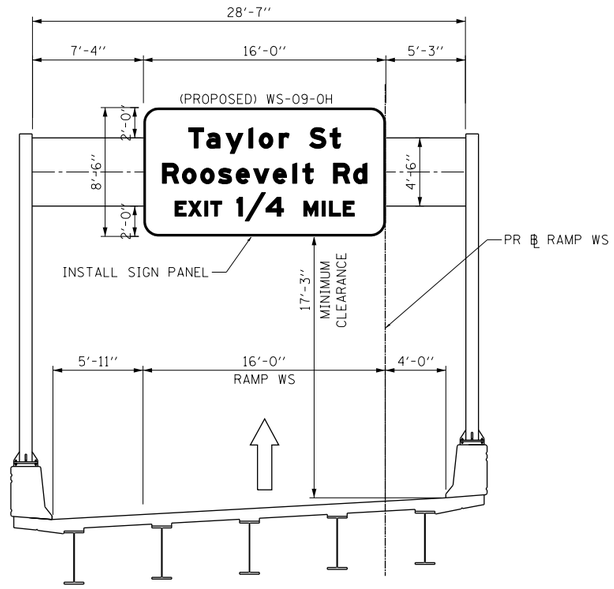


PROPOSED TRUSS MOUNT (RAMP WS)
STA 1217+17.95

NOTES:

1. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.

SIGN NUMBERING CODE
EXAMPLE

DP-01-LP

DIRECTION OF TRAFFIC

EB - EB I-290 & CONGRESS PKWY
WB - WB I-290 & CONGRESS PKWY
NB - NB I-90/94
SB - SB I-90/94
EN - EAST TO NORTH RAMP
NE - NORTH TO EAST RAMP
ES - EAST TO SOUTH RAMP
SE - SOUTH TO EAST RAMP
WS - WEST TO SOUTH RAMP
TAY - TAYLOR EXIT RAMP

SIGN PANEL NUMBER

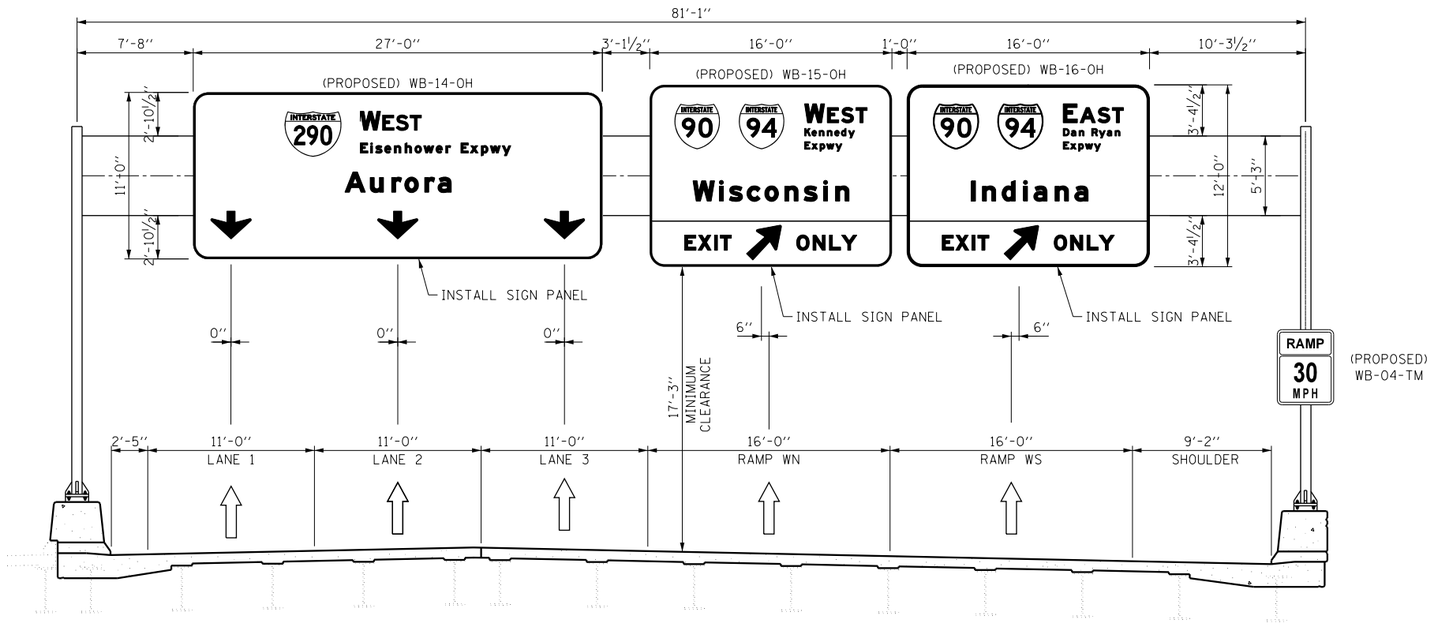
MOUNTING TYPE

ST - STEEL POST
TS - TELESCOPING STEEL
LP - LIGHT POLE BANDING
SP - SIGNAL POLE BANDING
SA - SIGNAL POLE MAST ARM
BM - BRIDGE MOUNTED
BS - BREAKAWAY STEEL
WP - WOOD POST
OH - OVERHEAD
TM - TRUSS SUPPORT MOUNTED
FM - FENCE MOUNTED
MP - METAL POST
BW - BARRIER WALL MOUNTED

FILE PATH = pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase 1\000_CAD\006-Roadway\Sheets\60X93 Contract\D160X93-SHT-Sign-OH-03.dgn

TranSystems	D160X93-SHT-Sign-OH-03.dgn	DESIGNED - VLJ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	USER NAME = msbilliot	DRAWN - VLJ	REVISED -	OVERHEAD SIGN STRUCTURES SIGN PANEL PLACEMENT
	PLOT SCALE = 10.0000 '/ in.	CHECKED - JMG	REVISED -	SCALE: 1" = 5' | SHEET 3 OF 12 SHEETS | STA. TO STA.
	PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	501
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



PROPOSED TRUSS MOUNT (WB I–290)
STA 5209 + 18.43

NOTES:

1. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.

SIGN NUMBERING CODE EXAMPLE

DP-01-LP

DIRECTION OF TRAFFIC

EB - EB I-290 & CONGRESS PKWY
WB - WB I-290 & CONGRESS PKWY
NB - NB I-90/94
SB - SB I-90/94
EN - EAST TO NORTH RAMP
NE - NORTH TO EAST RAMP
ES - EAST TO SOUTH RAMP
SE - SOUTH TO EAST RAMP
WS - WEST TO SOUTH RAMP
TAY - TAYLOR EXIT RAMP

SIGN PANEL NUMBER

MOUNTING TYPE

ST - STEEL POST
TS - TELESCOPING STEEL
LP - LIGHT POLE BANDING
SP - SIGNAL POLE BANDING
SA - SIGNAL POLE MAST ARM
BM - BRIDGE MOUNTED
BS - BREAKAWAY STEEL
WP - WOOD POST
OH - OVERHEAD
TM - TRUSS SUPPORT MOUNTED
FM - FENCE MOUNTED
MP - METAL POST
BW - BARRIER WALL MOUNTED

FILE PATH = pw:\\617479-PWNT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase I\000_CAD\006_Roadway\Sheets\60X93 Contract\D160X93-SHT-Sign-OH-04.dgn

TranSystems

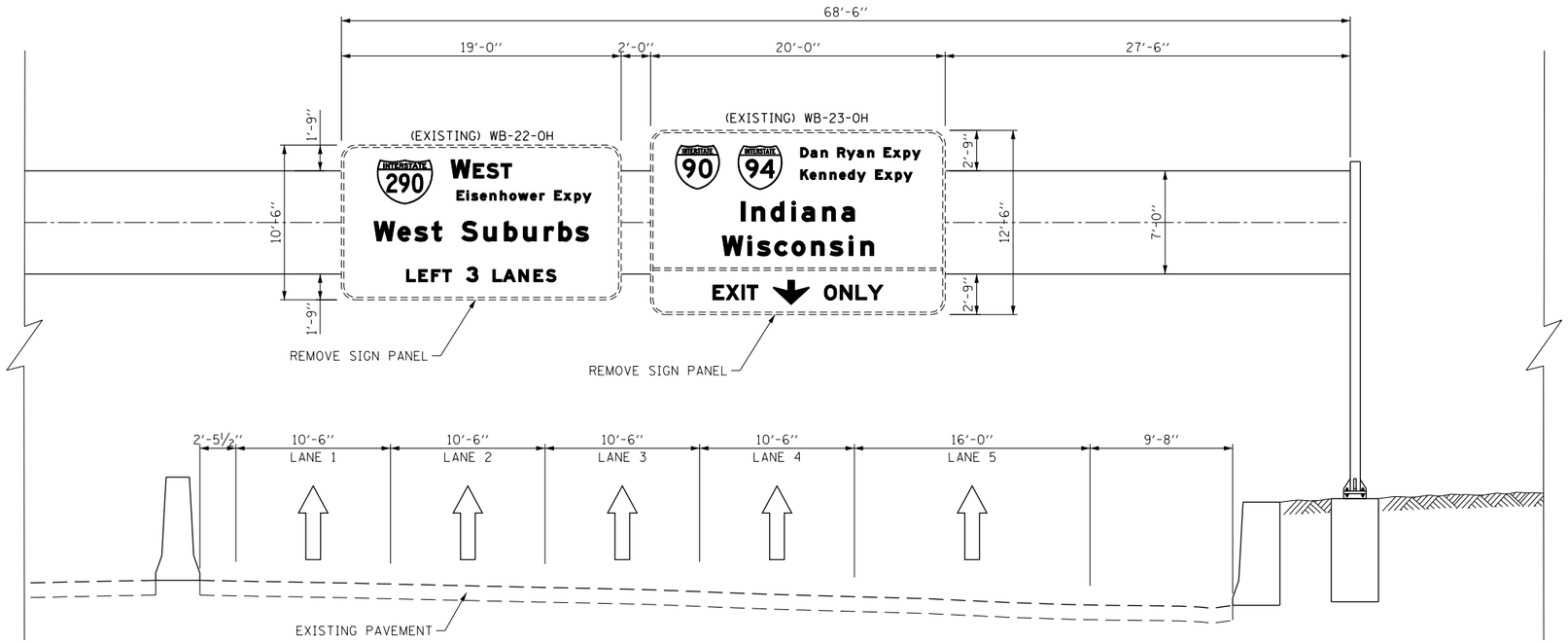
D160X93-SHT-Sign-OH-04.dgn	DESIGNED - VLJ	REVISED -	
USER NAME = msbilliot	DRAWN - VLJ	REVISED -	
PLOT SCALE = 10.0000 ' / in.	CHECKED - JMG	REVISED -	
PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' | SHEET 4 OF 12 SHEETS | STA. | TO STA.

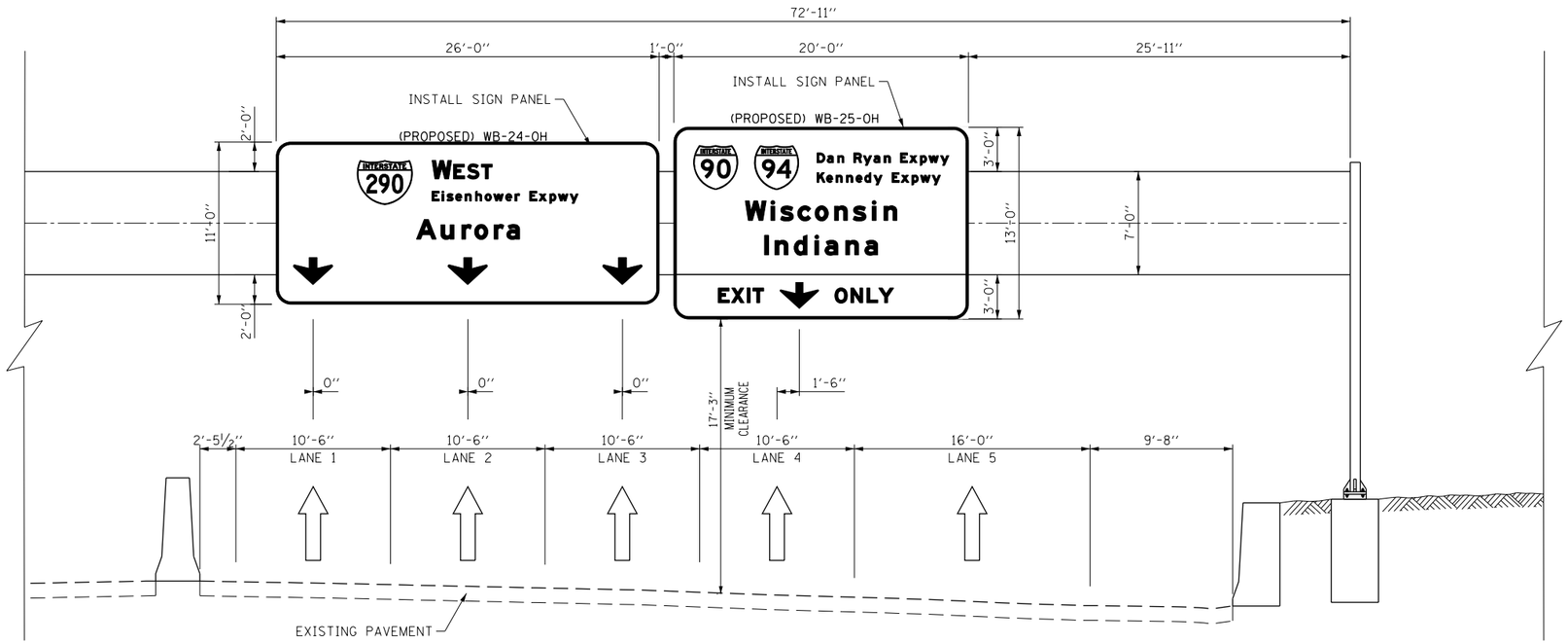
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	502
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



EXISTING TRUSS MOUNT (WB I–290)
STA 5186+12.70

NOTES:

1. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.



PROPOSED TRUSS MOUNT (WB I–290)
STA 5186+12.70

SIGN NUMBERING CODE EXAMPLE

DP-01-LP

DP = DIRECTION OF TRAFFIC
01 = SIGN PANEL NUMBER
LP = MOUNTING TYPE

DIRECTION OF TRAFFIC:
- EB - EB I-290 & CONGRESS PKWY
- WB - WB I-290 & CONGRESS PKWY
- NB - NB I-90/94
- SB - SB I-90/94
- EN - EAST TO NORTH RAMP
- NE - NORTH TO EAST RAMP
- ES - EAST TO SOUTH RAMP
- SE - SOUTH TO EAST RAMP
- WS - WEST TO SOUTH RAMP
- TAY - TAYLOR EXIT RAMP

MOUNTING TYPE:
- ST - STEEL POST
- TS - TELESCOPING STEEL
- LP - LIGHT POLE BANDING
- SP - SIGNAL POLE BANDING
- SA - SIGNAL POLE MAST ARM
- BM - BRIDGE MOUNTED
- BS - BREAKAWAY STEEL
- WP - WOOD POST
- OH - OVERHEAD
- TM - TRUSS SUPPORT MOUNTED
- FM - FENCE MOUNTED
- MP - METAL POST
- BW - BARRIER WALL MOUNTED

FILE PATH = per\61749-PWINT.decomonline.local#ECOM.DS02.NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000.CAD\006_Roadway\Sheets\60X93 Contract\D160X93-SHT-Sign-OH-05.dgn

TranSystems

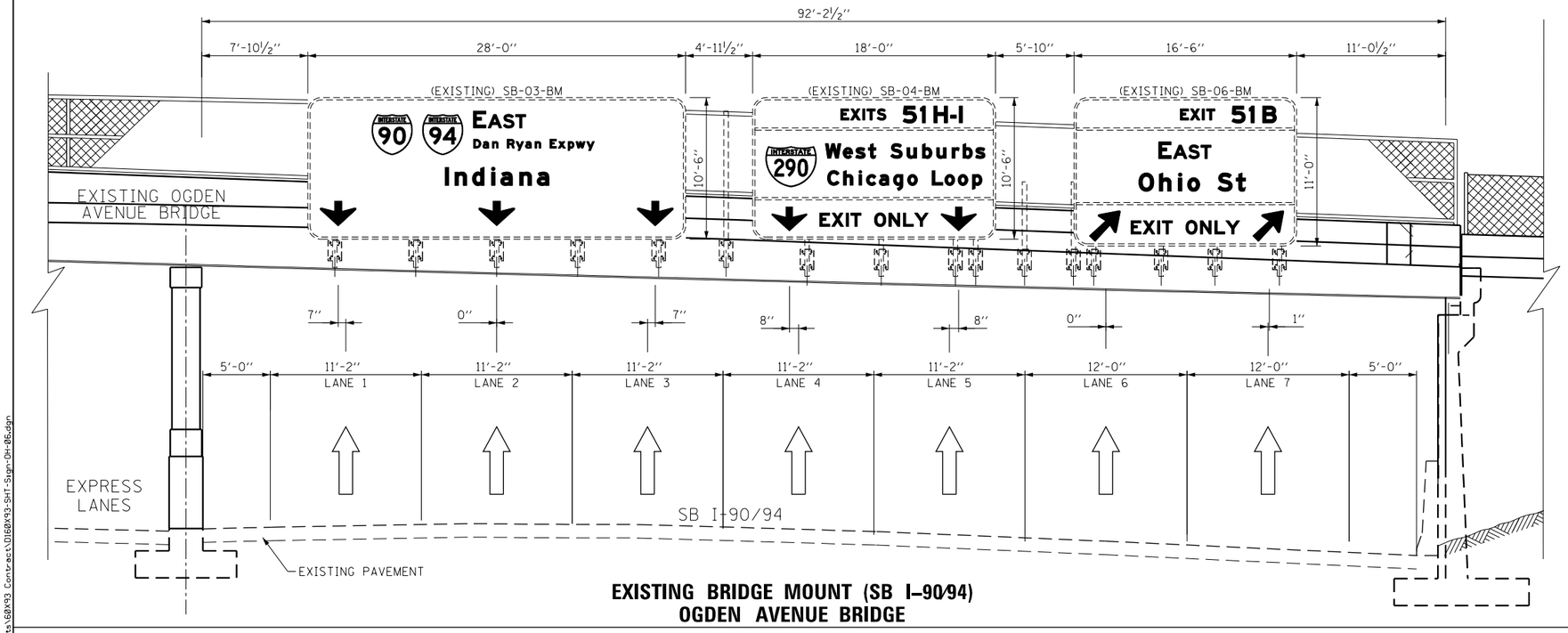
D160X93-SHT-Sign-OH-05.dgn	DESIGNED - VLJ	REVISED -
USER NAME = msbilliot	DRAWN - VLJ	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

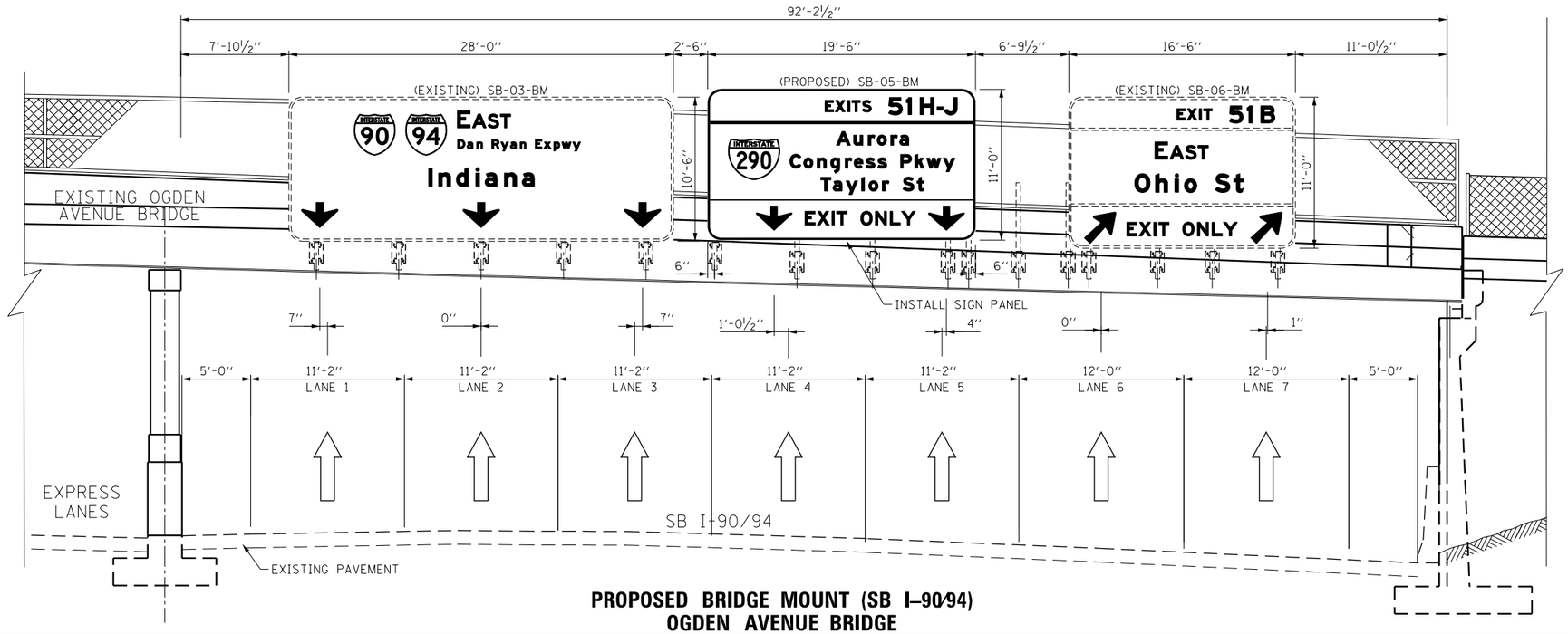
OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' | SHEET 5 OF 12 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	503
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



EXISTING BRIDGE MOUNT (SB I-90/94)
OGDEN AVENUE BRIDGE



PROPOSED BRIDGE MOUNT (SB I-90/94)
OGDEN AVENUE BRIDGE

NOTES:

1. ALL DIMENSIONS SHOWN FOR THE EXISTING BRACKETS ARE APPROXIMATED. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ORDERING SIGNS.
2. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.

SIGN NUMBERING CODE EXAMPLE

DP-01-LP

DIRECTION OF TRAFFIC

EB - EB I-290 & CONGRESS PKWY
WB - WB I-290 & CONGRESS PKWY
NB - NB I-90/94
SB - SB I-90/94
EN - EAST TO NORTH RAMP
NE - NORTH TO EAST RAMP
ES - EAST TO SOUTH RAMP
SE - SOUTH TO EAST RAMP
WS - WEST TO SOUTH RAMP
TAY - TAYLOR EXIT RAMP

SIGN PANEL NUMBER

MOUNTING TYPE

ST - STEEL POST
TS - TELESCOPING STEEL
LP - LIGHT POLE BANDING
SP - SIGNAL POLE BANDING
SA - SIGNAL POLE MAST ARM
BM - BRIDGE MOUNTED
BS - BREAKAWAY STEEL
WP - WOOD POST
OH - OVERHEAD
TM - TRUSS SUPPORT MOUNTED
FM - FENCE MOUNTED
MP - METAL POST
BW - BARRIER WALL MOUNTED

FILE PATH = pw:\\617479-PWNT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase 1\1000_CAD\006-Roadway\Sheets\60X93 Contract\D160X93-SHT-Sign-OH-06.dgn

TranSystems

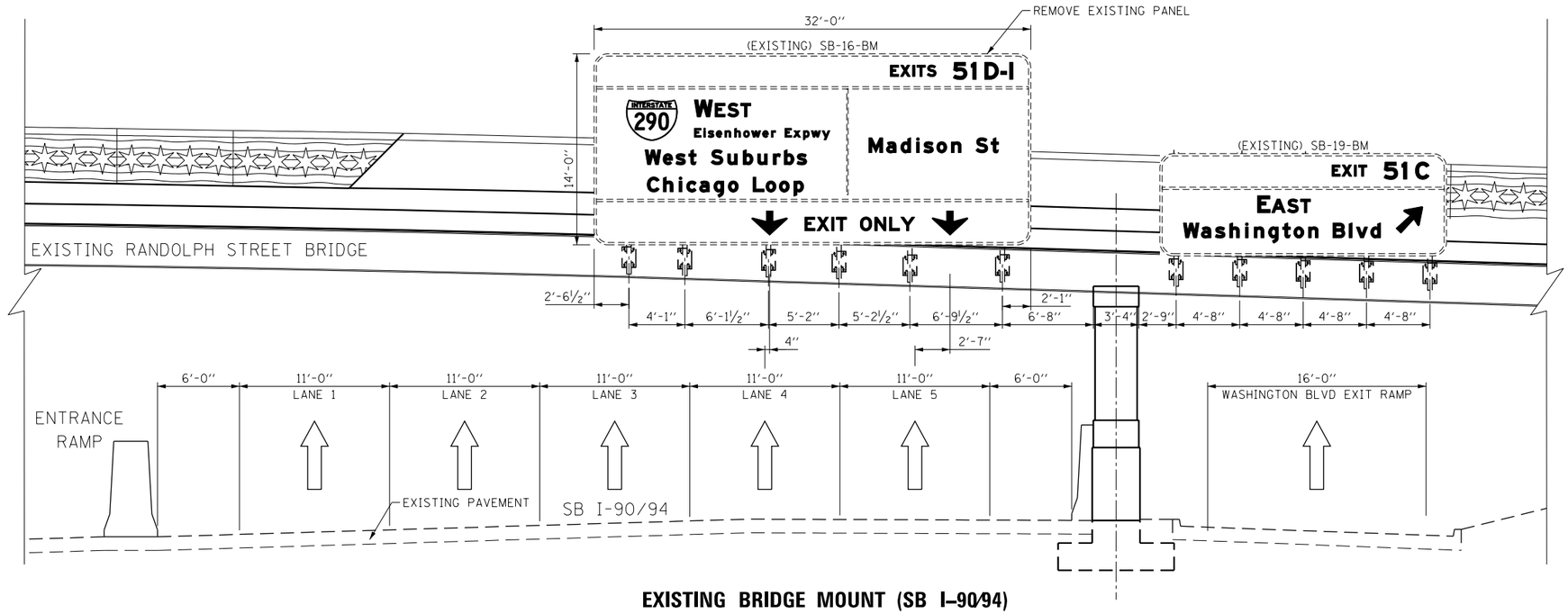
D160X93-SHT-Sign-OH-06.dgn	DESIGNED - VLJ	REVISED -	
USER NAME = msbilliot	DRAWN - VLJ	REVISED -	
PLOT SCALE = 10.0000 ' / in.	CHECKED - JMG	REVISED -	
PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

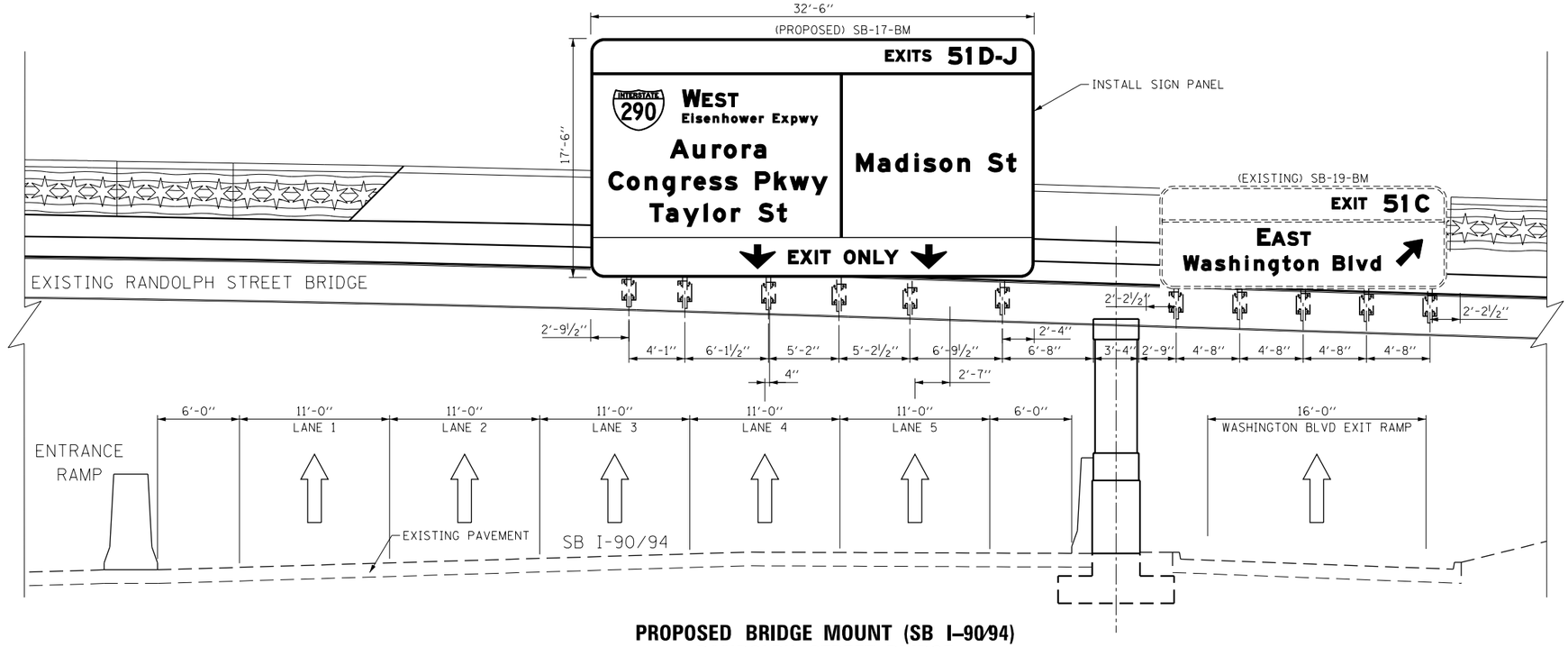
OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' | SHEET 6 OF 12 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	504
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



EXISTING BRIDGE MOUNT (SB I-90/94)
RANDOLPH STREET BRIDGE



PROPOSED BRIDGE MOUNT (SB I-90/94)
RANDOLPH STREET BRIDGE

NOTES:

1. ALL DIMENSIONS SHOWN FOR THE EXISTING BRACKETS ARE APPROXIMATED. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ORDERING SIGNS.
2. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.

SIGN NUMBERING CODE EXAMPLE

DP-01-LP

DIRECTION OF TRAFFIC

EB - EB I-290 & CONGRESS PKWY
WB - WB I-290 & CONGRESS PKWY
NB - NB I-90/94
SB - SB I-90/94
EN - EAST TO NORTH RAMP
NE - NORTH TO EAST RAMP
ES - EAST TO SOUTH RAMP
SE - SOUTH TO EAST RAMP
WS - WEST TO SOUTH RAMP
TAY - TAYLOR EXIT RAMP

SIGN PANEL NUMBER

MOUNTING TYPE

ST - STEEL POST
TS - TELESCOPING STEEL
LP - LIGHT POLE BANDING
SP - SIGNAL POLE BANDING
SA - SIGNAL POLE MAST ARM
BM - BRIDGE MOUNTED
BS - BREAKAWAY STEEL
WP - WOOD POST
OH - OVERHEAD
TM - TRUSS SUPPORT MOUNTED
FM - FENCE MOUNTED
MP - METAL POST
BW - BARRIER WALL MOUNTED

TranSystems

D160X93-SHT-Sign-OH-07.dgn	DESIGNED - VLJ	REVISED -
USER NAME = msbillot	DRAWN - VLJ	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -

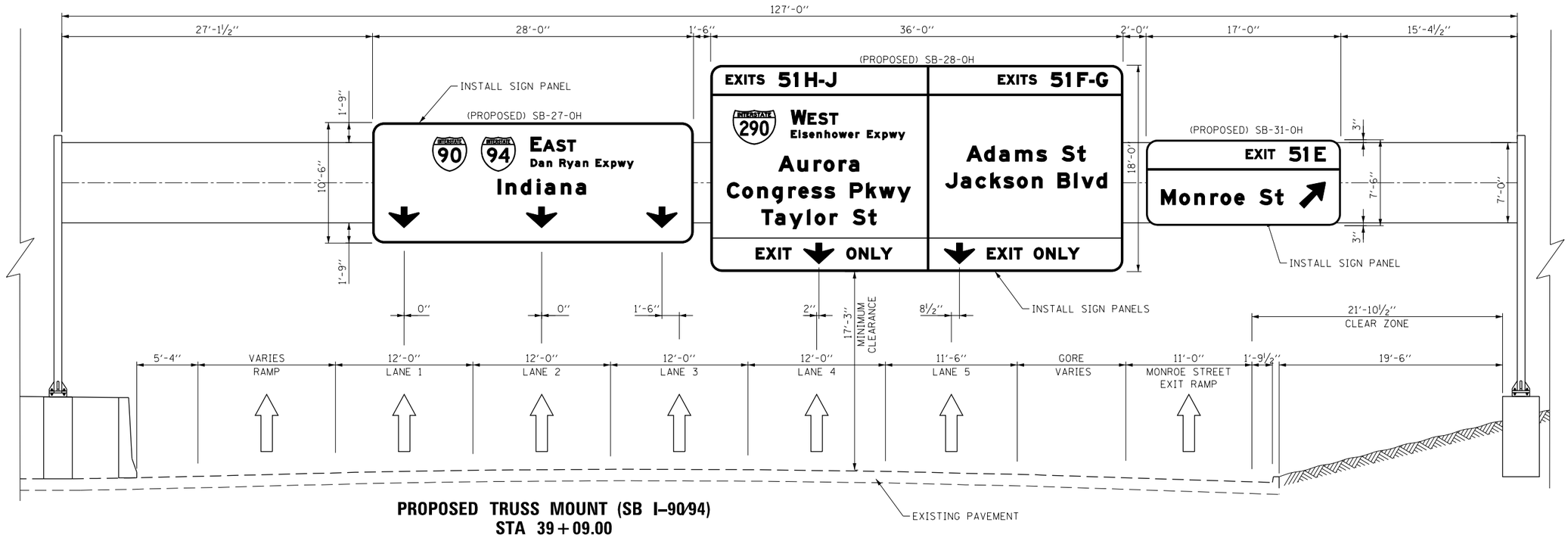
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' | SHEET 7 OF 12 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	505
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE PATH = pw:\\617479-PWNT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase 1\000_CAD\006_Roadway\Sheets\160X93 Contract\D160X93-SHT-Sign-OH-07.dgn



PROPOSED TRUSS MOUNT (SB I–90/94)
STA 39+09.00

NOTES:

1. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.

SIGN NUMBERING CODE EXAMPLE

DP-01-LP

DIRECTION OF TRAFFIC

EB - EB I-290 & CONGRESS PKWY
WB - WB I-290 & CONGRESS PKWY
NB - NB I-90/94
SB - SB I-90/94
EN - EAST TO NORTH RAMP
NE - NORTH TO EAST RAMP
ES - EAST TO SOUTH RAMP
SE - SOUTH TO EAST RAMP
WS - WEST TO SOUTH RAMP
TAY - TAYLOR EXIT RAMP

SIGN PANEL NUMBER

MOUNTING TYPE

ST - STEEL POST
TS - TELESCOPING STEEL
LP - LIGHT POLE BANDING
SP - SIGNAL POLE BANDING
SA - SIGNAL POLE MAST ARM
BM - BRIDGE MOUNTED
BS - BREAKAWAY STEEL
WP - WOOD POST
OH - OVERHEAD
TM - TRUSS SUPPORT MOUNTED
FM - FENCE MOUNTED
MP - METAL POST
BW - BARRIER WALL MOUNTED

FILE PATH = pw:\\617479-PWINT.aecomonline.local:ECOM.DS02.NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000_CAD\006_Roadway\Sheets\60X93 Contract\DI60X93-SHT-Sign-OH-08.dgn

TranSystems

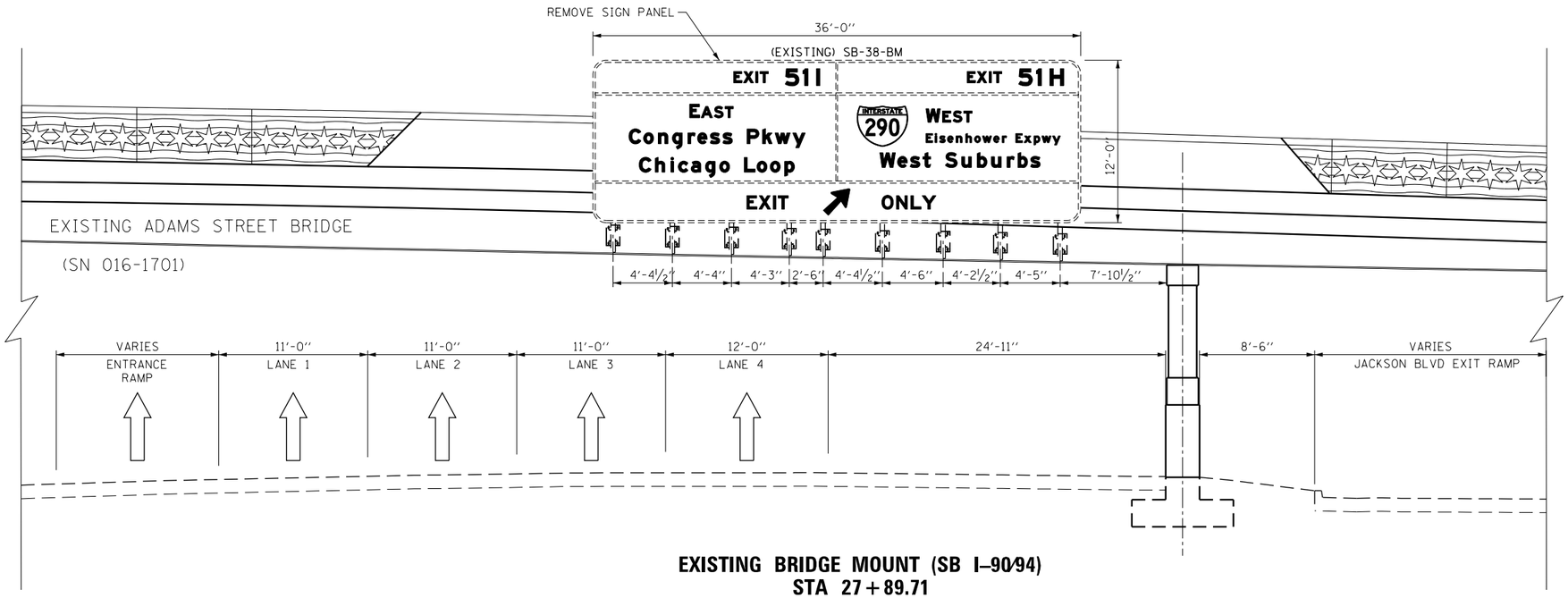
DI60X93-SHT-Sign-OH-08.dgn	DESIGNED - VLJ	REVISED -
USER NAME = msbilliot	DRAWN - VLJ	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' | SHEET 8 OF 12 SHEETS | STA. | TO STA.

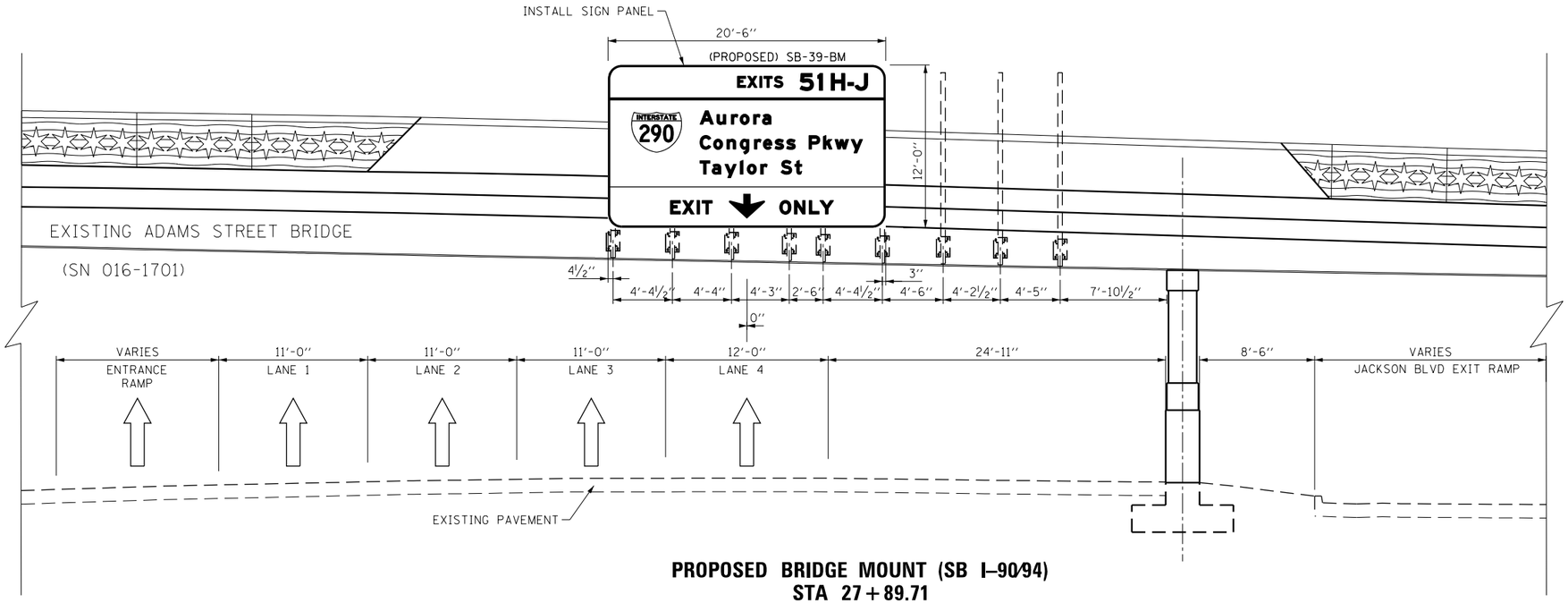
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	506
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



EXISTING BRIDGE MOUNT (SB I–90/94)
STA 27 + 89.71

NOTES:

1. ALL DIMENSIONS SHOWN FOR THE EXISTING BRACKETS ARE APPROXIMATED. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ORDERING SIGNS.
2. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.



PROPOSED BRIDGE MOUNT (SB I–90/94)
STA 27 + 89.71

SIGN NUMBERING CODE EXAMPLE

DP-01-LP

DIRECTION OF TRAFFIC

EB - EB I-290 & CONGRESS PKWY
WB - WB I-290 & CONGRESS PKWY
NB - NB I-90/94
SB - SB I-90/94
EN - EAST TO NORTH RAMP
NE - NORTH TO EAST RAMP
ES - EAST TO SOUTH RAMP
SE - SOUTH TO EAST RAMP
WS - WEST TO SOUTH RAMP
TAY - TAYLOR EXIT RAMP

SIGN PANEL NUMBER

MOUNTING TYPE

ST - STEEL POST
TS - TELESCOPING STEEL
LP - LIGHT POLE BANDING
SP - SIGNAL POLE BANDING
SA - SIGNAL POLE MAST ARM
BM - BRIDGE MOUNTED
BS - BREAKAWAY STEEL
WP - WOOD POST
OH - OVERHEAD
TM - TRUSS SUPPORT MOUNTED
FM - FENCE MOUNTED
MP - METAL POST
BW - BARRIER WALL MOUNTED

FILE PATH = pw:\\617479-PWINT.aecomonline.local:ACOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000_CAD\006_Roadway\Sheets\D160X93-SHT-Sign-OH-09.dgn

TranSystems

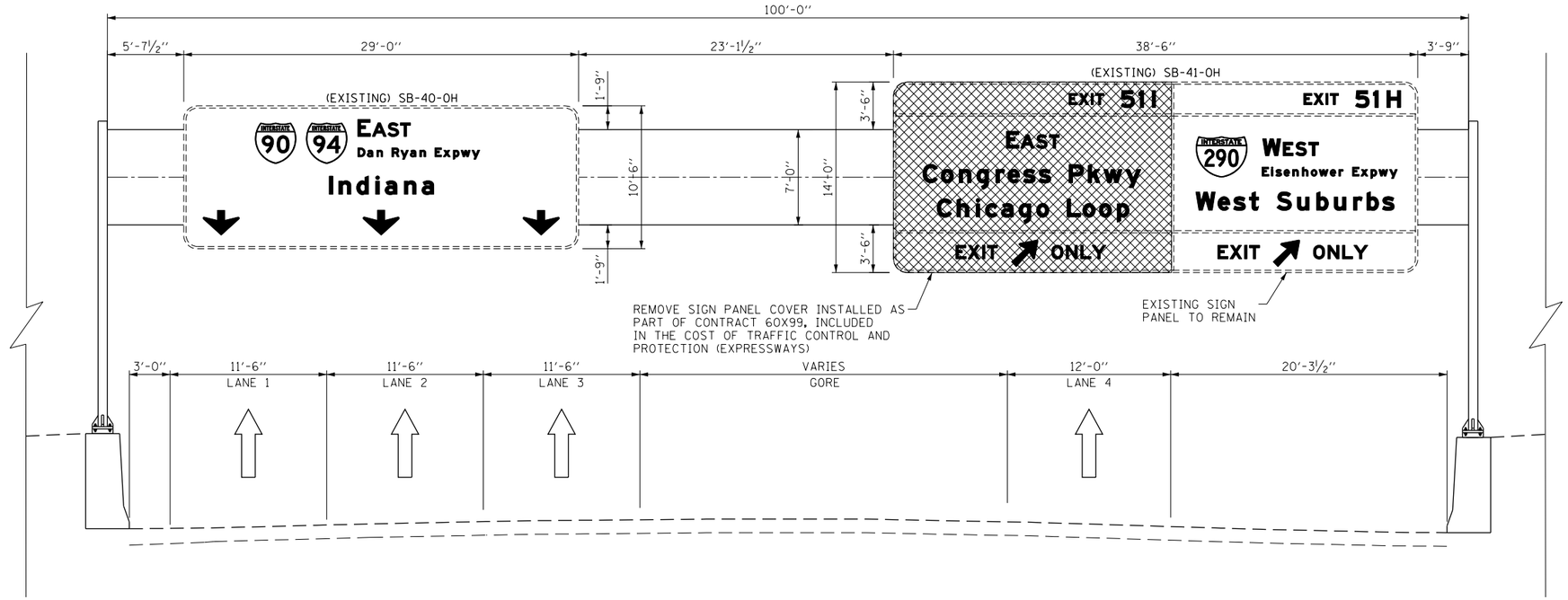
D160X93-SHT-Sign-OH-09.dgn	DESIGNED - VLJ	REVISED -
USER NAME = msbilliot	DRAWN - VLJ	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' | SHEET 9 OF 12 SHEETS | STA. | TO STA.

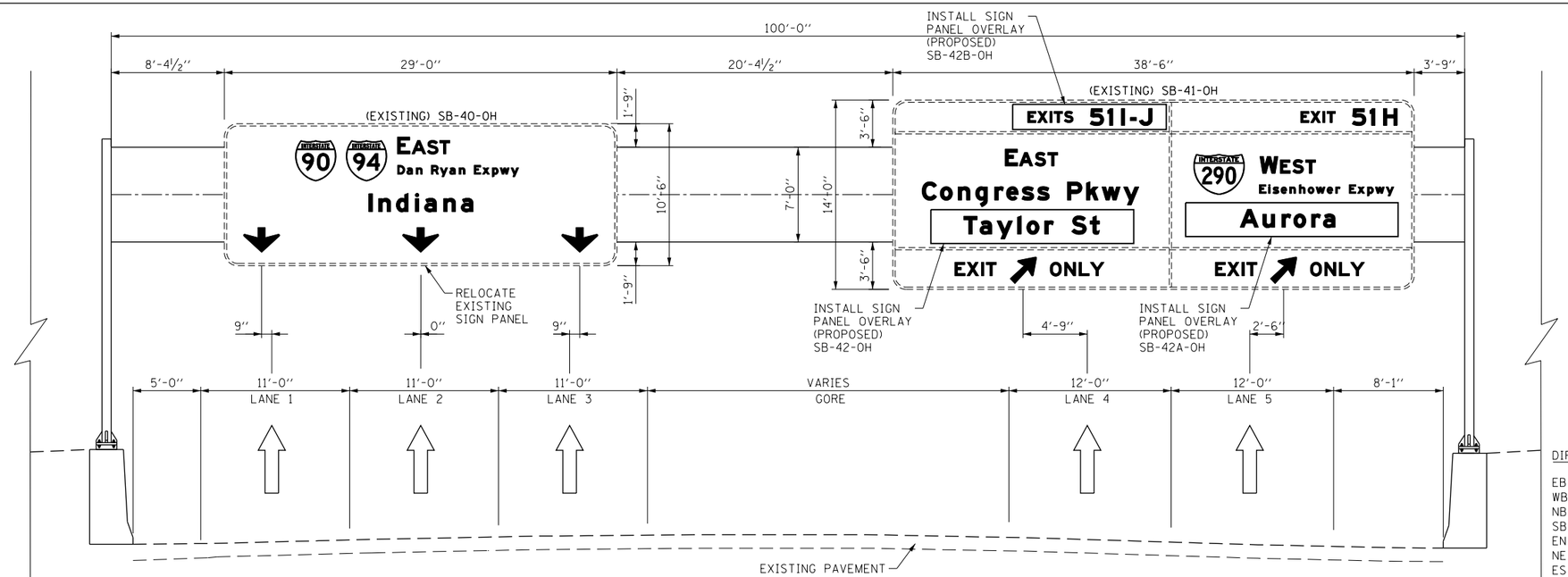
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	507
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



EXISTING TRUSS MOUNT (SB I–90/94)
STA 24+74.66

NOTES:

1. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.



PROPOSED TRUSS MOUNT (SB I–90/94)
STA 24+74.66

SIGN NUMBERING CODE EXAMPLE

DP-01-LP

DIRECTION OF TRAFFIC

EB - EB I-290 & CONGRESS PKWY
WB - WB I-290 & CONGRESS PKWY
NB - NB I-90/94
SB - SB I-90/94
EN - EAST TO NORTH RAMP
NE - NORTH TO EAST RAMP
ES - EAST TO SOUTH RAMP
SE - SOUTH TO EAST RAMP
WS - WEST TO SOUTH RAMP
TAY - TAYLOR EXIT RAMP

SIGN PANEL NUMBER

MOUNTING TYPE

ST - STEEL POST
TS - TELESCOPING STEEL
LP - LIGHT POLE BANDING
SP - SIGNAL POLE BANDING
SA - SIGNAL POLE MAST ARM
BM - BRIDGE MOUNTED
BS - BREAKAWAY STEEL
WP - WOOD POST
OH - OVERHEAD
TM - TRUSS SUPPORT MOUNTED
FM - FENCE MOUNTED
MP - METAL POST
BW - BARRIER WALL MOUNTED

FILE PATH = pw:\\617479-PWNT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase I\000_CAD\006_Roadway\Sheets\60X93 Contract\D160X93-SHT-Sign-OH-10.dgn

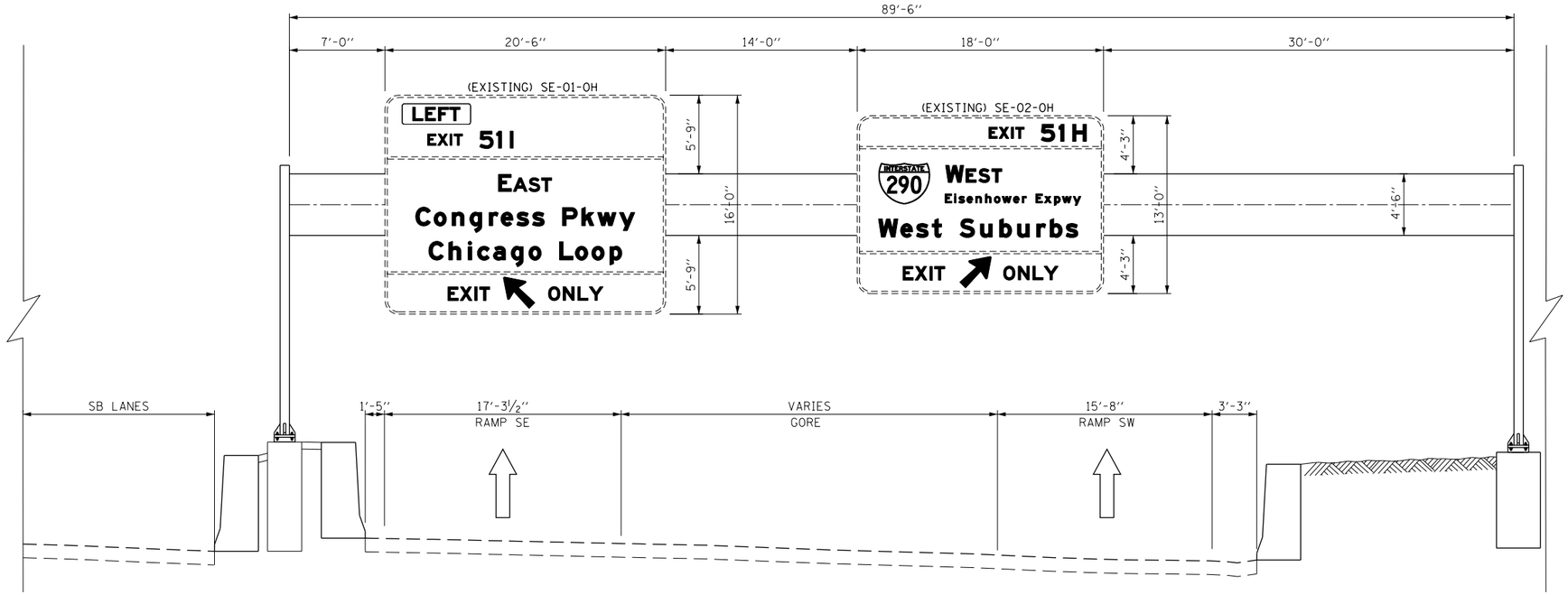
TranSystems	D160X93-SHT-Sign-OH-10.dgn	DESIGNED - VLJ	REVISED -
	USER NAME = msbillot	DRAWN - VLJ	REVISED -
	PLOT SCALE = 10.0000 ' / in.	CHECKED - JMG	REVISED -
	PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

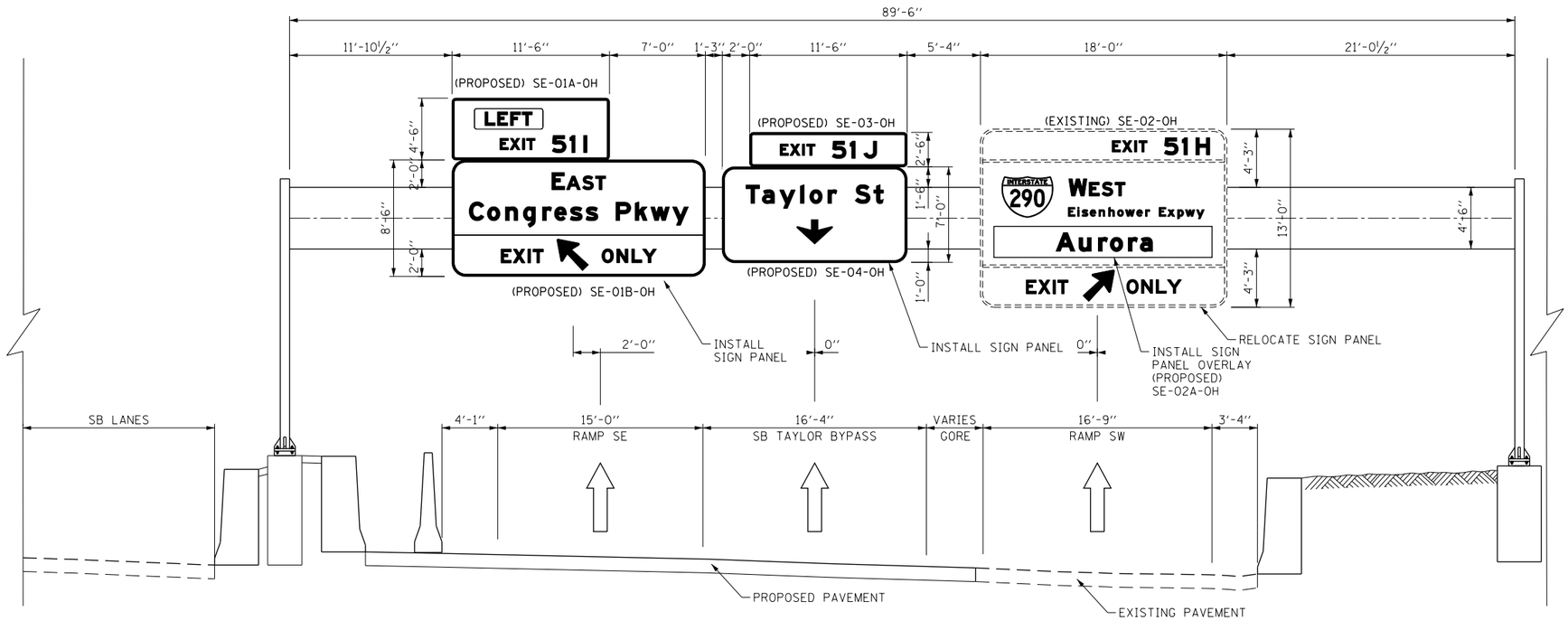
OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' | SHEET 10 OF 12 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	508
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



EXISTING TRUSS MOUNT (SB I–90/94)
STA 2399 + 41.76



PROPOSED TRUSS MOUNT (SB I–90/94)
STA 2399 + 41.76

NOTES:

1. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.

SIGN NUMBERING CODE EXAMPLE

DP-01-LP

DIRECTION OF TRAFFIC

EB - EB I-290 & CONGRESS PKWY
WB - WB I-290 & CONGRESS PKWY
NB - NB I-90/94
SB - SB I-90/94
EN - EAST TO NORTH RAMP
NE - NORTH TO EAST RAMP
ES - EAST TO SOUTH RAMP
SE - SOUTH TO EAST RAMP
WS - WEST TO SOUTH RAMP
TAY - TAYLOR EXIT RAMP

SIGN PANEL NUMBER

MOUNTING TYPE

ST - STEEL POST
TS - TELESCOPING STEEL
LP - LIGHT POLE BANDING
SP - SIGNAL POLE BANDING
SA - SIGNAL POLE MAST ARM
BM - BRIDGE MOUNTED
BS - BREAKAWAY STEEL
WP - WOOD POST
OH - OVERHEAD
TM - TRUSS SUPPORT MOUNTED
FM - FENCE MOUNTED
MP - METAL POST
BW - BARRIER WALL MOUNTED

FILE PATH = pw:\\617479-PWINT.aecomonline.local\AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000_CAD\006_Roadway\Sheets\I60X93 Contract\D160X93-SHT-Sign-OH-11.dgn

D160X93-SHT-Sign-OH-11.dgn	DESIGNED - VLJ	REVISED -	
USER NAME = msbilliot	DRAWN - VLJ	REVISED -	
PLOT SCALE = 10.0000 ' / in.	CHECKED - JMG	REVISED -	
PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -	

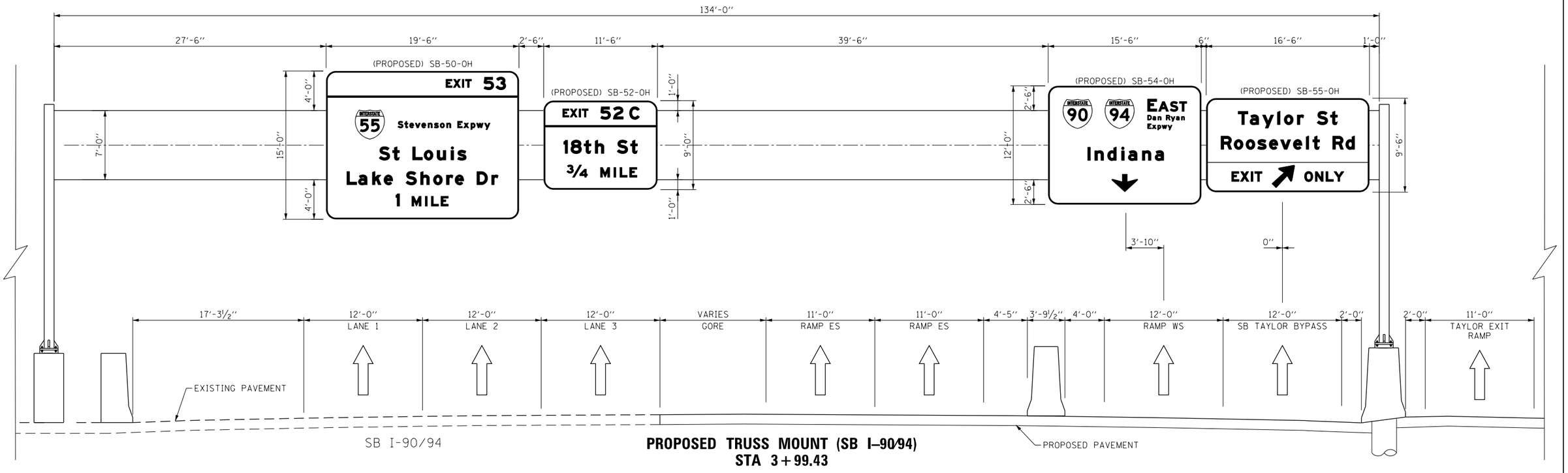
TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' | SHEET 11 OF 12 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	509
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. SEE SHEET NO. 479 TO 498 FOR OVERHEAD SIGN PANEL DETAILS.

