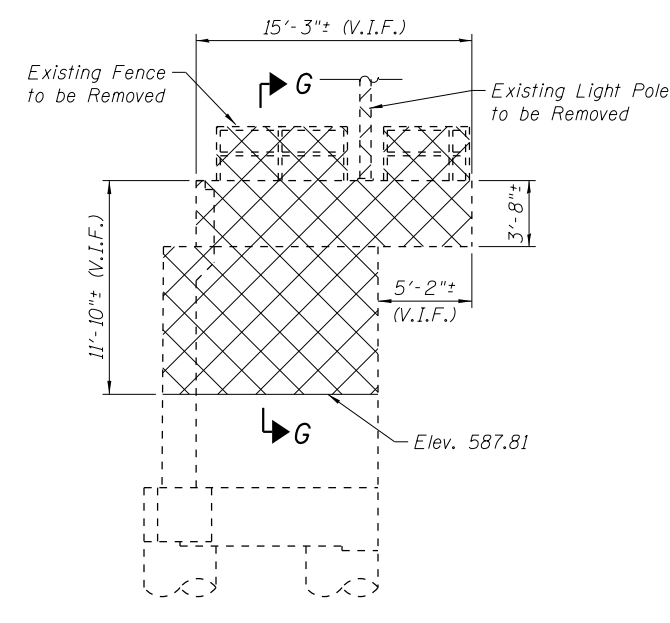
LEGEND:



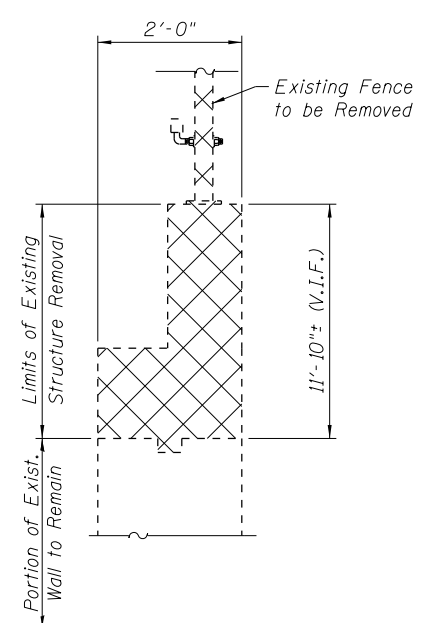
SECTION F-F



SECTION D-D



SECTION E-E



SECTION G-G

0161713-60W26-S06-Removal



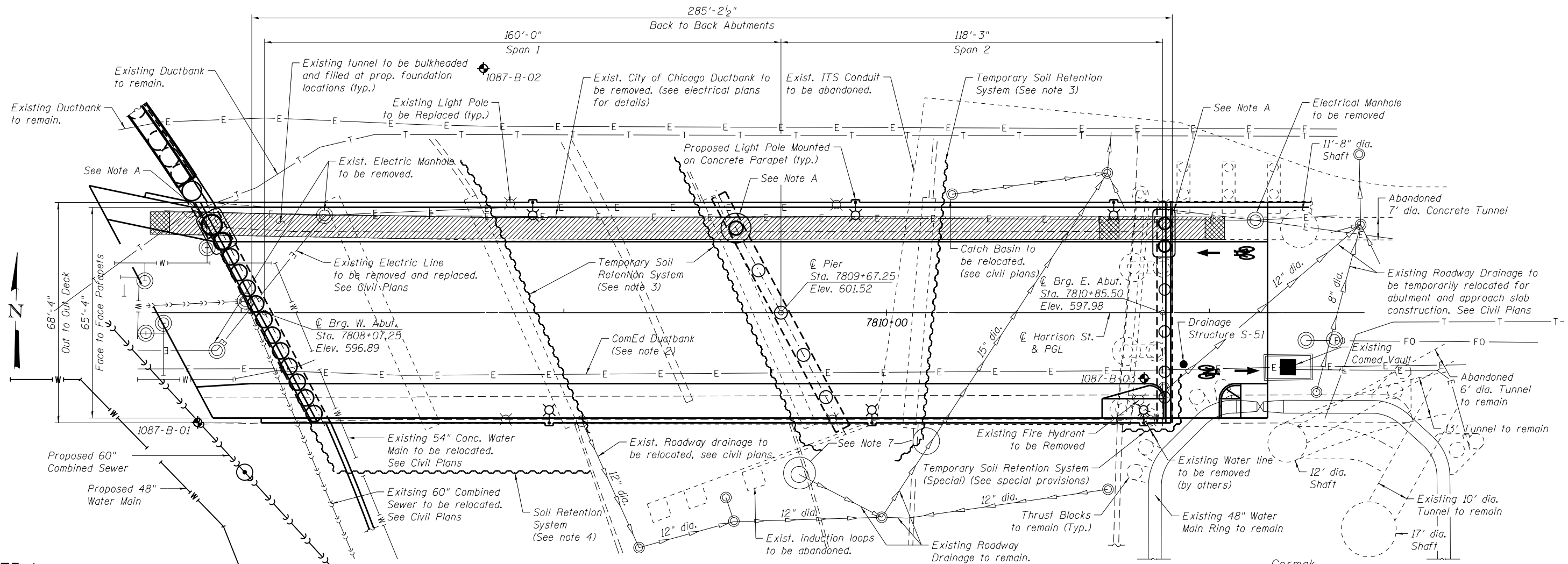
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PLOT DATE = 9/15/2013	DRAWN - MRK	REVISED
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING STRUCTURAL REMOVAL (3 OF 3)
STRUCTURE NO. 016-1713**

SHEET NO. S1-06 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 256
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

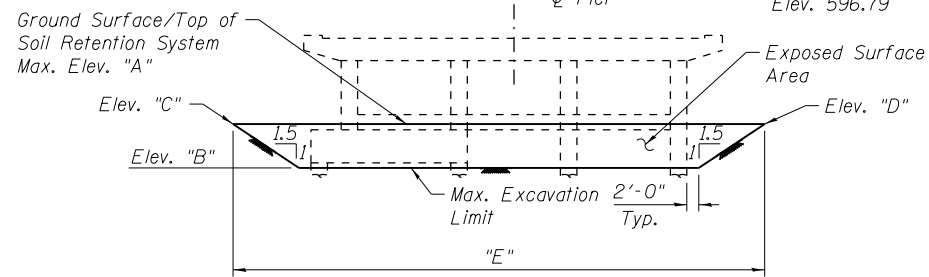


NOTE A:

The Drilled Shafts to be installed thru Existing Abandoned Tunnel require Permanent Casing. (see substructure sheets for details). (Drilling thru tunnel included in pay item Drilled Shaft In Soil. See Note 8.)

LEGEND:

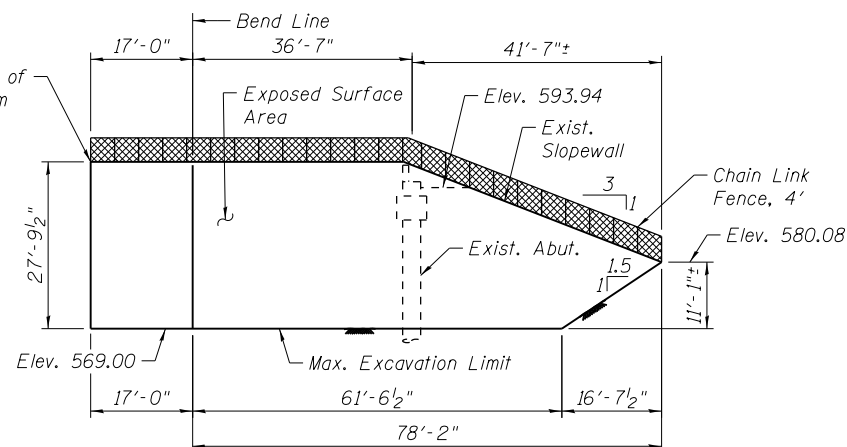
- Combined Sewer
- Electric
- Fiber Optic
- Telephone
- Storm Sewer
- Water Line
- Fire Hydrant
- Light Pole
- Soil Boring
- Bulkhead (Part of advanced contract - By Others)
- Area filled with Grout (Part of advanced contract - By Others)



ELEVATION - TEMPORARY SOIL RETENTION SYSTEM AT EXISTING PIERS
(Looking West)
(See Note 5)

Location	Elev. "A"	Elev. "B"	Elev. "C"	Elev. "D"	Length "E"
Pier 1	577.33	570.69	577.17	577.33	96'-6"
Pier 2	581.46	571.69	580.96	581.46	105'-5"
Pier 3	580.29	571.18	577.88	579.94	93'-9"

SUBSTRUCTURE LAYOUT PLAN



ELEVATION - SOIL RETENTION SYSTEM AT WEST ABUTMENT
(Looking North)
(See Note 5)

BILL OF MATERIAL

Item	Unit	Total
Temporary Soil Retention System	Sq. Ft.	2525
Soil Retention System	Sq. Ft.	2297
Chain Link Fence, 4'	Foot	99

NOTES:

- Bulkhead and area to be filled with grout shall be complete prior to construction of SN 016-1713 as part of advanced contract (By Others).
- Existing Utility between girders to be relocated (By Others) prior to bridge demolition. Utility to be placed back on proposed bridge (By Others).
- Temporary Soil Retention System required for existing pier removal. See sheets S1-04 thru S1-06.
- Soil Retention System to be left in place. Required for proposed abutment construction. To be removed in future contract (By Others).
- A cantilever sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system and soil retention system design including plan details and calculations for review and acceptance by the Engineer.
- The Contractor shall take precautions to protect existing utilities and foundations during construction of the bridge. The utilities were located based on SUE and utility supplier information available at design.
- Temporary soil retention system to avoid existing roadway drainage.
- Contractor shall provide equipment, labor, and materials as required to install drilled shafts thru existing abandoned tunnel at locations shown. The costs incurred by installation thru tunnel shall not be measured separately but shall be included in the respective Drilled Shaft pay item.



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	CHECKED - EJO	REVISED

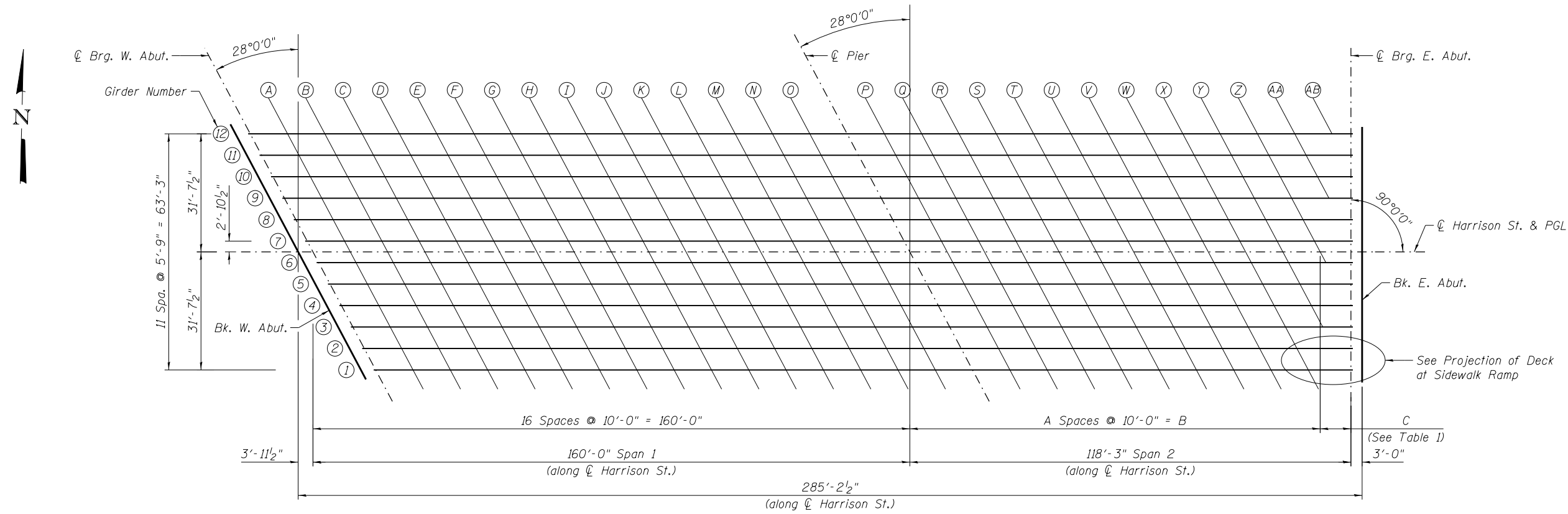
STATE OF ILLINOIS
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SUBSTRUCTURE LAYOUT
STRUCTURE NO. 016-1713

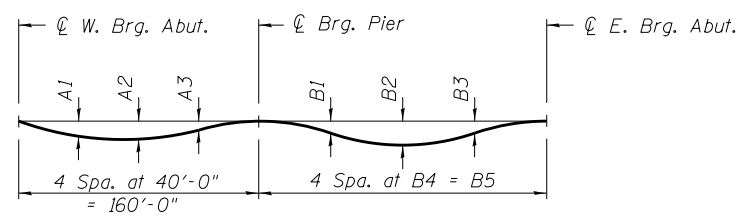
SHEET NO. S1-07 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 257
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

0161713-60W26-S07-SubSTRUCT

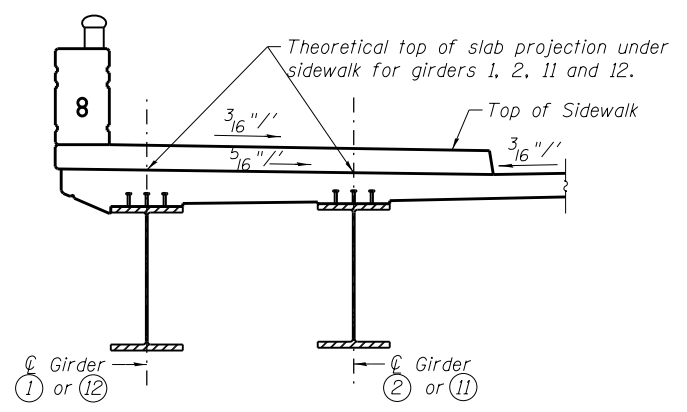


PLAN

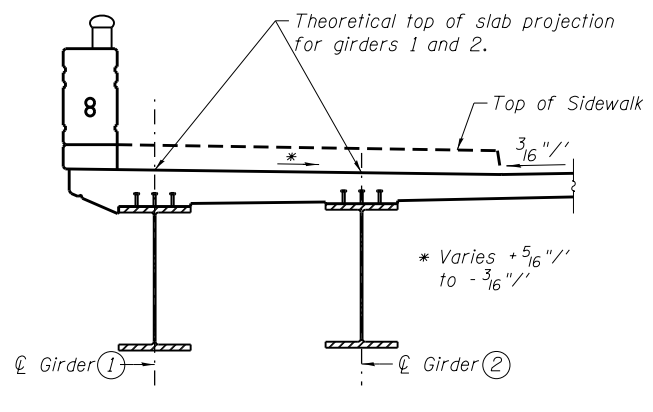


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete deck, sidewalk, parapet and railing)
 Note:
 The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets S1-09 thru S1-13 of S1-48.



PROJECTION UNDER SIDEWALK
(Typ. both sides)

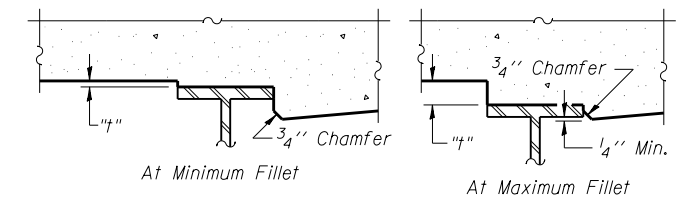


PROJECTION OF DECK AT SIDEWALK RAMP
(Southeast Corner)

TABLE 1

Girder	A	B	C
12	13	130'-0"	5'-0 ¹³ / ₁₆ "
11	12	120'-0"	12'-0 ⁸ / ₁₆ "
10	12	120'-0"	8'-11 ¹ / ₁₆ "
9	12	120'-0"	5'-10 ³ / ₄ "
8	11	110'-0"	12'-10 ¹ / ₁₆ "
7	11	110'-0"	9'-9 ³ / ₈ "
6	11	110'-0"	6'-8 ⁵ / ₈ "
5	10	100'-0"	13'-7 ⁵ / ₁₆ "
4	10	100'-0"	10'-7 ¹ / ₄ "
3	10	100'-0"	7'-6 ⁹ / ₁₆ "
2	9	90'-0"	14'-5 ⁷ / ₈ "
1	9	90'-0"	11'-5 ³ / ₁₆ "

Girder Number	DEAD LOAD DEFLECTIONS								
	Span 1			Span 2					
	A1	A2	A3	B1	B2	B3	B4	B5	
12	2 3/4"	3 3/8"	1 3/4"	1/8"	7/8"	7/8"	33'-9 3/16"	135'-0 13/16"	
11	2 3/4"	3 3/8"	1 3/4"	1/8"	3/4"	3/4"	33'-0"	132'-0 1/8"	
10	2 7/8"	3 1/2"	1 7/8"	0"	5/8"	5/8"	32'-2 7/8"	128'-11 7/16"	
9	2 7/8"	3 1/2"	1 7/8"	0"	1/2"	1/2"	31'-5 11/16"	125'-10 3/4"	
8	2 7/8"	3 5/8"	1 7/8"	-1/8"	3/8"	3/8"	30'-8 1/2"	122'-10 1/16"	
7	2 7/8"	3 5/8"	2"	-1/8"	1/4"	3/8"	29'-11 5/16"	119'-9 3/8"	
6	3"	3 3/4"	2"	-1/4"	1/8"	1/4"	29'-2 1/8"	116'-8 5/8"	
5	3"	3 3/4"	2"	-1/4"	0"	1/8"	28'-5"	113'-7 15/16"	
4	3"	3 3/4"	2 1/8"	-1/4"	0"	1/8"	27'-7 13/16"	110'-7 1/4"	
3	3 1/8"	3 7/8"	2 1/8"	-1/4"	-1/8"	0"	26'-10 5/8"	107'-6 9/16"	
2	3"	3 7/8"	2 1/8"	-3/8"	-1/8"	0"	26'-1 7/16"	104'-5 7/8"	
1	3"	3 3/4"	2 1/8"	-3/8"	-1/4"	0"	25'-4 5/16"	101'-5 3/16"	



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets S1-09 thru S1-13 of S1-48, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

0161713-60W26-S08-TopSlab



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATION PLAN
STRUCTURE NO. 016-1713**

SHEET NO. S1-08 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 258
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7808+20.12	31.625	597.28	597.28
⊕ Brg. W. Abut.	7808+24.07	31.625	597.44	597.44
A	7808+34.07	31.625	597.83	597.90
B	7808+44.07	31.625	598.22	598.36
C	7808+54.07	31.625	598.61	598.81
D	7808+64.07	31.625	599.00	599.25
E	7808+74.07	31.625	599.39	599.68
F	7808+84.07	31.625	599.78	600.09
G	7808+94.07	31.625	600.17	600.49
H	7809+04.07	31.625	600.56	600.87
I	7809+14.07	31.625	600.89	601.18
J	7809+24.07	31.625	601.15	601.41
K	7809+34.07	31.625	601.33	601.55
L	7809+44.07	31.625	601.44	601.61
M	7809+54.07	31.625	601.48	601.60
N	7809+64.07	31.625	601.44	601.51
O	7809+74.07	31.625	601.32	601.35
⊕ Pier	7809+84.07	31.625	601.14	601.14
P	7809+94.07	31.625	600.87	600.85
Q	7810+04.07	31.625	600.54	600.51
R	7810+14.07	31.625	600.19	600.16
S	7810+24.07	31.625	599.84	599.81
T	7810+34.07	31.625	599.49	599.47
U	7810+44.07	31.625	599.14	599.13
V	7810+54.07	31.625	598.79	598.78
W	7810+64.07	31.625	598.44	598.43
X*	7810+74.07	31.625	598.01	598.01
⊕ Brg. E. Abut.*	7810+85.50	31.625	597.50	597.50
Bk. E. Abut.*	7810+88.50	31.625	597.43	597.43

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7808+17.06	25.875	597.03	597.03
⊕ Brg. W. Abut.	7808+21.01	25.875	597.18	597.18
A	7808+31.01	25.875	597.57	597.64
B	7808+41.01	25.875	597.96	598.10
C	7808+51.01	25.875	598.35	598.55
D	7808+61.01	25.875	598.74	598.99
E	7808+71.01	25.875	599.13	599.42
F	7808+81.01	25.875	599.52	599.84
G	7808+91.01	25.875	599.91	600.23
H	7809+01.01	25.875	600.30	600.62
I	7809+11.01	25.875	600.66	600.96
J	7809+21.01	25.875	600.94	601.21
K	7809+31.01	25.875	601.14	601.36
L	7809+41.01	25.875	601.27	601.45
M	7809+51.01	25.875	601.33	601.45
N	7809+61.01	25.875	601.32	601.40
O	7809+71.01	25.875	601.23	601.26
⊕ Pier	7809+81.01	25.875	601.06	601.06
P	7809+91.01	25.875	600.82	600.80
Q	7810+01.01	25.875	600.51	600.48
R	7810+11.01	25.875	600.16	600.13
S	7810+21.01	25.875	599.81	599.79
T	7810+31.01	25.875	599.46	599.44
U	7810+41.01	25.875	599.11	599.10
V	7810+51.01	25.875	598.76	598.76
W	7810+61.01	25.875	598.41	598.41
X*	7810+71.01	25.875	598.06	598.06
⊕ Brg. E. Abut.*	7810+85.50	25.875	597.58	597.58
Bk. E. Abut.*	7810+88.50	25.875	597.52	597.52

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7808+14.	20.125	596.84	596.84
⊕ Brg. W. Abut.	7808+17.95	20.125	597.00	597.00
A	7808+27.95	20.125	597.39	597.46
B	7808+37.95	20.125	597.78	597.92
C	7808+47.95	20.125	598.17	598.37
D	7808+57.95	20.125	598.56	598.81
E	7808+67.95	20.125	598.95	599.24
F	7808+77.95	20.125	599.34	599.65
G	7808+87.95	20.125	599.73	600.05
H	7808+97.95	20.125	600.12	600.44
I	7809+07.95	20.125	600.49	600.78
J	7809+17.95	20.125	600.80	601.06
K	7809+27.95	20.125	601.03	601.25
L	7809+37.95	20.125	601.18	601.35
M	7809+47.95	20.125	601.26	601.38
N	7809+57.95	20.125	601.27	601.34
O	7809+67.95	20.125	601.20	601.23
⊕ Pier	7809+77.95	20.125	601.06	601.06
P	7809+87.95	20.125	600.84	600.82
Q	7809+97.95	20.125	600.55	600.52
R	7810+07.95	20.125	600.20	600.18
S	7810+17.95	20.125	599.85	599.83
T	7810+27.95	20.125	599.50	599.49
U	7810+37.95	20.125	599.15	599.15
V	7810+47.95	20.125	598.80	598.80
W	7810+57.95	20.125	598.45	598.46
X	7810+67.95	20.125	598.12	598.12
Y	7810+77.95	20.125	597.84	597.84
⊕ Brg. E. Abut.	7810+85.50	20.125	597.67	597.67
Bk. E. Abut.	7810+88.50	20.125	597.61	597.61

*Adjusted for sidewalk ramp slopes.

0161713-60W26-S09-TopSlab



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED
PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - I
STRUCTURE NO. 016-1713

SHEET NO. S1-09 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	259
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7808+10.94	14.375	596.81	596.81
⊕ Brg. W. Abut.	7808+14.89	14.375	596.97	596.97
A	7808+24.89	14.375	597.36	597.43
B	7808+34.89	14.375	597.75	597.89
C	7808+44.89	14.375	598.14	598.34
D	7808+54.89	14.375	598.53	598.78
E	7808+64.89	14.375	598.92	599.21
F	7808+74.89	14.375	599.31	599.62
G	7808+84.89	14.375	599.70	600.02
H	7808+94.89	14.375	600.09	600.41
I	7809+04.89	14.375	600.48	600.77
J	7809+14.89	14.375	600.80	601.06
K	7809+24.89	14.375	601.05	601.27
L	7809+34.89	14.375	601.23	601.40
M	7809+44.89	14.375	601.34	601.46
N	7809+54.89	14.375	601.37	601.44
O	7809+64.89	14.375	601.32	601.35
⊕ Pier	7809+74.89	14.375	601.20	601.20
P	7809+84.89	14.375	601.01	600.99
Q	7809+94.89	14.375	600.74	600.71
R	7810+04.89	14.375	600.40	600.38
S	7810+14.89	14.375	600.05	600.03
T	7810+24.89	14.375	599.70	599.69
U	7810+34.89	14.375	599.35	599.35
V	7810+44.89	14.375	599.00	599.01
W	7810+54.89	14.375	598.65	598.66
X	7810+64.89	14.375	598.31	598.31
Y	7810+74.89	14.375	598.01	598.01
⊕ Brg. E. Abut.	7810+85.50	14.375	597.76	597.76
Bk. E. Abut.	7810+88.50	14.375	597.70	597.70

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7808+07.89	8.625	596.78	596.78
⊕ Brg. W. Abut.	7808+11.84	8.625	596.94	596.94
A	7808+21.84	8.625	597.33	597.40
B	7808+31.84	8.625	597.72	597.86
C	7808+41.84	8.625	598.11	598.31
D	7808+51.84	8.625	598.50	598.75
E	7808+61.84	8.625	598.89	599.18
F	7808+71.84	8.625	599.28	599.59
G	7808+81.84	8.625	599.67	599.99
H	7808+91.84	8.625	600.06	600.37
I	7809+01.84	8.625	600.45	600.74
J	7809+11.84	8.625	600.80	601.06
K	7809+21.84	8.625	601.08	601.29
L	7809+31.84	8.625	601.28	601.45
M	7809+41.84	8.625	601.40	601.52
N	7809+51.84	8.625	601.45	601.52
O	7809+61.84	8.625	601.43	601.46
⊕ Pier	7809+71.84	8.625	601.34	601.34
P	7809+81.84	8.625	601.16	601.14
Q	7809+91.84	8.625	600.92	600.89
R	7810+01.84	8.625	600.60	600.58
S	7810+11.84	8.625	600.25	600.23
T	7810+21.84	8.625	599.90	599.89
U	7810+31.84	8.625	599.55	599.55
V	7810+41.84	8.625	599.20	599.21
W	7810+51.84	8.625	598.85	598.86
X	7810+61.84	8.625	598.50	598.51
Y	7810+71.84	8.625	598.19	598.20
⊕ Brg. E. Abut.	7810+85.50	8.625	597.85	597.85
Bk. E. Abut.	7810+88.50	8.625	597.79	597.79

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7808+04.83	2.875	596.76	596.76
⊕ Brg. W. Abut.	7808+08.78	2.875	596.91	596.91
A	7808+18.78	2.875	597.30	597.37
B	7808+28.78	2.875	597.69	597.83
C	7808+38.78	2.875	598.08	598.28
D	7808+48.78	2.875	598.47	598.72
E	7808+58.78	2.875	598.86	599.14
F	7808+68.78	2.875	599.25	599.56
G	7808+78.78	2.875	599.64	599.95
H	7808+88.78	2.875	600.03	600.34
I	7808+98.78	2.875	600.42	600.71
J	7809+08.78	2.875	600.79	601.04
K	7809+18.78	2.875	601.09	601.30
L	7809+28.78	2.875	601.31	601.47
M	7809+38.78	2.875	601.46	601.57
N	7809+48.78	2.875	601.54	601.61
O	7809+58.78	2.875	601.54	601.56
⊕ Pier	7809+68.78	2.875	601.46	601.46
P	7809+78.78	2.875	601.31	601.29
Q	7809+88.78	2.875	601.09	601.07
R	7809+98.78	2.875	600.80	600.78
S	7810+08.78	2.875	600.44	600.43
T	7810+18.78	2.875	600.09	600.09
U	7810+28.78	2.875	599.74	599.75
V	7810+38.78	2.875	599.39	599.41
W	7810+48.78	2.875	599.04	599.06
X	7810+58.78	2.875	598.69	598.71
Y	7810+68.78	2.875	598.36	598.37
Z	7810+78.78	2.875	598.09	598.09
⊕ Brg. E. Abut.	7810+85.50	2.875	597.94	597.94
Bk. E. Abut.	7810+88.50	2.875	597.88	597.88

0161713-60W26-S10-TopSlab



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED
PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS - II
STRUCTURE NO. 016-1713**

SHEET NO. S1-10 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	260
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7807+95.66	-14.375	596.22	596.22
⊕ Brg. W. Abut.	7807+99.61	-14.375	596.37	596.37
A	7808+09.61	-14.375	596.76	596.83
B	7808+19.61	-14.375	597.15	597.29
C	7808+29.61	-14.375	597.54	597.73
D	7808+39.61	-14.375	597.93	598.17
E	7808+49.61	-14.375	598.32	598.60
F	7808+59.61	-14.375	598.71	599.01
G	7808+69.61	-14.375	599.10	599.40
H	7808+79.61	-14.375	599.49	599.79
I	7808+89.61	-14.375	599.88	600.16
J	7808+99.61	-14.375	600.27	600.51
K	7809+09.61	-14.375	600.64	600.84
L	7809+19.61	-14.375	600.93	601.08
M	7809+29.61	-14.375	601.15	601.25
N	7809+39.61	-14.375	601.29	601.35
O	7809+49.61	-14.375	601.36	601.38
⊕ Pier	7809+59.61	-14.375	601.35	601.35
P	7809+69.61	-14.375	601.27	601.25
Q	7809+79.61	-14.375	601.12	601.10
R	7809+89.61	-14.375	600.89	600.88
S	7809+99.61	-14.375	600.59	600.59
T	7810+09.61	-14.375	600.23	600.26
U	7810+19.61	-14.375	599.88	599.92
V	7810+29.61	-14.375	599.53	599.58
W	7810+39.61	-14.375	599.18	599.23
X	7810+49.61	-14.375	598.83	598.88
Y	7810+59.61	-14.375	598.48	598.52
Z	7810+69.61	-14.375	598.16	598.18
AA	7810+79.61	-14.375	597.89	597.90
⊕ Brg. E. Abut.	7810+85.50	-14.375	597.76	597.76
Bk. E. Abut.	7810+88.50	-14.375	597.70	597.70

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7807+92.6	-20.125	596.01	596.01
⊕ Brg. W. Abut.	7807+96.55	-20.125	596.16	596.16
A	7808+06.55	-20.125	596.55	596.62
B	7808+16.55	-20.125	596.94	597.08
C	7808+26.55	-20.125	597.33	597.52
D	7808+36.55	-20.125	597.72	597.96
E	7808+46.55	-20.125	598.11	598.38
F	7808+56.55	-20.125	598.50	598.79
G	7808+66.55	-20.125	598.89	599.19
H	7808+76.55	-20.125	599.28	599.57
I	7808+86.55	-20.125	599.67	599.94
J	7808+96.55	-20.125	600.06	600.30
K	7809+06.55	-20.125	600.45	600.64
L	7809+16.55	-20.125	600.76	600.91
M	7809+26.55	-20.125	601.00	601.10
N	7809+36.55	-20.125	601.16	601.22
O	7809+46.55	-20.125	601.26	601.28
⊕ Pier	7809+56.55	-20.125	601.27	601.27
P	7809+66.55	-20.125	601.22	601.21
Q	7809+76.55	-20.125	601.08	601.07
R	7809+86.55	-20.125	600.88	600.88
S	7809+96.55	-20.125	600.60	600.61
T	7810+06.55	-20.125	600.25	600.28
U	7810+16.55	-20.125	599.90	599.94
V	7810+26.55	-20.125	599.55	599.61
W	7810+36.55	-20.125	599.20	599.26
X	7810+46.55	-20.125	598.85	598.91
Y	7810+56.55	-20.125	598.50	598.55
Z	7810+66.55	-20.125	598.16	598.19
AA	7810+76.55	-20.125	597.88	597.89
⊕ Brg. E. Abut.	7810+85.50	-20.125	597.67	597.67
Bk. E. Abut.	7810+88.50	-20.125	597.61	597.61

GIRDER 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7807+89.54	-25.875	595.95	595.95
⊕ Brg. W. Abut.	7807+93.49	-25.875	596.11	596.11
A	7808+03.49	-25.875	596.50	596.56
B	7808+13.49	-25.875	596.89	597.02
C	7808+23.49	-25.875	597.28	597.46
D	7808+33.49	-25.875	597.67	597.90
E	7808+43.49	-25.875	598.06	598.32
F	7808+53.49	-25.875	598.45	598.73
G	7808+63.49	-25.875	598.84	599.13
H	7808+73.49	-25.875	599.23	599.51
I	7808+83.49	-25.875	599.62	599.88
J	7808+93.49	-25.875	600.01	600.24
K	7809+03.49	-25.875	600.40	600.59
L	7809+13.49	-25.875	600.73	600.88
M	7809+23.49	-25.875	600.99	601.09
N	7809+33.49	-25.875	601.18	601.24
O	7809+43.49	-25.875	601.30	601.32
⊕ Pier	7809+53.49	-25.875	601.34	601.34
P	7809+63.49	-25.875	601.30	601.29
Q	7809+73.49	-25.875	601.19	601.18
R	7809+83.49	-25.875	601.01	601.01
S	7809+93.49	-25.875	600.75	600.77
T	7810+03.49	-25.875	600.42	600.46
U	7810+13.49	-25.875	600.07	600.12
V	7810+23.49	-25.875	599.72	599.79
W	7810+33.49	-25.875	599.37	599.44
X	7810+43.49	-25.875	599.02	599.09
Y	7810+53.49	-25.875	598.67	598.73
Z	7810+63.49	-25.875	598.32	598.37
AA	7810+73.49	-25.875	598.02	598.05
⊕ Brg. E. Abut.	7810+85.50	-25.875	597.73	597.73
Bk. E. Abut.	7810+88.50	-25.875	597.67	597.67

0161713-60W26-S12-TopSlab



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED
PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS - IV
STRUCTURE NO. 016-1713**

SHEET NO. S1-12 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	262
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	7807+86.48	- 31.625	595.97	595.97
⊕ Brg. W. Abut.	7807+90.43	- 31.625	596.13	596.13
A	7808+00.43	- 31.625	596.52	596.58
B	7808+10.43	- 31.625	596.91	597.03
C	7808+20.43	- 31.625	597.30	597.48
D	7808+30.43	- 31.625	597.69	597.91
E	7808+40.43	- 31.625	598.08	598.34
F	7808+50.43	- 31.625	598.47	598.74
G	7808+60.43	- 31.625	598.86	599.14
H	7808+70.43	- 31.625	599.25	599.52
I	7808+80.43	- 31.625	599.64	599.89
J	7808+90.43	- 31.625	600.03	600.25
K	7809+00.43	- 31.625	600.42	600.60
L	7809+10.43	- 31.625	600.78	600.92
M	7809+20.43	- 31.625	601.06	601.16
N	7809+30.43	- 31.625	601.27	601.32
O	7809+40.43	- 31.625	601.41	601.43
⊕ Pier	7809+50.43	- 31.625	601.47	601.47
P	7809+60.43	- 31.625	601.46	601.45
Q	7809+70.43	- 31.625	601.37	601.36
R	7809+80.43	- 31.625	601.21	601.22
S	7809+90.43	- 31.625	600.98	601.00
T	7810+00.43	- 31.625	600.67	600.71
U	7810+10.43	- 31.625	600.32	600.38
V	7810+20.43	- 31.625	599.97	600.04
W	7810+30.43	- 31.625	599.62	599.70
X	7810+40.43	- 31.625	599.27	599.35
Y	7810+50.43	- 31.625	598.92	598.99
Z	7810+60.43	- 31.625	598.56	598.61
AA	7810+70.43	- 31.625	598.25	598.28
AB	7810+80.43	- 31.625	597.98	597.99
⊕ Brg. E. Abut.	7810+85.50	- 31.625	597.87	597.87
Bk. E. Abut.	7810+88.50	- 31.625	597.81	597.81

0161713-60W26-S13-TopSlab



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED
PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS - V
STRUCTURE NO. 016-1713**

SHEET NO. S1-13 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	263
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of Apr. Slab	7807+52.92	-39.375'	594.61
A	7807+64.17	-37.021'	595.02
B	7807+74.50	-36.385'	595.50
E. End of Apr. Slab	7807+85.69	-34.167'	595.98

NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of Apr. Slab	7807+58.47	-28.927'	594.57
A	7807+69.72	-26.573'	595.01
B	7807+80.97	-24.219'	595.49
E. End of Apr. Slab	7807+92.15	-22.000'	595.96

CL HARRISON ST. & P.G.L.

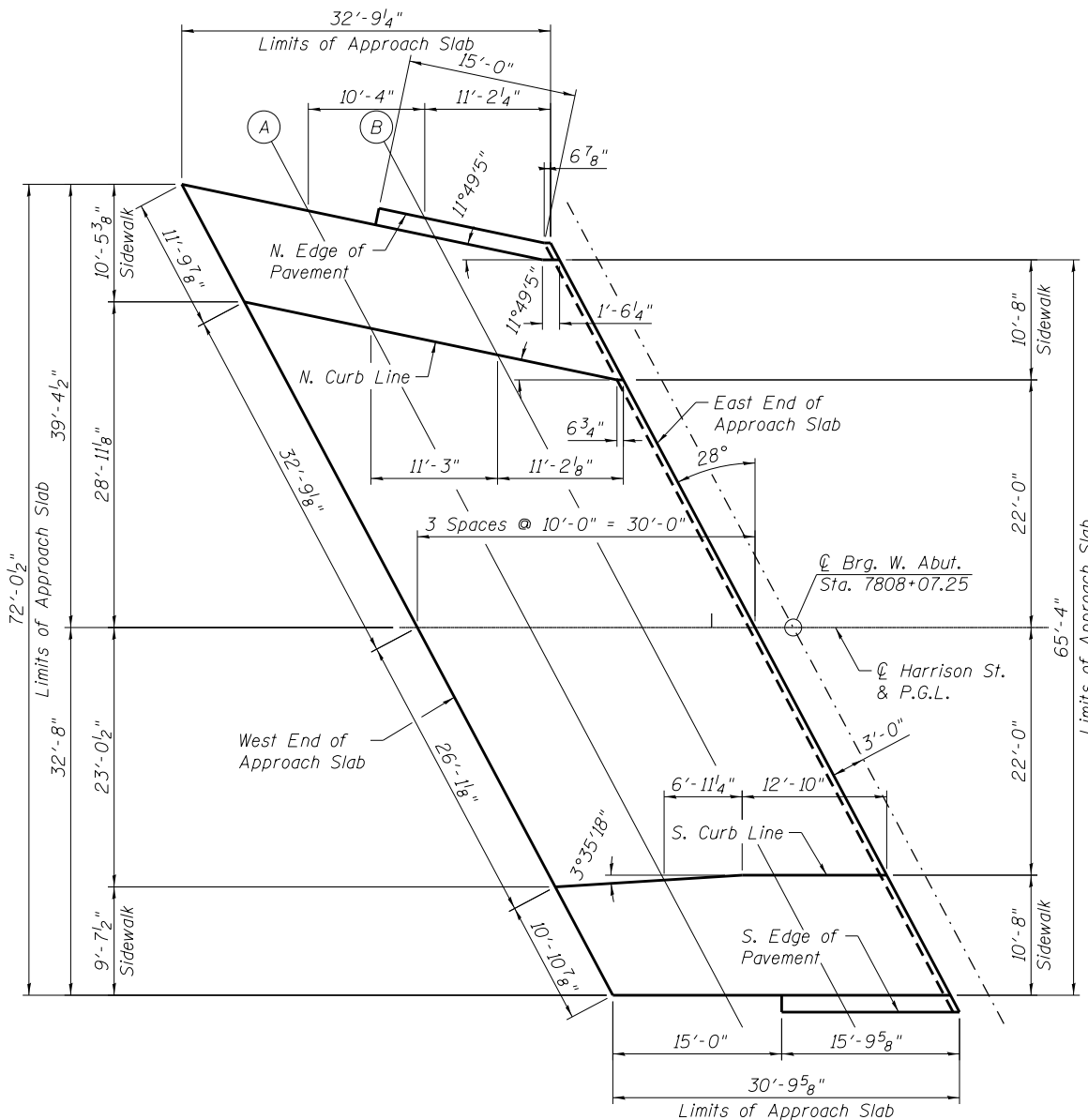
Location	Station	Offset	Theoretical Grade Elevations
W. End of Apr. Slab	7807+73.85	0.000'	595.59
A	7807+83.85	0.000'	595.98
B	7807+93.85	0.000'	596.37
E. End of Apr. Slab	7808+03.85	0.000'	596.76

SOUTH CURB LINE

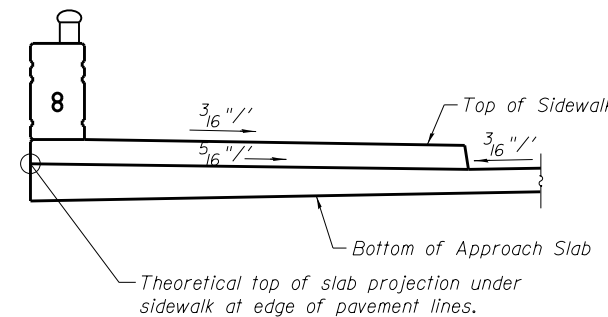
Location	Station	Offset	Theoretical Grade Elevations
W. End of Apr. Slab	7807+86.10	23.042'	595.71
A	7807+95.78	22.438'	596.10
B	7808+05.55	22.000'	596.48
E. End of Apr. Slab	7808+15.55	22.000'	596.87

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of Apr. Slab	7807+91.22	32.667'	596.17
A	7808+01.22	32.667'	596.59
B	7808+12.02	34.167'	597.05
E. End of Apr. Slab	7808+22.02	34.167'	597.44



PLAN



PROJECTION UNDER SIDEWALK

0161713-60W26-S14-TopSlab



USER NAME = dunkerleyb	DESIGNED - EJO	REVISOR
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISOR
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISOR
	CHECKED - EJO	REVISOR

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF WEST APPROACH SLAB ELEVATION
STRUCTURE NO. 016-1713**

SHEET NO. S1-14 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	264
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF PAVEMENT

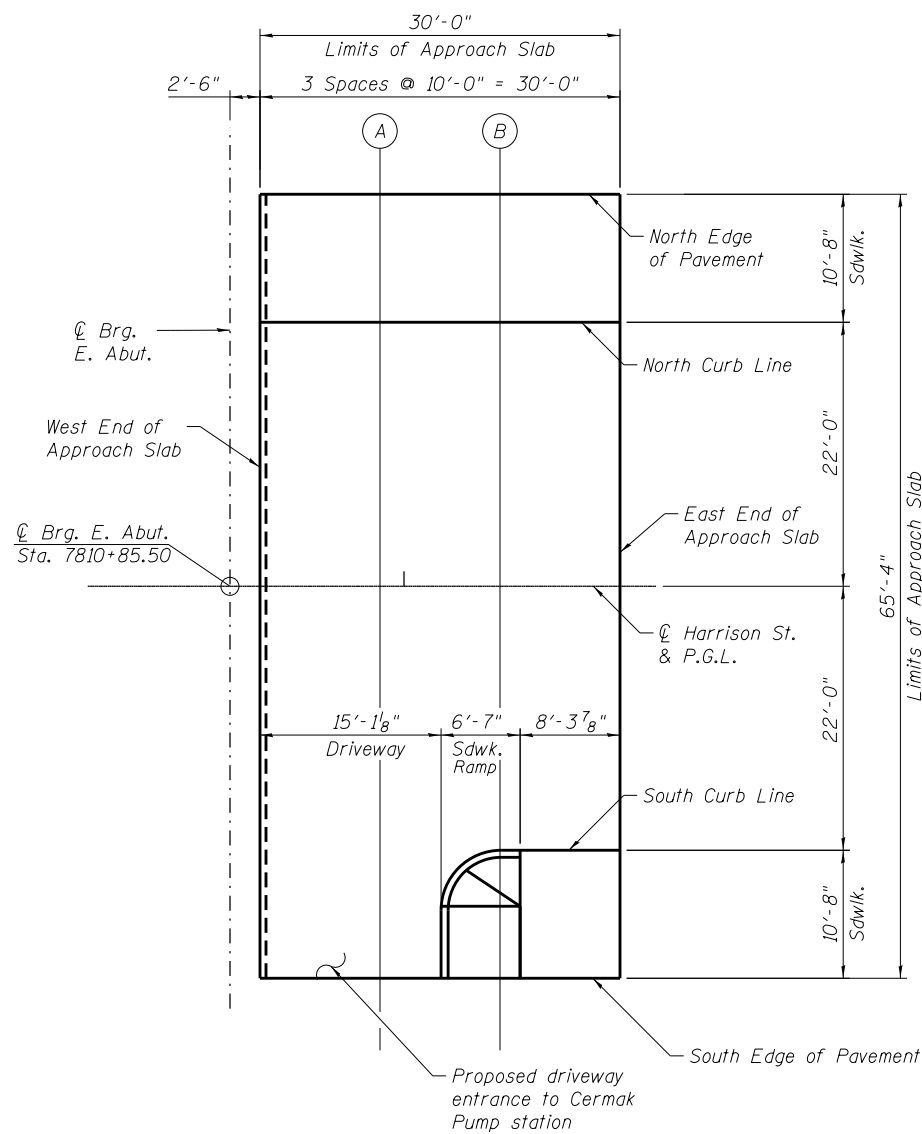
Location	Station	Offset	Theoretical Grade Elevations
W. End of Appr. Slab	7810+88.00	-32.667'	597.86
A	7810+98.00	-32.667'	597.69
B	7811+08.00	-32.667'	597.58
E. End of Appr. Slab	7811+18.00	-32.667'	597.52

NORTH CURB LINE

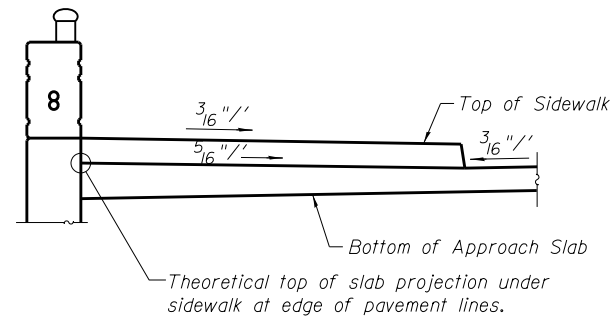
Location	Station	Offset	Theoretical Grade Elevations
W. End of Appr. Slab	7810+88.00	-22.000'	597.59
A	7810+98.00	-22.000'	597.42
B	7811+08.00	-22.000'	597.31
E. End of Appr. Slab	7811+18.00	-22.000'	597.25

CL HARRISON ST. & P.G.L.