SIGN NUMBERING CODE EXAMPLE

DP-01-LP

DIRECTION OF TRAFFIC

- EB - EB I-290 & CONGRESS PKWY
- WB - WB I-290 & CONGRESS PKWY
- NB - NB I-90/94
- SB - SB I-90/94
- EN - EAST TO NORTH RAMP
- NE - NORTH TO EAST RAMP
- ES - EAST TO SOUTH RAMP
- SE - SOUTH TO EAST RAMP
- WS - WEST TO SOUTH RAMP
- TAY - TAYLOR EXIT RAMP

SIGN PANEL NUMBER

MOUNTING TYPE

- ST - STEEL POST
- TS - TELESCOPING STEEL
- LP - LIGHT POLE BANDING
- SP - SIGNAL POLE BANDING
- SA - SIGNAL POLE MAST ARM
- BM - BRIDGE MOUNTED
- BS - BREAKAWAY STEEL
- WP - WOOD POST
- OH - OVERHEAD
- TM - TRUSS SUPPORT MOUNTED
- FM - FENCE MOUNTED
- MP - METAL POST
- BW - BARRIER WALL MOUNTED

FILE PATH = pw:\\617479-PWNT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase I\000_CAD\006-Roadway\Sheets\60X93 Contract\D160X93-SHT-Sign-OH-12.dgn

TranSystems

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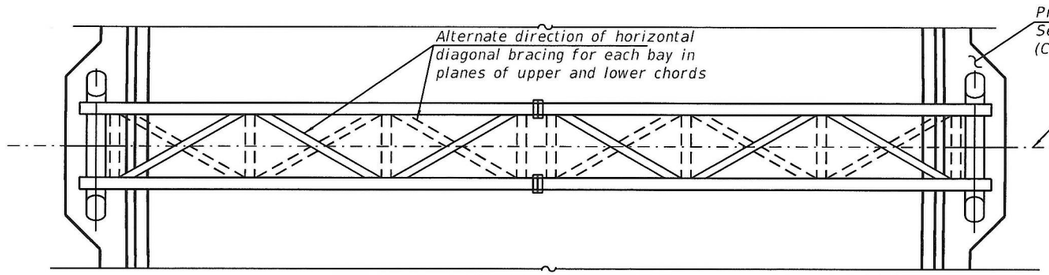
USER NAME = msbilliot	DRAWN - VLJ	REVISED -	
PLOT SCALE = 10.0000 '/ in.	CHECKED - JMG	REVISED -	
PLOT DATE = 7/30/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

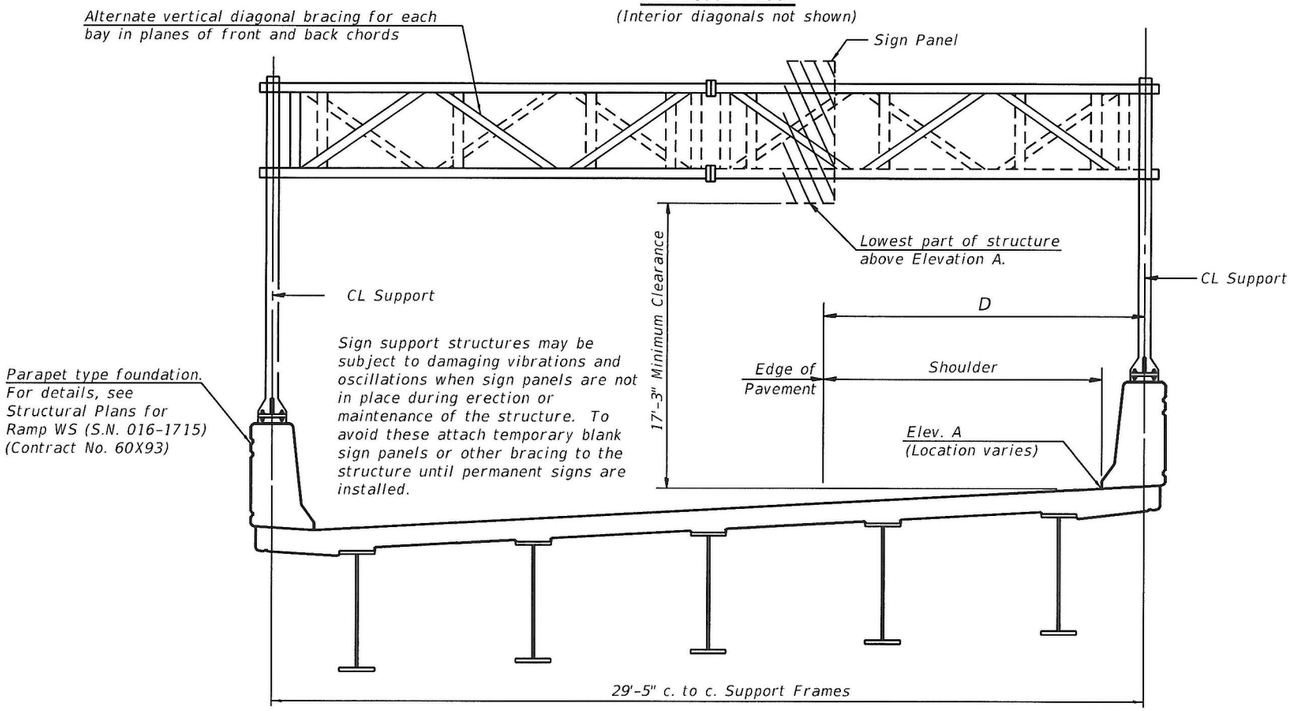
OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' | SHEET 12 OF 12 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	510
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

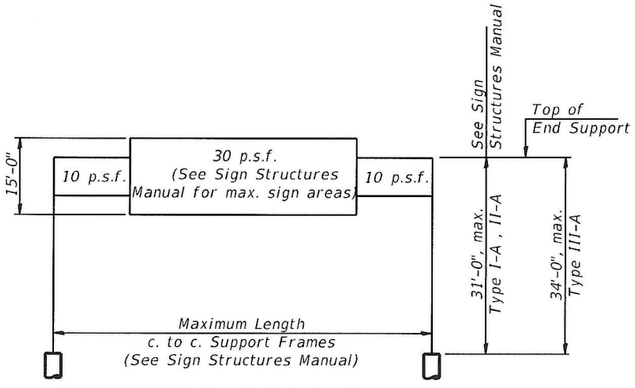


TYPICAL PLAN
(Interior diagonals not shown)



TYPICAL ELEVATION
(Looking at Face of Signs**)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
1S016I094R051.8	Sta. 1217+17.95	I-A	29'-5"	612.97	5'-8½"	8'-6"	136

**Looking upstation for structures with signs both sides.

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'c = 4,000 p.s.i. (Superstructure Concrete)
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer. The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

WALKWAY: Walkway grating, walkway brackets, handrails, lighting and associated components shown in these plans on the traffic side of the sign structure/sign panel will not be installed with Contract 60X93. The truss grating and maintenance walkway behind the sign panel will be included with this pay item.

STATE OF ILLINOIS
MOUSSA A. ISSA
081-005738
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed Moussa A. Issa
Dr. Moussa A. Issa, S.E. Il. Lic. No. 081-005738
Expires 11-30-2018
Date 07/30/18 For Sheets SS-01 thru SS-08

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	30

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\008_Structural\Structure_016-1718\Working\Sign Structures\016I718-60X93-SS101-SignStruct
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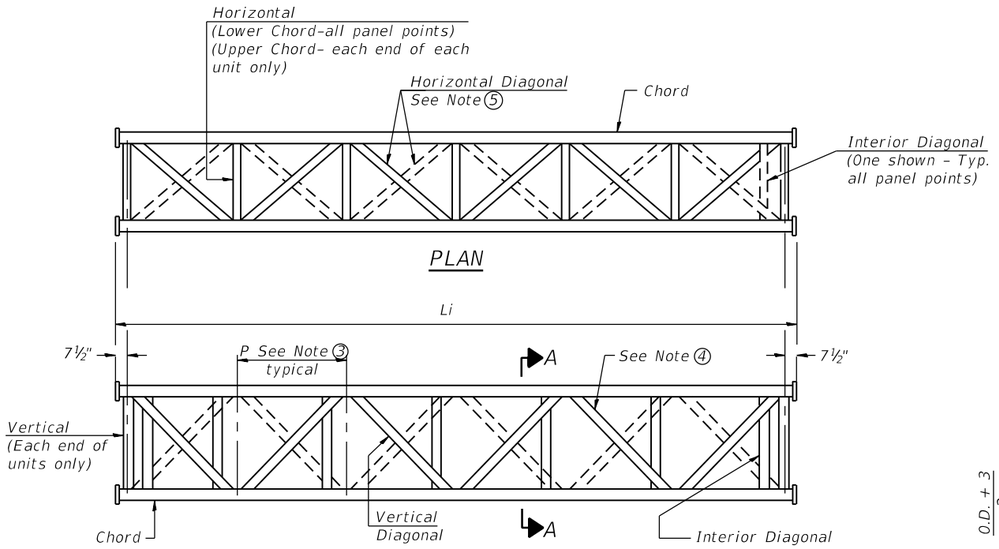
HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	
	CHECKED - MI, MAI	REVISED -	
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -	
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

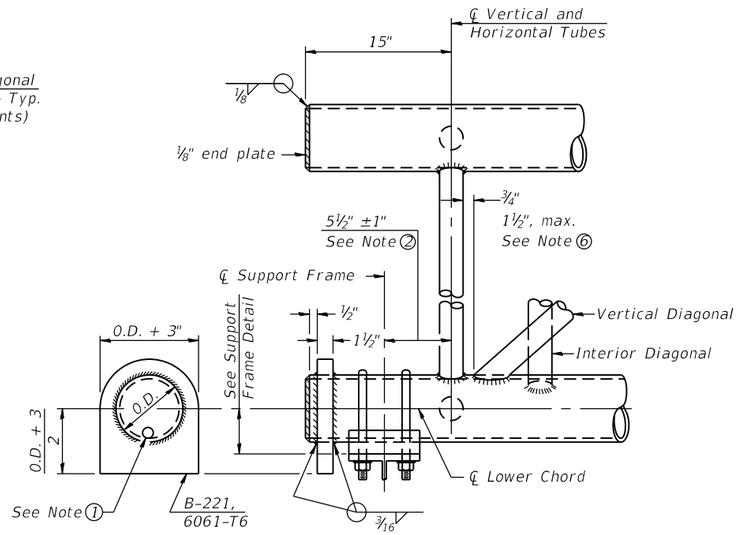
OVERHEAD SIGN STRUCTURES – GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-1715
SHEET NO. SS-01 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	511
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

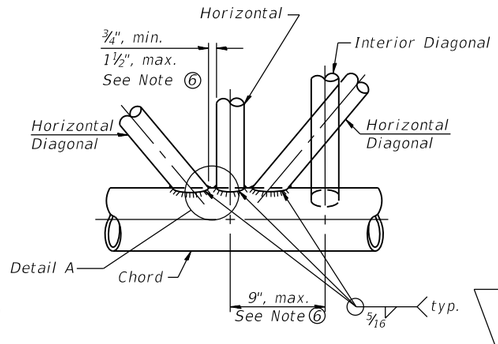


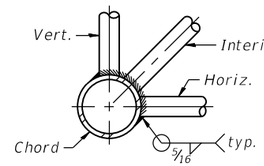
ELEVATION
TYPICAL INTERIOR UNIT

Even number of panels/interior unit required.

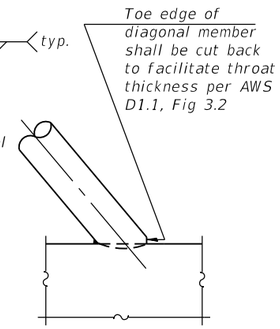


SUPPORT END DETAIL FOR EXTERIOR UNIT

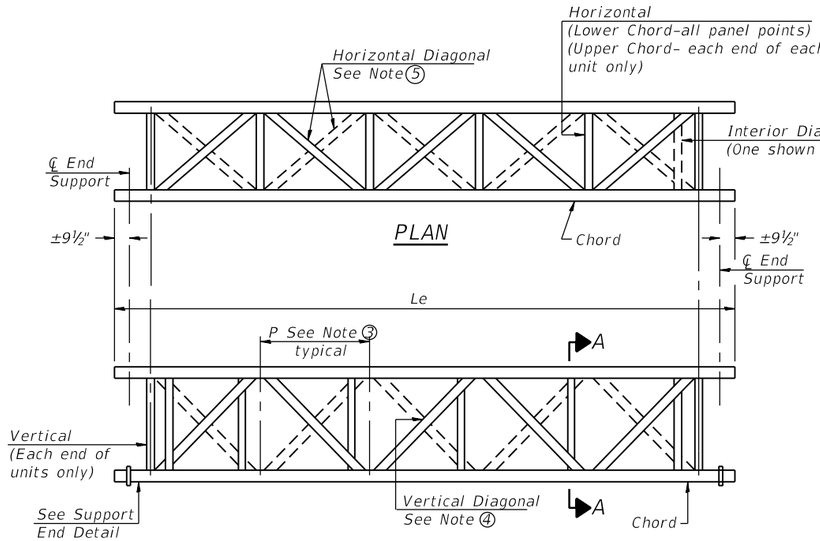




TYPICAL JOINT DETAILS

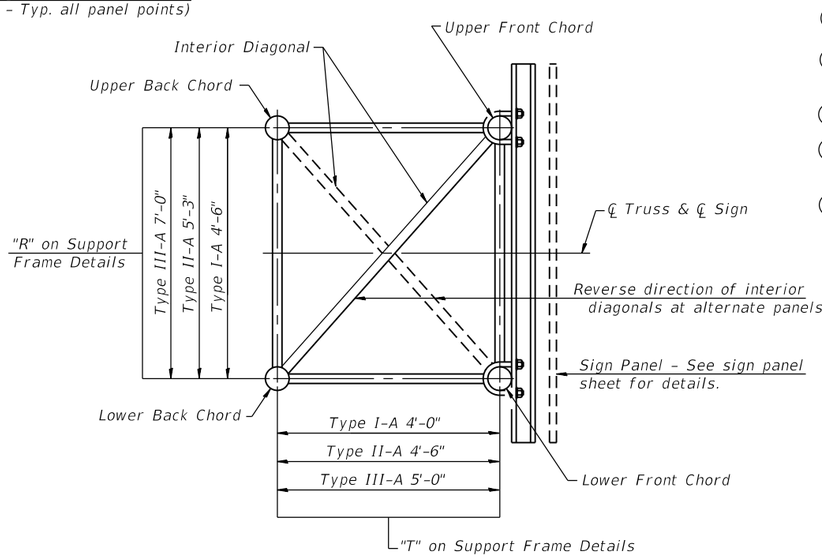


DETAIL A



ELEVATION
TYPICAL EXTERIOR UNIT

Even or odd number of panels/exterior units allowed.



SECTION A-A

1. *Contractor may alternatively use standard aluminum drive-fit cap to close end. ½" Ø drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)*
2. *5½" end dimension may vary by ±1" to provide uniform panel spacing (P).*
3. *Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.*
4. *Vertical Diagonals in front and back face shall alternate.*
5. *Hidden lines show wind bracing alternates direction between planes of top and bottom chords.*
6. *All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a ¾" minimum to 1½" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.*

OS-A-2 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	
	CHECKED - MI, MAI	REVISED -	
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -	
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS I
STRUCTURE NO. 016–1715

SHEET NO. SS-02 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	512
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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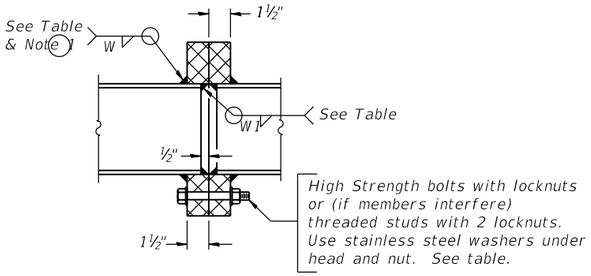
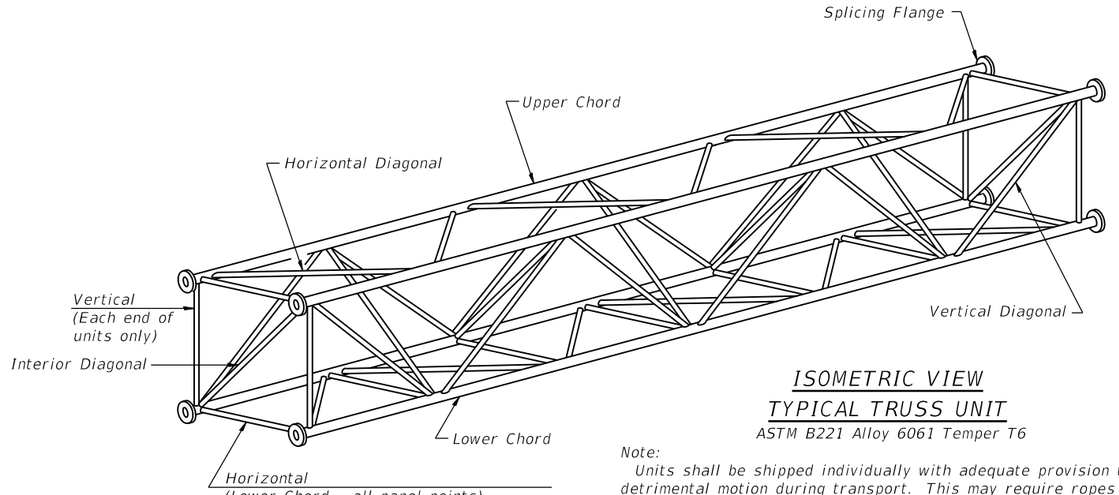
TRUSS UNIT TABLE

Structure Number	Station	Design Truss Type	Exterior Units (1)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical,Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(Le)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(Li)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W1		
1S016I094R051.8	Sta. 1217+17.95	I-A	6	31'-0"	4'-9"	–	–	–	–	5"	¼"	2½"	¼"	⅜"	–	–	–	–	–	–



SECTION B-B

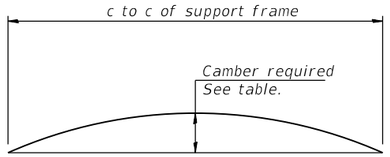
(1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



ISOMETRIC VIEW
TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

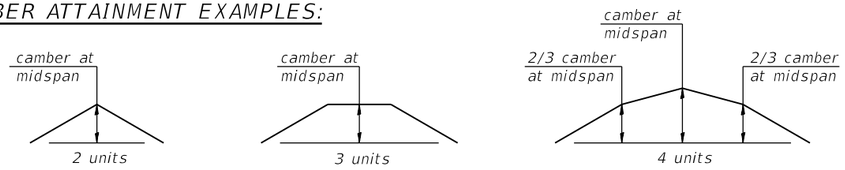
Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



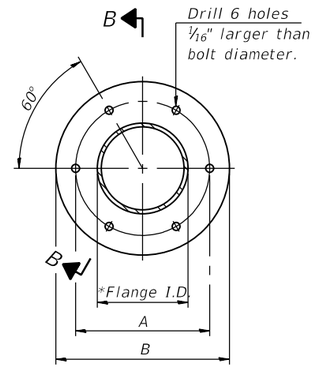
CAMBER DIAGRAM

Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

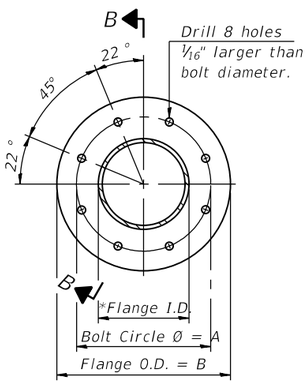
CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

SPLICING FLANGES

ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".

0S4-A-2

2-17-2017

HBM ENGINEERING GROUP, LLC	USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS II STRUCTURE NO. 016–1715
		CHECKED - MI, MAI	REVISED -		
	PLOT SCALE = N.T.S	DRAWN - EK	REVISED -		SHEET NO. SS-03 OF SS-32 SHEETS
	PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	513
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	ILLINOIS	FED. AID PROJECT		

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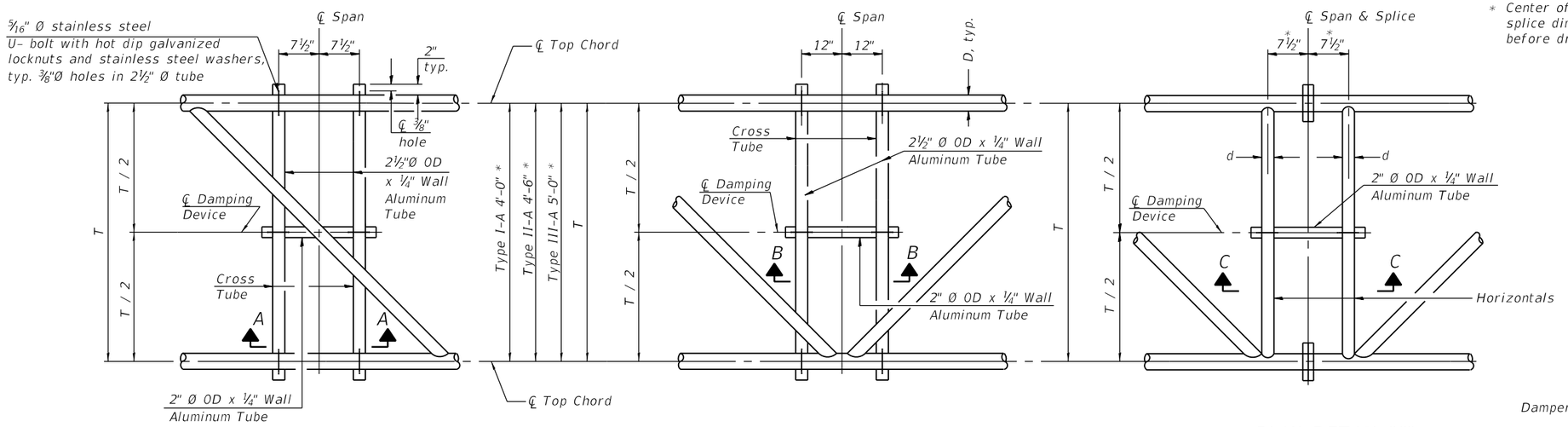


* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

NOTES

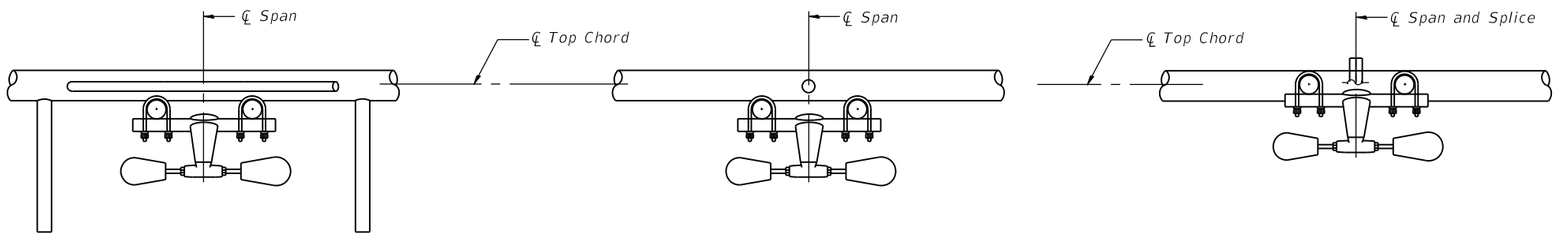
Damper: One damper per truss. (31 lbs. minimum Stockbridge–Type Aluminum – 29" minimum between ends of weights) Cost included in Overhead Sign Structure…

Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure…

PLAN DETAIL "A"
℄ Span between Panel Points

PLAN DETAIL "B"
℄ Span at Panel Point

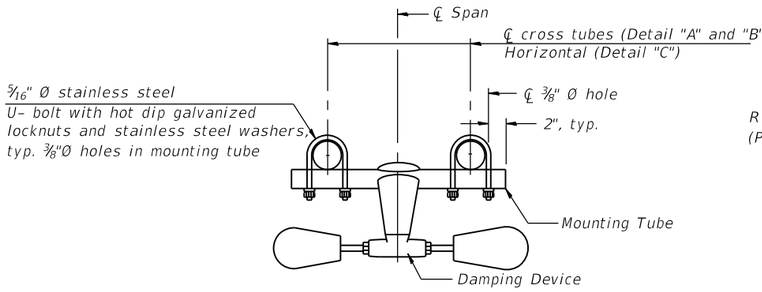
PLAN DETAIL "C"
℄ Span at ℄ Chord Splice



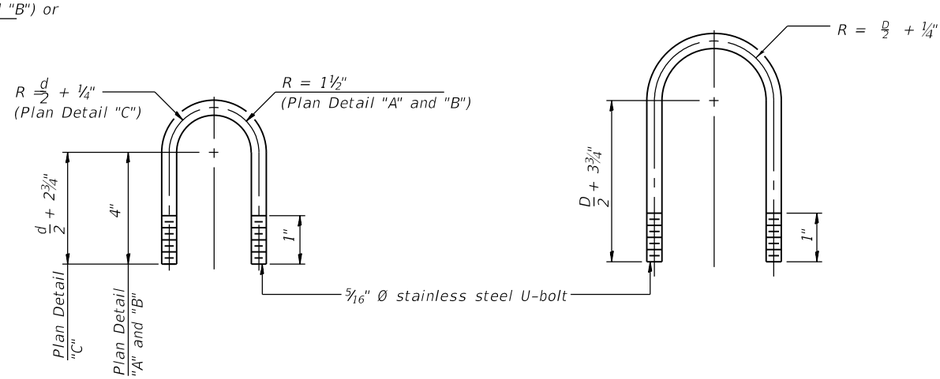
SECTION A-A

SECTION B-B

SECTION C-C

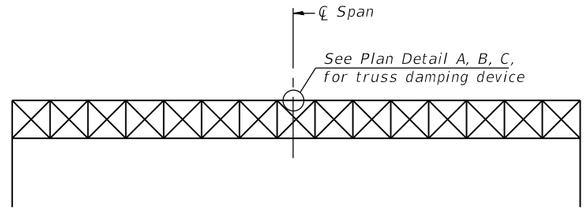


TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)

TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical – Detail "A" and "B")



ELEVATION
Aluminum Overhead Sign Truss

0S-A-D

2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa		DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURE DAMPING DEVICE STRUCTURE NO. 016–1715
		CHECKED - MI, MAI	REVISED -		
PLOT SCALE = N.T.S		DRAWN - EK	REVISED -		
PLOT DATE = 7/30/2018		CHECKED - MI, MAI	REVISED -		SHEET NO. SS-04 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	514
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_D502_NA\Documents\01 Americas\Transportation\60269938 CirclePhase_1\1000_CAD\008_StructuralStructure_016-1718WorkingSign Structures\016 1718-60X93-SS1104-SignStruct

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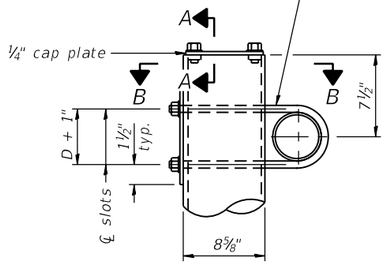
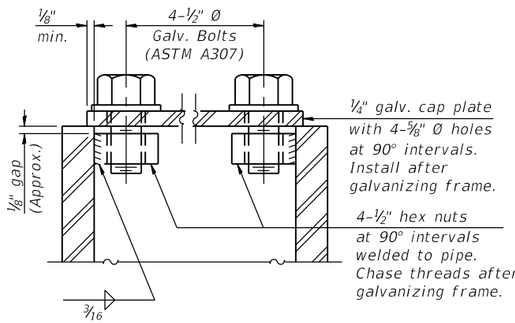
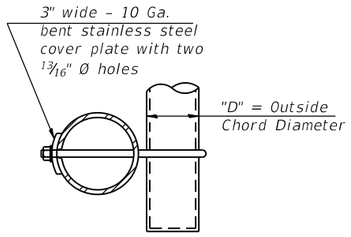


DETAIL A

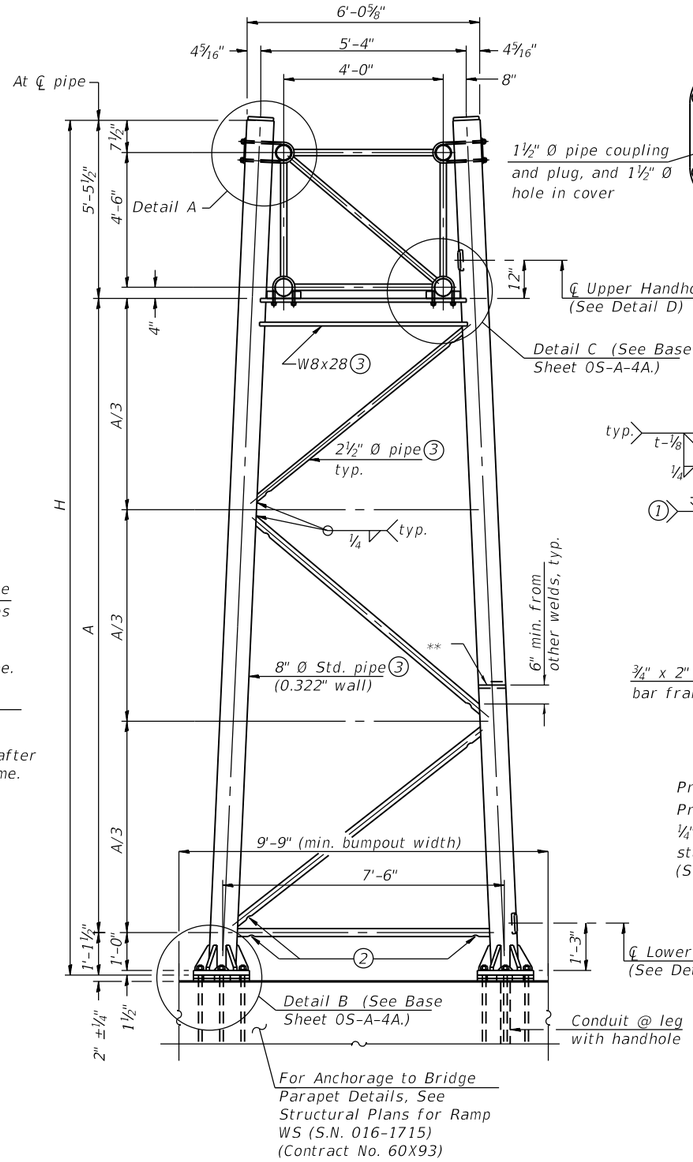


SECTION A-A

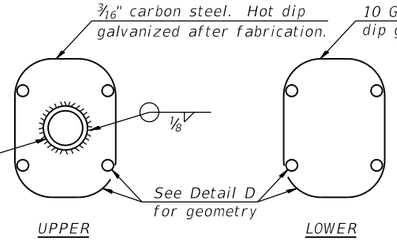
As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



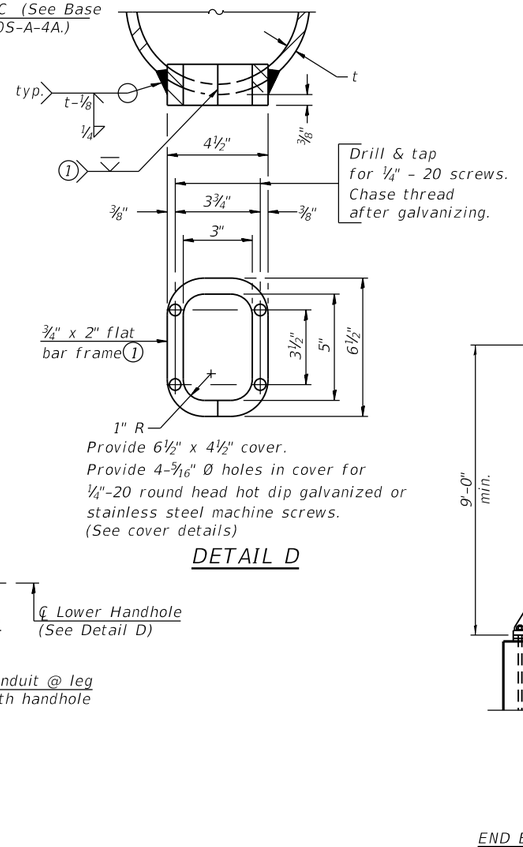
SECTION B-B



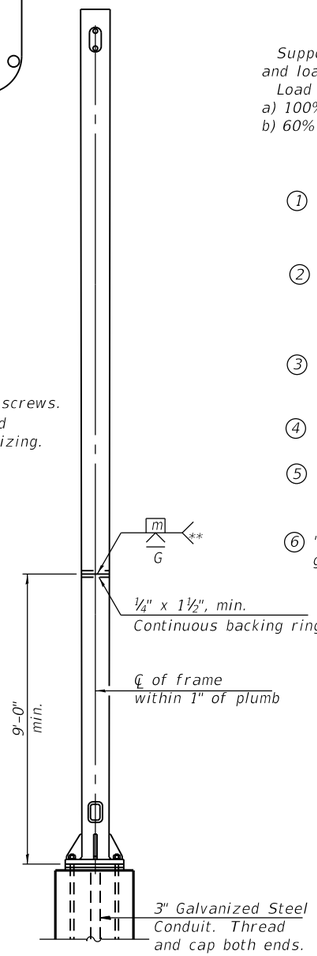
SIDE ELEVATION



HANDHOLE COVERS



DETAIL D



END ELEVATION

Support Design Loads: See Base Sheet 0S-A-1 for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

1. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500μ in or less.
2. Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.
3. Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet 0S-A-1.
4. See General Notes for fasteners.
5. Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
6. "H" based on 15'-0" or actual sign height, whichever is greater.

8" Ø PIPE TRUSS SUPPORT FRAME

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	Support Left	Support Right	H (6)	A
1S016I094R051.8	1217+17.95	X		26'-6⅛"	19'-11⅛"
1S016I094R051.8	1217+17.95		X	25'-2½"	18'-7½"

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -			
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -			
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES SUPPORT FRAME
STRUCTURE NO. 016-1715
SHEET NO. SS-05 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	515
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE NAME: pw:\\6117479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 CircletPhase_II\000_CAD\008_StructuralStructure_016-1718\Working\Sign Structures\016171 8-60X93-SS105-SignStruct
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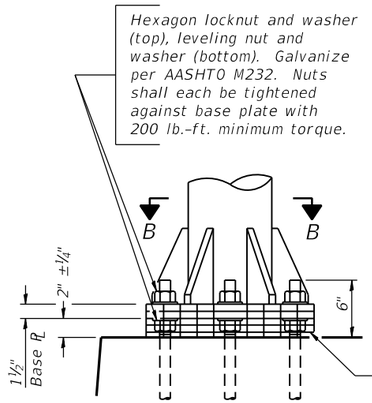
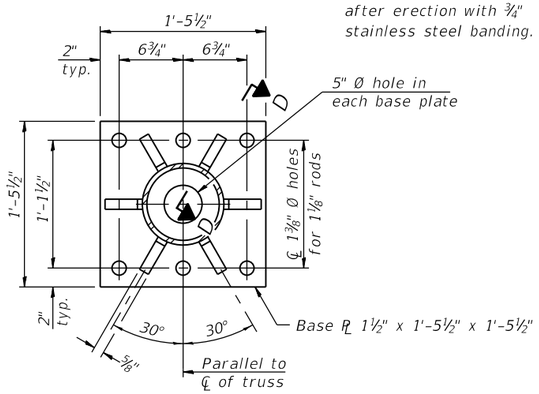


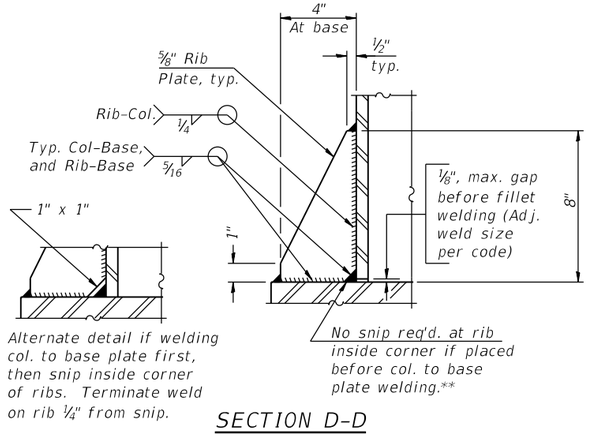
Stainless Steel Standard Grade Wire Cloth, 3" wide, ¼" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with ¾" stainless steel banding.

DETAIL B

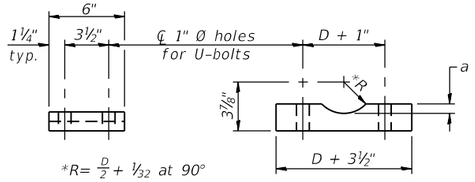
Ribs shall be cut to fit slope of pipe.



SECTION B-B



SECTION D-D



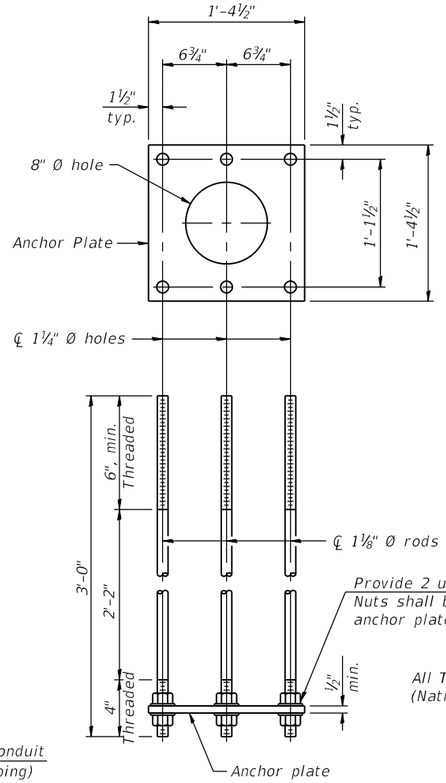
*R= $\frac{D}{2}$ + 1/32 at 90°

D = Outside Diameter of Chord.

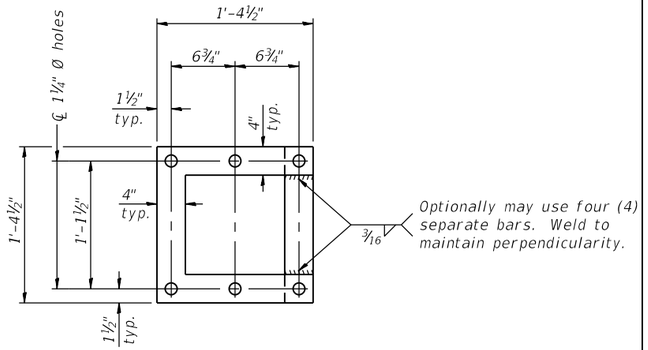
SADDLE SHIM DETAIL

ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)

Truss Chord Nominal Dia.	a
5"	¾"
5½"	13/16"
6"	⅞"
6½"	15/16"



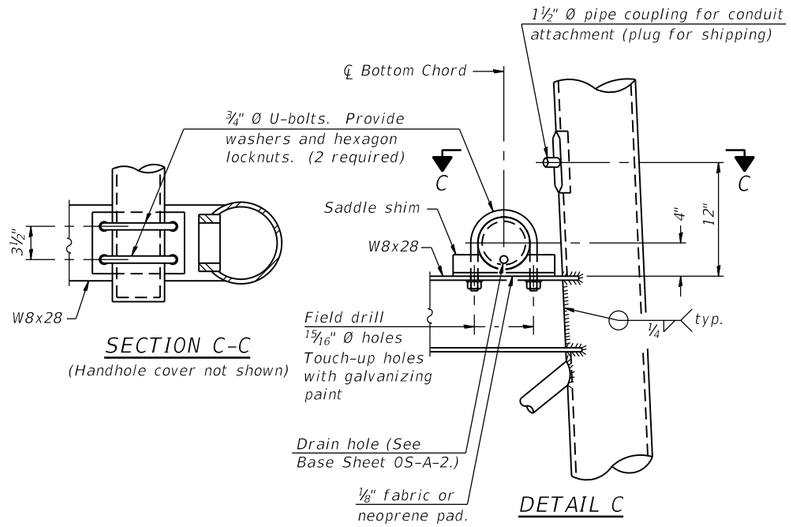
ANCHOR ROD DETAIL



POSITIONING PLATE(S)

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.

TYPE I-A TRUSS
8" Ø PIPE SUPPORT FRAME DETAILS



SECTION C-C

(Handhole cover not shown)

DETAIL C

0S-A-4A 2-17-2017

HBM ENGINEERING GROUP, LLC	USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES SUPPORT FRAME DETAILS STRUCTURE NO. 016-1715
		CHECKED - MI, MAI	REVISED -		
	PLOT SCALE = N.T.S	DRAWN - EK	REVISED -		SHEET NO. SS-06 OF SS-32 SHEETS
	PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	516
		CONTRACT NO. 60X93		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: pw:\617479-PWINT.aecomonline.local:AECOM_D502_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\008_Structural\Structure_016-1718\Working\Sign Structures\016178-60X93-SS106-SignStruct
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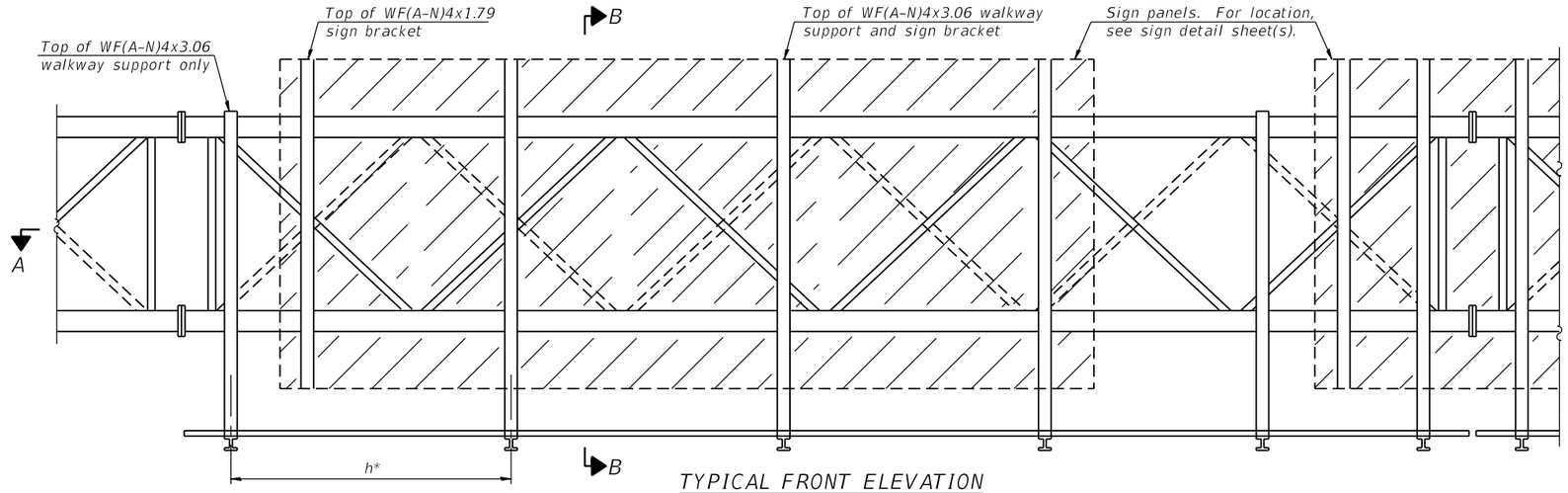
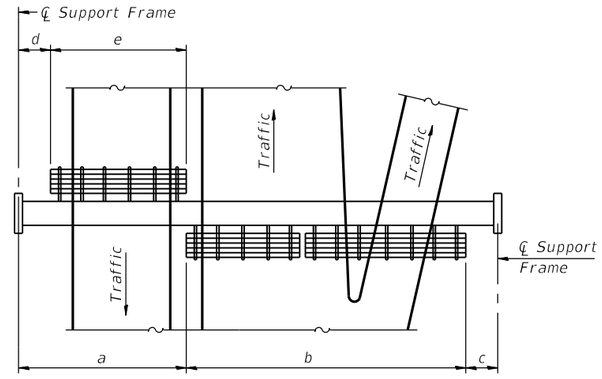


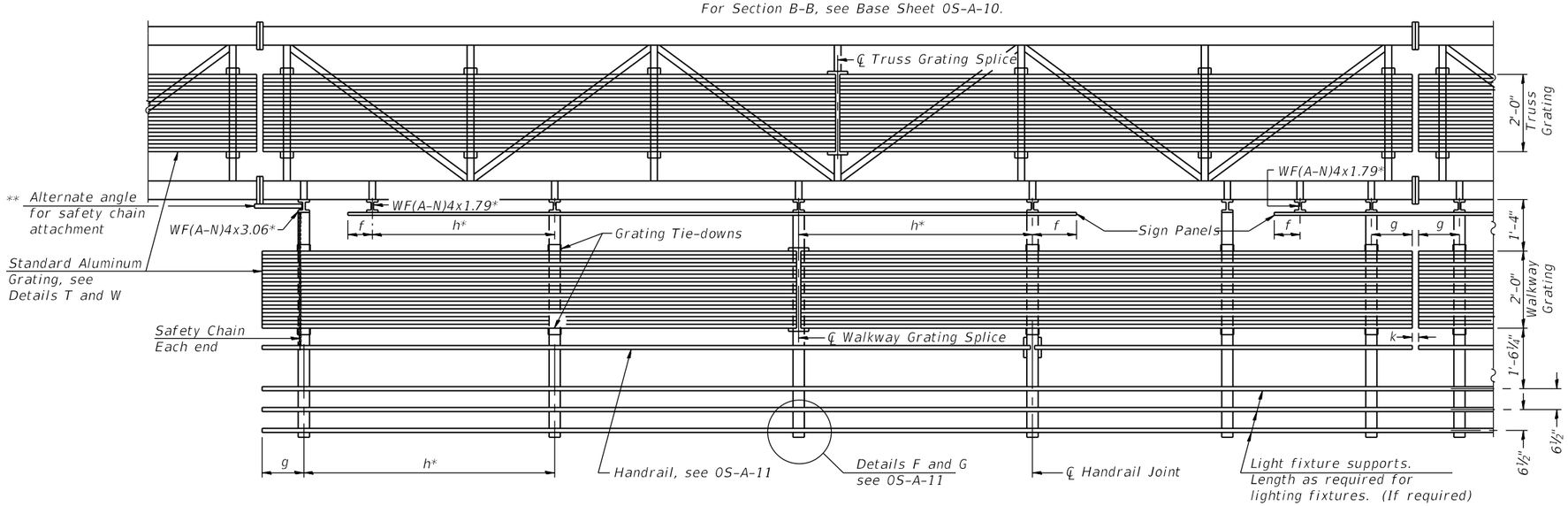
TYPICAL FRONT ELEVATION

With lights and handrail omitted for clarity.
For Section B-B, see Base Sheet 0S-A-10.



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Handrail joints, grating, and light support splices placed as needed.

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Notes:

* *Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:*

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ℄ of nearest support bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)
k = 2" maximum gap between adjacent walkway grating sections and handrail ends

** *If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet 0S-A-11.*

For Details T and W, Section B-B and Grating Splice Details see Base Sheet 0S-A-10.
For Handrail Details see Base Sheet 0S-A-11.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
1S016l094R051.8	Sta. 1217+17.95	-	-	-	-	-	-

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".

Walkway and Truss Grating width dimensions are nominal and may vary ±½" based on available standard widths.

0S-A-9 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES ALUMINUM WALKWAY DETAILS I STRUCTURE NO. 016-1715	
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -			
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		SHEET NO. SS-07 OF SS-32 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	517
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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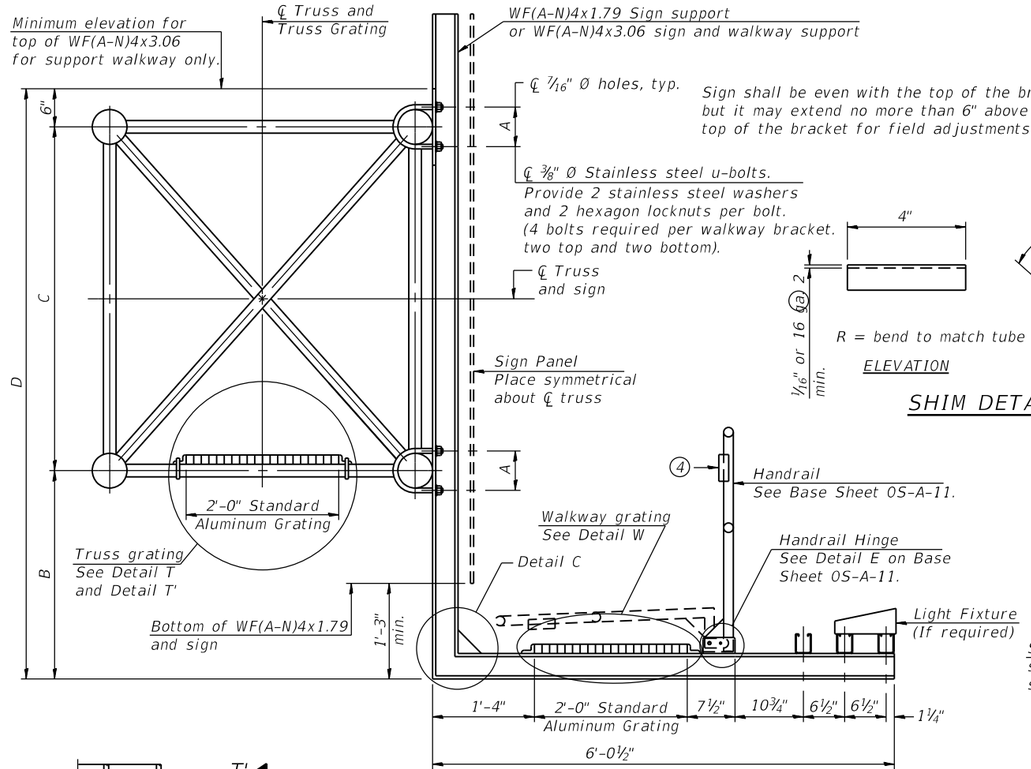
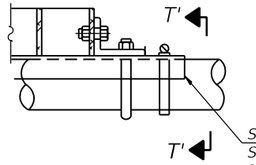


SECTION B-B

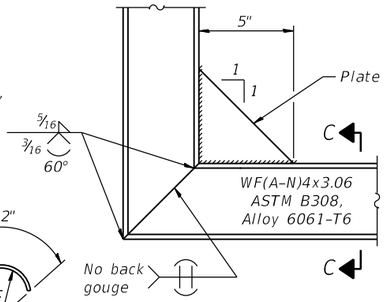


DETAIL T'

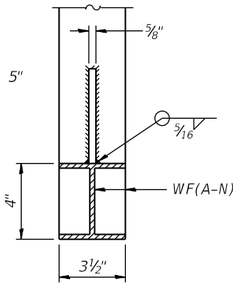
(Truss grating splice)

Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.

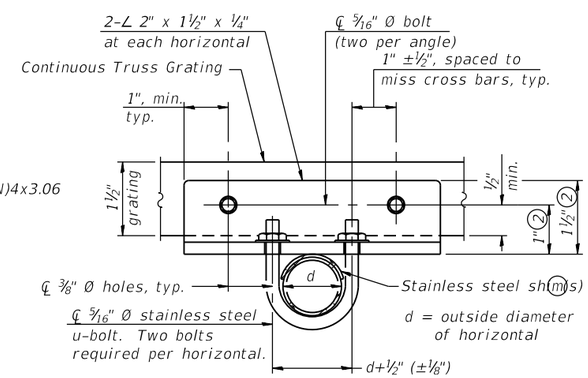
SHIM DETAIL



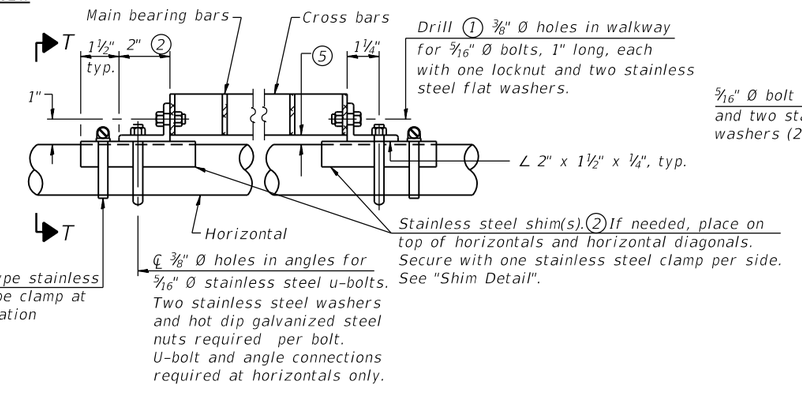
DETAIL C



SECTION C-C

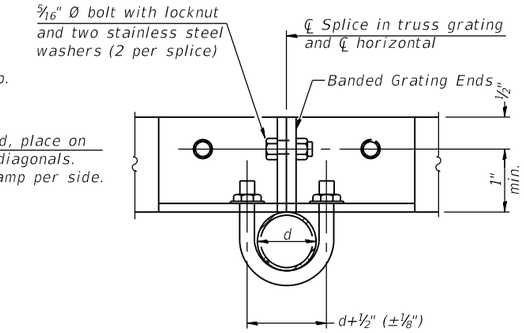


SECTION T-T

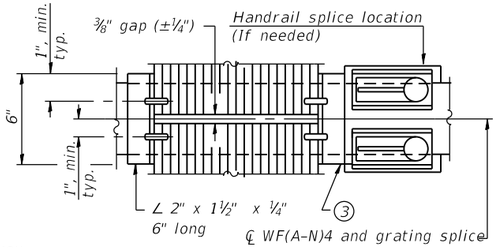


DETAIL T

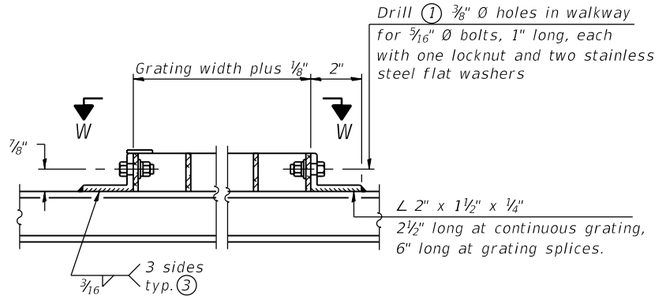
(Continuous Truss grating)



SECTION T'-T'

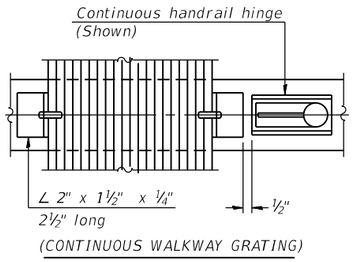


(AT WALKWAY GRATING SPLICE)



DETAIL W

(Walkway grating)



(CONTINUOUS WALKWAY GRATING)

SECTION W-W

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1½" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.

Cross bars shall be 3/16" x 1½" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1½", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	⑥ B	C	⑥ D
1S016I094R051.8	Sta. 1217+17.95	6"	5'-0"	4'-6"	10'-0"

① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

② Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.

③ If Handrail Joint present, weld angle to WF(A-N)4 and ¼" extension bars. (See Base Sheet 0S-A-11.)

④ PL ⅛" x ½" x 2" welded to handrail posts to protect locations that contact grating.

⑤ Tube to grating gap may vary from 0 to ½", max. to align walkway, allow for camber, etc.

⑥ Based on actual height of tallest sign given on 0S-A-1.

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa		DESIGNED - JJS, MA	REVISED -		
		CHECKED - MI, MAI	REVISED -		
PLOT SCALE = N.T.S		DRAWN - EK	REVISED -		
PLOT DATE = 7/30/2018		CHECKED - MI, MAI	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES ALUMINUM WALKWAY DETAILS II
STRUCTURE NO. 016-1715
SHEET NO. SS-08 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	518
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 CircleIPhase_II\000_CAD\008_StructuralStructure_016-1718\Working\Sign Structures\016178-60X93-SS108-SignStruct
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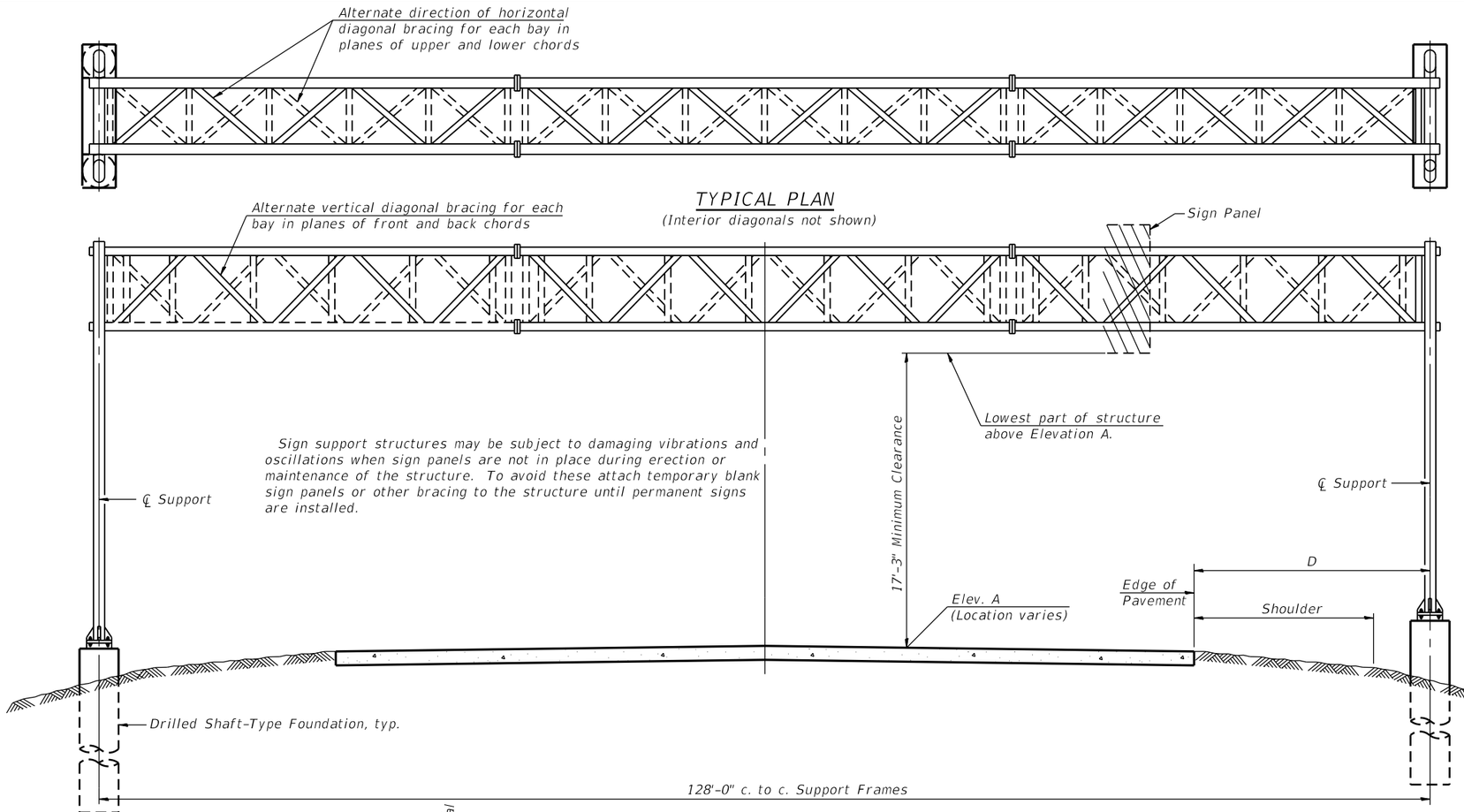
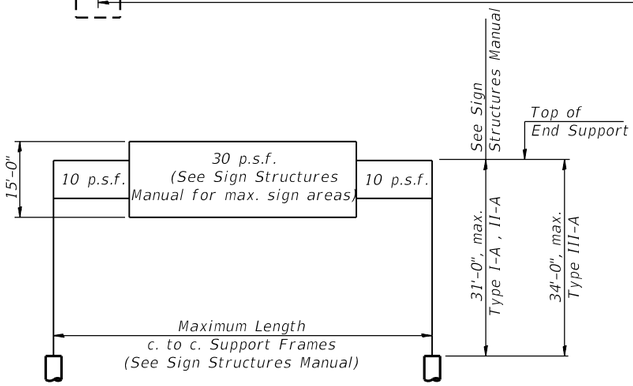


TYPICAL PLAN
(Interior diagonals not shown)



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

TYPICAL ELEVATION
(Looking at Face of Signs**)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
1S016I094R051.3	Sta. 39+09.00(SB)	III-A	128'-0"	579.62	23'-4½"	18'-0"	1036.25

WALKWAY: Walkway grating, walkway brackets, handrails, lighting and associated components shown in these plans on the traffic side of the sign structure/sign panel will not be installed with Contract 60X93. The truss grating and maintenance walkway behind the sign panel will be included with this pay item.

***Looking upstation for structures with signs both sides.*

** If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.*

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer. The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.*

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

STATE OF ILLINOIS
MOUSSA A. ISSA
081-005738
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed _____
Dr. Moussa A. Issa, S.E. Il. Lic. No. 081-005738
Expires 11-30-2018

Date _____

For Sheets SS-09 thru SS-17

TOTAL BILL OF MATERIAL

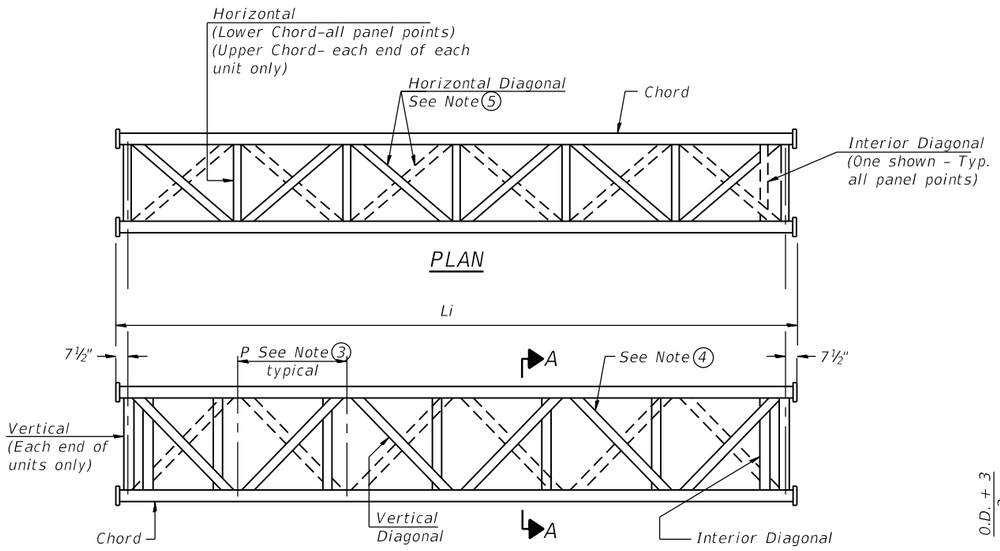
ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	128
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	7.3

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES - GENERAL PLAN & ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS	
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -		SHEET NO. SS-09 OF SS-32 SHEETS	
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -			

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	519
		CONTRACT NO. 60X93		
		ILLINOIS	FED. AID PROJECT	

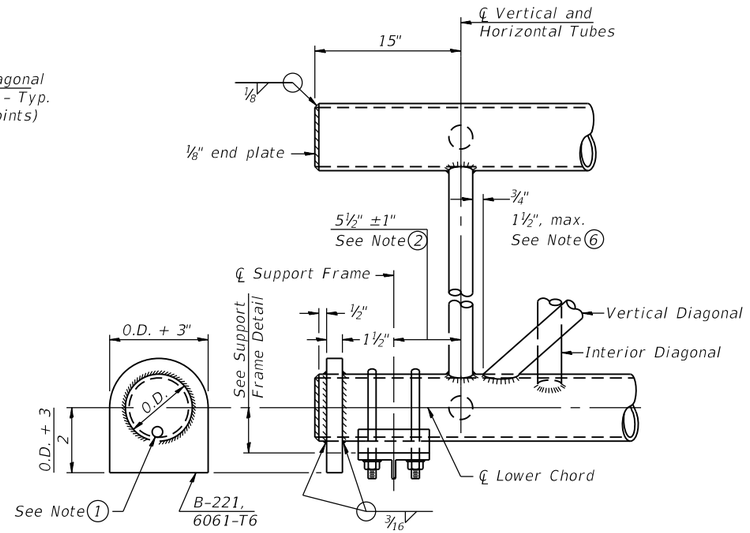
FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_D502_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\008_StructuralStructure_016-1718\Working\Sign Structures\016178-60X93-SS301-SignStruct
8:57:39 AM



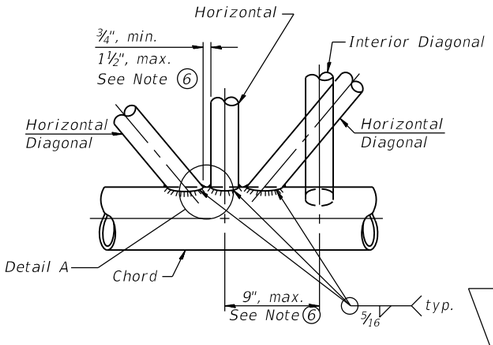
ELEVATION

TYPICAL INTERIOR UNIT

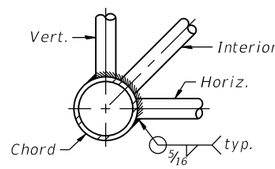
Even number of panels/interior unit required.

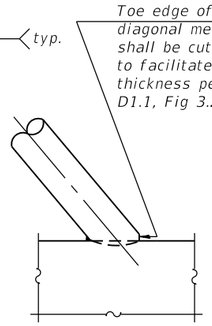


SUPPORT END DETAIL FOR EXTERIOR UNIT

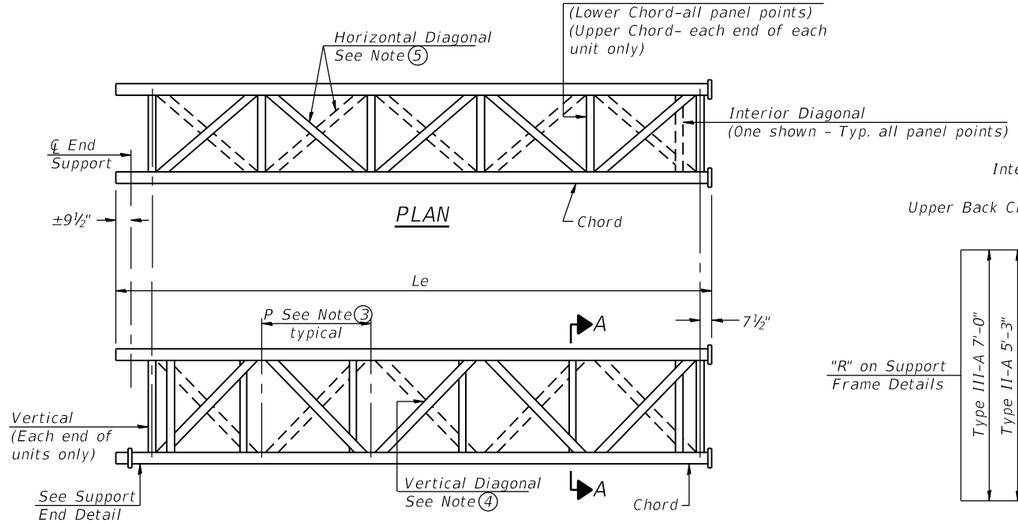


TYPICAL JOINT DETAILS





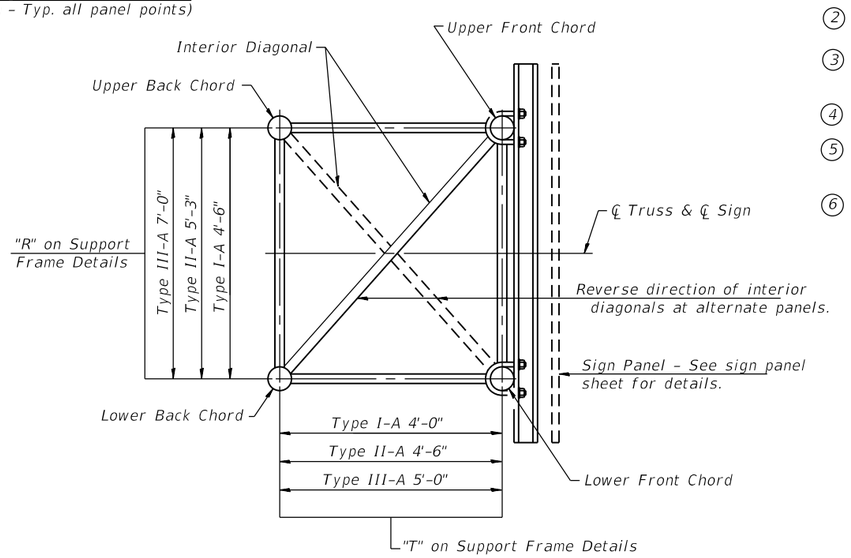
DETAIL A



ELEVATION

TYPICAL EXTERIOR UNIT

Even or odd number of panels/exterior units allowed.



SECTION A-A

1. Contractor may alternatively use standard aluminum drive-fit cap to close end. ½" Ø drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
2. 5½" end dimension may vary by ±1" to provide uniform panel spacing (P).
3. Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
4. Vertical Diagonals in front and back face shall alternate.
5. Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
6. All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a ¾" minimum to 1½" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

0S-A-2 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I–A, II–A AND III–A
	CHECKED - MI, MAI	REVISED -		
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -		
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		SHEET NO. SS-10 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	520
		CONTRACT NO. 60X93		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: pw:\6117479-PWINT.aecomonline.local:AECOM_D502_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\008_Structural\Structural Structure_016-1718\Working\Sign Structures\016 1718-60X93-55302-SignStruct

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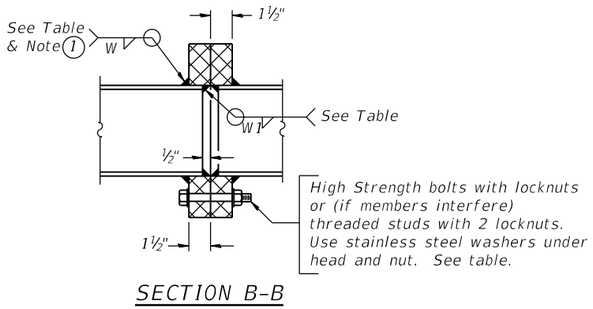
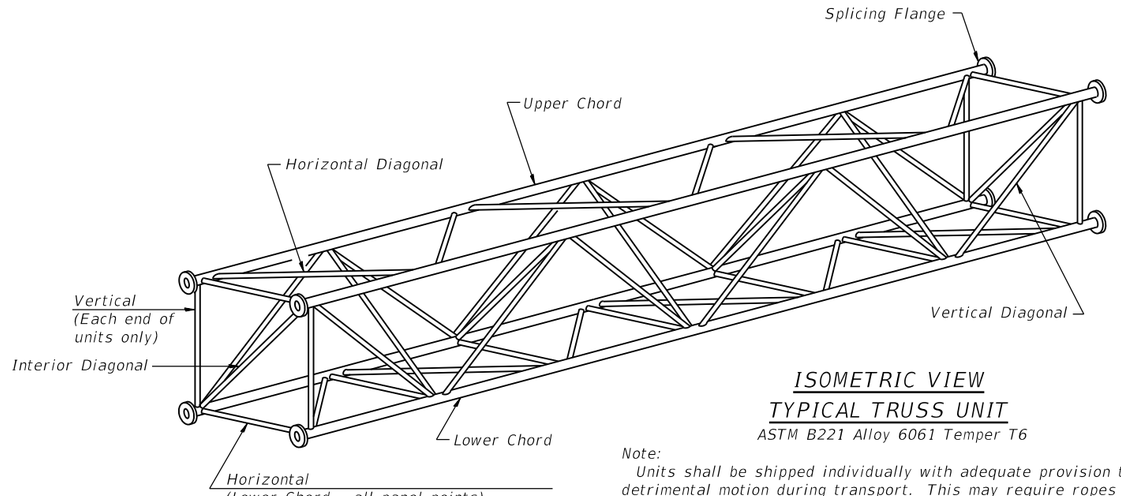
TRUSS UNIT TABLE

Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical,Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(Le)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(Li)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W1		
1S016I094R051.3	Sta. 39+09.00 (SB)	III-A	6	32'-9"	5'-1¼"	2	6	32'-1½"	5'-1¾"	8½"	½"	3½"	5/16"	3⅝"	8	1¼"	9/16"	7/16"	13"	16½"



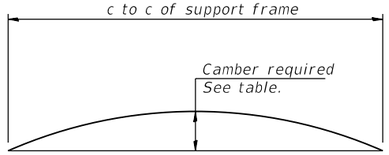
SECTION B-B

(1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



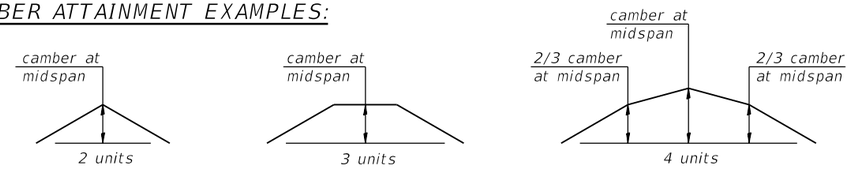
ISOMETRIC VIEW
TYPICAL TRUSS UNIT
ASTM B221 Alloy 6061 Temper T6

Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.

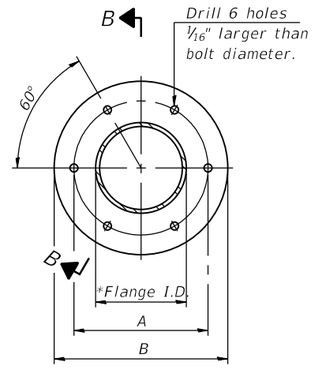


CAMBER DIAGRAM
Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

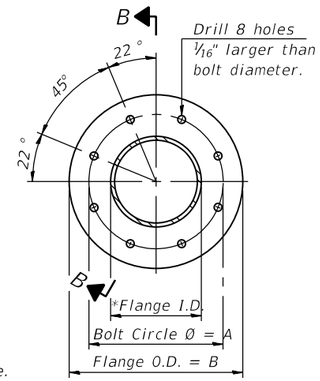
CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

SPLICING FLANGES
ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".

OS4-A-2 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A	
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -			
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		SHEET NO. SS-11 OF SS-32 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	521
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE NAME: pw:\\617479-PWINT.aecomonline.local\AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\008_Structural\Structure_016-1718\Working\Sign Structures\016 1718-60X93-SS303-SignStruct
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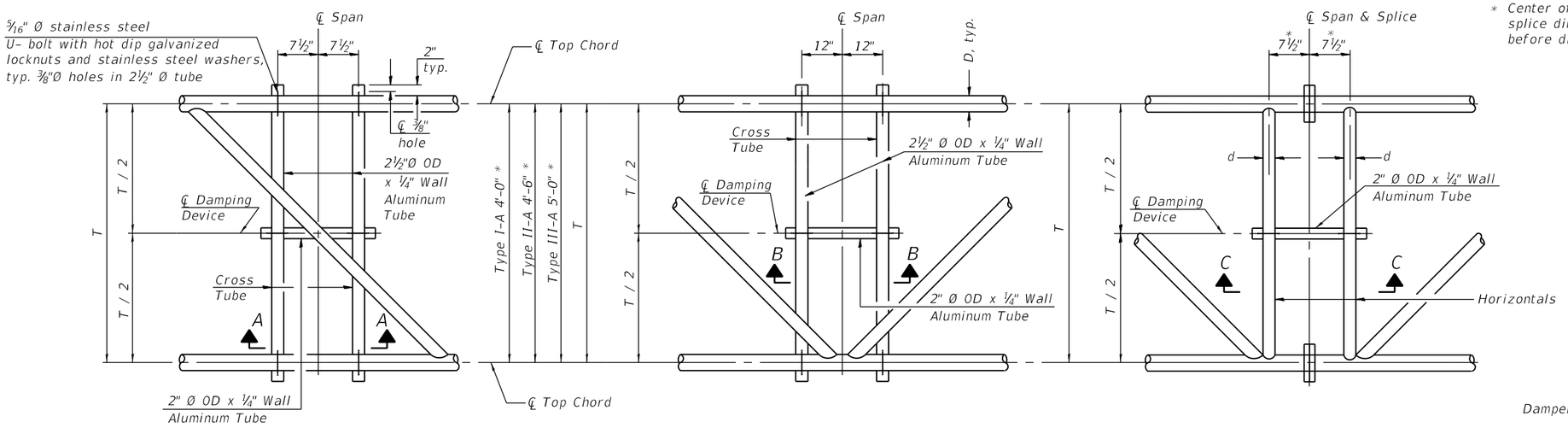
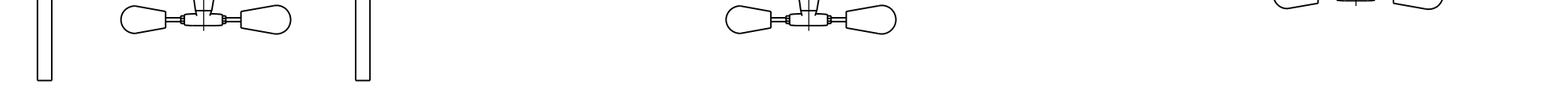


* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

PLAN DETAIL "A"
℄ Span between Panel Points

PLAN DETAIL "B"
℄ Span at Panel Point

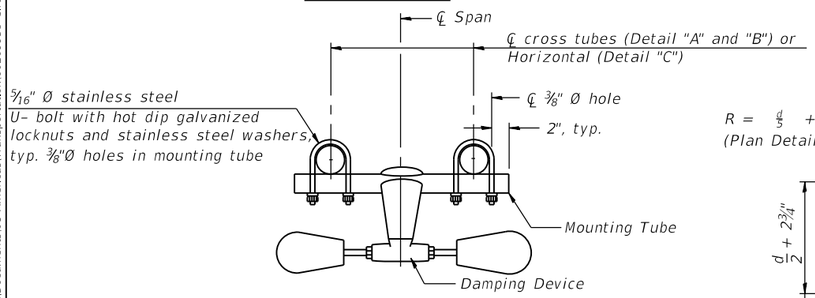
PLAN DETAIL "C"
℄ Span at ℄ Chord Splice



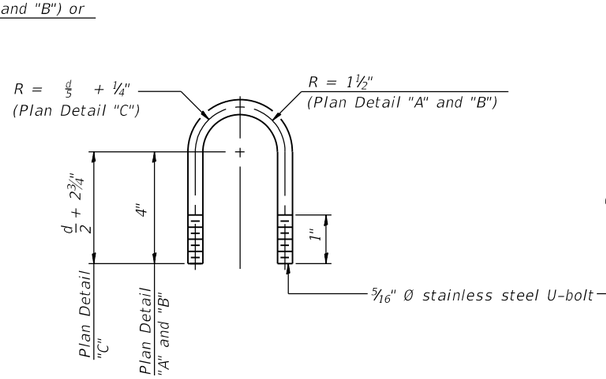
SECTION A-A

SECTION B-B

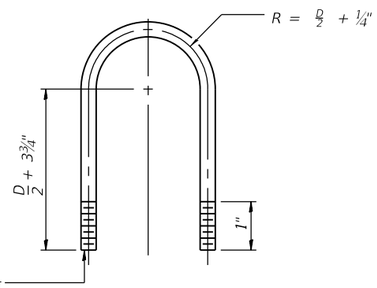
SECTION C-C



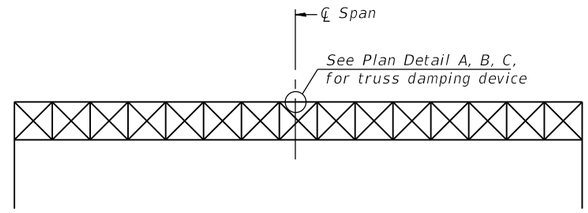
TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical - Detail "A" and "B")



ELEVATION
Aluminum Overhead Sign Truss

NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29" minimum between ends of weights) Cost included in Overhead Sign Structure...

Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...

OS-A-D 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa		DESIGNED - JJS, MA	REVISED -		
		CHECKED - MI, MAI	REVISED -		
PLOT SCALE = N.T.S		DRAWN - EK	REVISED -		
PLOT DATE = 7/30/2018		CHECKED - MI, MAI	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE
DAMPING DEVICE
SHEET NO. SS-12 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	522
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 CirclePhase_II\000_CAD\008_StructuralStructure_016-1718WorkingSign Structures\016-1718-60X93-SS304-SignStruct

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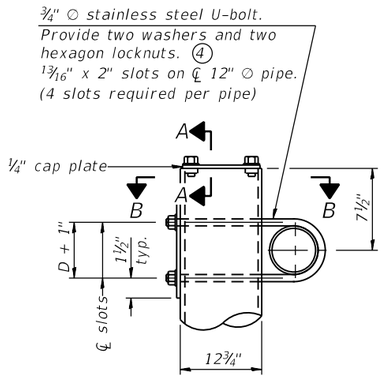
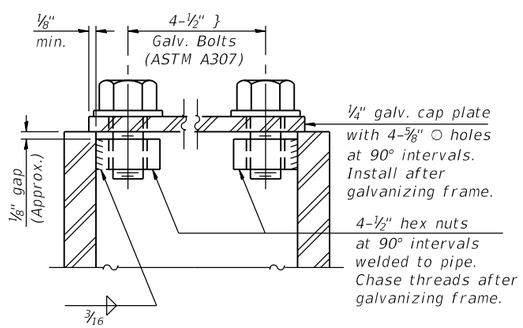
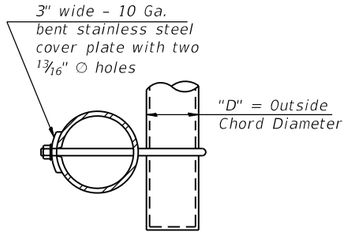


DETAIL A

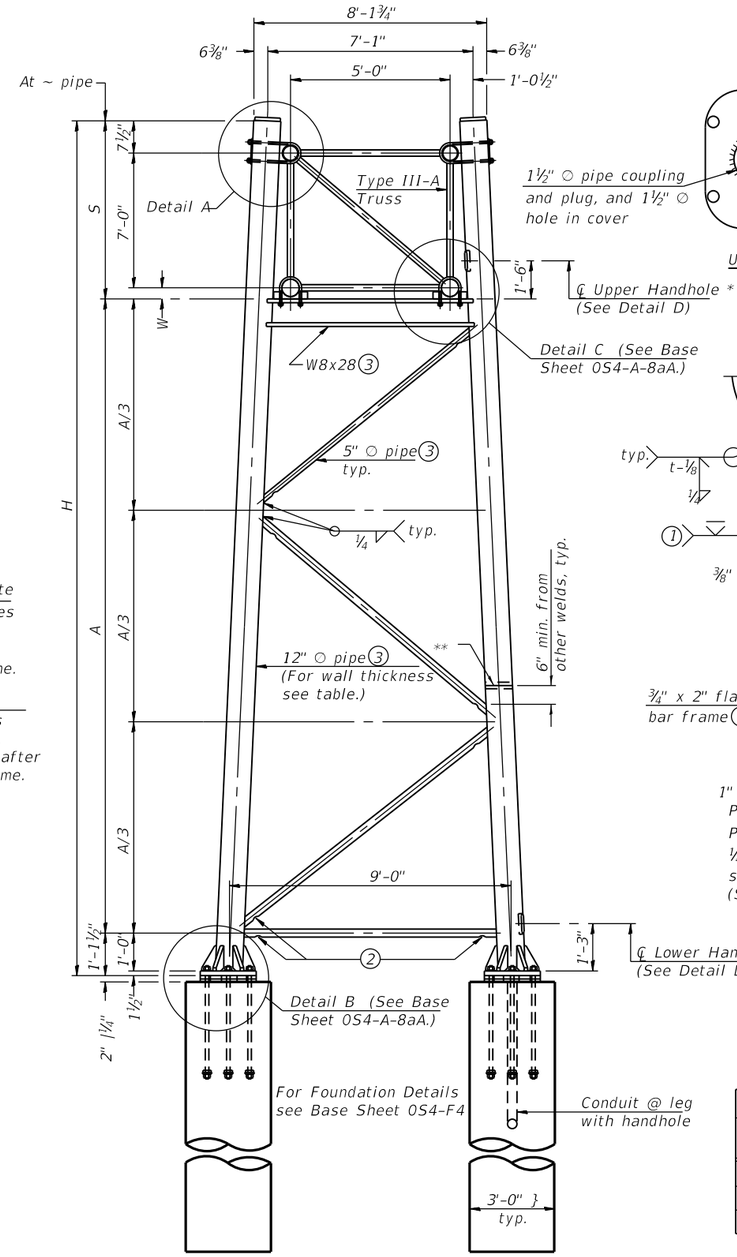


SECTION A-A

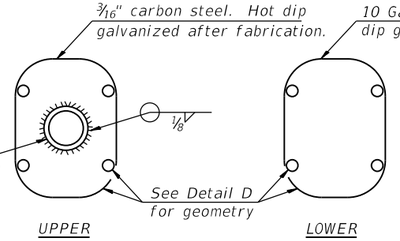
As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



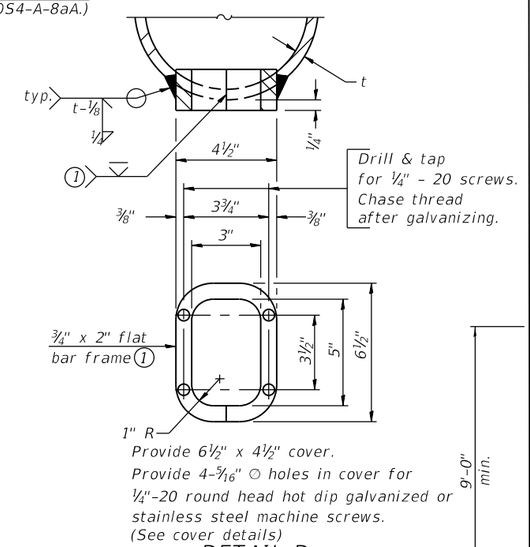
SECTION B-B



SIDE ELEVATION

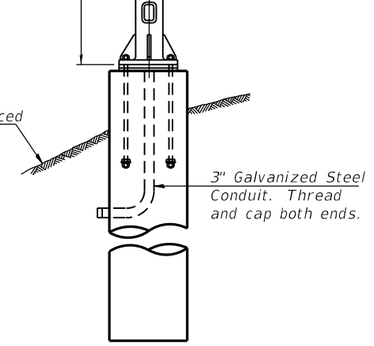


HANDHOLE COVERS



DETAIL D

Dimensions		
Truss Chord Nominal Dia.	W	S
7"	4¾"	8'-0¼"
8½"	5½"	8'-1"
9"	5¾"	8'-1¼"



END ELEVATION

Support Design Loads: See Base Sheet 0S-A-1 for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

(1) In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 in or less.

(2) Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.

(3) Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet 0S-A-1.

(4) See General Notes for fasteners.

(5) Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.

(6) "H" based on 15'-0" or actual sign height, whichever is greater.

* For dynamic message sign installations, provide upper and lower handholes in both legs of each support frame.

TRUSS SUPPORT DETAILS

(12" } Pipe-Type III-A Truss

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	Support		Pipe Wall Thickness	H (6)	A
		Left	Right			
1S016I094R051.3	Sta. 39+09.00	X		0.5 (XS)	28'-11¾"	19'-9¼"
1S016I094R051.3	Sta. 39+09.00		X	0.5 (XS)	23'-9"	14'-6½"

0S4-A-8a 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -		
	CHECKED - MI, MAI	REVISED -		
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -		
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES - SUPPORT FRAME FOR TYPE III-A ALUMINUM TRUSS

SHEET NO. SS-13 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	523
		CONTRACT NO. 60X93		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\0000_CAD\008_StructuralStructure_016-1718\Working\Sign Structures\0161718-60X93-55305-SignStruct
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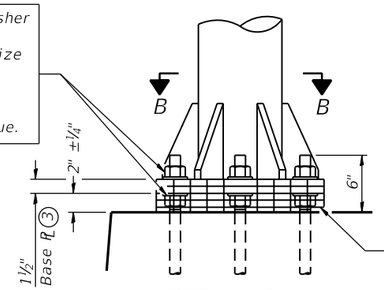
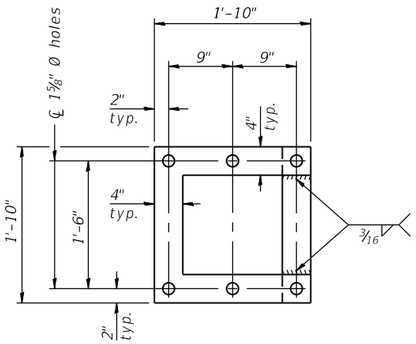
Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.



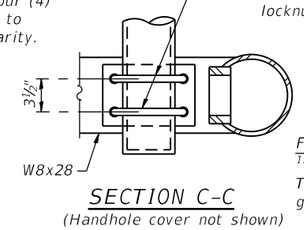
DETAIL B

Ribs shall be cut to fit slope of pipe.

Stainless Steel Standard Grade Wire Cloth, 3" wide, ¼" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with ¾" stainless steel banding.

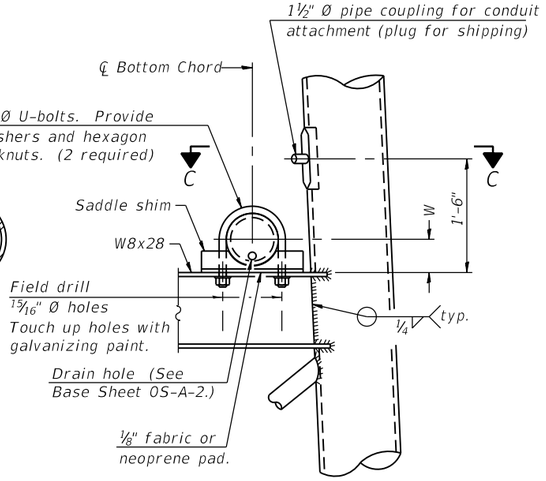


POSITIONING PLATE(S)

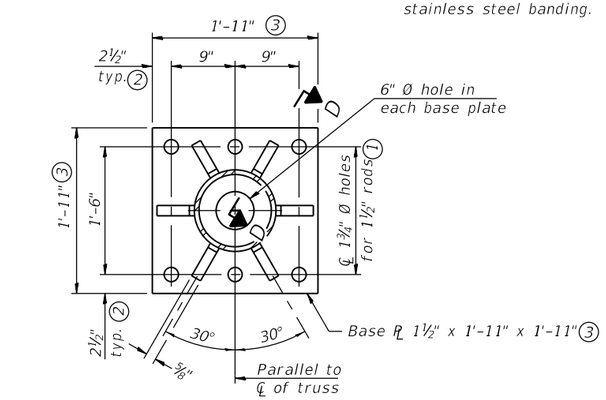


SECTION C-C

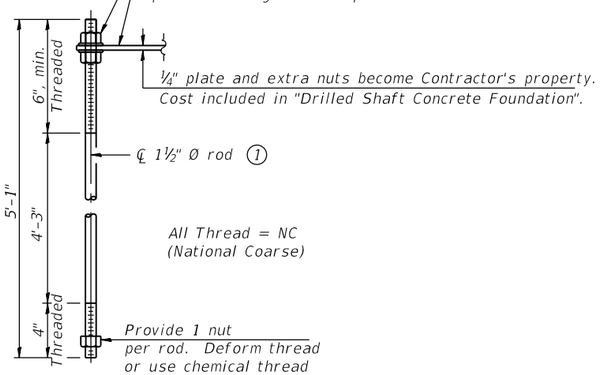
(Handhole cover not shown)



DETAIL C

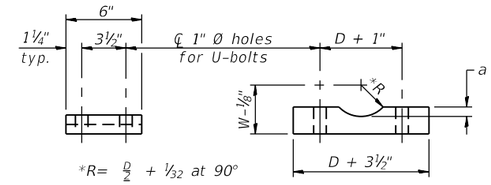


SECTION B-B



ANCHOR ROD DETAIL

Anchor rods shall conform to ASTM F1554 Grade 105 Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.



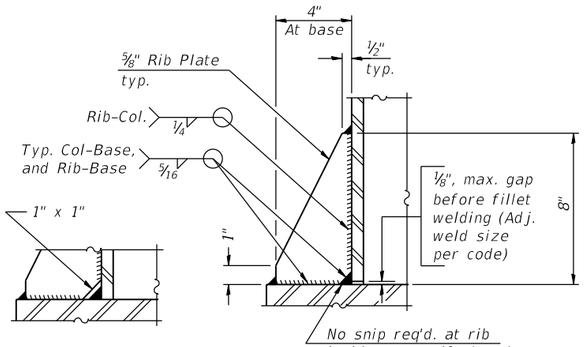
*R= D/2 + 1/32 at 90°

D = Outside Diameter of Chord.
For W, see Base Sheet OS-A-6.

Truss Chord Nominal Dia.	a
7"	1"
8½"	1¼"
9"	1⅜"

SADDLE SHIM DETAIL

ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)



** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib ¼" from snip.

SECTION D-D

TYPE III-A TRUSS
12" Ø PIPE SUPPORT FRAME DETAILS

Notes:
For Type III-A Truss spans greater than 150 ft, and up to 160 ft.:

① 1¾" Ø rod, 2" Ø holes

② 2¾" edge distance

③ Base ℄ 1⅝" x 1'-11½" x 1'-11½"

0S4-A-8aA 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa		DESIGNED - JJS, MA		REVISED -	
		CHECKED - MI, MAI		REVISED -	
PLOT SCALE = N.T.S		DRAWN - EK		REVISED -	
PLOT DATE = 7/30/2018		CHECKED - MI, MAI		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR TYPE III-A ALUMINUM TRUSS
SHEET NO. SS-14 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	524
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 CirclePhase_II\000_CAD\008_StructuralStructure_016-1718\Working\Sign Structures\016171 8-60X93-SS306-SignStruct

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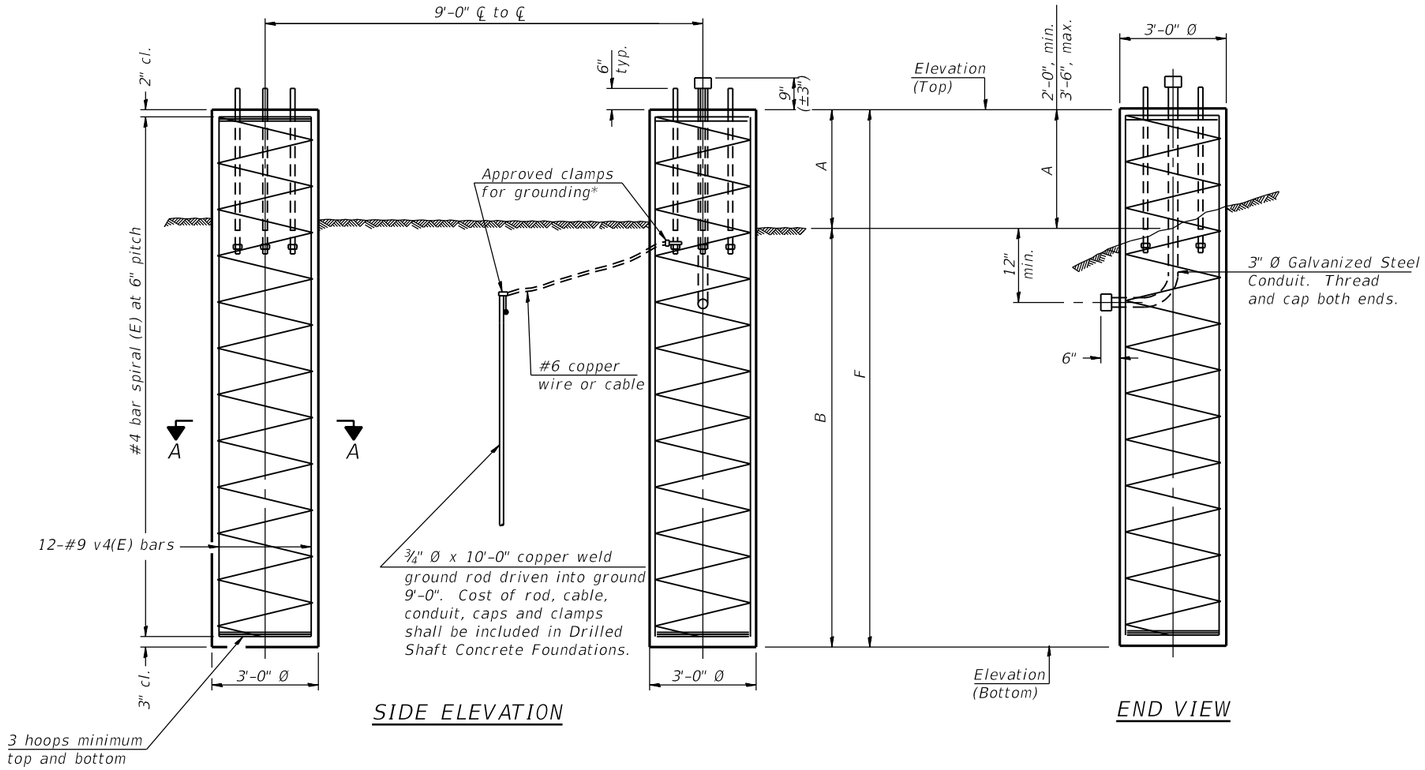
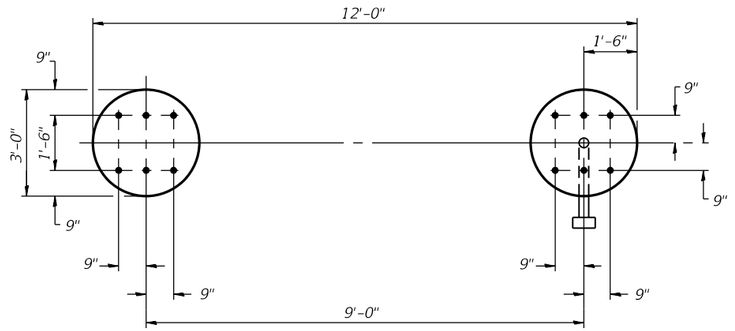


SIDE ELEVATION

END VIEW



PLAN

For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	——
#4 bar spiral (E) - see Side Elevation				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

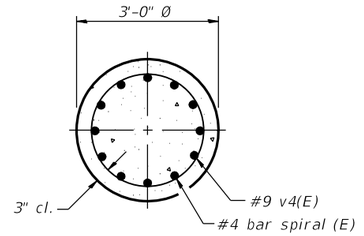
No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



SECTION A-A

DETAILS FOR 12" Ø SUPPORT FRAME TYPE III-A TRUSS

Structure Number	Station		Left Foundation				Right Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
1S016I094R051.3	Sta. 39+09.00(SB)	582.1	553.6	3'-6"	25'-0"	28'-6"	587.64	560.03	2'-7⅜"	25'-0"	27'-7⅜"	7.3

0S4-F4

2-17-2017

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USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES DRILLED SHAFT DETAILS
	CHECKED - MI, MAI	REVISED -		
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -		
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		SHEET NO. SS-15 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	525
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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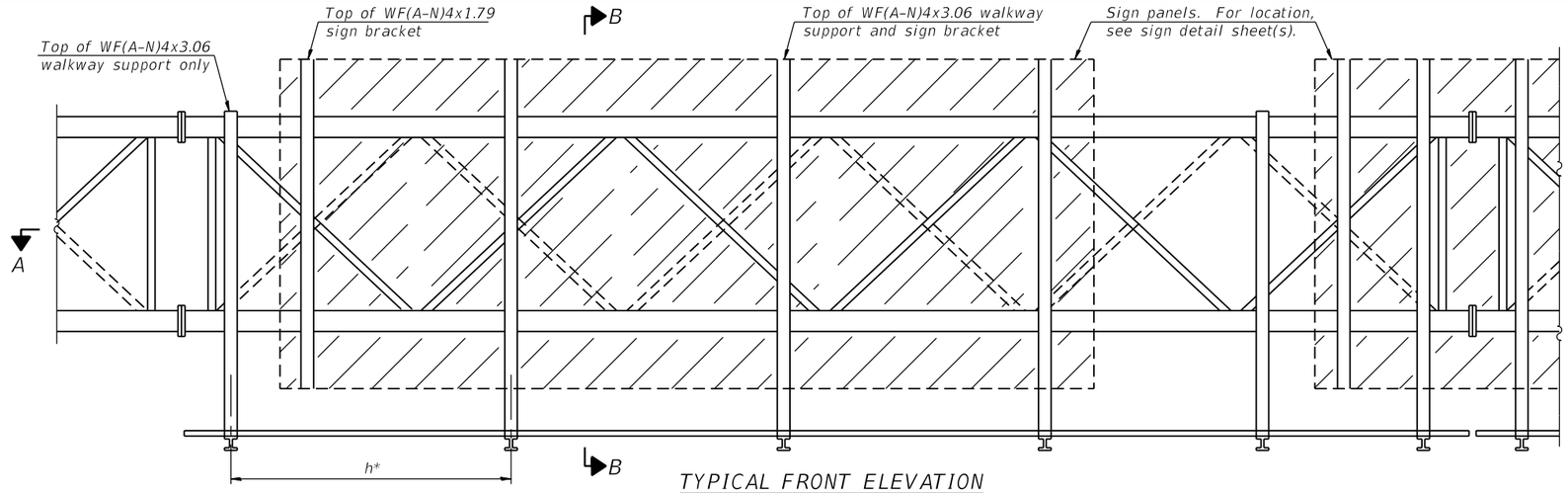
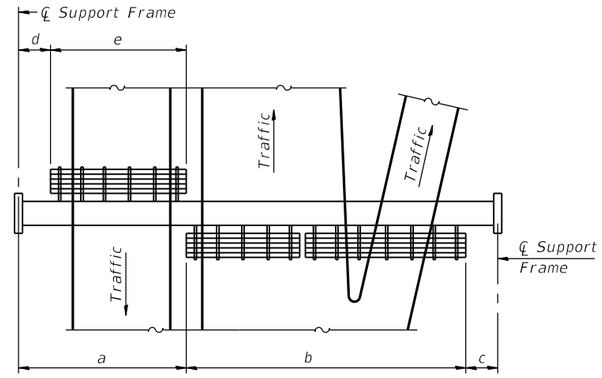


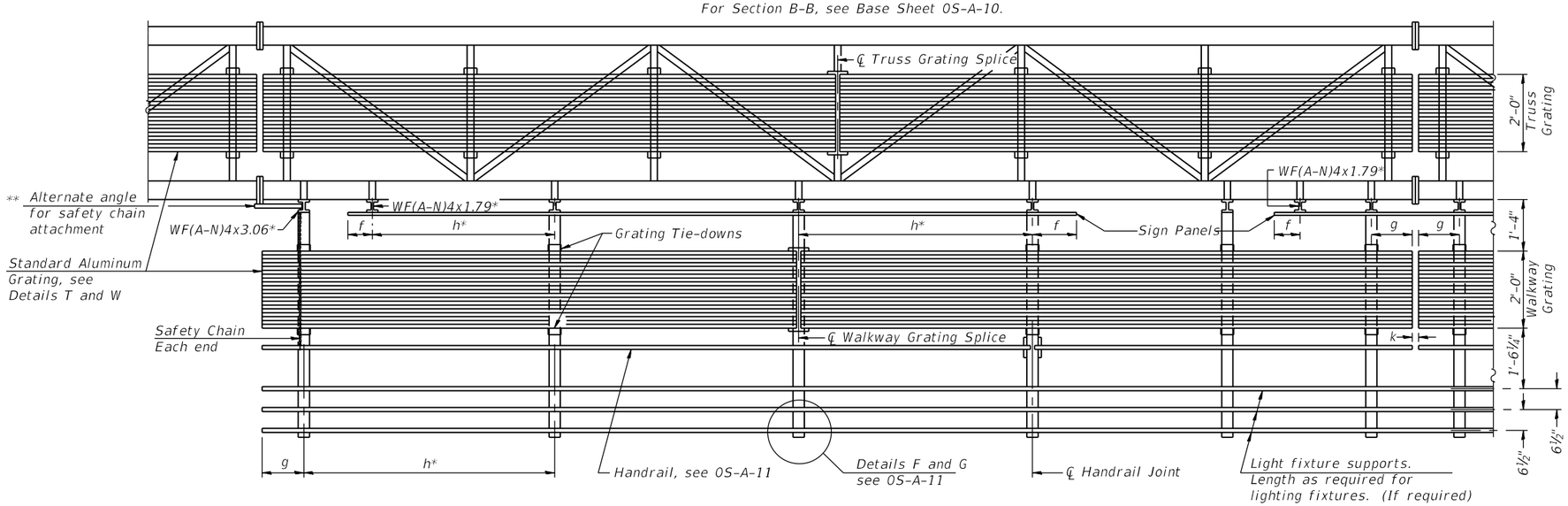
TYPICAL FRONT ELEVATION

With lights and handrail omitted for clarity.
For Section B-B, see Base Sheet 0S-A-10.



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Handrail joints, grating, and light support splices placed as needed.

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ℄ of nearest support bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)
k = 2" maximum gap between adjacent walkway grating sections and handrail ends

** If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet 0S-A-11.

For Details T and W, Section B-B and Grating Splice Details see Base Sheet 0S-A-10.
For Handrail Details see Base Sheet 0S-A-11.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
1S016I094R051.3	Sta. 39+09.00 (SB)	-	-	-	-	-	-

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".

Walkway and Truss Grating width dimensions are nominal and may vary ±½" based on available standard widths.

0S-A-9 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES ALUMINUM WALKWAY DETAILS	
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -			
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		SHEET NO. SS-16 OF SS-32 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	526
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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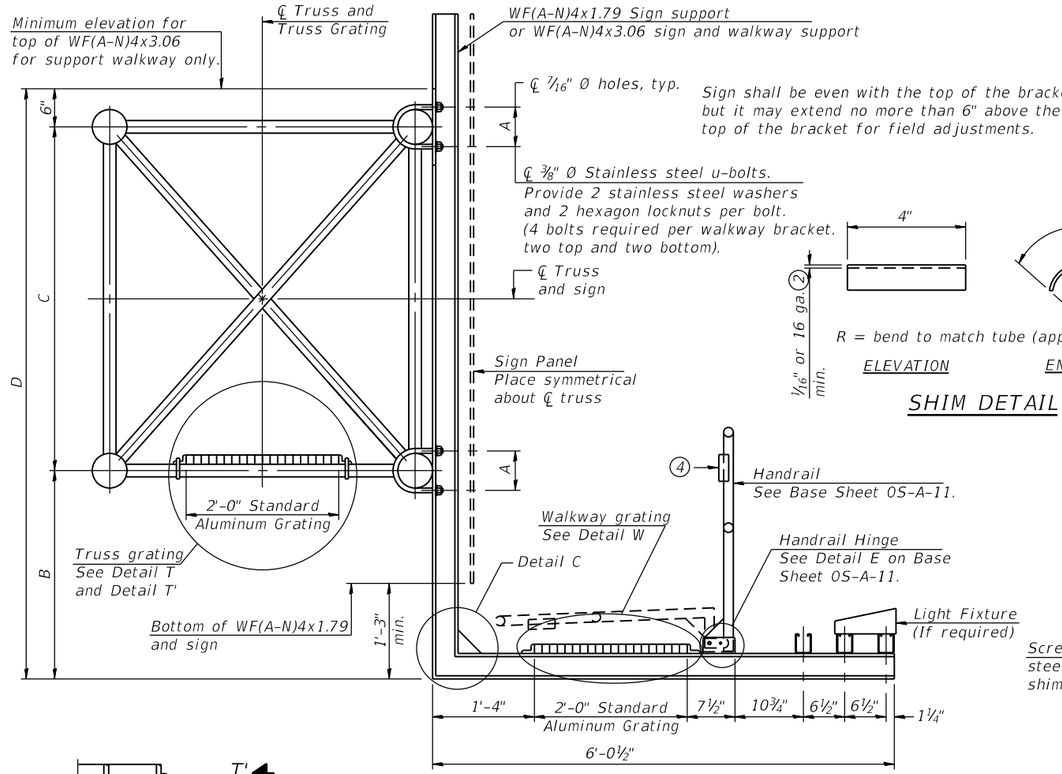
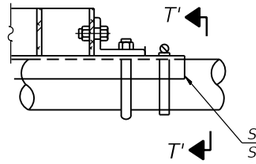


SECTION B-B

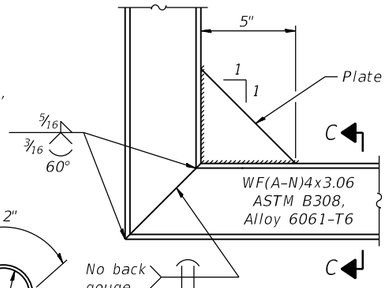


DETAIL T'

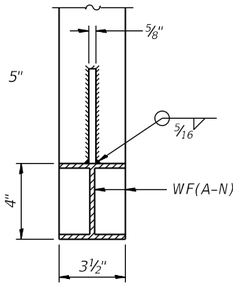
(Truss grating splice)

Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.

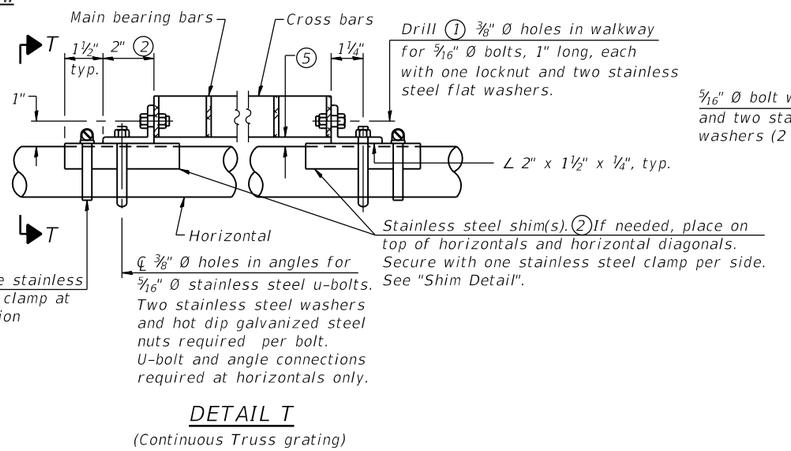
SHIM DETAIL



DETAIL C

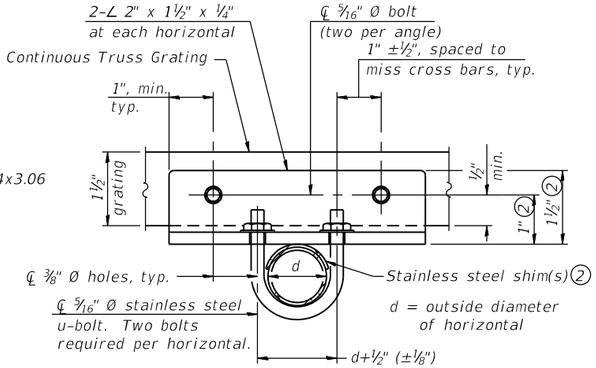


SECTION C-C

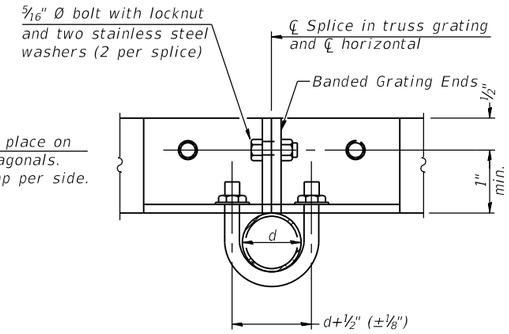


DETAIL T

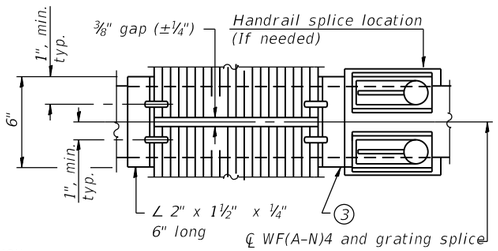
(Continuous Truss grating)



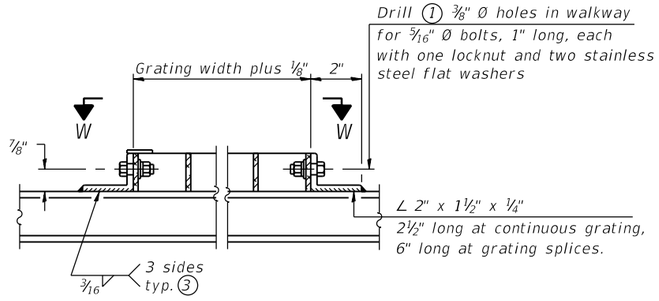
SECTION T-T



SECTION T'-T'

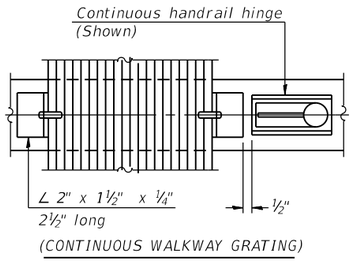


(AT WALKWAY GRATING SPLICE)



DETAIL W

(Walkway grating)



(CONTINUOUS WALKWAY GRATING)

SECTION W-W

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1½" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.

Cross bars shall be 3/16" x 1½" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1½", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	⑥ B	C	⑥ D
1S016I094R051.3	Sta. 39+09.00(SB)				

1. Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
2. Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
3. If Handrail Joint present, weld angle to WF(A-N)4 and ¼" extension bars. (See Base Sheet 0S-A-11.)
4. PL ⅛" x ½" x 2" welded to handrail posts to protect locations that contact grating.
5. Tube to grating gap may vary from 0 to ½", max. to align walkway, allow for camber, etc.
6. Based on actual height of tallest sign given on 0S-A-1.

0S-A-10 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad,issa		DESIGNED - JJS, MA	REVISED -		
		CHECKED - MI, MAI	REVISED -		
PLOT SCALE = N.T.S		DRAWN - EK	REVISED -		
PLOT DATE = 7/30/2018		CHECKED - MI, MAI	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

SHEET NO. SS-17 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	527
		CONTRACT NO. 60X93		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 CircleIPhase_II\000_CAD\008_StructuralStructure_016-1718\Working\Sign Structures\0161718-60X93-SS309-SignStruct

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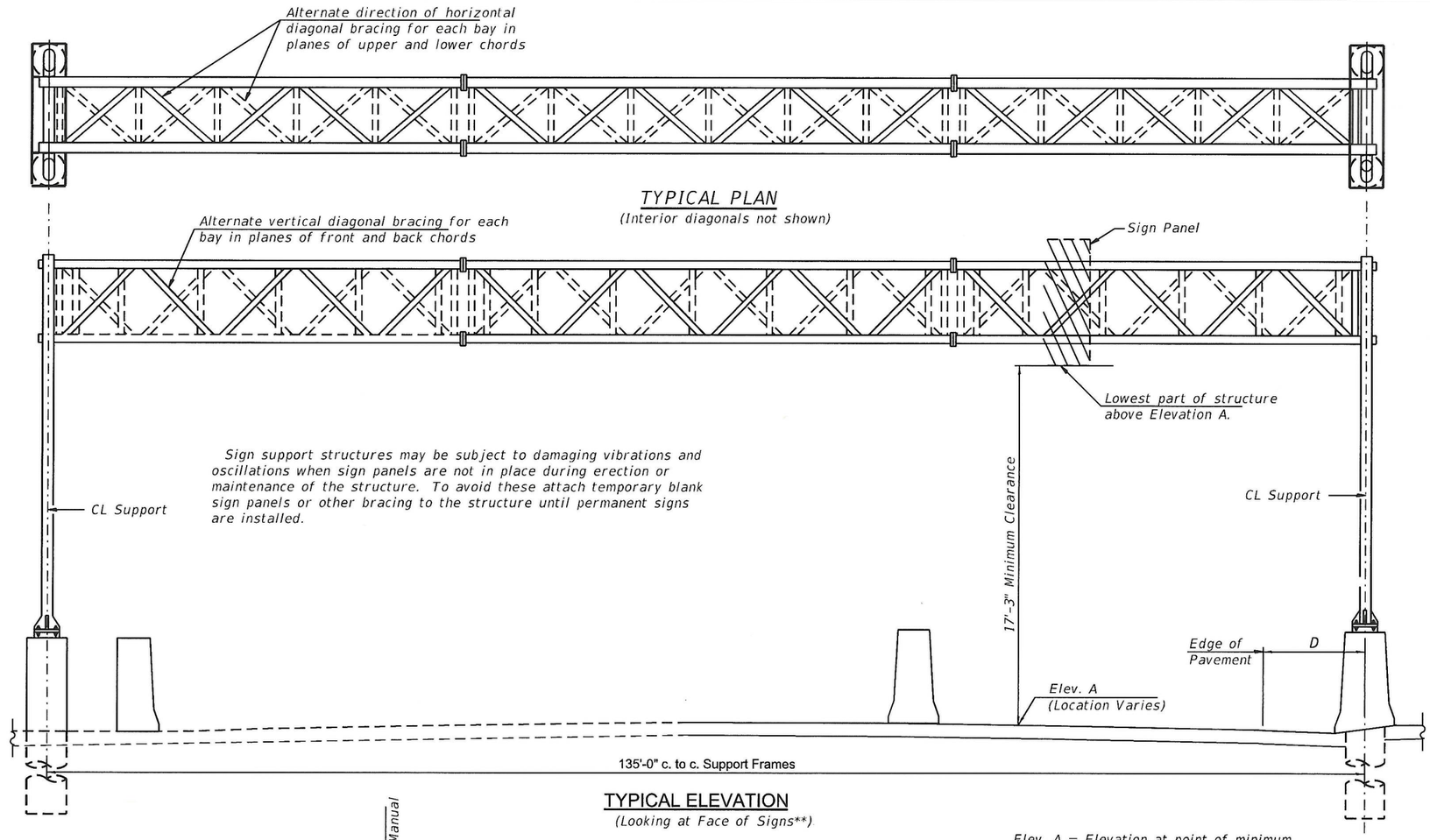
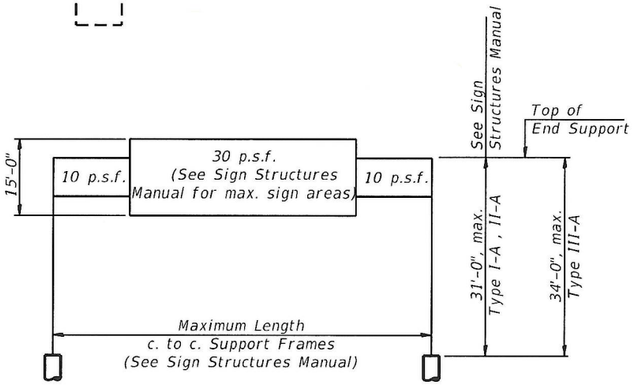


TYPICAL PLAN
(Interior diagonals not shown)

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these attach temporary blank sign panels or other bracing to the structure until permanent signs are installed.

TYPICAL ELEVATION
(Looking at Face of Signs**)



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
1S016I094R051.9	Sta. 3+99.43	III-A	135'-0"	585.09	4'-2½"	15'-0"	738.75

WALKWAY: Walkway grating, walkway brackets, handrails, lighting and associated components shown in these plans on the traffic side of the sign structure/sign panel will not be installed with Contract 60X93. The Truss grating and maintenance walkway behind the sign panel will be included with this pay item.

* *If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.*

** *Looking upstation for structures with signs both sides.*

STATE OF ILLINOIS
MOUSSA A. ISSA
081-005738
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed Moussa A. Issa
Dr. Mousso A. Issa, S.E. Il. Lic. No. 081-005738
Expires 11-30-2018
Date 07/30/18 For Sheets SS-18 thru SS-26

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.*
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	135
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	33.8

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NAIDocuments\01 Americas:Transportation\60269938 CirclePhase_II\000_CAD\008_StructuralStructure_016-1718\Working\Sign Structures\0161718-60X93-SS501-SignStruct
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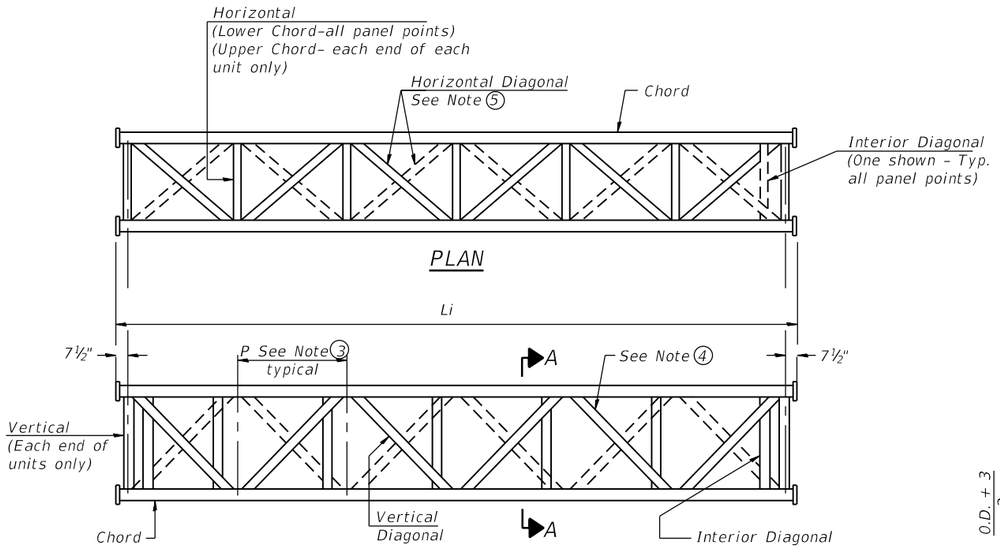
HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa		DESIGNED - JJS, MA		REVISED -	
		CHECKED - MI, MAI		REVISED -	
PLOT SCALE = N.T.S		DRAWN - MAA		REVISED -	
PLOT DATE = 7/30/2018		CHECKED - MI, MAI		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – GENERAL PLAN & ELEVATION – ALUMINUM TRUSS & STEEL SUPPORTS
SHEET NO. SS-18 OF SS-32 SHEETS

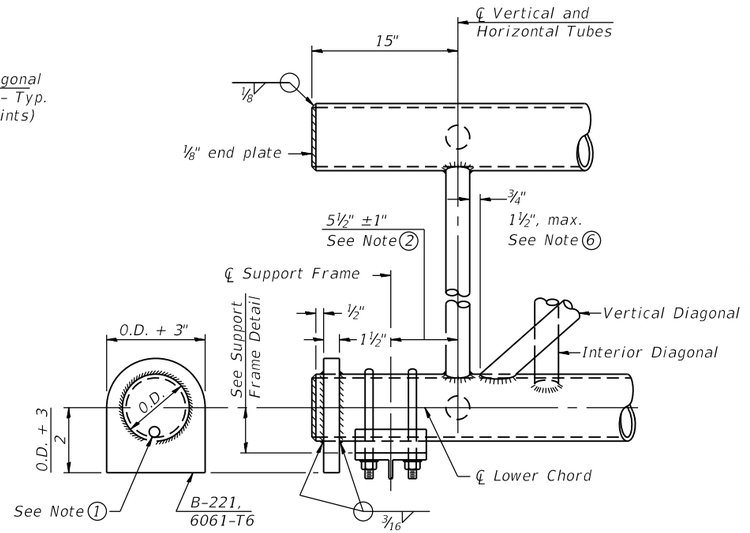
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	528
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		



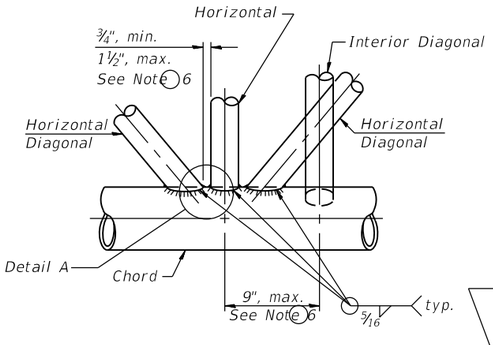
ELEVATION

TYPICAL INTERIOR UNIT

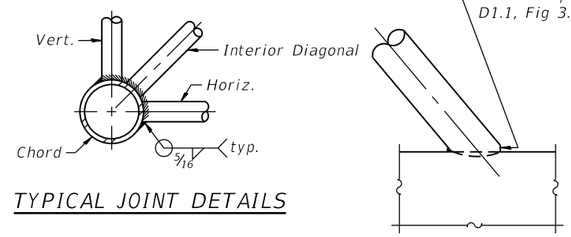
Even number of panels/interior unit required.



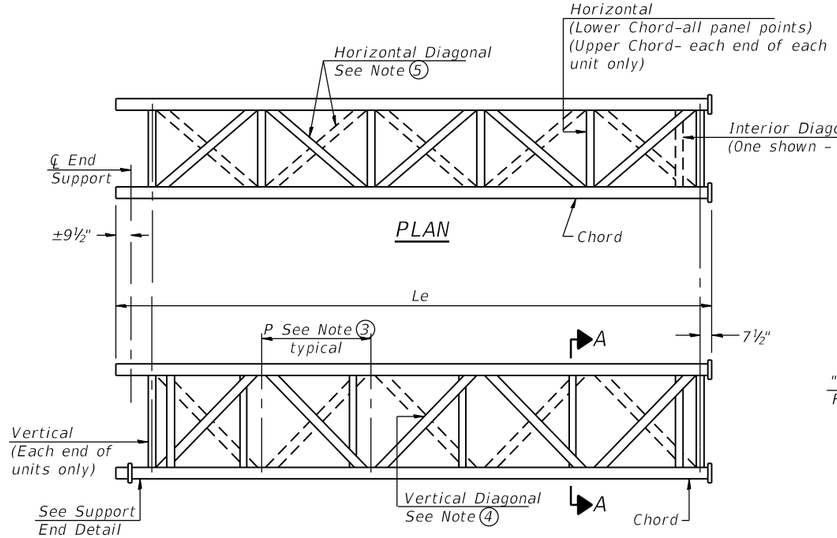
SUPPORT END DETAIL FOR EXTERIOR UNIT



TYPICAL JOINT DETAILS



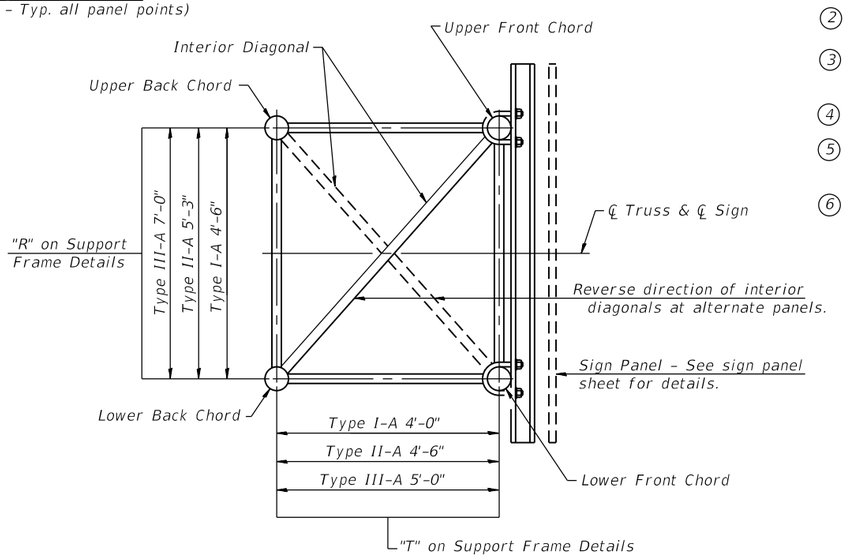
DETAIL A



ELEVATION

TYPICAL EXTERIOR UNIT

Even or odd number of panels/exterior units allowed.



SECTION A-A

1. Contractor may alternatively use standard aluminum drive-fit cap to close end. ½" Ø drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
2. 5½" end dimension may vary by ±1" to provide uniform panel spacing (P).
3. Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
4. Vertical Diagonals in front and back face shall alternate.
5. Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
6. All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a ¾" minimum to 1½" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2

2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE = N.T.S	DRAWN - MAA	REVISED -
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS
DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

SHEET NO. SS-19 OF SS-32 SHEETS

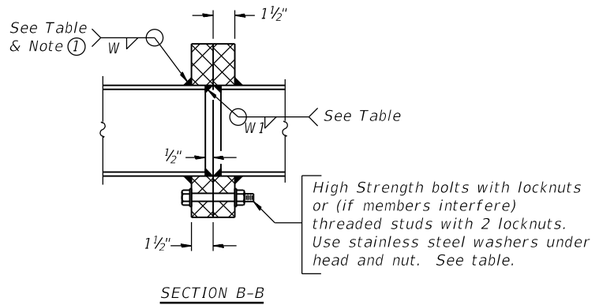
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	529
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: pw:\617479-PWINT.aecomonline.local:AECOM_D502_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\008_Structural\Structural Structure_016-1718\Working\Sign Structures\0161718-60X93-SS502-SignStruct

8:58:18 AM

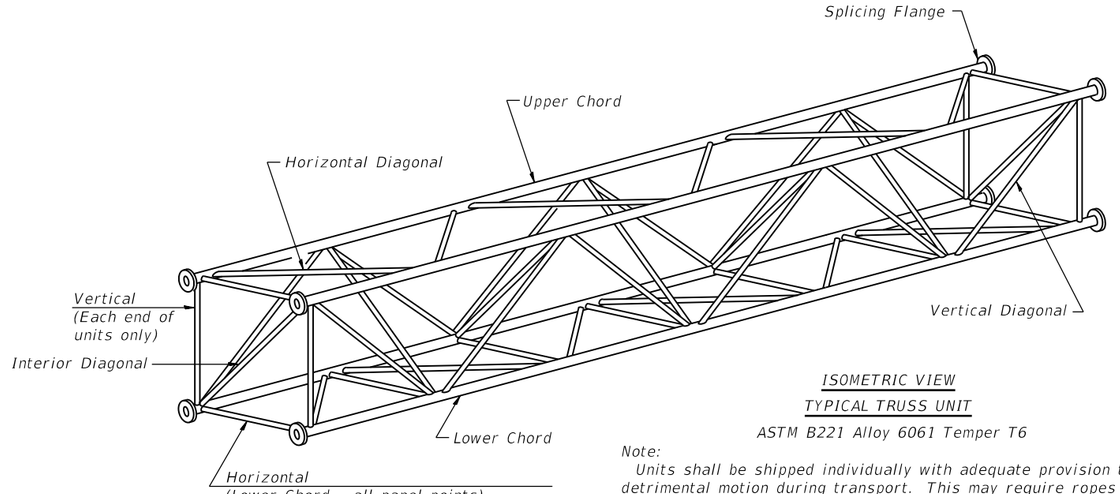
TRUSS UNIT TABLE

Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical,Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(Le)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(Li)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W1		
1S016I094R051.9	Sta. 3+99.43	III-A	6	34'-6"	5'-5¼"	2	6	33'-10½"	5'-1¾"	7"	½"	3¼"	5/16"	3¾"	8	1"	9/16"	7/16"	11½"	15"



SECTION B-B

(1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.