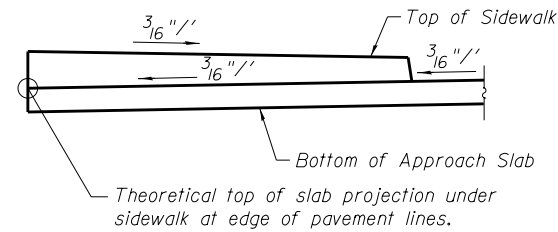
Location	Station	Offset	Theoretical Grade Elevations
W. End of Appr. Slab	7810+88.00	0.000'	597.93
A	7810+98.00	0.000'	597.76
B	7811+08.00	0.000'	597.65
E. End of Appr. Slab	7811+18.00	0.000'	597.59



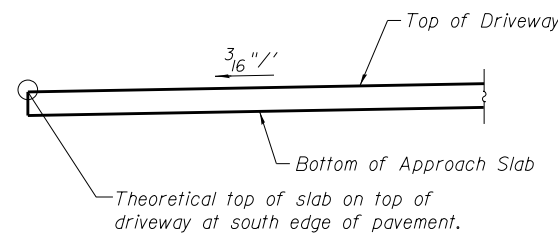
PLAN



PROJECTION UNDER SIDEWALK
(North Sidewalk)



PROJECTION UNDER SIDEWALK
(South Sidewalk)



TOP OF DRIVEWAY

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of Appr. Slab	-	-	-
A	-	-	-
B	7811+08.00	22.000'	597.31
E. End of Appr. Slab	7811+18.00	22.000'	597.25

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of Appr. Slab	7810+88.00	32.667'	597.42
A	7810+98.00	32.667'	597.25
B	7811+08.00	32.667'	597.14
E. End of Appr. Slab	7811+18.00	32.667'	597.08

0161713-60W26-S15-TopSlab



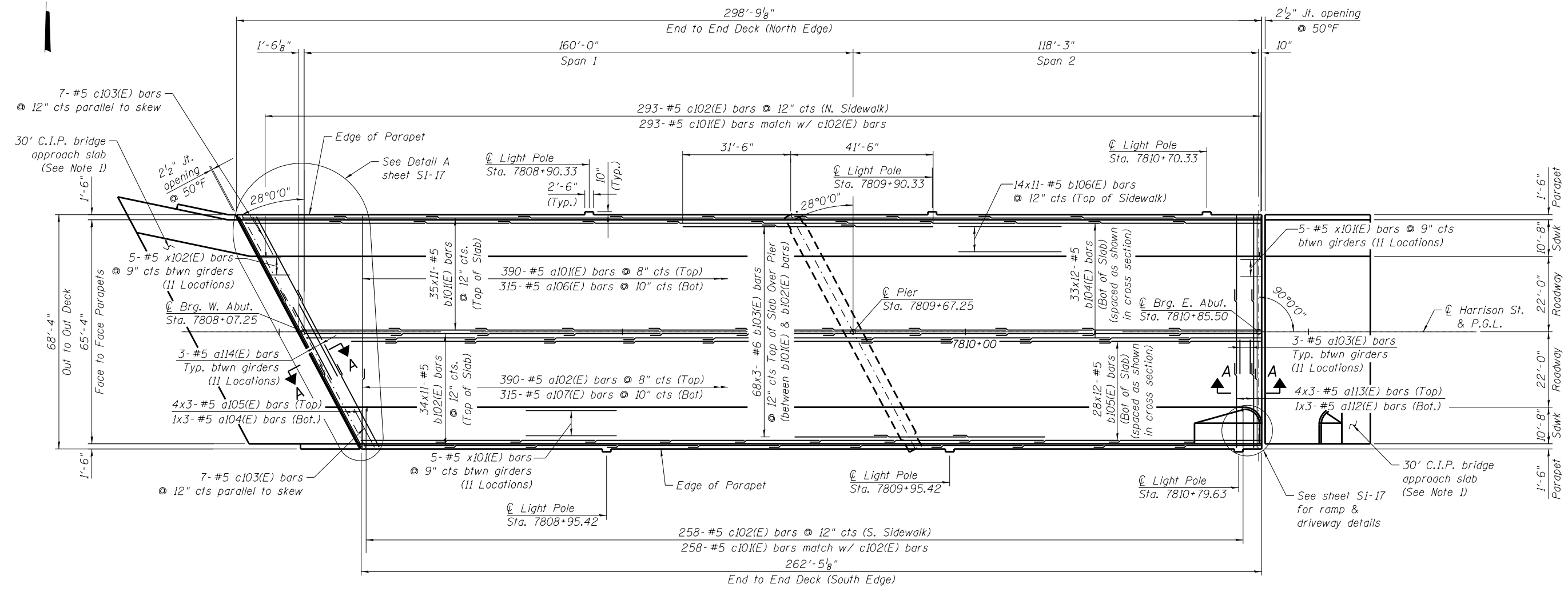
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PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF EAST APPROACH SLAB ELEVATION
STRUCTURE NO. 016-1713**

SHEET NO. S1-15 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	265
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				



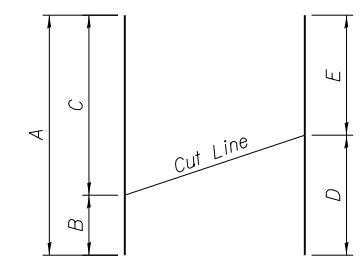
DECK PLAN

NOTES:

- For approach slab details, see sheets S1-23 to S1-26.
- For reinforcement details at light poles, see sheet S1-19.
- Bars indicated thus: 68x10-#5 etc. indicates 68 lines of bars with 10 lengths per line.
- See sheet S1-20 for Section A-A.
- Parapet reinforcement not shown for clarity. See sheet S1-19 for details.
- Minimum Lap Lengths:
3'-3" for #5 bar
3'-10" for #6 bar
- Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet S1-27.
- x101(E) and x102(E) bars are lapped with b104(E) and b105(E) bars between girders in bottom mat.
- See sheet S1-20 for Superstructure Bill of Material.

BAR CUTTING TABLE

Bar	No. of Bars to Cut	A	B	C	D	E
a108(E)	6	26'-2"	3'-8"	22'-6"	12'-5"	13'-9"
a109(E)	18	49'-1"	2'-7"	46'-6"	23'-11"	25'-2"
a110(E)	14	50'-7"	4'-11"	45'-8"	24'-6"	26'-1"
a111(E)	8	24'-9"	3'-9"	21'-0"	11'-7"	13'-2"



BAR CUTTING DIAGRAM

See table for dimensions, make all cuts normal to bar axis

0161713-60W26-S16-Deck

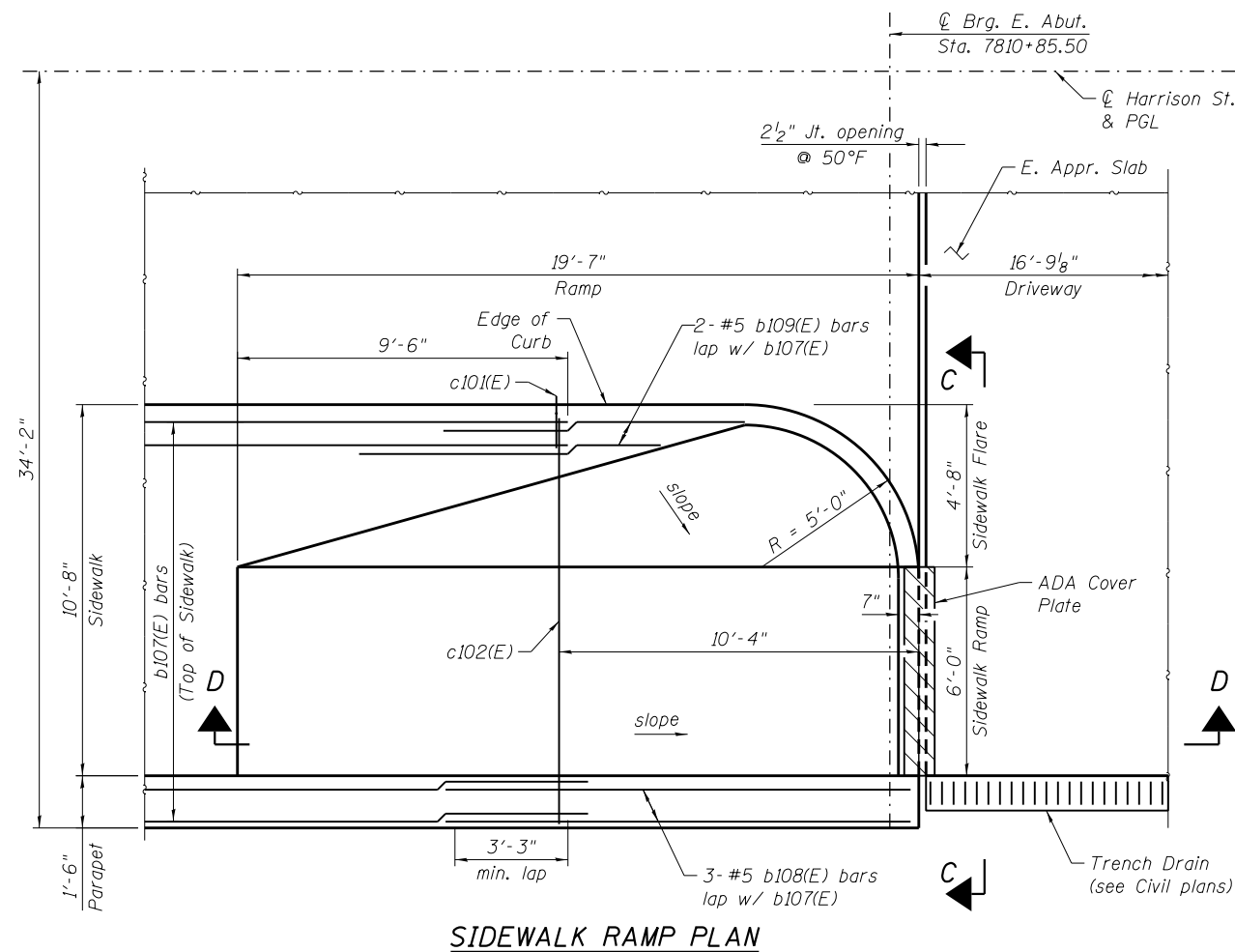


USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
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PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

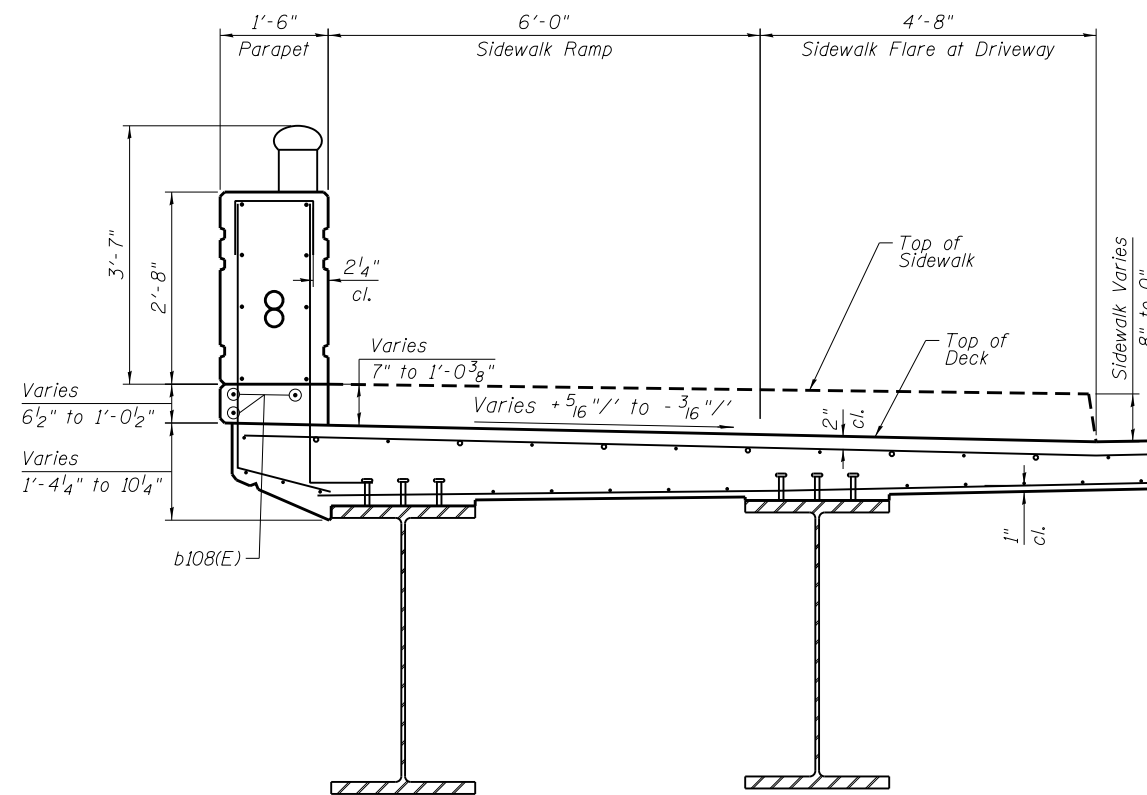
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK PLAN I
STRUCTURE NO. 016-1713**
SHEET NO. S1-16 OF S1-48 SHEETS

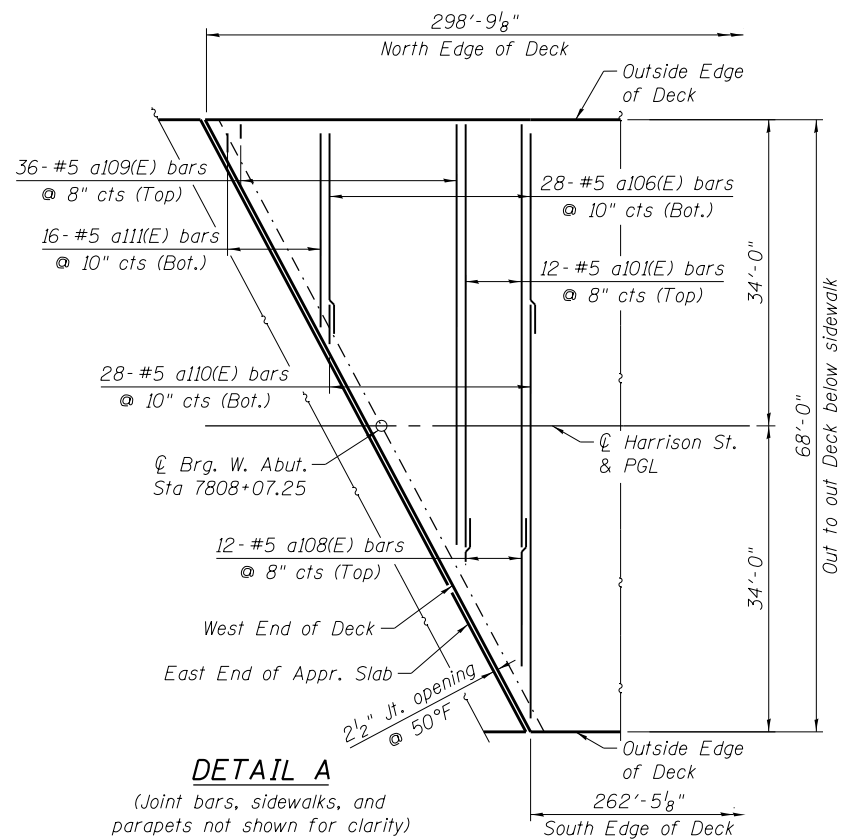
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	266
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				



SIDEWALK RAMP PLAN

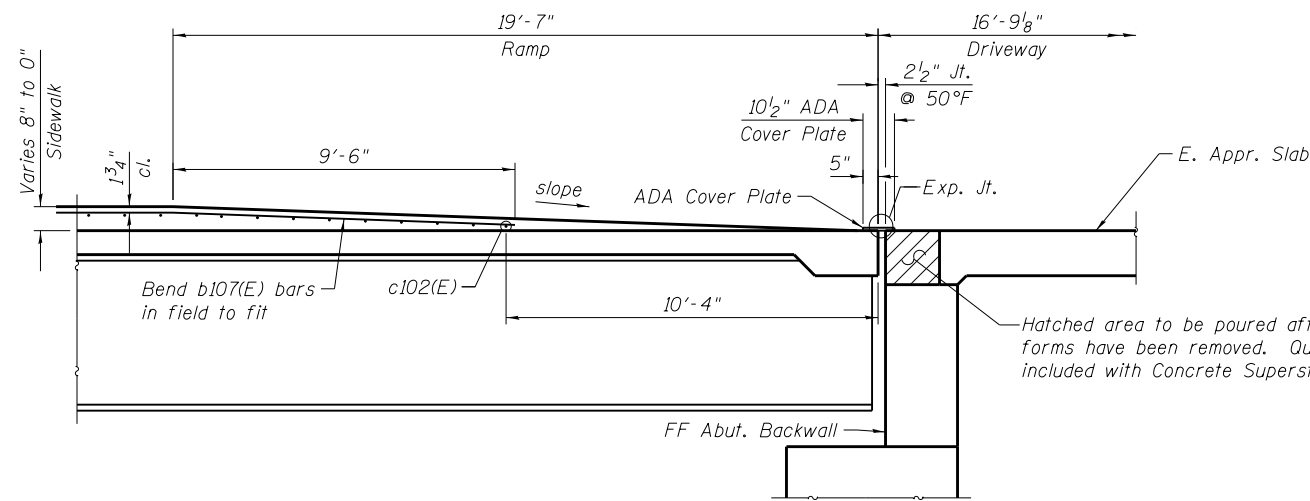


SECTION C-C THRU SOUTH SIDEWALK RAMP
(Facing West)



DETAIL A

(Joint bars, sidewalks, and parapets not shown for clarity)



SECTION D-D: SIDEWALK RAMP ELEVATION
(Looking North)

NOTES:

1. Work this sheet with S1-16.
2. See Civil plans for driveway flare details.
3. See sheet S1-27 for Expansion Joint details and ADA cover plate details.

0161713-60W26-S17-Deck



USER NAME = dunkerleyb
PLOT SCALE = N.T.S.
PLOT DATE = 9/15/2013

DESIGNED - EJO
CHECKED - ATB
DRAWN - BRD
CHECKED - EJO

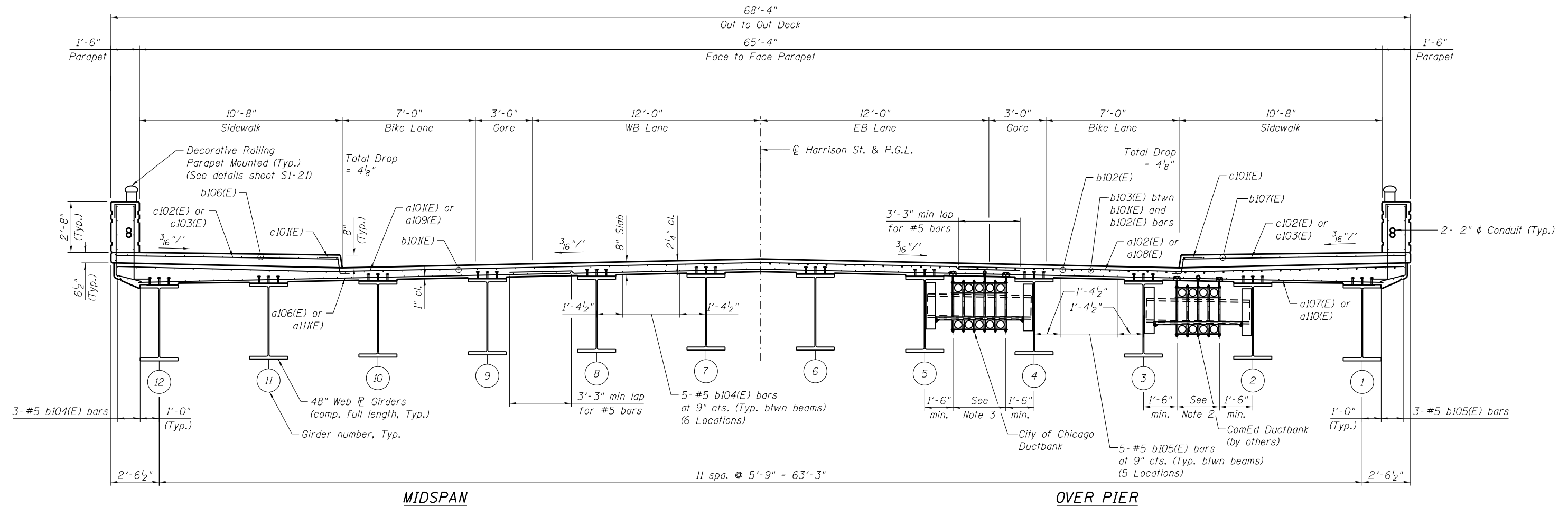
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

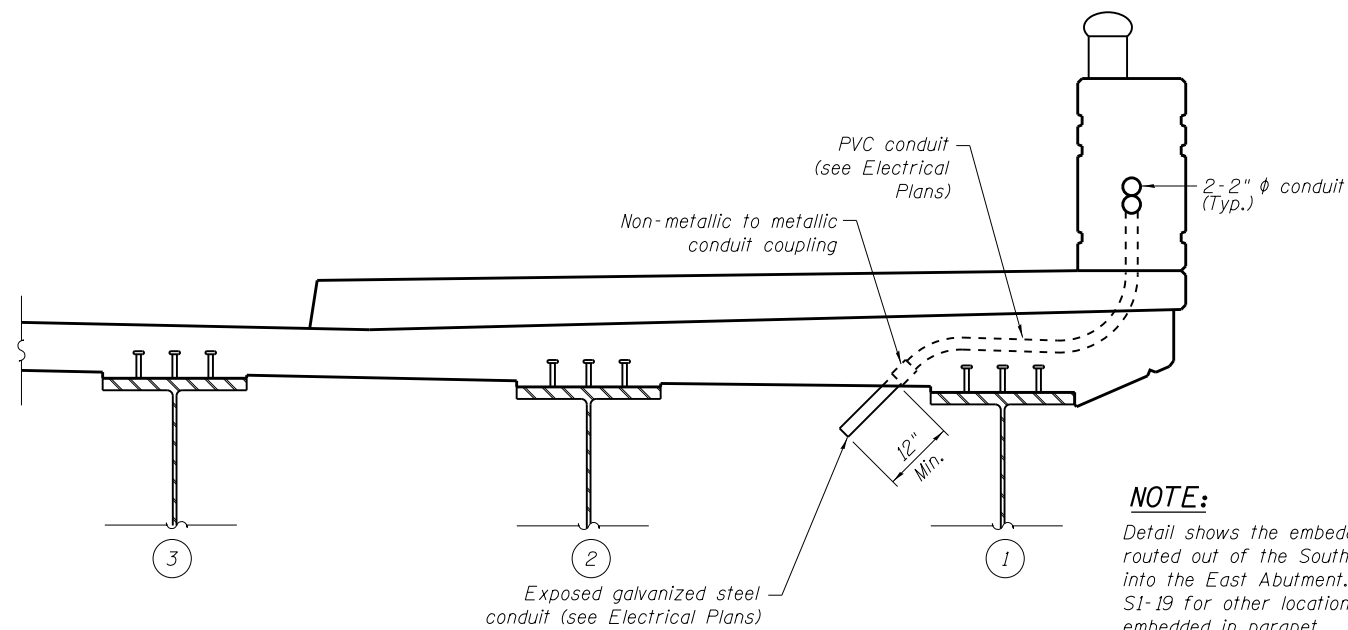
DECK PLAN II
STRUCTURE NO. 016-1713

SHEET NO. S1-17 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	267
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				



DECK CROSS SECTION
(Looking East)



NOTE:

Detail shows the embedded conduits routed out of the South Parapet into the East Abutment. See sheet S1-19 for other locations of conduit embedded in parapet.

NOTES:

1. Work this sheet with sheet S1-16.
2. Proposed conduit support system is shown for information only. The concrete inserts will be provided to the Contractor by ComEd. The Contractor is responsible for placing inserts per layout details and ComEd direction. ComEd may elect to provide support to Contractor for final insert placement in advance of pouring concrete. There is no separate payment for the placement of inserts. The work involved in placing inserts is included within Concrete Superstructure.
3. Space inserts at 10'-0" cts max longitudinally, full length of bridge (see framing plans). Cost of inserts included in Concrete Superstructure. See electrical plans for conduit support and insert details.

0161713-60W26-S18-Deck



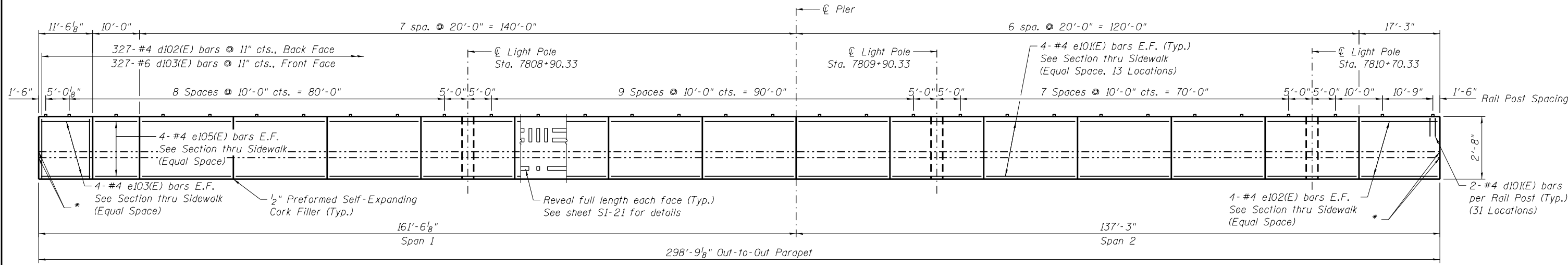
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	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED
PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK CROSS SECTION
STRUCTURE NO. 016-1713

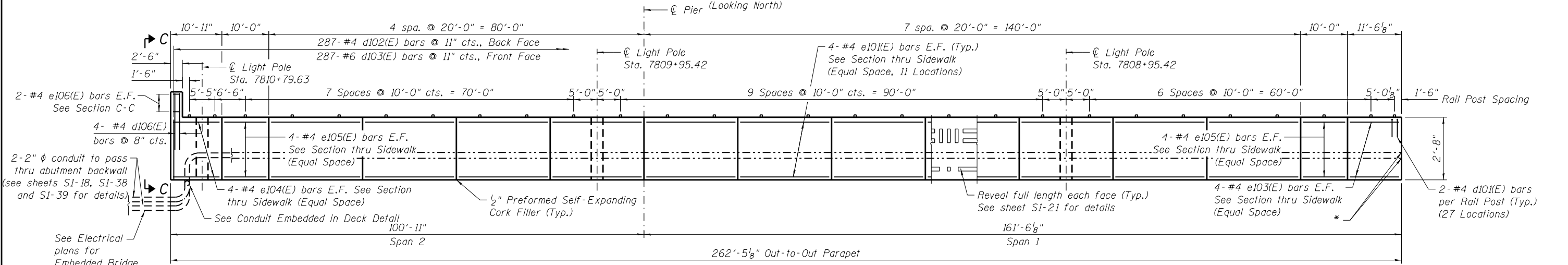
SHEET NO. S1-18 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	268
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



INSIDE ELEVATION OF NORTH PARAPET

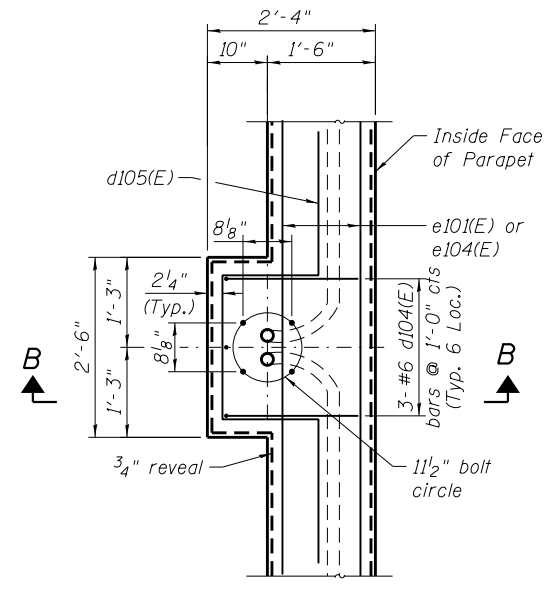
*Provide conduit expansion/deflection fitting at all expansion joints.



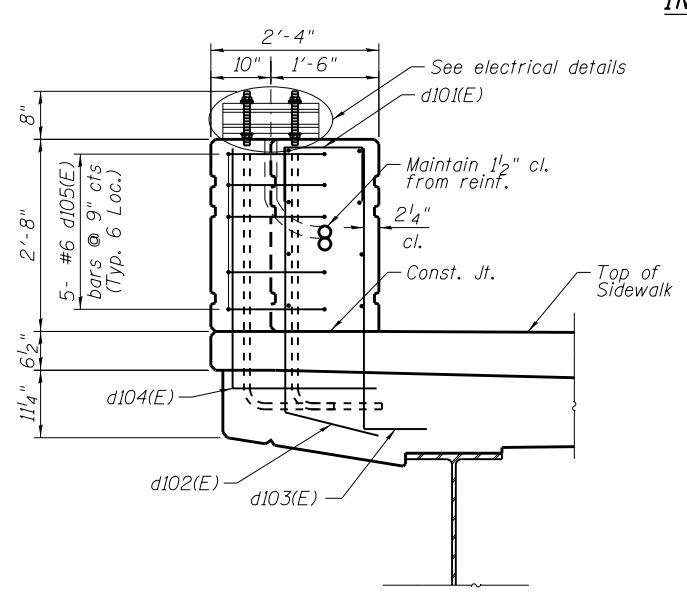
INSIDE ELEVATION OF SOUTH PARAPET

NOTES:

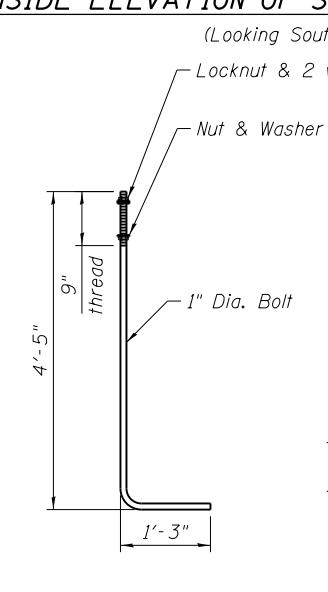
1. See sheets S1-23 thru S1-26 for approach slab parapet details.
2. Contractor to provide expansion/deflection conduit fittings at all structural expansion joints. See lighting plans for expansion/deflection fitting installation details.
3. Work this sheet with S1-18 and S1-20.
4. See sheet S1-41 for additional rail details.
5. Decorative Rail Parapet Mounted is continuous in front of light poles.



PLAN

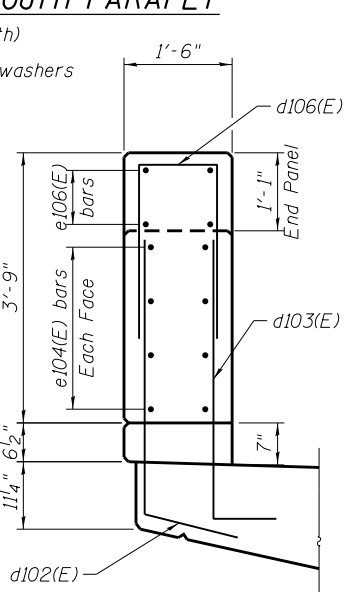


SECTION B-B

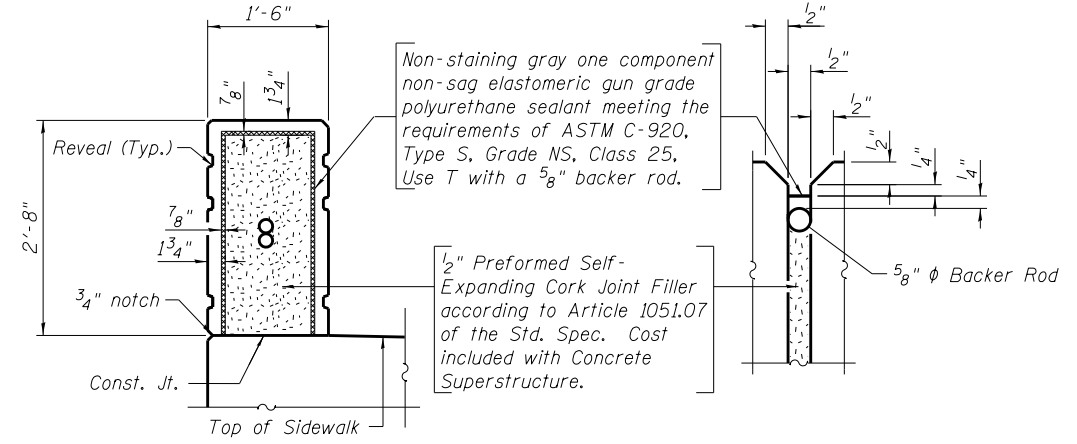


ANCHOR ROD

Cost of anchor rods is included with Concrete Superstructure. (ASTM F 1554 Grade 105) Full length hot dipped galvanized



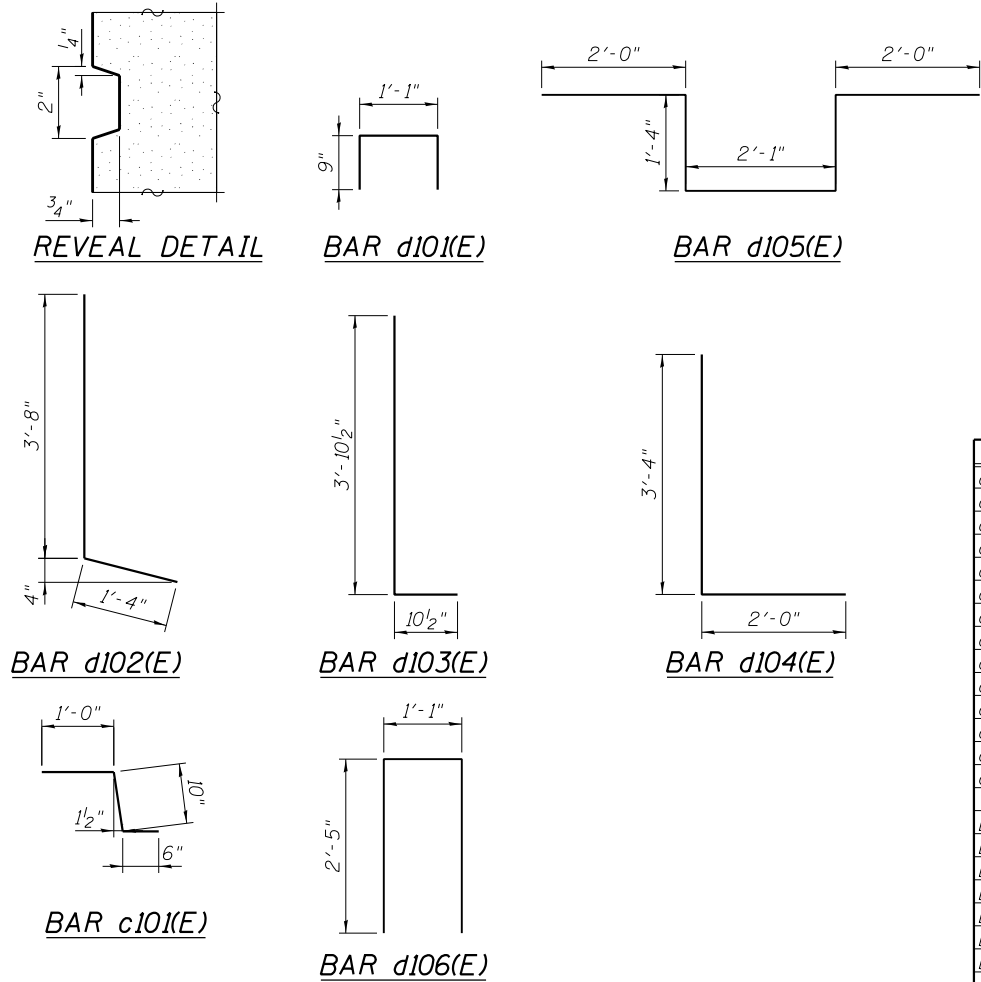
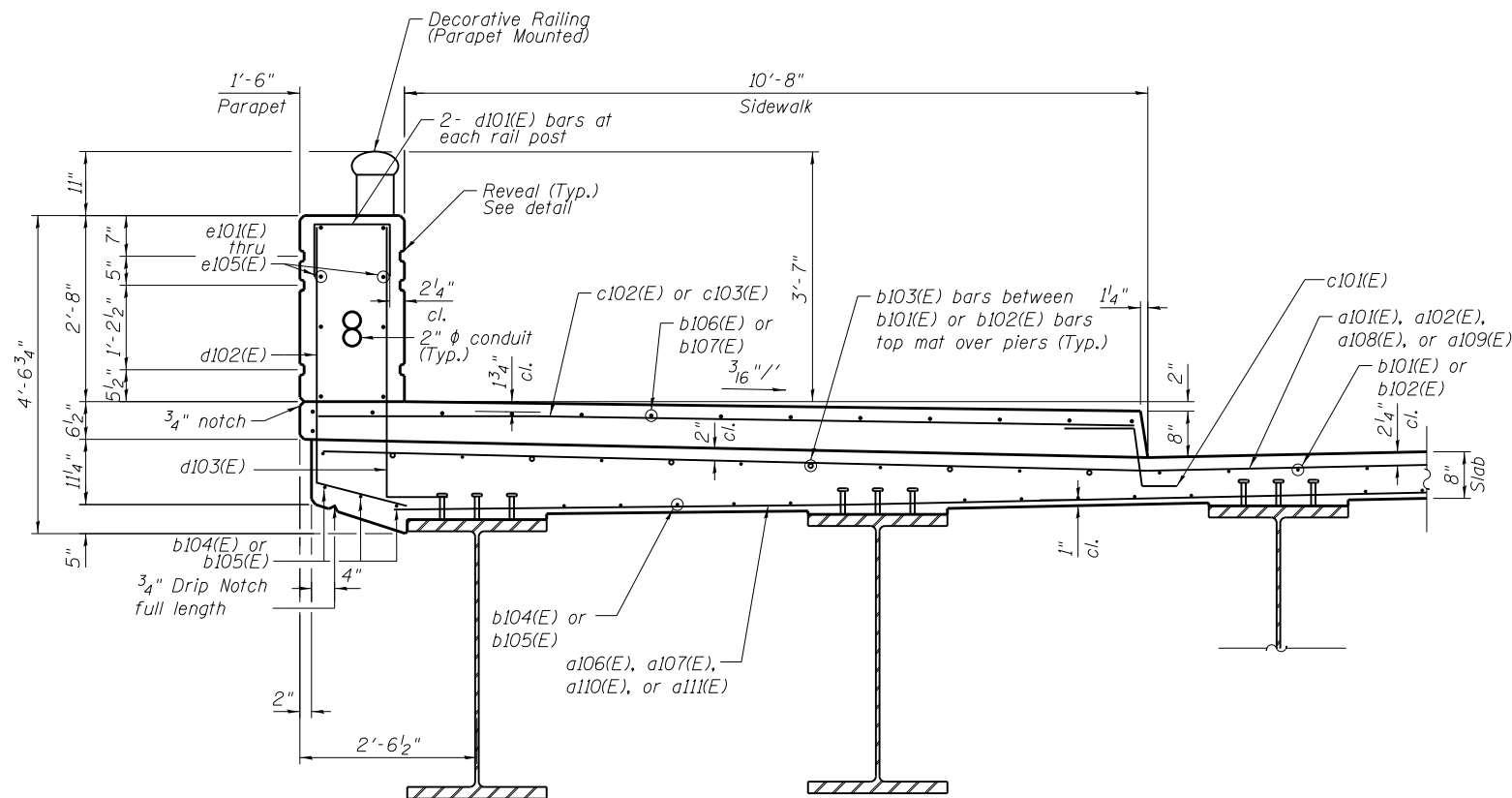
SECTION C-C



PARAPET JOINT DETAILS

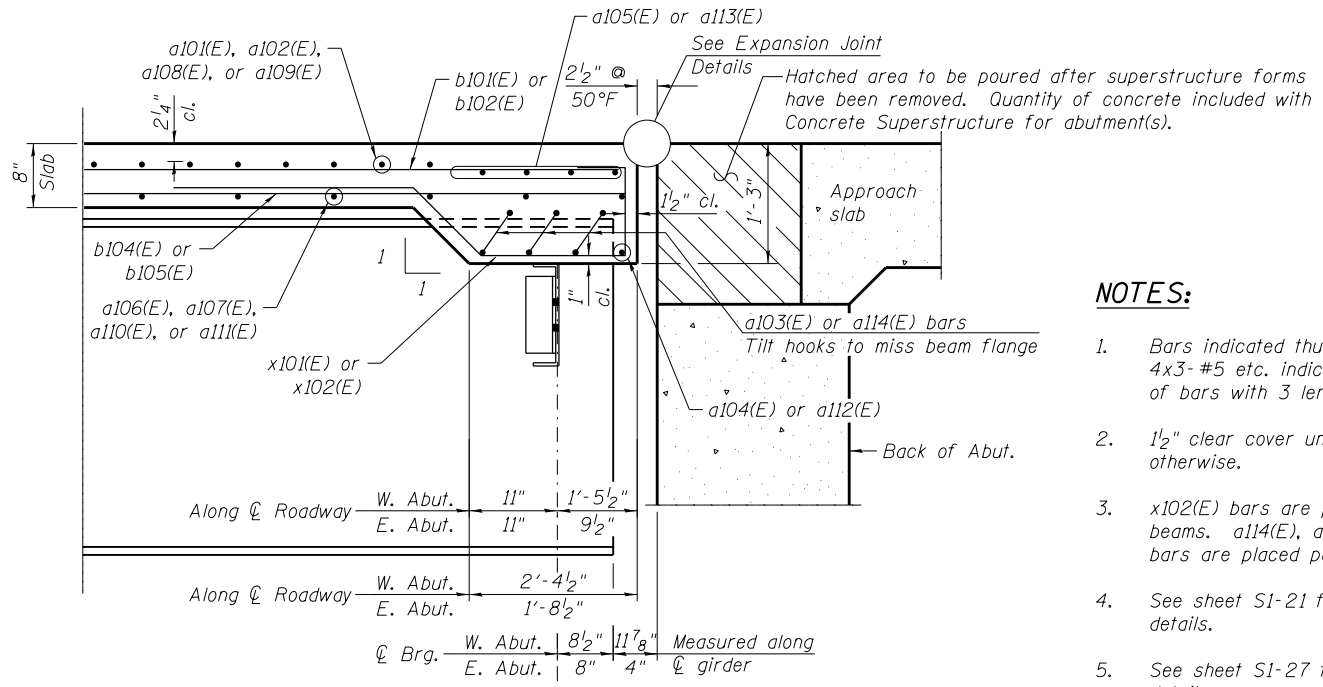
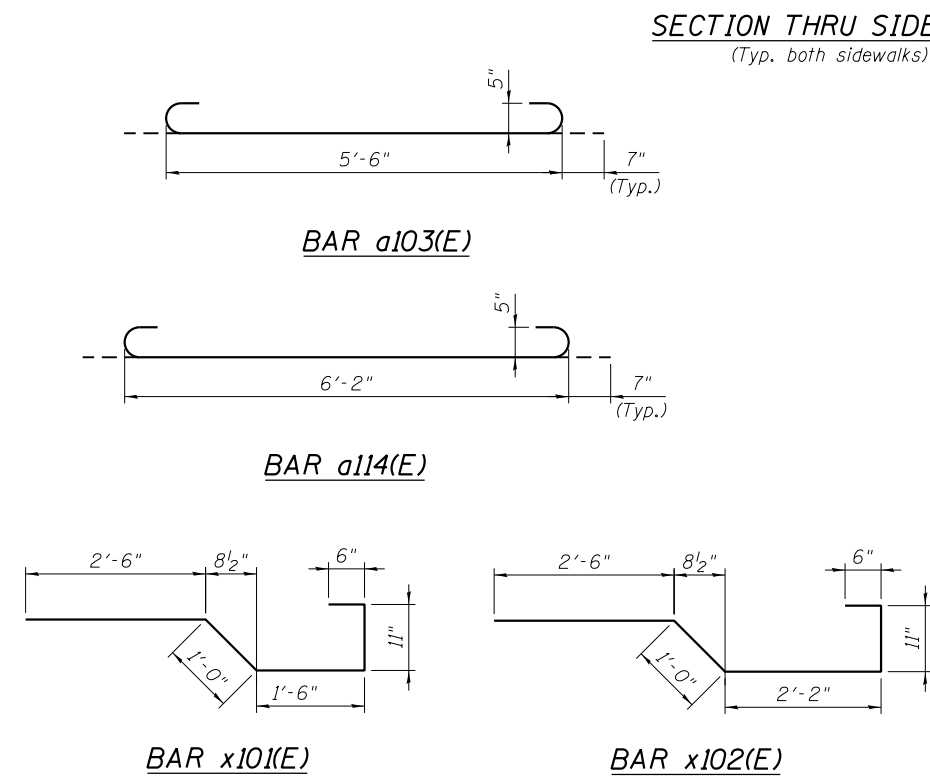
0161713-60W26-S19-Parapet

AECOM	USER NAME = dunkerleyb	DESIGNED - EJO	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PARAPET ELEVATIONS STRUCTURE NO. 016-1713	F.A.I. RTE. = 90/94/290	SECTION = 2013-00BR	COUNTY = COOK	TOTAL SHEETS = 559	SHEET NO. = 269
	PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED			CONTRACT NO. 60W26				
	PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED			ILLINOIS FED. AID PROJECT				



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a101(E)	402	#5	47'-4"	—
a102(E)	390	#5	23'-7"	—
a103(E)	33	#5	6'-8"	—
a104(E)	3	#5	25'-11"	—
a105(E)	12	#5	27'-9"	—
a106(E)	343	#5	22'-5"	—
a107(E)	315	#5	46'-1"	—
a108(E)	6	#5	26'-2"	—
a109(E)	18	#5	49'-1"	—
a110(E)	14	#5	50'-7"	—
a111(E)	8	#5	24'-9"	—
a112(E)	3	#5	23'-2"	—
a113(E)	12	#5	24'-9"	—
a114(E)	33	#5	7'-4"	—
b101(E)	385	#5	30'-1"	—
b102(E)	374	#5	28'-5"	—
b103(E)	204	#6	26'-11"	—
b104(E)	396	#5	27'-10"	—
b105(E)	336	#5	26'-4"	—
b106(E)	154	#5	30'-1"	—
b107(E)	154	#5	26'-6"	—
b108(E)	3	#5	13'-2"	—
b109(E)	2	#5	8'-8"	—
c101(E)	551	#5	2'-4"	—
c102(E)	551	#5	11'-8"	—
c103(E)	14	#5	13'-5"	—
d101(E)	116	#4	2'-7"	—
d102(E)	614	#4	5'-0"	—
d103(E)	614	#6	4'-9"	—
d104(E)	18	#6	5'-4"	—
d105(E)	30	#6	8'-9"	—
d106(E)	4	#4	5'-11"	—
e101(E)	192	#4	19'-7"	—
e102(E)	8	#4	16'-10"	—
e103(E)	16	#4	11'-1"	—
e104(E)	8	#4	10'-6"	—
e105(E)	24	#4	9'-7"	—
e106(E)	4	#4	2'-2"	—
x101(E)	55	#5	6'-5"	—
x102(E)	55	#5	7'-1"	—
Reinforcement Bars, Epoxy Coated		Pound	136,350	
Concrete Superstructure		Cu. Yd.	818	
Bridge Deck Grooving		Sq. Yd.	1324	
Protective Coat		Sq. Yd.	2588	



NOTES:

- Bars indicated thus: 4x3-#5 etc. indicates 4 lines of bars with 3 lengths per line.
- 1/2" clear cover unless noted otherwise.
- x102(E) bars are placed parallel to beams. a114(E), a104(E), and a105(E) bars are placed parallel to skew.
- See sheet S1-21 for Decorative Railing details.
- See sheet S1-27 for Expansion Joint details.

0161713-60W26-S20-Deck

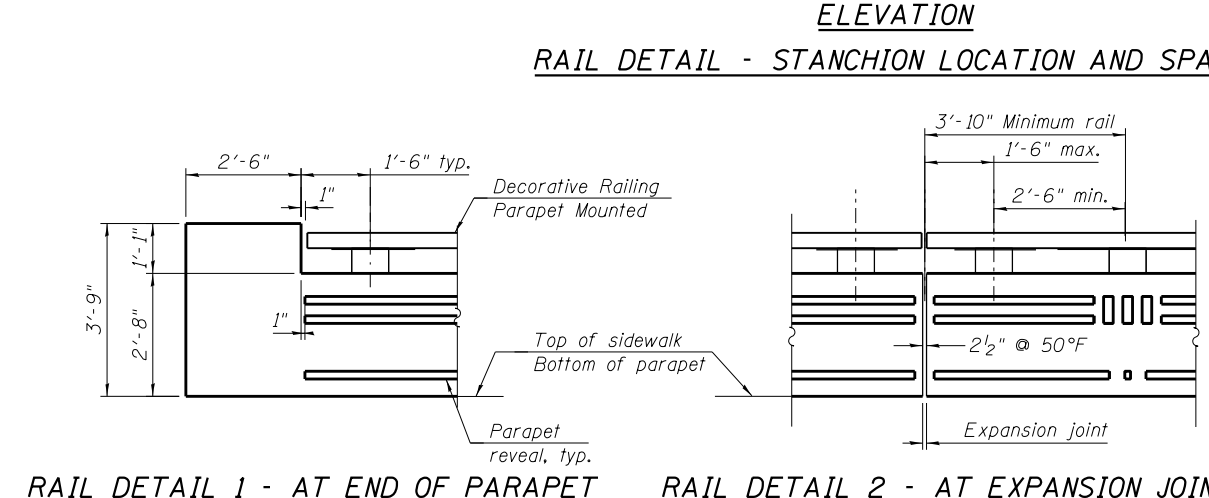
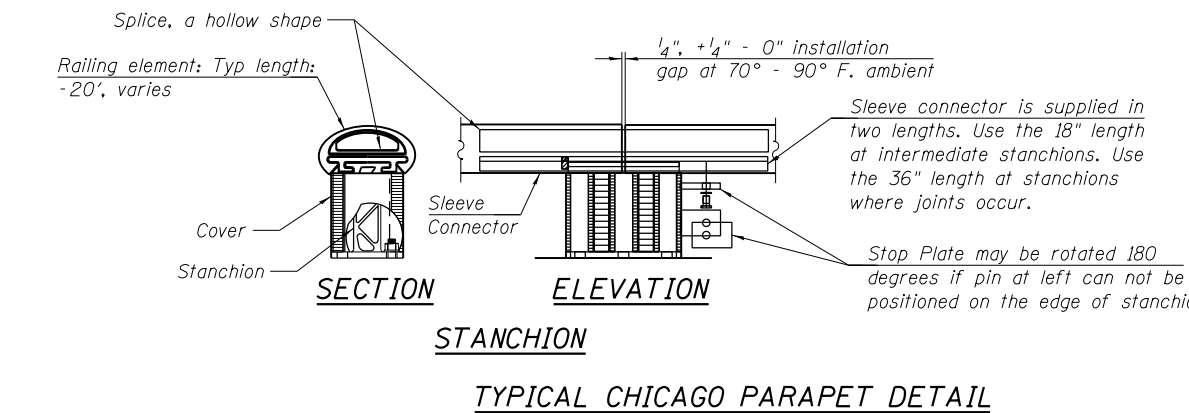
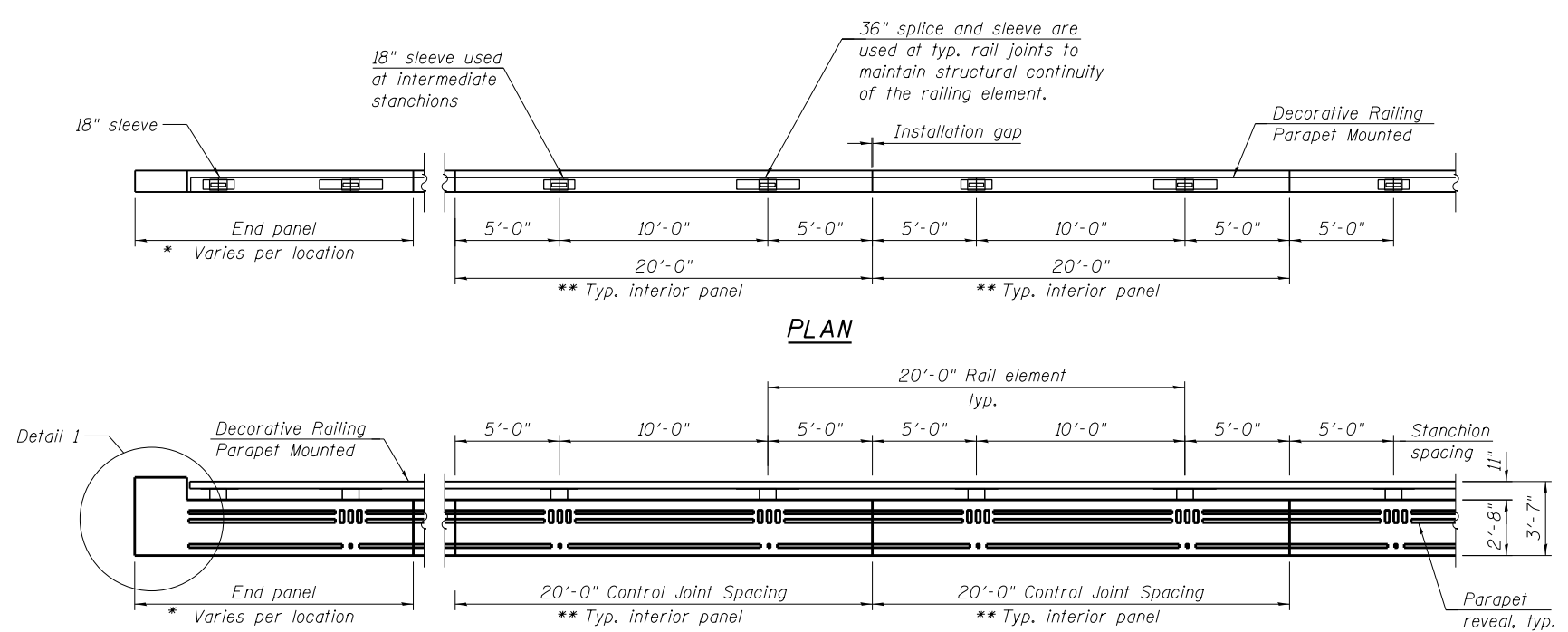
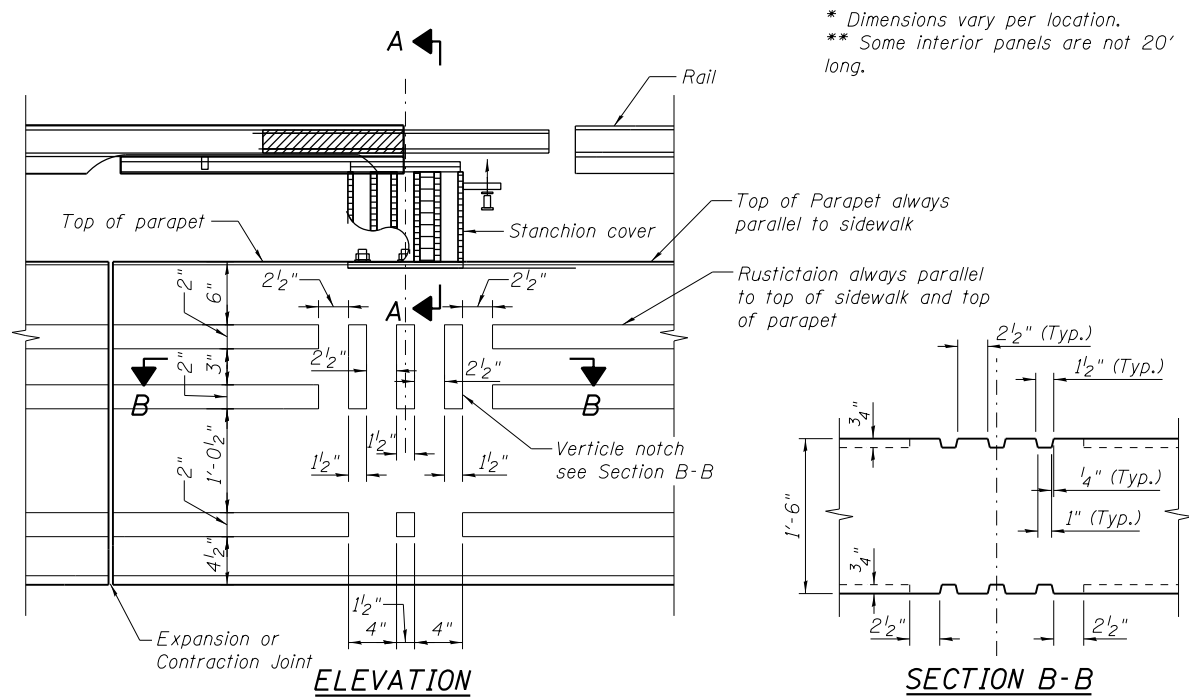


USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
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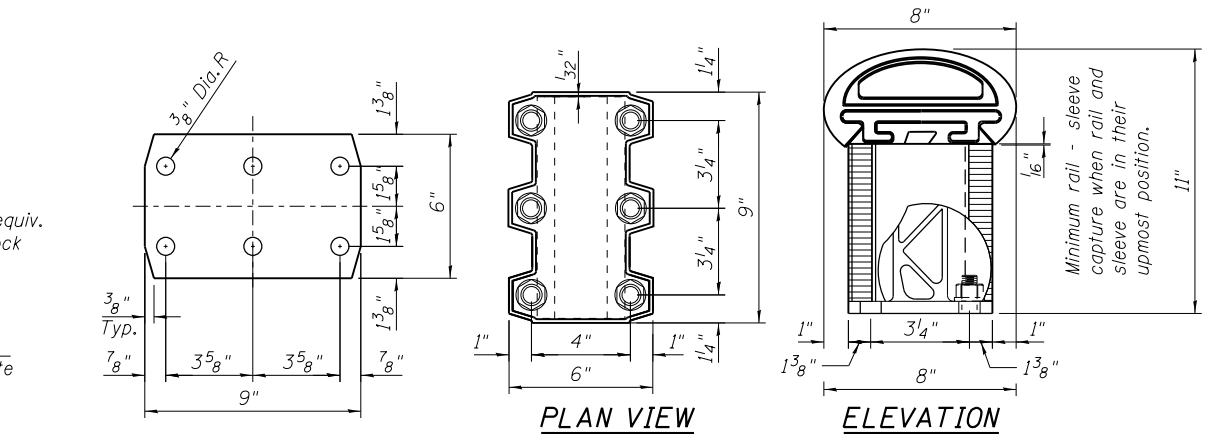
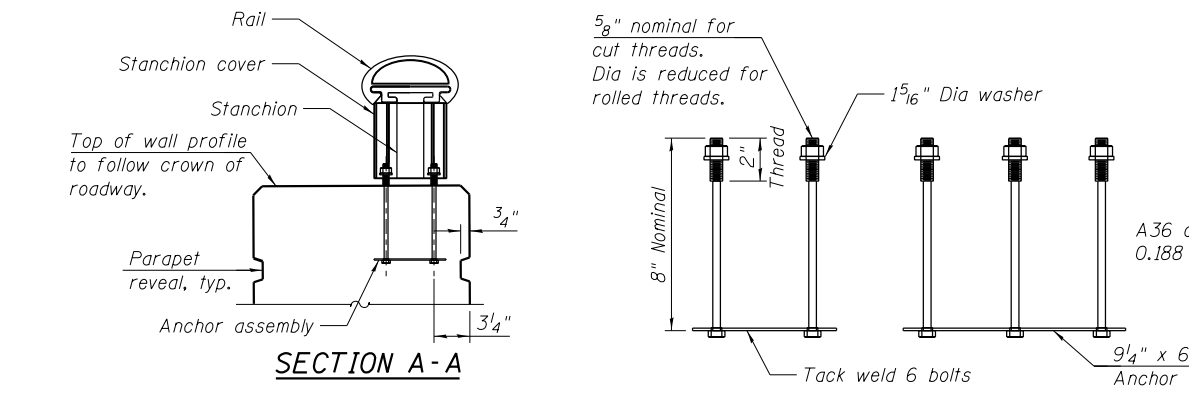
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DETAILS
STRUCTURE NO. 016-1713
SHEET NO. S1-20 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 270
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



- NOTES:**
1. When walls without rail are adjacent to Chicago wall with rail, their traffic face, or the terminus of their traffic face, must be in the same plane as Chicago wall with rail.
 2. Rustication may vary at terminal ends and is subject to site conditions and site approval. In all other situations, the middle 2.5" x 1.5" rustication is aligned with the center of the stanchion.
 3. Wall details above show that portion of the wall above the gutter break, the substructure is not shown. Note that substructure(s) depth variations could significantly alter the required top of wall profile.
 4. Field cutting of rail elements is acceptable. The cut edge will no longer be anodized. Saw cut only, flame cut not allowed.
 5. End caps shall be used at all rail terminals.
 6. Railing system to be produced using extruded aluminum that can be clear anodized.
 7. Alloy selection is based upon the above color requirement and the engineering sufficiency analysis which must be supplied by the contractor.
 8. The reveal on the bridge parapet Chicago wall will not be paid separately and shall be included in the cost of the pay item "Concrete Superstructure". Shop drawings shall be submitted including layout of the Chicago wall pattern, Chicago rail and light poles.



- ANCHOR ASSEMBLY NOTES:**
1. All fasteners to meet, or exceed, A-307 strength requirements.
 2. Galvanize per A-153 after fabrication.
 3. The size and position of parapet reinforcing must be consistent with capture of the anchor assembly. See structural drawings for rebar details.

- ELASTOMERIC PAD NOTES:**
1. Elastomeric pad for stanchion made from 1/16" thick stock.
 2. One required per stanchion.

- STANCHION COVER NOTES:**
1. Cover is shown superimposed over stanchion with anchors in place.
 2. The stanchion cover is a non-structural element, serving an aesthetic function. It rests on the flange of the stanchion, without fasteners and is captured in place by the rail and stanchion.

BILL OF MATERIAL

Item	Unit	Quantity
Decorative Railing (Parapet Mounted)	Foot	620

0161713-60W26-S21-Parapet

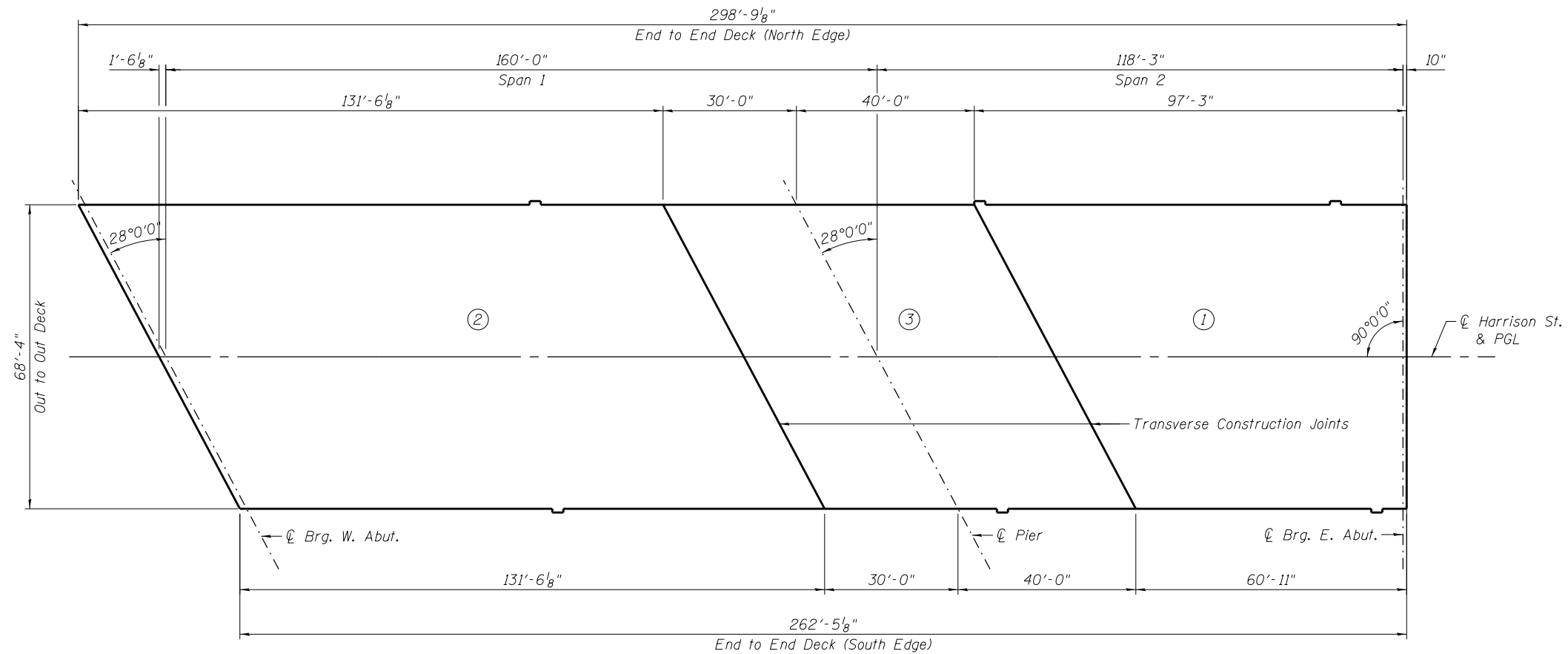


USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET AND DECORATIVE RAILING PARAPET MOUNTED DETAILS
STRUCTURE NO. 016-1713
SHEET NO. S1-21 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 271
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



DECK POURING SEQUENCE

When the deck pour is stopped for the day at one or more of the Transverse Bonded Construction Joints in the Deck Pouring Sequence as shown, the next pour shall not be made until both of the following requirements are met:

1. At least 72 hours shall have elapsed from the end of the previous pour.
2. The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

The concrete deck segments shall be poured in the numerical order shown above. The pour must start from East end deck.

① and ② can be poured on the same day, however ① must be poured first.

0161713-60W26-S22-Deck



USER NAME = dunkerleyb
 PLOT SCALE = N.T.S.
 PLOT DATE = 9/15/2013

DESIGNED - EJO
 CHECKED - ATB
 DRAWN - BRD
 CHECKED - EJO

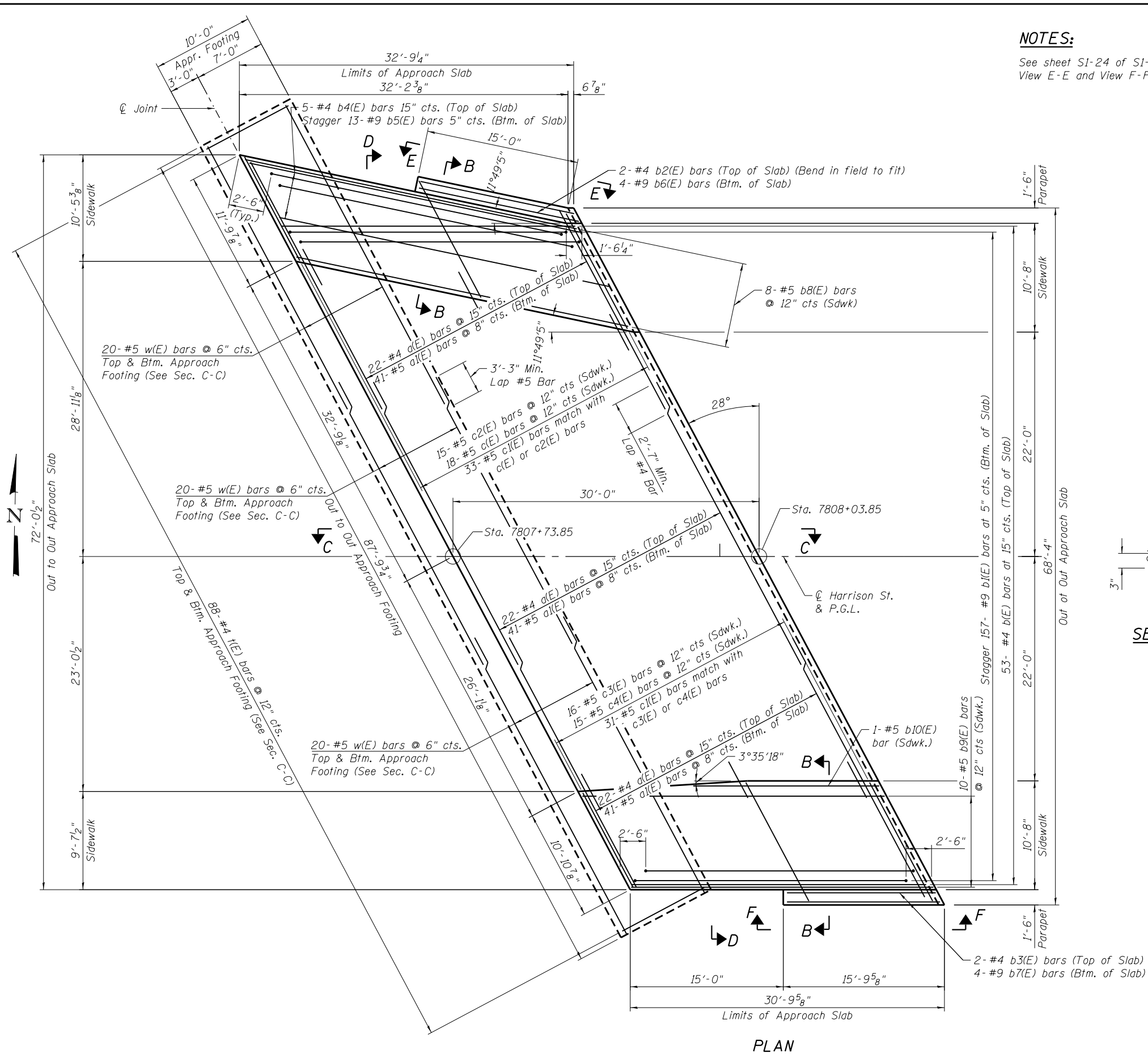
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DECK POURING SEQUENCE
 STRUCTURE NO. 016-1713

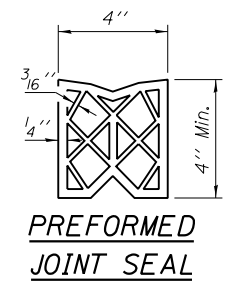
SHEET NO. S1-22 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	272
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

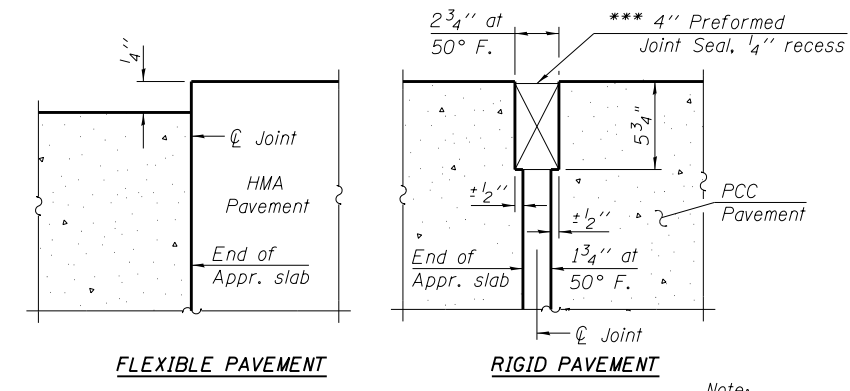


NOTES:

See sheet SI-24 of SI-48 for Sections C-C, D-D, View E-E and View F-F.

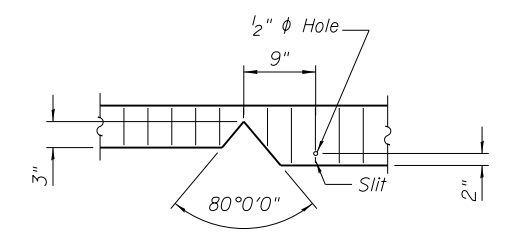


*** Cost included with Concrete Superstructure.

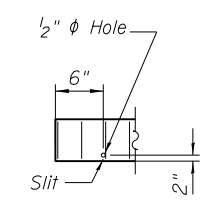


DETAIL A

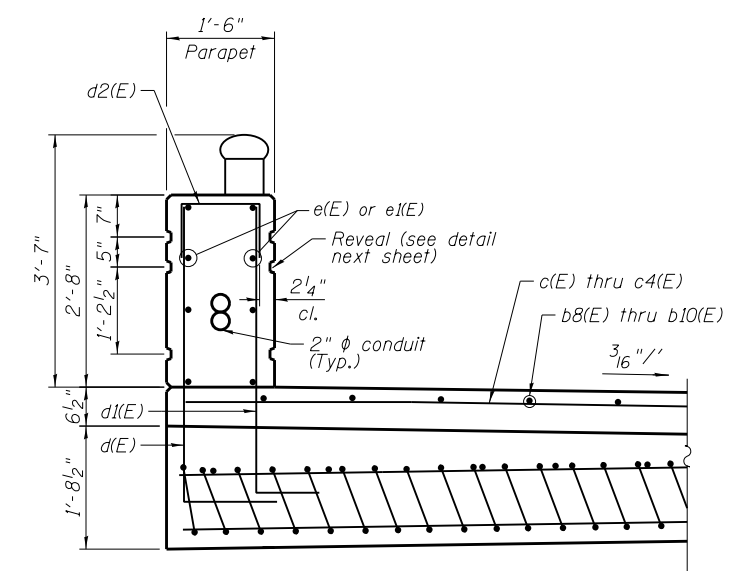
Note:
Dimensions are at right angles.



SEAL CUT-OUT AT CURB



END OF SEAL CUT-OUT



SECTION B-B

PLAN

0161713-60W26-S23-Appr Slab



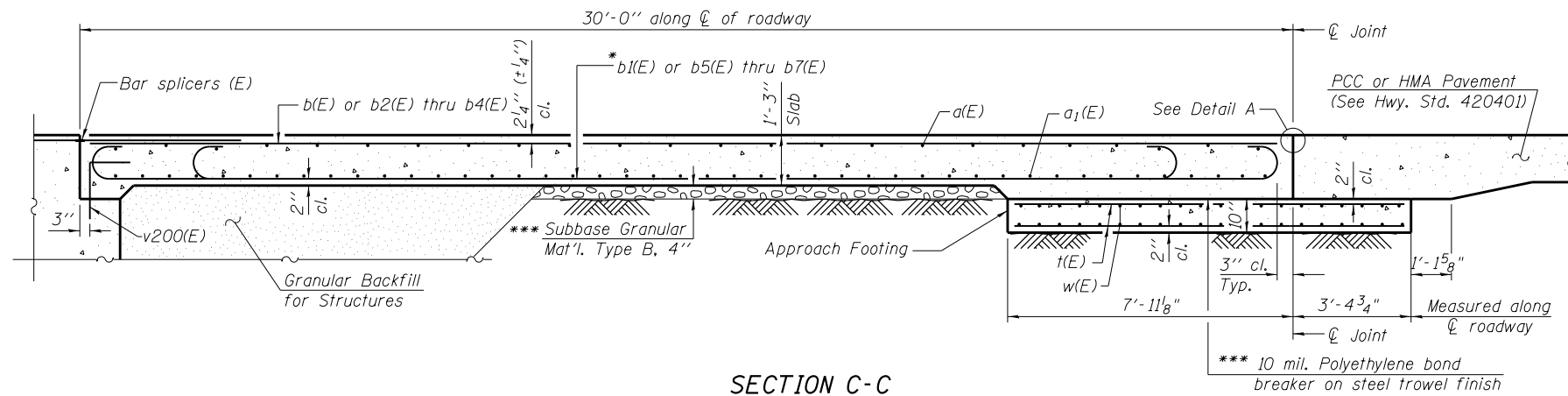
USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST APPROACH SLAB PLAN
STRUCTURE NO. 016-1713**

SHEET NO. SI-23 OF SI-48 SHEETS

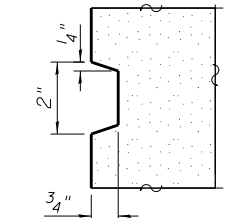
F.A.I. RTE. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 273
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



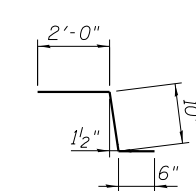
SECTION C-C

NOTES:

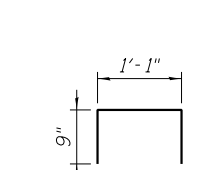
See sheet S1-23 of S1-48 for Detail A.
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v200(E) bar details, see sheet S1-36.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For bar splicer details, see sheet S1-45.
 For Granular Backfill for Structures details, see sheet S1-03.



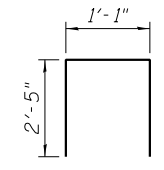
REVEAL DETAIL



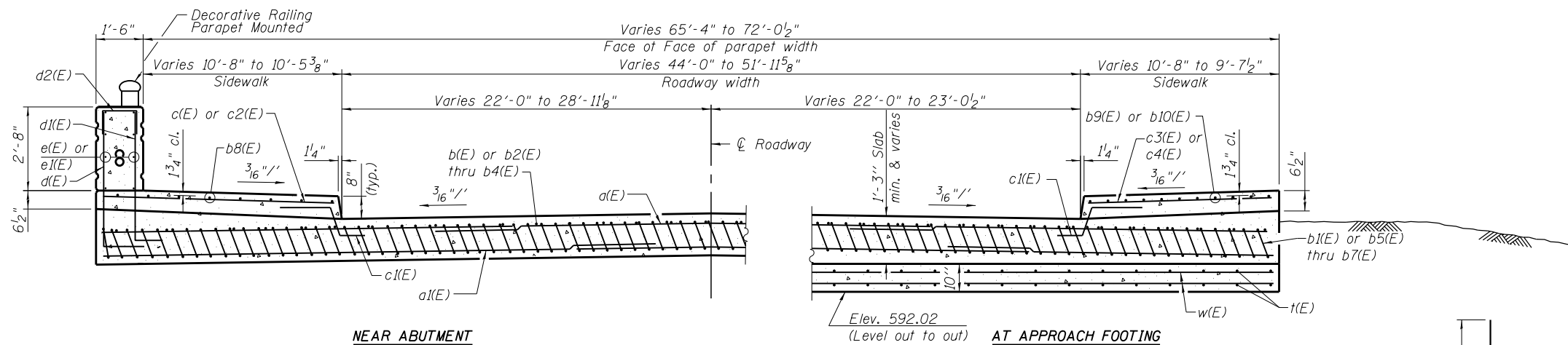
BAR c1(E)



BAR d2(E)



BAR d3(E)

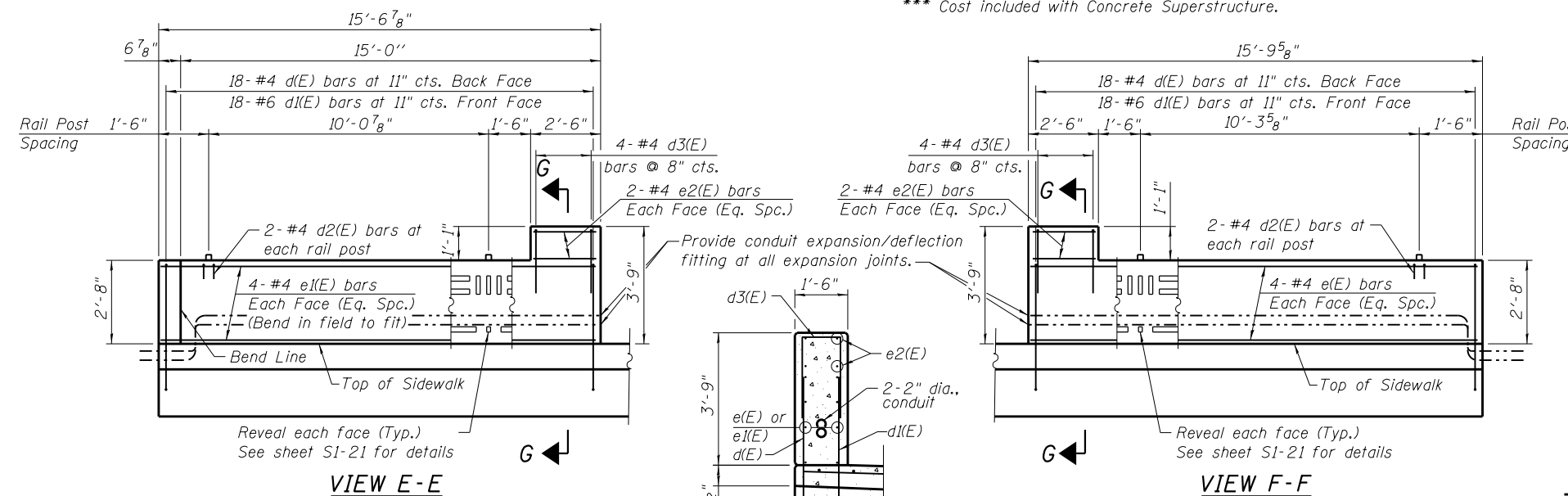


SECTION D-D

(See Plan for dimensions not shown)

* Tilt #9 b1(E) or b5(E) thru b7(E) bars as required to maintain clearance.

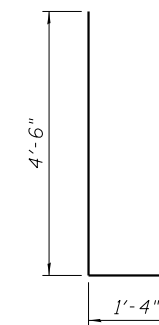
*** Cost included with Concrete Superstructure.