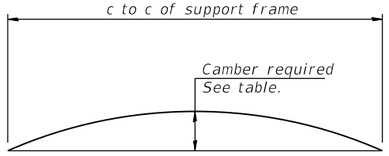


ISOMETRIC VIEW

TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

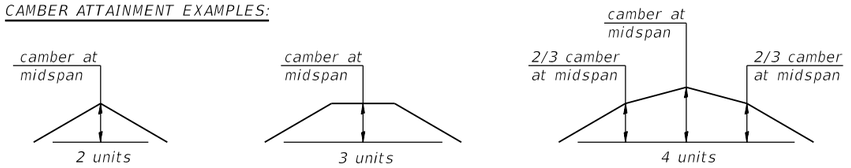
Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



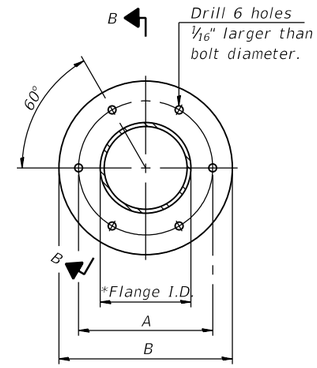
CAMBER DIAGRAM

Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

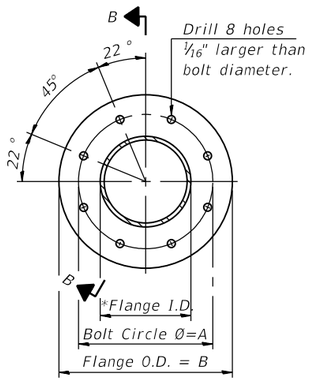
CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

SPLICING FLANGES

ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".

0S4-A-2 2-17-2017

HBM ENGINEERING GROUP, LLC	USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A
		CHECKED - MI, MAI	REVISED -		
	PLOT SCALE = N.T.S	DRAWN - MAA	REVISED -		
	PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		SHEET NO. SS-20 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	530
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: pw:\\617479-PWINT.aecomonline.localsAECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\008_Structural\Structure_016-1718\Working\Sign Structures\016171 8-60X93-SS503-SignStruct
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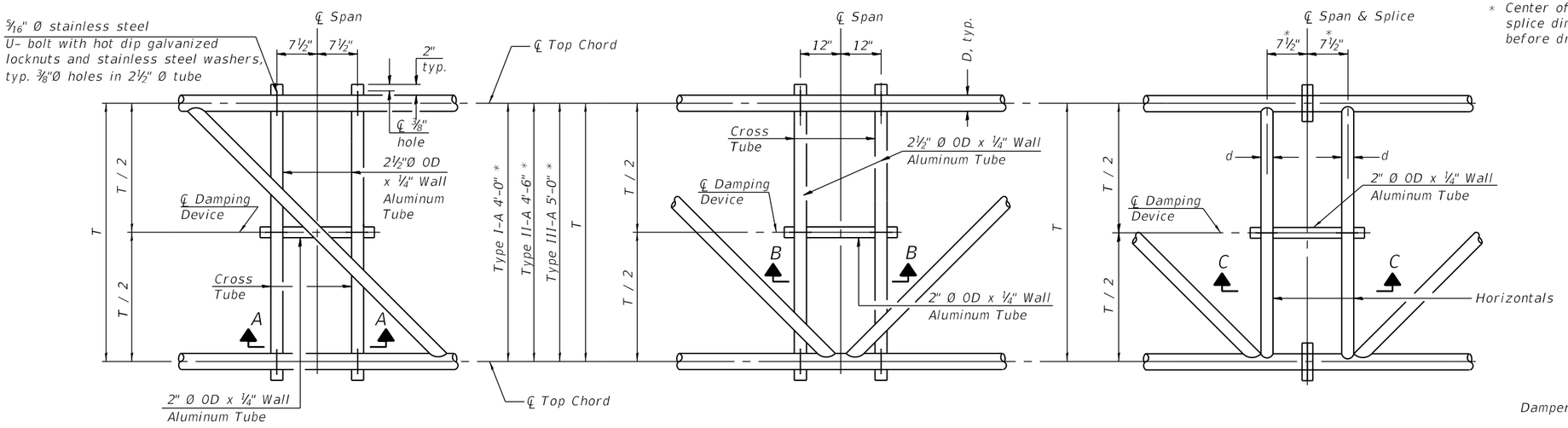


* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

PLAN DETAIL "A"
℄ Span between Panel Points

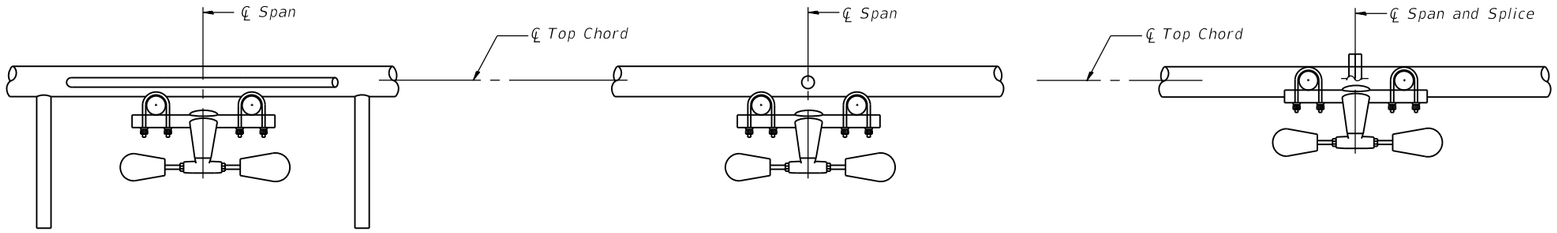
PLAN DETAIL "B"
℄ Span at Panel Point

PLAN DETAIL "C"
℄ Span at ℄ Chord Splice

NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum – 29" minimum between ends of weights) Cost included in Overhead Sign Structure...

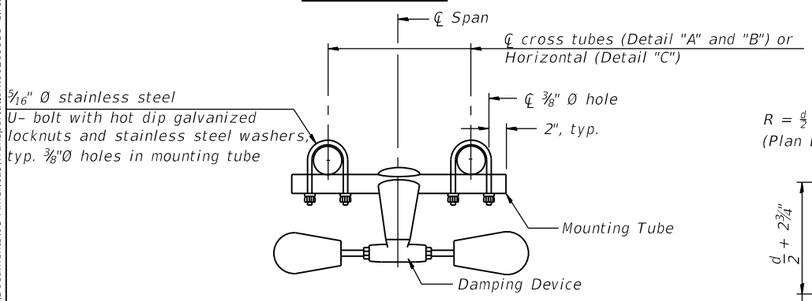
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



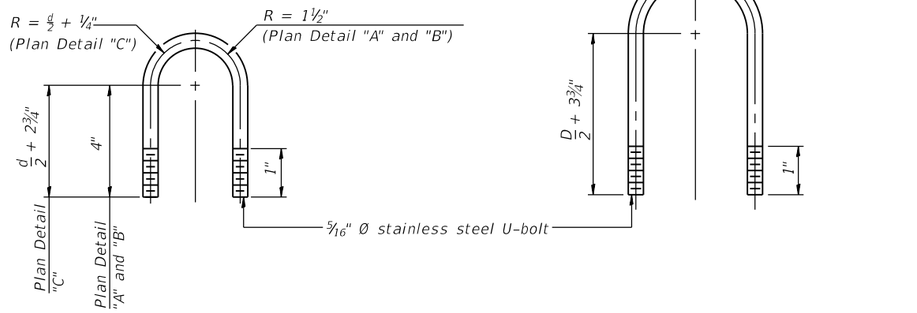
SECTION A-A

SECTION B-B

SECTION C-C

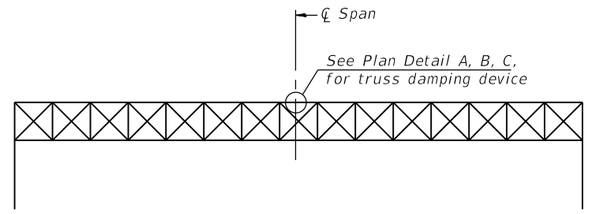


TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)

TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical - Detail "A" and "B")



ELEVATION
Aluminum Overhead Sign Truss

OS-A-D 2-17-2017

HBM ENGINEERING GROUP, LLC	USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURE DAMPING DEVICE
		CHECKED - MI, MAI	REVISED -		
	PLOT SCALE = N.T.S	DRAWN - MAA	REVISED -		SHEET NO. SS-21 OF SS-32 SHEETS
	PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	531
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_D502_NA\Documents\01 Americas\Transportation\60269938 CirclePhase_II\000_CAD\008_StructuralStructure_016-1718WorkingSign Structures\016178-60X93-55504-SignStruct
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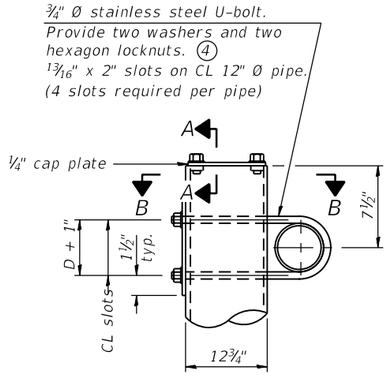
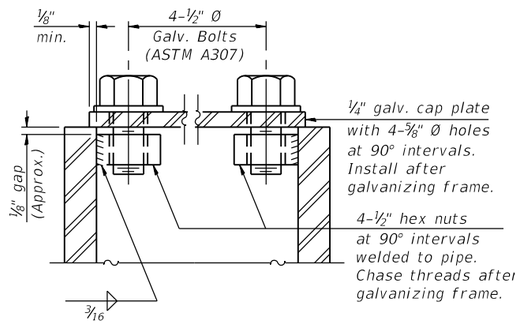
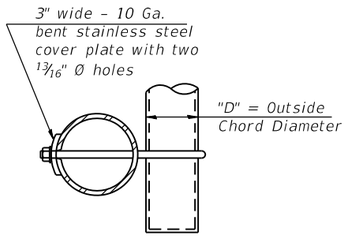


DETAIL A

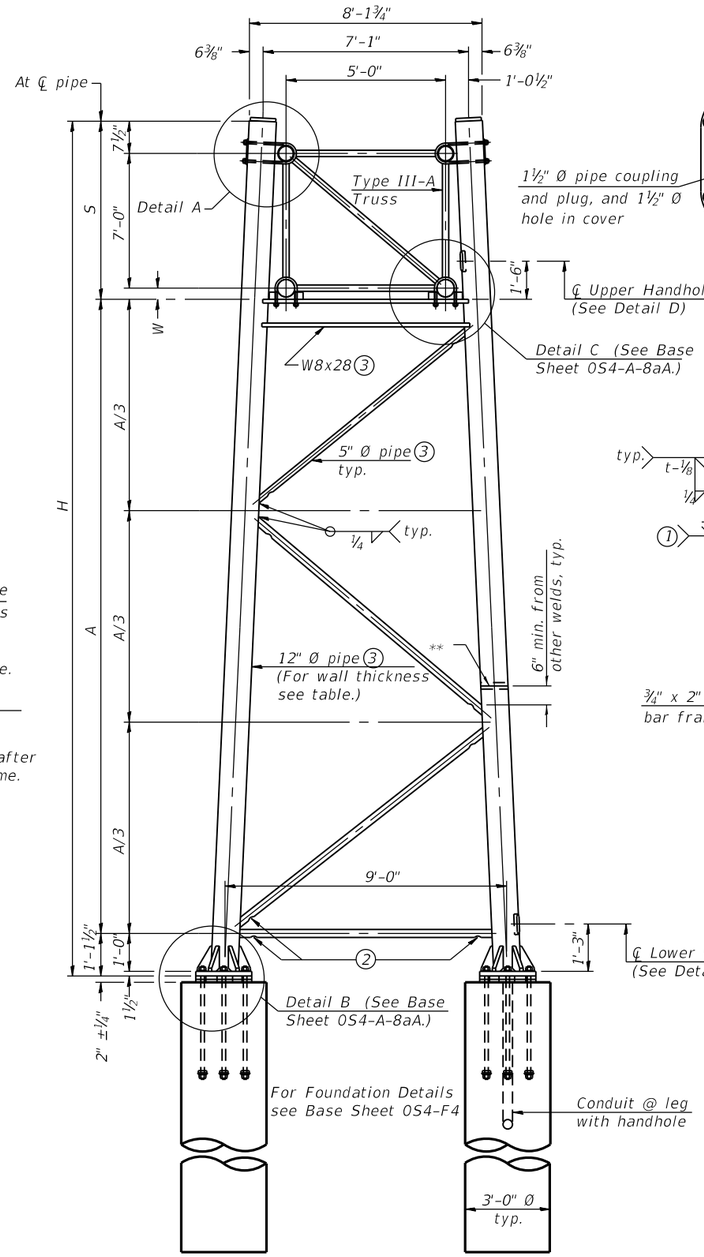


SECTION A-A

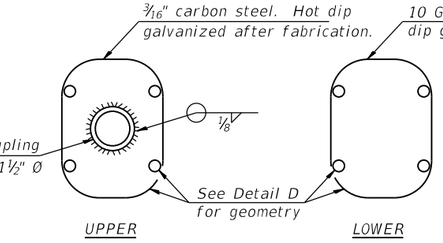
As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



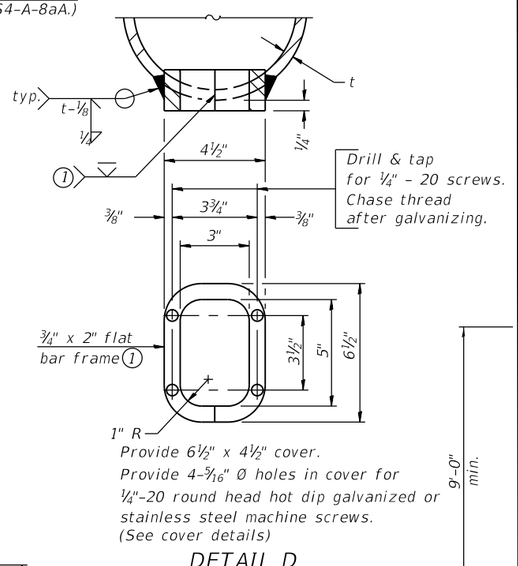
SECTION B-B



SIDE ELEVATION

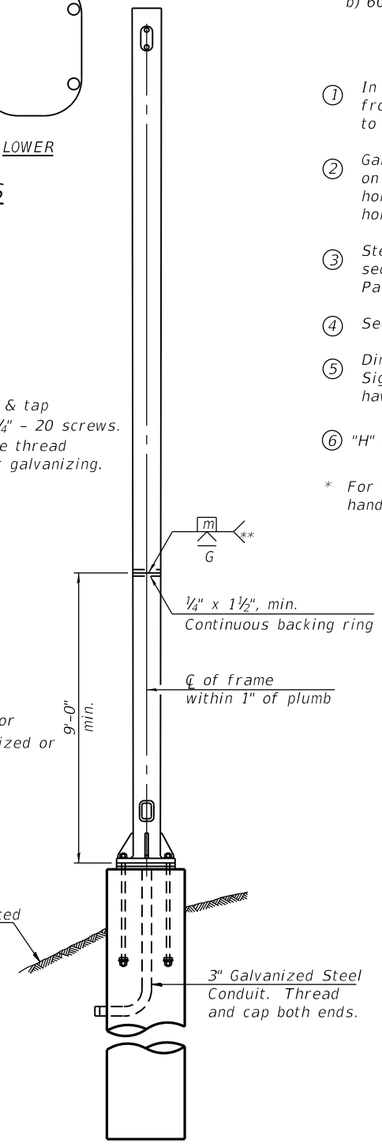


HANDHOLE COVERS



DETAIL D

Dimensions		
Truss Chord Nominal Dia.	W	S
7"	4¾"	8'-0¼"
8½"	5½"	8'-1"
9"	5¾"	8'-1¼"



END ELEVATION

Support Design Loads: See Base Sheet 0S-A-1 for design and loading criteria.

Load combinations checked include deadload plus:

a) 100% wind normal to sign, 20% parallel to sign

b) 60% wind normal to sign, 30% parallel to sign

(1) In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 µin or less.

(2) Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.

(3) Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet 0S-A-1.

(4) See General Notes for fasteners.

(5) Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.

(6) "H" based on 15'-0" or actual sign height, whichever is greater.

* For dynamic message sign installations, provide upper and lower handholes in both legs of each support frame.

TRUSS SUPPORT DETAILS

(12" Ø Pipe-Type III-A Truss

**One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	Support		Pipe Wall Thickness	H (6)	A
		Left	Right			
1S0161094R051.9	Sta. 3+99.43	X		⅜" (Std)	30'-4½"	21'-2¾"
1S0161094R051.9	Sta. 3+99.43		X	⅜" (Std)	27'-1¼"	17'-11½"

0S4-A-8a 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES - SUPPORT FRAME FOR TYPE III-A ALUMINUM TRUSS
	CHECKED - MI, MAI	REVISED -		
PLOT SCALE = N.T.S	DRAWN - MAA	REVISED -		
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		SHEET NO. SS-22 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	532
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE NAME: pw:\\0117479-PWINT.aecomonline.local:AECOM_DS02_NAIDocuments\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\008_StructuralStructure_016-1718\Working\Sign Structures\0161718-60X93-SSSOS-SignStruct

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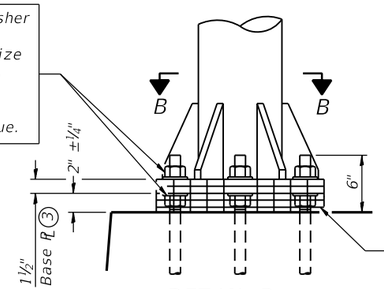
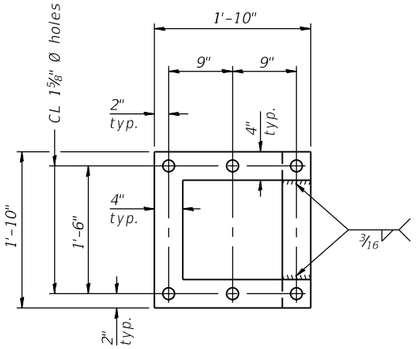
Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.



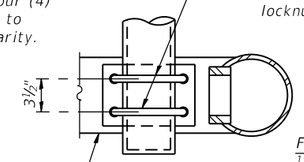
DETAIL B

Ribs shall be cut to fit slope of pipe.

Stainless Steel Standard Grade Wire Cloth, 3" wide, ¼" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with ¾" stainless steel banding.

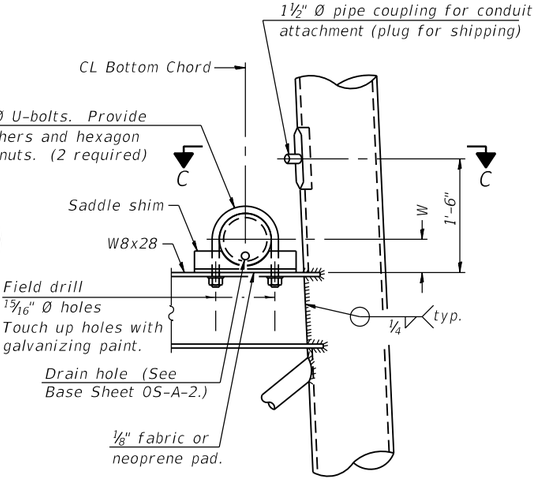


POSITIONING PLATE(S)

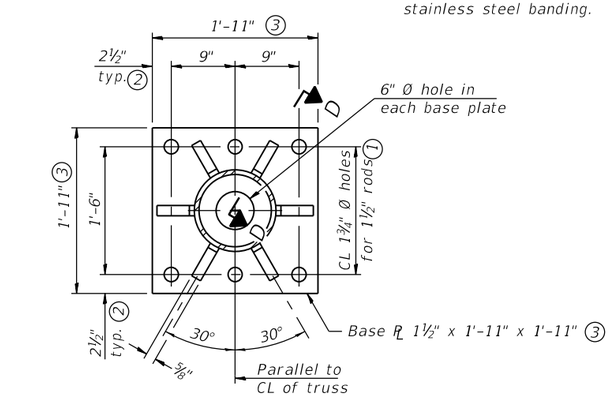


SECTION C-C

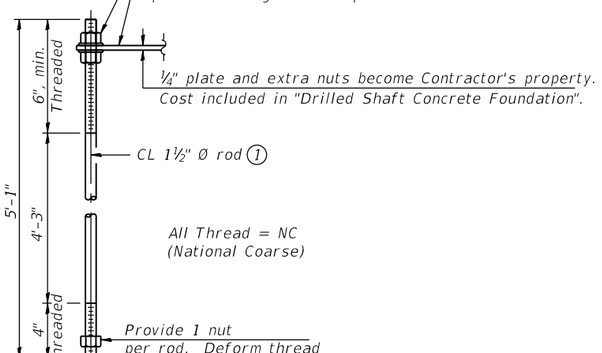
(Handhole cover not shown)



DETAIL C

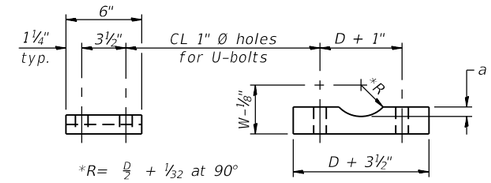


SECTION B-B



ANCHOR ROD DETAIL

Anchor rods shall conform to ASTM F1554 Grade 105 Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.

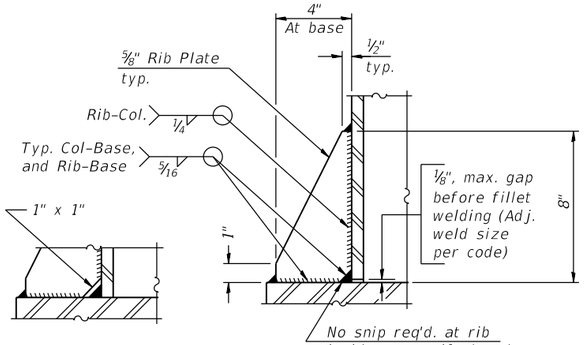


D = Outside Diameter of Chord.
For W, see Base Sheet OS-A-6.

Truss Chord Nominal Dia.	a
7"	1"
8½"	1¼"
9"	1⅜"

SADDLE SHIM DETAIL

ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)



** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib ¼" from snip.

SECTION D-D

TYPE III-A TRUSS
12" Ø PIPE SUPPORT FRAME DETAILS

Notes:
For Type III-A Truss spans greater than 150 ft, and up to 160 ft.:

① 1¾" Ø rod, 2" Ø holes

② 2¾" edge distance

③ Base PL 1⅝" x 1'-11½" x 1'-11½"

0S4-A-8aA 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad,issa		DESIGNED - JJS, MA		REVISED -	
		CHECKED - MI, MAI		REVISED -	
PLOT SCALE = N.T.S		DRAWN - MAA		REVISED -	
PLOT DATE = 7/30/2018		CHECKED - MI, MAI		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR TYPE III-A ALUMINUM TRUSS
SHEET NO. SS-23 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	533
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 CirclePhase_II\000_CAD\008_StructuralStructure_016-1718\Working\Sign Structures\016171 8-60X93-55506-SignStruct

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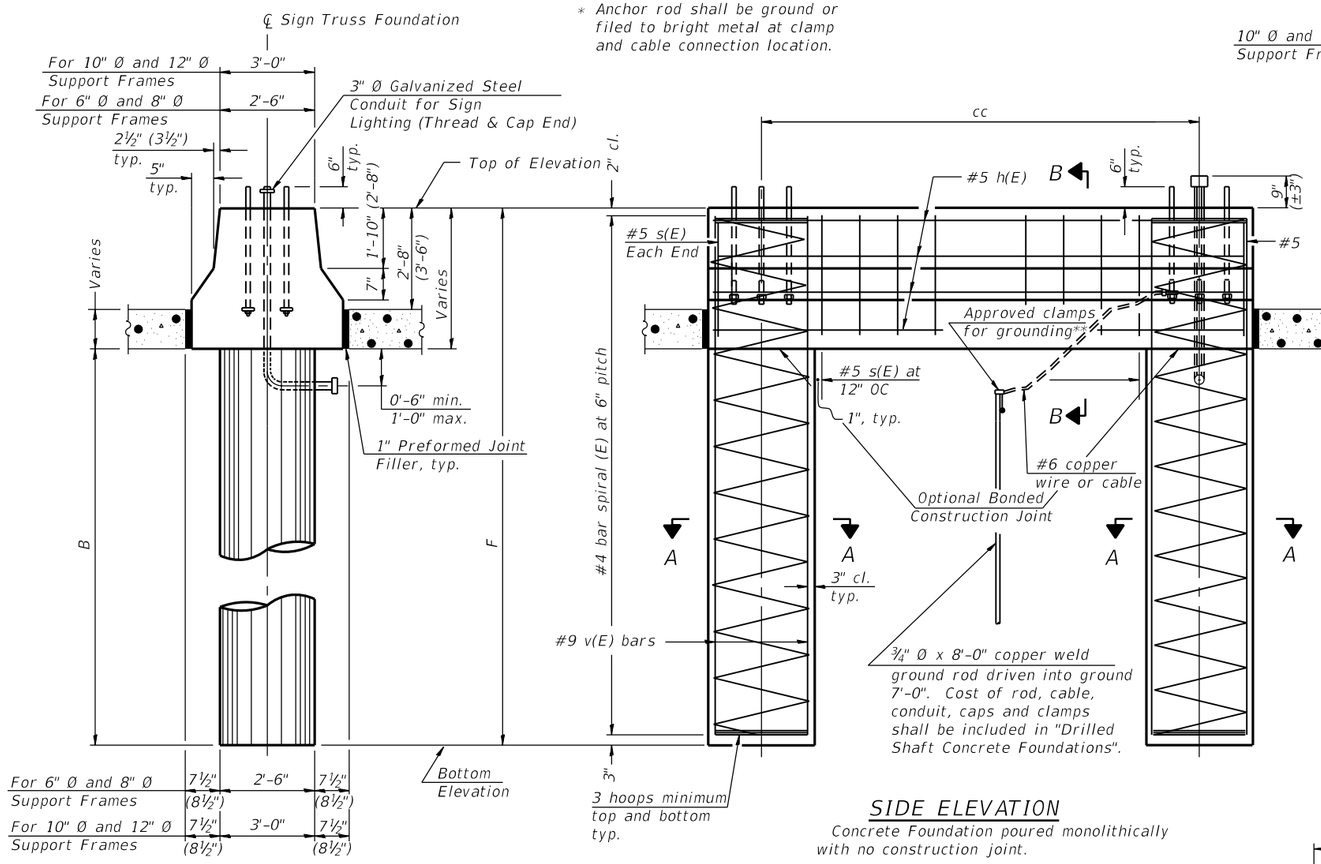


* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

END VIEW

SIDE ELEVATION

Concrete Foundation poured monolithically with no construction joint.

BAR s(E)

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.

Pipe Support Frames	cc	M	a	a/2
6"Ø	7'-0"	9'-6"	0'-11"	5½"
8"Ø	7'-6"	10'-0"	1'-1½"	6¾"
10"Ø	8'-3"	11'-3"	1'-3"	7½"
12"Ø	9'-0"	12'-0"	1'-6"	9"

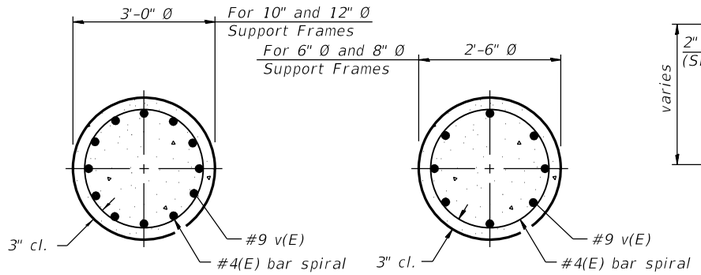
All dimensions in parenthesis are for 42" high barrier.

BAR LIST - EACH FOUNDATION

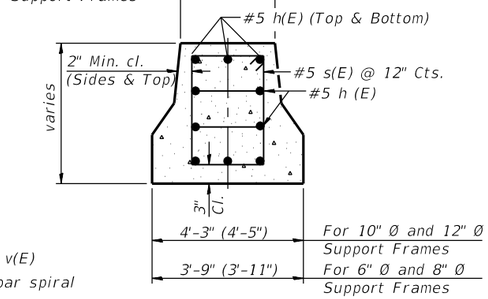
Bar	Number	Size	Length	Shape
h(E)	10	#5	M less 4"	——
s(E)	Varies	#5	Varies	□
v(E)	16	#9	F less 0'-5"	——
v(E)	24	#9	F less 0'-5"	——
#4(E) bar spiral _ see Side Elevation				

6" Ø and 8" Ø Support Frame

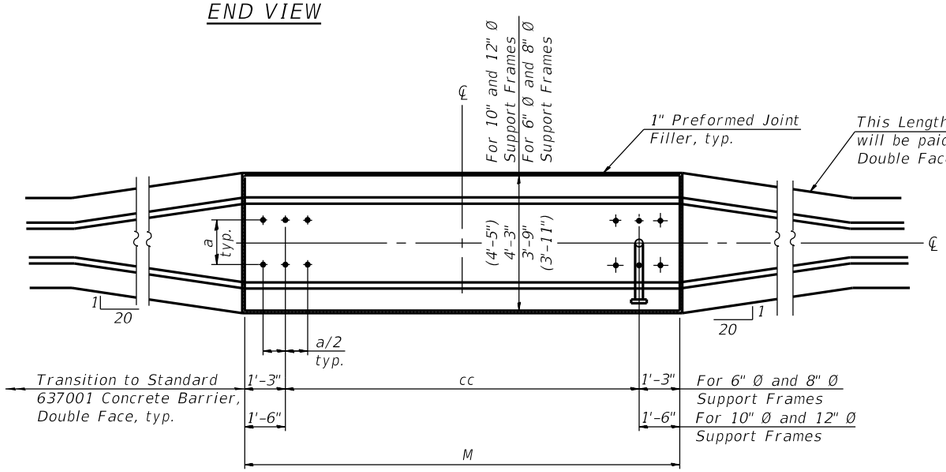
10" Ø and 12" Ø Support Frame



SECTION A-A



SECTION B-B



PLAN

Structure Number	Station	Left Foundation				Right Foundation				Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
1S016I094R051.9	3+99.43	584.68	538.00	42'-2⅛"	46'-8⅛"	587.95	538.00	45'-5½"	49'-11½"	33.8

0S4-MED 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -			
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - MAA	REVISED -			
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS
SHEET NO. SS-24 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	534
		CONTRACT NO. 60X93		
		ILLINOIS	FED. AID PROJECT	

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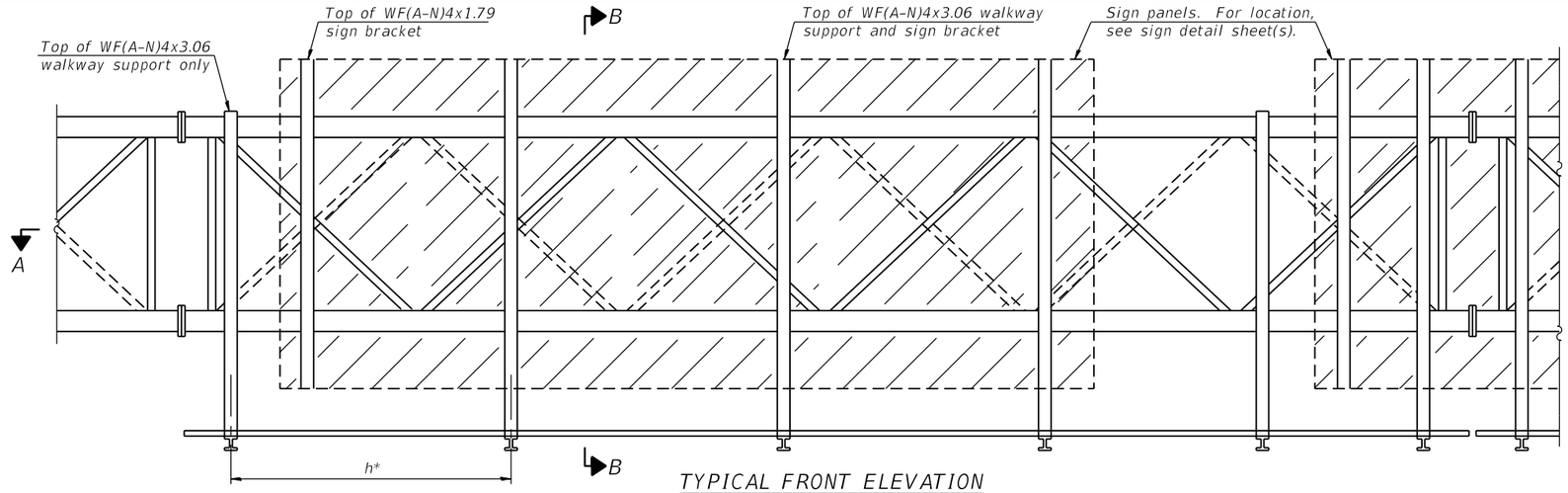
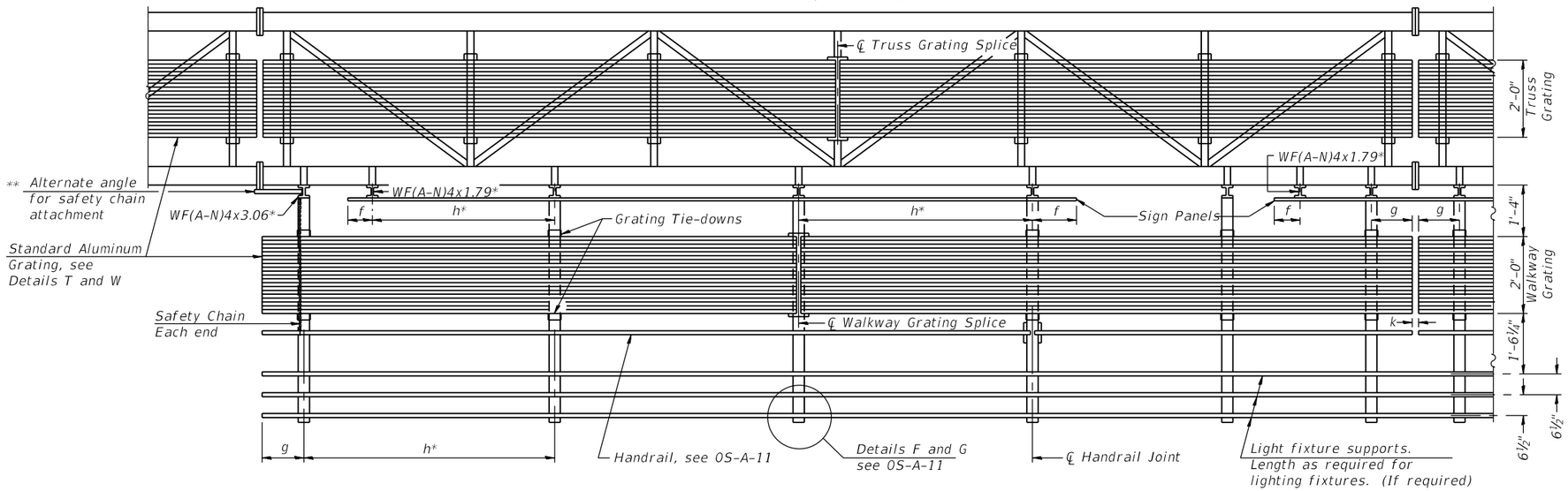
8:58:32 AM



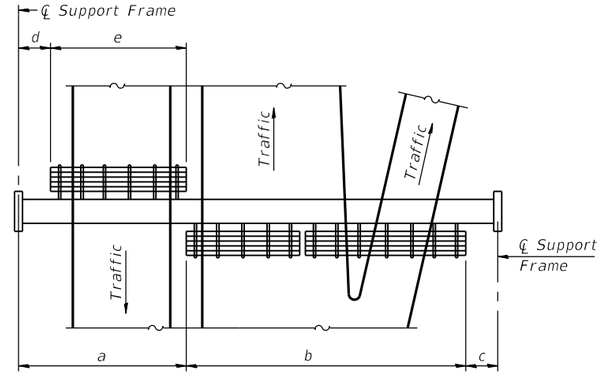
TYPICAL FRONT ELEVATION

With lights and handrail omitted for clarity.
For Section B-B, see Base Sheet 0S-A-10.



SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Handrail joints, grating, and light support splices placed as needed.



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ℄ of nearest support bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)
k = 2" maximum gap between adjacent walkway grating sections and handrail ends

** If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet 0S-A-11.

For Details T and W, Section B-B and Grating Splice Details see Base Sheet 0S-A-10.
For Handrail Details see Base Sheet 0S-A-11.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
1S0161094R051.9	Sta. 3+99.43	-	-	-	-	-	-

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".

Walkway and Truss Grating width dimensions are nominal and may vary ±½" based on available standard widths.

0S-A-9 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES ALUMINUM WALKWAY DETAILS	
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - MAA	REVISED -			
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		SHEET NO. SS-25 OF SS-32 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	535
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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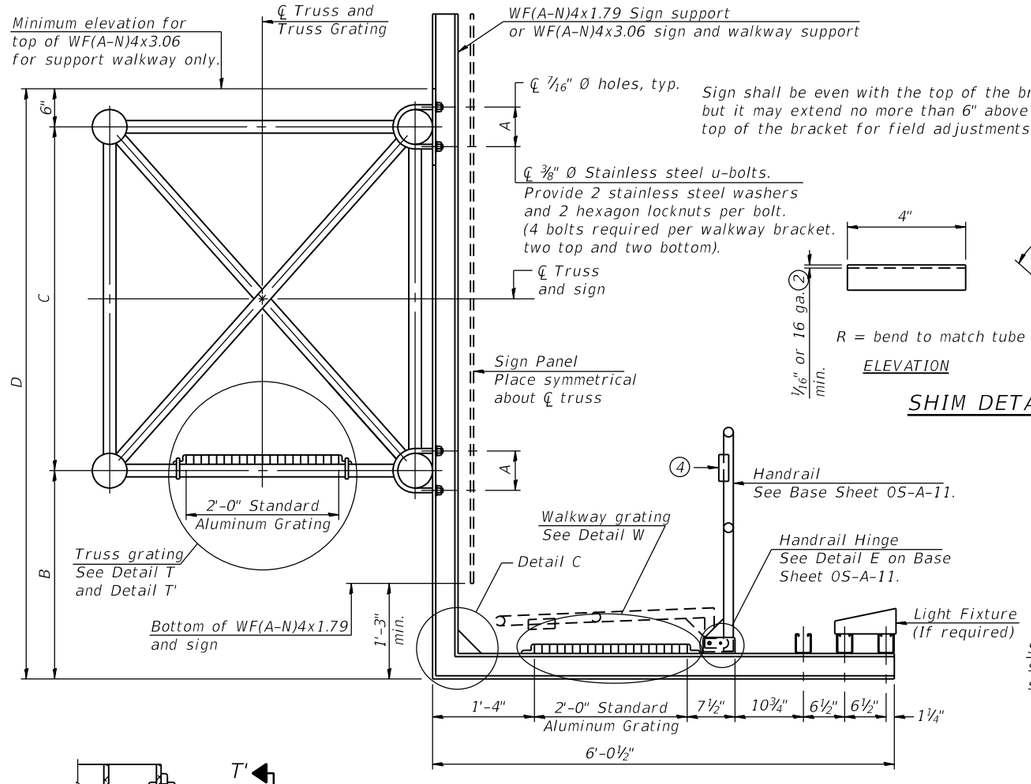
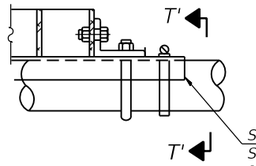


SECTION B–B

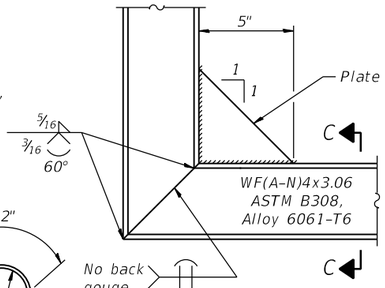


DETAIL T'

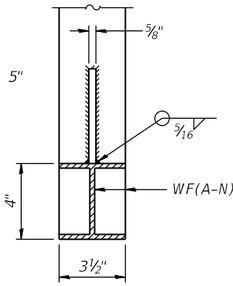
(Truss grating splice)

Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.

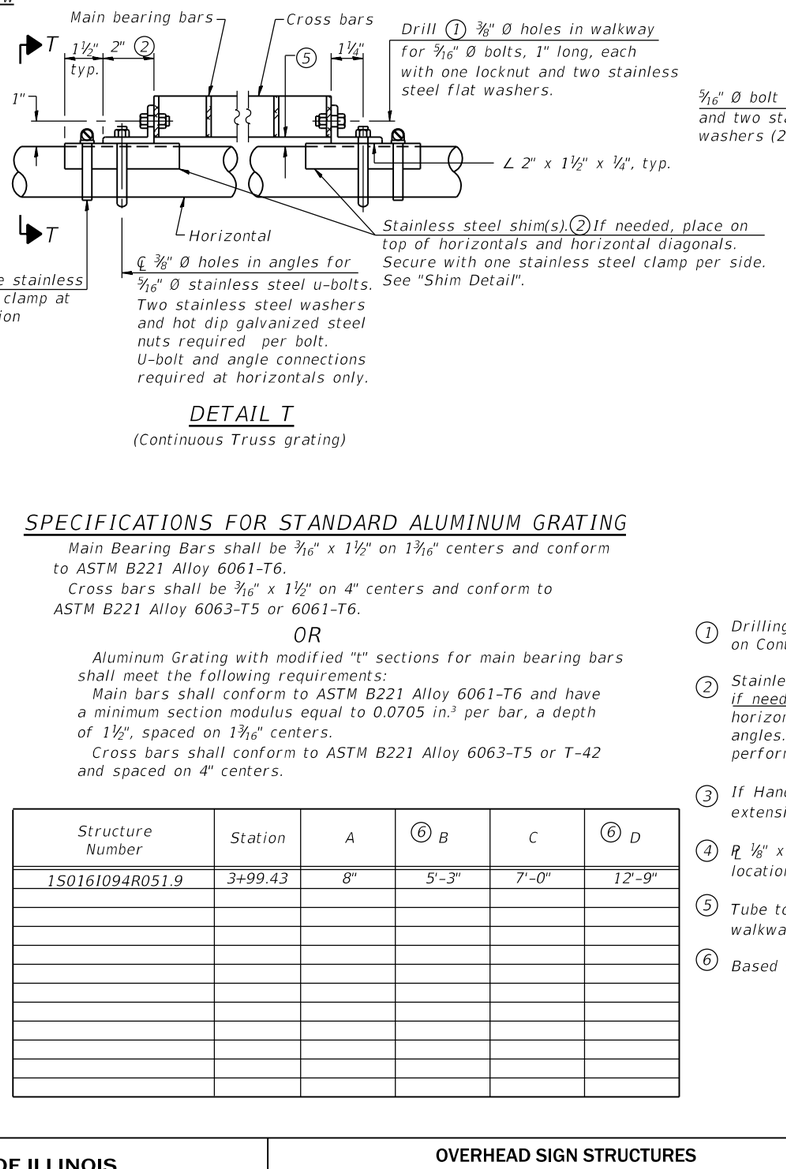
SHIM DETAIL



DETAIL C

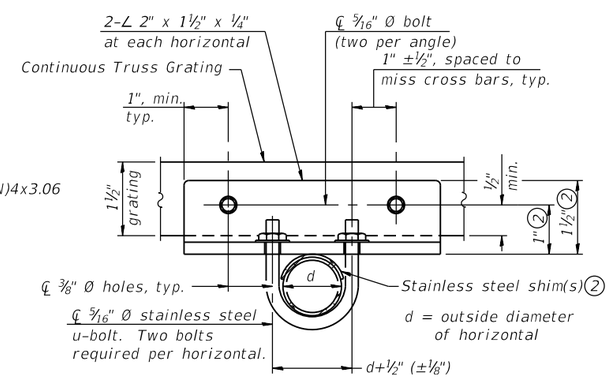


SECTION C–C

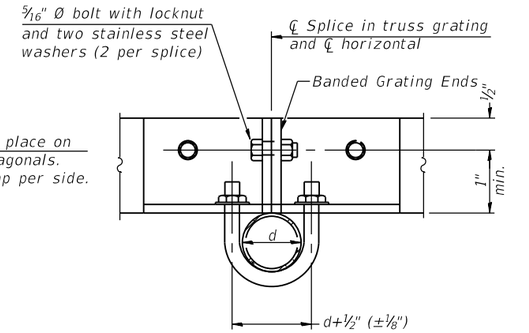


DETAIL T

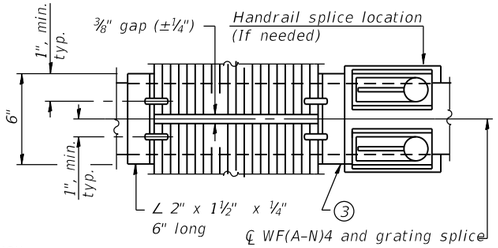
(Continuous Truss grating)



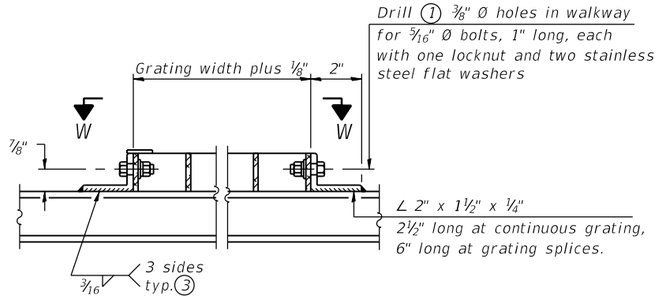
SECTION T–T



SECTION T'–T'

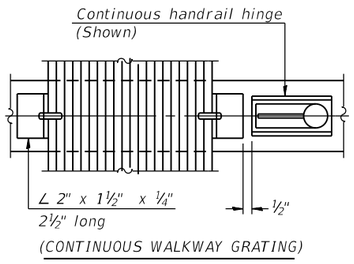


(AT WALKWAY GRATING SPLICE)



DETAIL W

(Walkway grating)



(CONTINUOUS WALKWAY GRATING)

SECTION W–W

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1½" on 1 3/16" centers and conform to ASTM B221 Alloy 6061–T6.

Cross bars shall be 3/16" x 1½" on 4" centers and conform to ASTM B221 Alloy 6063–T5 or 6061–T6.

OR

Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061–T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1½", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063–T5 or T–42 and spaced on 4" centers.

Structure Number	Station	A	⑥ B	C	⑥ D
1S016I094R051.9	3+99.43	8"	5'–3"	7'–0"	12'–9"

1. Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
2. Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
3. If Handrail Joint present, weld angle to WF(A–N)4 and ¼" extension bars. (See Base Sheet 0S–A–11.)
4. PL ⅛" x ½" x 2" welded to handrail posts to protect locations that contact grating.
5. Tube to grating gap may vary from 0 to ½", max. to align walkway, allow for camber, etc.
6. Based on actual height of tallest sign given on 0S–A–1.

0S–A–10 2–17–2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa		DESIGNED - JJS, MA		REVISED -	
		CHECKED - MI, MAI		REVISED -	
PLOT SCALE = N.T.S		DRAWN - MAA		REVISED -	
PLOT DATE = 7/30/2018		CHECKED - MI, MAI		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS
SHEET NO. SS-26 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	536
		CONTRACT NO. 60X93		
		ILLINOIS	FED. AID PROJECT	

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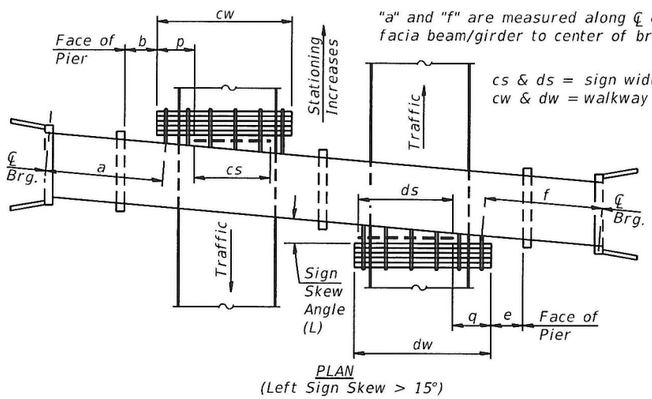
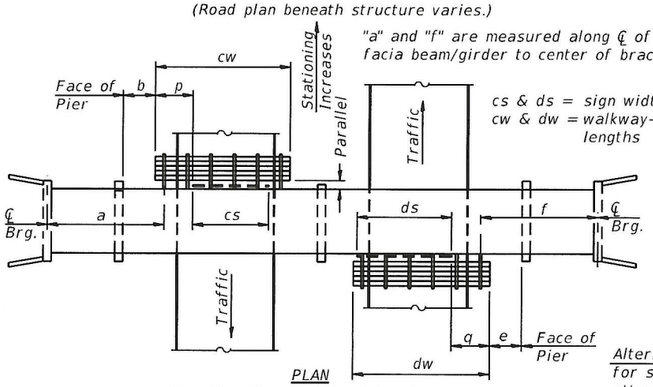


PLAN
(Left Sign Skew > 15°)

WALKWAY AND HANDRAIL SKETCH

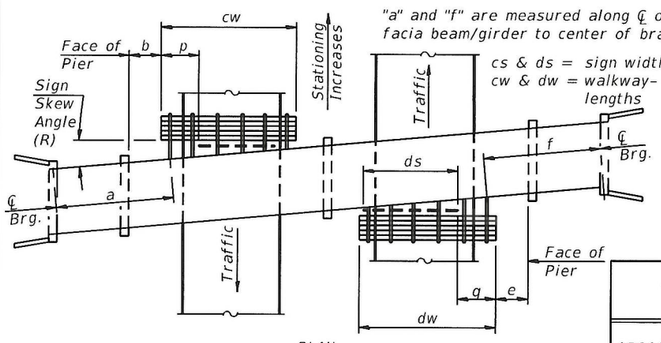
(Road plan beneath structure varies.)



PLAN
(For Sign Skew ≤ 15°, all brackets constant)

WALKWAY AND HANDRAIL SKETCH

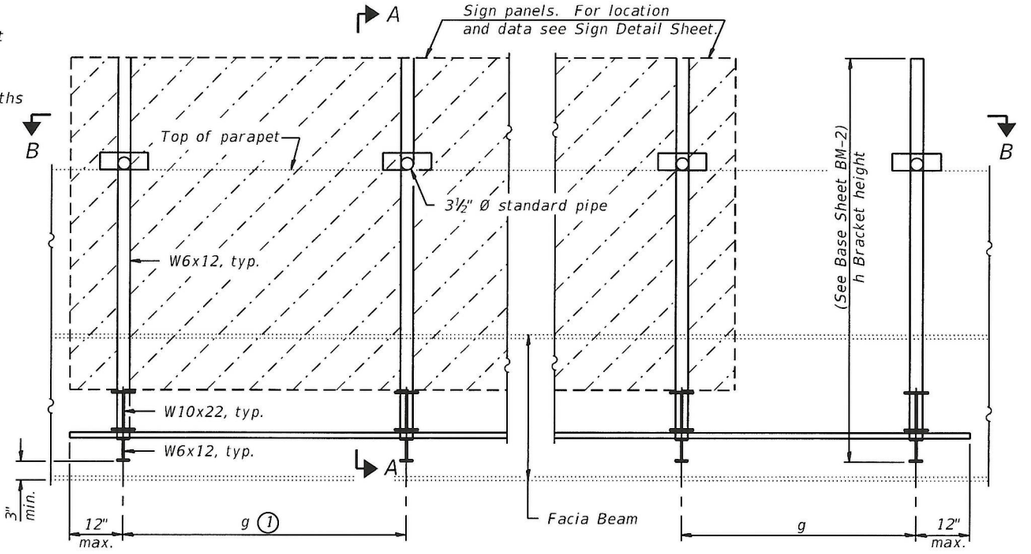
(Road plan beneath structure varies.)



PLAN
(Right Sign Skew > 15°)

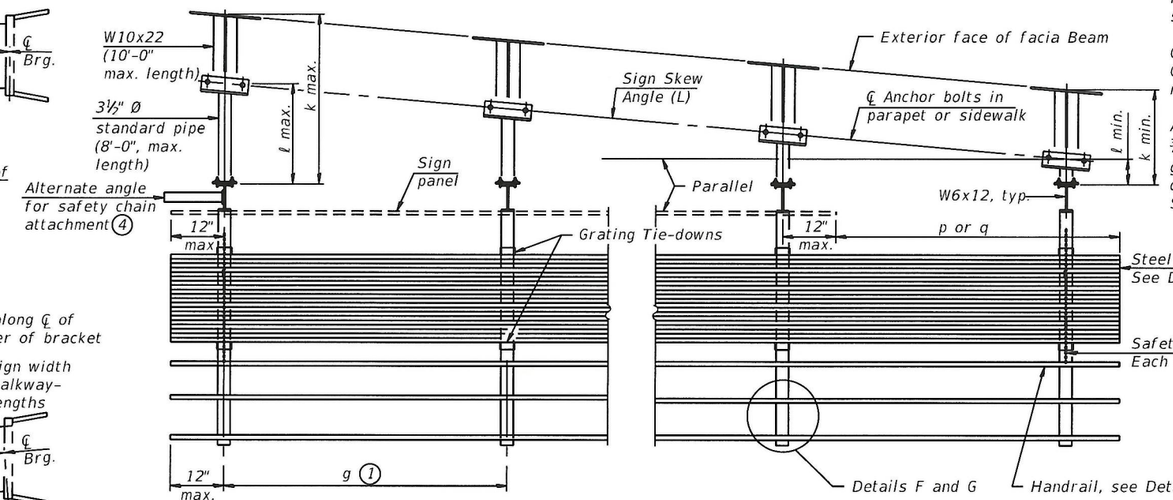
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath structure varies.)



TYPICAL FRONT ELEVATION

(With lights, safety chain and handrail omitted for clarity.)



SECTION B-B

(Shown: Left Sign Skew > 15°)

Structure Number	Sign Skew Angle (L) or (R)	Bridge Station	Bridge Structure Number	Contract Route Designation	a	b	cs	cw	ds	dw	e	f	g	No. of Brackets (Total)	p	q	Total Grating/ Hndrl. Lengths (cw + dw)
1B016I290R029.6	-	3703 + 94.18	016-1708	FAI 290	-	-	-	-	16'-6"	-	-	7'-0"	5'-2"	4	-	-	-

Dimensions a, b, e, f & g may vary as approved by the Engineer, see (1).
When cw < cs and/or dw < ds, use alternate brackets without walkway supports where applicable, see (3).

GENERAL NOTES

SPECIFICATIONS:

DESIGN: AASHTO Standard Specifications for Structural Supports for (2) Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

MINIMUM CLEARANCE: 3" greater than bridge members at all locations. (All Obstructions)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code (Steel) and the Standard Specificiations.

MATERIALS: All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 35,000 p.s.i., or A500 Grade B or C with a minimum yield of 46,000 p.s.i. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 (M183, M223 Gr. 50,).

HIGH STRENGTH BOLTS: All bolts, washers, nuts and locknuts shall satisfy the requirements of ASTM designation A307 unless noted as "H.S." which shall require AASHTO M164 (A325), ASTM A449, or approved alternate. All fasteners shall be hot dip galvanized per AASHTO M232 unless otherwise specified.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: All-threaded rod shall conform to ASTM F1554 Grade 105, ¾" Ø x 12" long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment in concrete shall be 9".

(1) Bracket spacing g ≤ 6'-0", max. Spacing shall be uniform if possible but may vary ±6" to miss existing obstruction (rail post, light poles, web stiffeners, splice plates, etc.). Adjust bracket lengths accordingly on skewed structures.

(2) Any design modifications shall be based on the current version of applicable specifications and submitted for the Engineer's approval.

(3) Unit price includes grating, handrail, brackets, supports, anchor bolts, fasteners, fabrication, delivery, erection, field drilling and other necessary items. Limits of payment are based on grating length (cw, dw) unless otherwise specified. For Safety Chain Details and Details D, F and G, see Base Sheet BM-4.

(4) If walkway bracket at safety chain location is behind sign, add angle to bracket. See detail on Base Sheet BM-4.

TOTAL BILL OF MATERIAL

(3) OVERHEAD SIGN STRUCTURE-BRIDGE MOUNTED	Foot	16.5

STATE OF ILLINOIS
MOUSSA A. ISSA
081-005738
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed Mousso A. Issa
Dr. Mousso A. Isso, S.E. Il. Lic. No. 081-005738
Expires 11-30-2018
Date 07/30/18
For Sheets SS-27 thru SS-29

BM-1 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE MOUNT SIGN STRUCTURES GENERAL PLAN AND ELEVATION
	CHECKED - MI, MAI	REVISED -		
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -		SHEET NO. SS-27 OF SS-32 SHEETS
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	537
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: pw:\\IG17479-PWINT.aecomonline.local:AECOM_DS02_NAIDocuments\01 Americas\Transportation\60269938 CirclePhase_II\000_CADD\008_Structural\Structure_016-1718\Working\Sign Structures\016171 8-60X93-SS401-SignStruct
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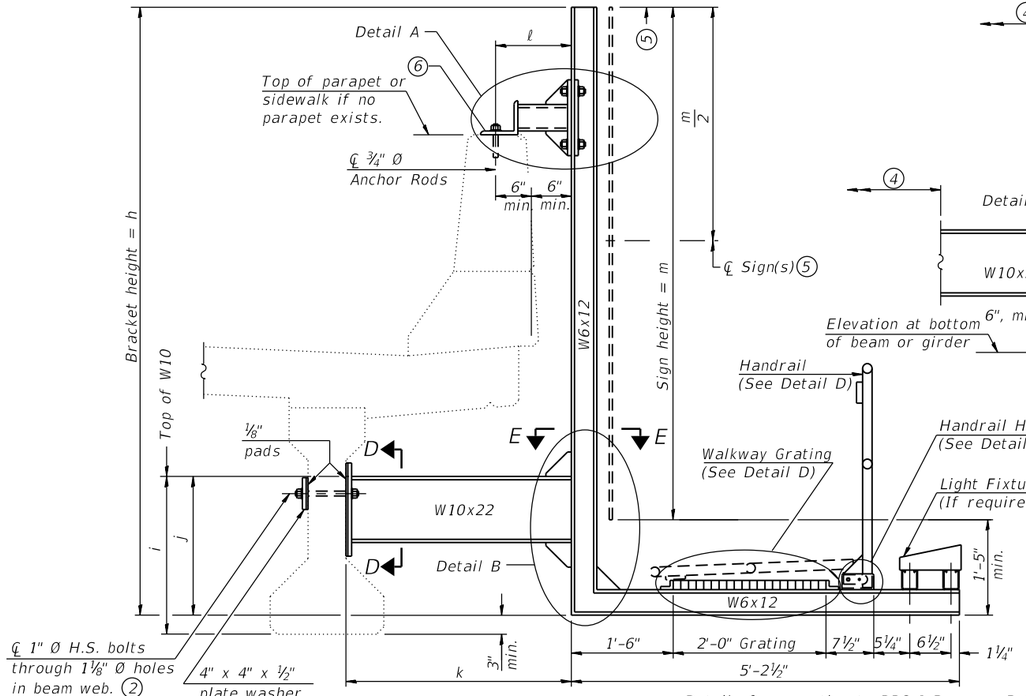
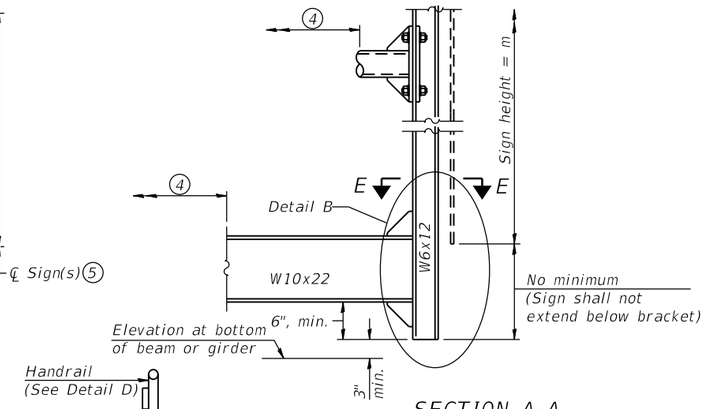


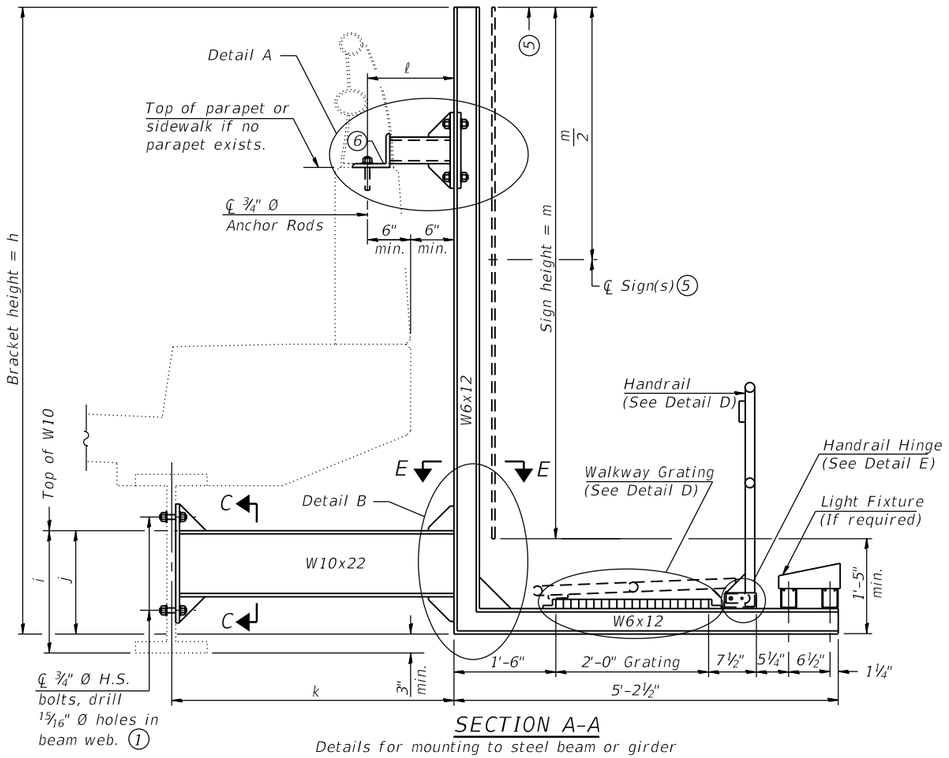
SECTION A-A

Details for mounting to PPC I Beam or Bulb "T" & Details for mounting to parapet w/o rail



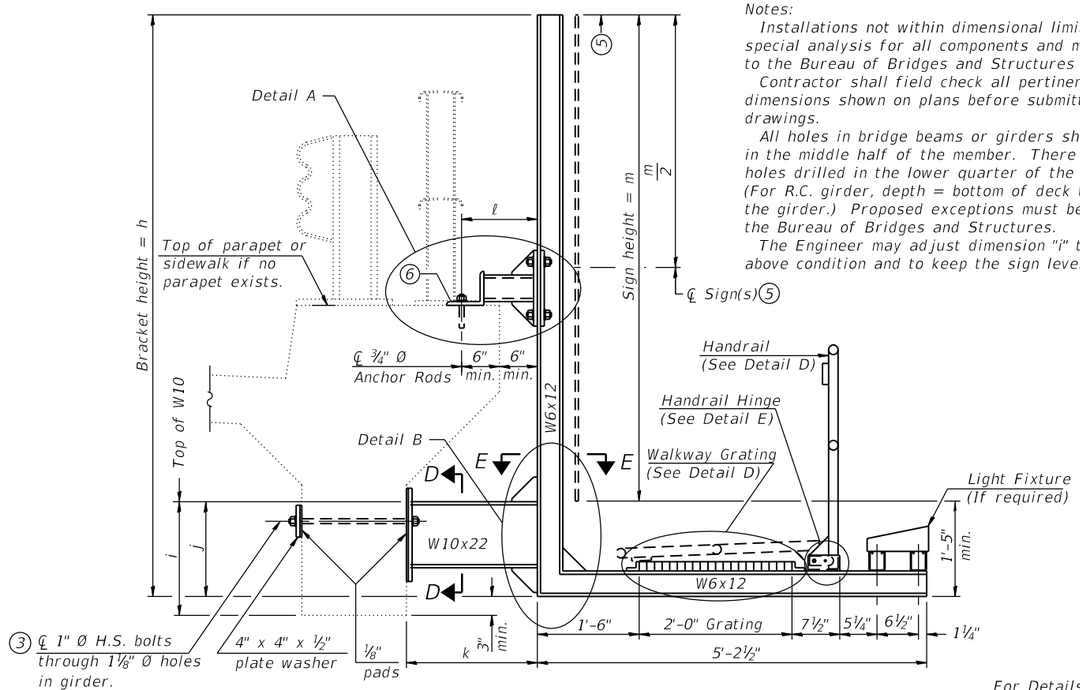
SECTION A-A

Alternate with no lights or walkways



SECTION A-A

Details for mounting to steel beam or girder & Details for mounting with existing parapet mounted rail



SECTION A-A

Details for mounting to integral reinforced concrete girder & Details for mounting on safety curb with surface-mount bridge rail

Notes:

Installations not within dimensional limits shown require special analysis for all components and must be submitted to the Bureau of Bridges and Structures for approval.