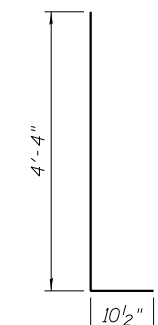
VIEW E-E

VIEW F-F

SECTION G-G



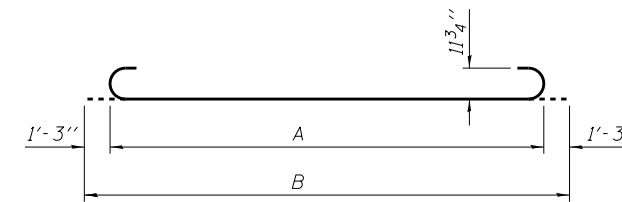
BAR d(E)



BAR d1(E)

A & B Dimensions

Bar	A	B
b1(E)	27'-3"	29'-9"
b5(E)	30'-7"	33'-1"
b6(E)	12'-2"	14'-8"
b7(E)	13'-3"	15'-9"



BARS

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	66	#4	30'-2"	—
a1(E)	123	#5	30'-7"	—
b(E)	53	#4	29'-8"	—
b1(E)	157	#9	29'-9"	—
b2(E)	2	#4	15'-2"	—
b3(E)	2	#4	15'-5"	—
b4(E)	5	#4	33'-1"	—
b5(E)	13	#9	33'-1"	—
b6(E)	4	#9	14'-8"	—
b7(E)	4	#9	15'-9"	—
b8(E)	8	#5	33'-2"	—
b9(E)	10	#5	30'-5"	—
b10(E)	1	#5	18'-0"	—
c(E)	18	#5	11'-5"	—
c1(E)	64	#5	3'-4"	—
c2(E)	15	#5	13'-5"	—
c3(E)	16	#5	12'-5"	—
c4(E)	15	#5	10'-6"	—
d(E)	36	#4	5'-10"	—
d1(E)	36	#6	5'-2 1/2"	—
d2(E)	8	#4	2'-7"	—
d3(E)	8	#4	5'-11"	—
e(E)	8	#4	15'-5"	—
e1(E)	8	#4	15'-2"	—
e2(E)	8	#4	2'-2"	—
t(E)	176	#4	9'-8"	—
w(E)	120	#5	31'-4"	—
Concrete Superstructure		Cu. Yd.	129	
Concrete Structures		Cu. Yd.	28	
Reinforcement Bars, Epoxy Coated		Pound	31550	
Protective Coat		Sq. Yd.	286	
Bridge Deck Grooving		Sq. Yd.	160	

0161713-60W26-S24-Appr Slab



USER NAME = dunkerleyb
 PLOT SCALE = N.T.S.
 PLOT DATE = 9/15/2013

DESIGNED - EJO
 CHECKED - ATB
 DRAWN - BRD
 CHECKED - EJO

REVISED
 REVISED
 REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

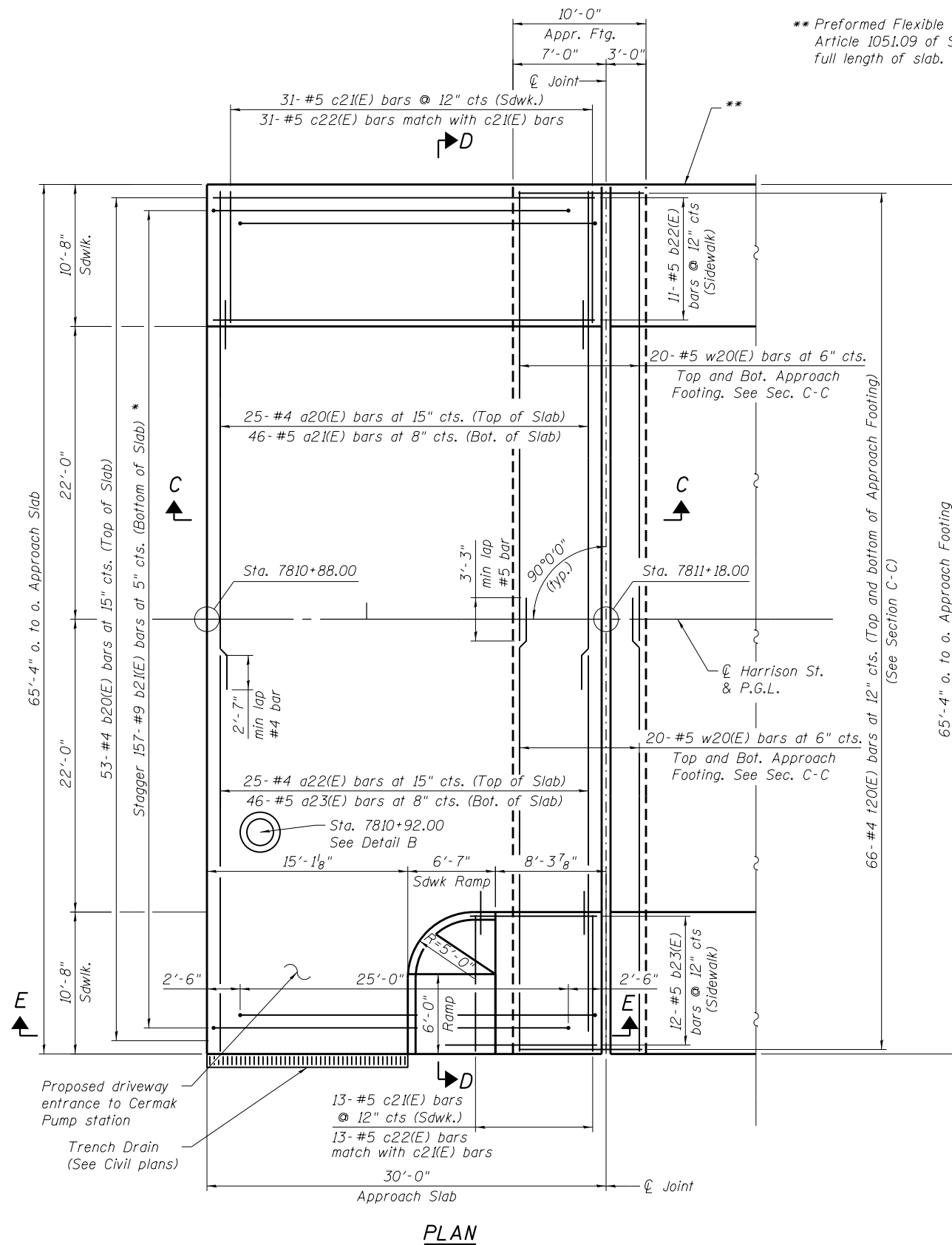
WEST APPROACH SLAB DETAILS
 STRUCTURE NO. 016-1713

SHEET NO. S1-24 OF S1-48 SHEETS

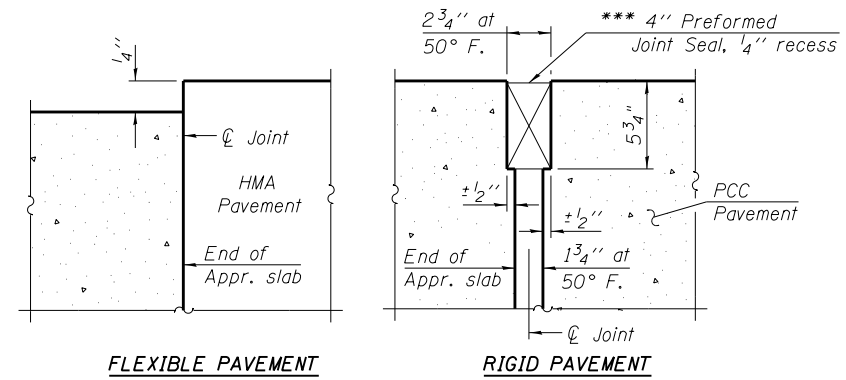
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-00BR	COOK	559	274
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

** Preformed Flexible Foam Expansion Joint Filler according to Article 1051.09 of Standard Specifications. Full depth of slab.

*** Cost included with Concrete Superstructure.

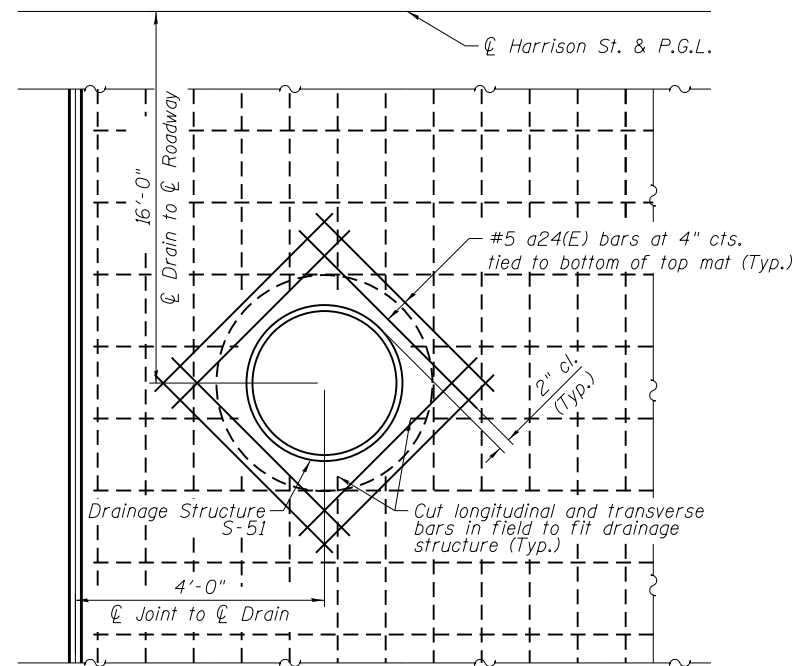
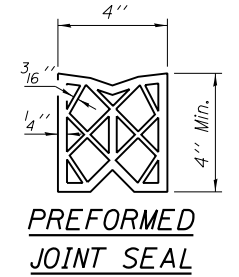


* Tilt #9 b21(E) bars as required to maintain clearance.



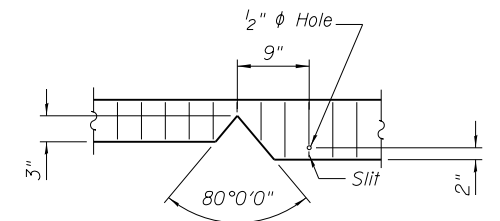
DETAIL A

Note:
Dimensions are at right angles.



DETAIL B

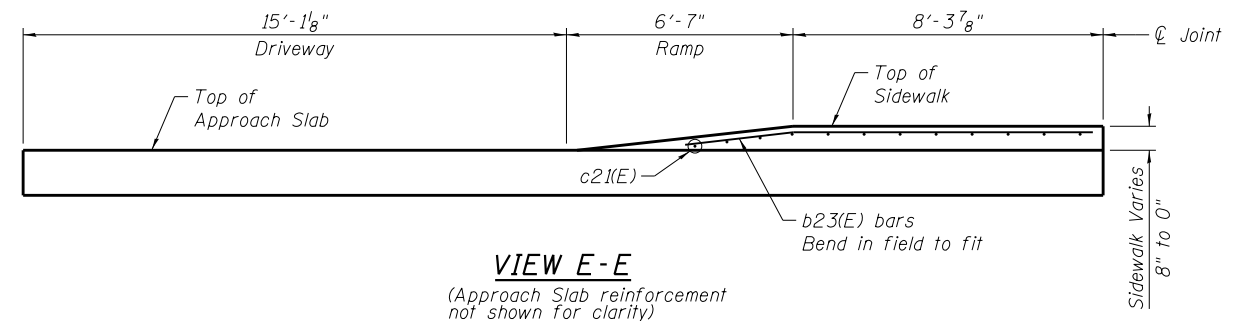
Cost of cutting bars included in Reinforcement Bars, Epoxy Coated



SEAL CUT-OUT AT CURB

NOTES:

1. See sheet S1-26 of S1-48 for Sections C-C & D-D.
2. See Civil plans for driveway flare details.
3. See Civil plans for drainage structure details.



VIEW E-E

(Approach Slab reinforcement not shown for clarity)

0161713-60W26-S25-Appr Slab



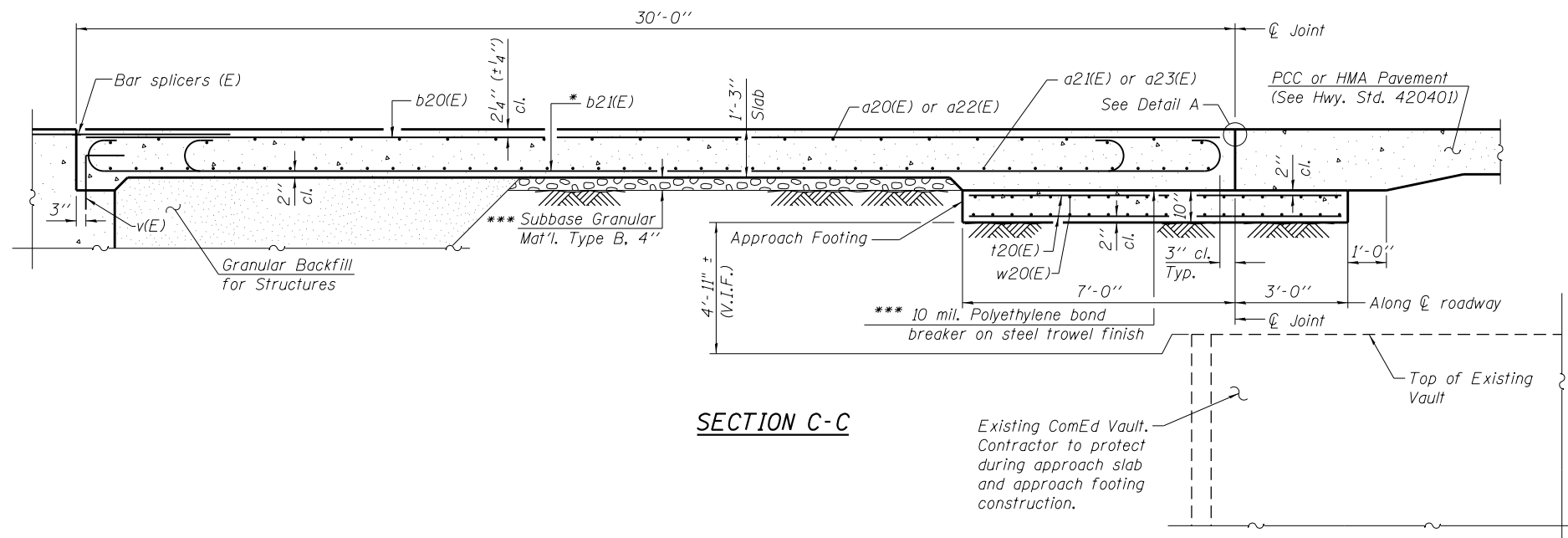
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PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

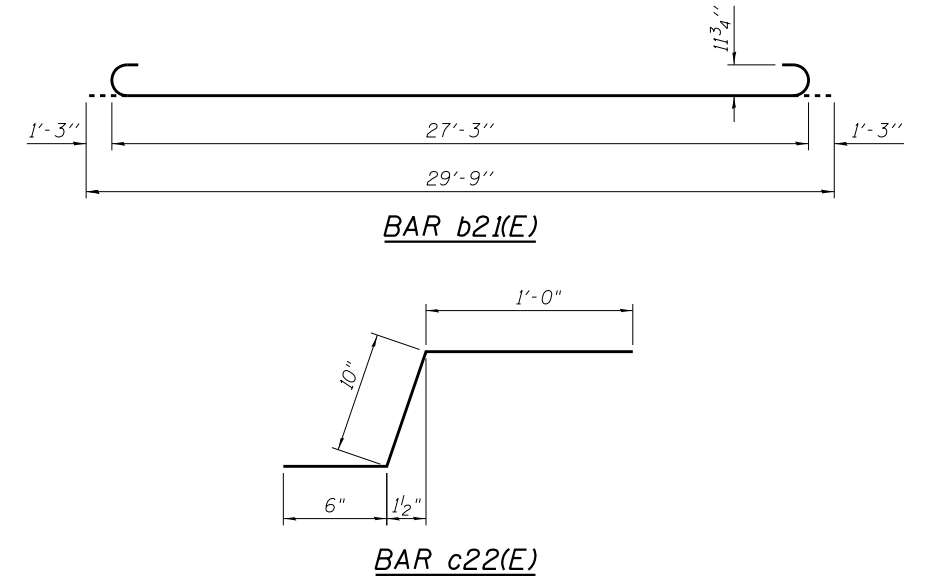
EAST APPROACH SLAB PLAN
STRUCTURE NO. 016-1713

SHEET NO. S1-25 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 275
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

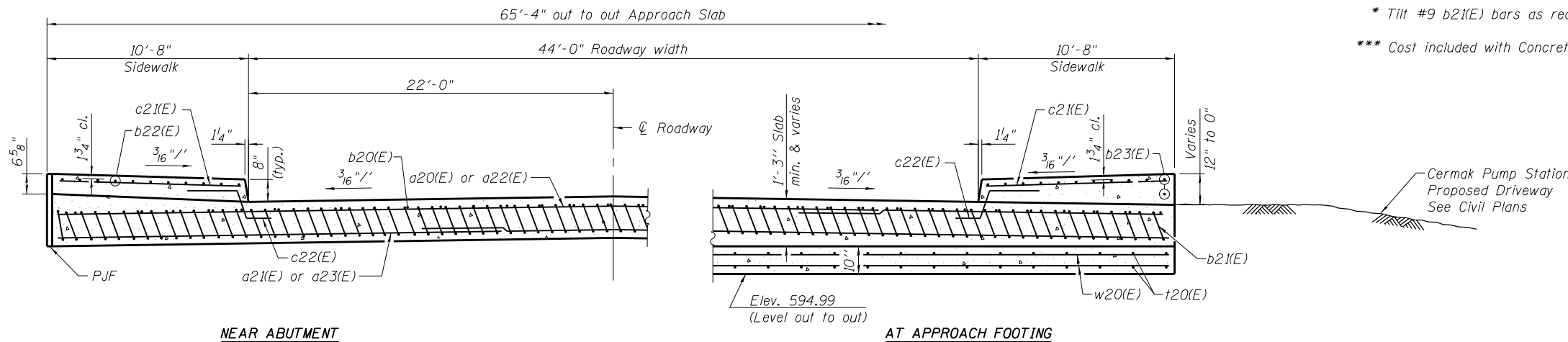


SECTION C-C



NOTES:

See sheet S1-25 of S1-48 for Detail A.
 Approach slab concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheet S1-39.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 For bar splicer details, see sheet S1-45.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures details, see sheet S1-03.
 V.I.F. = Contractor to verify in field.



SECTION D-D

(See Plan for dimensions not shown)

* Tilt #9 b21(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a20(E)	25	#4	40'-0"	—
a21(E)	46	#5	28'-3"	—
a22(E)	25	#4	27'-7"	—
a23(E)	46	#5	40'-0"	—
a24(E)	8	#5	3'-6"	—
b20(E)	53	#4	29'-8"	—
b21(E)	157	#9	29'-9"	⌋
b22(E)	11	#5	29'-8"	—
b23(E)	12	#5	11'-5"	—
c21(E)	44	#5	10'-4"	—
c22(E)	44	#5	2'-4"	⌋
t20(E)	132	#4	9'-8"	—
w20(E)	80	#5	34'-2"	—
Concrete Superstructure			Cu. Yd.	103
Concrete Structures			Cu. Yd.	21
Reinforcement Bars, Epoxy Coated			Pound	26140
Protective Coat			Sq. Yd.	205
Bridge Deck Grooving			Sq. Yd.	159

0161713-60W26-S26-Appr Slab



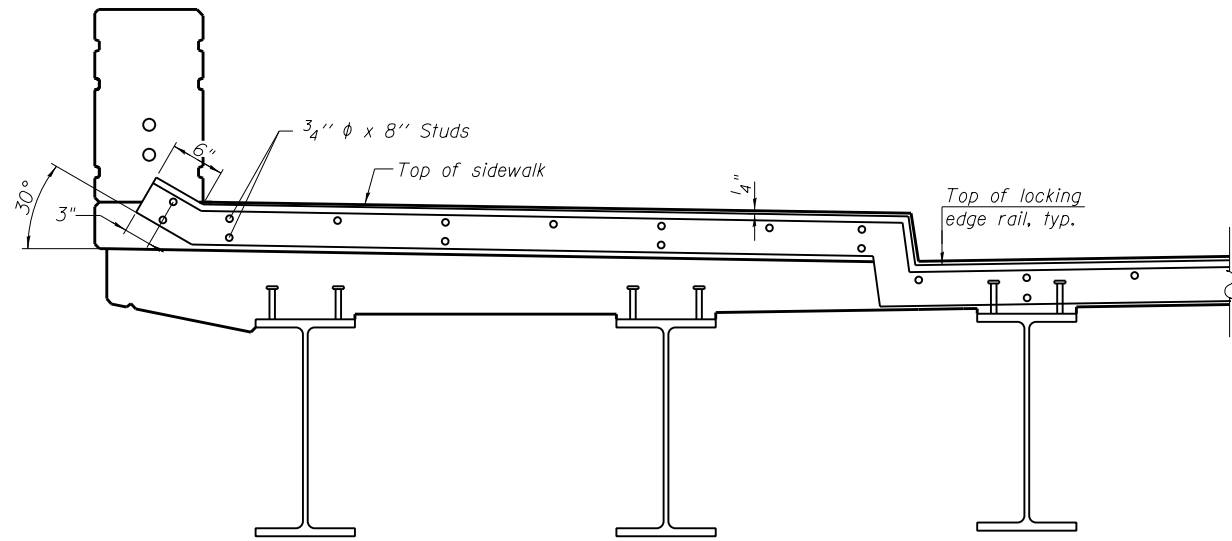
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PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EAST APPROACH SLAB DETAILS
 STRUCTURE NO. 016-1713**

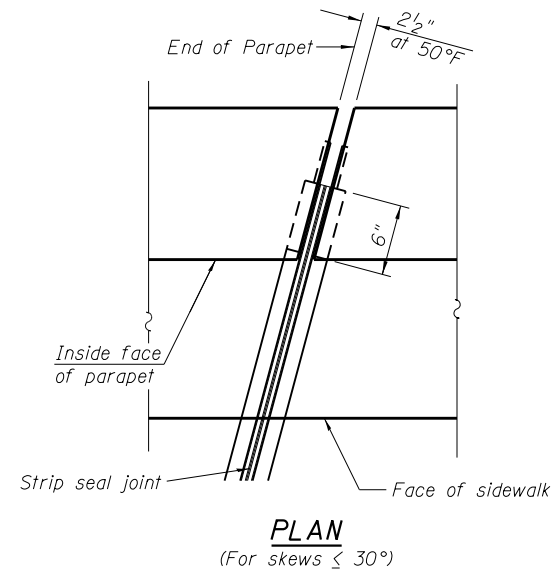
SHEET NO. S1-26 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 276
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

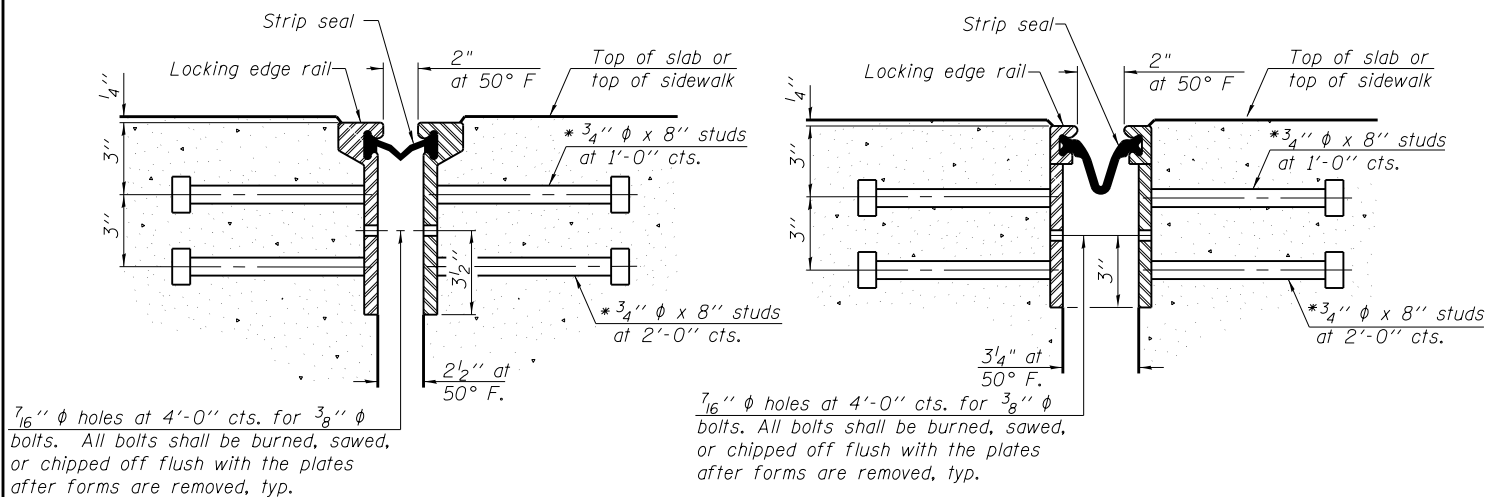


TYPICAL END TREATMENT AT SIDEWALK

Shorter plates with a single row of studs at 12" cts. may be necessary on sidewalks which are shallower than 9". See manufacturer's recommendation.



PLAN
(For skews ≤ 30°)

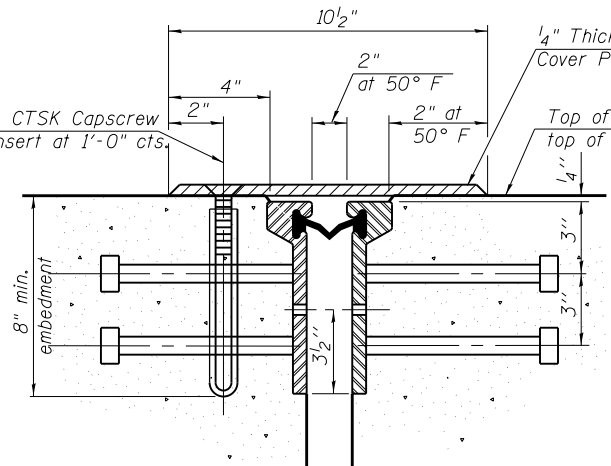


SECTION THRU ROLLED RAIL JOINT

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

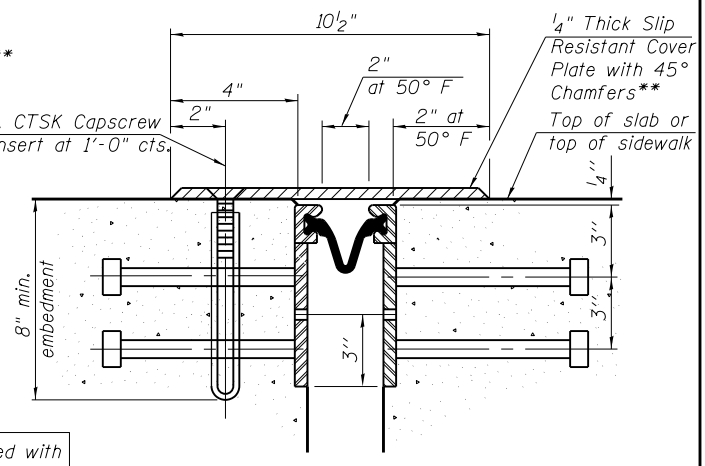


SECTION THRU WELDED RAIL JOINT



SECTION THRU ROLLED RAIL JOINT AT SIDEWALK

**Cost shall be included with Preformed Joint Strip Seal

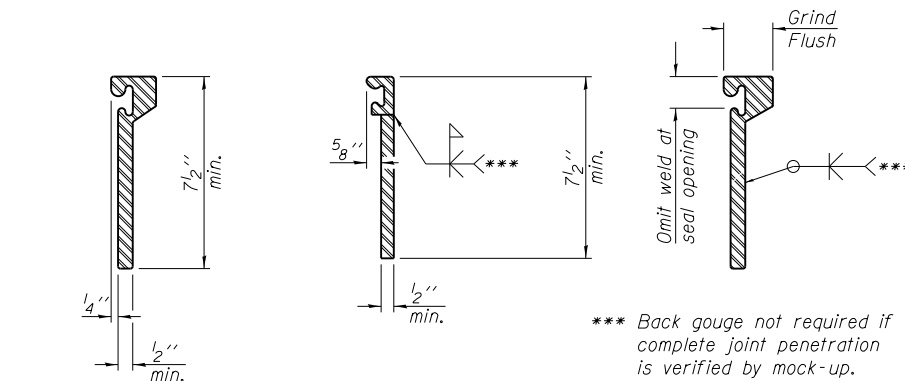


SECTION THRU WELDED RAIL JOINT AT ADA RAMP

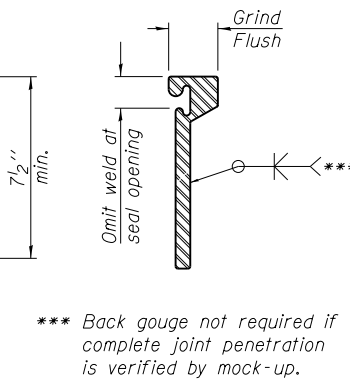
Note: At East Abut. and West Abut. attach cover plate to the Ramp Pavement with 1/2" S.S. CTSK cap screw with concrete insert at 1'-0" cts.

NOTES:

- The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
- The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
- The manufacturer's recommended installation methods shall be followed.
- The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
- All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.



ROLLED EXTRUDED RAIL WELDED RAIL LOCKING EDGE RAILS



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	143



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

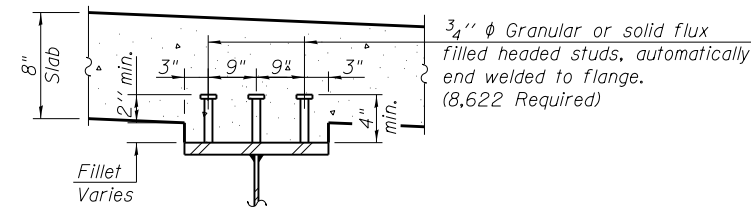
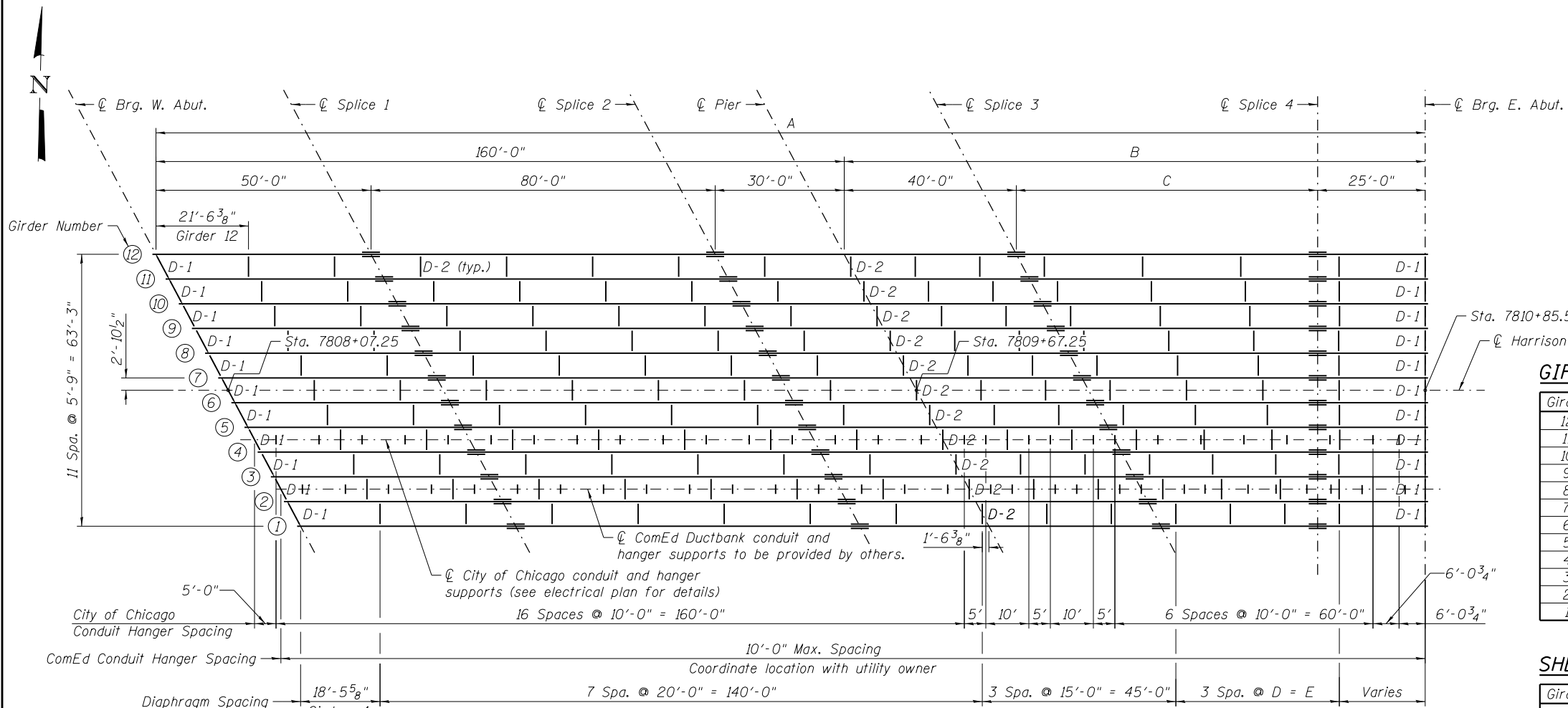
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS STRUCTURE NO. 016-1713

SHEET NO. S1-27 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 277
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

0161713-60W26-S27-ExpJoint



SECTION A-A
Do not place studs on splice plates.

GIRDER DIMENSIONS

Girder	A	B	C
12	295'-0 ³ / ₁₆ "	135'-0 ³ / ₁₆ "	70'-0 ³ / ₁₆ "
11	292'-0 ³ / ₁₆ "	132'-0 ³ / ₁₆ "	67'-0 ³ / ₁₆ "
10	288'-11 ¹ / ₁₆ "	128'-11 ¹ / ₁₆ "	63'-11 ¹ / ₁₆ "
9	285'-10 ³ / ₄ "	125'-10 ³ / ₄ "	60'-10 ³ / ₄ "
8	282'-10 ¹ / ₁₆ "	122'-10 ¹ / ₁₆ "	57'-10 ¹ / ₁₆ "
7	279'-9 ³ / ₈ "	119'-9 ³ / ₈ "	54'-9 ³ / ₈ "
6	276'-8 ⁵ / ₈ "	116'-8 ⁵ / ₈ "	51'-8 ⁵ / ₈ "
5	273'-7 ¹⁵ / ₁₆ "	113'-7 ¹⁵ / ₁₆ "	48'-7 ¹⁵ / ₁₆ "
4	270'-7 ¹ / ₄ "	110'-7 ¹ / ₄ "	45'-7 ¹ / ₄ "
3	267'-6 ⁹ / ₁₆ "	107'-6 ⁹ / ₁₆ "	42'-6 ⁹ / ₁₆ "
2	264'-5 ⁷ / ₈ "	104'-5 ⁷ / ₈ "	39'-5 ⁷ / ₈ "
1	261'-5 ³ / ₁₆ "	101'-5 ³ / ₁₆ "	36'-5 ³ / ₁₆ "

DIAPHRAGM SPACING

Girder	D	E
11-12	22'-10"	68'-6"
10-11	21'-10"	65'-6"
9-10	20'-10"	62'-6"
8-9	19'-9"	59'-3"
7-8	18'-9"	56'-3"
6-7	17'-9"	53'-3"
5-6	16'-9"	50'-3"
4-5	15'-9"	47'-3"
3-4	14'-8"	44'-0"
2-3	13'-8"	41'-0"
1-2	12'-8"	38'-0"

SHEAR CONNECTOR SCHEDULE

Girder	C1
12	65 Spa. @ 12" (±) = 64'-8 ³ / ₁₆ "
11	62 Spa. @ 12" (±) = 61'-8 ³ / ₁₆ "
10	59 Spa. @ 12" (±) = 58'-7 ¹ / ₁₆ "
9	56 Spa. @ 12" (±) = 55'-6 ³ / ₄ "
8	53 Spa. @ 12" (±) = 52'-6 ¹ / ₁₆ "
7	50 Spa. @ 12" (±) = 49'-5 ³ / ₈ "
6	47 Spa. @ 12" (±) = 46'-4 ⁵ / ₈ "
5	44 Spa. @ 12" (±) = 43'-3 ¹⁵ / ₁₆ "
4	41 Spa. @ 12" (±) = 40'-3 ¹ / ₄ "
3	38 Spa. @ 12" (±) = 37'-2 ⁹ / ₁₆ "
2	35 Spa. @ 12" (±) = 34'-1 ⁷ / ₈ "
1	32 Spa. @ 12" (±) = 31'-1 ³ / ₁₆ "

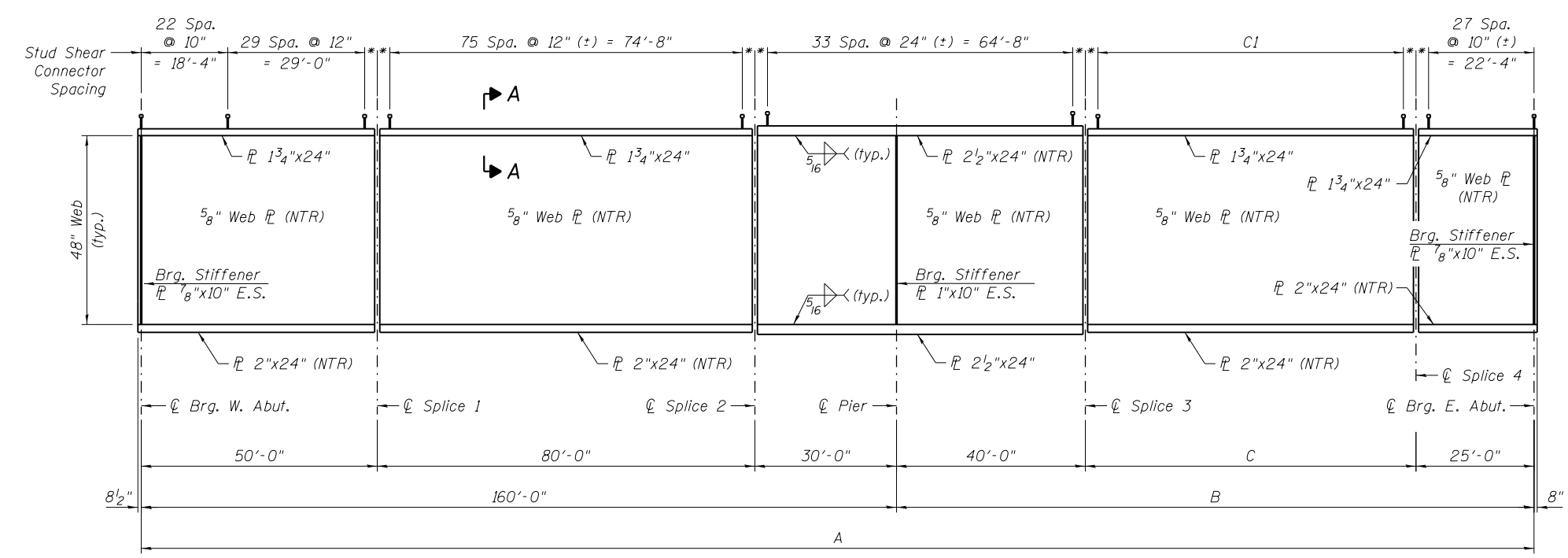
* = 2'-8"

NOTES:

- All structural steel shall be AASHTO M270 Grade 50 - galvanized.
- Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
- Girders have bearing stiffeners and connection plates as required by design. Additional stiffeners may be added at the Contractor's expense as necessary to prevent distortion of the girders during galvanizing. The Contractor shall coordinate with the fabricator and the galvanizer to determine if additional stiffeners are necessary, and where these should be placed. Any proposed changes shall be submitted to the Engineer for approval prior to making any changes.
- Temporary stiffener angles shall be bolted to each side of the splice ends of each girder segment to prevent distortion during galvanizing. Temporary stiffener angles shall bolt or fit tight against top & bottom flanges and include spacer tubes to minimize damage to galvanizing during removal. Cost included with Furnishing and Erecting Structural Steel.
- E.S. = Each Side
- Work this sheet with sheets S1-29 thru S1-31.

FRAMING PLAN

GIRDER ELEVATION



0161713-60W26-S28-FramePlan



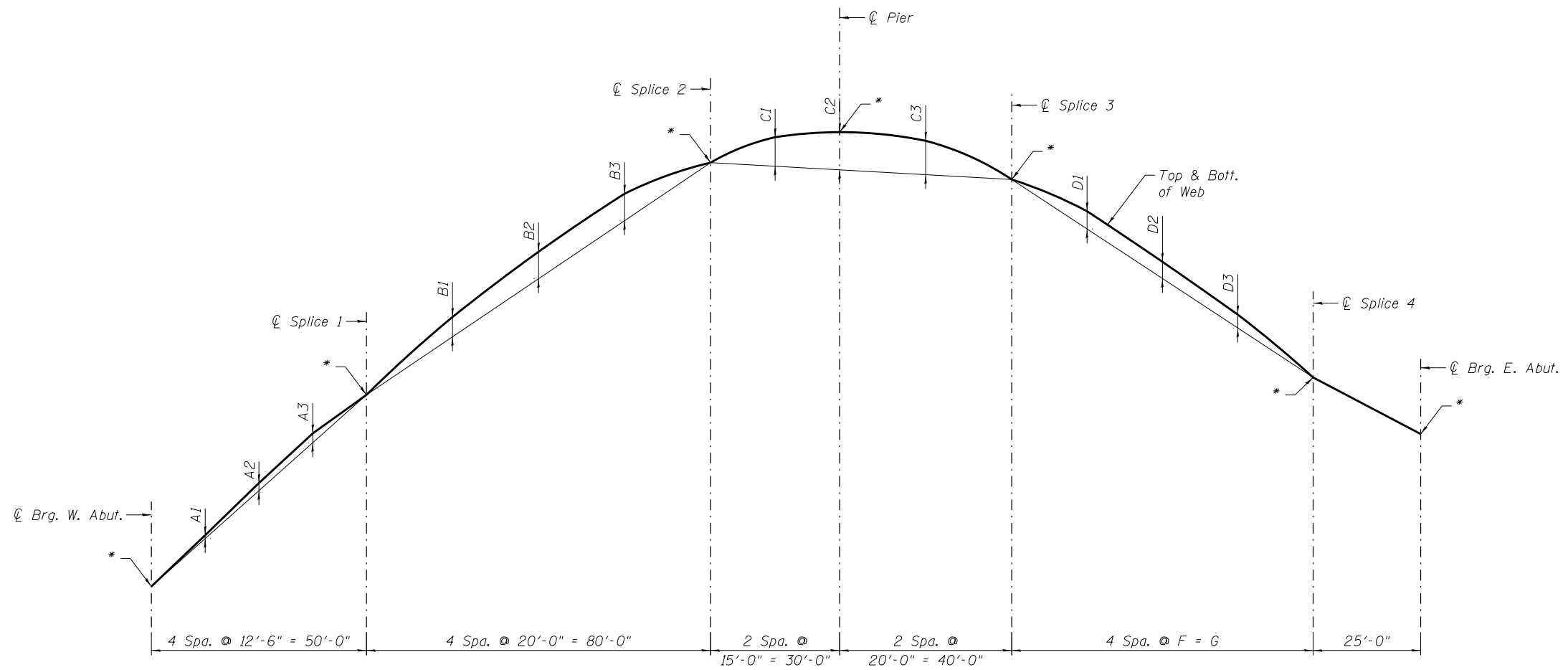
USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GIRDER FRAMING PLAN
STRUCTURE NO. 016-1713**

SHEET NO. S1-28 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 278
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



CAMBER DIAGRAM

* See Table for Top of Web Elevations
 (Includes weight of concrete deck, steel girders, sidewalk, parapet and railing)

CAMBER ORDINATES														
Girder	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3	F	G
12	1/2"	1"	1 1/4"	2 3/4"	3 3/4"	3 3/4"	4"	5 1/4"	4 3/4"	2 1/2"	2 1/4"	1 3/4"	17'-6 3/16"	70'-0 13/16"
11	1/2"	1"	1 1/4"	3"	4"	4"	4"	5 1/4"	4 3/4"	2 1/4"	2"	1 3/4"	16'-9"	67'-0 1/8"
10	1/2"	1"	1 1/4"	3 1/4"	4 1/2"	4 1/2"	4"	5 1/4"	4 3/4"	2"	2"	1 1/2"	15'-11 7/8"	63'-11 7/16"
9	1/2"	1"	1 1/4"	3 1/4"	4 3/4"	4 3/4"	3 3/4"	5"	4 1/2"	2"	1 3/4"	1 1/2"	15'-2 11/16"	60'-10 3/4"
8	1/2"	1"	1 1/4"	3 1/2"	5 1/4"	5"	3 3/4"	5"	4 1/2"	1 3/4"	1 1/2"	1 1/2"	14'-5 1/2"	57'-10 1/16"
7	1/2"	1"	1 1/4"	4"	5 3/4"	5 1/2"	3 3/4"	5"	4 1/2"	1 3/4"	1 1/2"	1 1/2"	13'-8 5/16"	54'-9 3/8"
6	3/4"	1"	1 1/4"	4 1/4"	6"	5 3/4"	3 3/4"	5"	4 1/4"	1 3/4"	1 1/2"	1 1/4"	12'-11 1/8"	51'-8 5/8"
5	3/4"	1"	1 1/4"	4 1/2"	6 1/2"	6"	3 1/2"	5"	4"	1 1/2"	1 1/2"	1 1/4"	12'-2"	48'-7 15/16"
4	3/4"	1"	1 1/4"	4 3/4"	7"	6 1/4"	3 1/2"	4 3/4"	3 3/4"	1 1/2"	1 1/2"	1 1/4"	11'-4 13/16"	45'-7 1/4"
3	3/4"	1"	1 1/4"	5 1/4"	7 1/2"	6 3/4"	3 1/2"	4 1/2"	3 1/2"	1 1/2"	1 1/2"	1 1/4"	10'-7 5/8"	42'-6 9/16"
2	3/4"	1"	1 1/4"	5 1/2"	8"	6 3/4"	3 1/2"	4 1/2"	3 1/4"	1 1/2"	1 1/2"	1 1/4"	9'-10 7/16"	39'-5 7/8"
1	3/4"	1"	1 1/4"	5 3/4"	8 1/4"	7"	3 1/4"	4 1/4"	3"	1 1/2"	1 1/2"	1 1/2"	9'-1 5/16"	36'-5 3/16"