Contractor shall field check all pertinent existing bridge dimensions shown on plans before submitting shop drawings.

All holes in bridge beams or girders should be located in the middle half of the member. There shall be no holes drilled in the lower quarter of the member's depth. (For R.C. girder, depth = bottom of deck to bottom of the girder.) Proposed exceptions must be approved by the Bureau of Bridges and Structures.

The Engineer may adjust dimension "i" to meet the above condition and to keep the sign level.

(1) Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.

(2) For new PPC I beams, holes shall be formed during casting. For existing PPC I beams, prestressing strand locations shall be determined and spaced to miss strands by 6", min. Minimize spalling during field drilling of existing beams.

(3) For new construction, form holes. For existing RC beams, locate primary reinforcement and space holes to miss by 6", min. Minimize spalling and concrete fracturing/damage during field drilling of existing concrete. Spalls over ¼" deep or beyond the coverage of the 4x4 plate washer shall be repaired with epoxy mortar before installing washer.

(4) For attachment details of 3½" pipe and W10x22, see other sections as applicable.

(5) Sign shall not extend more than 6" above top of bracket, and this dimension may vary to keep sign level if bridge is on grade or vertical curve. Multiple signs of various heights shall share a common horizontal centerline and use equal bracket heights. If no sign is attached to a W6x12 vertical (bracket only supporting walkway), dimension h shall be the same as an adjacent bracket with a sign attached, unless Engineer specifically directs shorter brackets due to locational restraints on future uses. (See Detail A for minimum bracket height.)

(6) For bridge mounted sign structures installed on new bridges with railing, during design, bracket spacing must be coordinated with railing post spacing and the Contractor must install upper brackets prior to railing installation. For bridge mounted sign structures installed on existing bridges with railing, during design, brackets spacing must be coordinated with railing post spacing and the Contractor must temporarily remove sections of railing to facilitate upper bracket installation. If it is determined during design that existing railings can't be removed, alternate upper connection details must be developed for the contract plans and approved by the Bureau of Bridges and Structures.

Structure Number	Station	h	i	j	k max. (10'-0" max.)	ℓ max. (8'-0" max.)	m (15'-0" max.)
1B016I290R029.6	Sta. 5145+58.00	13'-5"	1'-9¼"	1'-4"	4'-0"	1'-9"	12'-0"

For Details A & B, Sections C-C, D-D and E-E, see Base Sheet BM-3.
For Details D & E, see Base Sheet BM-4.

BM-2

2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -			
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -			
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

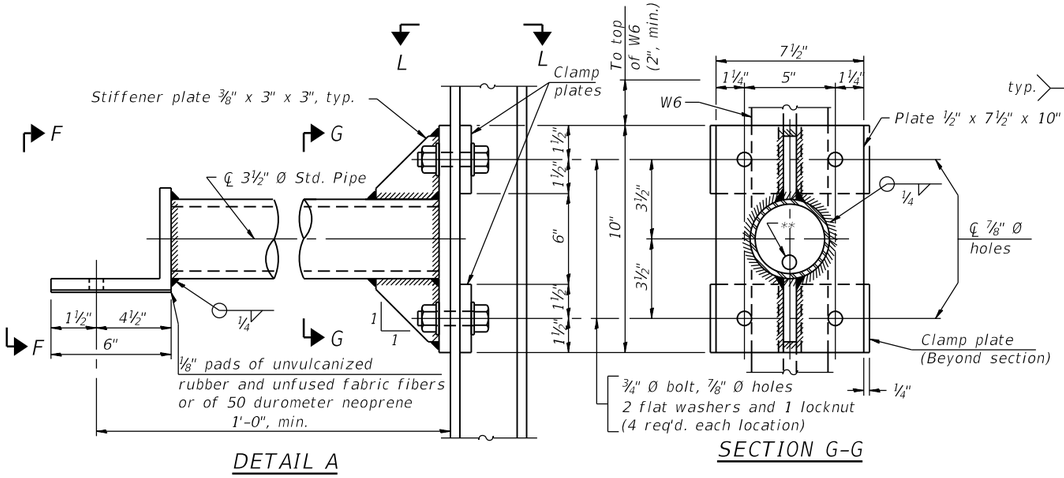
BRIDGE MOUNT SIGN STRUCTURES
WALKWAY AND CONNECTION DETAILS

SHEET NO. SS-28 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	538
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

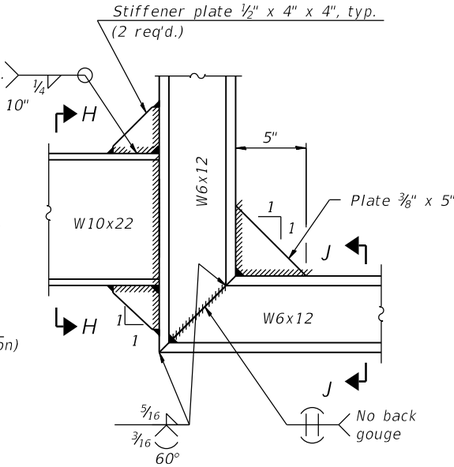
FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\008_Structural\Structural Structure_016-1718\Working\Sign Structures\016 1718-60X93-SS402-SignStruct

8:58:10 AM

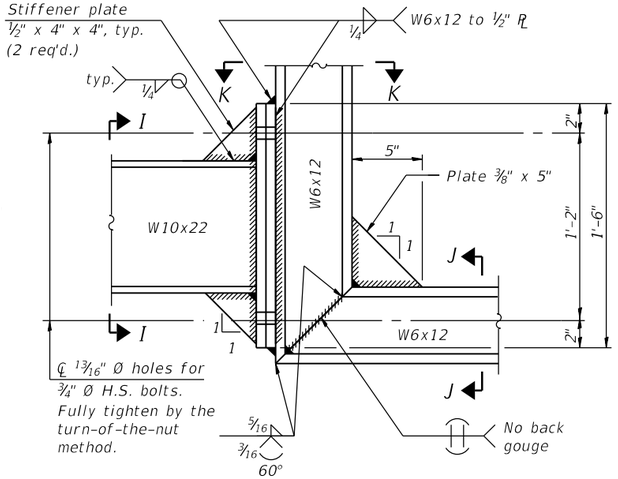


DETAIL A

SECTION G-G

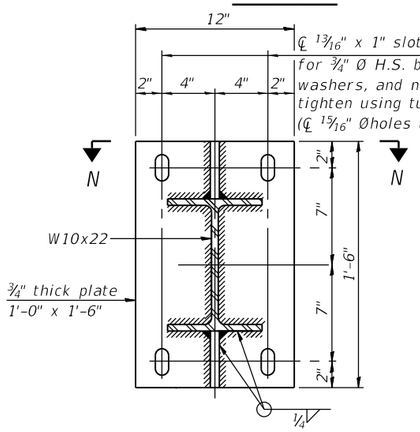


DETAIL B – WELDED W10x22 TO W6x12 CONNECTION



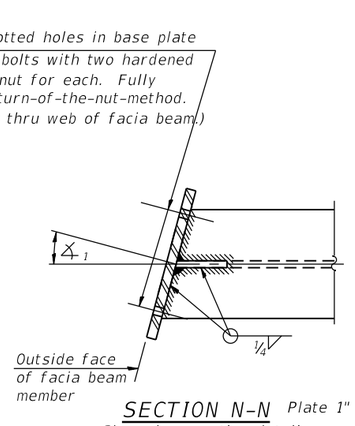
DETAIL B – ALTERNATE BOLTED W10x22 TO W6x12 CONNECTION

Alternate may be substituted by contractor to facilitate construction or galvanizing, especially on long struts for skewed bridges.



SECTION C-C

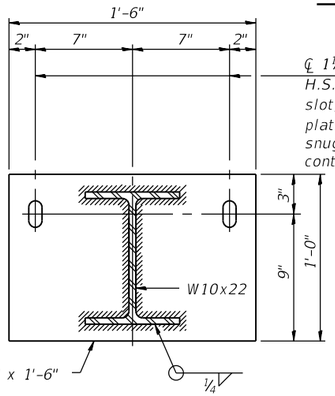
Steel beam or girder connection plate details



SECTION N-N

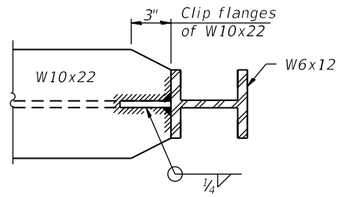
Skewed connection detail for W10x22 to facia beam.

Plate 1" x 12" x 1'-6"

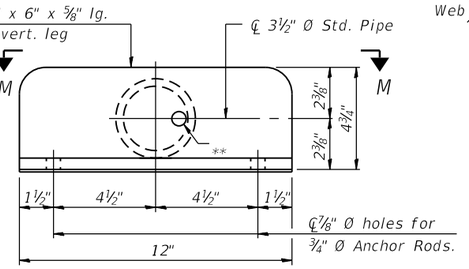


SECTION D-D

Concrete beam or girder connection plate details.

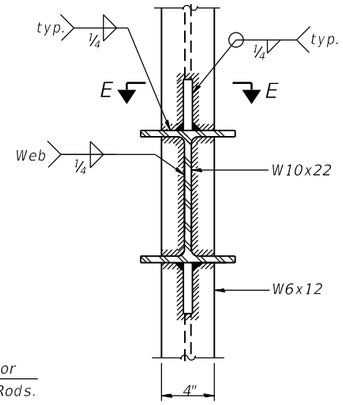


SECTION E-E

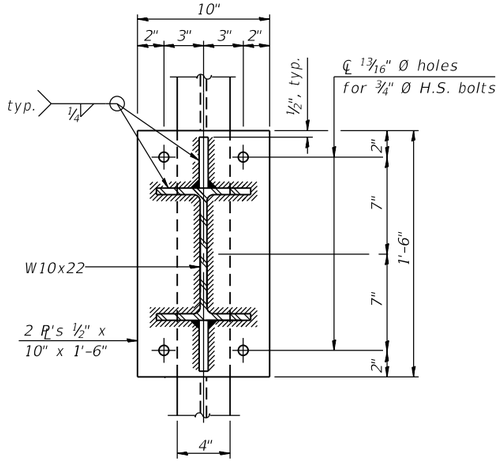


VIEW F-F

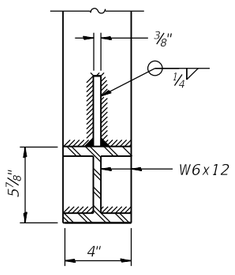
** 13/16" Ø holes for galvanizing. After galvanizing, install ⅞" Ø A307 hot-dip galvanized bolt to close hole in angle. (No bolt required in ½" plate.)



SECTION H-H

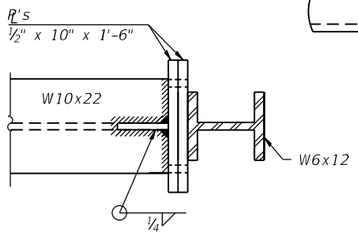


SECTION I-I

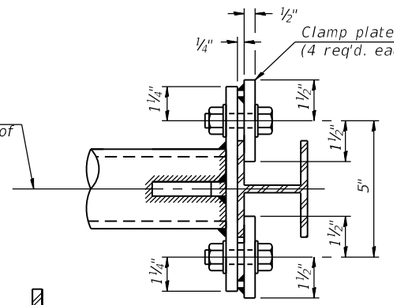


SECTION J-J

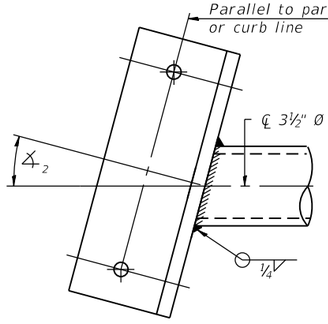
Note: For constant slab overhang at facia beam, ∠1 = ∠2 = sign angle. For flared beams or other special cases where ∠1 ≠ ∠2, ∠1 = sign angle.



SECTION K-K

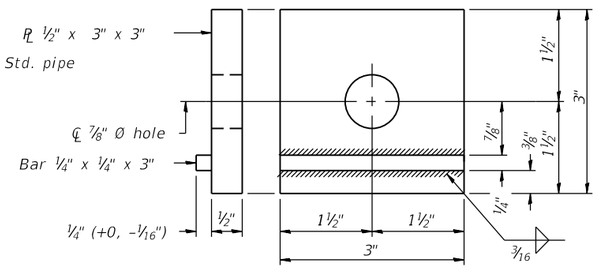


SECTION L-L



SECTION M-M

Skewed connection detail for 3½" Ø pipe to parapet.



CLAMP PLATE DETAILS

BM-3

2-17-2017

HBM ENGINEERING GROUP, LLC	USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE MOUNT SIGN STRUCTURES CONNECTION DETAILS
		CHECKED - MI, MAI	REVISED -		
	PLOT SCALE = N.T.S	DRAWN - EK	REVISED -		SHEET NO. SS-29 OF SS-32 SHEETS
	PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	539
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_D502_NAIDocuments\01 Americas\Transportation\60269938 CirclePhase_II\000_CAD\008_Structural\Structure_016-1718\Working\Sign Structures\016178-60X93-SS403-SignStruct

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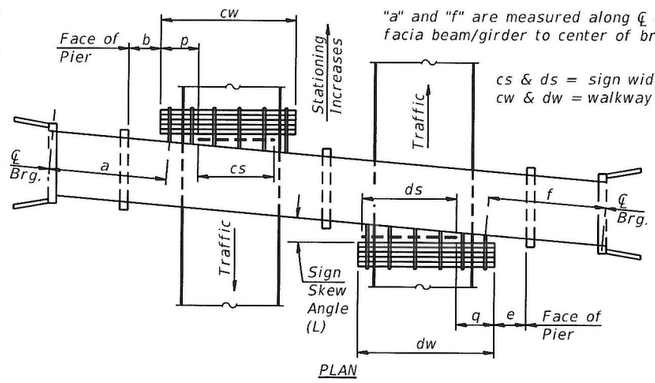
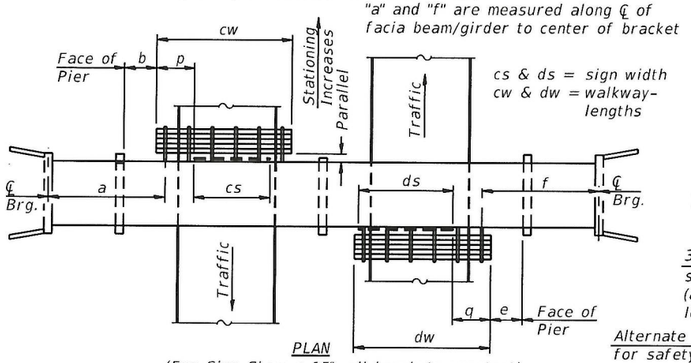


(Left Sign Skew > 15°)

WALKWAY AND HANDRAIL SKETCH

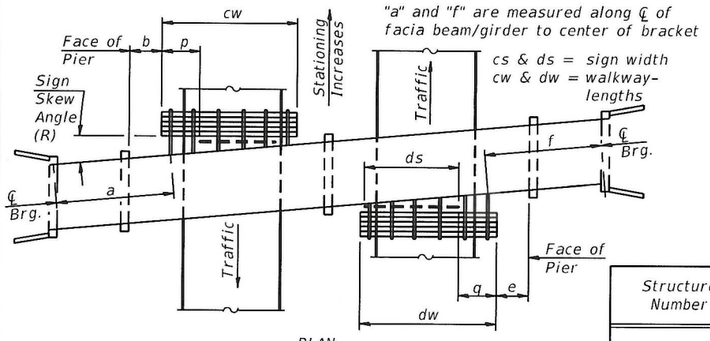
(Road plan beneath structure varies.)



(For Sign Skew ≤ 15°, all brackets constant)

WALKWAY AND HANDRAIL SKETCH

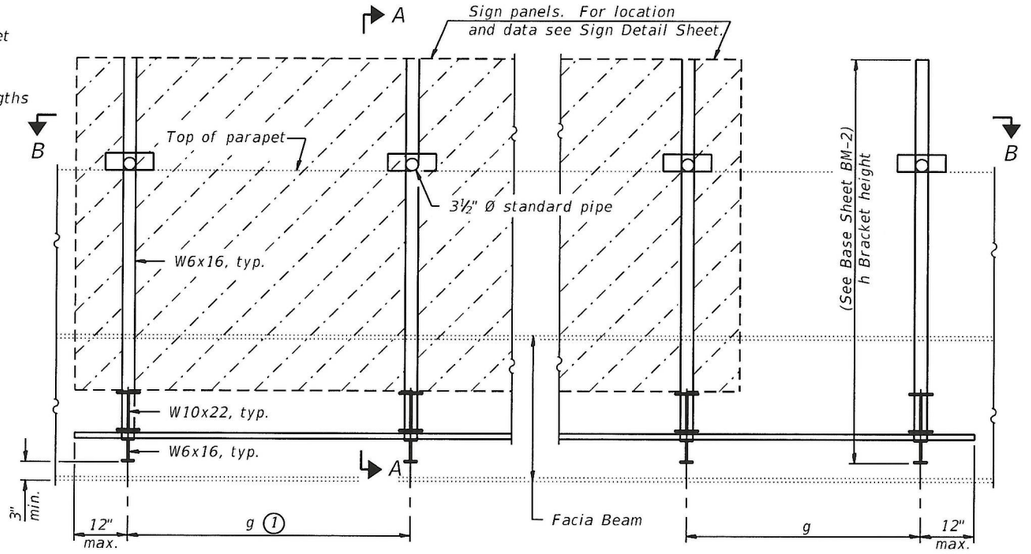
(Road plan beneath structure varies.)



(Right Sign Skew > 15°)

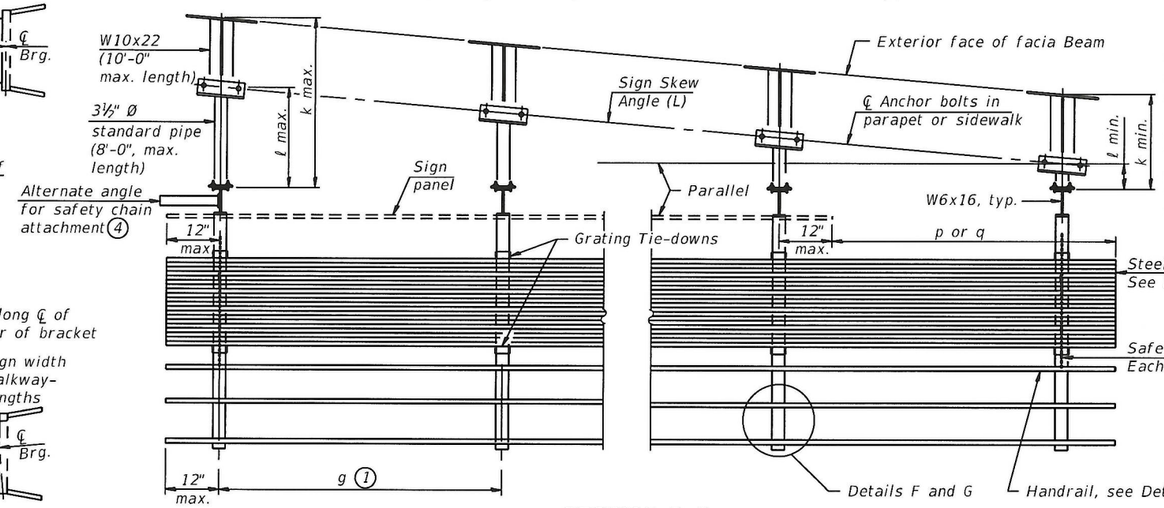
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath structure varies.)



TYPICAL FRONT ELEVATION

(With lights, safety chain and handrail omitted for clarity.)



SECTION B-B

(Shown: Left Sign Skew > 15°)

Structure Number	Sign Skew Angle (L) or (R)	Bridge Station	Bridge Structure Number	Contract Route Designation	a	b	cs	cw	ds	dw	e	f	g	No. of Brackets (Total)	p	q	Total Grating/ Hndrl. Lengths (cw + dw)
1B0161094L051.09	-	xxxx	016-0608	FAI 90/94	8'-4"	-	32'-6"	-	-	-	-	-	Varies	6	-	-	-

Dimensions a, b, e, f & g may vary as approved by the Engineer, see (1).
When cw < cs and/or dw < ds, use alternate brackets without walkway supports where applicable, see (3).

GENERAL NOTES

SPECIFICATIONS:

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications") (2)

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

MINIMUM CLEARANCE: 3" greater than bridge members at all locations. (All Obstructions)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code (Steel) and the Standard Specificiations.

MATERIALS: All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 35,000 p.s.i., or A500 Grade B or C with a minimum yield of 46,000 p.s.i. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 (M183, M223 Gr. 50,).

HIGH STRENGTH BOLTS: All bolts, washers, nuts and locknuts shall satisfy the requirements of ASTM designation A307 unless noted as "H.S." which shall require AASHTO M164 (A325), ASTM A449, or approved alternate. All fasteners shall be hot dip galvanized per AASHTO M232 unless otherwise specified.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: All-threaded rod shall conform to ASTM F1554 Grade 105, ¾" Ø x 12" long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment in concrete shall be 9".

(1) Bracket spacing g ≤ 6'-0", max. Spacing shall be uniform if possible but may vary ±6" to miss existing obstruction (rail post, light poles, web stiffeners, splice plates, etc.). Adjust bracket lengths accordingly on skewed structures.

(2) Any design modifications shall be based on the current version of applicable specifications and submitted for the Engineer's approval.

(3) Unit price includes grating, handrail, brackets, supports, anchor bolts, fasteners, fabrication, delivery, erection, field drilling and other necessary items. Limits of payment are based on grating length (cw, dw) unless otherwise specified. For Safety Chain Details and Details D, F and G, see Base Sheet BM-4.

(4) If walkway bracket at safety chain location is behind sign, add angle to bracket. See detail on Base Sheet BM-4.

TOTAL BILL OF MATERIAL

(3) OVERHEAD SIGN STRUCTURE-BRIDGE MOUNTED	Foot	32.5

STATE OF ILLINOIS
MOUSSA A. ISSA
081-005738
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed Mousa A. Issa
Dr. Mousso A. Isso, S.E. Il. Lic. No. 081-005738
Expires 11-30-2018
Date 07/30/18 For Sheets SS-30 thru SS-32

BM-1-Special 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE MOUNT SIGN STRUCTURES GENERAL PLAN AND ELEVATION	
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -			
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		SHEET NO. SS-30 OF SS-32 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	540
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

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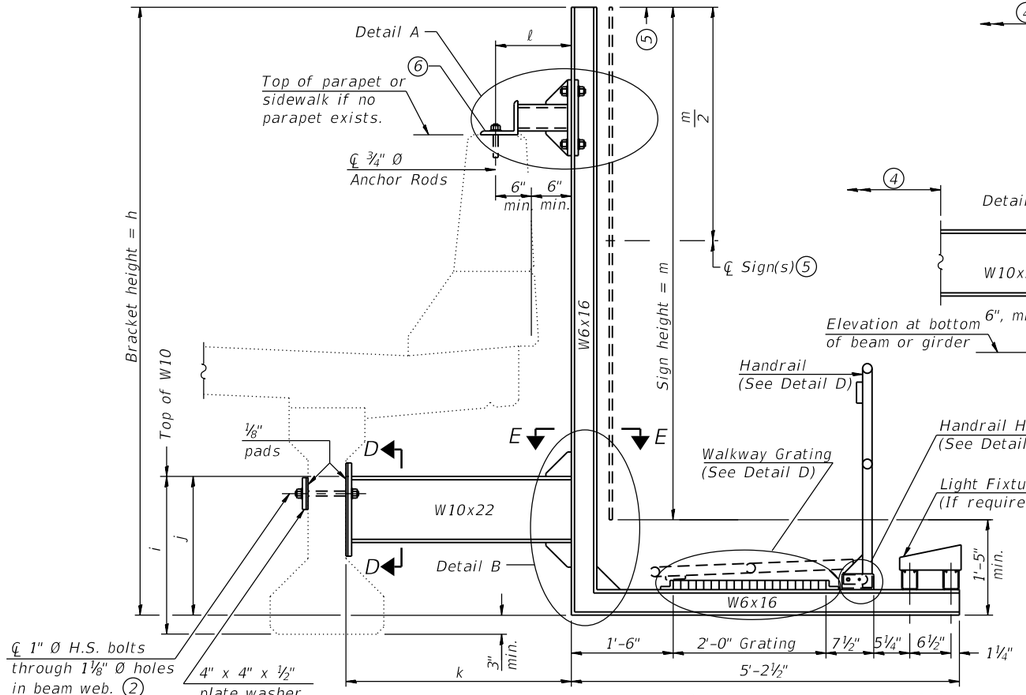
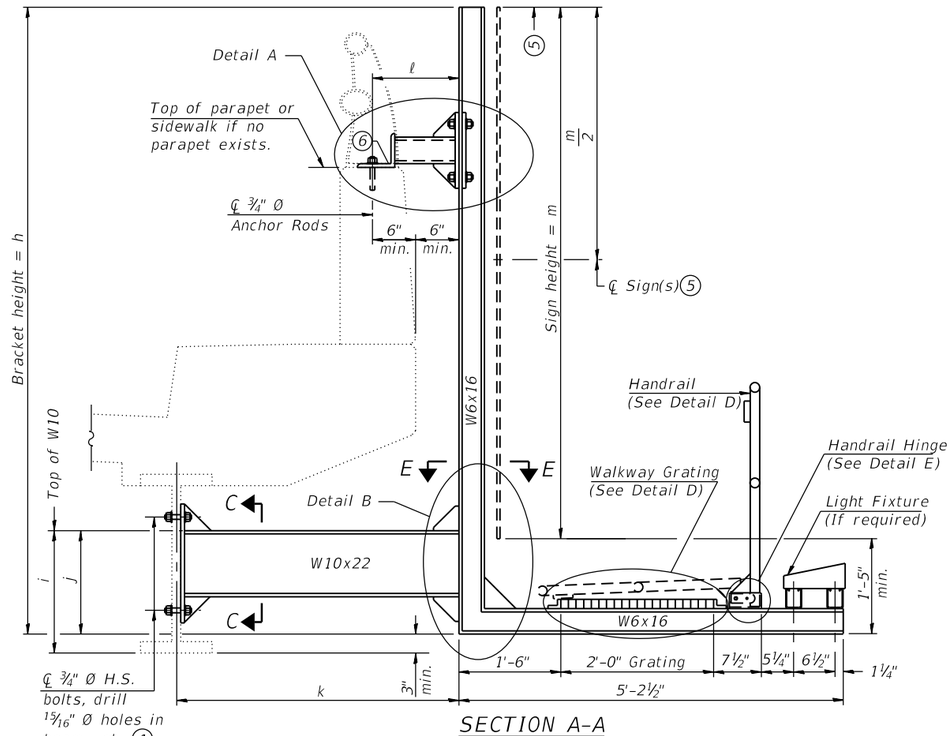


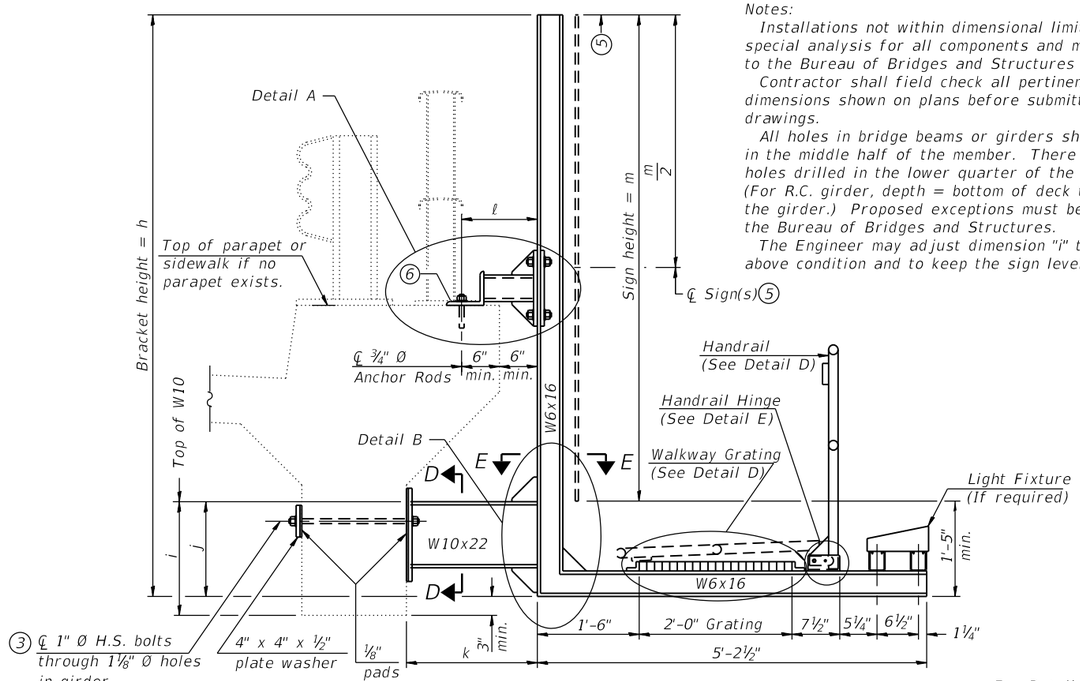
SECTION A-A

Details for mounting to PPC I Beam or Bulb "T" & Details for mounting to parapet w/o rail



SECTION A-A

Details for mounting to steel beam or girder & Details for mounting with existing parapet mounted rail



SECTION A-A

Details for mounting to integral reinforced concrete girder & Details for mounting on safety curb with surface-mount bridge rail

Notes:

Installations not within dimensional limits shown require special analysis for all components and must be submitted to the Bureau of Bridges and Structures for approval.

Contractor shall field check all pertinent existing bridge dimensions shown on plans before submitting shop drawings.

All holes in bridge beams or girders should be located in the middle half of the member. There shall be no holes drilled in the lower quarter of the member's depth. (For R.C. girder, depth = bottom of deck to bottom of the girder.) Proposed exceptions must be approved by the Bureau of Bridges and Structures.

The Engineer may adjust dimension "i" to meet the above condition and to keep the sign level.

SECTION A-A

Alternate with no lights or walkways

① Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.

② For new PPC I beams, holes shall be formed during casting. For existing PPC I beams, prestressing strand locations shall be determined and spaced to miss strands by 6", min. Minimize spalling during field drilling of existing beams.

③ For new construction, form holes. For existing RC beams, locate primary reinforcement and space holes to miss by 6", min. Minimize spalling and concrete fracturing/damage during field drilling of existing concrete. Spalls over ¼" deep or beyond the coverage of the 4x4 plate washer shall be repaired with epoxy mortar before installing washer.

④ For attachment details of 3½" pipe and W10x22, see other sections as applicable.

⑤ Sign shall not extend more than 6" above top of bracket, and this dimension may vary to keep sign level if bridge is on grade or vertical curve. Multiple signs of various heights shall share a common horizontal centerline and use equal bracket heights. If no sign is attached to a W6x16 vertical (bracket only supporting walkway), dimension h shall be the same as an adjacent bracket with a sign attached, unless Engineer specifically directs shorter brackets due to locational restraints on future uses. (See Detail A for minimum bracket height.)

⑥ For bridge mounted sign structures installed on new bridges with railing, during design, bracket spacing must be coordinated with railing post spacing and the Contractor must install upper brackets prior to railing installation. For bridge mounted sign structures installed on existing bridges with railing, during design, brackets spacing must be coordinated with railing post spacing and the Contractor must temporarily remove sections of railing to facilitate upper bracket installation. If it is determined during design that existing railings can't be removed, alternate upper connection details must be developed for the contract plans and approved by the Bureau of Bridges and Structures.

Structure Number	Station	h	i	j	k max. (10'-0" max.)	ℓ max. (8'-0" max.)	m (15'-0" max.)
1B016I094L051.09	xxxx	19'-0"	Match	Match	Match	Match	17'-6"
			Exist.	Exist.	Exist.	Exist.	
			(VIF)	(VIF)	(VIF)	(VIF)	

For Details A & B, Sections C-C, D-D and E-E, see Base Sheet BM-3.
For Details D & E, see Base Sheet BM-4.

BM-2-Special 2-17-2017

HBM ENGINEERING GROUP, LLC

USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -			
	CHECKED - MI, MAI	REVISED -			
PLOT SCALE = N.T.S	DRAWN - EK	REVISED -			
PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE MOUNT SIGN STRUCTURES
WALKWAY AND CONNECTION DETAILS
SHEET NO. SS-31 OF SS-32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	541
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

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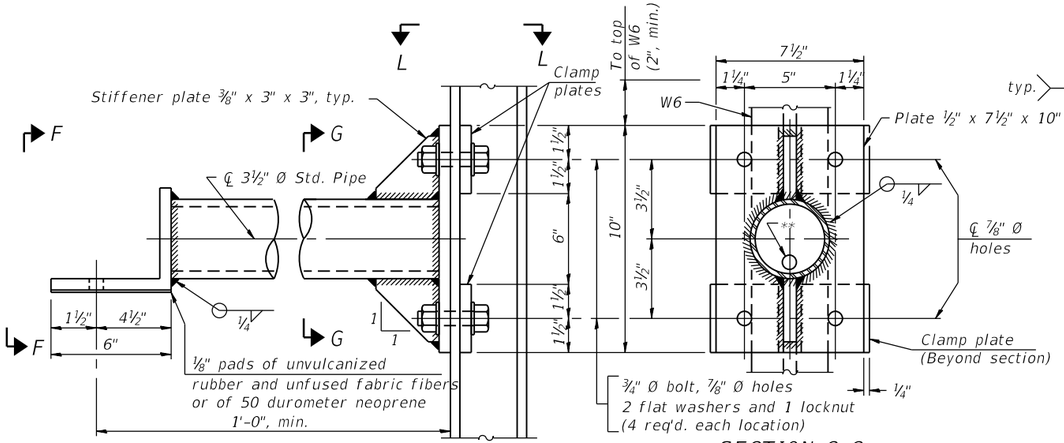
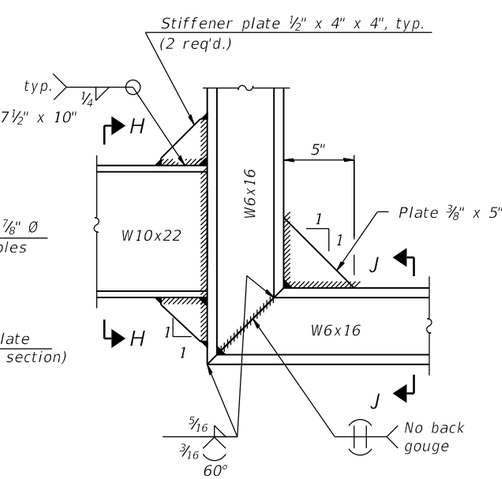
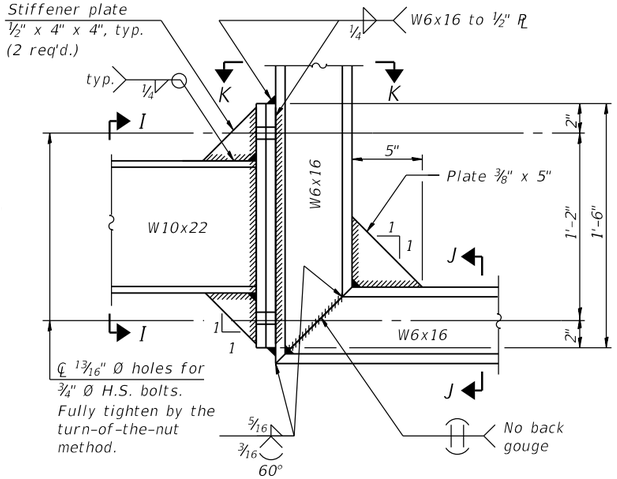


DETAIL A

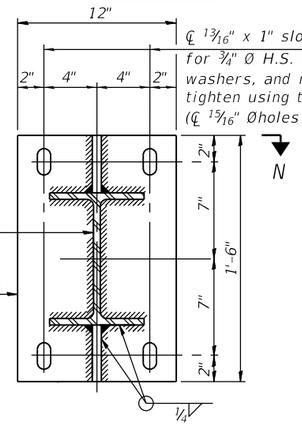


DETAIL B – WELDED W10x22 TO W6x16 CONNECTION



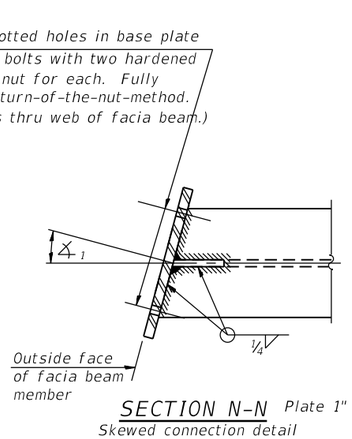
DETAIL B – ALTERNATE BOLTED W10x22 TO W6x16 CONNECTION

Alternate may be substituted by contractor to facilitate construction or galvanizing, especially on long struts for skewed bridges.



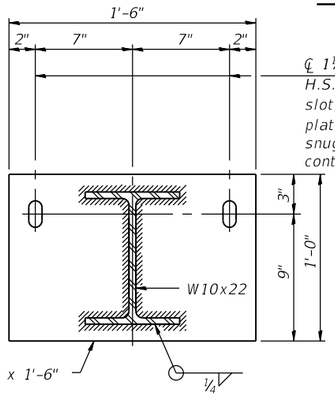
SECTION C–C

Steel beam or girder connection plate details



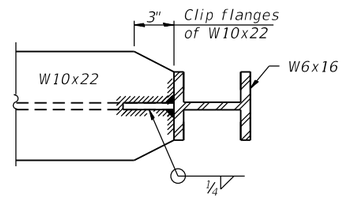
SECTION N–N

Skewed connection detail for W10x22 to facia beam.

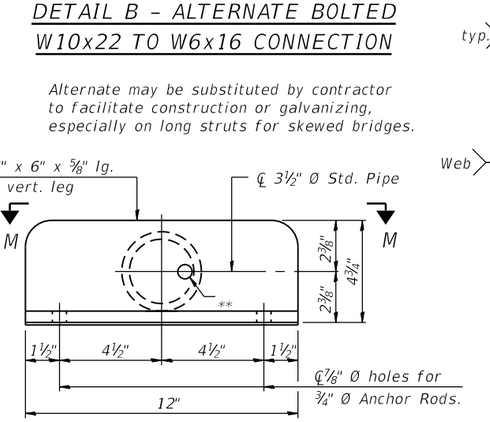


SECTION D–D

Concrete beam or girder connection plate details.

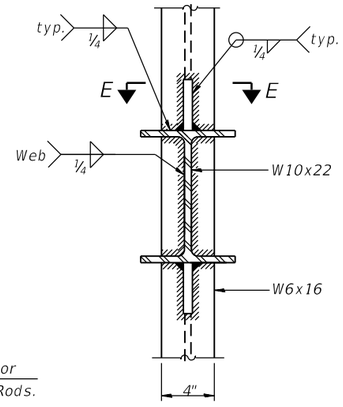


SECTION E–E

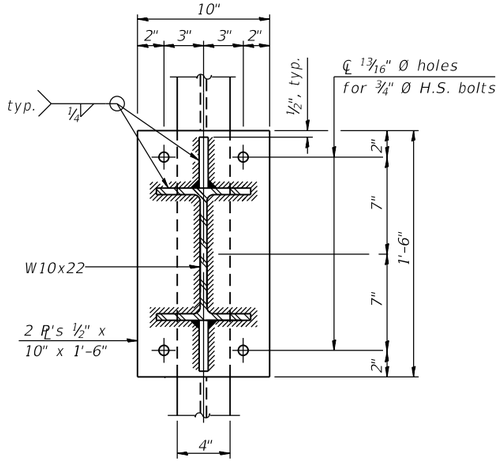


VIEW F–F

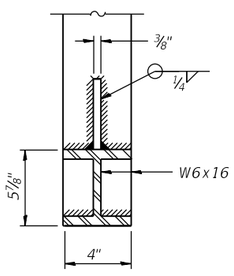
** 13⁄16" Ø holes for galvanizing. After galvanizing, install ⅞" Ø A307 hot-dip galvanized bolt to close hole in angle. (No bolt required in ½" plate.)



SECTION H–H

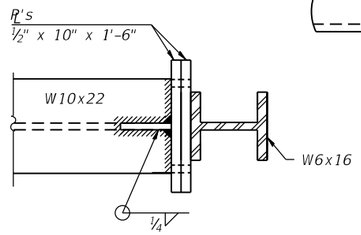


SECTION I–I

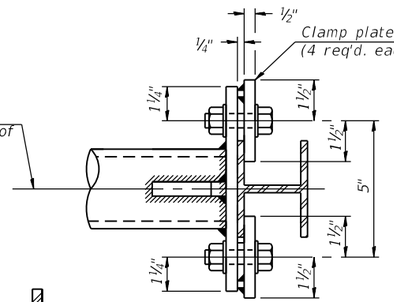


SECTION J–J

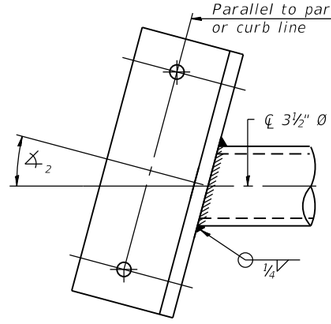
Note: For constant slab overhang at facia beam, ∠1 = ∠2 = sign angle. For flared beams or other special cases where ∠1 ≠ ∠2, ∠1 = sign angle.



SECTION K–K

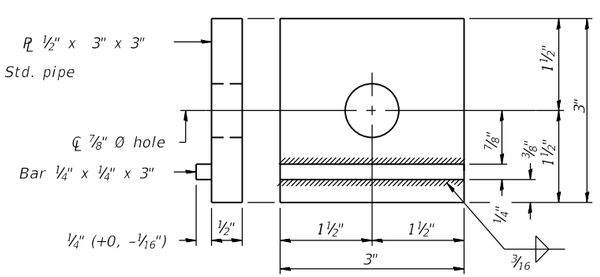


SECTION L–L



SECTION M–M

Skewed connection detail for 3½" Ø pipe to parapet.



CLAMP PLATE DETAILS

BM-3 -Special 2-17-2017

HBM ENGINEERING GROUP, LLC	USER NAME = ahmad.issa	DESIGNED - JJS, MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE MOUNT SIGN STRUCTURES CONNECTION DETAILS
		CHECKED - MI, MAI	REVISED -		
	PLOT SCALE = N.T.S	DRAWN - EK	REVISED -		SHEET NO. SS-32 OF SS-32 SHEETS
	PLOT DATE = 7/30/2018	CHECKED - MI, MAI	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	542
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: pw:\\617479-PWINT.aecomonline.local:AECOM_D502_NAIDocuments\01 Americas\Transportation\60269938 CirclePhase_II\000_CAD\008_StructuralStructure_016-1718WorkingSign Structures\0161718-60X93-SS603-SignStruct
8:58:47 AM

ELECTRICAL SYMBOLS FOR PROPOSED WORK

LIGHT TOWER:
LED LUMINAIRES
NUMBER INDICATES TOWER TYPE

TYPE	TOWER HEIGHT
13	130 FEET
15	150 FEET

LIGHTING UNIT: TYPE AS INDICATED

47'-6" M.H., 6 FT. DAVIT ARM
LED M-C-III LUMINAIRE.
MOUNTED ON PARAPET WALL

47'-6" M.H., 12 FT. DAVIT ARM
LED M-C-III LUMINAIRE.
MOUNTED ON PARAPET WALL

47'-6" M.H., 2-6 FT. DAVIT ARM
2-LED M-C-III LUMINAIRES.
MOUNTED ON PARAPET WALL

TEMPORARY LED LUMINAIRE AND POLE;
80 FOOT WOOD POLE

UNDERPASS LUMINAIRE:
LED, TYPE 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, 49⅝"x32⅛"x57"

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

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

DOUBLE ELECTRIC HANDHOLE

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, LENGTH AS INDICATED ON THE PLANS

HIGHWAY ADVISORY RADIO ANTENNA

ELECTRIC UTILITY POLE

CCTV CAMERA POLE

POLE MOUNTED ELECTRIC UTILITY TRANSFORMER(S)

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

TYPE AS SHOWN ON PLANS 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

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 FLASHER

EXISTING HIGHWAY ADVISORY RADIO ANTENNA

EXISTING CCTV CAMERA POLE

EXISTING UTILITY SERVICE CONNECTION, POLE MOUNTED

EXISTING UTILITY SERVICE CONNECTION, PAD MOUNTED

EXISTING CONCEALED CONDUIT IN STRUCTURE

EXISTING EXPOSED CONDUIT

EXISTING RACEWAY OR DIRECT BURIED CABLE WITHOUT ENCASEMENT

EXISTING CONCEALED CONDUIT UNDERGROUND, TRENCHED OR PUSHED

EXISTING ELECTRIC CABLE IN CONDUIT SLEEVE

EXISTING AERIAL CABLE TO REMAIN

EXISTING ELECTRICAL EQUIPMENT TO BE ABANDONED

GENERAL ELECTRICAL CALLOUTS

NUMBER OF LUMINAIRES
CONTROLLER DESIGNATION
CIRCUIT DESIGNATION (RED PHASE)
CIRCUIT DESIGNATION (BLACK PHASE)
UNIT NUMBER

FIBER OPTIC
START LOCATION
END LOCATION
C01 - CABLE DESIGNATOR

NN SHELTER NUMBER
C CCTV CAMERA
H HAR
V VEHICLE DETECTOR
R RAMP METER
S DYNAMIC MESSAGE SIGN

CONTROLLER DESIGNATION
CIRCUIT DESIGNATION
LIGHTING UNIT NUMBER
STA. 1700+00, 65' RT

4 SM, 1-4
FIBER COUNT
SINGLE MODE
NUMBER OF FIBERS

CKTS. C&D: 3#2, 1#4 GND, 1 1/4" UD

4" CONDUIT SLEEVE SCH. 80 PVC BELOW PAVEMENT

NUMBER OF LUMINAIRES
CONTROLLER DESIGNATION
SIGN STRUCTURE NUMBER

HANDHOLE NUMBER
TYPE DESIGNATION

PROPOSED IDOT CONTROLLER "U"
STA. 1528+10, 160LT

JB, SS, 18"x18"x8" ATS

CONDUIT-SPARE
CONDUIT WITH CABLE OR UNITDUCT
DUCTBANK LENGTH

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

DYNAMIC MESSAGE SIGN TO BE REMOVED

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

EXISTING LIGHT TOWER, PAD, AND FOUNDATION TO BE REMOVED

EXISTING SIGN LUMINAIRE TO BE REMOVED

E-01

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-sht-Light-01	DESIGNED - TJL	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT ELECTRICAL SYMBOLS

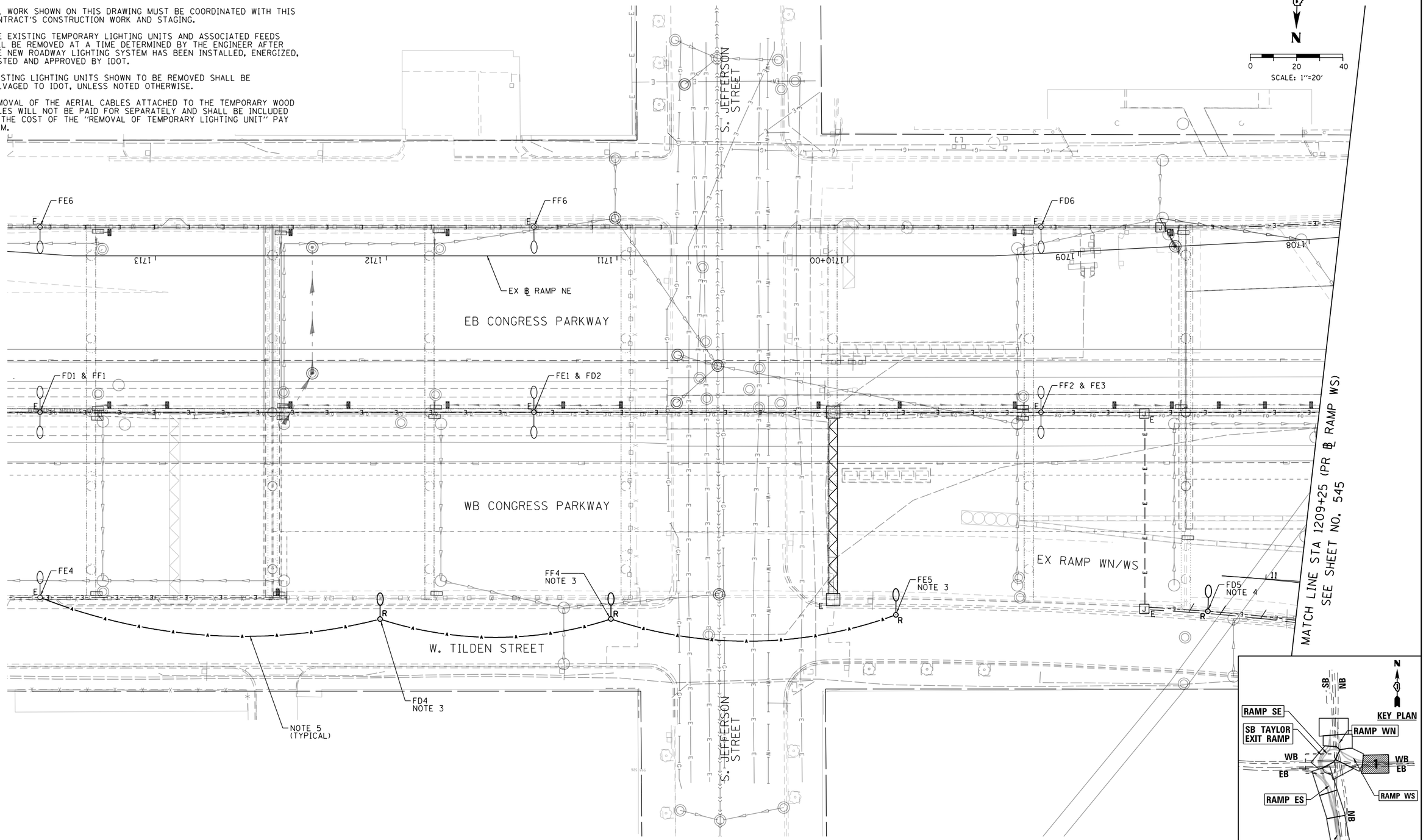
SCALE: N.T.S. | SHEET 1 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	543
		CONTRACT NO. 60X93		
		ILLINOIS FED. AID PROJECT		

FILE PATH = pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase 1\000_CAD\016_Electrical\Sheets\60X93_Contract\D160X93-sht-Light-01

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. THE EXISTING TEMPORARY LIGHTING UNITS AND ASSOCIATED FEEDS WILL BE REMOVED AT A TIME DETERMINED BY THE ENGINEER AFTER THE NEW ROADWAY LIGHTING SYSTEM HAS BEEN INSTALLED, ENERGIZED, TESTED AND APPROVED BY IDOT.
4. EXISTING LIGHTING UNITS SHOWN TO BE REMOVED SHALL BE SALVAGED TO IDOT, UNLESS NOTED OTHERWISE.
5. REMOVAL OF THE AERIAL CABLES ATTACHED TO THE TEMPORARY WOOD POLES WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF THE "REMOVAL OF TEMPORARY LIGHTING UNIT" PAY ITEM.



E-02

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-02	DESIGNED - TJL	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

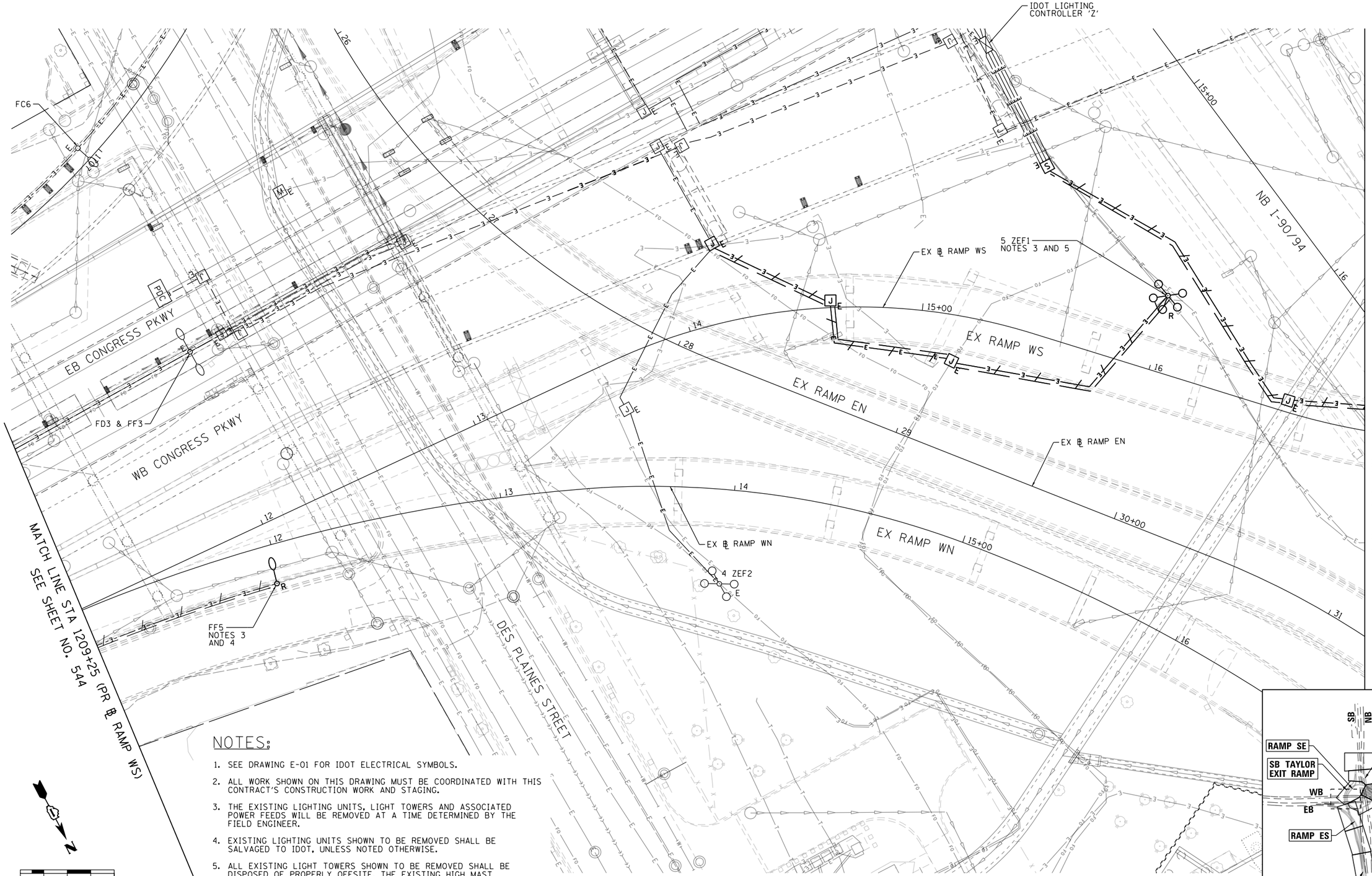
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY LIGHTING PLAN

SCALE: 1"=20' | SHEET 2 OF 28 SHEETS | STA. | TO STA.

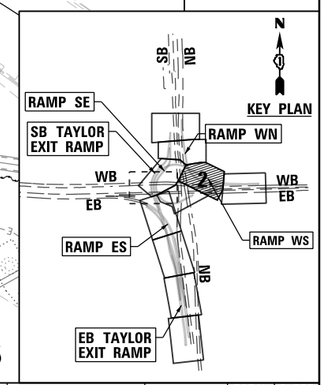
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	544
		CONTRACT NO. 60X93		
		ILLINOIS FED. AID PROJECT		

FILE PATH = pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000.CAD\016.Electrical\Sheets\60X93_Contract\D160X93-Sht-Light-02



NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. THE EXISTING LIGHTING UNITS, LIGHT TOWERS AND ASSOCIATED POWER FEEDS WILL BE REMOVED AT A TIME DETERMINED BY THE FIELD ENGINEER.
4. EXISTING LIGHTING UNITS SHOWN TO BE REMOVED SHALL BE SALVAGED TO IDOT, UNLESS NOTED OTHERWISE.
5. ALL EXISTING LIGHT TOWERS SHOWN TO BE REMOVED SHALL BE DISPOSED OF PROPERLY OFFSITE. THE EXISTING HIGH MAST LUMINAIRES SHALL NOT BE SALVAGED, UNLESS NOTED OTHERWISE.



E-03

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-03	DESIGNED - TJL	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY LIGHTING PLAN

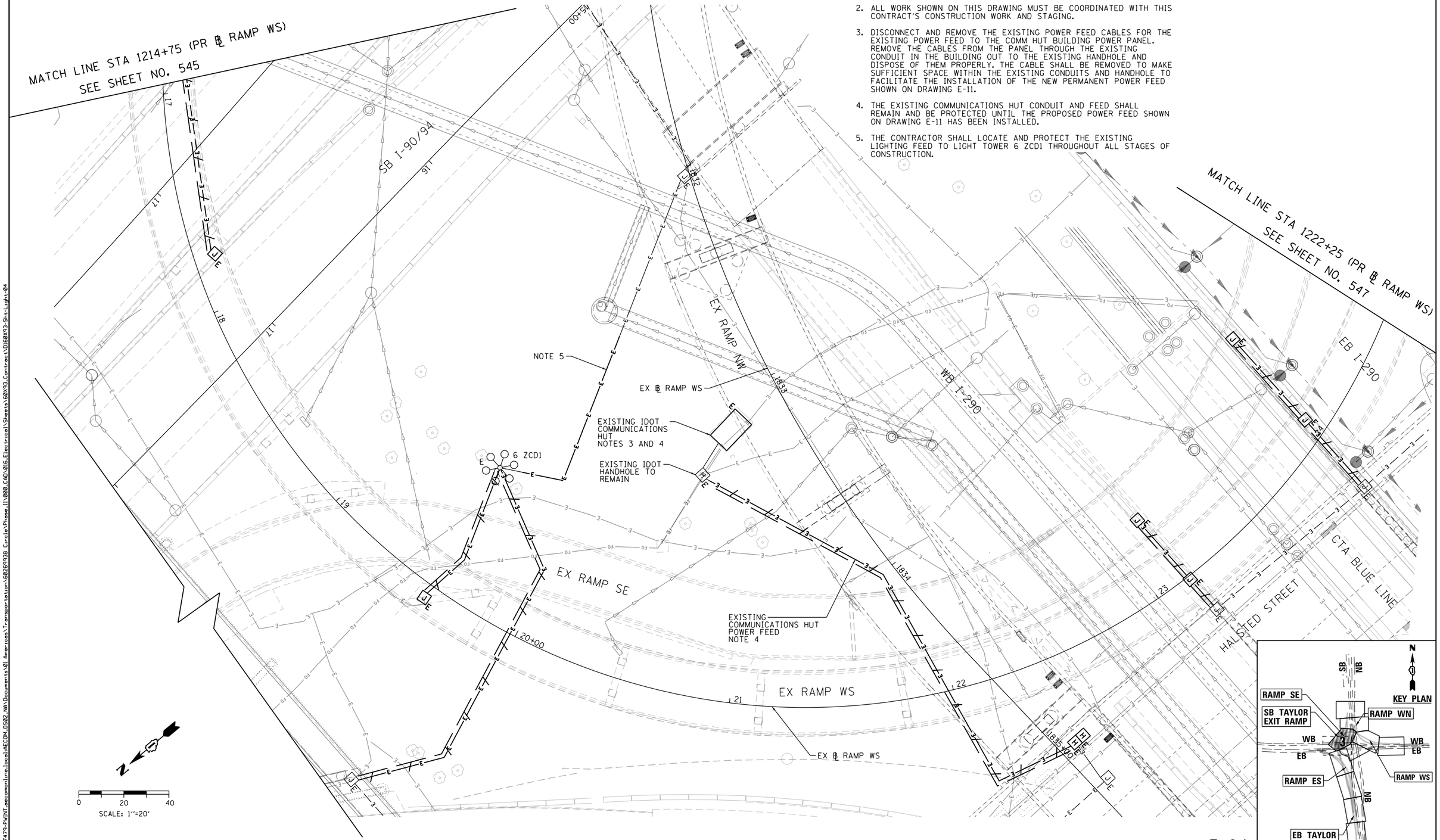
SCALE: 1"=20' | SHEET 3 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	545
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE PATH = pw:\\617479-PWNT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000_CAD\016_Electrical\Sheets\60X93_Contract\D160X93-Sht-Light-03

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. DISCONNECT AND REMOVE THE EXISTING POWER FEED CABLES FOR THE EXISTING POWER FEED TO THE COMM HUT BUILDING POWER PANEL. REMOVE THE CABLES FROM THE PANEL THROUGH THE EXISTING CONDUIT IN THE BUILDING OUT TO THE EXISTING HANDHOLE AND DISPOSE OF THEM PROPERLY. THE CABLE SHALL BE REMOVED TO MAKE SUFFICIENT SPACE WITHIN THE EXISTING CONDUITS AND HANDHOLE TO FACILITATE THE INSTALLATION OF THE NEW PERMANENT POWER FEED SHOWN ON DRAWING E-11.
4. THE EXISTING COMMUNICATIONS HUT CONDUIT AND FEED SHALL REMAIN AND BE PROTECTED UNTIL THE PROPOSED POWER FEED SHOWN ON DRAWING E-11 HAS BEEN INSTALLED.
5. THE CONTRACTOR SHALL LOCATE AND PROTECT THE EXISTING LIGHTING FEED TO LIGHT TOWER 6 ZCD1 THROUGHOUT ALL STAGES OF CONSTRUCTION.



E-04

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AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-04	DESIGNED - TJL	REVISED -
USER NAME = mgersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY LIGHTING PLAN

SCALE: 1"=20' | SHEET 4 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	546
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

EX ℄ RAMP EN

EX RAMP SE

EX RAMP EN

EX ℄ RAMP WS

EX RAMP WS

EX RAMP ES

EX ℄ RAMP ES

NOTE 3

4 DAB3

6 ZAB2

HARRISON STREET

HALSTED STREET

0+00

15+00

20+00

25+00

110+00

MATCH LINE STA 1222+25 (PR ℄ RAMP WS)
SEE SHEET NO. 546

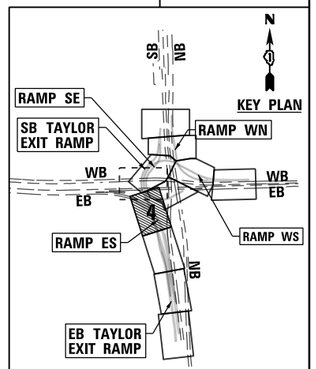
MATCH LINE STA 1227+75 (PR ℄ RAMP WS)
SEE SHEET NO. 548

N

0 20 40
SCALE: 1"=20'

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. THE CONTRACTOR SHALL LOCATE AND PROTECT THE EXISTING FEED FROM TOWER 5 ZAB1 ON DRAWING E-08 TO THE JUNCTION BOX ATTACHED TO PIER 1 OF HALSTED STREET BRIDGE.