TOP OF WEB ELEVATIONS**							
Girder	℄ Brg. W. Abut.	℄ Splice 1	℄ Splice 2	℄ Pier	℄ Splice 3	℄ Splice 4	℄ Brg. E. Abut.
12	594.85	597.09	599.78	600.13	599.58	597.28	596.59
11	595.06	597.30	599.94	600.23	599.58	597.37	596.68
10	595.27	597.52	600.11	600.31	599.57	597.45	596.77
9	595.48	597.73	600.27	600.39	599.56	597.53	596.86
8	595.69	597.94	600.41	600.47	599.54	597.61	596.95
7	595.89	598.16	600.55	600.53	599.51	597.69	597.04
6	596.01	598.28	600.60	600.50	599.40	597.68	597.04
5	596.04	598.32	600.54	600.38	599.19	597.58	596.95
4	596.07	598.35	600.48	600.24	598.99	597.48	596.86
3	596.10	598.38	600.41	600.10	598.79	597.38	596.77
2	596.13	598.41	600.33	599.95	598.58	597.29	596.68
1	596.16	598.44	600.24	599.80	598.38	597.19	596.59

**For fabrication use only.

0161713-60W26-S29-SuperStruct



USER NAME = dunkerleyb
 PLOT SCALE = N.T.S.
 PLOT DATE = 9/15/2013

DESIGNED - EJO
 CHECKED - ATB
 DRAWN - BRD
 CHECKED - EJO

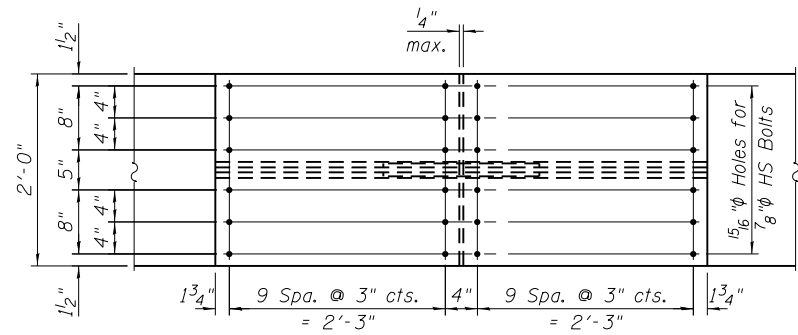
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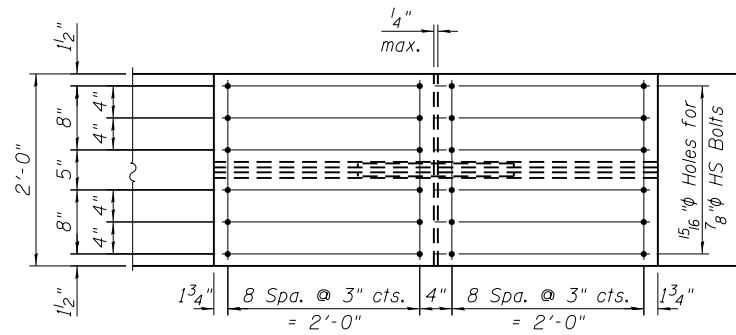
GIRDER CAMBER AND TOP OF WEB ELEVATIONS
 STRUCTURE NO. 016-1713

SHEET NO. S1-29 OF S1-48 SHEETS

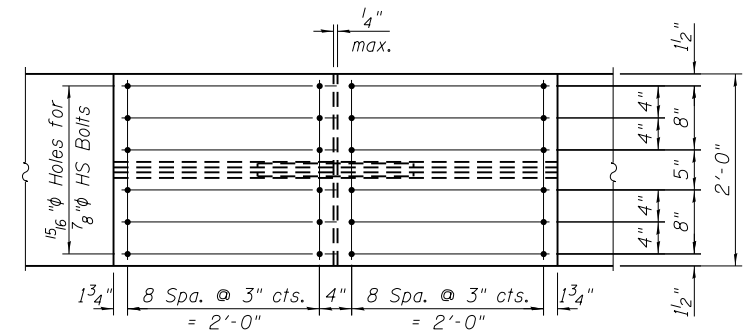
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CONTRACT NO. 60W26				ILLINOIS FED. AID PROJECT



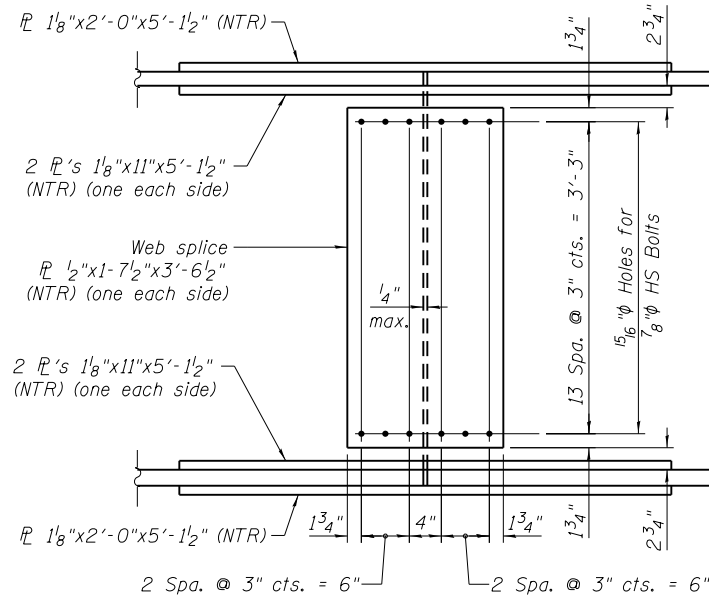
TOP FLANGE



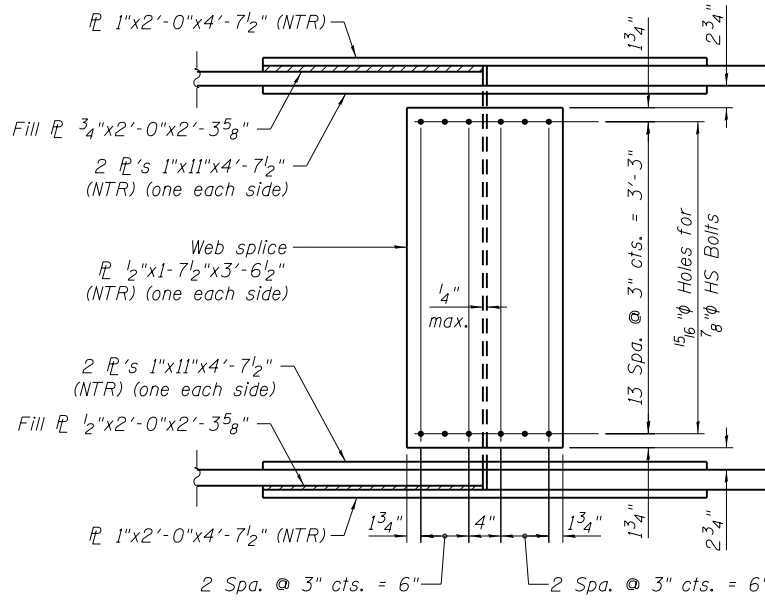
TOP FLANGE



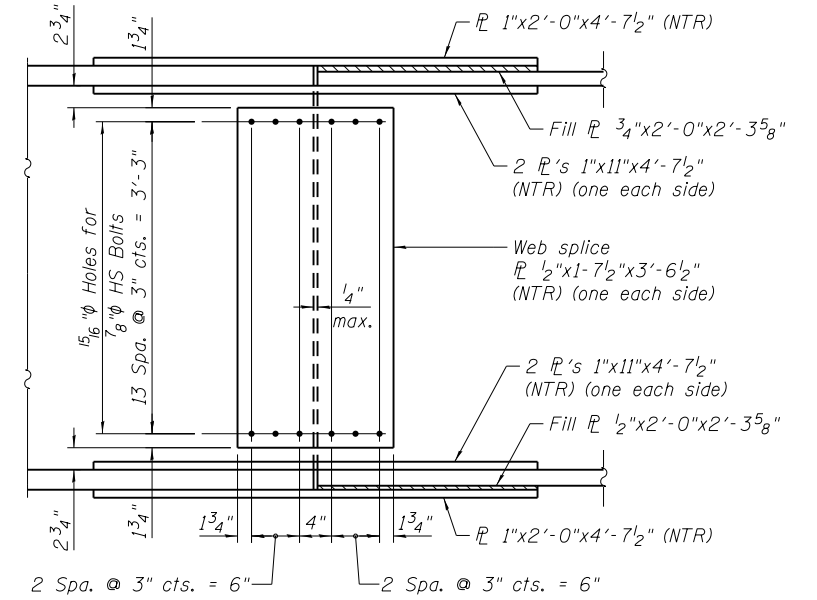
TOP FLANGE



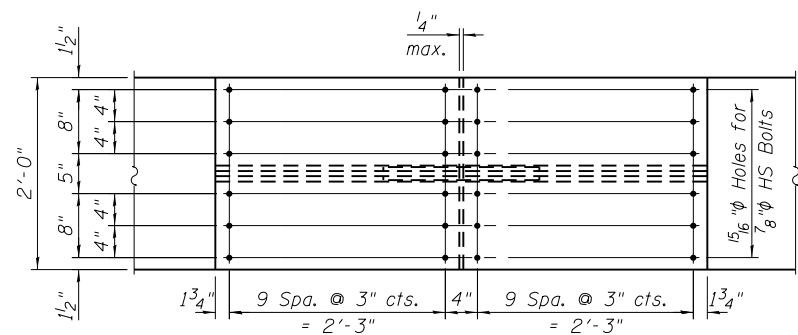
ELEVATION



ELEVATION



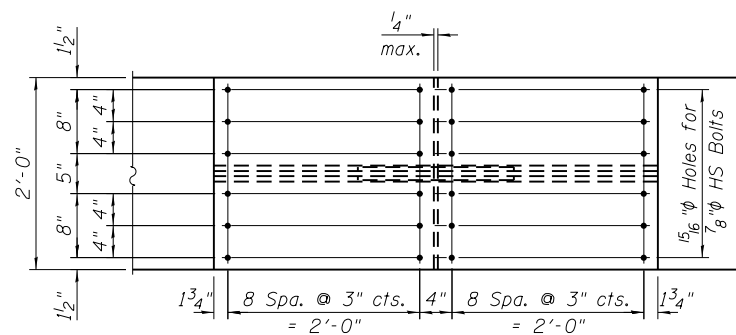
ELEVATION



BOTTOM FLANGE

SPLICE 1 & 4 DETAIL

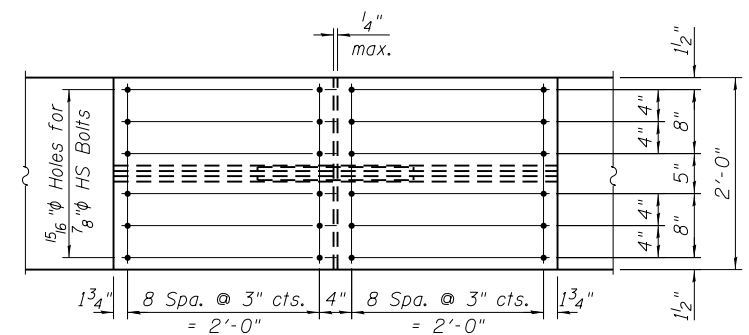
(24 Required)



BOTTOM FLANGE

SPLICE 2 DETAIL

(12 Required)



BOTTOM FLANGE

SPLICE 3 DETAIL

(12 Required)

NOTES:

- All structural steel shall be AASHTO M270 Grade 50 - galvanized.
- Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

0161713-60W26-S30-SuperStruct



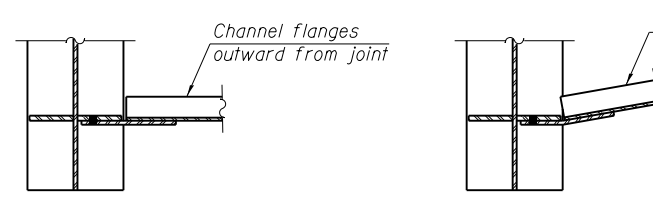
USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

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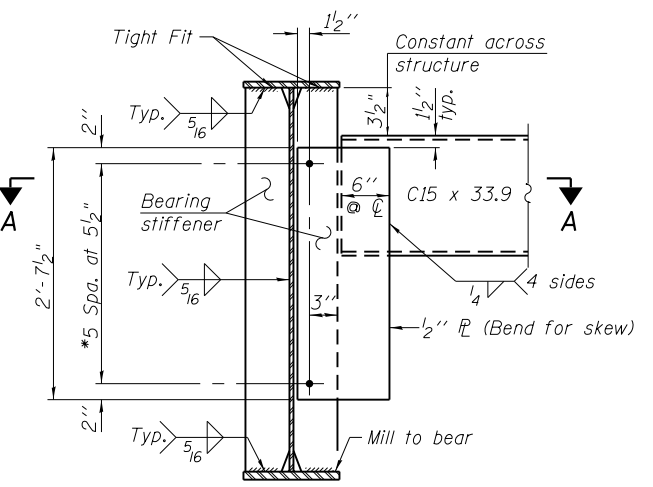
GIRDER BOLTED FIELD SPLICE DETAILS
STRUCTURE NO. 016-1713

SHEET NO. S1-30 OF S1-48 SHEETS

F.A.I. R.T.E. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 280
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

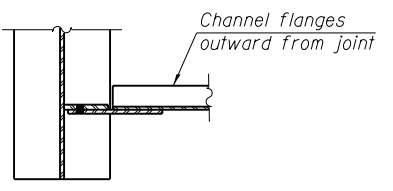


SECTION A-A

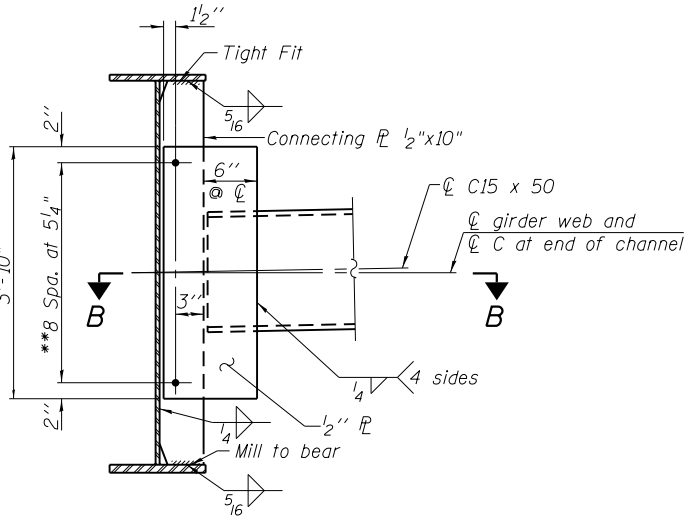


END DIAPHRAGM - D-1

(22 Required)
*7/8" φ HS Bolts, 1/16" φ holes

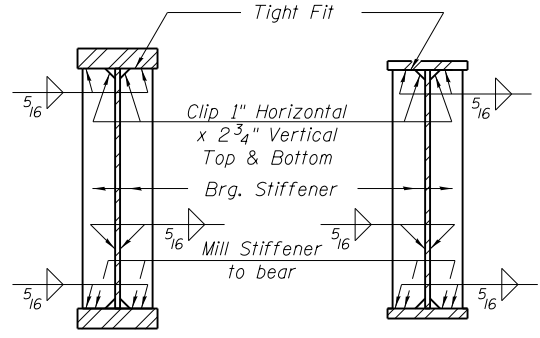


SECTION B-B



INTERIOR DIAPHRAGM - D-2

**7/8" φ HS bolts, 1/16" φ holes



SECTION AT PIER
SECTION AT ABUTMENT

BEARING STIFFENER DETAIL

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.⁴ and in.³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

$I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).

$DC1$: Un-factored non-composite dead load (kips/ft.).

M_{DC1} : Un-factored moment due to non-composite dead load (kip-ft.).

$DC2$: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2} : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW : Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW} : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_L + 1M$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + 1M$

$\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

$f_s DC1$: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
 M_{DC1} / S_{nc}

$f_s DC2$: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
 $M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

$f_s DW$: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
 $M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

$f_s (\pm + 1M)$: Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
 $M_L + 1M / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
 $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s (\pm + 1M)$

$0.95R_n F_y f$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
 $1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_s (\pm + 1M)$

$\phi_r F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_r : Maximum factored shear range in span computed according to Article 6.10.10.

** For Girders 2 and 3, the load due to ComEd ductbank is 105 pounds per linear foot. For Girders 4 and 5, the load due to City of Chicago ductbank is 105 pounds per linear foot.

NOTES:

- All structural steel shall be AASHTO M270 Grade 50 - galvanized.
- All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Two hardened washers required for each set of oversized holes.

	0.4 Sp. 1	Pier	0.6 Sp. 2
I_s (in ⁴)	61,574	82,330	61,574
$I_c(n)$ (in ⁴)	106,081	-	106,081
$I_c(3n)$ (in ⁴)	80,858	-	80,858
$I_c(cr)$ (in ⁴)	-	87,346	-
S_s (in ³)	2,492	3,107	2,492
$S_c(n)$ (in ³)	2,945	-	2,945
$S_c(3n)$ (in ³)	2,730	-	2,730
$S_c(cr)$ (in ³)	-	3,433	-
$DC1$ (k/')	1.22	1.30	1.22
M_{DC1} (k)	2.281	3.652	1.104
$DC2$ (k/')	0.57	0.57	0.57
M_{DC2} (k)	1.093	1.670	526
DW (k/')	0.27	0.27	0.27
M_{DW} (k)	522	796	250
$M_L + 1M$ (k)	1,851	1,923	1,512
M_u (Strength I) (k)	8,240	11,212	5,059
$\phi_r M_n$ (k)	11,325	-	11,514
$f_s DC1$ (ksi)	10.98	14.10	5.32
$f_s DC2$ (ksi)	4.80	5.84	2.31
$f_s DW$ (ksi)	2.29	2.78	1.10
$f_s (\pm + 1M)$ (ksi)	7.54	6.72	6.16
f_s (Service II) (ksi)	27.89	31.46	16.74
$0.95R_n F_y f$ (ksi)	47.50	47.50	47.50
f_s (Total)(Strength I) (ksi)	36.38	40.86	21.97
$\phi_r F_n$ (ksi)	-	50.00	-
V_r (k)	22.40	24.10	22.10

	W. Abut.	Pier	E. Abut.
R_{DC1} (k)	76	234	54
R_{DC2} (k)	36	107	25
R_{DW} (k)	17	51	12
$R_L + 1M$ (k)	66	127	63
R_{Total} (k)	195	519	154

	0.4 Sp. 1	Pier	0.6 Sp. 2
I_s (in ⁴)	61,574	82,330	61,574
$I_c(n)$ (in ⁴)	104,358	-	104,358
$I_c(3n)$ (in ⁴)	79,900	-	79,900
$I_c(cr)$ (in ⁴)	-	87,065	-
S_s (in ³)	2,492	3,107	2,492
$S_c(n)$ (in ³)	2,932	-	2,932
$S_c(3n)$ (in ³)	2,720	-	2,720
$S_c(cr)$ (in ³)	-	3,414	-
$DC1$ (k/')	1.18	1.26	1.18
M_{DC1} (k)	2.235	3.612	1.170
$DC2$ (k/')	0.57	0.57	0.57
M_{DC2} (k)	1.082	1.682	563
DW (k/')	0.27	0.27	0.27
M_{DW} (k)	516	802	268
$M_L + 1M$ (k)	2,102	2,257	1,753
M_u (Strength I) (k)	8,599	11,770	5,636
$\phi_r M_n$ (k)	11,348	-	11,514
$f_s DC1$ (ksi)	10.76	13.95	5.63
$f_s DC2$ (ksi)	4.77	5.91	2.48
$f_s DW$ (ksi)	2.28	2.82	1.18
$f_s (\pm + 1M)$ (ksi)	8.60	7.93	7.17
f_s (Service II) (ksi)	29.00	32.99	18.63
$0.95R_n F_y f$ (ksi)	47.50	47.50	47.50
f_s (Total)(Strength I) (ksi)	37.89	42.94	24.48
$\phi_r F_n$ (ksi)	-	50.00	-
V_r (k)	23.00	26.70	24.10

	W. Abut.	Pier	E. Abut.
R_{DC1} (k)	74	228	55
R_{DC2} (k)	35	107	26
R_{DW} (k)	17	51	12
$R_L + 1M$ (k)	67	144	65
R_{Total} (k)	193	530	158

	0.4 Sp. 1	Pier	0.6 Sp. 2
I_s (in ⁴)	61,574	82,330	61,574
$I_c(n)$ (in ⁴)	106,081	-	106,081
$I_c(3n)$ (in ⁴)	80,858	-	80,858
$I_c(cr)$ (in ⁴)	-	87,346	-
S_s (in ³)	2,492	3,107	2,492
$S_c(n)$ (in ³)	2,945	-	2,945
$S_c(3n)$ (in ³)	2,730	-	2,730
$S_c(cr)$ (in ³)	-	3,433	-
$DC1$ (k/')	1.22	1.30	1.22
M_{DC1} (k)	2.409	3.322	302
$DC2$ (k/')	0.62	0.62	0.62
M_{DC2} (k)	1.224	1.622	161
DW (k/')	0.27	0.27	0.27
M_{DW} (k)	548	723	70
$M_L + 1M$ (k)	2,284	2,327	1,459
M_u (Strength I) (k)	9,360	11,337	3,237
$\phi_r M_n$ (k)	11,380	-	11,779
$f_s DC1$ (ksi)	11.60	12.83	1.45
$f_s DC2$ (ksi)	5.38	5.67	0.71
$f_s DW$ (ksi)	2.41	2.53	0.31
$f_s (\pm + 1M)$ (ksi)	9.31	8.13	5.94
f_s (Service II) (ksi)	31.49	31.60	10.20
$0.95R_n F_y f$ (ksi)	47.50	47.50	47.50
f_s (Total)(Strength I) (ksi)	41.13	41.15	13.57
$\phi_r F_n$ (ksi)	-	50.00	-
V_r (k)	21.40	22.60	21.60

	W. Abut.	Pier	E. Abut.
R_{DC1} (k)	78	219	34
R_{DC2} (k)	39	108	17
R_{DW} (k)	17	48	7
$R_L + 1M$ (k)	93	177	78
R_{Total} (k)	227	552	136

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER DIAPHRAGM DETAILS AND MOMENT TABLES
STRUCTURE NO. 016-1713



USER NAME = dunkerleyb
DESIGNED - EJO
CHECKED - ATB
PLOT SCALE = N.T.S.
DRAWN - BRD
PLOT DATE = 9/15/2013
CHECKED - EJO

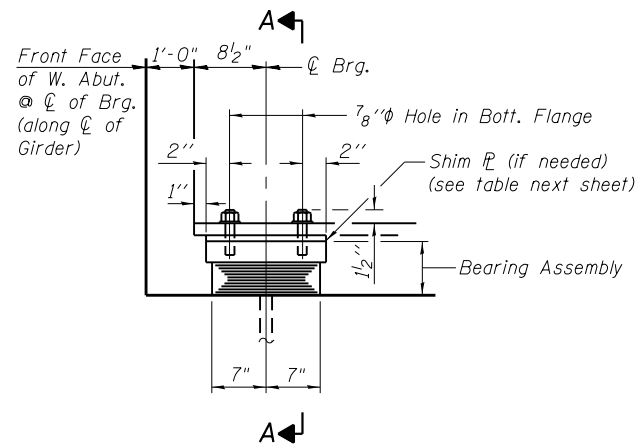
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CHECKED - EJO

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REVISED

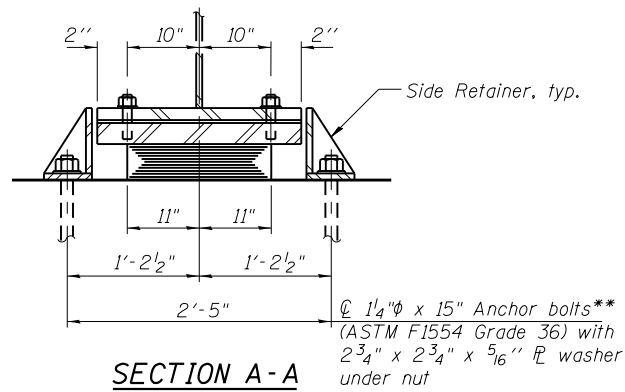
SHEET NO. S1-31 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-00BR	COOK	559	281
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

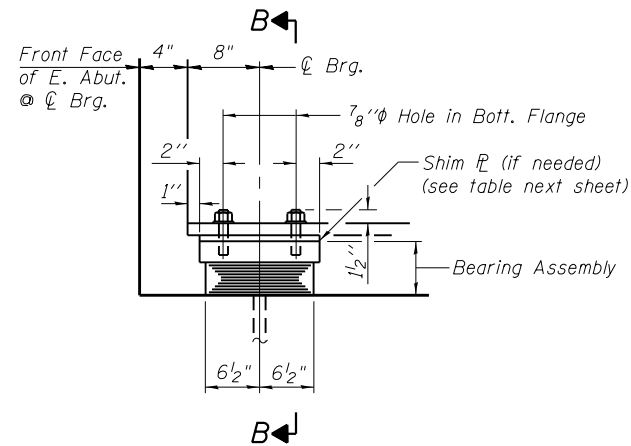
0161713-60W26-S31-Super-Struct



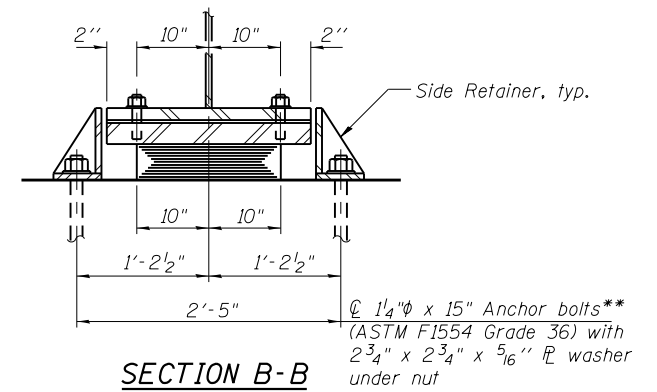
ELEVATION AT W. ABUT.



SECTION A-A



ELEVATION AT E. ABUT.



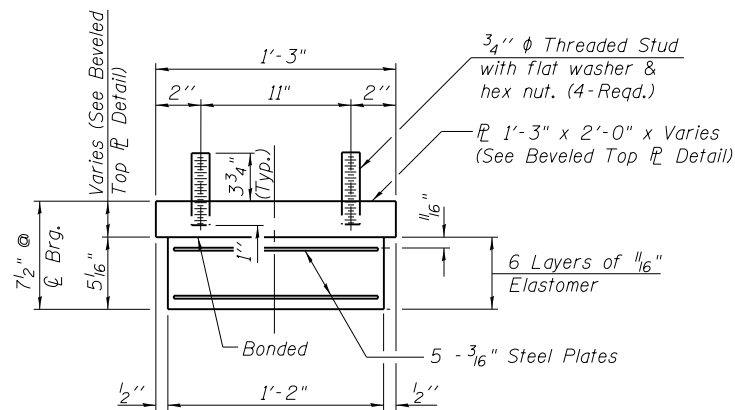
SECTION B-B

TYPE I ELASTOMERIC EXP. BRG. WEST ABUTMENT

** Length shown is minimum required embedment length.

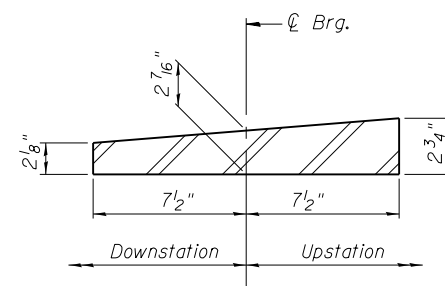
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** Length shown is minimum required embedment length.

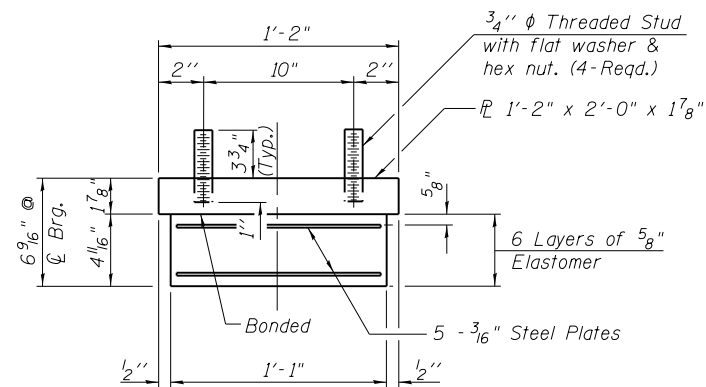


BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

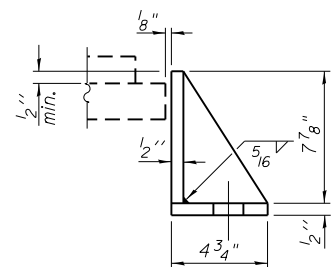


BEVELED TOP PLATE DETAIL WEST ABUTMENT



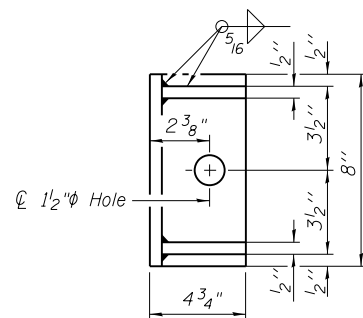
BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.



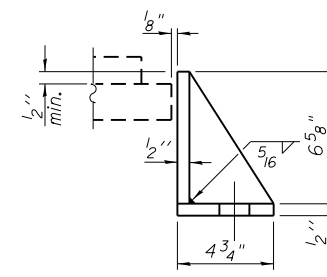
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



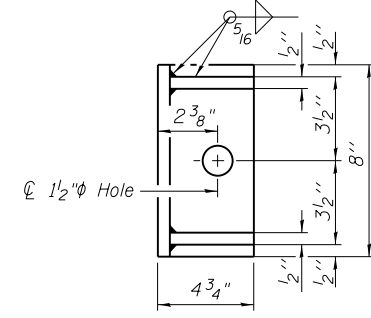
NOTES:

- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.
- Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
- Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
- The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.
- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	24
Anchor Bolts, 1 1/4"	Each	48

0161713-60W26-S32-Bearing



USER NAME = dunkerleyb
 DESIGNED - EJO
 CHECKED - ATB
 PLOT SCALE = N.T.S.
 DRAWN - BRD
 PLOT DATE = 9/15/2013
 CHECKED - EJO

DESIGNED - EJO
 CHECKED - ATB
 DRAWN - BRD
 CHECKED - EJO

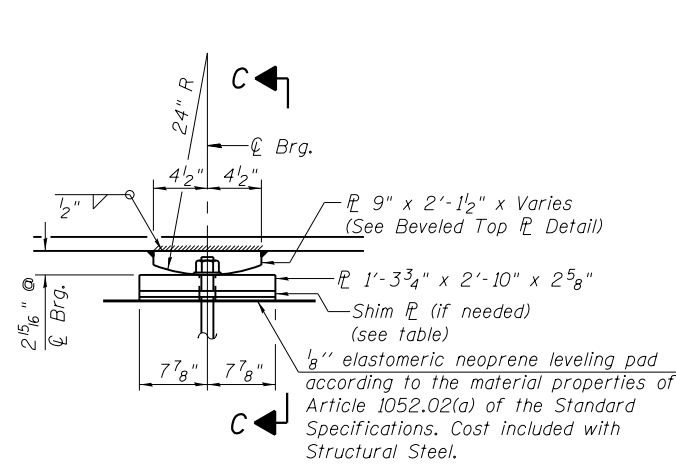
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STATE OF ILLINOIS
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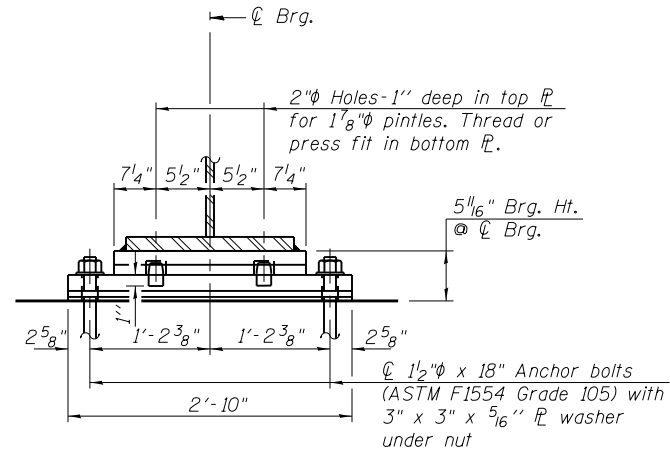
ELASTOMERIC BEARING DETAILS
 STRUCTURE NO. 016-1713

SHEET NO. S1-32 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	282
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				



ELEVATION AT PIER

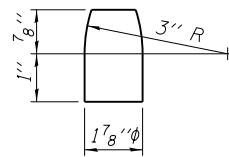


SECTION C-C

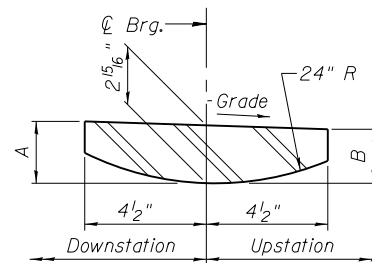
BEVELED TOP FLANGE DIMENSIONS

Girder No.	A	B	Grade
1	3 1/6"	2 13/16"	-2.24%
2	3"	2 7/8"	-2.02%
3	3"	2 7/8"	-1.79%
4	3"	2 7/8"	-1.56%
5	3"	2 7/8"	-1.34%
6	3"	2 7/8"	-1.11%
7	3"	2 7/8"	-0.88%
8	2 15/16"	2 15/16"	-0.66%
9	2 15/16"	2 15/16"	-0.43%
10	2 15/16"	2 15/16"	-0.20%
11	2 15/16"	2 15/16"	0.03%
12	2 15/16"	2 15/16"	0.25%

FIXED BEARING - PIER



PINTLE



BEVELED TOP FLANGE DETAIL

NOTES:

- Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
- Fixed Bearing Assembly included in "Furnishing and Erecting Structural Steel."
- The structural steel plates and pintles shall conform to the requirements of AASHTO M270 Grade 50.
- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.

SHIM PLATE THICKNESS TABLE

Location	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12
West Abut.	1/4"	-	3/8"	-	3/8"	-	-	-	-	-	-	-
Pier	-	-	-	-	-	-	-	-	-	-	-	-
East Abut.	-	-	-	-	-	-	-	-	-	-	-	-

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1 1/2"	Each	24

0161713-60W26-S33-Bearing



USER NAME = dunkerleyb
 PLOT SCALE = N.T.S.
 PLOT DATE = 9/15/2013

DESIGNED - EJO
 CHECKED - ATB
 DRAWN - BRD
 CHECKED - EJO

REVISED
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 REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FIXED BEARING DETAILS
 STRUCTURE NO. 016-1713**

SHEET NO. S1-33 OF S1-48 SHEETS

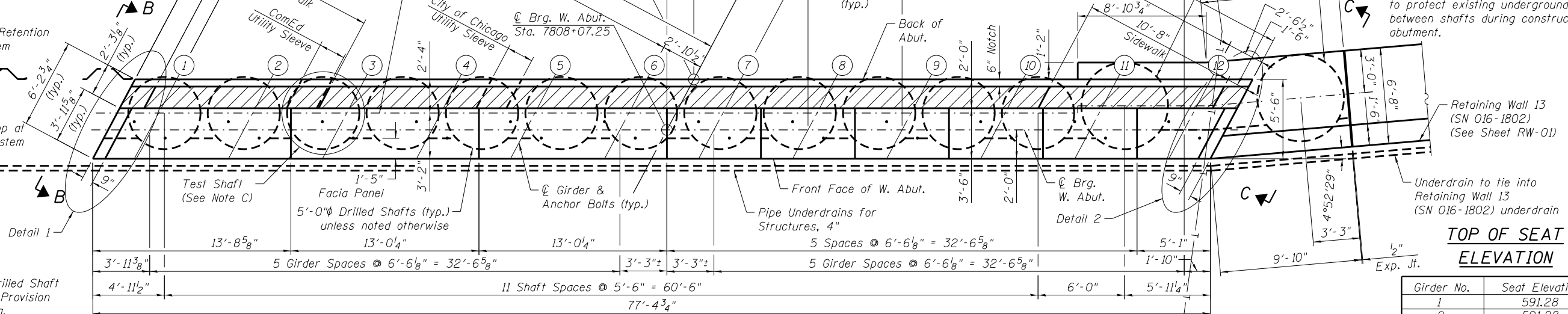
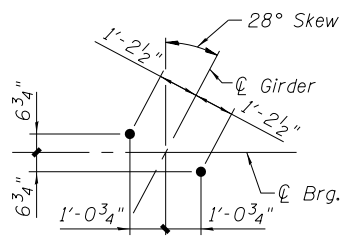
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	283
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				

NOTES:

1. For section views and details see Sheet S1-35 and S1-36.
2. For Anchor Bolt Details see Sheet S1-32.

3. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
4. Concrete in West Abutment and Drilled Shafts to be minimum 7000 psi.
5. Concrete in Fascia Panel Wall to be minimum 3500 psi.
6. Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths of bars per line.
7. The contractor shall take all precautions to protect existing underground utility between shafts during construction of abutment.

ANCHOR BOLT LAYOUT

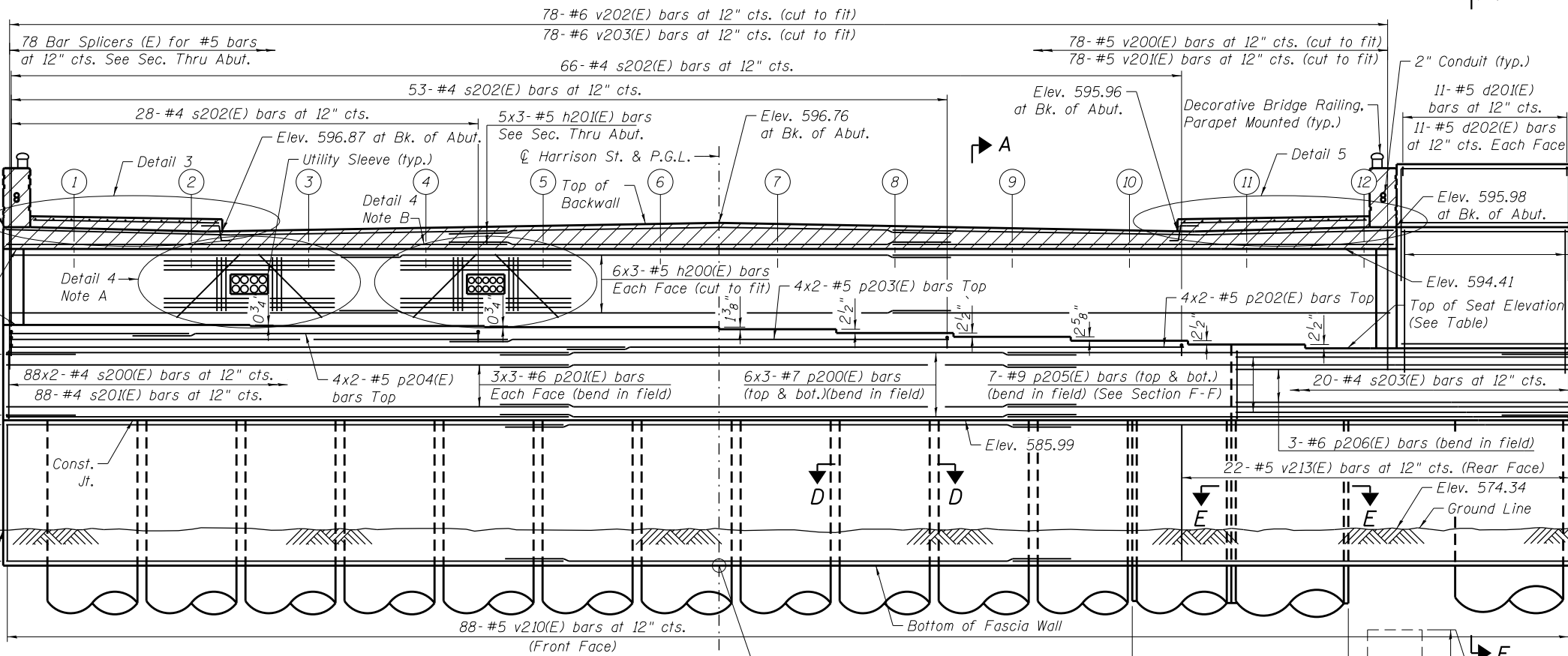


Note C:
Contractor shall test the Drilled Shaft in accordance with Special Provision for Crosshole Sonic Logging.

TOP OF SEAT ELEVATION

Girder No.	Seat Elevation
1	591.28
2	591.28
3	591.22
4	591.22
5	591.16
6	591.16
7	591.04
8	590.83
9	590.62
10	590.41
11	590.20
12	589.99

PLAN



ELEVATION

(Looking West, Cheekwall and Barrier Reinforcement not shown for clarity)

TYP. MIN. BAR LAP

- (Unless Noted Otherwise)
- #5 bar = 3'-3"
 - #6 bar = 3'-10"
 - #7 bar = 5'-2"
 - #9 bar = 8'-7"
 - #10 bar = 10'-10"

0161713-60W26-S34-Abutment



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED
PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

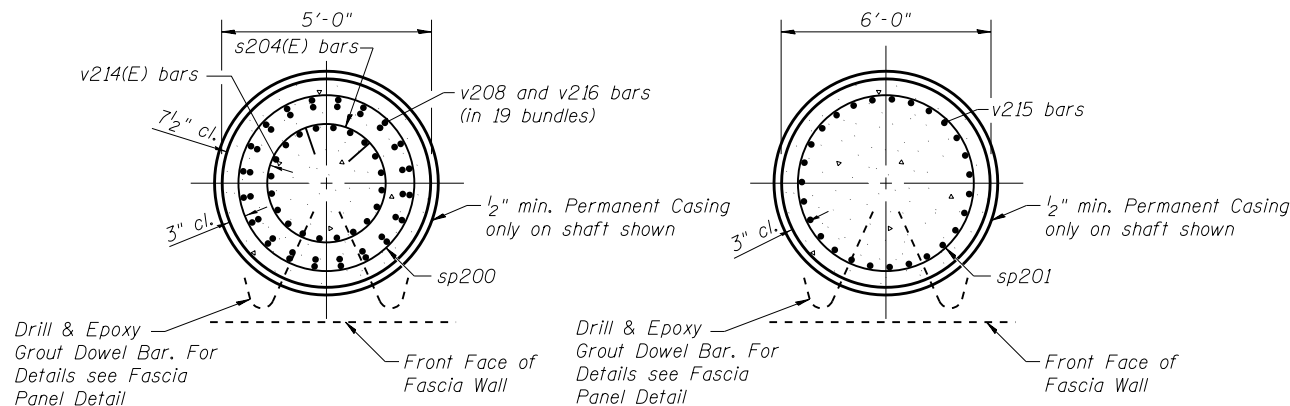
**WEST ABUTMENT PLAN AND ELEVATION
STRUCTURE NO. 016-1713**

SHEET NO. S1-34 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 284
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

WEST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a200(E)	4	#5	11'-9"	
a201(E)	4	#5	2'-4"	
b200(E)	26	#5	4'-0"	
d200(E)	560	#5	1'-11"	
d201(E)	11	#5	2'-10"	
d202(E)	22	#5	7'-7"	
e200(E)	12	#5	9'-6"	
h200(E)	36	#5	27'-10"	
h201(E)	15	#5	27'-10"	
h202(E)	22	#5	1'-4"	
h203(E)	16	#4	5'-10"	
h204(E)	16	#4	5'-10"	
h205(E)	16	#5	1'-4"	
h206(E)	24	#5	9'-6"	
h207(E)	8	#5	5'-0"	
h208(E)	93	#5	31'-2"	
h209(E)	16	#5	9'-6"	
h210(E)	31	#5	22'-7"	
p200(E)	36	#7	32'-5"	
p201(E)	18	#6	31'-6"	
p202(E)	8	#5	34'-4"	
p203(E)	8	#5	27'-10"	
p204(E)	8	#5	14'-10"	
p205(E)	14	#9	18'-2"	
p206(E)	3	#6	18'-2"	
s200(E)	176	#4	11'-2"	
s201(E)	88	#4	6'-2 1/2"	
s202(E)	147	#4	4'-6"	
s203(E)	20	#4	6'-11"	
s204(E)	13	#5	12'-8 3/8"	
sp200	12	#6	85'-9"	
sp201	2	#6	85'-9"	
u200(E)	5	#6	23'-6"	
u201(E)	5	#6	15'-6"	
v200(E)	78	#5	2'-10"	
v201(E)	78	#5	4'-8"	
v202(E)	78	#6	9'-6"	
v203(E)	78	#6	7'-0"	
v204(E)	6	#6	13'-0"	
v205(E)	12	#4	6'-0"	
v206(E)	12	#4	6'-0"	
v207(E)	6	#6	11'-7"	
v208	1824	#14	23'-6"	
v209(E)	24	#5	4'-1"	
v210(E)	88	#5	14'-8"	
v211(E)	11	#6	8'-0"	
v212(E)	22	#6	9'-0"	
v213(E)	22	#5	14'-8"	
v214(E)	20	#9	12'-1"	
v215	162	#11	35'-9"	
v216	1824	#14	19'-6"	
Granular Backfill for Structures		Cu. Yd.	236	
Structure Excavation		Cu. Yd.	712	
Concrete Structures		Cu. Yd.	112	
Concrete Superstructure		Cu. Yd.	13	
Reinforcement Bars		Pound	463690	
Reinforcement Bars, Epoxy Coated		Pound	286410	
Permanent Casing		Foot	172	
Drilled Shaft In Soil		Cu. Yd.	931	
Concrete Sealer		Sq. Ft.	2499	
Geocomposite Wall Drain		Sq. Yd.	31	
Pipe Underdrain for Structures 4"		Foot	105	
Class SI Concrete Miscellaneous		Cu. Yd.	41	
Crosshole Sonic Logging		Each	1	

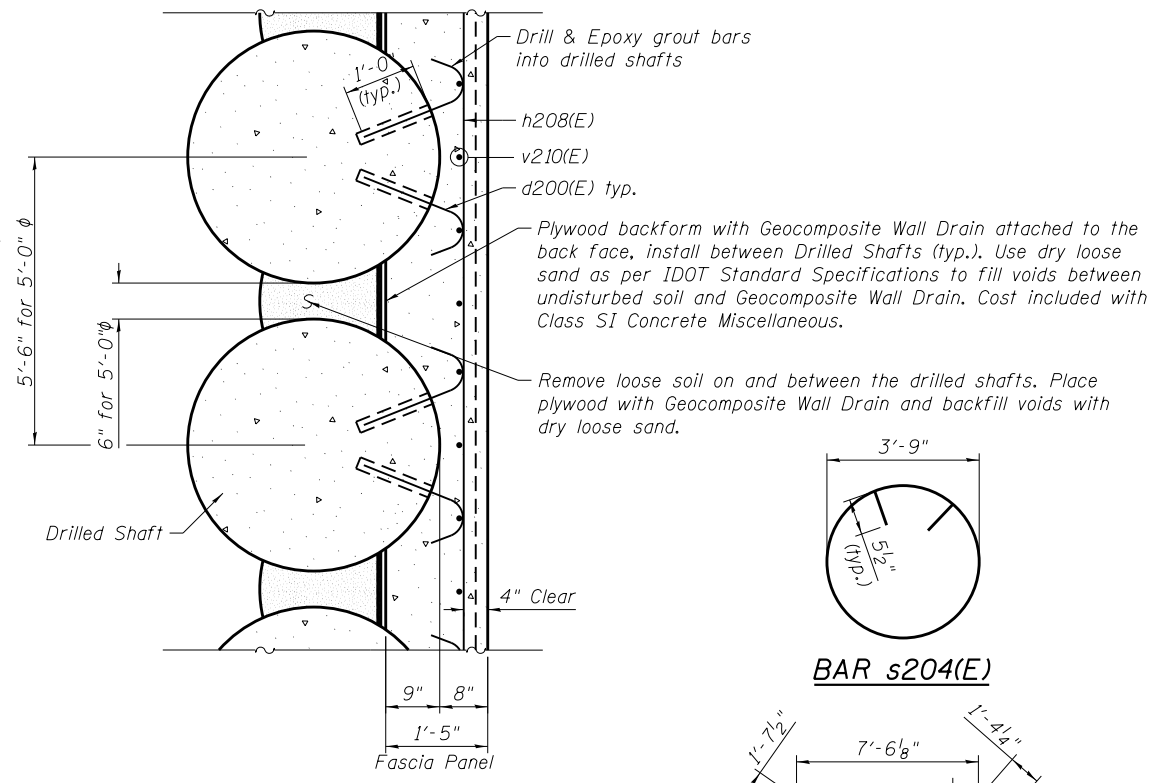


SECTION D-D

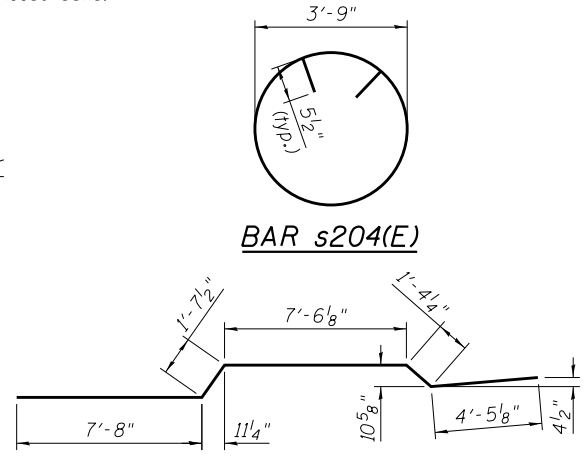
SECTION E-E

NOTES:

- When splicing spiral reinforcement is necessary, the spiral shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.
- Drilling and grouting of d200(E) bars included with Class SI Concrete Special (Fascia Wall) pay item.
- Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths of bars per line.
- For details of Bar Splicers see sheet S1-45.
- Contractor to use Mechanical Splicers in drilled shafts that will fit between spirals.

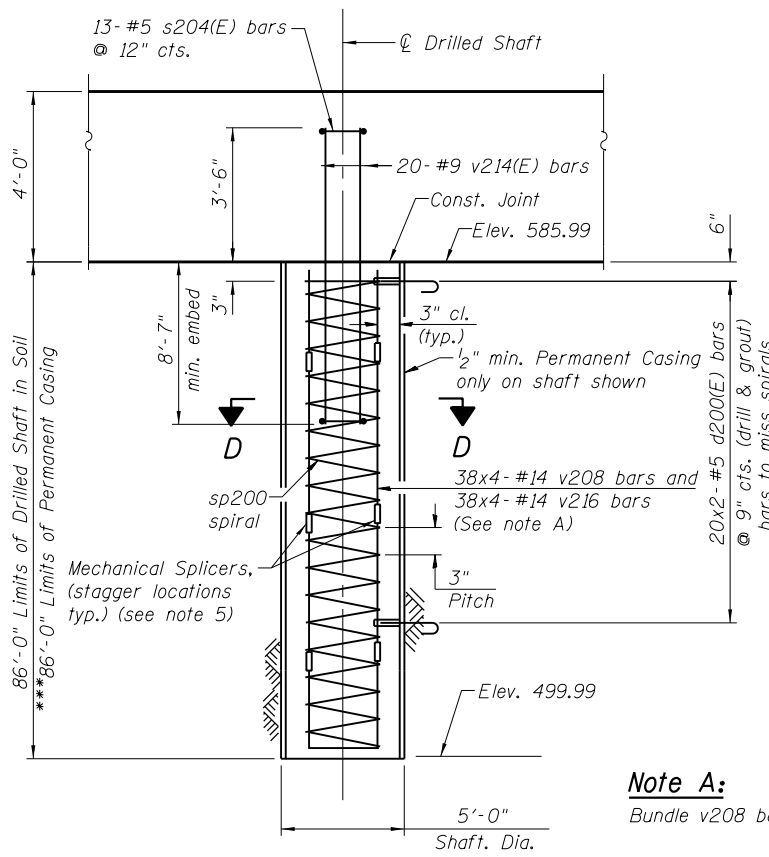


FASCIA PANEL DETAIL
(See next sheet for additional details.)

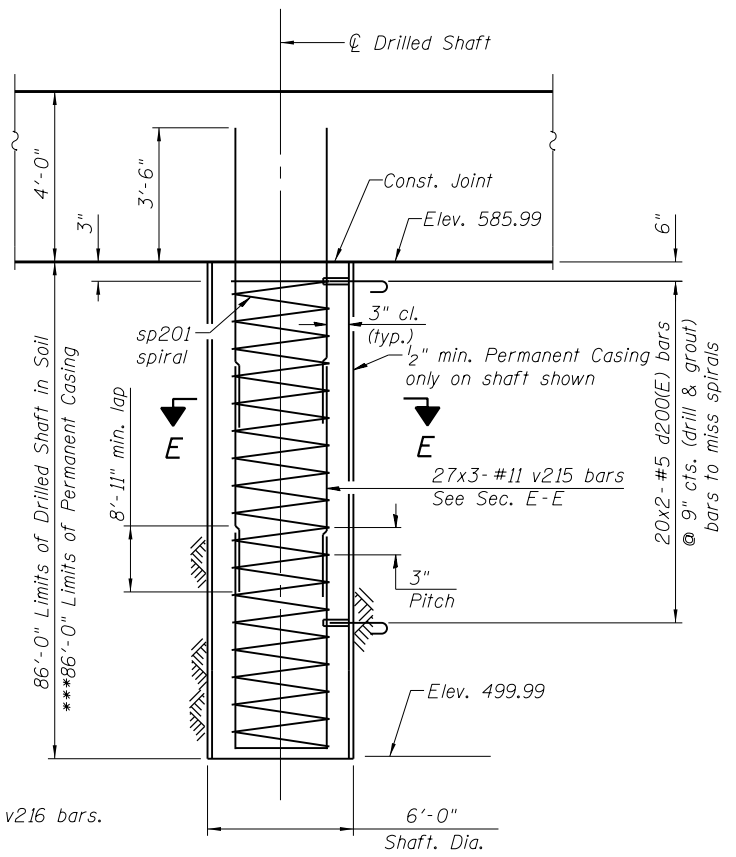


BAR s204(E)

BAR h2010(E)

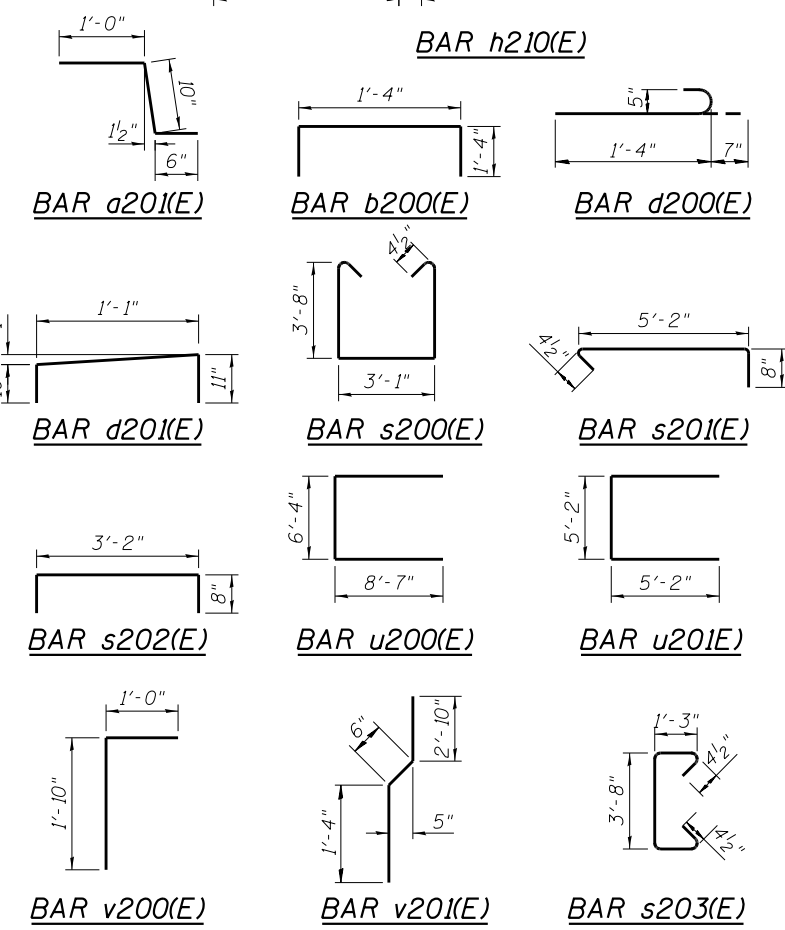


ABUTMENT SHAFT ELEVATION
5'-0" Shaft



ABUTMENT SHAFT ELEVATION
6'-0" Shaft

Note A:
Bundle v208 bars with v216 bars.



*** Contractor may need to increase the casing thickness to withstand the installation process. See Article 516.06(d) of the Standard Specifications.

* Length is height of spiral
** Shown for information only. Cost included with Class SI Concrete Special (Fascia Wall).

0161713-60W26-S36-Abutment

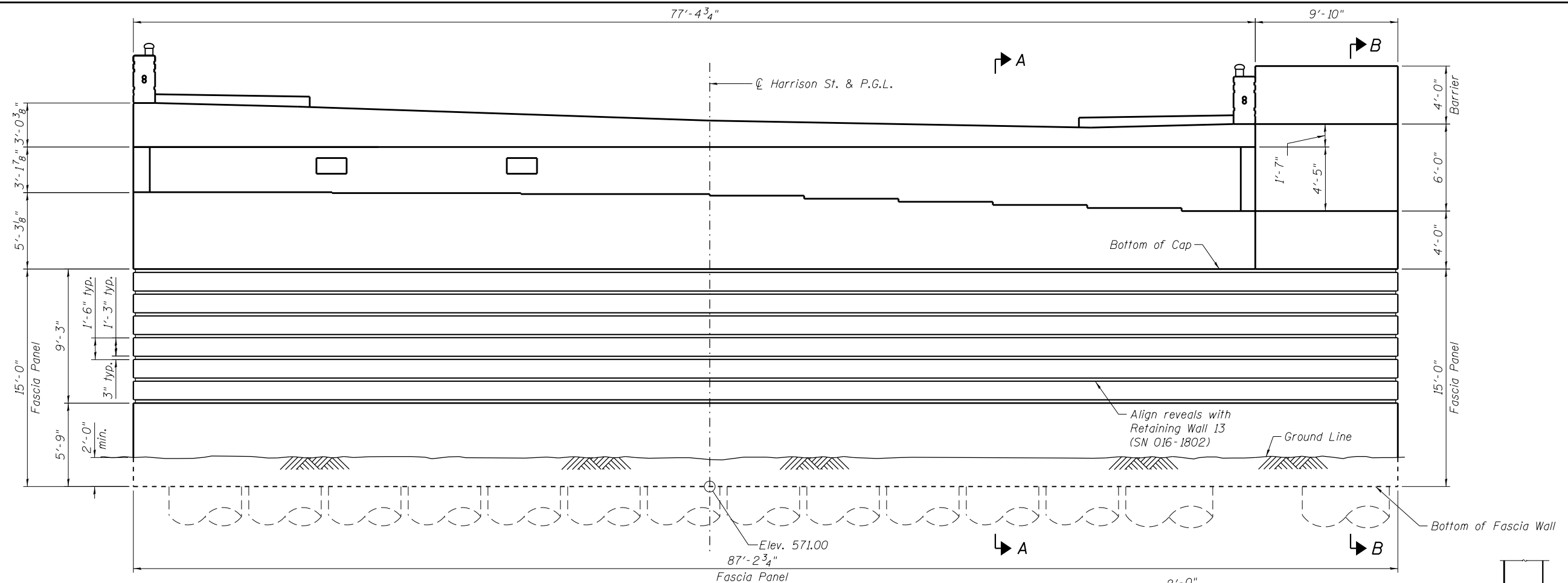


USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

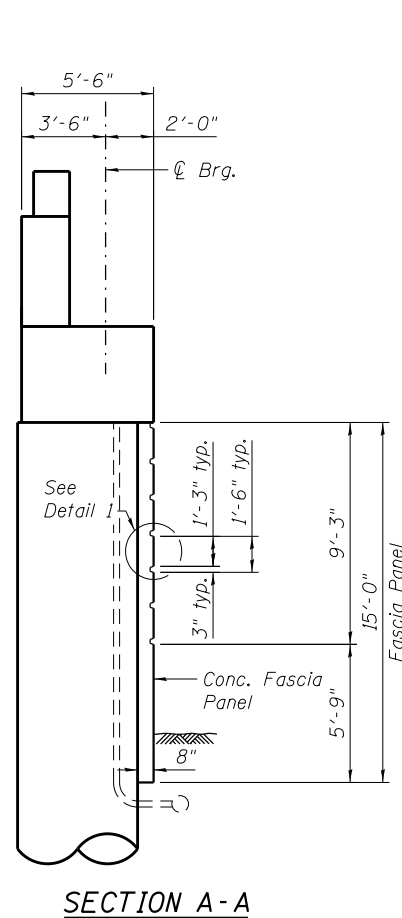
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE NO. 016-1713
SHEET NO. S1-36 OF S1-48 SHEETS

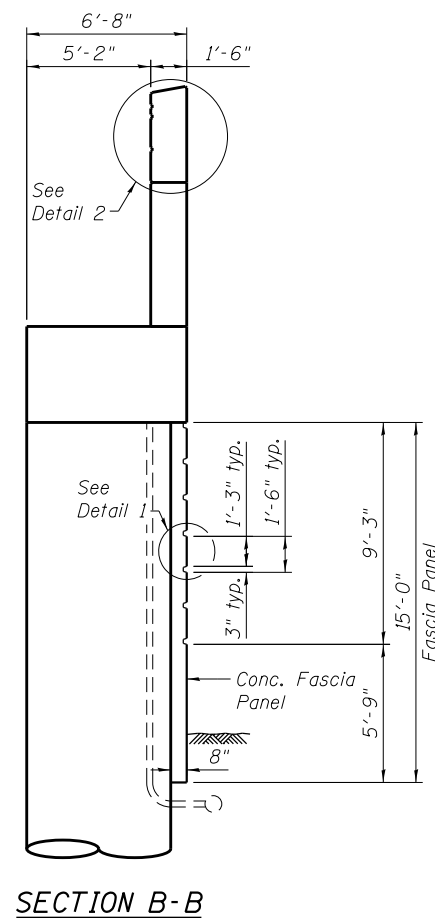
F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 286
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



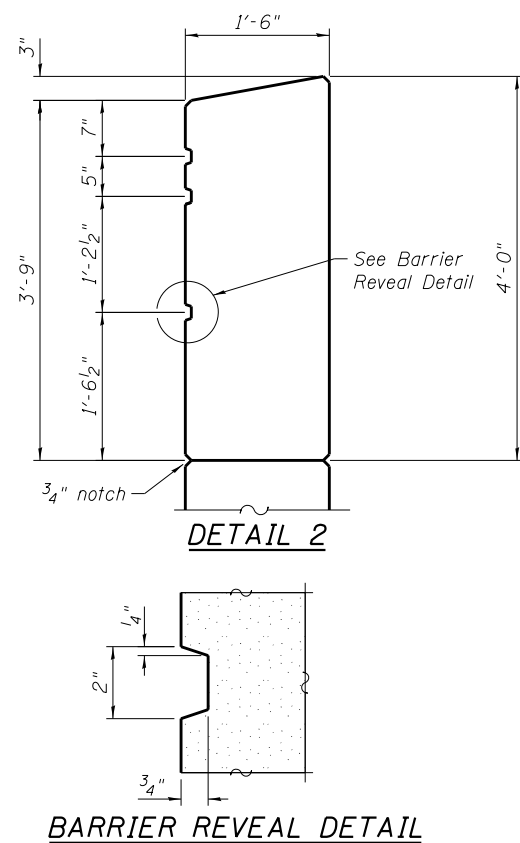
WEST ABUTMENT ELEVATION
(Looking West)



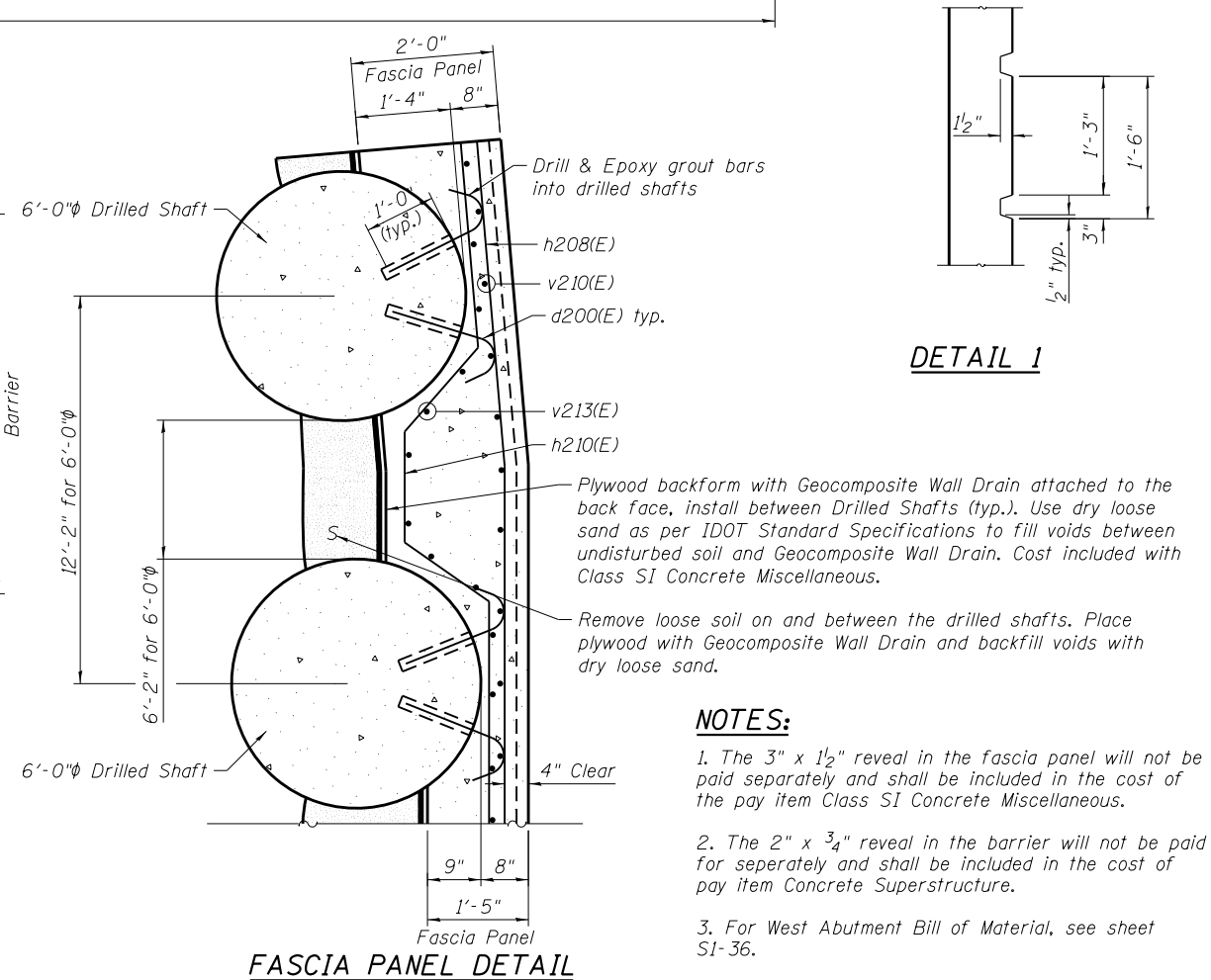
SECTION A-A



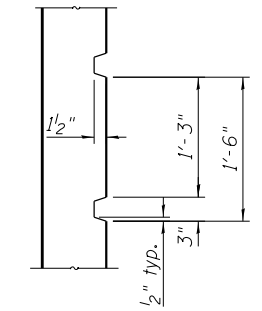
SECTION B-B



BARRIER REVEAL DETAIL



FASCIA PANEL DETAIL



DETAIL 1

NOTES:

1. The 3" x 1/2" reveal in the fascia panel will not be paid separately and shall be included in the cost of the pay item Class SI Concrete Miscellaneous.
2. The 2" x 3/4" reveal in the barrier will not be paid for separately and shall be included in the cost of pay item Concrete Superstructure.
3. For West Abutment Bill of Material, see sheet SI-36.

0161713-60W26-S37-Abutment



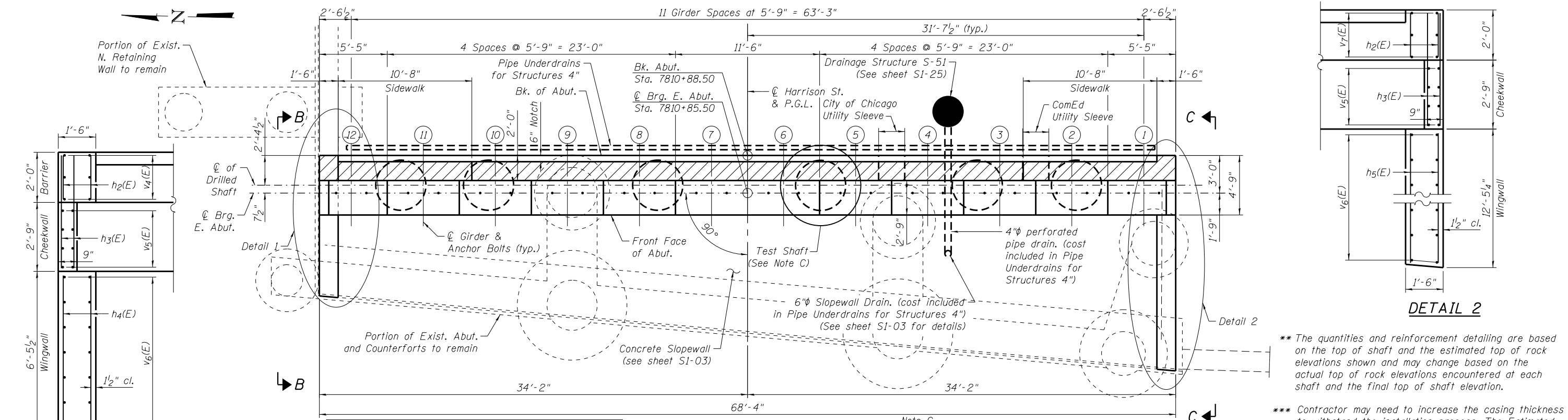
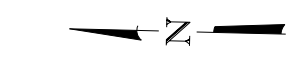
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PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT ARCHITECTURAL DETAILS
STRUCTURE NO. 016-1713**

SHEET NO. S1-37 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 287
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



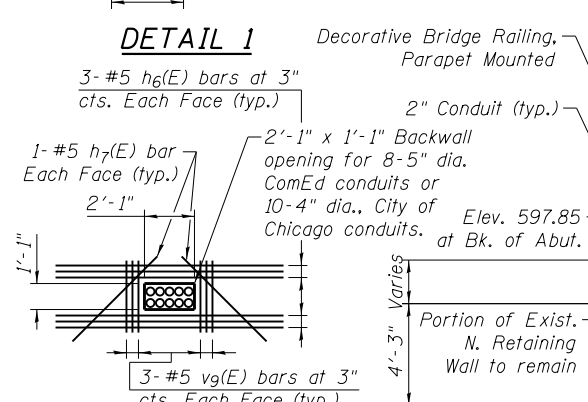
PLAN

Lateral load resisted by existing abutment to remain. Proposed East Abutment designed for vertical load only.

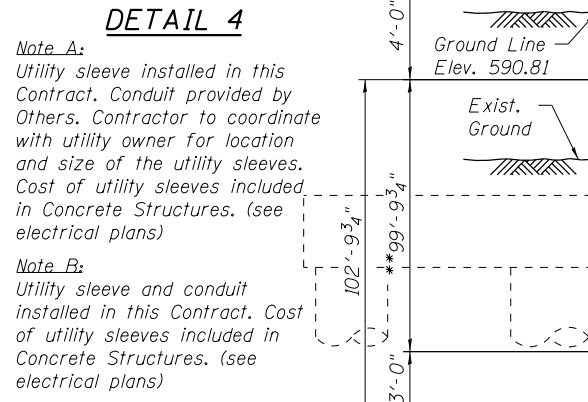
Note C: Contractor shall test the Drilled Shaft in accordance with Special Provision for Crosshole Sonic Logging.

** The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock elevations encountered at each shaft and the final top of shaft elevation.

*** Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.06(d) of the Standard Specifications.



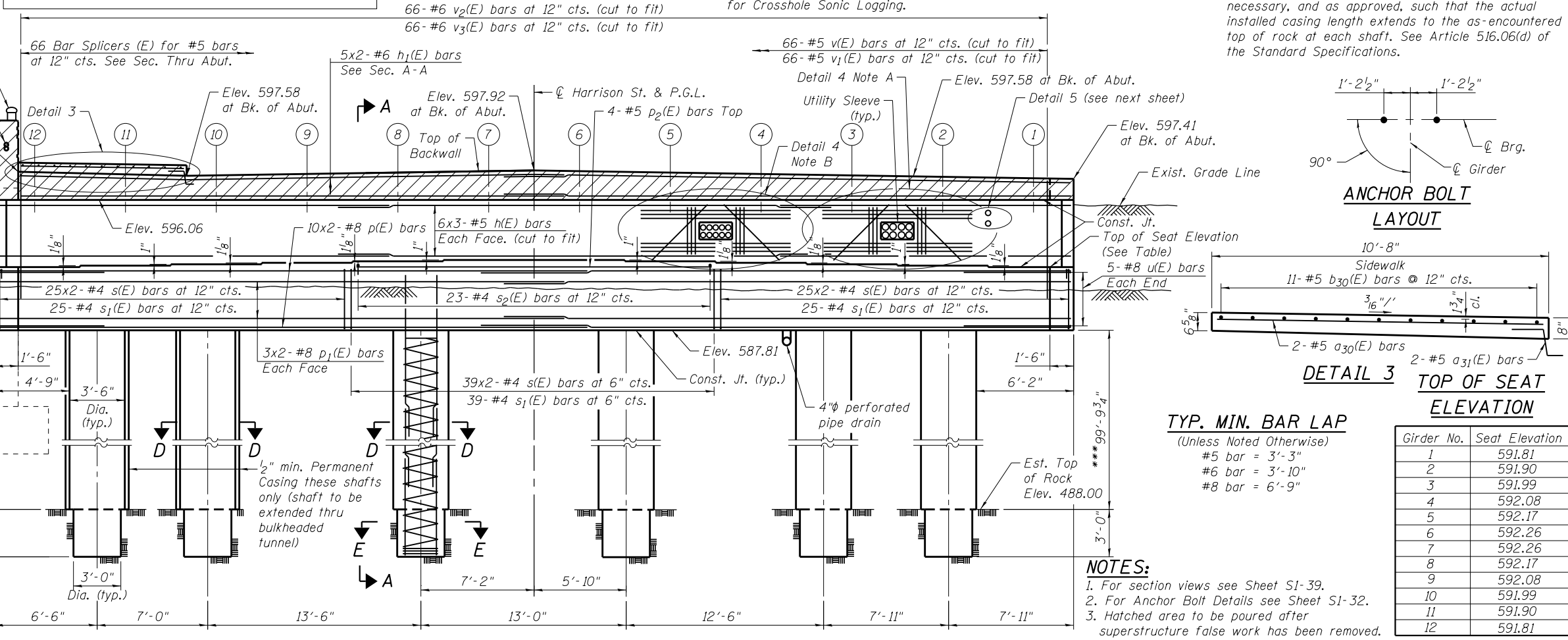
DETAIL 1



DETAIL 4

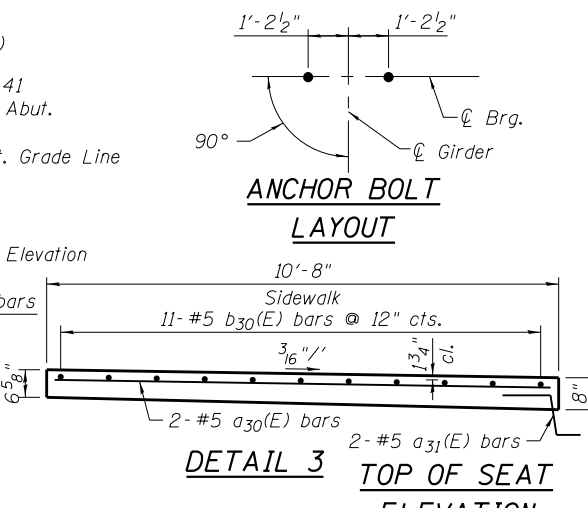
Note A: Utility sleeve installed in this Contract. Conduit provided by Others. Contractor to coordinate with utility owner for location and size of the utility sleeves. Cost of utility sleeves included in Concrete Structures. (see electrical plans)

Note B: Utility sleeve and conduit installed in this Contract. Cost of utility sleeves included in Concrete Structures. (see electrical plans)



ELEVATION

(Looking East. Wingwall, Cheekwall and Barrier Reinforcement not shown for clarity)



ANCHOR BOLT LAYOUT

DETAIL 3 TOP OF SEAT ELEVATION

TYP. MIN. BAR LAP

(Unless Noted Otherwise)
 #5 bar = 3'-3"
 #6 bar = 3'-10"
 #8 bar = 6'-9"

Girder No.	Seat Elevation
1	591.81
2	591.90
3	591.99
4	592.08
5	592.17
6	592.26
7	592.26
8	592.17
9	592.08
10	591.99
11	591.90
12	591.81

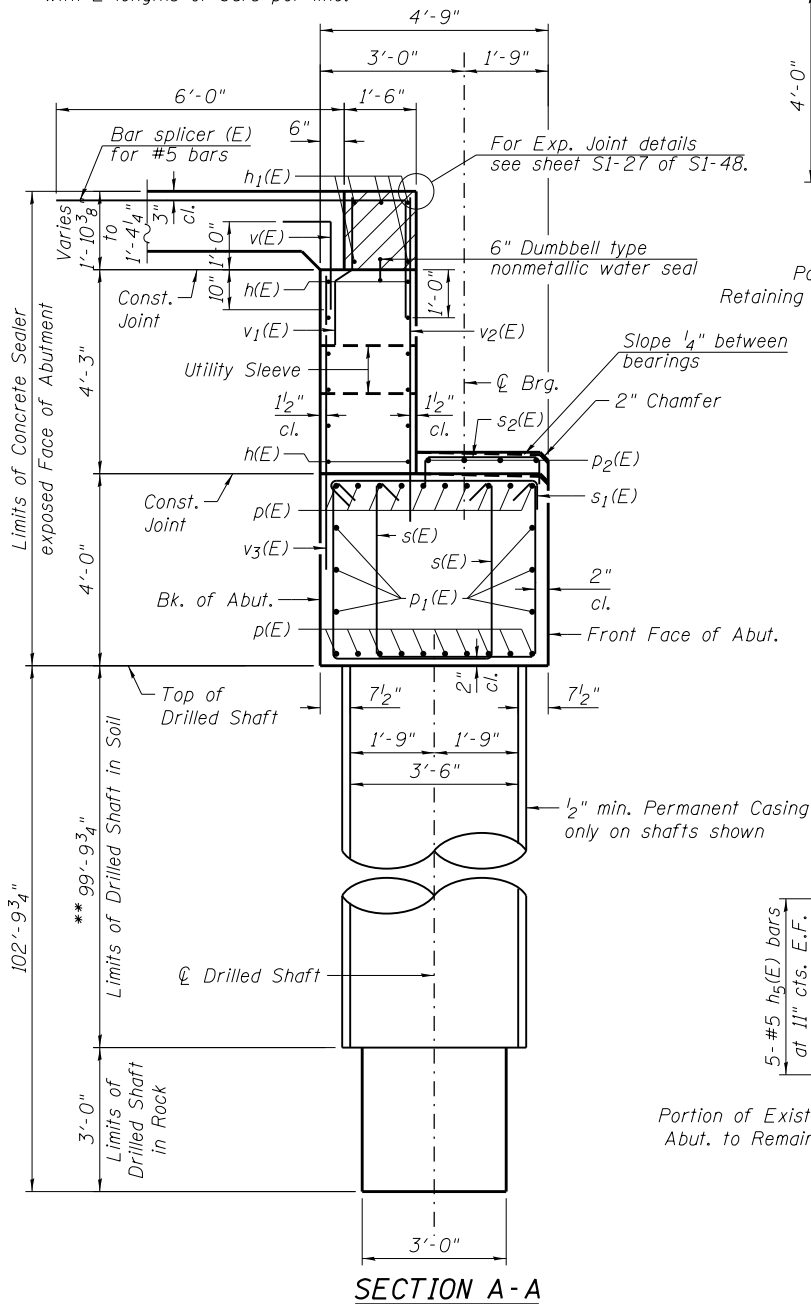
NOTES:

- For section views see Sheet S1-39.
- For Anchor Bolt Details see Sheet S1-32.
- Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
- Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths of bars per line.

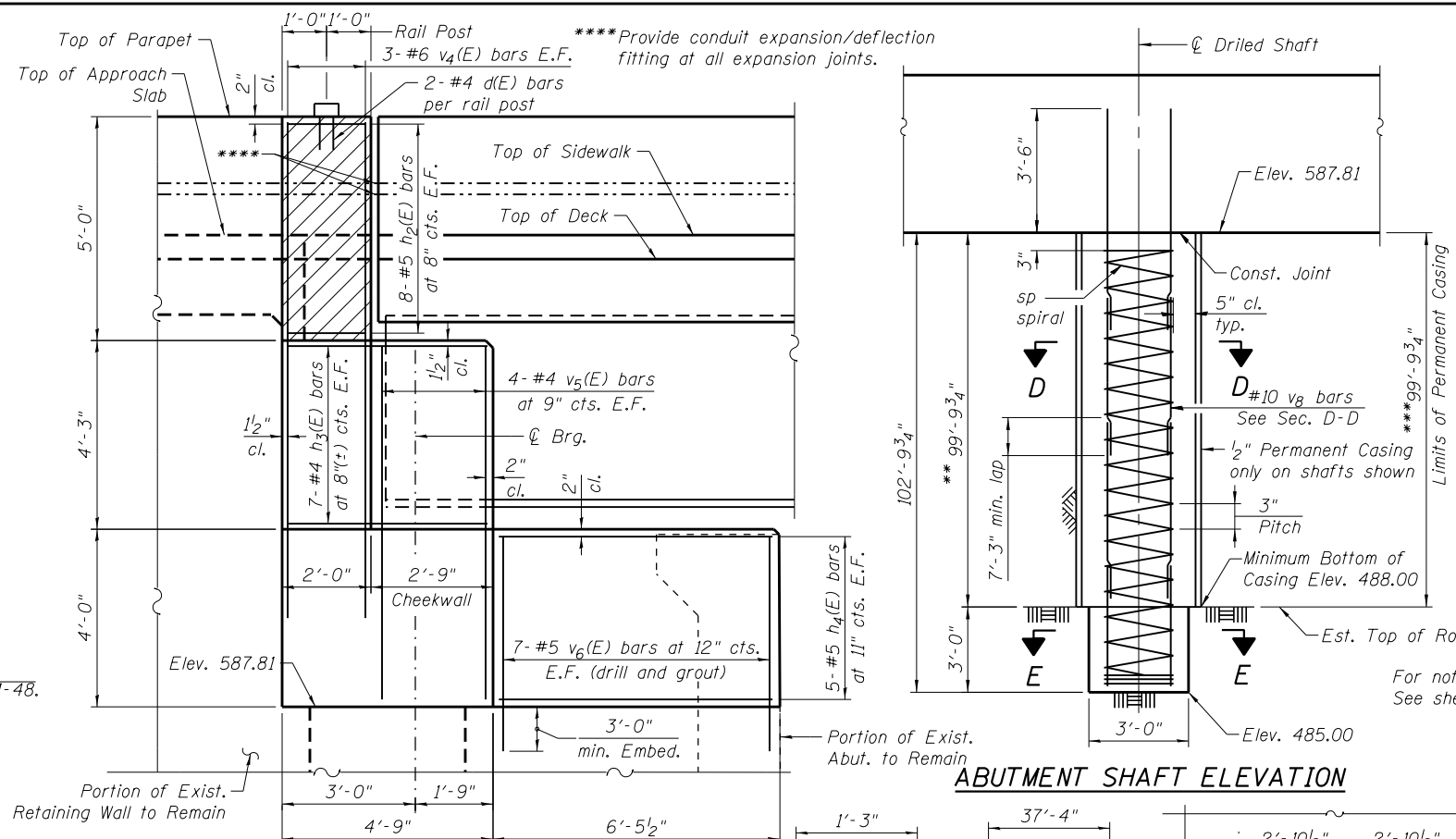
0161713-60W26-S38-Abutment

NOTES:

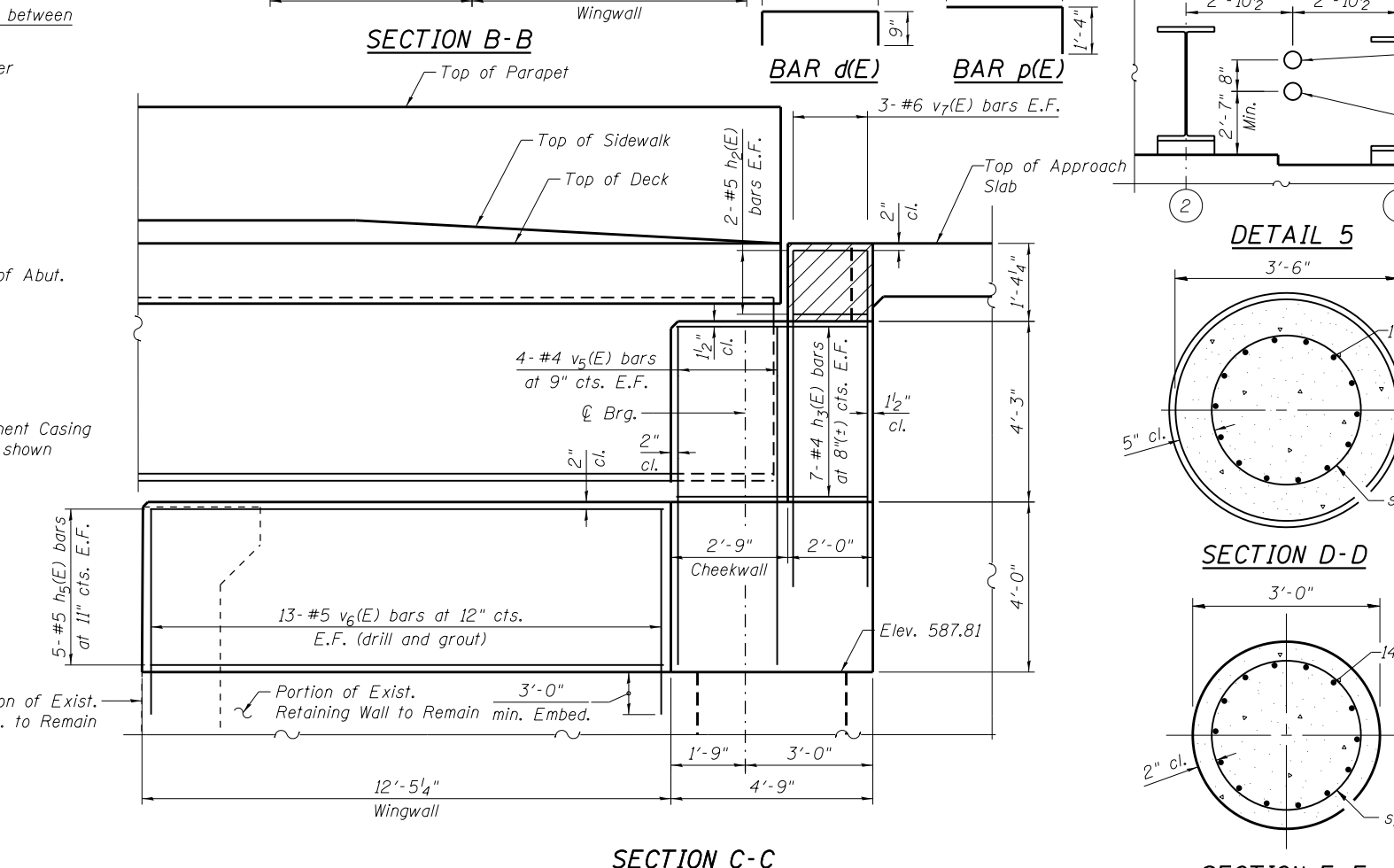
- Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
- Concrete Sealer shall be applied to abutment backwall, bearing seats and exposed faces of abutment cap, cheekwalls and wingwalls.
- When splicing spiral reinforcement is necessary, the spiral shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.
- E.F. = Each Face
- Drilling and grouting of v6(E) bars are included with Reinforcement Bars, Epoxy Coated pay item.
- For Pipe Underdrain detail see sheet S1-03.
- Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths of bars per line.