E-05

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-05	DESIGNED - TJL	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY LIGHTING PLAN

SCALE: 1"=20' | SHEET 5 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	547
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE PATH = pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000.CAD\016.Electrical\Sheets\60X93-Sht-Light-05

MATCH LINE STA 1227+75 (PR ℄ RAMP WS)
SEE SHEET NO. 547

D1
NOTES 3 AND 4

EX SB I-90/94
EX ℄ SB I-90/94

(8 TOTAL SIGN LUMINAIRES)

EX RAMP ES/WS

EX SB TAYLOR EXTI RAMP

8 DEF2

UIC ACCESS ROAD

UIC ACCESS ROAD

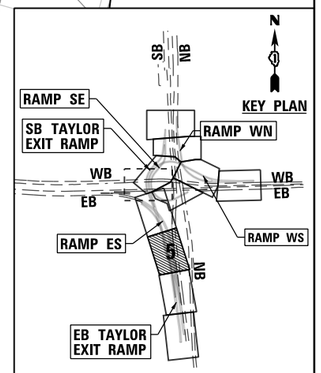
UIC TENNIS/BASKETBALL COURTS

EX RETAINING WALL 10
SN 016-1729

UIC STUDENT RECREATION FACILITY

MATCH LINE STA 1233+25 (PR ℄ RAMP WS)
SEE SHEET NO. 549

0 20 40
SCALE: 1"=20'



NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. REMOVE EXISTING SIGN LUMINAIRES. THIS REMOVAL WORK SHALL BE INCLUDED IN THE COST OF THE "REMOVE OVERHEAD SIGN STRUCTURE-SPAN" PAY ITEM.
4. DISCONNECT THE EXISTING SIGN LIGHTING ELECTRICAL FEED AND REMOVE CABLES BACK TO THE NEAREST SPLICE POINT UNAFFECTED BY CONSTRUCTION. THIS WORK SHALL BE PAID FOR UNDER THE "DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO THE NEAREST SPLICE" PAY ITEM.

E-06

FILE PATH = p:\61747\9-PWINT.aecomonline.local\AECOM.0502.NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000 CAD\016 Electrical\Sheets\60X93_Contract\D160X93-Sht-Light-06

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-06	DESIGNED - TJL	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY LIGHTING PLAN

SCALE: 1"=20' | SHEET 6 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	548
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. REMOVE EXISTING SIGN LUMINAIRES. THIS REMOVAL WORK SHALL BE INCLUDED IN THE COST OF THE "REMOVE OVERHEAD SIGN STRUCTURE-SPAN" PAY ITEM.
4. DISCONNECT THE EXISTING SIGN LIGHTING ELECTRICAL FEED AND REMOVE CABLES BACK TO THE NEAREST SPLICE POINT UNAFFECTED BY CONSTRUCTION. THIS WORK SHALL BE PAID FOR UNDER THE "DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO THE NEAREST SPLICE" PAY ITEM.
5. THE VERTICAL SECTIONS OF THE EXISTING RIGID STEEL CONDUITS LOCATED BEHIND EXISTING RETAINING WALL 12 SHALL REMAIN AND BE PROTECTED TO ENSURE THEY CAN BE INTERCEPTED AS SHOWN ON DRAWING E-14.
6. DISCONNECT AND REMOVE THE EXISTING LIGHTING CIRCUITS 'G' AND 'H' FROM THE EXISTING HAND HOLE LOCATED IN THE ACCIDENT INVESTIGATION SITE TO THE IDOT LIGHTING CONTROLLER 'D'. ROD AND CLEAN THE CONDUIT BEFORE PULLING NEW LIGHTING CIRCUIT CABLES THROUGH THE EXISTING UNDERGROUND CONDUIT AS SHOWN ON DRAWING E-14.

MATCH LINE STA 1233+25 (PR ℄ RAMP WS)
SEE SHEET NO. 548

IDOT LIGHTING CONTROLLER 'D'

N

0 20 40
SCALE: 1"=20'

RAMP NW

1817
1815+00
1814
208
NOTE 6

EX NB I-90/94

ACCIDENT INVESTIGATION SITE

8 DEF1

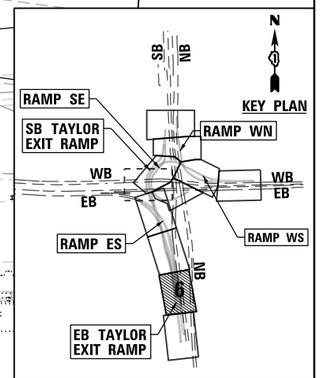
209
208
EX SB I-90/94
207
206
205+00

EX SB TAYLOR EXIT RAMP
16
17
18
19
123
20+00
D3
NOTES 3 AND 4

119
EX RAMP ES/WS
120+00
(6 TOTAL SIGN LUMINAIRES)
122
121
EX SB ENTRANCE RAMP

NOTE 5
EXISTING CONDUIT AND CONDUIT SLEEVES TO REMAIN
EX EB TAYLOR EXIT RAMP
6 DGH1

E-07



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AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-07	DESIGNED - TJL	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY LIGHTING PLAN

SCALE: 1"=20' | SHEET 7 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	549
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

MATCH LINE STA 1222+25 (PR ℄ RAMP WS)
SEE SHEET NO. 546

EXISTING ABOVE GROUND SPLICE BOX

EXISTING IDOT LIGHTING CONTROLLER 'Z'

NOTE 3

5 ZAB1

EB CONGRESS PKWY

WB CONGRESS PKWY

EX RAMP EN

EX RAMP SE

EX RAMP WS

SB I-90/94

NB I-90/94

RAMP NW

EX ℄ RAMP EN

0+00

25+00

1830+00

6281

5157

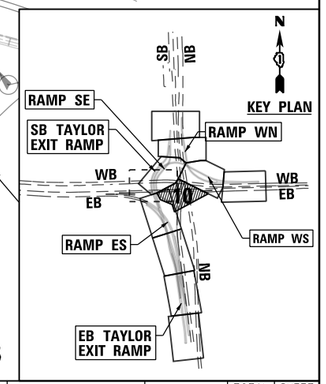
N

0 20 40

SCALE: 1"=20'

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. THE CONTRACTOR SHALL LOCATE AND PROTECT THE EXISTING FEED FROM TOWER 5 ZAB1 TO THE JUNCTION BOX ATTACHED TO PIER 1 OF HALSTED STREET BRIDGE SHOWN ON DRAWING E-05.



E-08

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-08	DESIGNED - TJL		REVISED -
USER NAME = myersc	DRAWN - CAM		REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS		REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY LIGHTING PLAN

SCALE: 1"=20' | SHEET 8 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	550
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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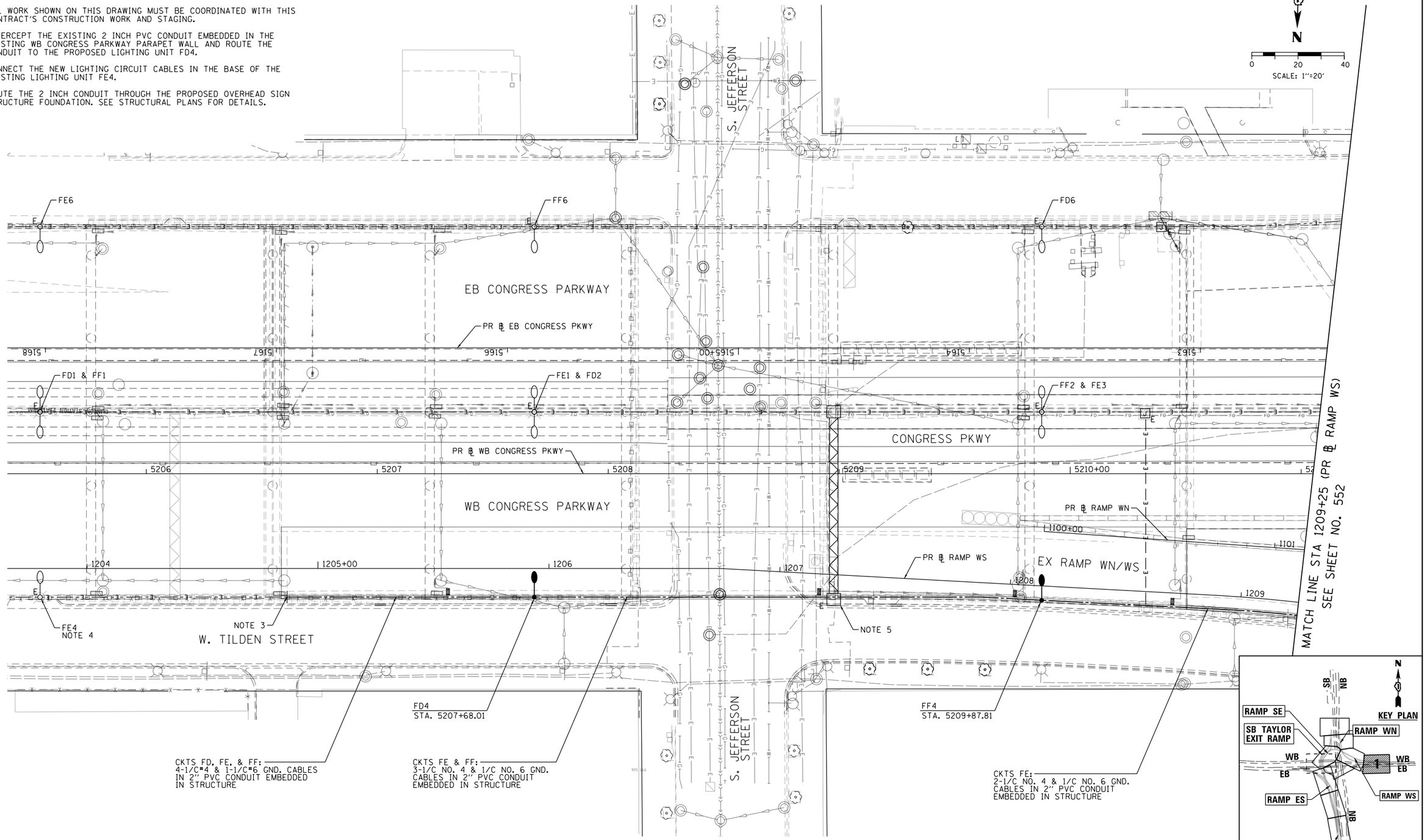
NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. INTERCEPT THE EXISTING 2 INCH PVC CONDUIT EMBEDDED IN THE EXISTING WB CONGRESS PARKWAY PARAPET WALL AND ROUTE THE CONDUIT TO THE PROPOSED LIGHTING UNIT FD4.
4. CONNECT THE NEW LIGHTING CIRCUIT CABLES IN THE BASE OF THE EXISTING LIGHTING UNIT FE4.
5. ROUTE THE 2 INCH CONDUIT THROUGH THE PROPOSED OVERHEAD SIGN STRUCTURE FOUNDATION. SEE STRUCTURAL PLANS FOR DETAILS.



E-09

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303 EAST WACKER DRIVE, SUITE 1400
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PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-09	DESIGNED - TJL	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

SCALE: 1"=20' | SHEET 9 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	551
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

CKTS ZK & ZL: 3-1/C NO. 2 & 1/C NO. 4 GND CABLES IN 1-1/2" UD NOTE 7

EX RAMP NE

FC6

PR ℄ RAMP SE

PR ℄ EB CONGRESS PKWY

FD3 & FF3

EB CONGRESS PKWY

WB CONGRESS PKWY

FE5
STA. 1210+20.0

1-2" PVC CONDUIT EMBEDDED IN STRUCTURE (SPARE FOR FUTURE USE)

W. TILDEN STREET

S. DESPLAINES STREET

MATCH LINE STA 1209+25 (PR ℄ RAMP WS)
SEE SHEET NO. 551

CKT FE:
2-1/C #4 & 1-1/C #6 GND. CABLES IN 2" PVC CONDUIT EMBEDDED IN STRUCTURE

JB, NM, 21"x11"x8", EIS
NOTE 3

IDOT LIGHTING CONTROLLER 'Z'
NOTE 7

NOTE 4

JB, NM, 21"x11"x8", EIS
NOTE 3

CKTS ZE&ZF:
3-1/C NO. 2 & 1/C NO. 4 GND. CABLES IN 1-1/2" UD

NOTE 5

EX RAMP EN

RAMP WS

PR ℄ RAMP WS

EX RAMP WN

JB, SS, 18"x18"x8", ATS

NOTE 6

PR ℄ WB CONGRESS PKWY

CKTS ZE & ZF: 3-1/C NO. 2 & 1/C NO. 4 GND CABLES IN 1-1/2" UD NOTE 7

CKTS ZE&ZF:
3-1/C NO. 2 & 1/C NO. 4 GND. CABLES IN 1-1/2" UD

2-2" PVC CONDUIT EMBEDDED IN STRUCTURE (BOTH SPARES FOR FUTURE USE)

6 ZEF1
STA. 1105+64.7
65.90' LT.
(PR RAMP WN ℄)

NB I-90/94

RAMP WN

PR ℄ RAMP WN

JB, SS, 12"x10"x6", ATS

2-2" PVC CONDUIT EMBEDDED IN STRUCTURE (BOTH SPARES FOR FUTURE USE)

MATCH LINE STA 1214+75 (PR ℄ RAMP WS)
SEE SHEET NO. 553

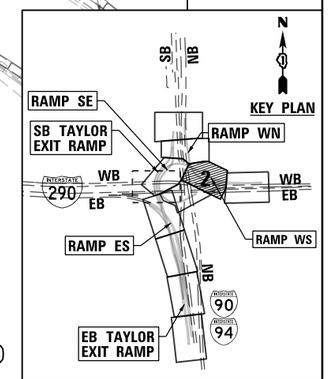
5216 5215+00 5214 5213 5212 5211 1414 1415+00 1416 1104 1105+00 1106 1102 1210+00 1212 1213 1214 2106 2107

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. PROVIDE TWO 2 INCH RGC PVCC CONDUIT STUBOUTS FROM THE PROPOSED EMBEDDED JUNCTION BOX THROUGH THE BOTTOM OF THE BRIDGE DECK 6 INCHES EXPOSED AND CAP EACH ONE FOR FUTURE USE.
4. DRILL THE EXISTING JUNCTION BOX ATTACHED TO STRUCTURE AND ROUTE A 3 INCH RGC PVCC CONDUIT DOWN THE PIER STRUCTURE AND PROVIDE STUB OUT UNDERGROUND. ROUTE UNIT DUCT UP THE VERTICAL CONDUIT RUN AND INTERCEPT THE EXISTING LIGHTING CIRCUIT CABLES INSIDE THE EXISTING JUNCTION BOX.
5. ROUTE THE NEW UNIT DUCT UP THE VERTICAL CONDUIT ATTACHED TO STRUCTURE INTO THE NEW JUNCTION BOX ATTACHED TO STRUCTURE. CONNECT THE LIGHTING CIRCUITS WITHIN THE JUNCTION BOX. SEE DRAWING E-17 FOR CONTINUATION OF THE CIRCUIT.
6. THE TYPE, SIZE, AND ROUTING OF THE PROPOSED CONDUIT ATTACHED TO THE WB CONGRESS PARKWAY BRIDGE STRUCTURE CAN BE SEEN ON DRAWINGS E-11 AND E-15.
7. CONTRACTOR COORDINATION IS REQUIRED BETWEEN CONTRACTS 60X79 AND 60X93 IN ORDER TO CONNECT THE PROPOSED LIGHTING EQUIPMENT INSTALLED IN THIS CONTRACT TO THE NEW IDOT LIGHTING CONTROLLER 'Z' BEING INSTALLED IN CONTRACT 60X79.

N

0 20 40
SCALE: 1"=20'



E-10

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-10	DESIGNED - TJL	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

SCALE: 1"=20' | SHEET 10 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	552
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. PROVIDE TWO 2 INCH RGC PVCC CONDUIT STUBOUTS FROM THE PROPOSED EMBEDDED JUNCTION BOX THROUGH THE BOTTOM OF THE BRIDGE DECK AND CAP EACH ONE.
4. ROUTE NEW UNIT DUCT INTO THE EXISTING CONDUIT UP TO THE EXISTING JUNCTION BOX ATTACHED TO STRUCTURE. CONNECT THE NEW CABLES TO THE EXISTING LIGHTING CIRCUITS WITHIN THE JUNCTION BOX. REMOVE THE EXISTING LIGHTING CIRCUIT CABLES FROM THE CONDUIT PRIOR TO INSTALLING THE NEW LIGHTING CIRCUITS.
5. ROUTE NEW UNIT DUCT INTO EXISTING LIGHT TOWER 6 ZCD1 THROUGH THE EXISTING CONDUIT SLEEVE IN THE CONCRETE FOUNDATION AND CONNECT THE NEW LIGHTING CIRCUIT CABLES TO LIGHT TOWER LIGHTING CABLES.
6. INSTALL THE CONCRETE ENCASED CONDUIT UNDER THE SHOULDER OF WB I-290. SEE THE CONCRETE ENCASED CONDUIT DETAILS ON DRAWING E-28.
7. DRILL AND CLEAN THE EXISTING DOUBLE HANDHOLE FOR THE INSTALLATION OF THE TWO PROPOSED PVC CONDUITS.
8. ROUTE THE NEW COMMUNICATIONS HUT FEEDER CABLES THROUGH THE EXISTING HANDHOLE INTO THE COMMUNICATIONS HUT AND CONNECT TO THE EXISTING POWER PANEL. THE WORK TO CONNECT THE CABLES TO THE PANEL WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF THE CABLES.
9. INSTALL THE PROPOSED LIGHTING FEED FOR CIRCUITS ZC AND ZD BETWEEN EXISTING LIGHT TOWER 6 ZCD1 AND THE EXISTING JUNCTION BOX MOUNTED ON THE VAN BUREN STREET BRIDGE AS SHOWN. THIS PROPOSED FEED MUST BE INSTALLED PRIOR TO THE REMOVAL OF THE EXISTING FEED TO THE SAME LOADS. THE PROPOSED FEED MUST BE INSTALLED BELOW GRADE AT AN ELEVATION OF 573.00 TO AVOID CONFLICT WITH THE EXCAVATION WORK FOR THE PROPOSED RAMP SE AND THE SB TAYLOR STREET EXIT RAMP. ONCE THE PROPOSED FEED IS INSTALLED, THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING IT FROM DAMAGE FOR THE DURATION OF THE CONTRACT. IF THE PROPOSED FEED IS DAMAGED, FOR ANY REASON, THE CONTRACTOR MUST IMMEDIATELY REPLACE THE FEED AT NO COST TO IDOT.
10. THE CONTRACTOR SHALL LOCATE AND PROTECT THE EXISTING LIGHTING FEED TO LIGHT TOWER 6 ZCD1 THROUGHOUT ALL STAGES OF CONSTRUCTION.

MATCH LINE STA 1214+75 (PR ℄ RAMP WS)
SEE SHEET NO. 552

JB, NM, 21"x11"x8", EIS NOTE 3

CKTS ZK & ZL: 3-1/C#2 & 1-1/C#4 GND. CABLES IN 3" PVCC RGC ATS SEE DRAWING E-15 FOR CONTINUATION

JB, SS, 18"x18"x8", ATS

SB I-90/94

5219

1216

1217

2-2" PVC CONDUIT EMBEDDED IN STRUCTURE (BOTH SPARES FOR FUTURE USE)

CKTS ZK & ZL: 3-1/C NO. 2 & 1/C NO. 4 GND. CABLES IN 1-1/2" UD

RAMP NW

EXISTING IDOT COMMUNICATIONS HUT NOTE 8

DOUBLE HANDHOLE STA. 1404+24.45, 69.3' LT PR ℄ RAMP SE

NOTE 10

NOTE 5

6 ZCD1

3-1/C NO. 3/0 & 1/C NO. 4 GND CABLES IN 3" DIA. PVC CONDUIT

JB, SS, 12"x10"x6", ATS

SEE DRAWING E-17 FOR CONTINUATION

1403

1404

1402

1218

1219

CKTS ZC & ZD: 3-1/C NO. 2 & 1/C NO. 4 GND CABLES IN 4" DIA. RGC CONDUIT NOTE 9

PR SB TAYLOR EXIT RAMP

6405+00

6406

JB, NM, 21"x11"x8", EIS NOTE 3

6407

CKTS ZK & ZL: 3-1/C NO. 2 & 1/C NO. 4 GND. CABLES IN 3" DIA. PVCC RGC ATS

PR ℄ RAMP WS

2-2" PVC CONDUIT EMBEDDED IN STRUCTURE (BOTH SPARES FOR FUTURE USE)

JB, SS, 12"x10"x6", ATS

2-2" PVC CONDUIT EMBEDDED IN STRUCTURE (BOTH SPARES FOR FUTURE USE)

3-1/C NO. 3/0 & 1/C NO. 4 GND CABLES IN EXISTING UNDERGROUND CONDUIT

NOTE 4

PR ℄ WB I-290

JB, NM, 21"x11"x8", EIS

JB, NM, 21"x11"x8", EIS NOTE 3

WB I-290

2-3" PVC CONDUITS UNDERGROUND (1) 3-1/C NO. 3/0 & 1/C NO. 4 GND CABLES (1) SPARE FOR FUTURE USE

PR ℄ RAMP SE

1406

RAMP SE

5220+00

1405+00

SEE DRAWING E-18 FOR CONTINUATION

1221

RAMP WS

6409

TAYLOR BYPASS

OVER A BLUE LINE

1222

5215

I-290

EB

1220+00

6408

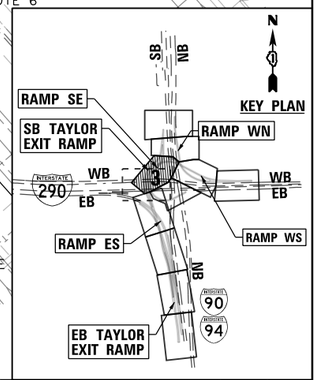
2-3" CONCRETE ENCASED PVC CONDUITS UNDER SHOULDER (1) 3-1/C NO. 3/0 & 1/C NO. 4 GND CABLES (1) SPARE FOR FUTURE USE NOTE 6

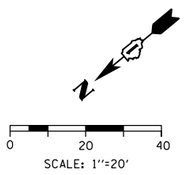
5221

HALSTED STREET

2-3" PVC CONDUITS UNDERGROUND (1) 3-1/C NO. 3/0 & 1/C NO. 4 GND CABLES (1) SPARE FOR FUTURE USE NOTE 7

MATCH LINE STA 1222+25 (PR ℄ RAMP WS)
SEE SHEET NO. 554





E-11

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AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

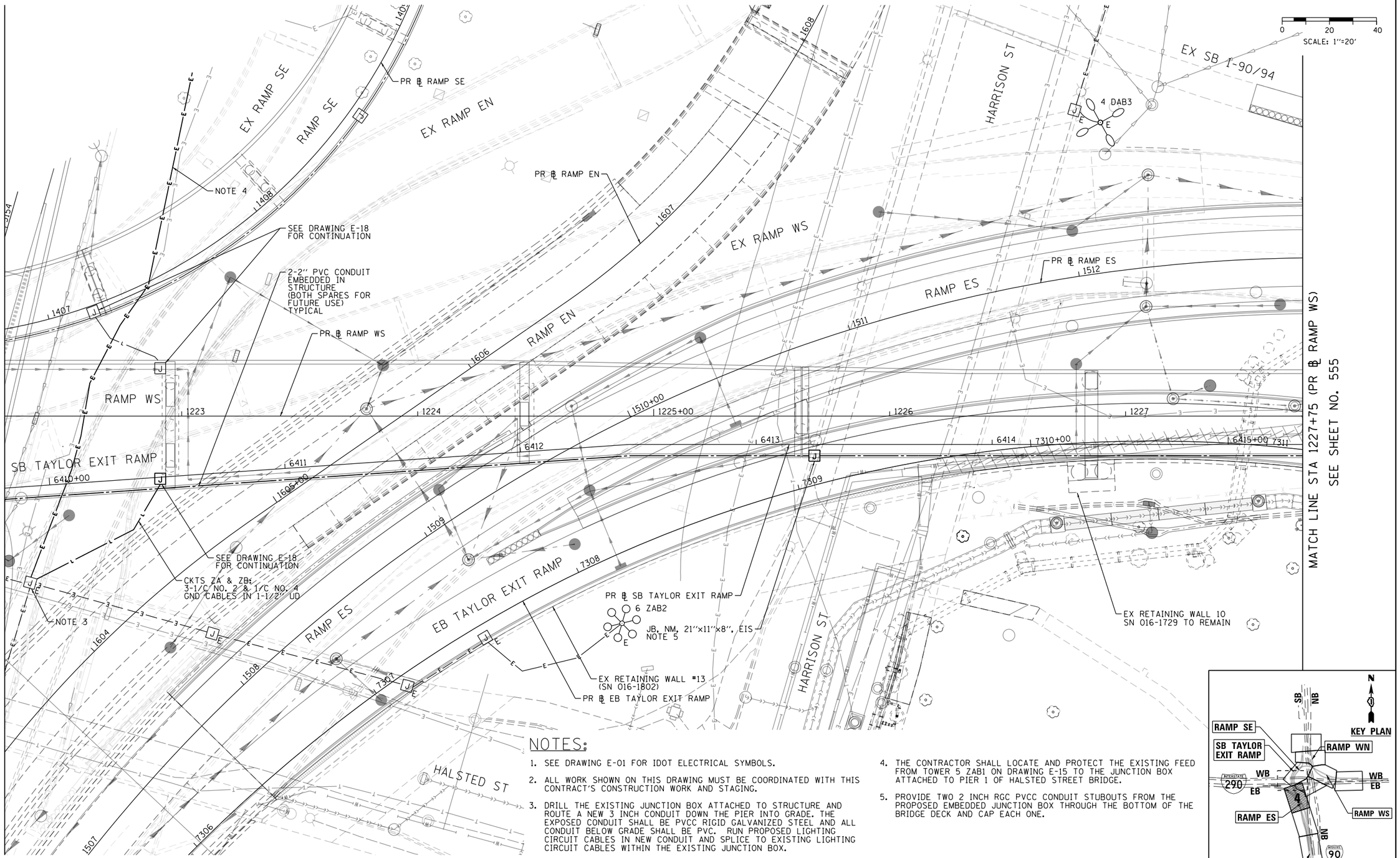
D160X93-Sht-Light-11	DESIGNED - TJL	REVISED -	
USER NAME = mgersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

SCALE: 1"=20' | SHEET 11 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	553
	CONTRACT NO. 60X93			
	ILLINOIS FED. AID PROJECT			



NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. DRILL THE EXISTING JUNCTION BOX ATTACHED TO STRUCTURE AND ROUTE A NEW 3 INCH CONDUIT DOWN THE PIER INTO GRADE. THE EXPOSED CONDUIT SHALL BE PVCC RIGID GALVANIZED STEEL AND ALL CONDUIT BELOW GRADE SHALL BE PVC. RUN PROPOSED LIGHTING CIRCUIT CABLES IN NEW CONDUIT AND SPLICE TO EXISTING LIGHTING CIRCUIT CABLES WITHIN THE EXISTING JUNCTION BOX.
4. THE CONTRACTOR SHALL LOCATE AND PROTECT THE EXISTING FEED FROM TOWER 5 ZAB1 ON DRAWING E-15 TO THE JUNCTION BOX ATTACHED TO PIER 1 OF HALSTED STREET BRIDGE.
5. PROVIDE TWO 2 INCH RGC PVCC CONDUIT STUBOUTS FROM THE PROPOSED EMBEDDED JUNCTION BOX THROUGH THE BOTTOM OF THE BRIDGE DECK AND CAP EACH ONE.

E-12

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-12	DESIGNED - TJL	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

SCALE: 1"=20' | SHEET 12 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	554
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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MATCH LINE STA 1227+75 (PR ℄ RAMP WS)
SEE SHEET NO. 554

MATCH LINE STA 1233+25 (PR ℄ RAMP WS)
SEE SHEET NO. 556

PROPOSED RETAINING WALL 14
SN 016-1803 (SEE STRUCTURAL PLANS)

EX SB I-90/94

RAMP ES

PR ℄ RAMP ES

RAMP WS

SB TAYLOR EXIT RAMP

PR ℄ RAMP WS

JB, SS, 12"x10"x6"
ATS

PR ℄ SB TAYLOR EXIT RAMP

PR ℄ EB TAYLOR EXIT RAMP

EB TAYLOR EXIT RAMP

2-2" PVC CONDUIT
EMBEDDED IN
STRUCTURE
(BOTH SPARES FOR
FUTURE USE)
TYPICAL

EX RETAINING WALL 10
SN 016-1729 TO REMAIN

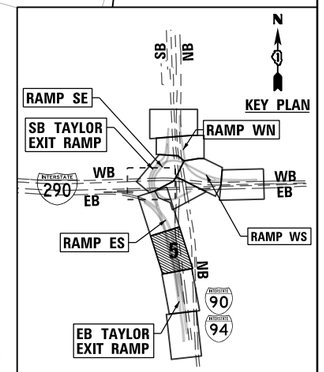
UIC ACCESS ROAD

UIC TENNIS/BASKETBALL COURTS

UIC ACCESS ROAD

UIC STUDENT RECREATION FACILITY

0 20 40
SCALE: 1"=20'



NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.

E-13

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AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-13	DESIGNED - TJL	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

SCALE: 1"=20' | SHEET 13 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	555
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. ROUTE TWO 2 INCH RIGID STEEL CONDUITS FROM THE PROPOSED HAND HOLE LOCATED IN THE SHOULDER OF THE EB TAYLOR EXIT RAMP AND INTERCEPT THE TWO EXISTING CONDUITS THAT ARE ROUTED THROUGH THE EXISTING CONDUIT SLEEVES IN RETAINING WALL 12. SEE DRAWING E-24 FOR THE CONDUIT ROUTING THROUGH EXISTING RW #12 DETAIL.
4. INTERCEPT THE EXISTING TWO 2 INCH RIGID STEEL CONDUITS LOCATED BEHIND EXISTING RETAINING WALL 12. ROUTE THE PROPOSED CONDUITS TO THE PROPOSED HANDHOLE TO BE INSTALLED BEHIND THE EXISTING WALL.

MATCH LINE STA 1233+25 (PR ℄ RAMP WS)
SEE SHEET NO. 555

IDOT LIGHTING CONTROLLER 'D'

RAMP NW

EX NB I-90/94

CKTS DG&DH:
3-1/C NO. 2 & 1/C NO. 4
GND. CABLES IN EXISTING
UNDERGROUND CONDUIT
(TYPICAL)

ACCIDENT INVESTIGATION SITE

8 DEF1

2-2" RGC CONDUITS
UNDERGROUND
(1) CKTS DG&DH:
3-1/C NO. 2 & 1/C NO. 4
GND. CABLES
(1) SPARE CONDUIT FOR
FUTURE USE

HH01
TYPE E2

EX SB I-90/94

2-2" RGC CONDUITS
UNDERGROUND
(1) CKTS DG&DH:
3-1/C NO. 2 & 1/C NO. 4
GND. CABLES
(1) SPARE CONDUIT FOR
FUTURE USE

PR RETAINING WALL 16
SN 016-1805 (SEE STRUCTURAL PLANS)

RAMP ES

PR ℄ RAMP WS

RAMP WS

1234 1235+00 1236 1237 1238

6421 6422 6423 6424

SB TAYLOR EXIT RAMP

PR ℄ SB TAYLOR EXIT RAMP

EB TAYLOR EXIT RAMP

7317 7318 7319 7320+00 7321

PR ℄ EB TAYLOR EXIT RAMP

2-2" RGC CONDUITS
UNDERGROUND
(1) CKTS DG&DH:
3-1/C NO. 2 & 1/C NO. 4
GND. CABLES
(1) SPARE CONDUIT FOR
FUTURE USE
NOTE 3

HH02
TYPE E2
STA. 7320+12.30, 6.80' RT.
PR ℄ EB TAYLOR EXIT RAMP

CKTS DG&DH:
3-1/C NO. 2 & 1/C NO. 4 GND. CABLES
IN 2" DIA. RGC CONDUIT

6 DGH1

13

HH03
TYPE E2

2-2" RGC CONDUITS
UNDERGROUND
(1) CKTS DG&DH:
3-1/C NO. 2 & 1/C NO. 4
GND. CABLES
(1) SPARE CONDUIT FOR
FUTRE USE
NOTE 4

EXISTING CONDUIT
SLEEVES

EX RETAINING WALL 12
SN 016-2311 (SEE STRUCTURAL PLANS)

N
0 20 40
SCALE: 1"=20'

KEY PLAN
RAMP SE
SB TAYLOR EXIT RAMP
RAMP WN
WB
EB
RAMP ES
RAMP WS
NB
INTERSTATE 290
INTERSTATE 90
INTERSTATE 94
EB TAYLOR EXIT RAMP

E-14

AECOM 303 EAST WACKER DRIVE, SUITE 1400 CHICAGO, IL 60601-5276 PHONE: (312) 373-7700 FAX: (312) 373-6800	D160X93-Sht-Light-14	DESIGNED - TJL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING PLAN
	USER NAME = PIMSARNO	DRAWN - CAM	REVISED -		SCALE: 1"=20' SHEET 14 OF TOTSHEETS STA. TO STA.
	PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -		
	PLOT DATE = 7/29/2018	DATE - 7/30/2018	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	556
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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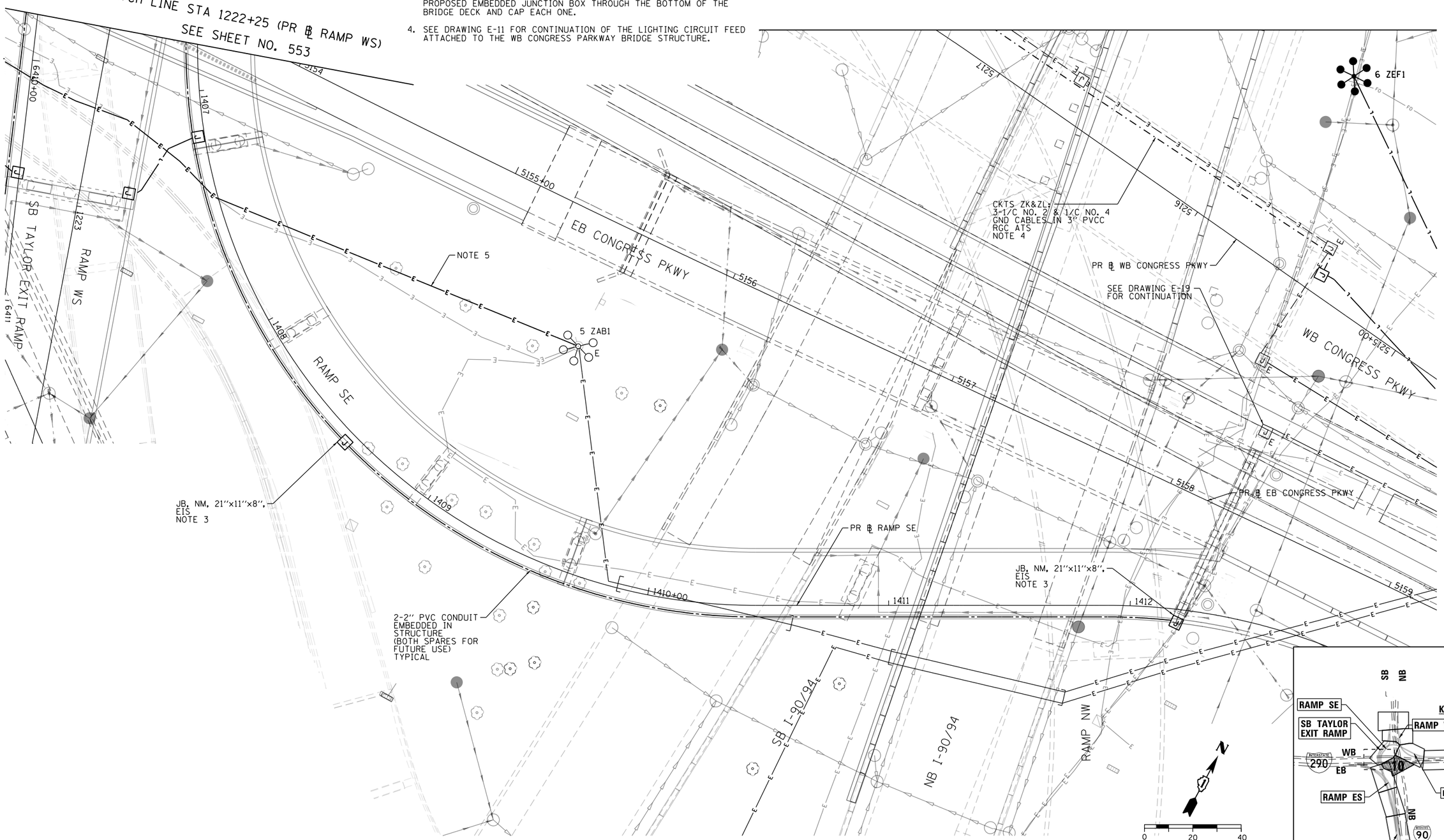
NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. PROVIDE TWO 2 INCH PVCC RGC CONDUIT STUBOUTS FROM THE PROPOSED EMBEDDED JUNCTION BOX THROUGH THE BOTTOM OF THE BRIDGE DECK AND CAP EACH ONE.
4. SEE DRAWING E-11 FOR CONTINUATION OF THE LIGHTING CIRCUIT FEED ATTACHED TO THE WB CONGRESS PARKWAY BRIDGE STRUCTURE.
5. THE CONTRACTOR SHALL LOCATE AND PROTECT THE EXISTING FEED FROM TOWER 5 ZAB1 TO THE JUNCTION BOX ATTACHED TO PIER 1 OF HALSTED STREET BRIDGE.



E-15

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AECOM
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CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

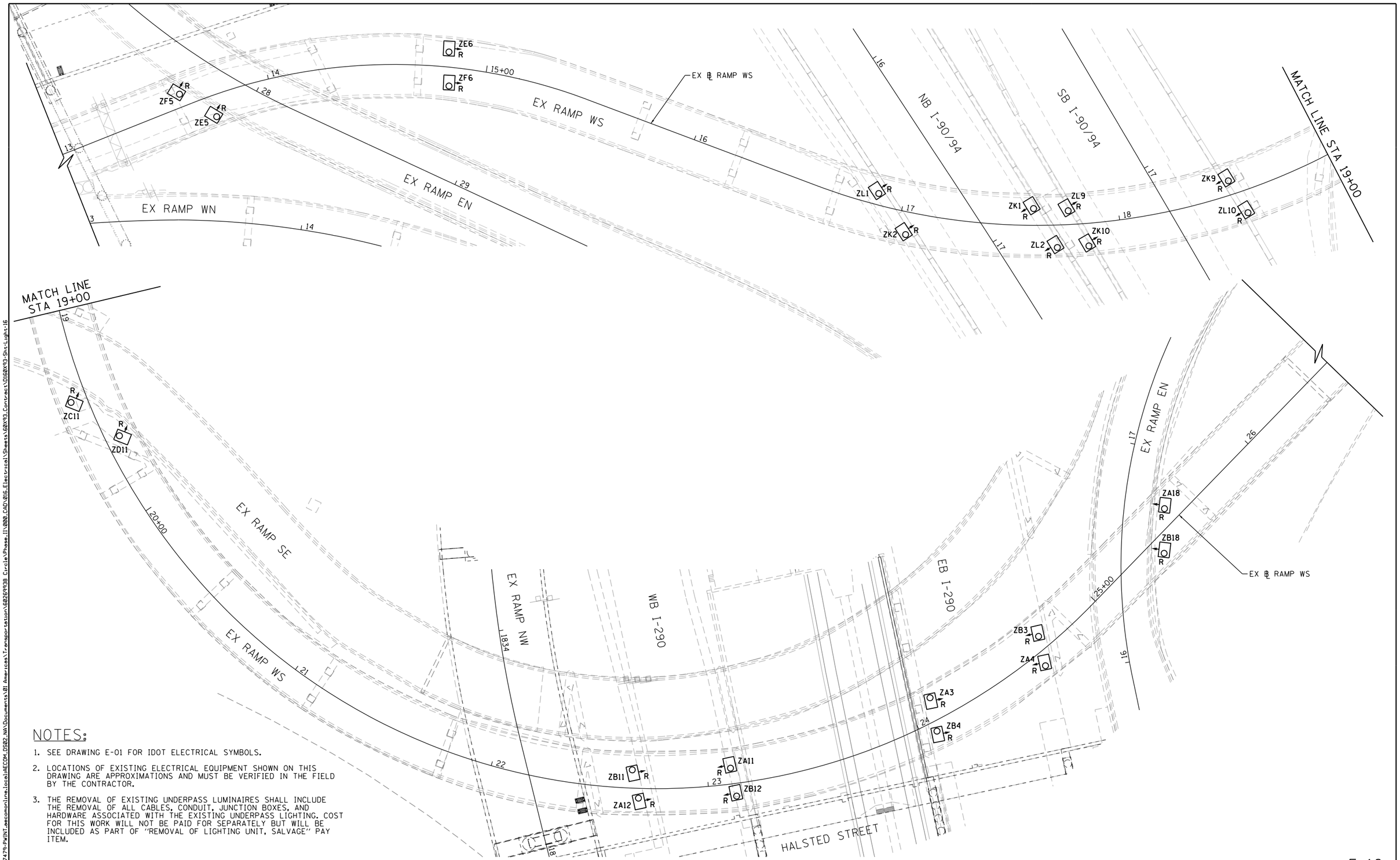
D160X93-Sht-Light-15	DESIGNED - TJL		REVISED -
USER NAME = myersc	DRAWN - CAM		REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS		REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

SCALE: 1"=20' | SHEET 15 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	557
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
3. THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES SHALL 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 "REMOVAL OF LIGHTING UNIT, SALVAGE" PAY ITEM.

EXISTING UNDERPASS LIGHTING PLAN

E-16

FILE PATH = pw:\\617479-PWNT.aecomonline.local:AECOM_DS02.NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000_CAD\016_Electrical\Sheets\60X93_Contract\D160X93-Sht-Light-16

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303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

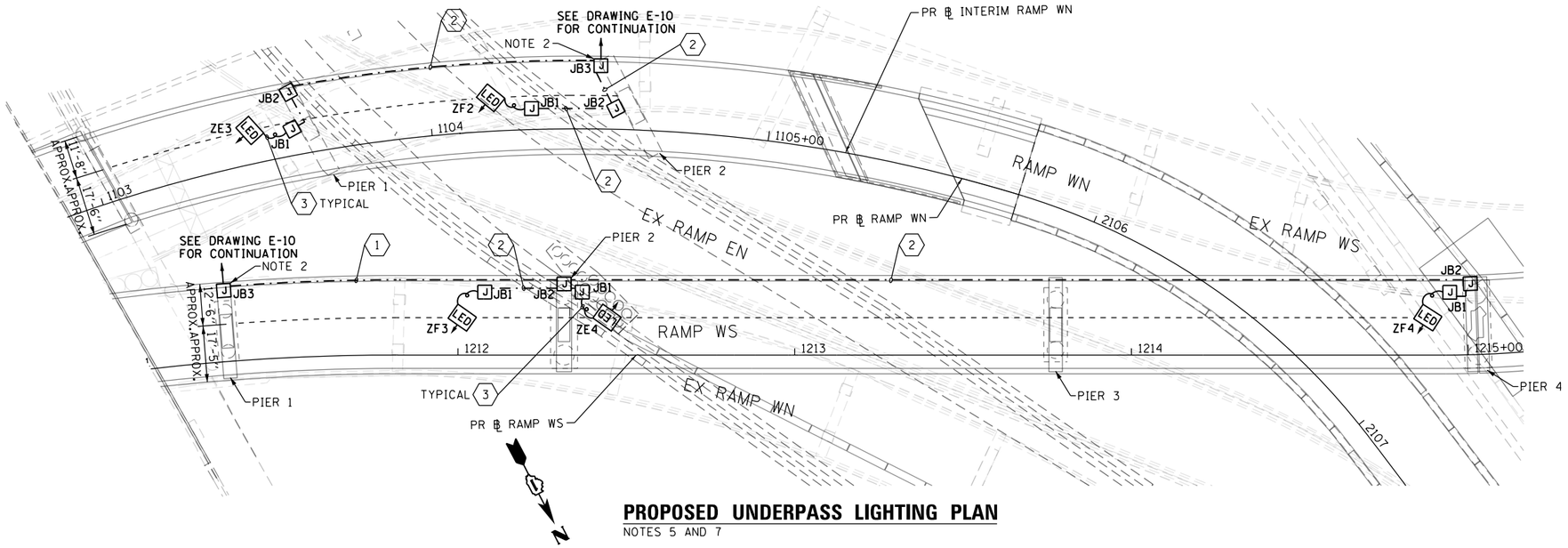
D160X93-Sht-Light-16	DESIGNED - TJL	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING RAMP WS UNDERPASS LIGHTING REMOVAL PLAN

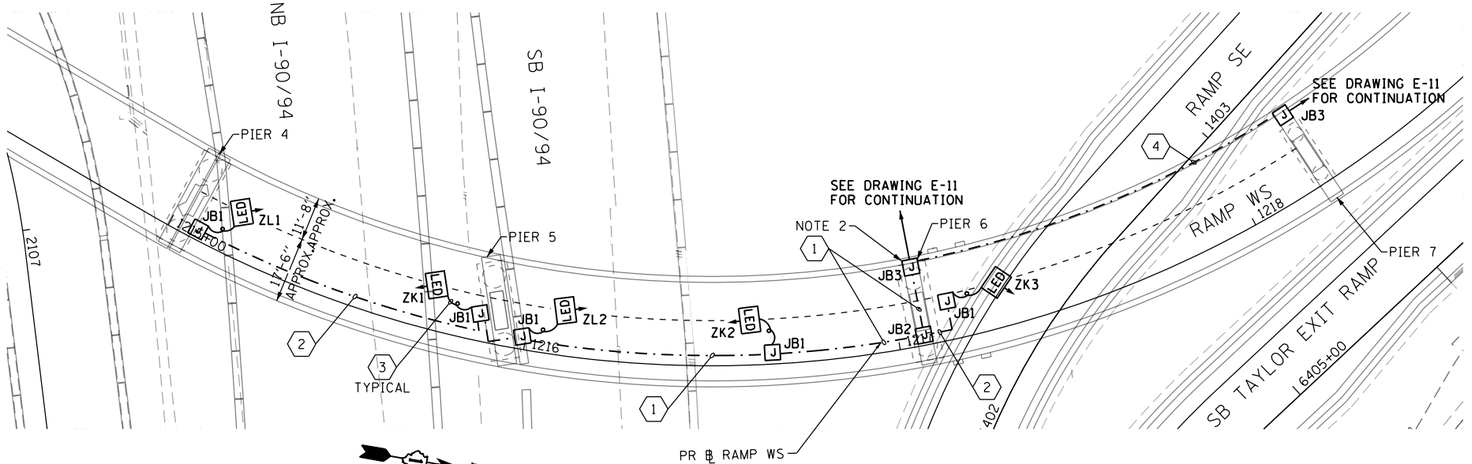
SCALE: 1"=20' | SHEET 16 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	558
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



PROPOSED UNDERPASS LIGHTING PLAN

NOTES 5 AND 7



PROPOSED UNDERPASS LIGHTING PLAN

NOTES 5 AND 7

UNDERPASS LUMINAIRE TABLE (CONTROLLER 'Z')				
LUMINAIRE	BASELINE	STATION & OFFSET	NOTES	MOUNTING
ZF2	RAMP WN	STA. 1104+18.0, 9.9 LT	NOTE 3	SUSPENDED
ZE3	RAMP WN	STA. 1103+47.3, 9.9 LT	NOTE 3	SUSPENDED
ZF3	RAMP WS	STA. 1212+01.3, 11.1 LT	NOTE 3	SUSPENDED
ZE4	RAMP WS	STA. 1212+44.3, 11.1 LT	NOTE 3	SUSPENDED
ZF4	RAMP WS	STA. 1214+88.0, 11.1 LT	NOTE 3	SUSPENDED

NOTE: CENTERING THE UNDERPASS LUMINAIRES BETWEEN THE STRUCTURAL BEAMS TAKES PRECEDENCE OVER THE STATION AND OFFSET PROVIDED IN THE TABLE.

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/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 3/4" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)
4	3-1/C#2, 1-1/C#4 GND IN 3" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)

UNDERPASS LUMINAIRE TABLE (CONTROLLER 'Z')				
LUMINAIRE	BASELINE	STATION & OFFSET	NOTES	MOUNTING
ZK1	RAMP WS	STA. 1215+73.4, 11.9 LT	NOTE 3	SUSPENDED
ZL1	RAMP WS	STA. 1215+16.1, 11.9 LT	NOTE 3	SUSPENDED
ZK2	RAMP WS	STA. 1216+60.4, 11.9 LT	NOTE 3	SUSPENDED
ZL2	RAMP WS	STA. 1216+09.6, 11.9 LT	NOTE 3	SUSPENDED
ZK3	RAMP WS	STA. 1217+29.2, 11.9 LT	NOTE 3	SUSPENDED

NOTE: CENTERING THE UNDERPASS LUMINAIRES BETWEEN THE STRUCTURAL BEAMS TAKES PRECEDENCE OVER THE STATION AND OFFSET PROVIDED IN THE TABLE.

0 20 40
SCALE: 1"=20'

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. PROVIDE TERMINAL BLOCKS AND 30A FUSES IN THE JUNCTION BOX FOR SPLICING THE NO. 10 UNDERPASS LIGHTING WIRES TO THE NO. 2 LIGHTING CIRCUIT WIRES. SEE DRAWING E-24 FOR TYPICAL UNDERPASS LIGHTING UNIT WIRING DIAGRAM.
3. SEE IDOT STANDARD DRAWING BE-900 FOR ADDITIONAL INSTALLATION DETAILS FOR PROPOSED SUSPENDED MOUNT UNDERPASS LUMINAIRES.
4. SEE IDOT STANDARD DRAWING BE-902 FOR ADDITIONAL INSTALLATION DETAILS FOR THE PROPOSED PIER/ ABUTMENT WALL MOUNTED UNDERPASS LUMINAIRES.
5. ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM EXISTING IDOT LIGHTING CONTROLLERS "Z".
6. SUSPENDED MOUNT UNDERPASS LUMINAIRES SETBACK FROM THE EDGE OF PAVEMENT SHALL BE 2 FEET.
7. THE INSTALLATION LOCATIONS OF THE UNDERPASS LUMINAIRES ARE SHOWN FOR THE ULTIMATE ROADWAY CONFIGURATION TO BE CONSTRUCTED IN A FUTURE IDOT CONTRACT. SEE THE UNDERPASS LUMINAIRE TABLE FOR APPROXIMATE INSTALLATION LOCATIONS.

AECOM
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D160X93-Sht-Light-17	DESIGNED - TJL	REVISED -	
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PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

UNDERPASS LIGHTING PLAN
RAMPS WN AND WS

SCALE: 1"=20' | SHEET 17 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	559
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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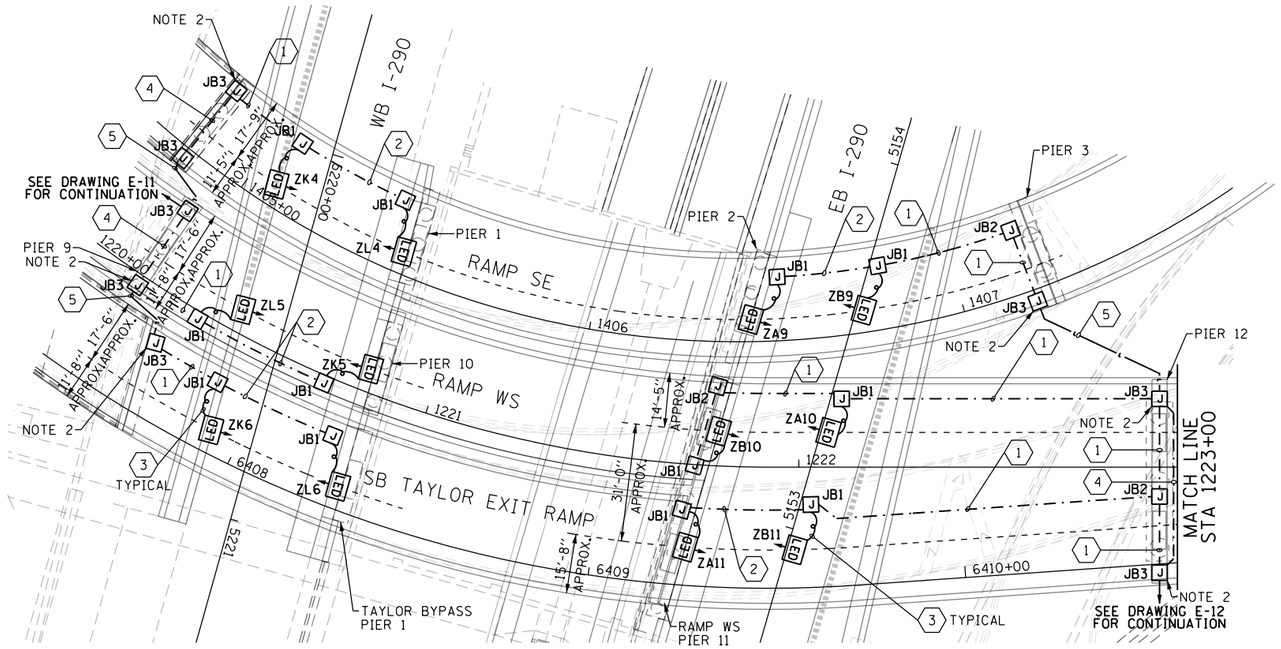
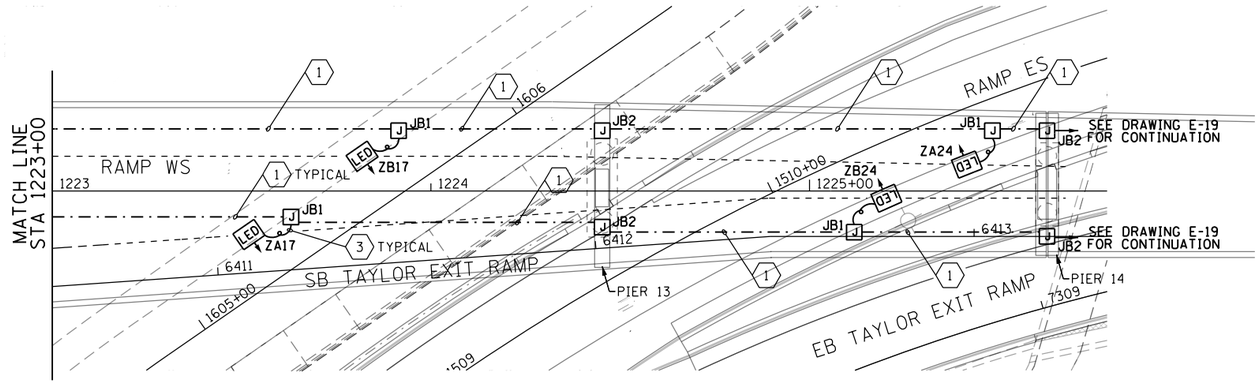


PROPOSED UNDERPASS LIGHTING PLAN

NOTES 5 AND 7



PROPOSED UNDERPASS LIGHTING PLAN

NOTES 5 AND 7

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. PROVIDE TERMINAL BLOCKS AND 30A FUSES IN THE JUNCTION BOX FOR SPLICING THE NO. 10 UNDERPASS LIGHTING WIRES TO THE NO. 2 LIGHTING CIRCUIT WIRES. SEE DRAWING E-24 FOR TYPICAL UNDERPASS LIGHTING UNIT WIRING DIAGRAM.
3. SEE IDOT STANDARD DRAWING BE-900 FOR ADDITIONAL INSTALLATION DETAILS FOR PROPOSED SUSPENDED MOUNT UNDERPASS LUMINAIRES.
4. SEE IDOT STANDARD DRAWING BE-902 FOR ADDITIONAL INSTALLATION DETAILS FOR THE PROPOSED PIER/ ABUTMENT WALL MOUNTED UNDERPASS LUMINAIRES.
5. ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM EXISTING IDOT LIGHTING CONTROLLERS "Z".
6. SUSPENDED MOUNT UNDERPASS LUMINAIRES SETBACK FROM THE EDGE OF PAVEMENT SHALL BE 2 FEET.
7. THE INSTALLATION LOCATIONS OF THE UNDERPASS LUMINAIRES ARE SHOWN FOR THE ULTIMATE ROADWAY CONFIGURATION TO BE CONSTRUCTED IN A FUTURE IDOT CONTRACT. SEE THE UNDERPASS LUMINAIRE TABLE FOR APPROXIMATE INSTALLATION LOCATIONS.

UNDERPASS LUMINAIRE TABLE (CONTROLLER 'Z')

LUMINAIRE	BASELINE	STATION & OFFSET (RAMP WS)	NOTES	MOUNTING
ZA9	RAMP SE	STA. 1406+43.0, 5.8 LT	NOTE 4	PIER
ZB9	RAMP SE	STA. 1406+73.7, 5.8 LT	NOTE 3	SUSPENDED
ZA10	RAMP WS	STA. 1222+07.9, 9.2 LT	NOTE 3	SUSPENDED
ZB10	RAMP WS	STA. 1221+78.4, 9.2 LT	NOTE 4	PIER
ZA11	TAYLOR BP	STA. 6409+25.1, 10.1 LT	NOTE 4	PIER
ZB11	TAYLOR BP	STA. 6409+55.0, 10.1 LT	NOTE 3	SUSPENDED
ZA17	TAYLOR BP	STA. 6411+08.8, 10.1 LT	NOTE 3	SUSPENDED
ZB17	RAMP WS	STA. 1223+81.8, 9.2 LT	NOTE 3	SUSPENDED
ZA24	RAMP WS	STA. 1225+41.6, 7.0 LT	NOTE 3	SUSPENDED
ZB24	TAYLOR BP	STA. 6412+76.9, 10.1 LT	NOTE 3	SUSPENDED

NOTE: CENTERING THE UNDERPASS LUMINAIRES BETWEEN THE STRUCTURAL BEAMS TAKES PRECEDENCE OVER THE STATION AND OFFSET PROVIDED IN THE TABLE.

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/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 3/4" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)
4	3-1/C#2, 1-1/C#4 GND IN 3" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
5	3-1/C#2, 1-1/C#4 GND IN 1-1/2" DIA UNIT DUCT (CKTS AS INDICATED ON THIS DRAWING)

UNDERPASS LUMINAIRE TABLE (CONTROLLER 'Z')

LUMINAIRE	BASELINE	STATION & OFFSET (RAMP WS)	NOTES	MOUNTING
ZK4	RAMP SE	STA. 1405+07.4, 5.8 LT	NOTE 3	SUSPENDED
ZL4	RAMP SE	STA. 1405+46.4, 5.8 LT	NOTE 4	PIER
ZK5	RAMP WS	STA. 1220+82.2, 6.1 LT	NOTE 4	PIER
ZL5	RAMP WS	STA. 1220+44.2, 6.1 LT	NOTE 3	SUSPENDED
ZK6	TAYLOR BP	STA. 6407+92.0, 6.1 LT	NOTE 3	SUSPENDED
ZL6	TAYLOR BP	STA. 6408+29.4, 6.1 LT	NOTE 4	PIER

NOTE: CENTERING THE UNDERPASS LUMINAIRES BETWEEN THE STRUCTURAL BEAMS TAKES PRECEDENCE OVER THE STATION AND OFFSET PROVIDED IN THE TABLE.

N

0 20 40

SCALE: 1"=20'

E-18

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AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

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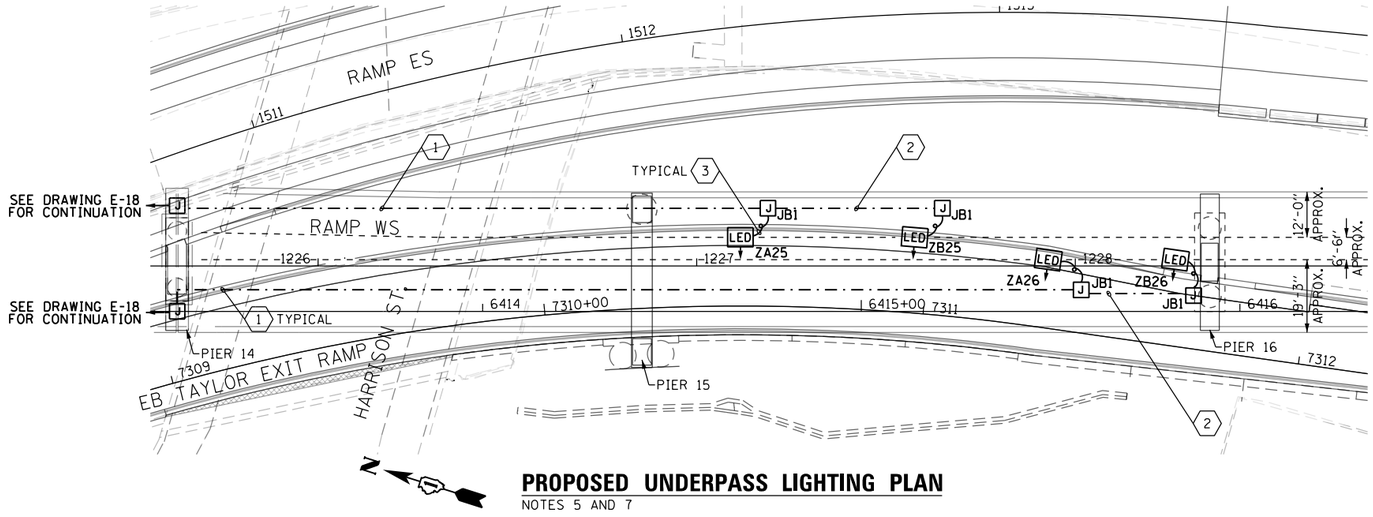
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

UNDERPASS LIGHTING PLAN
RAMPS SE, WS, AND TAYLOR BYPASS

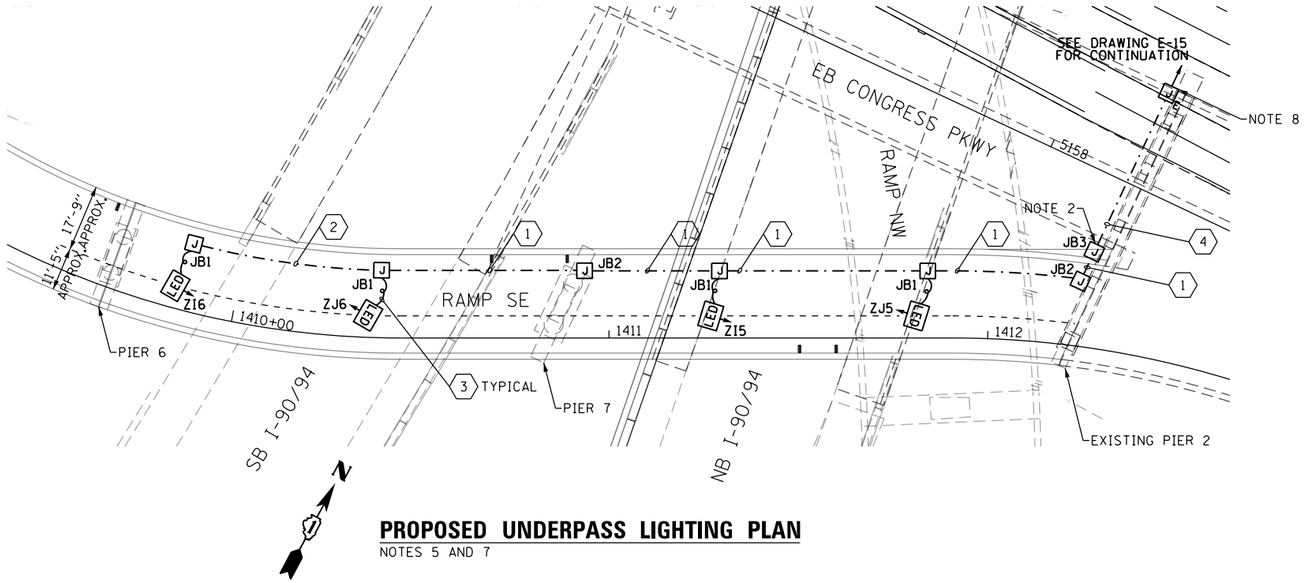
SCALE: 1"=20' | SHEET 18 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	560
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



PROPOSED UNDERPASS LIGHTING PLAN

NOTES 5 AND 7



PROPOSED UNDERPASS LIGHTING PLAN

NOTES 5 AND 7

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. PROVIDE TERMINAL BLOCKS AND 30A FUSES IN THE JUNCTION BOX FOR SPLICING THE NO. 10 UNDERPASS LIGHTING WIRES TO THE NO. 2 LIGHTING CIRCUIT WIRES. SEE DRAWING E-24 FOR TYPICAL UNDERPASS LIGHTING UNIT WIRING DIAGRAM.
3. SEE IDOT STANDARD DRAWING BE-900 FOR ADDITIONAL INSTALLATION DETAILS FOR PROPOSED SUSPENDED MOUNT UNDERPASS LUMINAIRES.
4. SEE IDOT STANDARD DRAWING BE-902 FOR ADDITIONAL INSTALLATION DETAILS FOR THE PROPOSED PIER/ ABUTMENT WALL MOUNTED UNDERPASS LUMINAIRES.
5. ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM EXISTING IDOT LIGHTING CONTROLLERS "Z".
6. SUSPENDED MOUNT UNDERPASS LUMINAIRES SETBACK FROM THE EDGE OF PAVEMENT SHALL BE 2 FEET.
7. THE INSTALLATION LOCATIONS OF THE UNDERPASS LUMINAIRES ARE SHOWN FOR THE ULTIMATE ROADWAY CONFIGURATION TO BE CONSTRUCTED IN A FUTURE IDOT CONTRACT. SEE THE UNDERPASS LUMINAIRE TABLE FOR APPROXIMATE INSTALLATION LOCATIONS.
8. DRILL THE EXISTING JUNCTION BOX ATTACHED TO PIER 2 OF THE EB CONGRESS PARKWAY BRIDGE STRUCTURE. SPLICE THE PROPOSED UNDERPASS LIGHTING CIRCUIT CABLES TO THE EXISTING LIGHTING CABLES LOCATED IN THE EXISTING JUNCTION BOX.