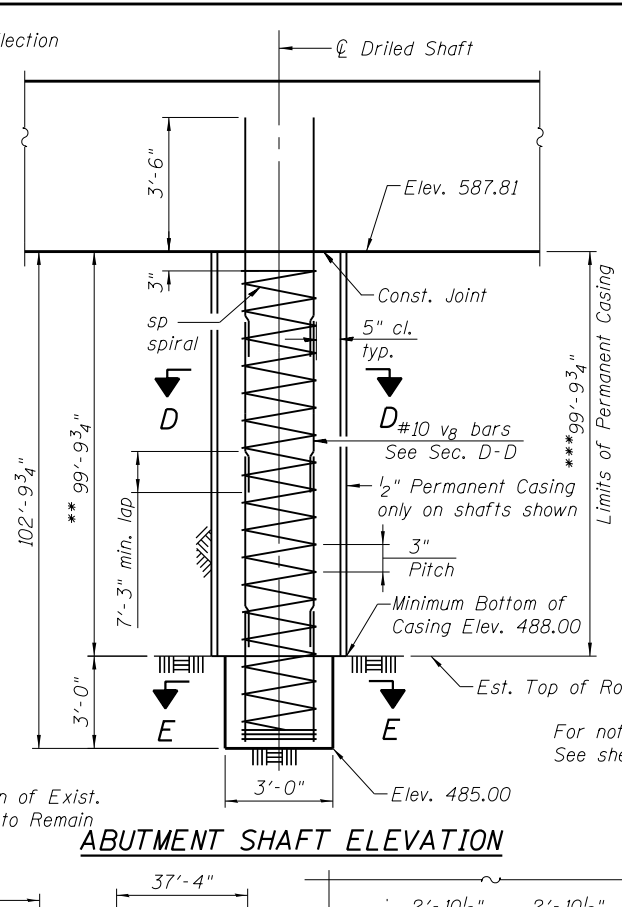
SECTION A-A



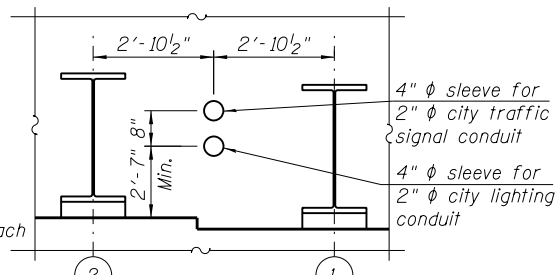
SECTION B-B



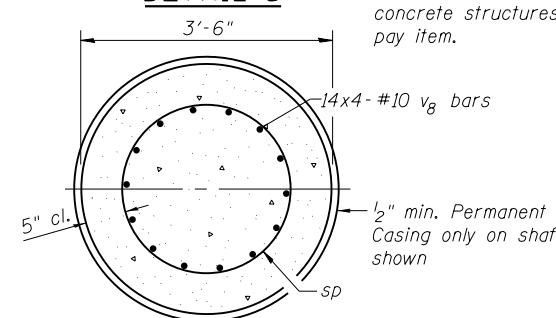
SECTION C-C



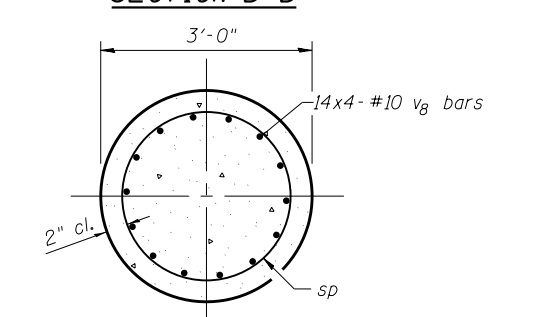
ABUTMENT SHAFT ELEVATION



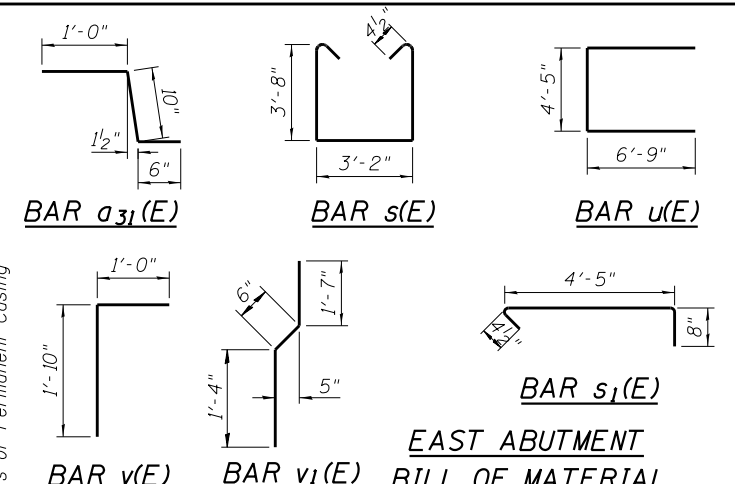
DETAIL 5



SECTION D-D



SECTION E-E



EAST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a30(E)	2	#5	10'-4"	
a31(E)	2	#5	2'-4"	
b30(E)	11	#5	1'-2"	
d(E)	2	#4	2'-9"	
h(E)	36	#5	24'-10"	
h1(E)	10	#6	35'-11"	
h2(E)	20	#5	1'-8"	
h3(E)	28	#4	4'-5"	
h4(E)	10	#5	6'-1"	
h5(E)	10	#5	12'-1"	
h6(E)	24	#5	9'-6"	
h7(E)	8	#5	5'-0"	
p(E)	40	#8	38'-8"	
p1(E)	12	#8	37'-5"	
p2(E)	4	#5	22'-8"	
s(E)	178	#4	11'-3"	
s1(E)	89	#4	5'-5 1/2"	
s2(E)	23	#4	3'-9"	
sp	6	#6	102'-6"	
u(E)	10	#8	17'-11"	
v(E)	66	#5	2'-10"	
v1(E)	66	#5	3'-5"	
v2(E)	66	#6	7'-1"	
v3(E)	66	#6	6'-3"	
v4(E)	6	#6	11'-2"	
v5(E)	16	#4	7'-11"	
v6(E)	40	#5	7'-0"	
v7(E)	6	#6	7'-6"	
v8	336	#10	32'-1"	
v9(E)	24	#5	3'-0"	
Granular Backfill for Structures		Cu. Yd.	145	
Structure Excavation		Cu. Yd.	492	
Concrete Structures		Cu. Yd.	78	
Concrete Superstructure		Cu. Yd.	6	
Reinforcement Bars		Pound	77290	
Reinforcement Bars, Epoxy Coated		Pound	12100	
Permanent Casing		Foot	200	
Drilled Shaft In Soil		Cu. Yd.	214	
Drilled Shaft In Rock		Cu. Yd.	5	
Concrete Sealer		Sq. Ft.	817	
Geocomposite Wall Drain		Sq. Yd.	62	
Pipe Underdrain for Structures 4"		Foot	77	
Crosshole Sonic Logging		Each	1	

For details of Bar Splicers, see sheet S1-45.
* Length is height of spiral.



USER NAME = dunkerleyb
DESIGNED - EJO
CHECKED - ATB
PLOT SCALE = N.T.S.
DRAWN - BRD
PLOT DATE = 9/15/2013
CHECKED - EJO

DESIGNED - EJO
CHECKED - ATB
DRAWN - BRD
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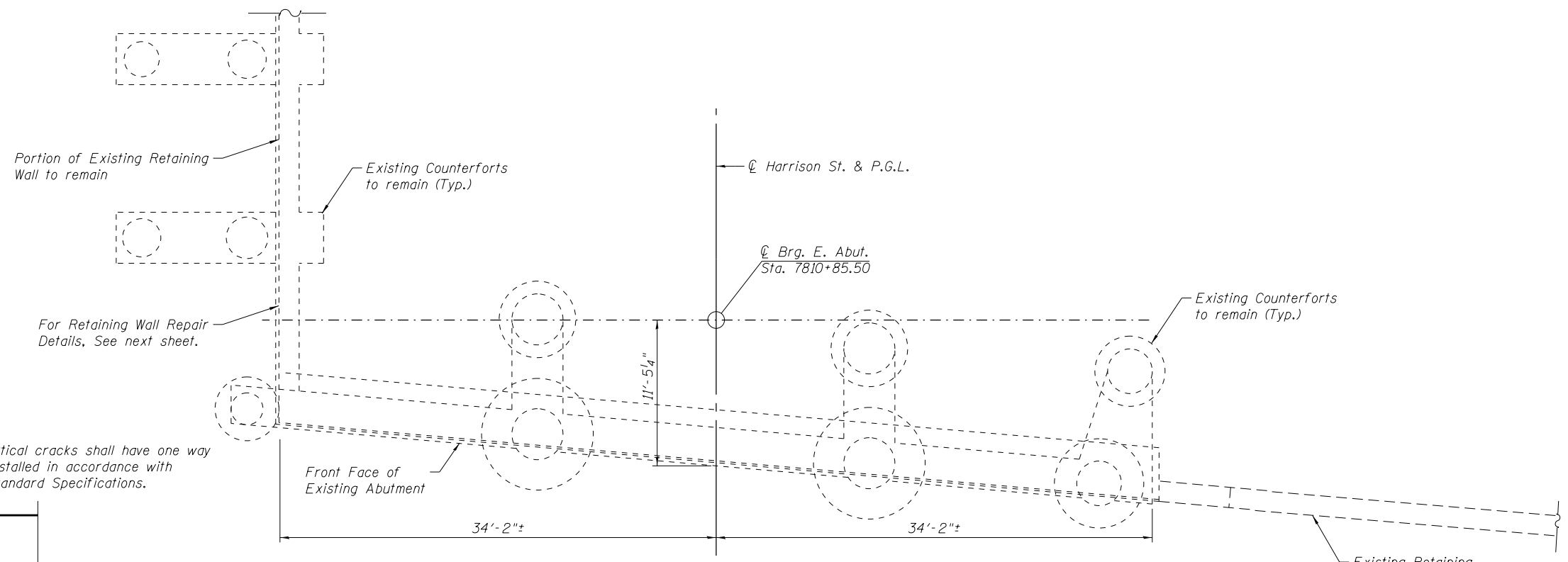
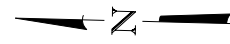
**EAST ABUTMENT SECTION AND DETAILS
STRUCTURE NO. 016-1713**

SHEET NO. S1-39 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	289
CONTRACT NO.			60W26	

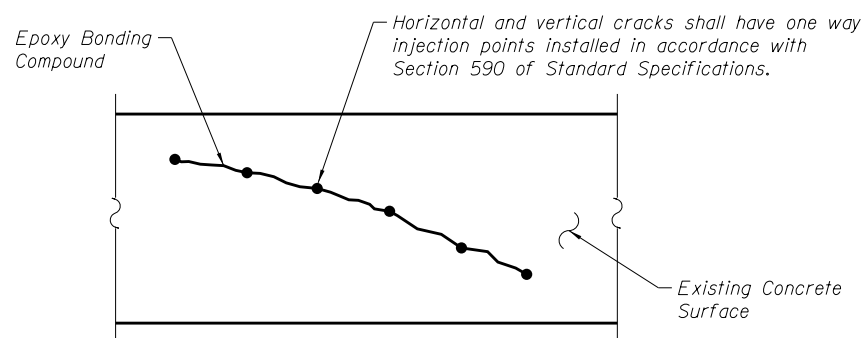
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0161713-60W26-S39-Abutment

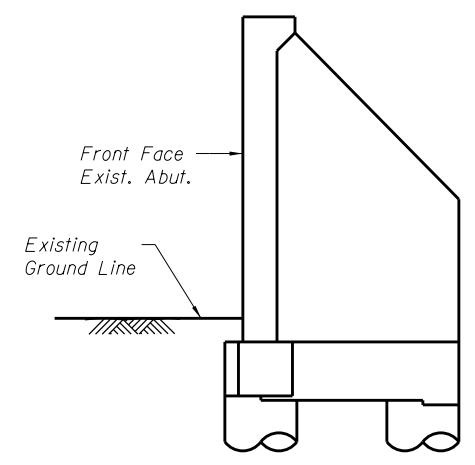


Note:
Proposed East Abutment
not shown for clarity.

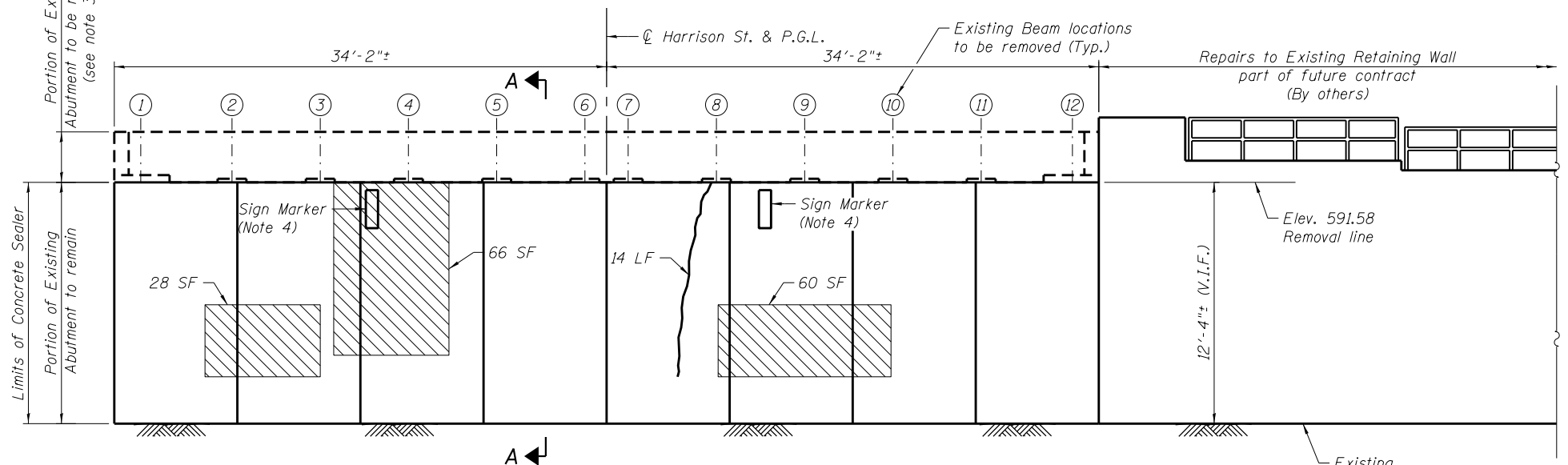
PLAN



EPOXY CRACK INJECTION



SECTION A-A



ELEVATION
(Looking East)

LEGEND

- Epoxy crack injection
- Area of structural repair of concrete (depth equal to or less than 5")

NOTES:

1. Deck and superstructure not shown for clarity.
2. Concrete sealer shall be applied to front face of existing abutment.
3. For removal details see sheets S1-04 thru S1-06.
4. Sign Markers attached to face of existing abutment shall be removed prior to repair work.

BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete (depth equal to or less than 5")	Sq. Ft.	154
Epoxy Crack Injection	Foot	14
Concrete Sealer	Sq. Ft.	843

0161713-60W26-S40-Abutment



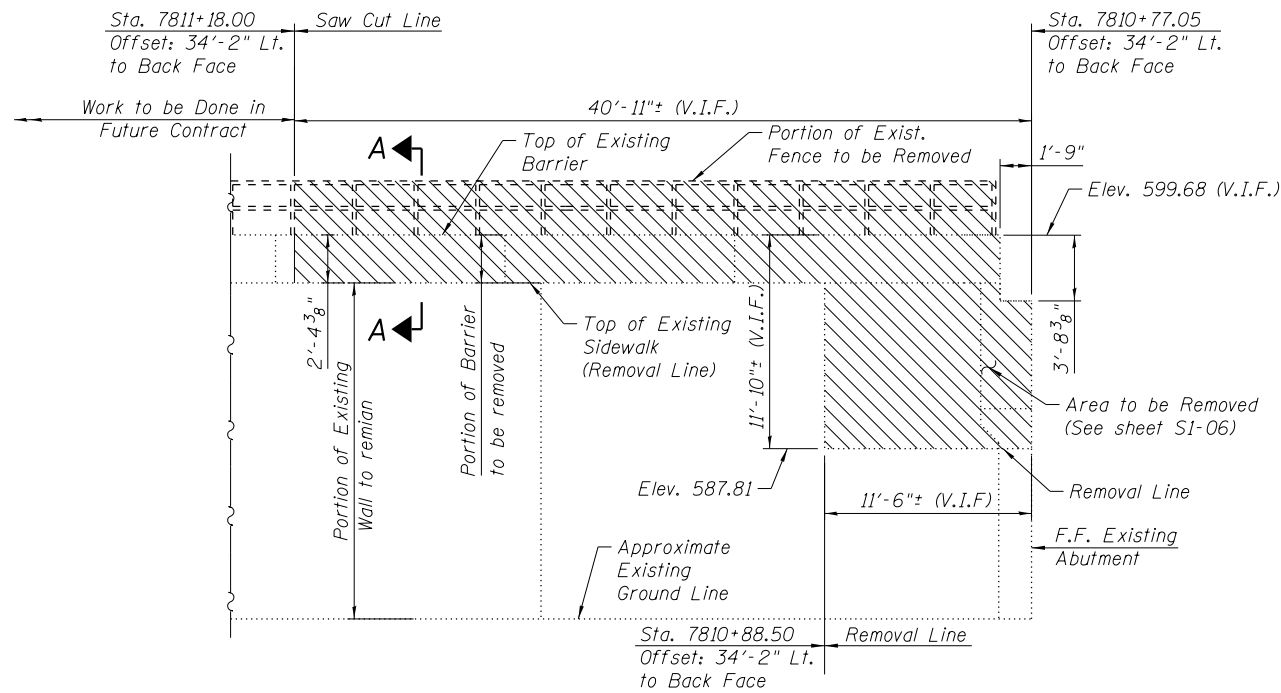
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	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED
PLOT DATE = 9/15/2013	CHECKED - EJO	REVISED

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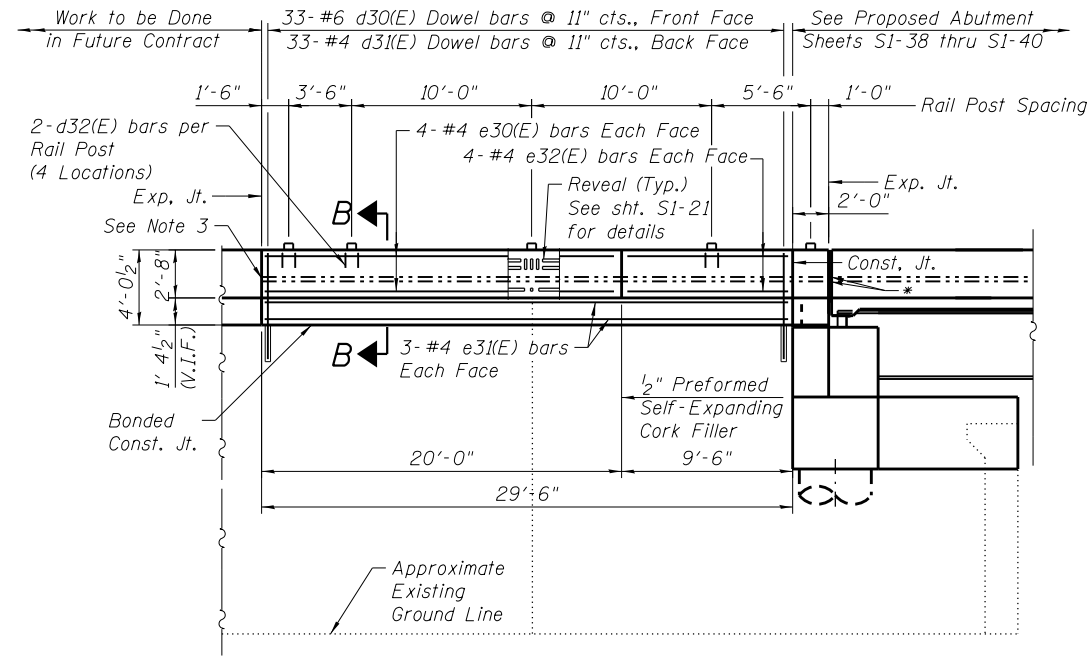
**EAST ABUTMENT REPAIR DETAILS (1 OF 2)
STRUCTURE NO. 016-1713**

SHEET NO. S1-40 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 290
CONTRACT NO. 60W26				ILLINOIS FED. AID PROJECT



EXISTING ELEVATION
(Looking South)



PROPOSED ELEVATION
(Looking South)

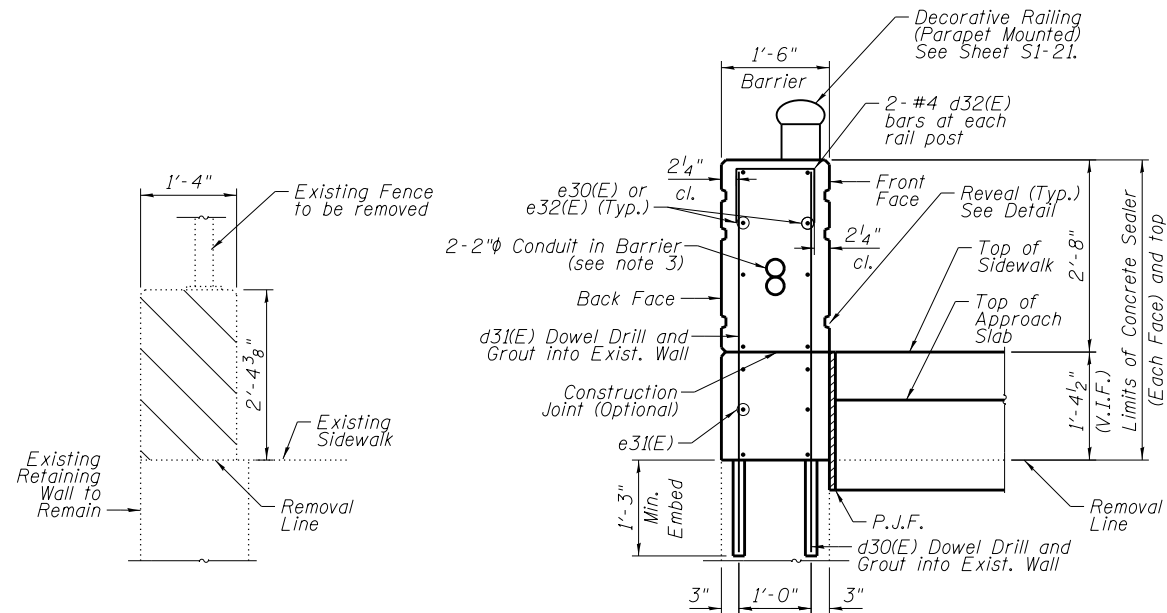
* Provide conduit expansion/deflection fitting at all expansion joints.

LEGEND:

Removal of Existing Structure (See Sheet S1-06)

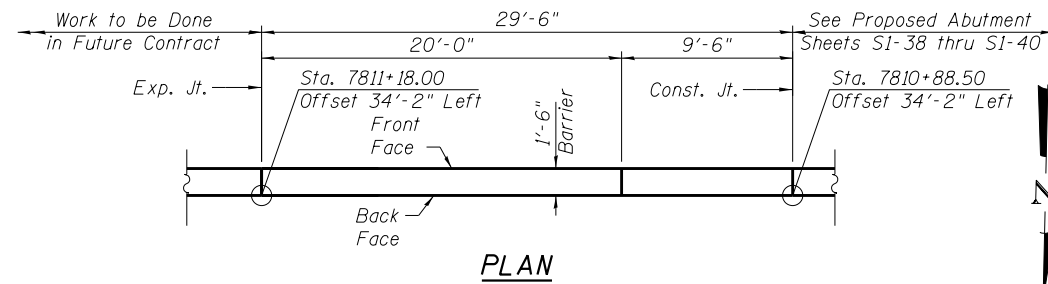
NOTES:

1. Work this sheet with sheet S1-40.
2. Drill and Grout d30(E) and d31(E) into the Concrete to 1/4" larger in dia. than the diameter of the bar used with a Minimum Depth of 15 Inches. Cost included with Reinforcement Bars, Epoxy Coated pay item. Refer to Section 584 of the Standard Specifications.
3. Embedded conduit shall be routed to the end of the new parapet wall and capped. See Lighting Plans details.

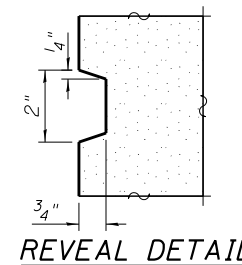


SECTION A-A

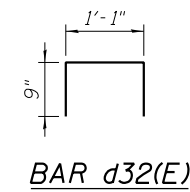
SECTION B-B



PLAN



REVEAL DETAIL



BAR d32(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d30(E) Dowel	33	#6	5'-2"	—
d31(E) Dowel	33	#4	5'-2"	—
d32(E)	8	#4	2'-7"	□
e30(E)	8	#4	19'-8"	—
e31(E)	6	#4	29'-2"	—
e32(E)	8	#4	9'-2"	—
Concrete Superstructure		Cu. Yd.		7
Reinforcement Bars, Epoxy Coated		Pound		660
Concrete Sealer		Sq. Ft.		283

0161713-60W26-541-Abutment



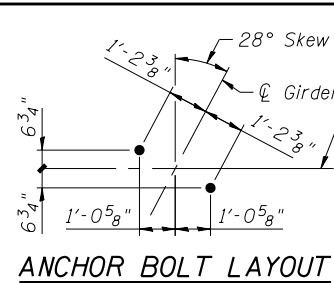
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PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

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EAST ABUTMENT REPAIR DETAILS (2 OF 2)
STRUCTURE NO. 016-1713

SHEET NO. S1-41 OF S1-48 SHEETS

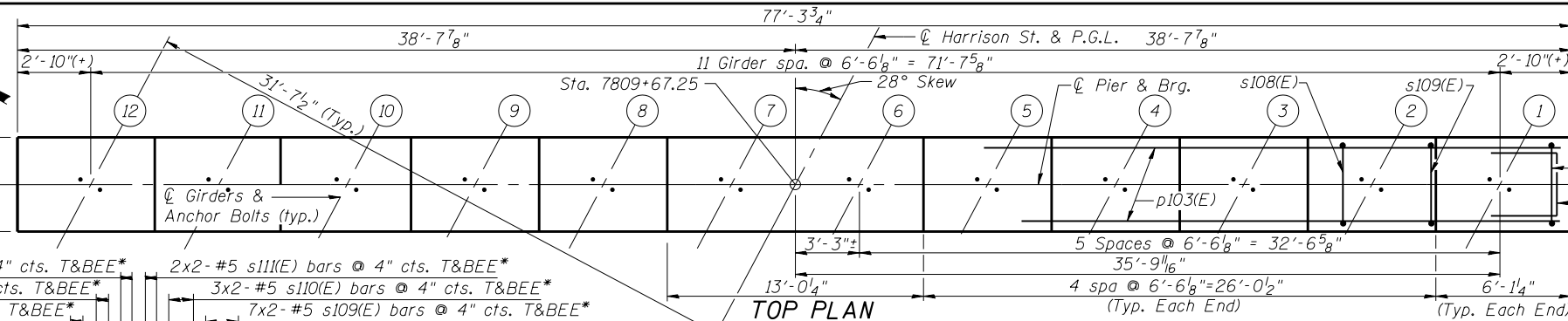
F.A.I. RTE. 90/94/290	SECTION 2013-00BR	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 291
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



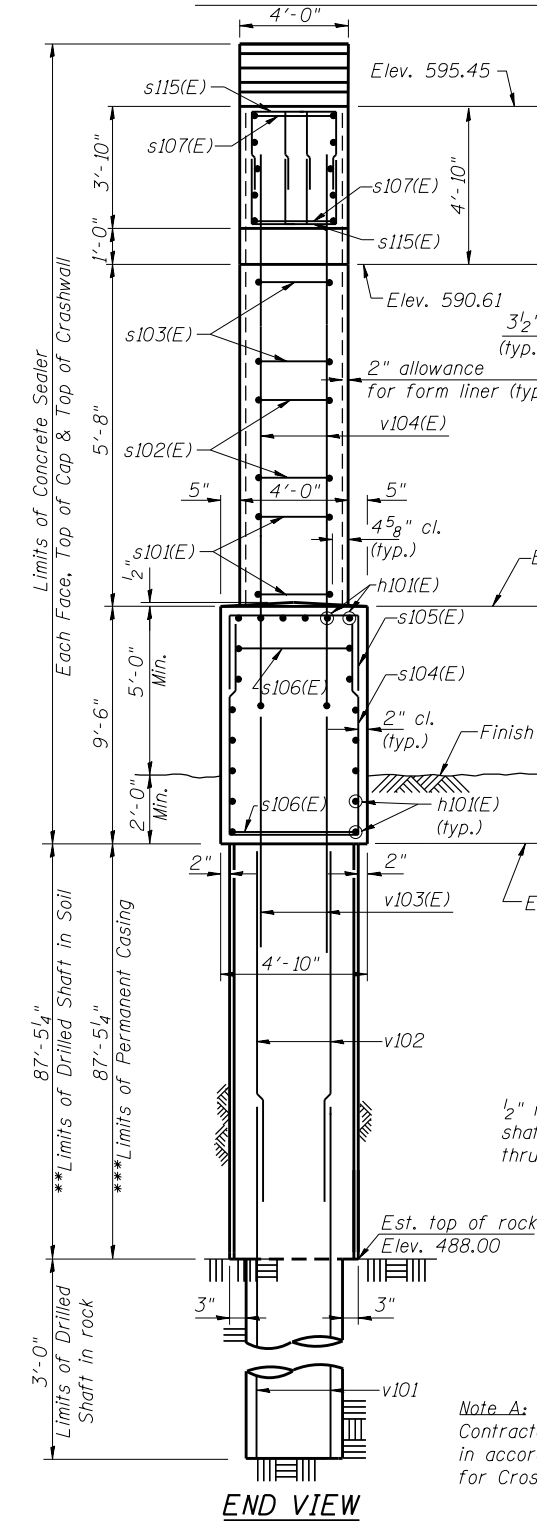
ANCHOR BOLT LAYOUT

2x2-#5 s112(E) bars @ 4" cts. T&BEE*
 2x2-#5 s113(E) bars @ 4" cts. T&BEE*
 2x2-#5 s114(E) bars @ 4" cts. T&BEE*
 2x2-#5 s115(E) bars @ 4" cts. T&BEE*

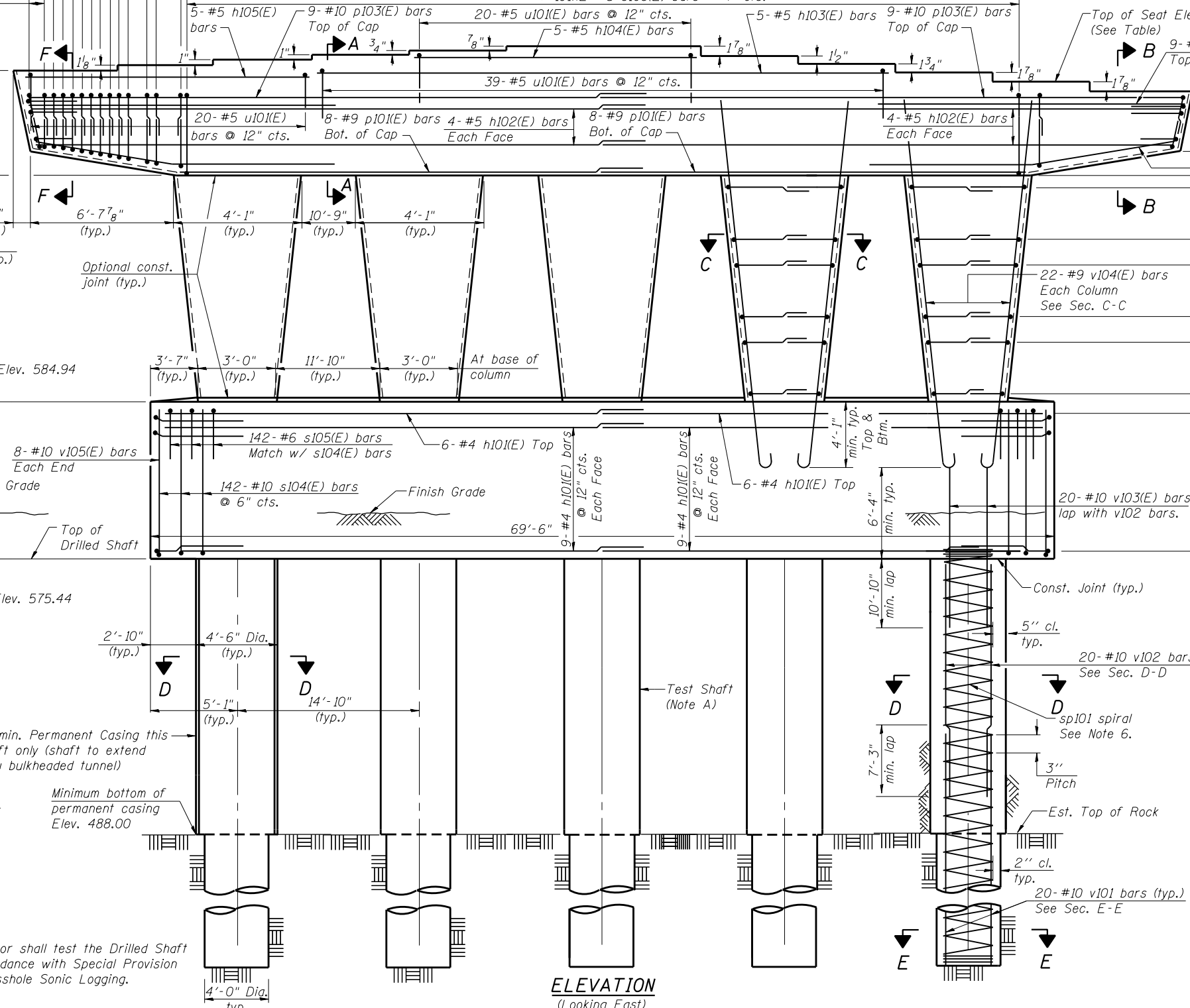
*T&BEE = Top and Bottom Each End



TOP PLAN



END VIEW



ELEVATION
(Looking East)

- NOTES:**
1. Space reinforcement in cap to miss anchor bolts.
 2. Pour steps monolithically with cap.
 3. For section cuts see next sheet.
 4. For Anchor Bolt Details see sheet S1-33.
 5. Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths of bars per line.
 6. #6 sp101 spiral, each drilled shaft
 1. Provide 1/2 extra turns, shop welded together per AWS D1.4 top and bottom. Extend spiral 2" into crashwall. Provide 4-#4 spacers or equivalent.
 2. When splicing spiral reinforcement is necessary, the spiral shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.

TYP. MIN. BAR LAP

- (Unless Noted Otherwise)
- #4 bar = 2'-7"
 - #5 bar = 3'-3"
 - #9 bar = 8'-7"
 - #10 bar = 10'-10"
 - #11 bar = 13'-4"

TOP OF SEAT ELEVATION

Girder No.	Seat Elevation
1	595.11
2	595.27
3	595.42
4	595.56
5	595.69
6	595.85
7	595.85
8	595.78
9	595.71
10	595.63
11	595.54
12	595.45

** The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock elevations encountered at each shaft and the final top of shaft elevation.

*** Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.06(d) of the Standard Specifications.



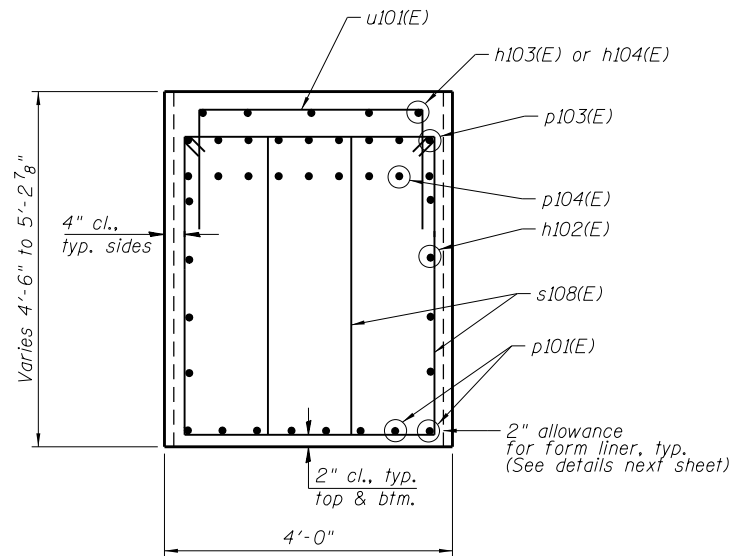
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PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
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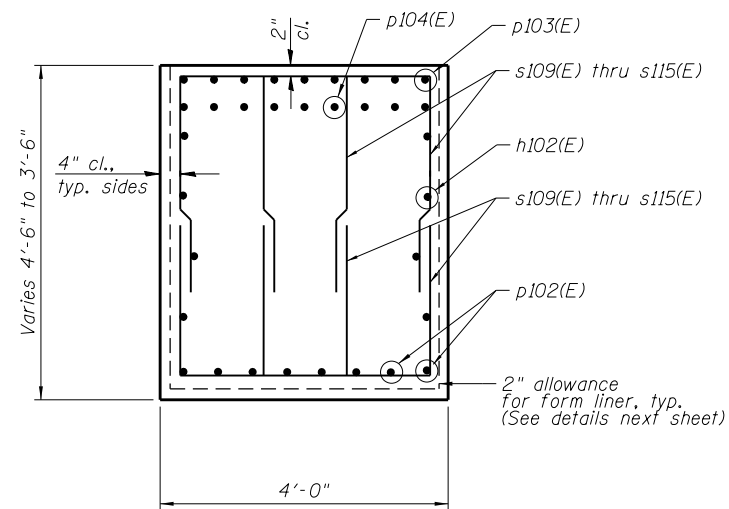
PIER PLAN AND ELEVATION
STRUCTURE NO. 016-1713

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 292
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	

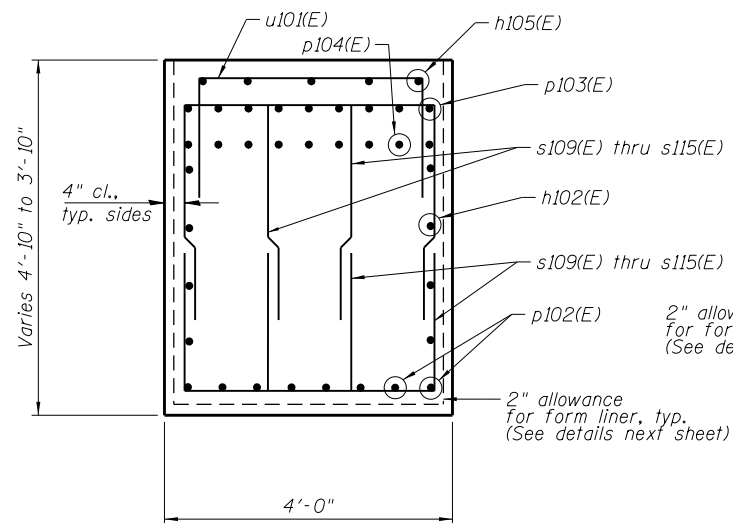
SHEET NO. S1-42 OF S1-48 SHEETS



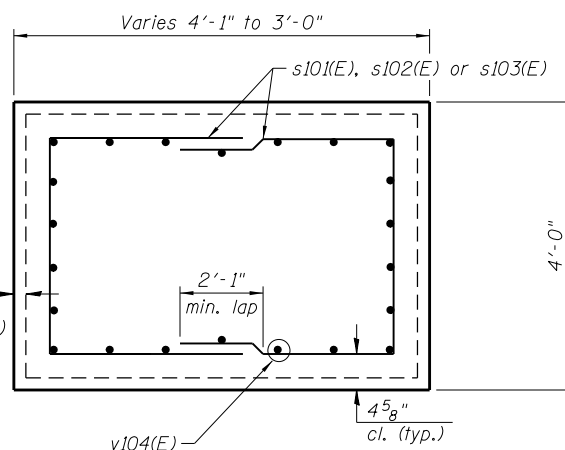
SECTION A-A



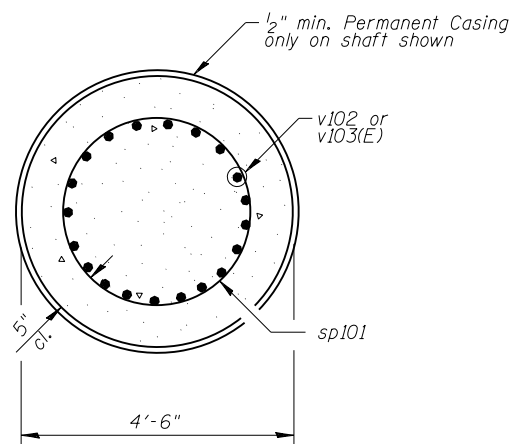
SECTION B-B



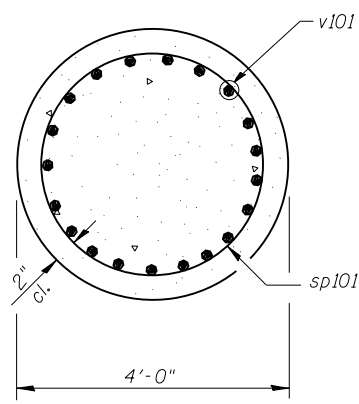
SECTION F-F



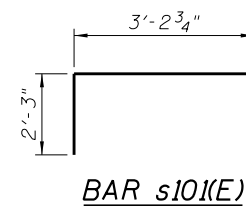
SECTION C-C



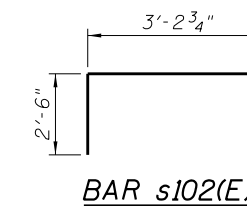
SECTION D-D



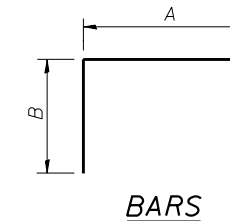
SECTION E-E



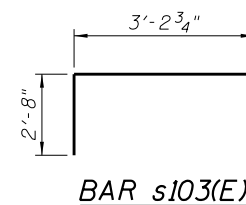
BAR s101(E)



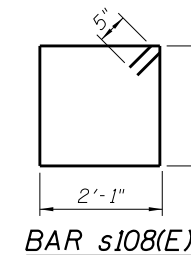
BAR s102(E)



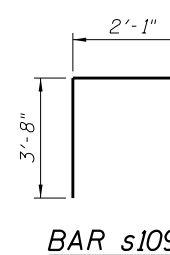
BARS



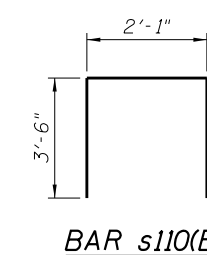
BAR s103(E)



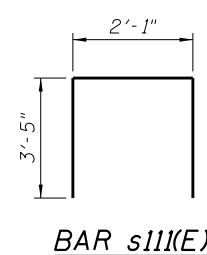
BAR s108(E)