UNDERPASS LUMINAIRE TABLE (CONTROLLER 'Z')				
LUMINAIRE	BASELINE	STATION & OFFSET (RAMP WS)	NOTES	MOUNTING
ZA25	RAMP WS	STA. 1227+11.5, 7.6 LT	NOTE 3	SUSPENDED
ZB25	RAMP WS	STA. 1227+57.6, 7.6 LT	NOTE 3	SUSPENDED
ZA26	RAMP WS	STA. 1227+92.8, 1.7 LT	NOTE 3	SUSPENDED
ZB26	RAMP WS	STA. 1228+26.5, 1.7 LT	NOTE 3	SUSPENDED

NOTE: CENTERING THE UNDERPASS LUMINAIRES BETWEEN THE STRUCTURAL BEAMS TAKES PRECEDENCE OVER THE STATION AND OFFSET PROVIDED IN THE TABLE.

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/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 3/4" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)
4	3-1/C#2, 1-1/C#4 GND IN 3" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)

UNDERPASS LUMINAIRE TABLE (CONTROLLER 'Z')				
LUMINAIRE	BASELINE	STATION & OFFSET (RAMP WS)	NOTES	MOUNTING
ZI5	RAMP SE	STA. 1411+26.9, 5.8 LT	NOTE 3	SUSPENDED
ZJ5	RAMP SE	STA. 1411+81.2, 5.8 LT	NOTE 3	SUSPENDED
ZI6	RAMP SE	STA. 1409+83.2, 5.8 LT	NOTE 3	SUSPENDED
ZJ6	RAMP SE	STA. 1410+36.2, 5.8 LT	NOTE 3	SUSPENDED

NOTE: CENTERING THE UNDERPASS LUMINAIRES BETWEEN THE STRUCTURAL BEAMS TAKES PRECEDENCE OVER THE STATION AND OFFSET PROVIDED IN THE TABLE.

0 20 40
SCALE: 1"=20'

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-Light-19	DESIGNED - TJL	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

UNDERPASS LIGHTING PLAN
RAMPS SE AND WS

SCALE: 1"=20' | SHEET 19 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	561
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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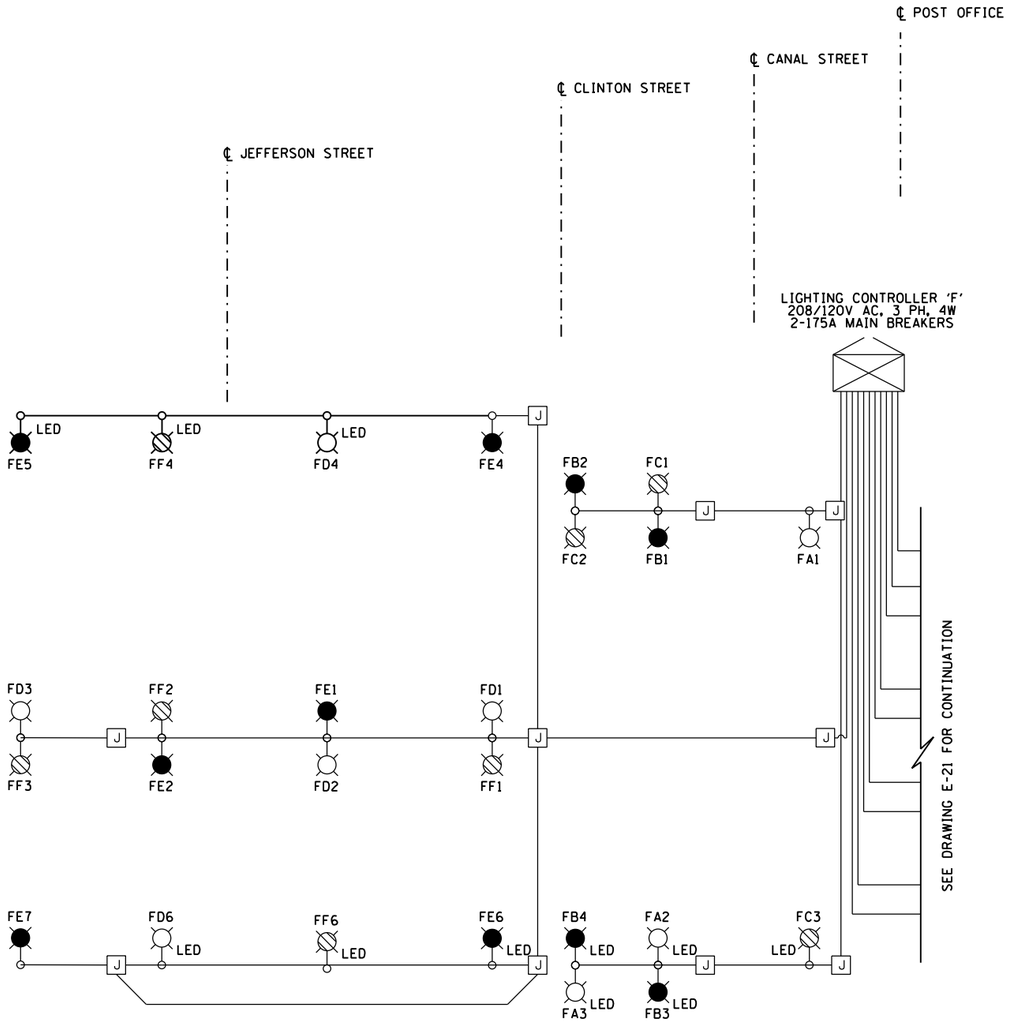

SYMBOLS LEGEND

- IDOT LIGHTING CONTROLLER
- J — JUNCTION BOX
- LIGHTING UNIT (400W HPS LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED SYMBOL)
- TWIN ARM LIGHTING UNIT (400W HPS LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED SYMBOL)
- LED — LIGHTING UNIT (LED LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED SYMBOL)
- LED LED — TWIN ARM LIGHTING UNIT (LED LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED SYMBOL)
- LIGHTING UNIT (200W LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED SYMBOL)
- TWIN ARM LIGHTING UNIT (200W LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED SYMBOL)
- UNDERPASS LIGHTING UNIT
  400 WATT HPS LUMINAIRE
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED SYMBOL)
- UNDERPASS LIGHTING UNIT
  55 WATT LPS LUMINAIRE
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED SYMBOL)
- T — TEMPORARY LIGHTING UNIT
  (400W HPS LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED SYMBOL)
- A — TEMPORARY AERIAL CABLE

LOAD TABLE (120V)
LIGHTING CONTROLLER "F"

CIRCUIT	RED PHASE AMPS	RED PHASE WATTS	CIRCUIT	BLACK PHASE AMPS	BLACK PHASE WATTS	CIRCUIT	BLUE PHASE AMPS	BLUE PHASE WATTS
A	7.45	894	B	11.25	1350	C	9.43	1131
D	15.05	1806	E	18.85	2262	F	15.05	1806
G	7.38	886	H	9.84	1181	I	9.84	1181
J	7.38	886	K	25.04	3005	L	25.04	3005
M	7.38	886	N	9.84	1181	O	9.84	1181
P	7.38	886	Q	9.84	1181	R	9.84	1181
S	-	-	T	-	-	U	-	-
V	9.44	2266	W	7.08	850	X	7.08	850
TOTAL	61.5	8,508	TOTAL	91.7	11,009	TOTAL	86.1	10,334

N

E-20

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AECOM
303 EAST WACKER DRIVE, SUITE 1400
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PHONE: (312) 373-7700 FAX: (312) 373-6800

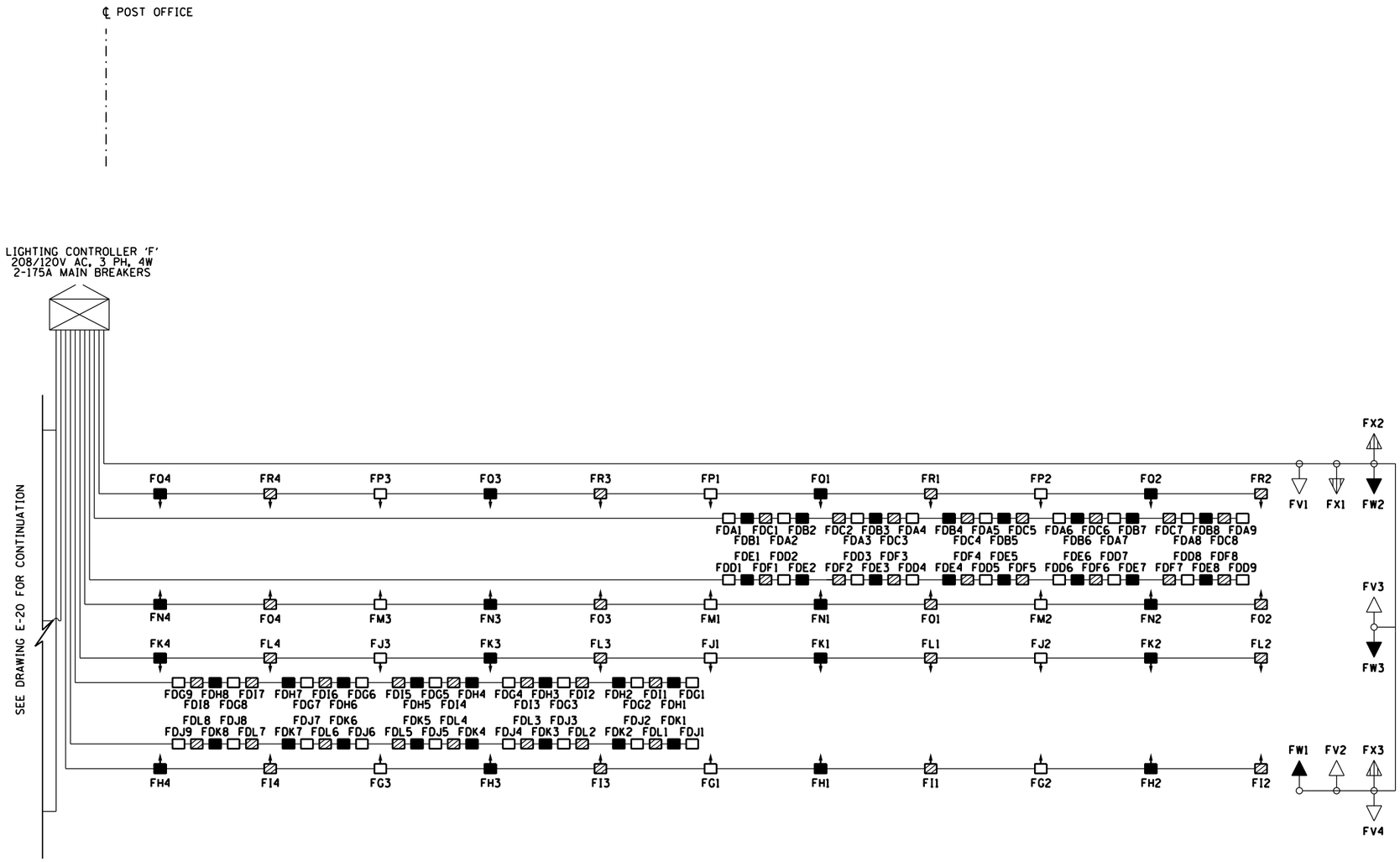
D160X93-sht-Light-20	DESIGNED - TJL	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT LIGHTING CONTROLLER 'F'
WIRING DIAGRAM

SCALE: N.T.S. | SHEET 20 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	562
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



SYMBOLS LEGEND

- IDOT LIGHTING CONTROLLER
- J — JUNCTION BOX
- LIGHTING UNIT (400W HPS LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED)
- TWIN ARM LIGHTING UNIT (400W HPS LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED)
- LIGHTING UNIT (200W LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED)
- TWIN ARM LIGHTING UNIT (200W LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED)
- UNDERPASS LIGHTING UNIT
  400 WATT HPS LUMINAIRE
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED)
- UNDERPASS LIGHTING UNIT
  55 WATT LPS LUMINAIRE
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED)
- T — TEMPORARY LIGHTING UNIT
  (400W HPS LUMINAIRE)
  (RED PHASE - OPEN SYMBOL
  BLACK PHASE - SOLID SYMBOL
  BLUE PHASE - STRIPED)
- A — TEMPORARY AERIAL CABLE

NOTES:

1. NO WORK SHOWN ON THIS SHEET. FOR INFORMATION ONLY.

LOAD TABLE (120V)
LIGHTING CONTROLLER "F"

CIRCUIT	RED PHASE AMPS	RED PHASE WATTS	CIRCUIT	BLACK PHASE AMPS	BLACK PHASE WATTS	CIRCUIT	BLUE PHASE AMPS	BLUE PHASE WATTS
DA	34.2	4104	DB	30.4	3648	DC	30.4	3648
DD	34.2	4104	DE	30.4	3648	DF	30.4	3648
DG	34.2	4104	DH	30.4	3648	DI	30.4	3648
DJ	34.2	4104	DK	30.4	3648	DL	30.4	3648
TOTAL	136.8	16,416	TOTAL	121.6	14,592	TOTAL	121.6	14,592

N

E-21

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-sht-Light-21	DESIGNED - TJL	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 '/ in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT LIGHTING CONTROLLER 'F'
WIRING DIAGRAM - PART 2

SCALE: N.T.S. | SHEET 21 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	563
		CONTRACT NO. 60X93		
		ILLINOIS FED. AID PROJECT		

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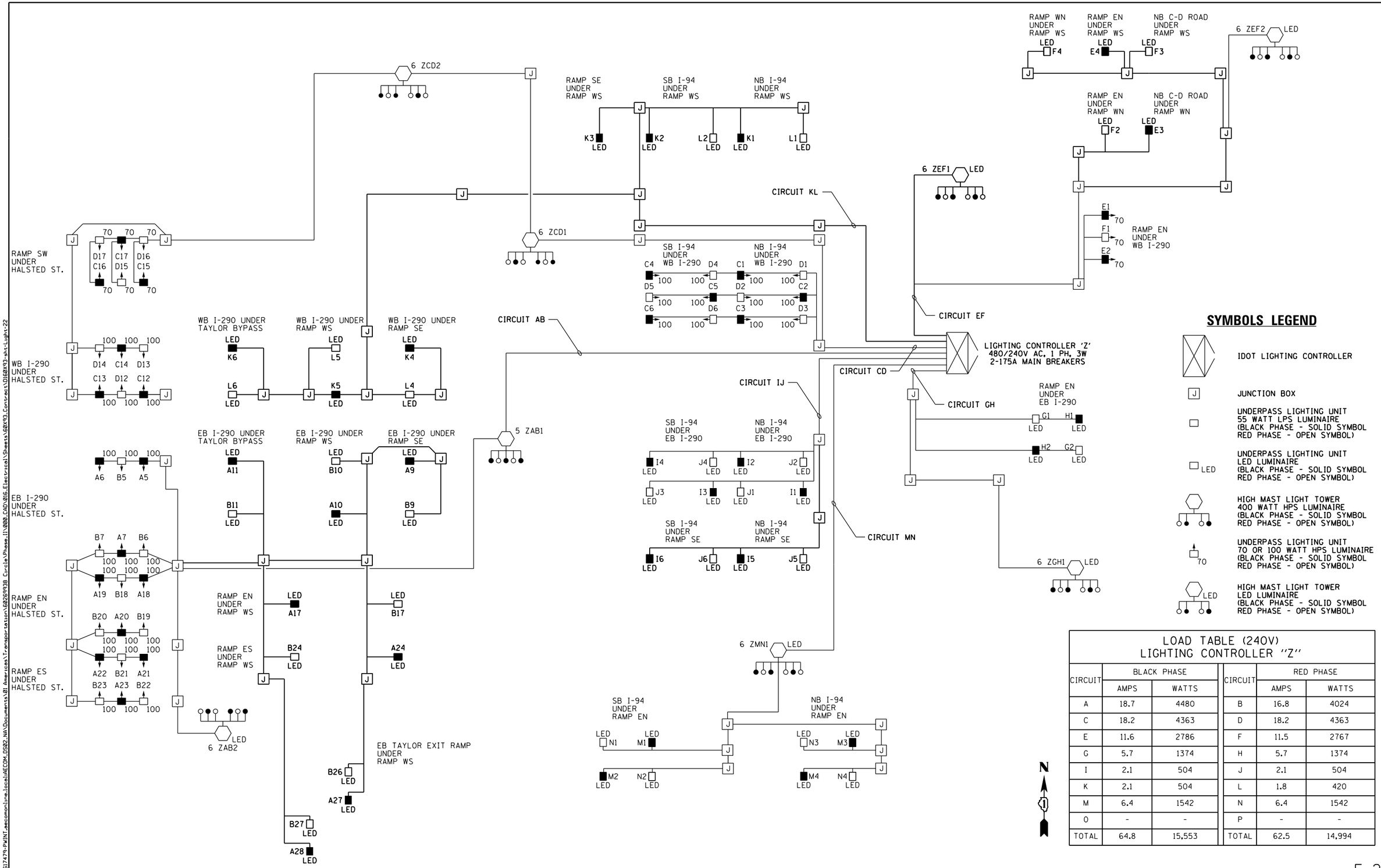

SYMBOLS LEGEND

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

LOAD TABLE (240V) LIGHTING CONTROLLER "Z"

CIRCUIT	BLACK PHASE AMPS	BLACK PHASE WATTS	CIRCUIT	RED PHASE AMPS	RED PHASE WATTS
A	18.7	4480	B	16.8	4024
C	18.2	4363	D	18.2	4363
E	11.6	2786	F	11.5	2767
G	5.7	1374	H	5.7	1374
I	2.1	504	J	2.1	504
K	2.1	504	L	1.8	420
M	6.4	1542	N	6.4	1542
O	-	-	P	-	-
TOTAL	64.8	15,553	TOTAL	62.5	14,994

E-22

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-sht-Light-22	DESIGNED - TJL	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT LIGHTING CONTROLLER 'Z'
WIRING DIAGRAM

SCALE: N.T.S. | SHEET 22 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	564
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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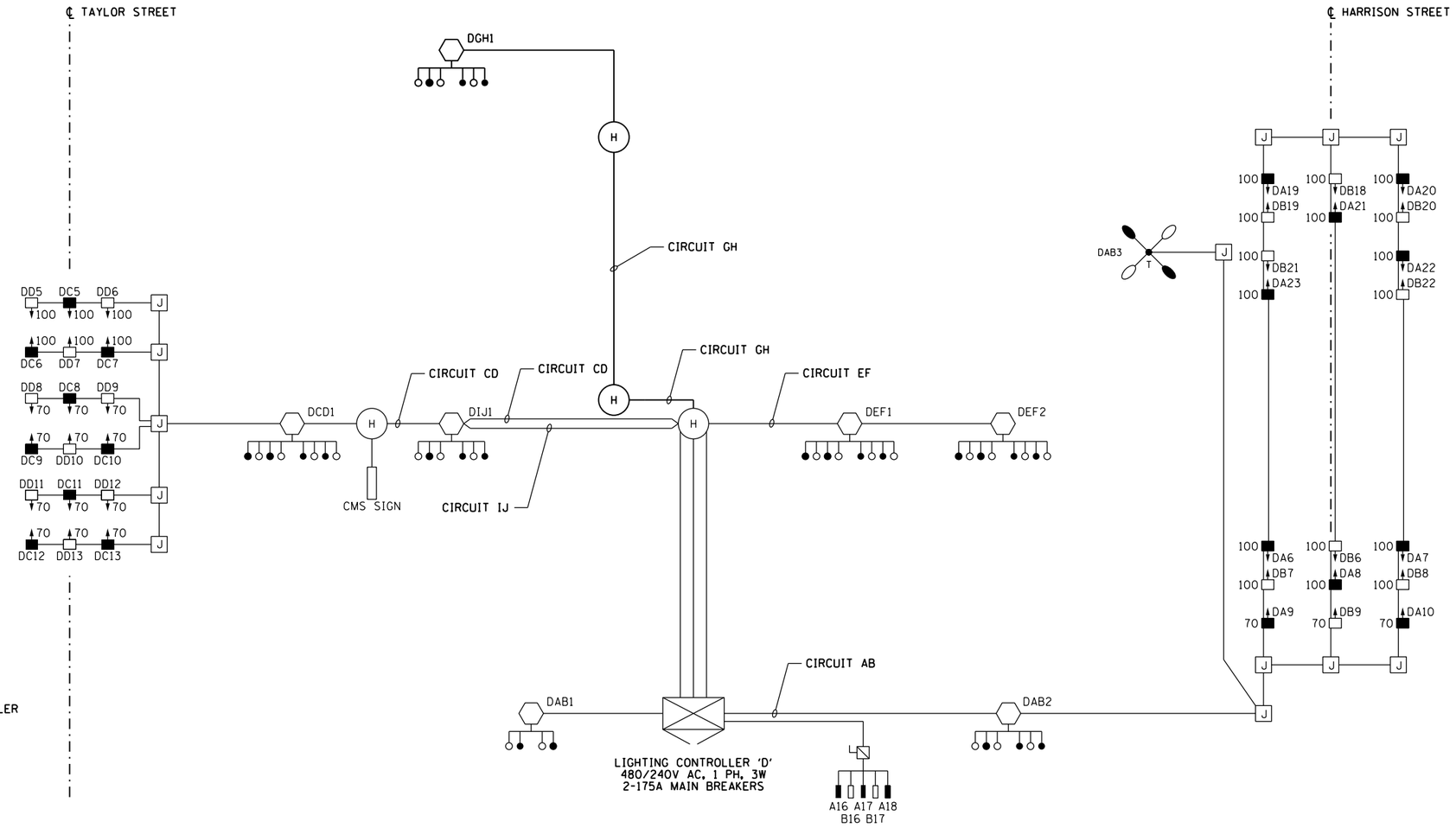

SYMBOLS LEGEND

IDOT LIGHTING CONTROLLER

HANDHOLE

JUNCTION BOX

HANDHOLE

CMS SIGN

UNDERPASS LIGHTING UNIT
55 WATT HPS LUMINAIRE
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)

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)

UNDERPASS LIGHTING UNIT
70 OR 100 WATT HPS LUMINAIRE
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)

TEMPORARY LIGHTING UNIT
WITH 400 WATT HPS LUMINAIRES
(BLACK PHASE - SOLID SYMBOL
RED PHASE - OPEN SYMBOL)

LOAD TABLE
LIGHTING CONTROLLER ''D''

CIRCUIT	BLACK PHASE		CIRCUIT	RED PHASE	
	AMPS	WATTS		AMPS	WATTS
A	20.54	4930	B	19.61	4706
C	24.58	5899	D	24.08	5779
E	17.2	4128	F	17.2	4128
G	13.35	3204	H	13.35	3204
I	5.7	1368	J	5.7	1368
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	81.4	19,529	TOTAL	79.9	19,186

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USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT LIGHTING CONTROLLER 'D'
WIRING DIAGRAM

SCALE: N.T.S. | SHEET 23 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	565
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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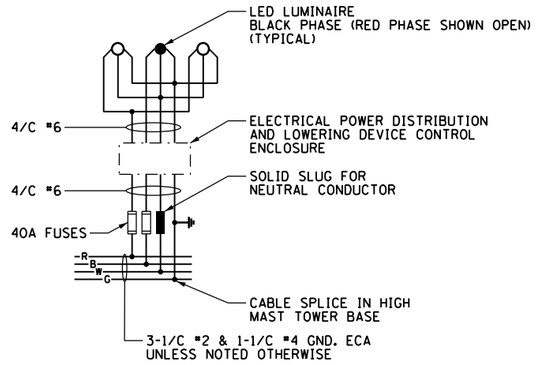
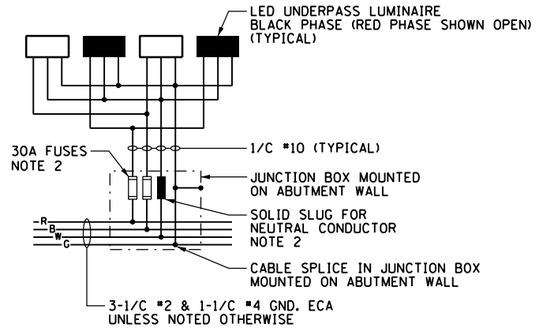
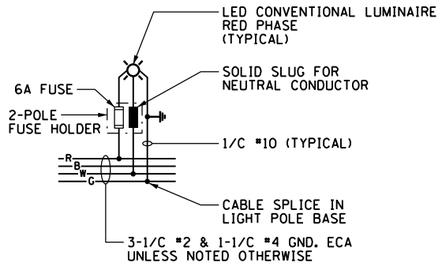
HIGH MAST LIGHT TOWER FOUNDATION SCHEDULE								
HIGH MAST LIGHT TOWER IDENTIFICATION	HIGH MAST LIGHT TOWER FOUNDATION LOCATION			HIGH MAST LIGHT TOWER FOUNDATION ELEVATIONS			HIGH MAST TOWER HEIGHT	REMARKS AND NOTES
	STATION	OFFSET	BASELINE	TOP ELEVATION	BOTTOM ELEVATION	DESIGN DEPTH (FT)		
6 ZEF1	1105+64.7	65.90' RT	PR RAMP WN	577.87	531.37	46.5	150'	NOTES 3 & 4



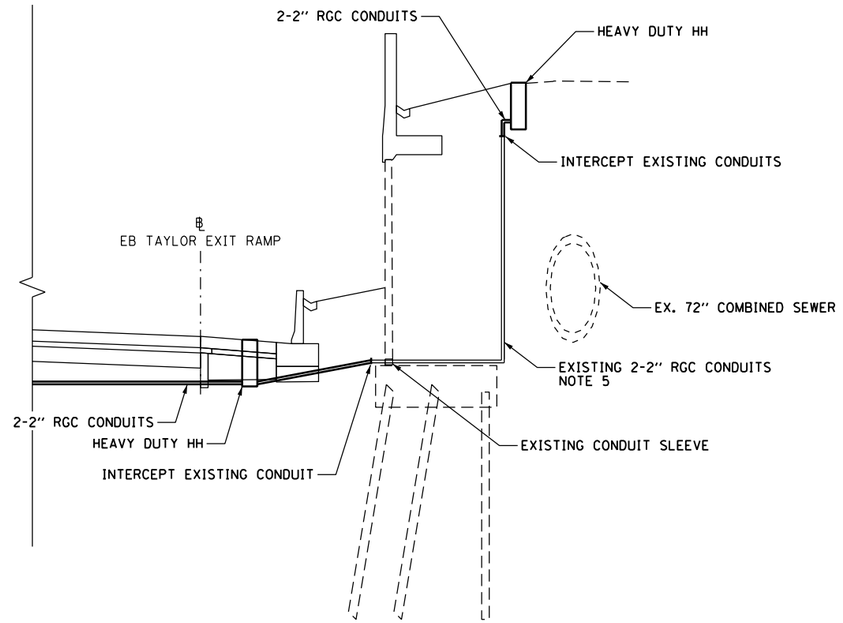
TYPICAL HIGH MAST LIGHT TOWER WIRING DIAGRAM
NOT TO SCALE



TYPICAL UNDERPASS LIGHTING UNIT WIRING DIAGRAM
NOT TO SCALE



TYPICAL CONVENTIONAL LIGHTING UNIT WIRING DIAGRAM
NOT TO SCALE



CONDUIT ROUTING THROUGH EXISTING RW #12
NOTE TO SCALE

NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. THE FUSES, FUSE HOLDERS, AND SOLID SLUGS SHALL BE PROVIDED ACCORDING TO ARTICLE 1065.01 OF THE IDOT STANDARDS. THE COST OF PROVIDING THE FUSES, FUSE HOLDERS, AND SOLID SLUGS IN THE JUNCTION BOX WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE JUNCTION BOX IN WHICH THEY ARE INSTALLED.
3. SEE IDOT STANDARDS BE-506 AND BE-511 FOR LIGHT TOWER FOUNDATION DETAILS.
4. THE SCHEDULE ON THIS DRAWING REPLACES THE "SHAFT LENGTH (D) TABLE" SHOWN ON IDOT STANDARDS BE-506 AND BE-511.
5. THE EXISTING CONDUITS LOCATED BEHIND RETAINING WALL 12 SHALL REMAIN AND BE PROTECTED DURING THE RETAINING WALL RECONSTRUCTION.

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D160X93-sht-Light-24	DESIGNED - TJL	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 '/ in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ELECTRICAL DETAILS

SCALE: N.T.S. | SHEET 24 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	566
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

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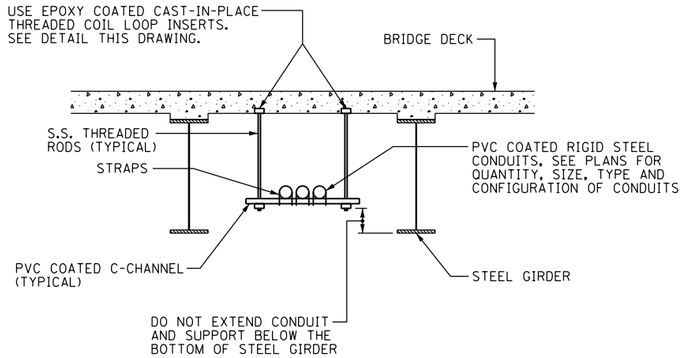
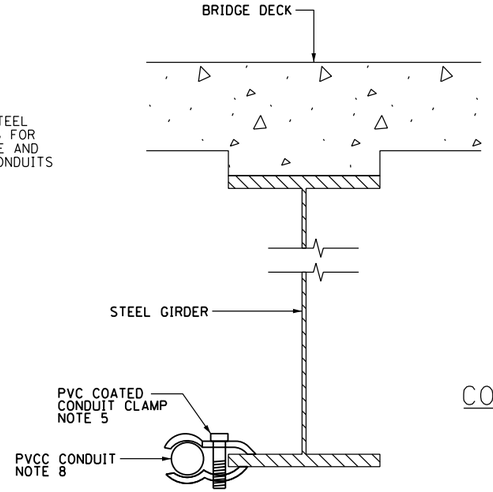
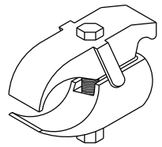


TYPICAL CONDUIT SUPPORT ATTACHED TO BRIDGE DECK DETAIL

SCALE: NOT TO SCALE
NOTES 3 & 5



CONDUIT BEAM CLAMPED INSTALLATION DETAIL

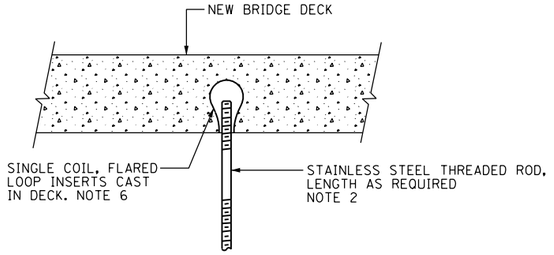


PVC COATED CONDUIT BEAM CLAMP

NOT TO SCALE NOTE 7

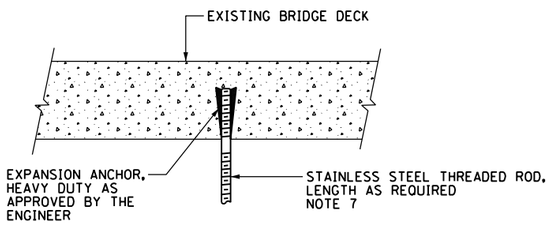
NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR ATTACHING CONDUITS AND JUNCTION BOXES TO A STRUCTURE. ALL WORK REQUIRED TO ATTACH CONDUIT TO STRUCTURES MUST COMPLY WITH SECTION 811 OF THE STANDARD SPECIFICATIONS AND ALL MATERIALS MUST COMPLY WITH SECTION 1088 OF THE STANDARD SPECIFICATIONS.
2. THE CONTRACTOR MUST COORDINATE THREADED ROD END SIZES WITH THE C-CHANNEL AND FLARED LOOP INSERT MANUFACTURERS.
3. THE CONDUIT SUPPORT SYSTEM ATTACHED TO THE BRIDGE STRUCTURE, INCLUDING THE CONCRETE INSERTS AND MOUNTING HARDWARE, WILL NOT BE PAID FOR SEPARATELY, AND SHALL BE INCLUDED IN THE COST FOR THE "CONDUIT ATTACHED TO STRUCTURE" PAY ITEM.
4. SEE PLAN DRAWINGS FOR THE PROPOSED CONDUIT ROUTING.
5. ALL MOUNTING HARDWARE FOR CONDUIT SUPPORTS AND PVCC RGC MUST BE PVC COATED.
6. 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 THE INSERT LOCATIONS IN THE FIELD AND COORDINATING ALL WORK WITH THE BRIDGE DECK CONSTRUCTION.
7. SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS OR CONDUIT BEAM CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS WILL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE" PAY ITEM.
8. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.

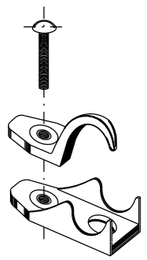


NEW BRIDGE DECK THREADED ROD INSTALLATION ANCHOR DETAILS

SCALE: NOT TO SCALE

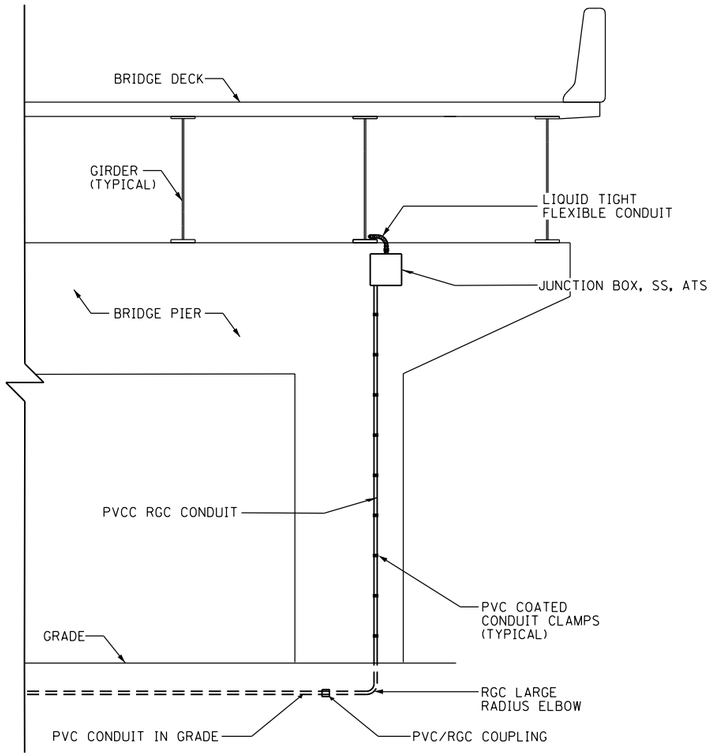


EXISTING BRIDGE DECK THREADED ROD INSTALLATION ANCHOR DETAILS



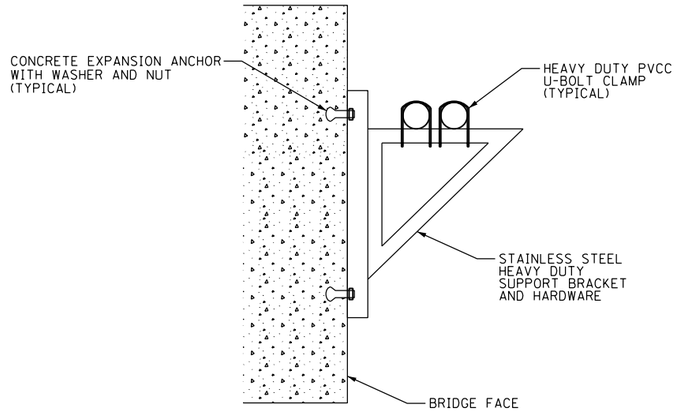
PVC COATED CONDUIT CLAMP

NOT TO SCALE NOTE 7



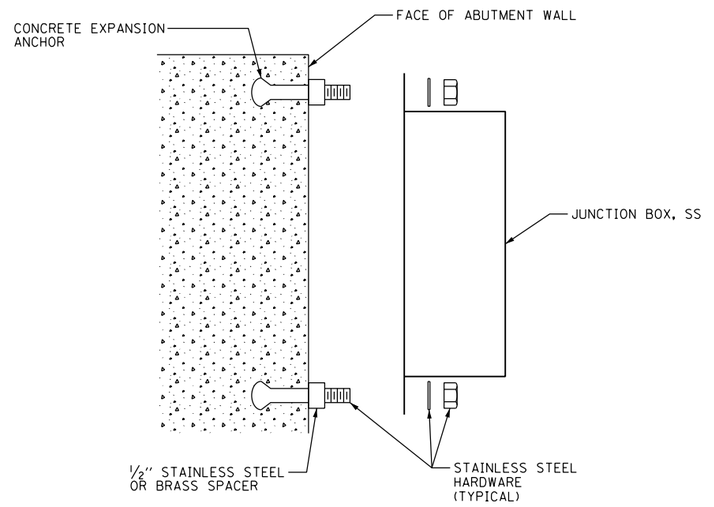
VERTICAL CONDUIT ATTACHED TO STRUCTURE DETAIL

NOT TO SCALE



MOUNTING BRACKET FOR MULTIPLE CONDUITS

NOT TO SCALE



JUNCTION BOX MOUNTED TO STRUCTURE

NOT TO SCALE

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-sht-Light-25	DESIGNED - TJL	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS

SCALE: N.T.S. | SHEET 25 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	567
		CONTRACT NO. 60X93		
		ILLINOIS FED. AID PROJECT		

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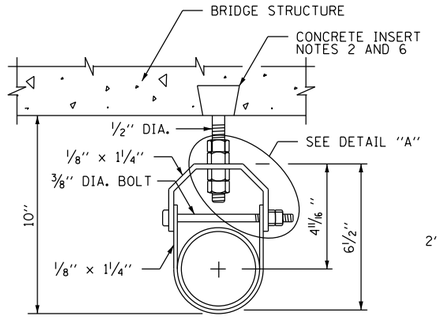
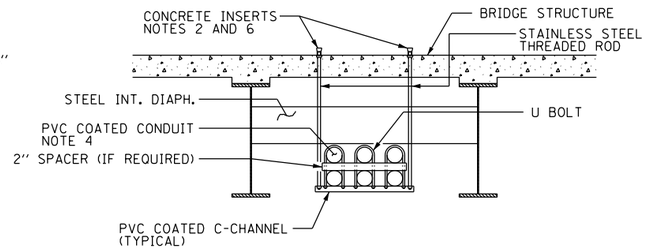
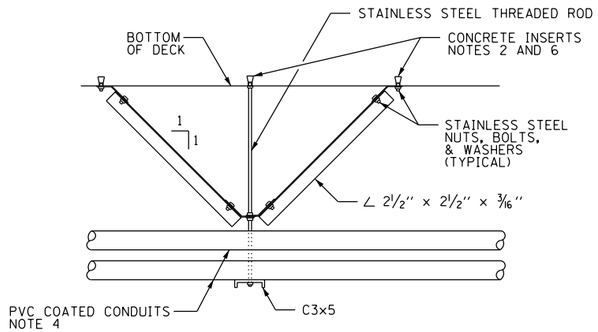


CONDUIT HANGER DETAIL



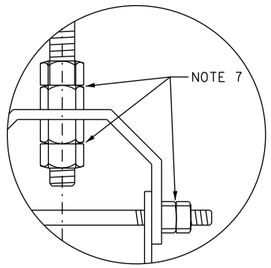
TYPICAL CONDUIT SUPPORT ATTACHED TO BRIDGE DECK WITH DIAPHRAGM DETAIL

NOTES 2 AND 3

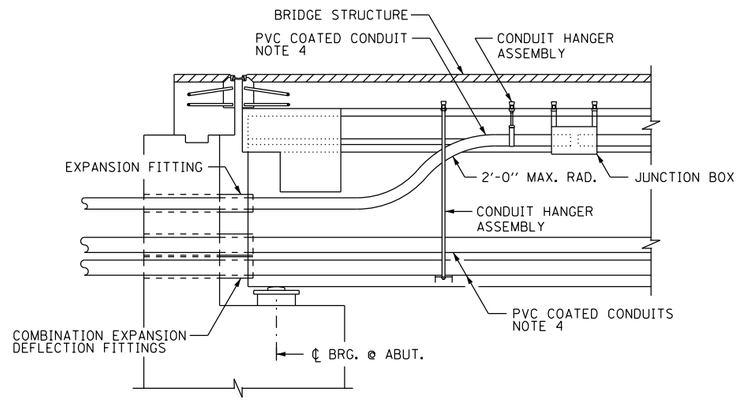


CENTERING DEVICE DETAIL - SIDE VIEW

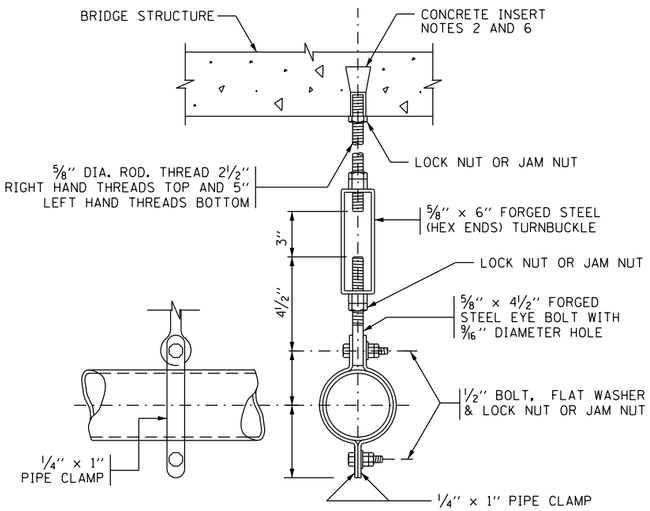
(LOCATED ONLY ON A HANGER ADJACENT TO PIER)



DETAIL "A"

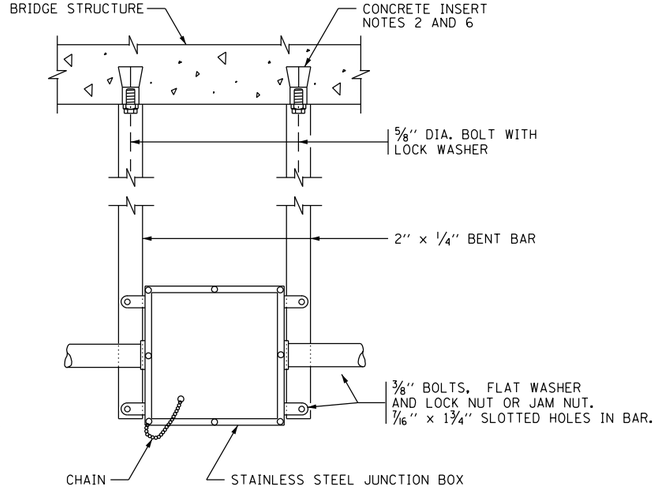


LONGITUDINAL SECTION



HANGER ASSEMBLY

EACH HANGER ASSEMBLY SHALL CONSIST OF CONCRETE INSERT, STAINLESS STEEL ROD, PIPE CLAMPS, NUTS, BOLTS, WASHERS, TURNBUCKLE AND EYE BOLT



JUNCTION BOX SUSPENDED FROM STRUCTURE DETAILS

NOTE 5

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR ATTACHING CONDUITS AND JUNCTION BOXES TO A STRUCTURE. ALL WORK REQUIRED TO ATTACH CONDUIT TO STRUCTURES MUST COMPLY WITH SECTION 811 OF THE STANDARD SPECIFICATIONS AND ALL MATERIALS MUST COMPLY WITH SECTION 1088 OF THE STANDARD SPECIFICATIONS.
2. SEE DRAWING E-25 FOR ADDITIONAL CONDUIT MOUNTING DETAILS AND FOR DETAILS REGARDING THE INSTALLATION OF CONCRETE INSERTS.
3. THE CONDUIT SUPPORT SYSTEM ATTACHED TO THE BRIDGE STRUCTURE, INCLUDING THE CONCRETE INSERTS AND MOUNTING HARDWARE, WILL NOT BE PAID FOR SEPARATELY, AND SHALL BE INCLUDED IN THE COST FOR THE "CONDUIT ATTACHED TO STRUCTURE" PAY ITEM.
4. SEE THE PLAN DRAWINGS FOR THE PROPOSED CONDUIT ROUTING.
5. THE JUNCTION BOX SUPPORT SYSTEM ATTACHED TO THE BRIDGE STRUCTURE, INCLUDING THE CONCRETE INSERTS AND ALL MOUNTING HARDWARE, WILL NOT BE PAID FOR SEPARATELY, AND SHALL BE INCLUDED IN THE COST FOR THE "JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE" PAY ITEM.
6. SPACE INSERTS AT 10 FOOT (MAXIMUM) CENTERS.
7. PROVIDE STAINLESS STEEL DOUBLE NUTS, JAM NUTS OR LOCK NUTS FOR THIS INSTALLATION.
8. PROVIDE CONDUIT SLEEVES IN THE BRIDGE ABUTMENT AS REQUIRED TO ROUTE THE CONDUITS THROUGH THE STRUCTURE AS SHOWN. THE DIAMETER OF THE SLEEVES SHALL BE A MINIMUM OF 2 INCHES LARGER IN DIAMETER THAN THE DIAMETER OF THE CONDUIT. PROVIDE WATERPROOF SEALANT IN THE INTERSTITIAL SPACE BETWEEN THE SLEEVE AND THE CONDUIT.

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DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS

SCALE: N.T.S. | SHEET 26 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	568
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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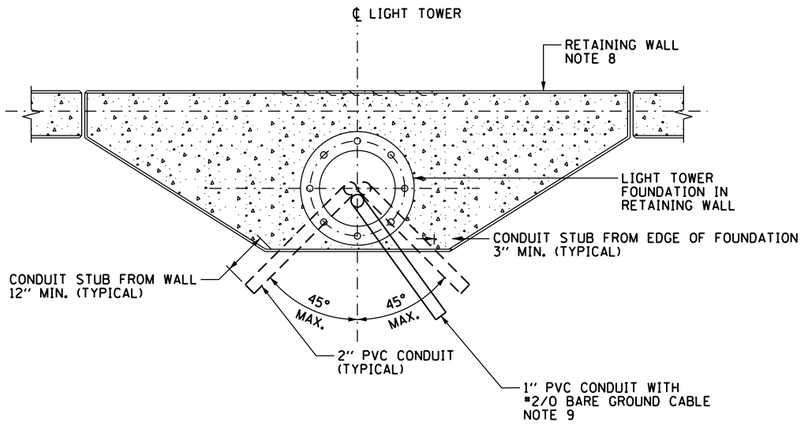
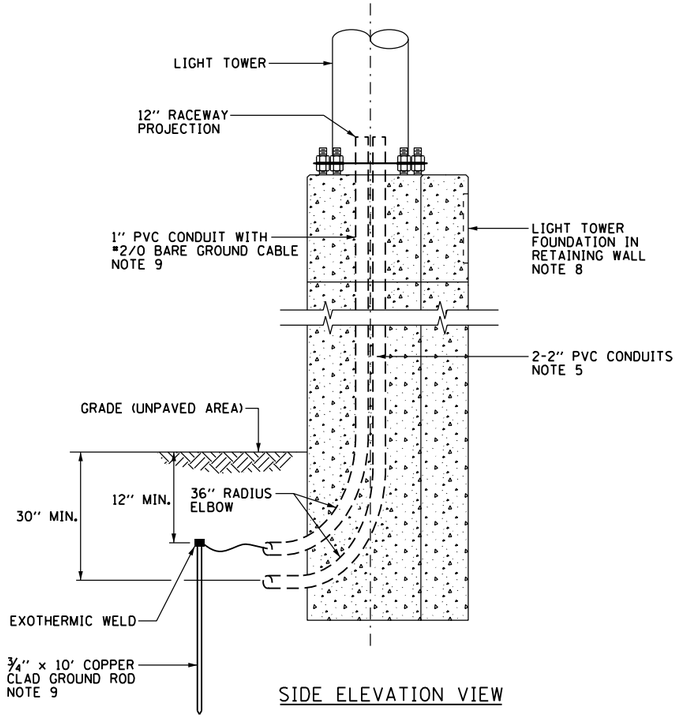


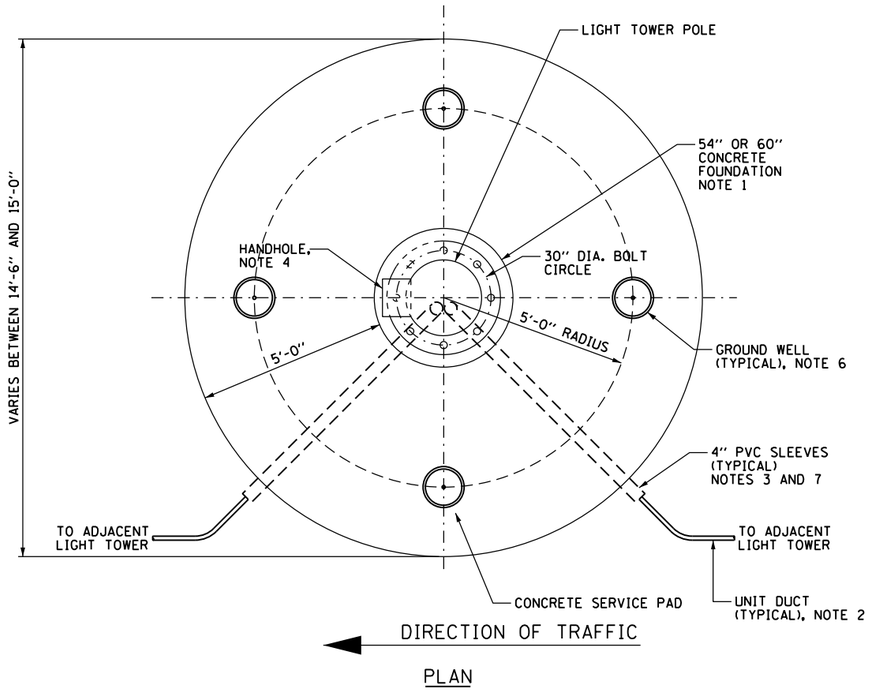
TOP VIEW



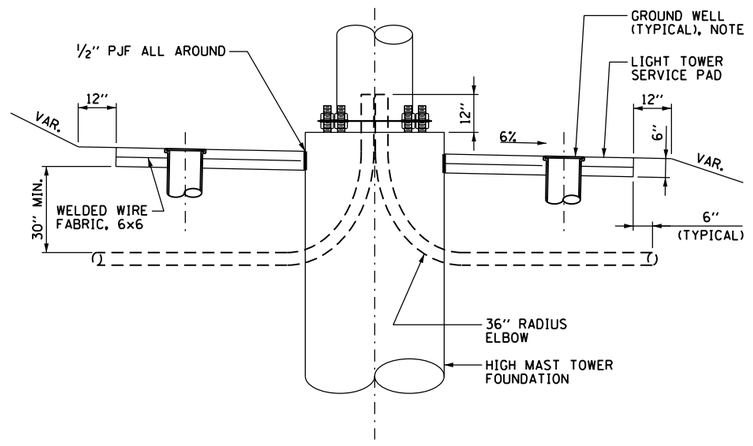
SIDE ELEVATION VIEW

TYPICAL CONDUIT INSTALLATION DETAIL FOR ROUTING UNIT DUCT IN GRADE TO TOWER FOUNDATION IN RETAINING WALL

NOT TO SCALE



PLAN



ELEVATION - SHOWN WITHOUT CURB

GROUND MOUNTED HIGH MAST TOWER SERVICE PAD, GROUNDING AND CONDUIT INSTALLATION DETAILS

NOT TO SCALE

NOTES:

1. SEE IDOT STANDARD DRAWING BE-506 FOR ADDITIONAL HIGH MAST LIGHT TOWER FOUNDATION AND GROUND WELL DETAILS.
2. SEE ELECTRICAL PLAN DRAWINGS FOR QUANTITY, SIZE, AND TYPE OF RACEWAY AND LIGHTING CIRCUITS ROUTED TO EACH HIGH MAST LIGHT TOWER FOUNDATION.
3. PVC CONDUITS AND SLEEVES MUST BE EXTENDED 6 INCHES BEYOND THE EDGE OF THE CONCRETE PAD.
4. THE HANDHOLE FOR THE HIGH MAST LIGHTING UNIT MUST BE ORIENTED SUCH THAT IT IS MOUNTED ON THE SIDE OF THE POLE THAT IS OPPOSITE THE DIRECTION OF TRAFFIC.
5. ALL EMPTY CONDUITS MUST BE CAPPED UNLESS NOTED OTHERWISE ON THE PLANS.
6. INSTALL GROUND WELLS 5'-0" AS MEASURED FROM THE CENTER LINE OF THE HIGH MAST TOWER TO THE CENTER LINE OF THE WELL.
7. PVC CONDUIT AND CONDUIT SLEEVES SHALL BE INCLUDED IN THE COST OF THE LIGHT TOWER FOUNDATION AND SHALL NOT BE PAID FOR SEPARATELY.
8. SEE STRUCTURAL PLANS FOR THE FOUNDATION INSTALLATION DESIGN DETAILS.
9. ALL NECESSARY WORK AND MATERIALS FOR GROUNDING SHALL BE INCLUDED IN THE COST OF THE RETAINING WALL.

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LIGHT TOWER SERVICE PAD AND CONDUIT DETAILS

SCALE: N.T.S. | SHEET 27 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	569
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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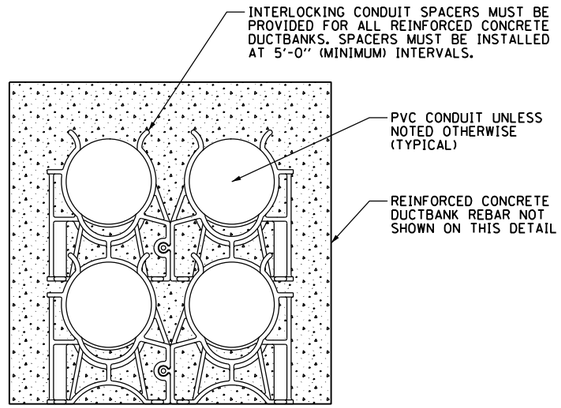
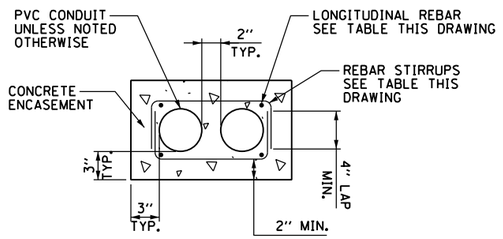
NOTES:

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. PROVIDE MINIMUM CLEARANCE SHOWN FROM TOP OF DUCTBANK TO FINISHED GRADE FOR ALL DUCTBANKS, REGARDLESS OF SIZE. CONTRACTOR MUST INSTALL DUCTBANKS SUCH THAT THEY WILL CLEAR ALL UNDERGROUND OBSTACLES.
3. TRENCH MUST HAVE MINIMUM WIDTH SHOWN FOR ALL DUCTBANKS DETAILED ON THIS DRAWING. THE CONTRACTOR MUST INCREASE TRENCH WIDTH FOR ADDITIONAL CONDUITS, AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST.

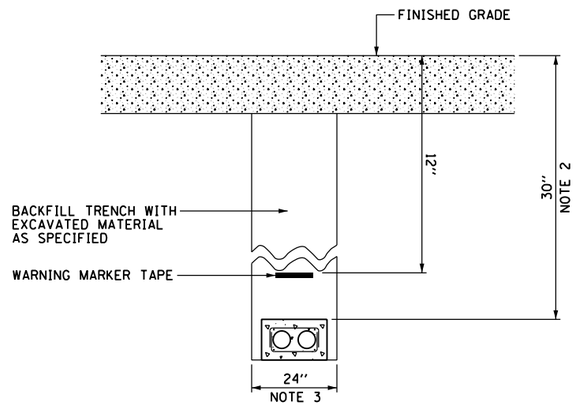
DUCTBANK REINFORCEMENT TABLE		
DUCTBANK CONCRETE CROSS-SECTIONAL AREA SQ. INCHES	LONGITUDINAL REBAR BARS	REBAR STIRRUPS
LESS THAN 450	#4	#3 AT 12" SPACING
451 TO 650	#5	#3 AT 12" SPACING
GREATER THAN 651	#6	#3 AT 12" SPACING



INTERLOCKING CONDUIT SPACER DETAIL
NOT TO SCALE



2x1 DUCTBANK DETAIL IN REINFORCED CONCRETE
NOT TO SCALE



TYPICAL ELECTRICAL DUCTBANK UNDER PAVEMENT
NOT TO SCALE

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DEPARTMENT OF TRANSPORTATION

ELECTRICAL DETAILS

SCALE: N.T.S. | SHEET 28 OF 28 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	570
		CONTRACT NO. 60X93		
	ILLINOIS	FED. AID PROJECT		

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N

0 20 40

SCALE: 1"=20'

W. CONGRESS PARKWAY

S. JEFFERSON STREET

EB CONGRESS PKWY

WB CONGRESS PKWY

EX RAMP WN/WS

W. TILDEN STREET

S. JEFFERSON STREET

1713 1712 1711 1710+00 1709 1708

5168 5167 5166 5165+00 5164 5163

5206 5207 5208 5209 5210+00

1204 1205+00 1206 1207 1208 1209

1100+00 1101 11

EX. (1) 3" PVCC GS CONDUIT ATS
EX. (7) NO 18 4/C LEAD-IN
TO BE MAINTAINED

PR ℄ EB CONGRESS PKWY

PR ℄ WB CONGRESS PKWY

EX. JB ATS
EX. FIBER OPTIC SPLICE - LATERAL
TO BE MAINTAINED

EX. (1) 3" PVCC GS CONDUIT ATS
EX. (9) NO. 18 4/C LEAD-IN
EX. (2) 2" PVCC GS CONDUIT ATS
EX. (1) 96 SMF
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. CCTV CABINET ATS
EX. CCTV EQUIPMENT
TO BE MAINTAINED

PR ℄ RAMP WN

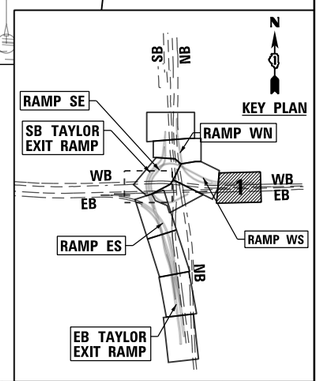
PR ℄ RAMP WS

EX. (2) 2" PVCC GS CONDUIT ATS
EX. 12 SMF
EX. NO. 6/C & NO. 8
TO BE MAINTAINED

EX. (1) 2" PVCC GS CONDUIT ATS
EX. CCTV CABLES
TO BE MAINTAINED

EX. TEMPORARY WOOD POLE
EX. (2) CCTV CAMERA
TO BE SALVAGED
NOTES 1 & 2

MATCH LINE STA 1209+25 (PR ℄ RAMP WS)
SEE SHEET NO. 572



NOTES:

1. THE EXISTING CCTV CAMERAS AND CABLES ATTACHED TO THE TEMPORARY WOOD POLE ARE TO BE MAINTAINED UNTIL NEW INFRASTRUCTURE IS IN PLACE. CONDUIT AND CABLES ATTACHED TO THE EXISTING PIER ARE TO BE RELOCATED AS NECESSARY TO MINIMIZE DOWNTIME. THIS WORK SHALL BE INCLUDED IN THE COST OF "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.

2. REMOVE EXISTING SURVEILLANCE EQUIPMENT (SALVAGE) WHERE NOTED AND TURN OVER TO IDOT DISTRICT 1. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE "REMOVE EXISTING TRAFFIC SURVEILLANCE EQUIPMENT" PAY ITEM.

ITS-01

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 1 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	571
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

SEE SHEET NO. 586

EX. (1) 2" PVCC GS CONDUIT ATS
EX. (1) NO. 19 6-PAIR
EX. (1) 3" PVCC GS CONDUIT ATS
EX. (7) NO. 18 4/C LEAD-IN
TO BE MAINTAINED

EX. 18"x18"x8" JB ATS
TO BE MAINTAINED

PR ℄ EB CONGRESS PKWY

EX. (1) 3" PVCC GS CONDUIT ATS
EX. (1) NO. 19 6-PAIR
EX. (7) NO. 18 4/C LEAD-IN
TO BE MAINTAINED

EX. LIGHTING CONTROLLER Z
TO BE MAINTAINED

EX. (2) 2" PVC CONDUIT EMBEDDED
IN STRUCTURE
EX. (1) 96 SMF
TO BE MAINTAINED

PR ℄ WB CONGRESS PKWY

PR ℄ RAMP SE

EX. 18"x18"x8" JB ATS
TO BE MAINTAINED

EX. (3) 18"x18"x8" JB ATS
EX. (1) JB EMBEDDED IN BARRIER WALL
TO BE MAINTAINED

EX. (1) 1-1/4" P-DUCT
ABANDONDED

EX ℄ RAMP WS

EX. (1) 3" PVCC GS CONDUIT ATS
EX. (7) NO 18 4/C LEAD-IN
TO BE MAINTAINED

EX. LOOPS MAINLINE
TO BE MAINTAINED

EX. (3) 18"x18"x8" JB ATS
TO BE MAINTAINED

EX. JB ATS
TO BE MAINTAINED

EX. (1) 3" PVCC GS CONDUIT ATS
EX. (2) 2" PVCC GS CONDUIT ATS
TO BE ABANDONED

(1) REMOVE EXISTING HANDHOLE
NOTE 4

EX. (3) 18"x18"x8" JB ATS
TO BE MAINTAINED

EX. (1) 3" PVCC GS CONDUIT ATS
EX. (9) NO. 18 4/C LEAD-IN
EX. (2) 2" PVCC GS CONDUIT ATS
EX. (1) 96 SMF
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. 10"x8"x4" JB ATS
TO BE ABANDONED
NOTES 1-2

EX. (1) 1-1/4" PVCC GS CONDUIT
EX. (1) NO. 18 4/C LEAD-IN
TO BE ABANDONED
NOTES 1-2

EX. 10"x8"x4" JB ATS
TO BE ABANDONED
NOTES 1-2

EX. (1) 1-1/4" PVCC GS CONDUIT
EX. (1) NO. 18 4/C LEAD-IN
TO BE ABANDONED
NOTES 1-2

EX. 18"x18"x8" JB ATS
TO BE ABANDONED
NOTES 1-2

EX. (1) 1-1/4" PVCC GS CONDUIT ATS
EX. (2) NO. 18 4/C LEAD-IN
TO BE ABANDONED
NOTES 1-2

EX. HDHH
TO BE MAINTAINED

EX. LOOP
RAMP WS
TO BE
ABANDONED
NOTES 1-2

EX. (2) 2" PVC CONDUIT
EX. (1) NO. 6 2/C & NO. 8
EX. (2) 96 SMF
EX. (1) NO. 19 6/C
EX. (1) 3" PVC CONDUIT
EX. (12) NO. 18 4/C LEAD-IN
TO BE ABANDONED, NOTE 4

EX. LOOP
RAMP WN
TO BE
ABANDONED
NOTES
1-2

EX ℄ RAMP WN

PR ℄ RAMP WS

EX. CCTV CAMERA STRUCTURE
TO BE MAINTAINED
NOTE 4

EX. (2) 3" PVC CONDUIT
TO BE ABANDONED

EX. HDHH
(REMOVED BY OTHERS)

EX. HDHH
TO BE MAINTAINED

EX. (1) 1-1/4" P-DUCT
ABANDONDED

EX. (2) 2" PVC CONDUIT
EX. (1) 3" PVC CONDUIT
EX. (2) NO. 18 4/C LEAD-IN
TO BE MAINTAINED

EX. (1) 2" GS CONDUIT
TO BE ABANDONED

EX. (2) 3" PVC CONDUIT
TO BE ABANDONED

EX. CABINET Z5
TO BE MAINTAINED

EX. HIGHWAY ADVISORY RADIO
TO BE SALVAGED (BY OTHERS)

EX. (2) 3" PVC CONDUIT
EX. (2) 96 SMF
EX. (1) NO. 19 6/C
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. (2) 3" PVC CONDUIT
EX. (1) 12 SMF
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. (2) 3" GS CONDUIT
EX. (2) NO. 6 2/C & NO. 8
EX. (1) 12 SMF
EX. (1) 2" GS CONDUIT
EX. (2) 96 SMF
TO BE MAINTAINED

EX. (2) 2" GS CONDUIT
EX. (1) NO. 19 6/C
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

WB CONGRESS PKWY

EX RAMP WS

EX RAMP EN

EX RAMP WN

NB I-90/94

MATCH LINE STA 1214+75 (PR ℄ RAMP WS)
SEE SHEET NO. 573

MATCH LINE STA 1209+25 (PR ℄ RAMP WS)
SEE SHEET NO. 571

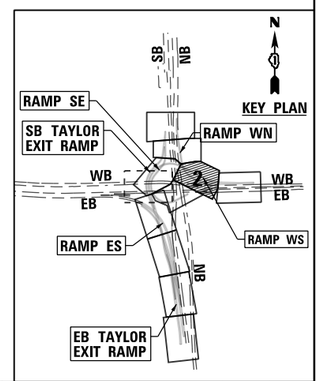
MATCH LINE STA 2107+00 (PR ℄ RAMP WN)
SEE SHEET NO. 584

N

SCALE: 1"=20'
0 20 40

NOTES:

1. ALL EXISTING EQUIPMENT ATTACHED TO OR PART OF AN EXISTING STRUCTURE TO BE DEMOLISHED SHALL BE REMOVED AS PART OF THE STRUCTURAL REMOVAL PAY ITEMS, UNLESS OTHERWISE NOTED.
2. EXISTING CONDUITS AND CABLES ATTACHED TO PIER C1 ARE INSTALLED UNDER CONTRACT 60X78 AND ARE TO BE MAINTAINED UNLESS OTHERWISE NOTED. SEE DETAIL ON ITS-37.
3. MAINTAIN EXISTING CCTV CAMERA POWER AND COMMUNICATIONS.
4. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL INCLUDE BUT IS NOT LIMITED TO EXISTING HANDHOLES AND CONDUIT CONTAINING FIBER OPTIC, COMMUNICATION AND DETECTION CABLES AND WILL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.