BAR s109(E)



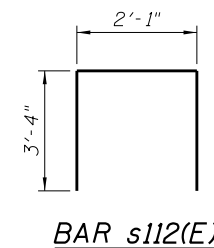
BAR s110(E)



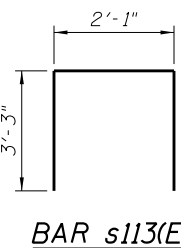
BAR s111(E)

A & B DIMENSIONS

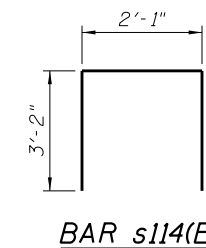
Bar	A	B
s104(E)	4'-6"	9'-2"
s105(E)	4'-6"	3'-1"
s106(E)	4'-6"	3'-1"
s107(E)	3'-4"	1'-5"



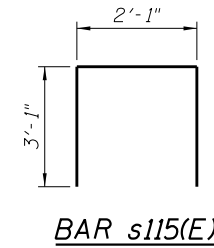
BAR s112(E)



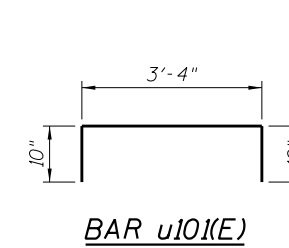
BAR s113(E)



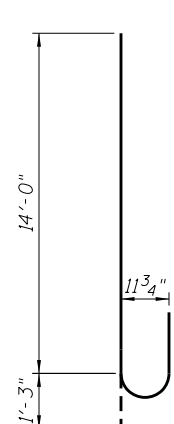
BAR s114(E)



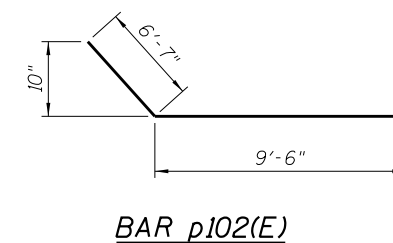
BAR s115(E)



BAR u101(E)



BAR v104(E)



BAR p102(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h101(E)	48	#4	35'-11"	—
h102(E)	16	#5	40'-2"	—
h103(E)	5	#5	38'-8"	—
h104(E)	5	#5	19'-2"	—
h105(E)	5	#5	19'-0"	—
p101(E)	16	#9	35'-10"	—
p102(E)	16	#9	16'-1"	—
p103(E)	18	#10	43'-11"	—
p104(E)	18	#10	21'-9"	—
s101(E)	20	#4	7'-8 3/4"	□
s102(E)	30	#4	8'-2 3/4"	□
s103(E)	20	#4	8'-6 3/4"	□
s104(E)	142	#10	22'-10"	□
s105(E)	142	#6	10'-8"	□
s106(E)	20	#4	10'-8"	□
s107(E)	10	#6	6'-2"	□
s108(E)	382	#5	13'-4"	□
s109(E)	56	#5	9'-5"	□
s110(E)	24	#5	9'-1"	□
s111(E)	16	#5	8'-11"	□
s112(E)	16	#5	8'-9"	□
s113(E)	16	#5	8'-7"	□
s114(E)	16	#5	8'-5"	□
s115(E)	16	#5	8'-3"	□
** sp101	5	#6	90'-8"	⋈
u101(E)	79	#5	5'-0"	□
v101	100	#10	60'-0"	—
v102	100	#10	37'-9"	—
v103(E)	100	#10	17'-2"	—
v104(E)	110	#9	15'-3"	□
v105(E)	16	#10	9'-2"	—
Structure Excavation		Cu. Yd.	325	
Concrete Structures		Cu. Yd.	187	
Reinforcement Bars		Pound	73380	
Reinforcement Bars, Epoxy Coated		Pound	47920	
Permanent Casing		Foot	88	
Drilled Shaft in Soil		Cu. Yd.	258	
Drilled Shaft in Rock		Cu. Yd.	7	
Concrete Sealer		Sq. Ft.	3030	
Crosshole Sonic Logging		Each	1	

** Length is height of spiral.

0161713-60W26-S43-Pier



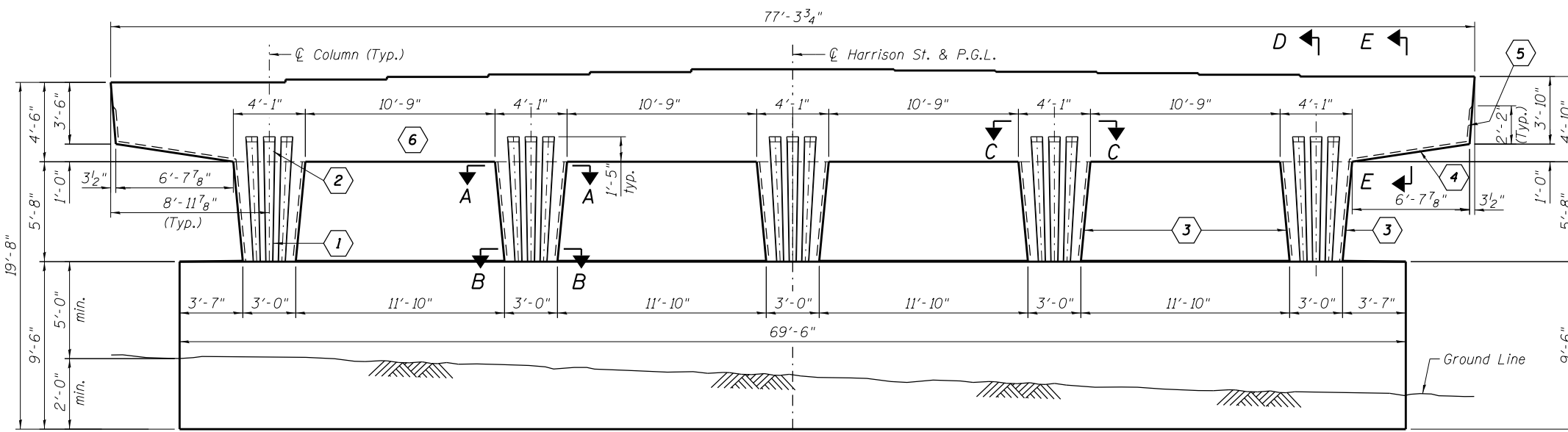
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DEPARTMENT OF TRANSPORTATION

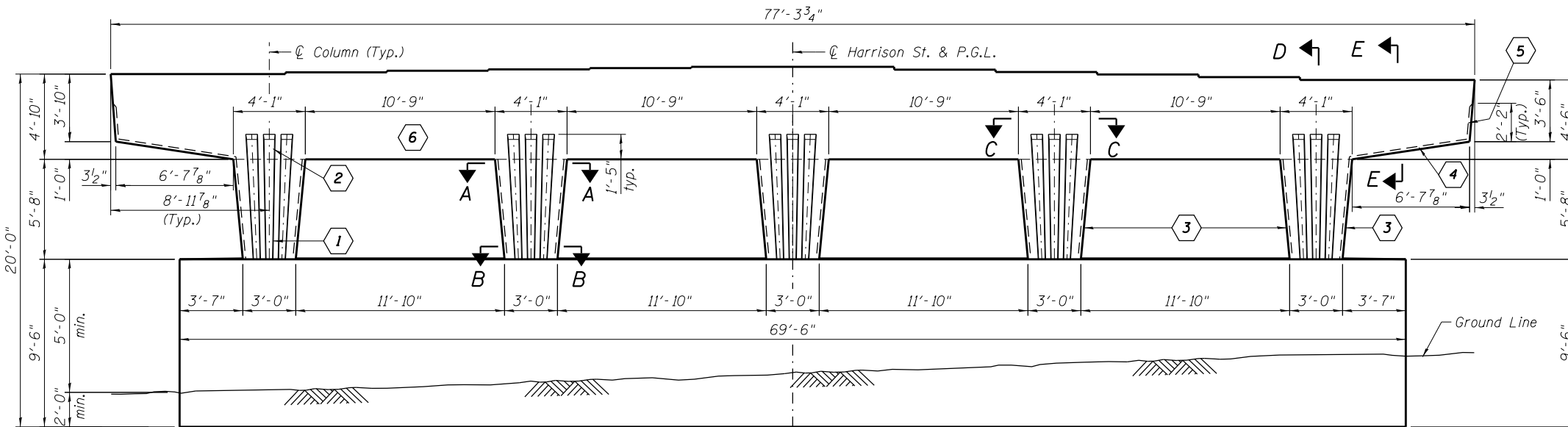
PIER DETAILS
STRUCTURE NO. 016-1713

SHEET NO. S1-43 OF S1-48 SHEETS

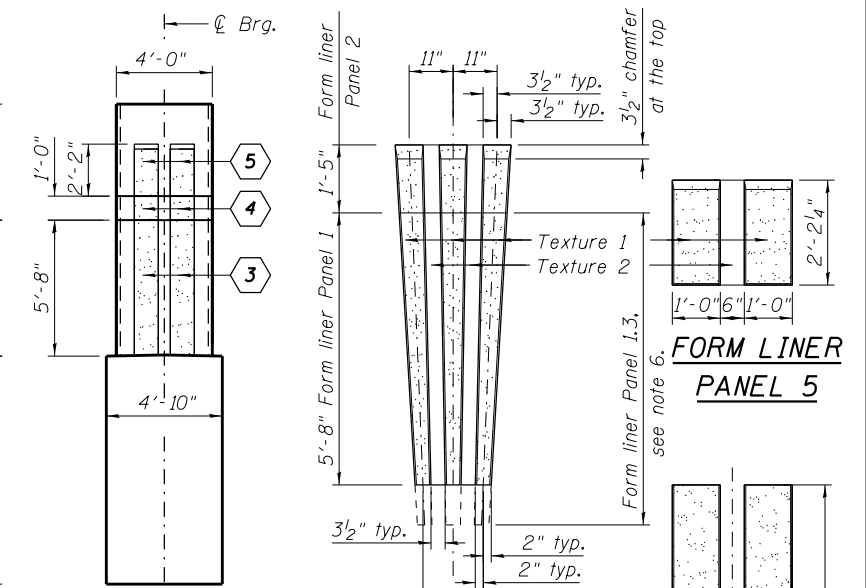
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90/94/290	2013-00BR	COOK	559	293
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				



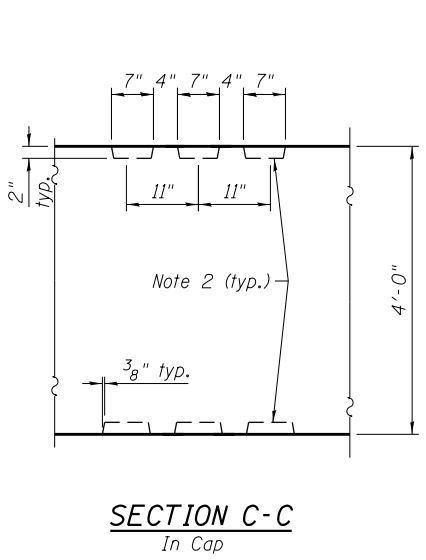
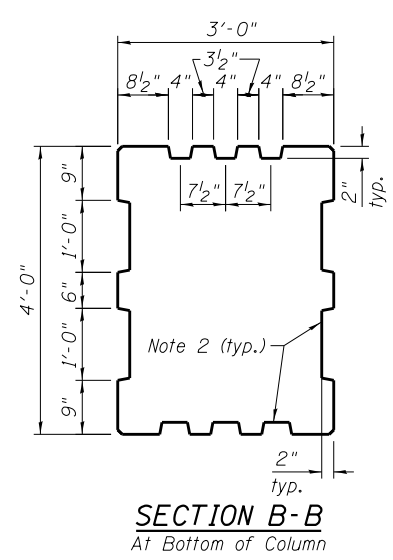
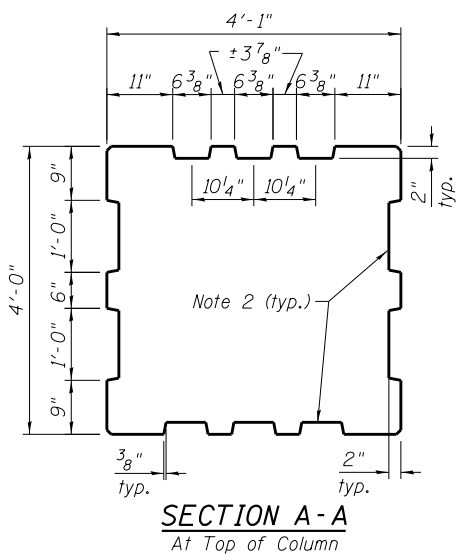
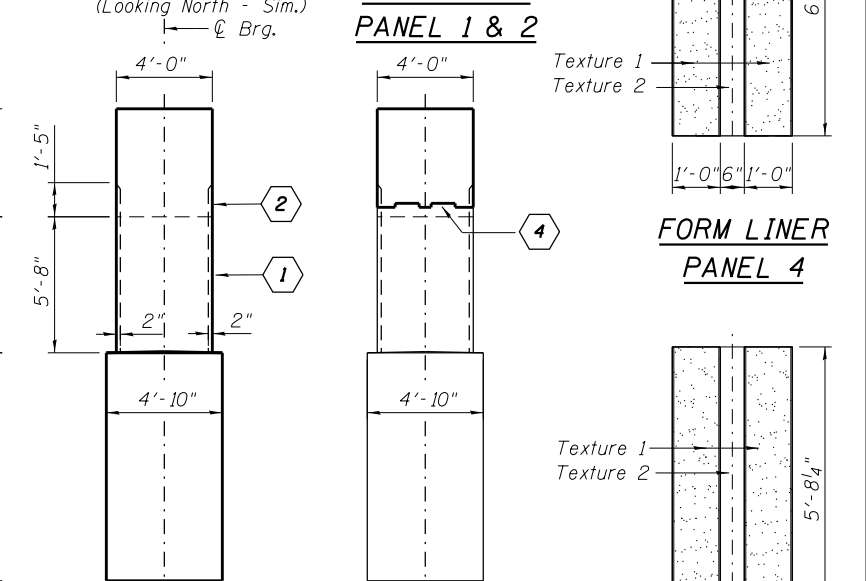
PIER ELEVATION
(Looking West)



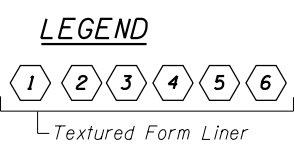
PIER ELEVATION
(Looking East)



PIER END VIEW
(Looking South)
(Looking North - Sim.)



- NOTES:
- Alternate: For surface indicated as Textured Form liner (6), Contractor can chose to build large protrusion directly into these forms if a smooth uniform surface can be provided.
 - Tapered fluting - dimensions vary, see elevation profile.
 - Form liner panel (2) is continuation of panel (1). Keep adjacent form liners aligned.
 - Hand clean and smooth the surface of the construction joint between the pier and cap.
 - Texture 1: Light Sandblast as selected from manufacturer's standard pattern selection. Texture 2: Smooth
 - Form liner panel (1) is similar to form liner panel (4.3) on SN 016-1716 only shorter.



BILL OF MATERIAL

Item	Unit	Total
Form Liner Textured Surface	Sq. Ft.	1244

0161713-60W26-S44-Pier



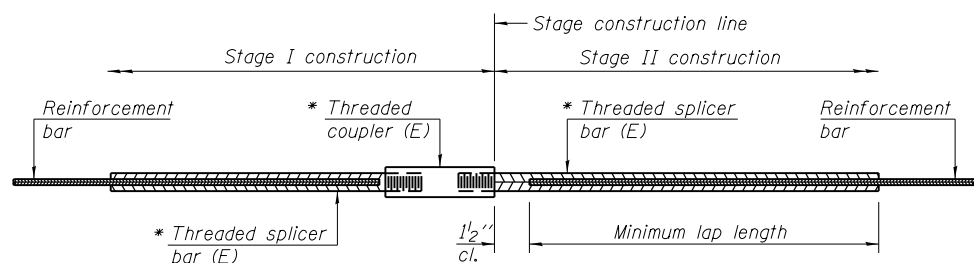
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PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER ARCHITECTURAL DETAILS
STRUCTURE NO. 016-1713

SHEET NO. S1-44 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 294
CONTRACT NO. 60W26				ILLINOIS FED. AID PROJECT



STANDARD BAR SPLICER ASSEMBLY

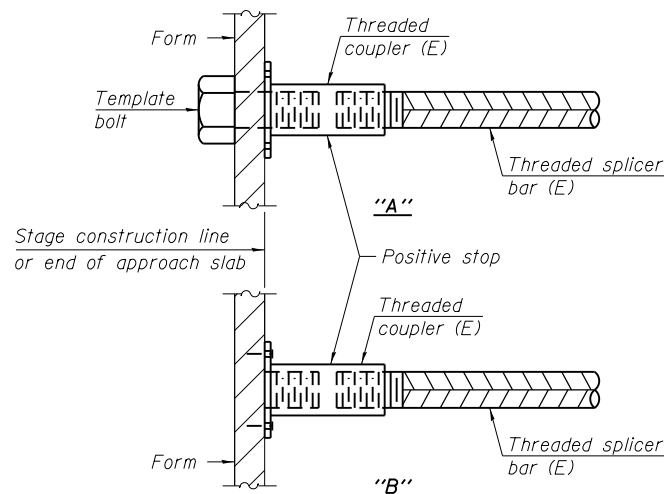
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

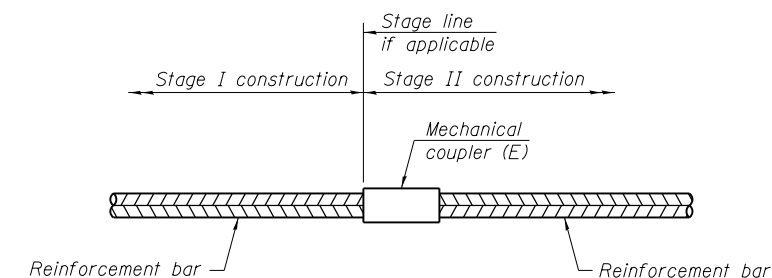
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



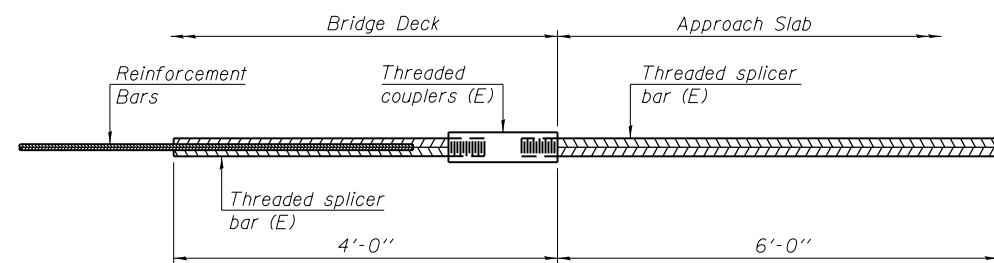
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



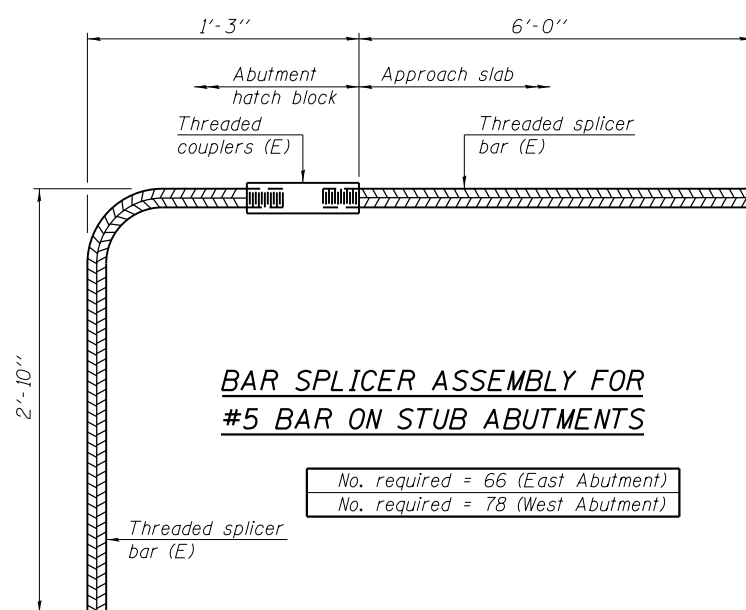
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
West Abutment	#14	1368



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 66 (East Abutment)
 No. required = 78 (West Abutment)

NOTES:

1. Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
2. All reinforcement shall be lapped and tied to the splicer bars.
3. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
4. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

0161713-60W26-S45-Bar-Splice



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY
STRUCTURE NO. 016-1713

SHEET NO. S1-45 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 295
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



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1145 N Main Street
Lombard, IL 60148
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Fax: 630 953-9938

BORING LOG 1087-B-01

WEI Job No.: 1100-04-01

Client: AECOM
Project: Circle Interchange Reconstruction
Location: Sections 16 and 17, T39N, R14E of 3rd PM

Datum: NAVD 88
Elevation: 594.63 ft
North: 1897505.91 ft
East: 1171279.56 ft
Station: 7807+80.07
Offset: 34.23 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
593.6	12-inch thick, black SILTY CLAY --TOPSOIL--														
	Very stiff to hard, dark brown to brown SILTY CLAY, trace gravel, concrete and brick fragments --FILL--	1	X	1	4 5 17	4.50 P	17			11	X	11	0 2 2	0.33 B	26
		2	X	2	3 4 4	3.75 P	15			12	X	12	0 0 0	0.16 B	26
589.1	Very loose to medium dense, brown, fine SAND, trace concrete, clay, and rock fragments --FILL--	3	X	3	2 1 1	NP	7			13	X	13	0 2 2	0.16 B	27
		4	X	4	10 4 11	NP	27			14	X	14	0 0 2	0.16 B	26
584.1	Very stiff, gray SILTY CLAY, trace gravel	5	X	5	3 5 7	2.38 B	18			15	X	15	0 0 2	0.41 B	27
581.6	Very soft to medium stiff, gray CLAY, trace gravel	6	X	6	2 2 3	0.66 B	23			16	X	16	1 2 2	0.41 B	28
		7	X	7	0 0 0	0.33 B	19			17	X	17	0 3 5	0.66 B	23
		8	X	8	0 0 2	0.41 B	21			18	X	18	6 12 12	3.44 B	21
		9	X	9	0 0 1	0.50 P	20			19	X	19	10 24 25	NP	17
		10	X	10	0 0 3	0.41 B	25			20	X	20	6 12 12	3.44 B	21

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling 03-03-2013 Complete Drilling 03-04-2013
Drilling Contractor Wang Testing Services Drill Rig B-57 TMR
Driller R&J Logger D. Kolpacki Checked by C. Marin
Drilling Method 2.25" SSA to 15', Mud Rotary 15' to 80'

While Drilling 10.50 ft
At Completion of Drilling MUD (10')
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



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BORING LOG 1087-B-01

WEI Job No.: 1100-04-01

Client: AECOM
Project: Circle Interchange Reconstruction
Location: Sections 16 and 17, T39N, R14E of 3rd PM

Datum: NAVD 88
Elevation: 594.63 ft
North: 1897505.91 ft
East: 1171279.56 ft
Station: 7807+80.07
Offset: 34.23 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
542.6	Stiff, gray SILTY CLAY, trace gravel	17	X	17	0 4 7	1.23 B	18	517.6	Medium dense, gray SANDY LOAM, trace gravel	17	X	17	0 4 7	1.23 B	18
		18	X	18	16 19 17	NP	11	514.9	Hard, gray SILTY LOAM, trace gravel	18	X	18	16 19 17	NP	11
537.6	Dense, gray SILTY LOAM to SILTY CLAY LOAM, trace gravel and sand seams --LL%=23, PL%=14-- --%Gravel=5.1-- --%Sand=23.5-- --%Silt=55.6-- --%Clay=15.8-- --A-4 (4)--	18	X	18	16 19 17	NP	11			19	X	19	10 24 25	NP	17
		19	X	19	10 24 25	NP	17			20	X	20	6 12 12	3.44 B	21
527.6	Medium stiff to very stiff, gray SILTY CLAY, trace gravel --LL%=35, PL%=15-- --%Gravel=1.1-- --%Sand=8.1-- --%Silt=53.3-- --%Clay=37.5-- --A-6 (17)--	20	X	20	6 12 12	3.44 B	21			21	X	21	0 3 5	0.66 B	23
		21	X	21	0 3 5	0.66 B	23			22	X	22	4 11 15	NP	27
		22	X	22	4 11 15	NP	27			23	X	23	6 15 25	5.74 B	16
		23	X	23	6 15 25	5.74 B	16			24	X	24	11 14 30	4.67 B	19
		24	X	24	11 14 30	4.67 B	19			25	X	25	50/2"	NR	
		25	X	25	50/2"	NR				26	X	26	50/3"	NP	
		26	X	26	50/3"	NP		495.6	Boring terminated at 99.00 ft	99.00					

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling 03-03-2013 Complete Drilling 03-04-2013
Drilling Contractor Wang Testing Services Drill Rig B-57 TMR
Driller R&J Logger D. Kolpacki Checked by C. Marin
Drilling Method 2.25" SSA to 15', Mud Rotary 15' to 80'

While Drilling 10.50 ft
At Completion of Drilling MUD (10')
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

0161713-60W26-546-Bor-Ing



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS - I
STRUCTURE NO. 016-1713

SHEET NO. S1-46 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-00BR	COOK	559	296
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				



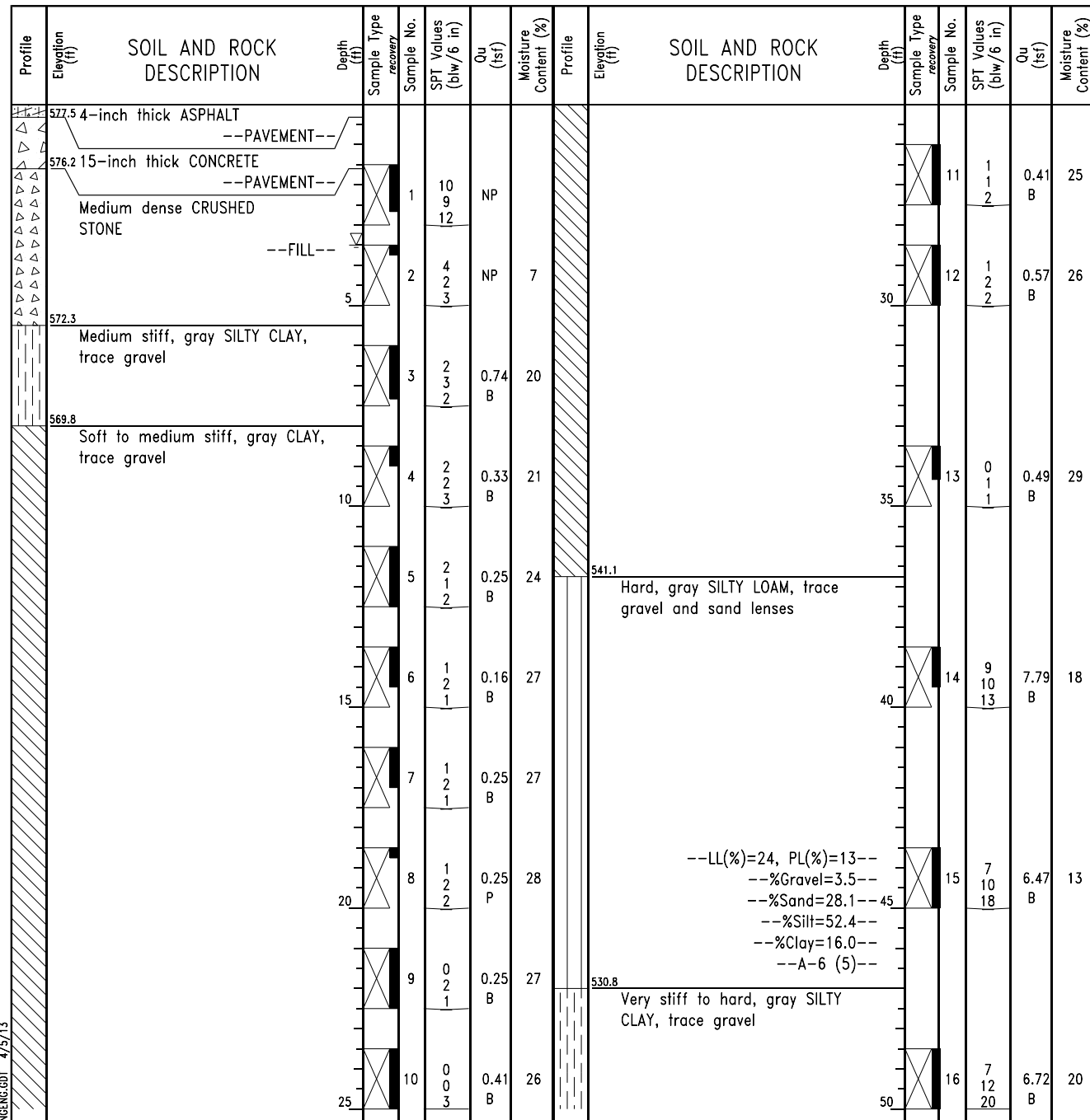
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG 1087-B-02

WEI Job No.: 1100-04-01

Client: AECOM
Project: Circle Interchange Reconstruction
Location: Sections 16 and 17, T39N, R14E of 3rd PM

Datum: NAVD 88
Elevation: 577.83 ft
North: 1897618.19 ft
East: 1171373.71 ft
Station: 7808+76.83
Offset: 75.40 LT



GENERAL NOTES

Begin Drilling 03-06-2013 Complete Drilling 03-14-2013
Drilling Contractor Wang Testing Services Drill Rig B-57 TMR
Driller R&J Logger D. Kolpacki Checked by C. Marin
Drilling Method 2.25" SSA to 20', Mud Rotary 20' thereafter

WATER LEVEL DATA

While Drilling 3.50 ft
At Completion of Drilling MUD (20')
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



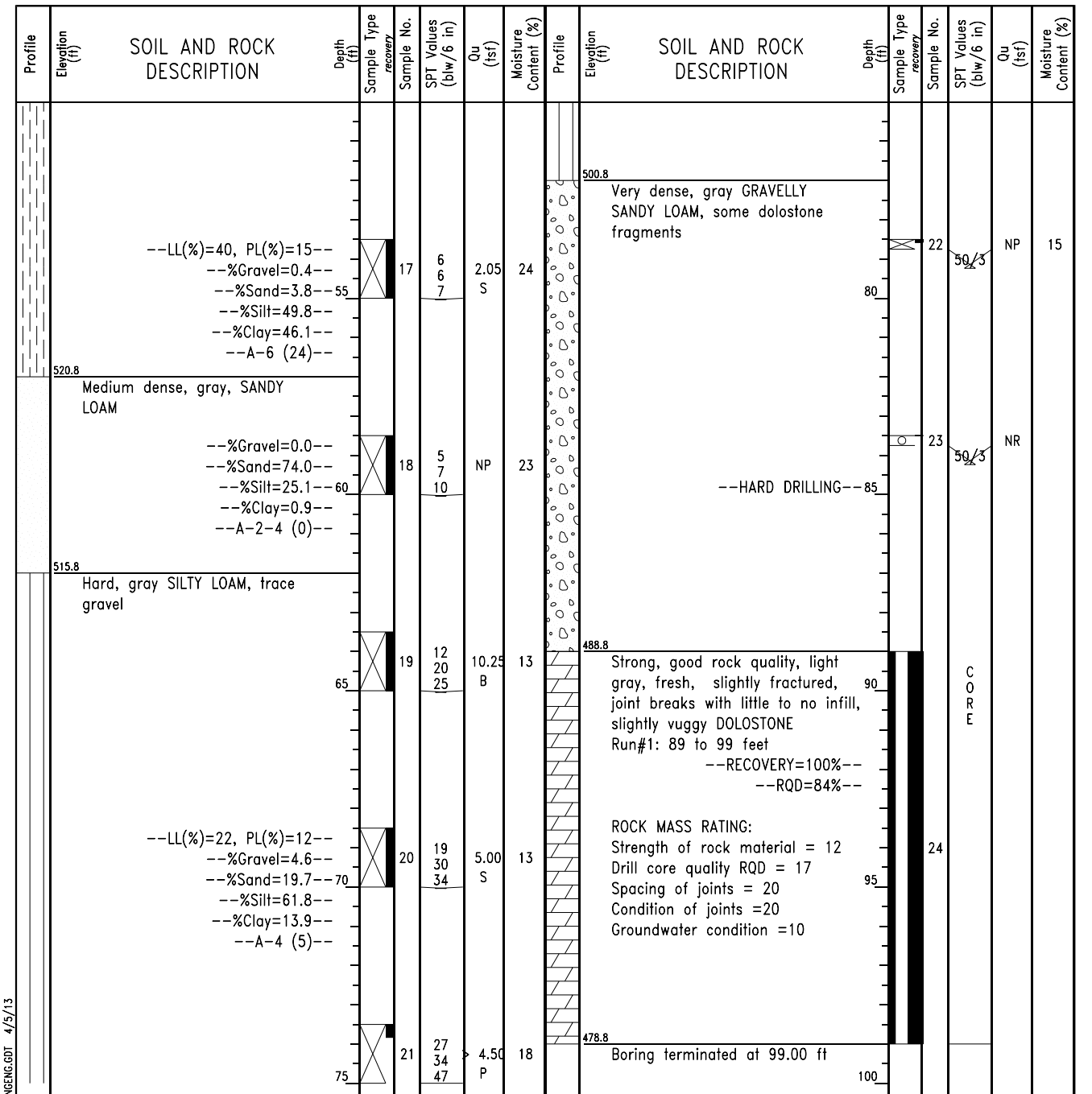
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1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG 1087-B-02

WEI Job No.: 1100-04-01

Client: AECOM
Project: Circle Interchange Reconstruction
Location: Sections 16 and 17, T39N, R14E of 3rd PM

Datum: NAVD 88
Elevation: 577.83 ft
North: 1897618.19 ft
East: 1171373.71 ft
Station: 7808+76.83
Offset: 75.40 LT



GENERAL NOTES

Begin Drilling 03-06-2013 Complete Drilling 03-14-2013
Drilling Contractor Wang Testing Services Drill Rig B-57 TMR
Driller R&J Logger D. Kolpacki Checked by C. Marin
Drilling Method 2.25" SSA to 20', Mud Rotary 20' thereafter

WATER LEVEL DATA

While Drilling 3.50 ft
At Completion of Drilling MUD (20')
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



USER NAME = dunkerleyb
DESIGNED - EJO
CHECKED - ATB
PLOT SCALE = N.T.S.
DRAWN - BRD
PLOT DATE = 9/15/2013
CHECKED - EJO

REVISOR
REVISION
REVISOR
REVISION
REVISOR
REVISION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS - II
STRUCTURE NO. 016-1713

SHEET NO. S1-47 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	297
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				



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BORING LOG 1087-B-03

WEI Job No.: 1100-04-01

Client: AECOM
Project: Circle Interchange Reconstruction
Location: Sections 16 and 17, T39N, R14E of 3rd PM

Datum: NAVD 88
Elevation: 596.41 ft
North: 1897526.93 ft
East: 1171579.56 ft
Station: 7811+18.84
Offset: 5.33 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
595.6	10.25-inch thick CONCRETE --PAVEMENT--														
	Gray CRUSHED STONE --BASE COURSE--														
593.7	Medium dense, brown and gray, fine SAND to SANDY LOAM, little gravel and brick fragments --FILL--	5	PUSH	1						30	PUSH	12	2 2 2	0.41 B	22
		10	PUSH	2			12			35	PUSH	13	1 2 3	0.41 B	21
		15	PUSH	3			15			40	PUSH	14	0 0 0	0.25 B	26
		20	PUSH	4			11			45	PUSH	15	1 2 2	0.25 B	25
		25	PUSH	5			14			50	PUSH	16	0 1 3	0.41 B	27
583.4	Medium stiff to very stiff, gray SILTY CLAY, trace gravel	5													
		10													
		15													
		20													
		25													
573.4	Soft to medium stiff, gray CLAY to SILTY CLAY, trace gravel	5													
		10													
		15													
		20													
		25													

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	03-21-2013	Complete Drilling	03-22-2013	While Drilling	▽	DRY	
Drilling Contractor	Wang Testing Services	Drill Rig	D-50 TMR	At Completion of Drilling	▽	DRY	
Driller	R&T	Logger	D. Kolpacki	Time After Drilling	NA		
Drilling Method	1.0" IDA Geoprobe to 11', 2.25" SSA 11' to 20', Mud Rotary 20' thereafter			Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							



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BORING LOG 1087-B-03

WEI Job No.: 1100-04-01

Client: AECOM
Project: Circle Interchange Reconstruction
Location: Sections 16 and 17, T39N, R14E of 3rd PM

Datum: NAVD 88
Elevation: 596.41 ft
North: 1897526.93 ft
East: 1171579.56 ft
Station: 7811+18.84
Offset: 5.33 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		55								80					
		60								85					
539.7	Very stiff to hard, gray SILTY LOAM to SILTY CLAY LOAM, trace gravel and sand seams	5													
		10													
		15													
		20													
		25													
		30													
		35													
		40													
		45													
		50													
529.7	Medium stiff to hard, gray CLAY to SILTY CLAY, trace gravel and seams of sand	5													
		10													
		15													
		20													
		25													
		30													
		35													
		40													
		45													
		50													
		55													
		60													
		65													
		70													
		75													
		80													
		85													
		90													
		95													
		100													

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	03-21-2013	Complete Drilling	03-22-2013	While Drilling	▽	DRY	
Drilling Contractor	Wang Testing Services	Drill Rig	D-50 TMR	At Completion of Drilling	▽	DRY	
Driller	R&T	Logger	D. Kolpacki	Time After Drilling	NA		
Drilling Method	1.0" IDA Geoprobe to 11', 2.25" SSA 11' to 20', Mud Rotary 20' thereafter			Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

0161713-60W26-S48-Bor-Ing



USER NAME = dunkerleyb	DESIGNED - EJO	REVISOR
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISION
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISION
	CHECKED - EJO	REVISION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS - III
STRUCTURE NO. 016-1713

SHEET NO. S1-48 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-00BR	COOK	559	298
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
 FEDERAL AID INTERSTATE HIGHWAY**

INDEX OF VOLUMES

VOL. NO.	DESCRIPTION	NO. OF SHEETS
1	ROADWAY PLANS & GENERAL SHEETS	151
2	MAINTENANCE OF TRAFFIC & ROADWAY CROSS SECTIONS	81
3	BRIDGES & ASSOCIATED STRUCTURES	79
4	RETAINING WALLS	38
5	ROADWAY LIGHTING & SURVEILLANCE	36
TOTAL		385

NOTE: FOR INDEX OF SHEETS SEE SHEET NO. 2

PLAN 1 INCH = 50 FEET
 PROFILE HORIZ. 1 INCH = 50 FEET
 PROFILE VERT. 1 INCH = 5 FEET
 CROSS SECTIONS 1 INCH = 10 FEET HORIZONTAL
 1 INCH = 5 FEET VERTICAL

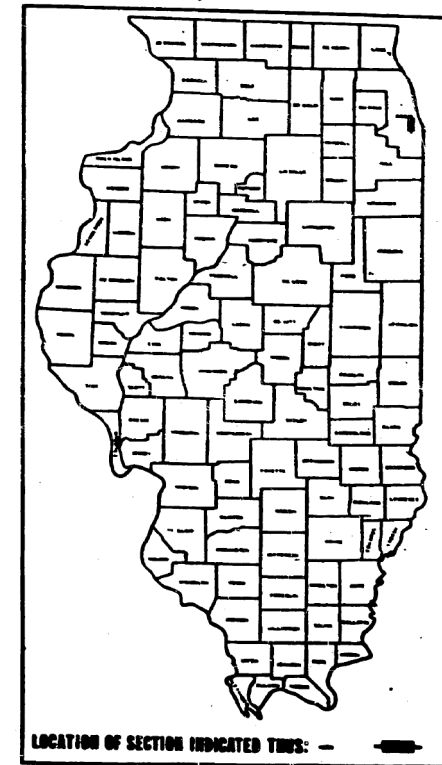
VOLUME NO. 1

F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)
 SECTION 1985 - 080 R
 PROJECT IDR-94-3 (268) 52
 COOK COUNTY
 C-91-433-85

ROADWAY GRADING AND PAVING
 MAXWELL STREET TO I-290

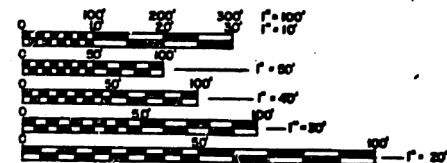
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	151	1

* 1985-080 R
 P-91-179-84



DESIGN DESIGNATION

DAN RYAN EXPRESSWAY (MAINLINE S.B. & N.B.) } 45,700 (2000) TRUNK 18.41 (15" CRPCC - 20) Δ
 COLLECTOR-DISTRIBUTOR (S.B. & N.B.) }
 N.B. ROOSEVELT RD./RUBLE ST. } 19,300 (2000) AREA SERVICE 16.08 (12" PCC - 20)
 S.B. ROOSEVELT RD./UNION AVE. }
 N.B. TAYLOR ST. ENTRANCE RAMP }
 TAYLOR ST. MAINLINE EXIT } 7,700 (2000) AREA SERVICE 4.67 (10" PCC - 20)
 AND RAMP W-S }



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

CONTRACT NO. **80063**

PROJECT ENDS
 STA. 17+50 (S.B.)
 STA. 14+75 (N.B.)
 DAN RYAN EXPRESSWAY

STA. EQ. 99 DAN RYAN EXPRESSWAY
 STA. 16+37.95 BK + STA. 16+37.67 AMD.

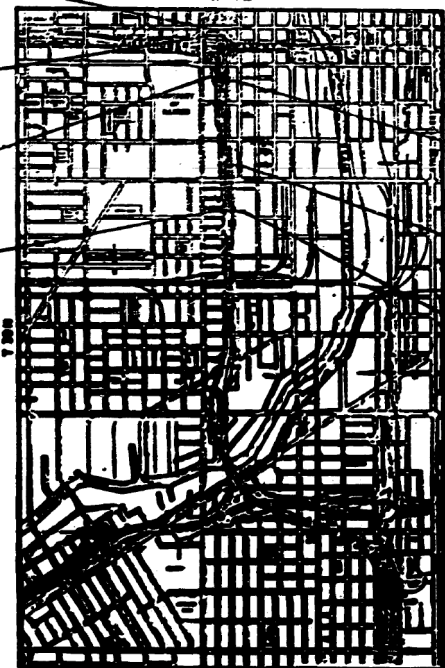
STA. EQ. 98 DAN RYAN EXPRESSWAY
 STA. 209+97.18 BK + STA. 3+11.65 AMD

PROJECT BEGINS
 STA. 183+13.36
 DAN RYAN EXPRESSWAY

STA. EQ. NB. DAN RYAN EXPRESSWAY
 STA. 209+89.95 BK + STA. 3+06.94 AMD

STA. EQ. NB. DAN RYAN EXPRESSWAY
 STA. 196+40.97 BK + STA. 196+39.94 AMD

STA. EQ. SB. & NB. DAN RYAN EXPRESSWAY
 STA. 183+87.10 BK + STA. 183+15.36 AMD



Thomas Allan Smith
 8-15-87

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

DESIGNED: *August 15, 1987*
 DRAWN: *Ralph L. Nelson*
 CHECKED: *11-26-87*
 PLOTTED: *10/20/87*
 APPROVED: *8-20-87*

DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

DIVISION ADMINISTRATOR _____ DATE _____

NET LENGTH = 4,122.32 LIN. FT. (0.78 MILES)
 CROSS LENGTH = 4,122.32 LIN. FT. (0.78 MILES)

COUNTY COOK SECTION 1985 - 080 R ROUTE 190/94 (DAN RYAN EXPRESSWAY)

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1087

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	299

CONTRACT NO. 60W26
 ILLINOIS FED. AID PROJECT

SCALE: NTS SHEET AS-01 OF AS-62 SHEETS STA. TO STA.