ITS-02

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PLOT DATE = 7/28/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 2 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	572
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE PATH = pw:\\617479-PWNT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000_CAD\006_Roadway\Sheets\60X93 Contract\D160X93-Sht-ITS-02

MATCH LINE STA 1214+75 (PR ℄ RAMP WS)
SEE SHEET NO. 572

SEE SHEET NO. 584

SEE SHEET NO. 586

SEE SHEET NO. 586

MATCH LINE STA 1401+50 (PR ℄ RAMP SE)
SEE SHEET NO. 584

MATCH LINE STA 1222+25 (PR ℄ RAMP WS)
SEE SHEET NO. 574

PR ℄ WB I-290

EX ℄ RAMP NW

SB I-90/94

WB I-290

EX RAMP NW

EX RAMP SE

PR ℄ RAMP SE

EX RAMP WS

PR ℄ RAMP WS

EX ℄ RAMP WS

EB I-290

CTA BLUE LINE

HALSTED STREET

EX. (2) 2" PVC CONDUIT
EX. (1) 96 SMF
EMBEDDED IN STRUCTURE
TO BE MAINTAINED

EX. (1) 4" PVC CONDUIT
EX. (1) NO. 19 25-PAIR
EX. (1) 96 SMF
TO BE MAINTAINED

EX. (1) 2" PVC CONDUIT
EX. (4) NO. 18 4/C LEAD-IN
TO BE MAINTAINED

EX. COMM HUT
TO BE MAINTAINED

EX. CONDUIT
(4) 25 FT. REMOVE CABLE FROM CONDUIT
(1) 25 FT. FIBER OPTIC CABLE IN CONDUIT, 96 FIBERS, SINGLE MODE
(2) 25 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25-PAIR
(1) 25 FT. FIBER OPTIC CABLE IN CONDUIT, 12 FIBERS, SINGLE MODE
(1) 25 FT. ELECTRIC CABLE IN CONDUIT, 3-1/C NO. 6
NOTE 5

EX. DOUBLE HANDHOLE
(2) DRILL EXISTING HANDHOLE

EX. (2) 3" PVC CONDUIT
EX. (1) 12 SMF
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. CLOSED CIRCUIT
TELEVISION CAMERA
STRUCTURE
TO BE MAINTAINED

(1) REMOVE EXISTING
HANDHOLE

EX. (1) 3" GS CONDUIT
EX. (1) 96 SMF
EX. (1) 12 SMF
EX. (1) NO. 19 50-PAIR
EX. (1) 2" GS CONDUIT
EX. (1) NO. 6 3-1/C
TO BE MAINTAINED

(1) 70 FT. UNDERGROUND CONDUIT, GS, 3" DIA.
(1) 70 FT. FIBER OPTIC CABLE IN CONDUIT, 96 FIBERS, SINGLE MODE
(2) 70 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25-PAIR
(1) 70 FT. FIBER OPTIC CABLE IN CONDUIT, 12 FIBERS, SINGLE MODE
(1) 70 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
(1) 70 FT. ELECTRIC CABLE IN CONDUIT, 3-1/C NO. 6
NOTE 5

PROPOSED DOUBLE HH
(SEE LIGHTING PLANS)

EX. (2) 4" PVC CONDUIT
EX. (4) 1-1/4" INNERDUCT
EX. (3) 96 SMF
TO BE MAINTAINED

EX. DOUBLE HH
TO BE MAINTAINED

PR SB TAYLOR
EXIT RAMP

(2) CONCRETE ENCASED PVC CONDUIT, 3" DIA. (SEE LIGHTING PLANS)
(1) 220 FT. FIBER OPTIC CABLE IN CONDUIT, 96 FIBERS, SINGLE MODE
(2) 220 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25-PAIR
(1) 220 FT. FIBER OPTIC CABLE IN CONDUIT, 12 FIBERS, SINGLE MODE
(1) 220 FT. ELECTRIC CABLE IN CONDUIT, 3-1/C NO. 6
NOTE 5

(1) TEMPORARY WOOD POLE, 80 FT., CLASS 4
(4) 75 FT. REMOVE AND INSTALL CABLE IN CONDUIT
(1) 75 FT. CONDUIT ATS, PVC COATED GS, 3" DIA.
EX. (1) FIBER OPTIC CABLE IN CONDUIT, 96 FIBERS, SINGLE MODE
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 19 50-PAIR
EX. (1) FIBER OPTIC CABLE IN CONDUIT, 12 FIBERS, SINGLE MODE
(1) 75 FT. CONDUIT ATS, PVC COATED GS, 2" DIA.
EX. (1) ELECTRIC CABLE IN CONDUIT, 3-1/C NO. 6
NOTES 3-5

EX. 24"x24"x10" JB ATS
TO BE MAINTAINED

EX. 80 FT. WOOD POLE
TO BE REMOVED

EX. (1) SPAN WIRE
EX. (1) 96 SMF
EX. (1) 12 SMF
EX. (1) NO. 19 50-PAIR
EX. (1) NO. 6 3-1/C
TO BE RELOCATED

RELOCATED AERIAL
CABLES, NOTE 5

(1) 65 FT. UNDERGROUND CONDUIT, GS, 3" DIA.
(4) 65 FT. REMOVE AND REINSTALL CABLE IN CONDUIT
EX. (1) FIBER OPTIC CABLE IN CONDUIT, 96 FIBERS, SINGLE MODE
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 19 50-PAIR
EX. (1) FIBER OPTIC CABLE IN CONDUIT, 12 FIBERS, SINGLE MODE
(1) 65 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
EX. (1) ELECTRIC CABLE IN CONDUIT, 3-1/C NO. 6

EX. DOUBLE HH
TO BE MAINTAINED

EX. CONDUIT
EX. (2) NO. 19 25-PAIR

EX. MCD CABINET
TO BE MAINTAINED

EX. CONDUIT
ABANDONED

EX. (2) 4" PVC CONDUIT
EX. (4) 1-1/4" INNERDUCT
EX. (3) 96 SMF
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. (1) 4" PVC CONDUIT
EX. (1) 2" GS CONDUIT
TO BE MAINTAINED

EX. DOUBLE HH
TO BE MAINTAINED

EX. JB EMBEDDED IN BARRIER
TO BE MAINTAINED

EX. (1) 2" GS CONDUIT ATS
EX. (1) NO. 19 6/C
TO BE MAINTAINED

EX. (2) 2" PVCC GS CONDUIT
EX. (1) NO. 6 2/C & NO. 8
EX. (1) NO. 19 6/C
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. (1) 2" PVCC GS CONDUIT ATS
EX. (3) NO. 18 4/C LEAD-IN
TO BE MAINTAINED

EX. EMBEDDED JB
TO BE MAINTAINED

EX. DOUBLE HANDHOLE
(2) DRILL EXISTING HANDHOLE
TO BE MAINTAINED
NOTE 5

EX. EMBEDDED JB
TO BE MAINTAINED

EX. (2) 2" PVCC GS CONDUIT ATS
EX. (1) NO. 6 2/C & NO. 8
EX. (3) NO. 18 4/C LEAD-IN
EX. (2) NO. 19 6/C
TO BE MAINTAINED

EX. (1) 18"x18"x8" JB ATS
TO BE MAINTAINED

EX. (1) 4" PVC CONDUIT
STUBBED AND CAPPED
TO BE MAINTAINED

EX. (1) 2" PVCC GS
CONDUIT ATS
EX. (1) NO. 19 6/C
TO BE MAINTAINED

EX. (1) 18"x18"x8"
JB ATS
TO BE MAINTAINED

NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
2. ALL EXISTING EQUIPMENT ATTACHED TO OR PART OF AN EXISTING STRUCTURE TO BE DEMOLISHED SHALL BE REMOVED AS PART OF THE STRUCTURAL REMOVAL PAY ITEMS, UNLESS OTHERWISE NOTED.
3. NO. 19 25-PAIR AND 96 SINGLE MODE FIBER OPTIC CABLES INSTALLED IN TEMPORARY CONDUIT UNDER PERVIOUS IDOT CONTRACTS ARE TO BE MAINTAINED.
4. INSTALL NEW TEMPORARY WOOD POLE IN COORDINATION WITH THIS CONTRACT'S PROPOSED WORK SUCH THAT THE POLE WILL NOT REQUIRE RELOCATION IN FUTURE STAGES. INSTALL 50 FT. OF SLACK OF ALL CABLES ON EACH WOOD POLE.
5. RELOCATION OF FIBER OPTIC, COMMUNICATION, AND POWER CABLES IS TO OCCUR BEFORE THE DIRECT BURIED CONDUIT TO THE DOUBLE HANDHOLE ADJACENT TO THE COMMUNICATION HUT IS DISTURBED BY THIS CONTRACT'S PROPOSED STRUCTURAL WORK. PULL BACK THE JACKSON ST CCTV 12 FIBER AND POWER CABLING AND THE KENNEDY 96 FIBER AND NO. 19 50 PAIR COMMUNICATION CABLING FROM THE COMMUNICATION HUT AND SPLICE WITH NEW CABLES INSTALLED VIA THE TEMPORARY ROUTE AS SHOWN IN THE PLANS. SPLICE CABLES IN THE EXISTING DOUBLE HANDHOLE ADJACENT TO THE HALSTED ST BRIDGE AND RELOCATE AERIAL CABLES TO THE NEW TEMPORARY WOOD POLE. THE CONTRACTOR SHALL COORDINATE ALL DISCONNECTION AND SPLICING WORK WITH IDOT/OAK PARK TSC. THIS WORK SHALL ONLY OCCUR OVERNIGHT AFTER THE PM PEAK HOUR AND BEFORE THE AM PEAK HOUR THE NEXT MORNING. ALL SPLICING AND TERMINATION WORK SHALL BE ACCOMPLISHED IN ONE NIGHT. ALL CABLE ASSIGNMENTS SHALL REMAIN THE SAME.

KEY PLAN
RAMP SE
SB TAYLOR EXIT RAMP
RAMP WN
WB
EB
RAMP ES
RAMP WS
NB
EB TAYLOR EXIT RAMP

0 20 40
SCALE: 1"=20'

ITS-03

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 3 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	573
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

SEE SHEET NO. 586

EX ℄ RAMP EN

EX. (1) 2" PVC CONDUIT
EX. (1) 12 SMF
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

PR ℄ RAMP EN

EX. (1) 2" PVC CONDUIT
EX. (1) 12 SMF
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. HDHH
REMOVED BY OTHERS
CONTRACT 60X79

EX. HDHH
TO BE MAINTAINED

EX. CLOSED CIRCUIT
TELEVISION CAMERA
STRUCTURE
TO BE MAINTAINED

EX. (1) 2" PVC CONDUIT
EX. (1) 12 SMF
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. (1) 2" GS CONDUIT
EX. (1) RVSD CABLE
TO BE MAINTAINED

EX. (1) 45 FT. WOOD POLE
EX. (1) RVSD
TO BE MAINTAINED

EX RAMP SE

EX RAMP EN

EX RAMP WS

EX RAMP ES

PR ℄ RAMP NE

PR ℄ RAMP WS

PR ℄ RAMP ES

PR ℄ EB TAYLOR EXIT RAMP

PR ℄ SB TAYLOR EXIT RAMP

EX ℄ RAMP ES

HARRISON STREET

HALSTED STREET

EX. (1) 45 FT. WOOD POLE
EX. (2) RVSD
(REMOVED BY OTHERS)

EX. 2" GS CONDUIT
TO BE ABANDONED
NOTE 1

EX. 10"x8"x4" JB ATS
TO BE MAINTAINED

EX. (1) 45 FT. WOOD POLE
EX. (1) RVSD
TO BE SALVAGED
NOTES 1-2

EX. (1) 2" PVCC GS CONDUIT ATS, TO BE MAINTAINED
EX. RVSD CABLES, TO BE REMOVED
(1) 106 FT. REMOVE CABLE WITH DETECTOR SITE
NOTES 1-2

EX. ITS CABINET ZI
TO BE MAINTAINED

EX. (2) 2" PVCC GS CONDUIT
EX. (1) NO. 6 2/C & NO. 8
EX. (1) NO. 19 6/C
EX. RVSD CABLES
(1) 15 FT. REMOVE CABLE FROM CONDUIT
TO BE REMOVED
NOTES 1-2

EX. 10"x8"x4" JB ATS
TO BE MAINTAINED

EX. (2) PVCC GS CONDUIT
EX. (1) NO. 6 2/C & NO. 8
EX. (1) NO. 19 6/C
TO BE MAINTAINED

SEE SHEET NO. 573
MATCH LINE STA 1222+25 (PR ℄ RAMP WS)

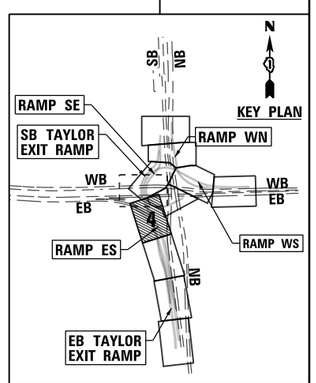
SEE SHEET NO. 575
MATCH LINE STA 1227+75 (PR ℄ RAMP WS)

0 20 40
SCALE: 1"=20'

NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS INCLUDING THE RVSD DETECTOR SYSTEM AND RVSD CABLES IN THE EXISTING CONDUITS, HEAVY DUTY HANDHOLES, AND JUNCTION BOXES UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS WORK SHALL INCLUDE THE ADJUSTMENT OF RVSD DETECTORS AS NECESSARY IN COORDINATION WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING. RVSD MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.

2. REMOVE EXISTING SURVEILLANCE EQUIPEMENT (SALVAGE) AND TURN OVER TO IDOT DISTRICT 1. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE "REMOVE EXISTING TRAFFIC SURVEILLANCE EQUIPMENT" PAY ITEM.



ITS-04

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PLOT DATE = 7/28/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 4 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	574
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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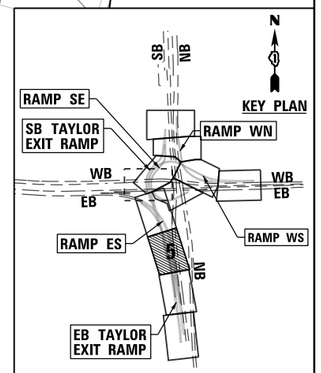
SEE SHEET NO. 574
MATCH LINE STA 1227+75

EX SB I-90/94
EX ℄ SB I-90/94
EX RAMP ES/WS
PR ℄ RAMP ES
EX SB TAYLOR EXIT RAMP
PR ℄ RAMP WS
PR ℄ SB TAYLOR EXIT RAMP
PR ℄ EB TAYLOR EXIT RAMP
UIC ACCESS ROAD
UIC TENNIS/BASKETBALL COURTS
UIC ACCESS ROAD
UIC STUDENT RECREATION FACILITY
EX RETAINING WALL 10
SN 016-1729

MATCH LINE STA 1233+25 (PR ℄ RAMP WS)
SEE SHEET NO. 576

N
0 20 40
SCALE: 1"=20'



ITS-05

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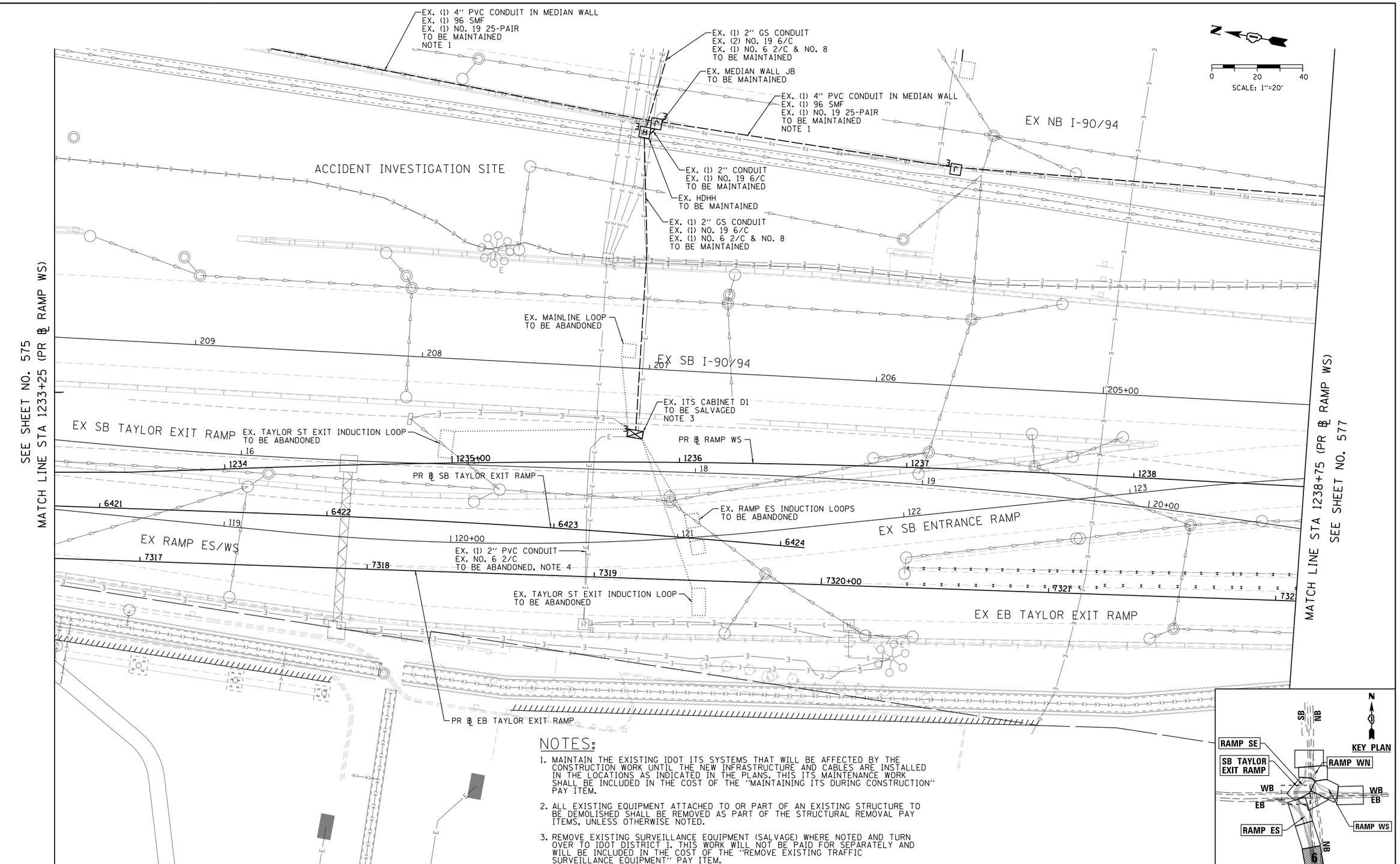
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 5 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	575
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
2. ALL EXISTING EQUIPMENT ATTACHED TO OR PART OF AN EXISTING STRUCTURE TO BE DEMOLISHED SHALL BE REMOVED AS PART OF THE STRUCTURAL REMOVAL PAY ITEMS, UNLESS OTHERWISE NOTED.
3. REMOVE EXISTING SURVEILLANCE EQUIPMENT (SALVAGE) WHERE NOTED AND TURN OVER TO IDOT DISTRICT 1. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE "REMOVE EXISTING TRAFFIC SURVEILLANCE EQUIPMENT" PAY ITEM.
4. EXISTING CONDUIT AND CABLE FROM THE HANDHOLE IN THE TAYLOR ST EXIT SHOULDER TO ITS CABINET D1 IS TO BE ABANDONED. REFER TO LIGHTING PLANS FOR DIRECTION RELATED TO IDOT LIGHTING INFRASTRUCTURE.

ITS-06

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 6 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	576
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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EX. (1) 4" CONDUIT IN MEDIAN WALL
EX. (1) 96 SMF
EX. (1) NO. 19 25-PAIR
TO BE MAINTAINED
NOTE 1

EX. MEDIAN WALL JB
TO BE MAINTAINED

EX. (1) 3" GS CONDUIT
EX. (1) NO. 6 3-1/C & NO. 6 1/C GROUND
TO BE MAINTAINED

EX. (1) 4" CONDUIT IN MEDIAN WALL
EX. (1) 96 SMF
EX. (1) NO. 19 25-PAIR
TO BE MAINTAINED
NOTE 1

EX NB I-90/94

EX. CONDUIT
EX. (2) 24 SMF
EX. (1) NO. 19 6/C
TO BE MAINTAINED

EX. 20"x20"x8" JB ATS
TO BE MAINTAINED

EX. 12"x12"x6" JB ATS
TO BE MAINTAINED

EX. CABINET DMS-10
TO BE MAINTAINED

EX. (1) 3" PVC CONDUIT
EX. (1) 1" INNERDUCT
EX. (1) 12 SMF
EX. (1) NO. 19 6/C
TO BE MAINTAINED

EX. 12"x12"x6" JB ATS
TO BE MAINTAINED

EX SB I-90/94

EX ℄ SB I-90/94

EX. (1) 3" PVCC GS CONDUIT ATS
EX. (1) NO. 19 6/C
EX. (1) 12 SMF
EX. (1) 3" PVCC GS CONDUIT ATS
EX. (1) NO. 6 3-1/C &
NO. 6 1/C GROUND
TO BE MAINTAINED

EX. (2) 2" PVCC GS CONDUIT ATS
EX. (6) NO. 18 4/C LEAD-IN
TO BE MAINTAINED

EX SB ENTRANCE RAMP

PR ℄ RAMP WS

EX. (2) 12"x12"x6" JB ATS
TO BE MAINTAINED

EX. (2) HDHH

EX. (1) 2" GS CONDUIT
EX. (1) NO. 6 3-1/C &
NO. 6 1/C GROUND
TO BE MAINTAINED

EX SB TAYLOR EXIT RAMP

EX EB TAYLOR EXIT RAMP

EX. (1) 3" GS CONDUIT
EX. (2) 1" INNERDUCT
EX. (1) 12 SMF
EX. (1) NO. 19 6/C
EX. (1) 2" GS CONDUIT
EX. (8) NO. 18 4/C LEAD-IN
TO BE MAINTAINED

EX. (2) 12"x12"x6" JB ATS
TO BE MAINTAINED

EX. (1) 3" PVCC GS CONDUIT
EX. (2) 1" INNERDUCT
EX. (1) NO. 19 6/C
EX. (1) 12 SMF
TO BE MAINTAINED

EX. (1) 2" PVCC GS CONDUIT
EX. (1) NO. 6 3-1/C & NO. 6
1/C GROUND
TO BE MAINTAINED

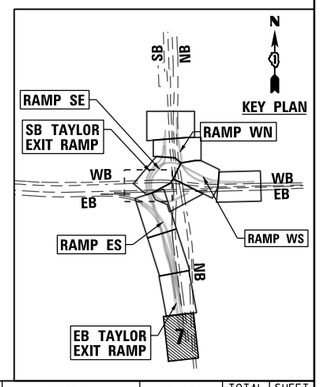
PR ℄ EB TAYLOR EXIT RAMP

TAYLOR STREET

SEE SHEET NO. 576
MATCH LINE STA 1238+75 (PR ℄ RAMP WS)

MATCH LINE STA 198+25 (EX ℄ NB I-90/94)
SEE SHEET NO. 578

0 20 40
SCALE: 1"=20'



NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.

ITS-07

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 7 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	577
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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EX. HDHH
TO BE MAINTAINED

EX. (1) 2" PVC CONDUIT
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. ITS CABINET C6A
TO BE MAINTAINED

EX. (1) 2" PVC CONDUIT
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. (1) 2" PVC CONDUIT
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. RAMP METER SIGNAL
TO BE MAINTAINED

EX. P-DUCT
EX. NO. 14 2/C
TO BE MAINTAINED

EX. FLASHER/SIGN
TO BE MAINTAINED

EX. P-DUCT
EX. NO. 12 3/C
TO BE MAINTAINED

RUBLE ST.

EX. HDHH
TO BE MAINTAINED

EX. (1) 2" PVC CONDUIT
TO BE MAINTAINED

EX. (1) 2" PVC CONDUIT
EX. (1) NO. 6 2/C & NO. 8
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. (1) 2" PVC CONDUIT
TO BE MAINTAINED

EX. LOOPS
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. P-DUCT
EX. NO. 14 2/C
TO BE MAINTAINED

EX. LOOPS
TO BE MAINTAINED

EX. ITS CABINET C6
TO BE MAINTAINED

1807 1806 1805+00 1804 1803 1802

SEE SHEET NO. 577
MATCH LINE STA 198+25 (EX ℄ NB I-90/94)

EX. (1) 4" CONDUIT IN MEDIAN WALL
EX. (1) 96 SMF
EX. (1) NO. 19 25-PAIR
TO BE MAINTAINED
NOTE 1

EX NB I-90/94

198 197 196 195+00 194 193

EX ℄ NB I-90/94

EX. HDHH
TO BE MAINTAINED

EX. CABINET DMS-09
TO BE MAINTAINED

EX. (1) 2" GS CONDUIT
EX. (1) NO. 19 6/C
TO BE MAINTAINED

EX. MEDIAN WALL JB
TO BE MAINTAINED

EX. (1) 4" CONDUIT IN MEDIAN WALL
EX. (1) 96 SMF
EX. (1) NO. 19 25-PAIR
TO BE MAINTAINED
NOTE 1

EX. (1) 3" GS CONDUIT
EX. (1) NO. 6 3-1/C & NO. 6 1/C GROUND
TO BE MAINTAINED

EX. (1) 2" GS CONDUIT
EX. (1) 24 SMF
TO BE MAINTAINED

EX SB I-90/94

198 197 196 195+00 194 193

EX. (1) 2" GS CONDUIT
EX. (1) DMS POWER CABLE
EX. (1) DMS COMMUNICATION CABLE
TO BE MAINTAINED

EX. (1) 3" GS CONDUIT
EX. (1) 1" INNERDUCT
EX. NO. (1) 12 SMF
EX. (1) NO. 19 6/C
EX. (1) 2" GS CONDUIT
EX. (8) NO. 18 4/C LEAD-IN
TO BE MAINTAINED

EX. (1) 2" GS CONDUIT
EX. (1) NO. 6 3-1/C &
NO. 6 1/C GROUND
TO BE MAINTAINED

EX. ITS CABINET C3
TO BE MAINTAINED

EX. (2) HDHH
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. (1) 2" GS CONDUIT
EX. (1) 12 SMF
TO BE MAINTAINED

EX. (1) 2" GS CONDUIT
EX. (1) 12 SMF
TO BE MAINTAINED

MATCH LINE STA 192+75 (EX ℄ NB I-90/94)
SEE SHEET NO. 579

NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.

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SCALE: 1"=20'

ITS-08

FILE PATH = pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000_CAD\006_Roadway\Sheets\60X93 Contract\D160X93-Sht-ITS-08

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-ITS-08	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

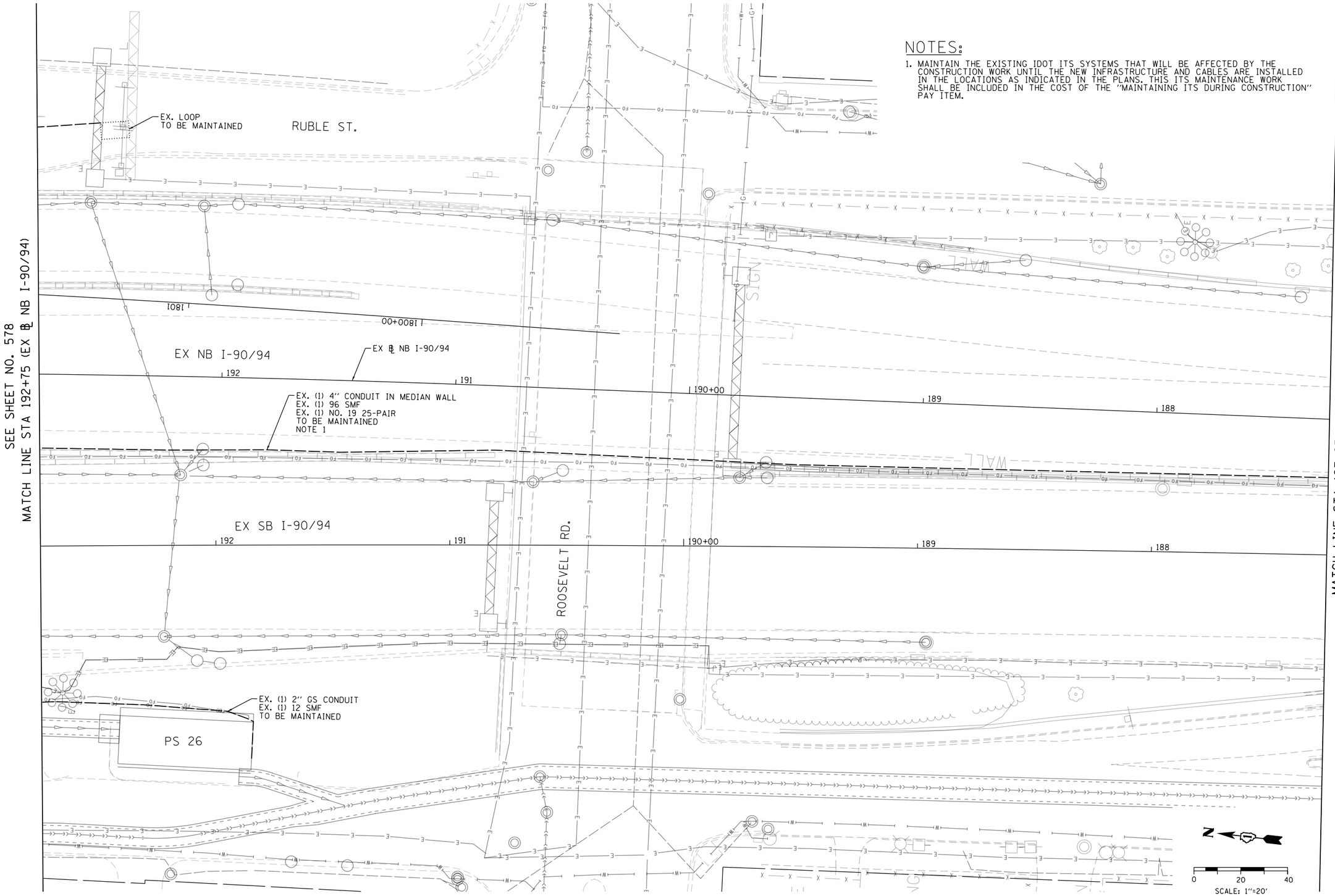
EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 8 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	578
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.



ITS-09

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PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-ITS-09	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

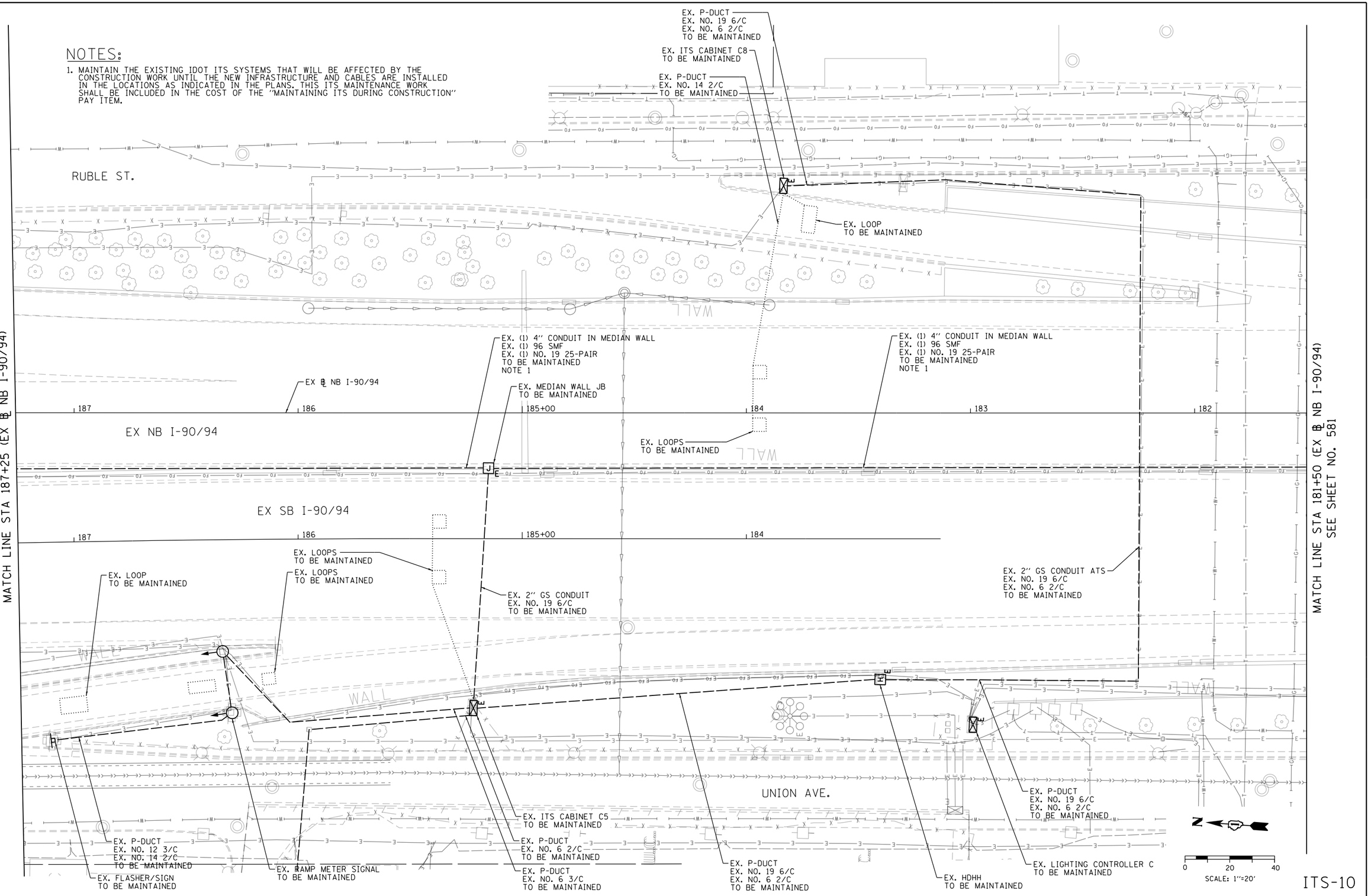
EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 9 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	579
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.



ITS-10

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-ITS-10	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

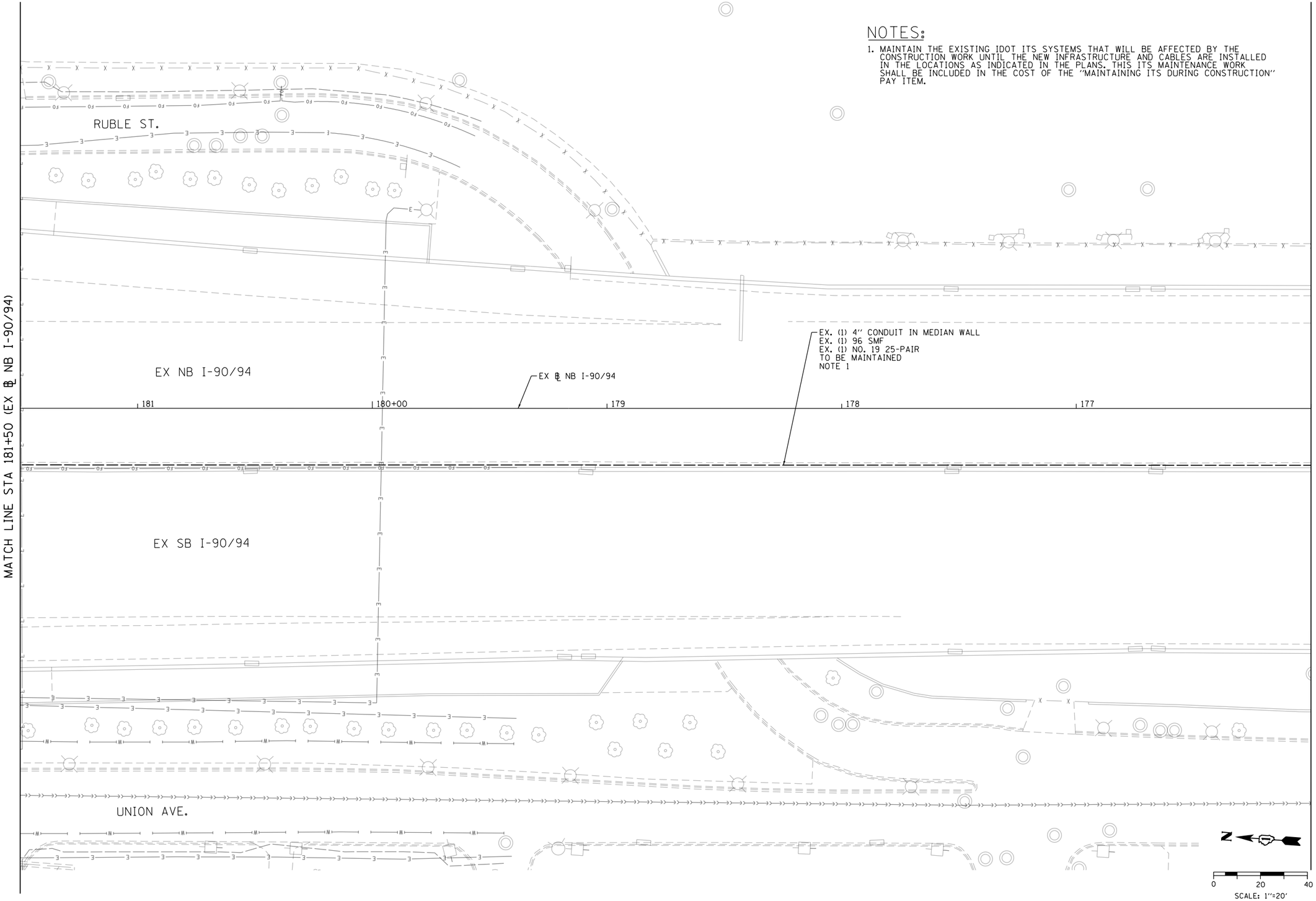
SCALE: 1"=20' | SHEET 10 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	580
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE PATH = pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000.CAD\006.Roadway\Sheets\60X93 Contract\D160X93-Sht-ITS-10

NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.



ITS-11

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CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-ITS-11	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

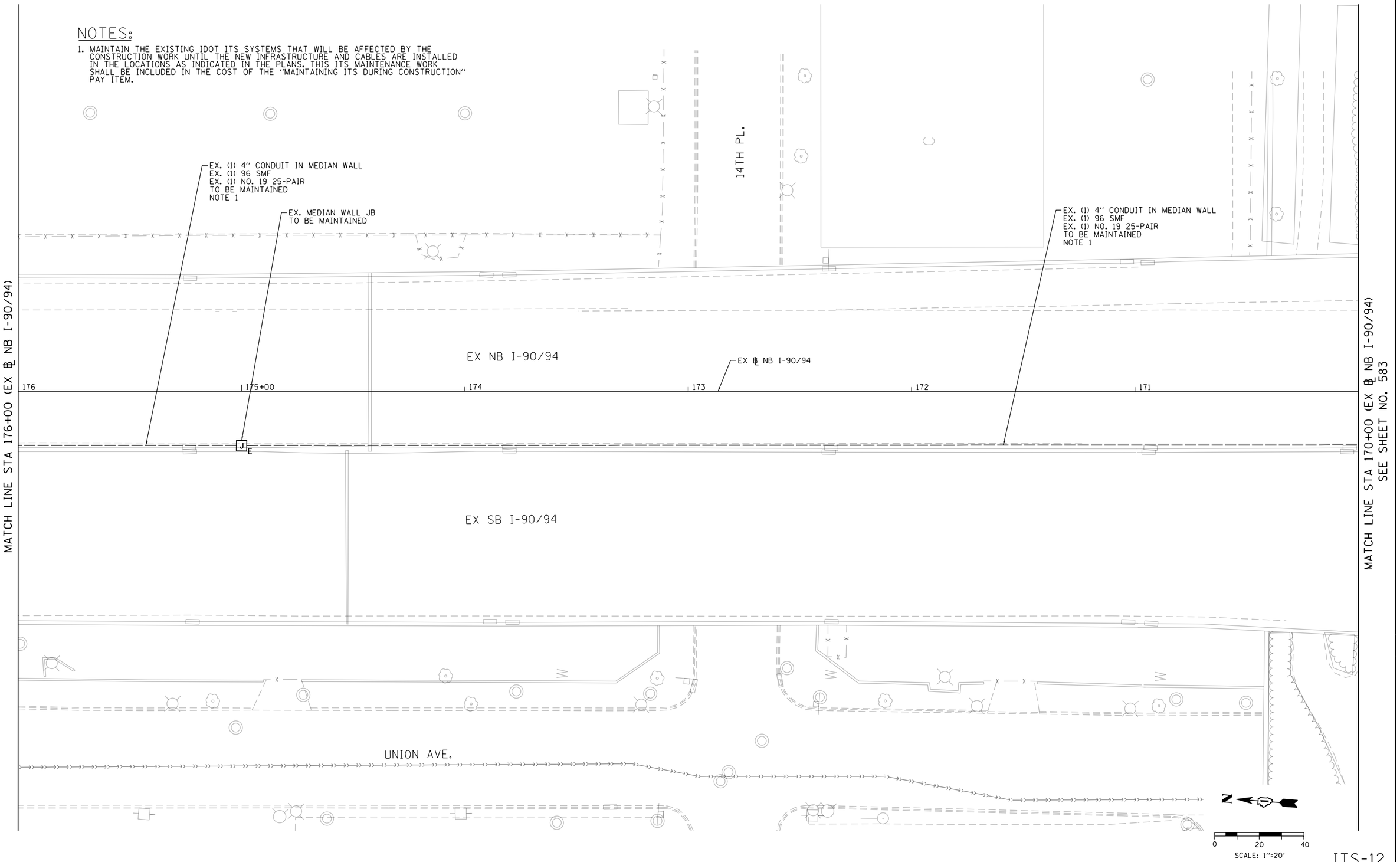
EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 11 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	581
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.



ITS-12

FILE PATH = pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000.CAD\006.Roadway\Sheets\60X93 Contract\D160X93-Sht-ITS-12

D160X93-Sht-ITS-12	DESIGNED - PTJ	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

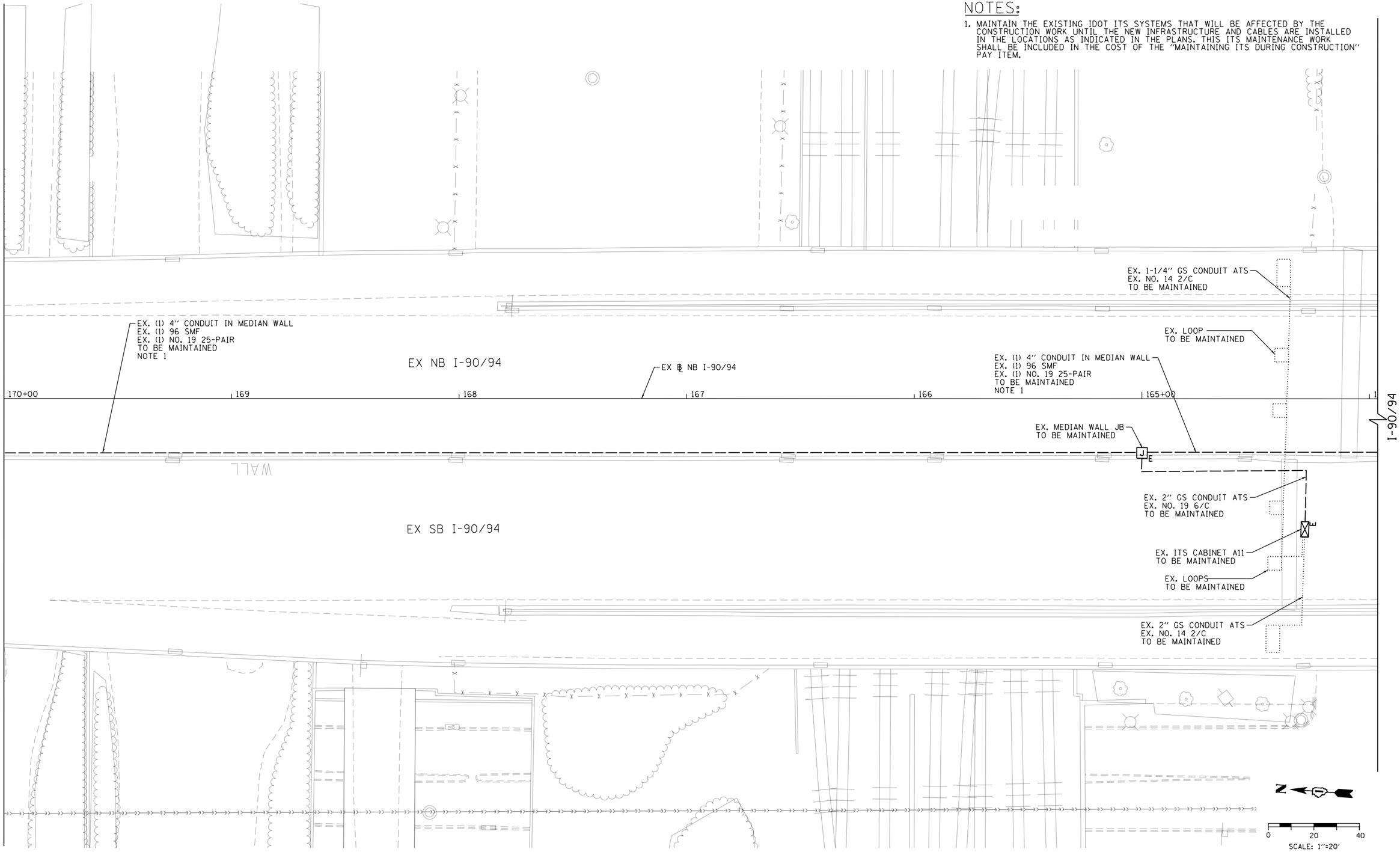
EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 12 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	582
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.



ITS-13

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D160X93-Sht-ITS-13	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 13 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	583
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

MATCH LINE STA 20+50 (EX ℄ SB I-90/94)
SEE SHEET NO. 585

EX. 40 FT. TEMPORARY WOOD POLE
EX. WIRELESS VEHICLE DETECTION SYSTEM (REPEATER)
TO BE MAINTAINED
NOTES 3-4

EX. WIRELESS VEHICLE DETECTION SYSTEM
(IN-PAVEMENT SENSORS), NOTE 2

EX ℄ SB I-90/94

EX. 60 FT. WOOD POLE
TO BE MAINTAINED

EX. (1) SPAN WIRE
EX. (1) 96 SMF
EX. (1) 12 SMF
EX. (1) NO. 19 50-PAIR
EX. (1) NO. 6 3-1/C
TO BE MAINTAINED

PR ℄ RAMP SW

PR SB TAYLOR
EXIT RAMP

EX. 60 FT. WOOD POLE
TO BE MAINTAINED

EX ℄ RAMP SW

NB I-90/94

SB I-90/94

EX RAMP WN

EX ℄ RAMP EN

EX. HDHH
TO BE MAINTAINED

EX. (1) 3" PVCC GS CONDUIT ATS
TO BE MAINTAINED

EX. (1) 4" PVCC GS CONDUIT ATS
EX. (1) 1-1/4" INNERDUCT
EX. (1) 2" PVCC GS CONDUIT ATS
TO BE MAINTAINED

EX. (1) 4" PVCC GS CONDUIT ATS
EX. (1) 1-1/4" INNERDUCT
EX. (1) 2" PVCC GS CONDUIT ATS
EX. (1) NO. 19 6/C
TO BE MAINTAINED

EX. 18"x18"x8" JB ATS
TO BE MAINTAINED

EX. 24"x24"x10" JB ATS
TO BE MAINTAINED

EX. (1) 3" PVCC GS CONDUIT ATS
TO BE MAINTAINED

EX. (1) 4" PVCC GS CONDUIT ATS
EX. (1) 1-1/4" INNERDUCT
EX. (1) 2" PVCC GS CONDUIT ATS
EX. (1) NO. 19 6/C
TO BE MAINTAINED

EX. TYPE D FOUNDATION
TO BE MAINTAINED

EX. (2) HDHH
TO BE MAINTAINED

EX. (2) 3" GS CONDUIT
EX. (1) NO. 6 2/C & NO. 8
EX. (1) NO. 19 6/C
TO BE MAINTAINED

VAN BUREN ST

EX. HDHH
TO BE MAINTAINED

EX. (2) 2" GS CONDUIT
EX. (1) NO. 6 2/C & NO. 8
EX. (1) NO. 19 6/C
TO BE MAINTAINED

PR ℄ RAMP SE

EX ℄ SB I-90/94

EX. (1) 4" PVCC GS CONDUIT ATS
EX. (1) 1-1/4" INNERDUCT
TO BE MAINTAINED

EX. 24"x24"x10" JB ATS
TO BE MAINTAINED

SEE SHEET NO. 573
MATCH LINE STA 1401+50 (PR ℄ RAMP SE)

EX. 18"x18"x8" JB ATS
TO BE MAINTAINED

EX. (1) 2" PVC CONDUIT
EX. (1) NO. 19 6/C
TO BE MAINTAINED, NOTE 1

SEE SHEET NO. 573

SEE SHEET NO. 572
MATCH LINE STA 2107+00 (PR ℄ RAMP WN)

NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.

2. WIRELESS VEHICLE DETECTION SYSTEM IN-PAVEMENT DETECTORS TO BE CENTERED IN EACH MAINLINE AND RAMP LANE. REMOVE AND RELOCATE LANE SENSORS AS NECESSARY TO ALLOW FOR RAMP LANE REALIGNMENT. THIS WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.

3. THE WIRELESS VEHICLE DETECTION SYSTEM RADIOS REQUIRE LINE OF SIGHT. THE CONTRACTOR SHALL LOCATE THE SYSTEM SO THAT EXISTING TREES WILL NOT IMPEDE THE WIRELESS SIGNAL BETWEEN THE POLE MOUNTED EQUIPMENT. THE RELOCATION OF TEMPORARY WOOD POLES TO MAINTAIN THE WIRELESS VEHICLE DETECTION SYSTEM AND THE REQUIRED LINE OF SIGHT WILL BE INCLUDED IN THE COST OF THE "RELOCATED EXISTING WOOD POLE" PAY ITEM.

4. TEMPORARY WOOD POLES AND SENSYS NETWORKS SYSTEM TO REMAIN BEYOND THIS CONTRACT AND ARE TO BE TURNED OVER TO IDOT AT THE END OF THE PROJECT.

N

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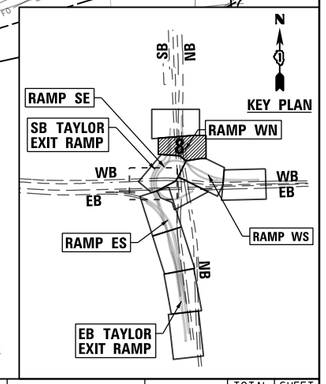
SCALE: 1"=20'



ITS-14

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-ITS-14	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/28/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 14 OF 45 SHEETS | STA. 6218+25 TO STA. 1401+50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	584
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

FILE PATH = pw:\\617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\006_Roadway\Sheets\60X93 Contract\D160X93-Sht-ITS-14

I-90/94

EX. 20"x16"x10" JB ATS
TO BE MAINTAINED

EX. (1) 4" PVC CONDUIT
EX. (1) 96 SMF
EX. (1) NO. 19 50-PAIR
TO BE MAINTAINED

EX. 60 FT. WOOD POLE
TO BE MAINTAINED

EX. (1) 4" PVC CONDUIT
EX. (1) 96 SMF
EX. (1) NO. 19 50-PAIR
TO BE MAINTAINED

EX. (1) 2" CONDUIT ATS
EX. (1) NO. 19 6/C
TO BE MAINTAINED

EX. (1) 4" CONDUIT ATS
EX. (1) 96 SMF
EX. (1) NO. 19 50-PAIR
TO BE MAINTAINED

EX. (1) 4" GS ENCASED IN CONCRETE
EX. (1) 96 SMF
EX. (1) NO. 19 50-PAIR
TO BE MAINTAINED

EX. 20"x16"x10" JB ATS
TO BE MAINTAINED

EX. 20"x16"x10" JB ATS
TO BE MAINTAINED

JACKSON BLVD

EX. 12"x10"x6" JB ATS
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

SB I-90/94

NB I-90/94

EX ℄ RAMP SW

PR ℄ RAMP SW

PR SB TAYLOR
EXIT RAMP

EX. (1) SPAN WIRE
EX. (1) 96 SMF
EX. (1) 12 SMF
EX. (1) NO. 19 50-PAIR
EX. (1) NO. 6 3-1/C
TO BE MAINTAINED

EX ℄ SB I-90/94

EX. 60 FT. WOOD POLE
TO BE MAINTAINED

EX. HDHH
ABANDONED

EX ℄ NB I-90/94

EX. WIRELESS VEHICLE DETECTION SYSTEM
(IN-PAVEMENT SENSORS), NOTE 2

MATCH LINE STA 20+50 (EX ℄ SB I-90/94)
SEE SHEET NO. 584

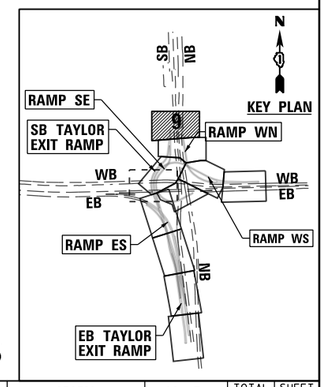
NOTES:

1. MAINTAIN THE EXISTING IDOT ITS SYSTEMS THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
2. WIRELESS VEHICLE DETECTION SYSTEM IN-PAVEMENT DETECTORS TO BE CENTERED IN EACH MAINLINE AND RAMP LANE. REMOVE AND RELOCATE LANE SENSORS AS NECESSARY TO ALLOW FOR RAMP LANE REALIGNMENT. THIS WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
3. THE WIRELESS VEHICLE DETECTION SYSTEM RADIOS REQUIRE LINE OF SIGHT. THE CONTRACTOR SHALL LOCATE THE SYSTEM SO THAT EXISTING TREES WILL NOT IMPEDE THE WIRELESS SIGNAL BETWEEN THE POLE MOUNTED EQUIPMENT. THE RELOCATION OF TEMPORARY WOOD POLES TO MAINTAIN THE WIRELESS VEHICLE DETECTION SYSTEM AND THE REQUIRED LINE OF SIGHT WILL BE INCLUDED IN THE COST OF THE "RELOCATED EXISTING WOOD POLE" PAY ITEM.
4. TEMPORARY WOOD POLES AND SENSYS NETWORKS SYSTEM TO REMAIN BEYOND THIS CONTRACT AND ARE TO BE TURNED OVER TO IDOT AT THE END OF THE PROJECT.

N

0 20 40

SCALE: 1"=20'



ITS-15

FILE PATH = pw:\\617479-PWINT.aecomonline.local\AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000_CAD\006_Roadway\Sheets\60X93 Contract\D160X93-Sht-ITS-15

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PHONE: (312) 373-7700 FAX: (312) 373-6800

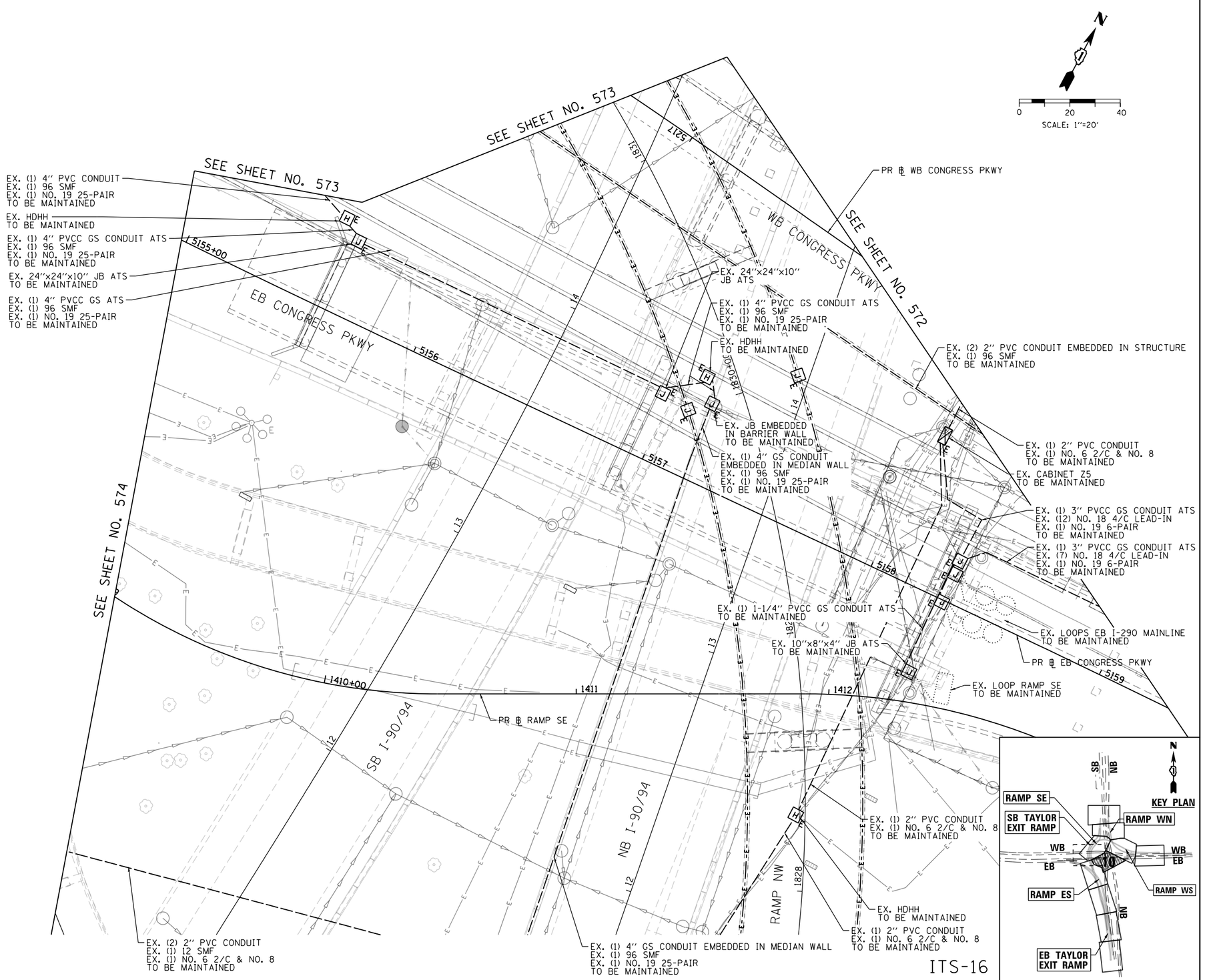
D160X93-Sht-ITS-15	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/28/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 15 OF 45 SHEETS | STA. 6215+00 | TO STA. 6218+25

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	585
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



ITS-16

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303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-ITS-16	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/28/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING/TEMPORARY ITS PLAN

SCALE: 1"=20' | SHEET 16 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	586
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

EX. (1) 4" PVC CONDUIT EMBEDDED IN MEDIAN WALL
EX. (2) 1-1/4" INNERDUCT
TO BE MAINTAINED

PR ℄ WB I-290

EX. (1) 4" PVC CONDUIT, SCH. 80
TO BE MAINTAINED

EX. MEDIAN WALL JB
TO BE MAINTAINED

SEE SHEET 573 FOR
EXISTING ITS PLANS

EX. MCD CABINET

WB CONGRESS PKWY

EX. (1) 4" PVC CONDUIT EMBEDDED IN MEDIAN WALL
EX. (2) 1-1/4" INNERDUCT
EX. (1) 2" PVC CONDUIT EMBEDDED IN MEDIAN WALL
TO BE MAINTAINED

EX. MEDIAN WALL JB
TO BE MAINTAINED

EX. (1) 4" PVC CONDUIT EMBEDDED IN MEDIAN WALL
EX. (1) 2" GS CONDUIT
TO BE MAINTAINED

EX. MEDIAN WALL JB
TO BE MAINTAINED

CTA BLUE LINE

EX. (1) 2" GS CONDUIT
EX. (1) 4" PVC CONDUIT
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EB CONGRESS PKWY

PR ℄ EB I-290

EX. (1) 3" GS CONDUIT
EX. (1) 2" GS CONDUIT
TO BE MAINTAINED

EX. (1) 2" GS CONDUIT
TO BE MAINTAINED

PR ℄ RAMP SE

PR ℄ RAMP EN

PR ℄ RAMP WS

PR ℄ RAMP ES

HALSTED ST

EX RAMP EN

EX RAMP WS

EX ℄ RAMP EN

EX ℄ RAMP WS

EX. HDHH
TO BE MAINTAINED

EX. (2) 2" PVC CONDUIT
EMBEDDED IN STRUCTURE
TO BE MAINTAINED

EX. HDHH
TO BE MAINTAINED

EX. (2) 2" GS CONDUIT
TO BE MAINTAINED

EX. CLOSED CIRCUIT TELEVISION CAMERA STRUCTURE
TO BE MAINTAINED

EX. (4) PREFORMED LOOPS
TO BE MAINTAINED

SEE SHEET 574 FOR
EXISTING ITS PLANS

PR ℄ EB TAYLOR EXIT RAMP

EX ℄ RAMP ES

PR ℄ SB TAYLOR EXIT RAMP

N

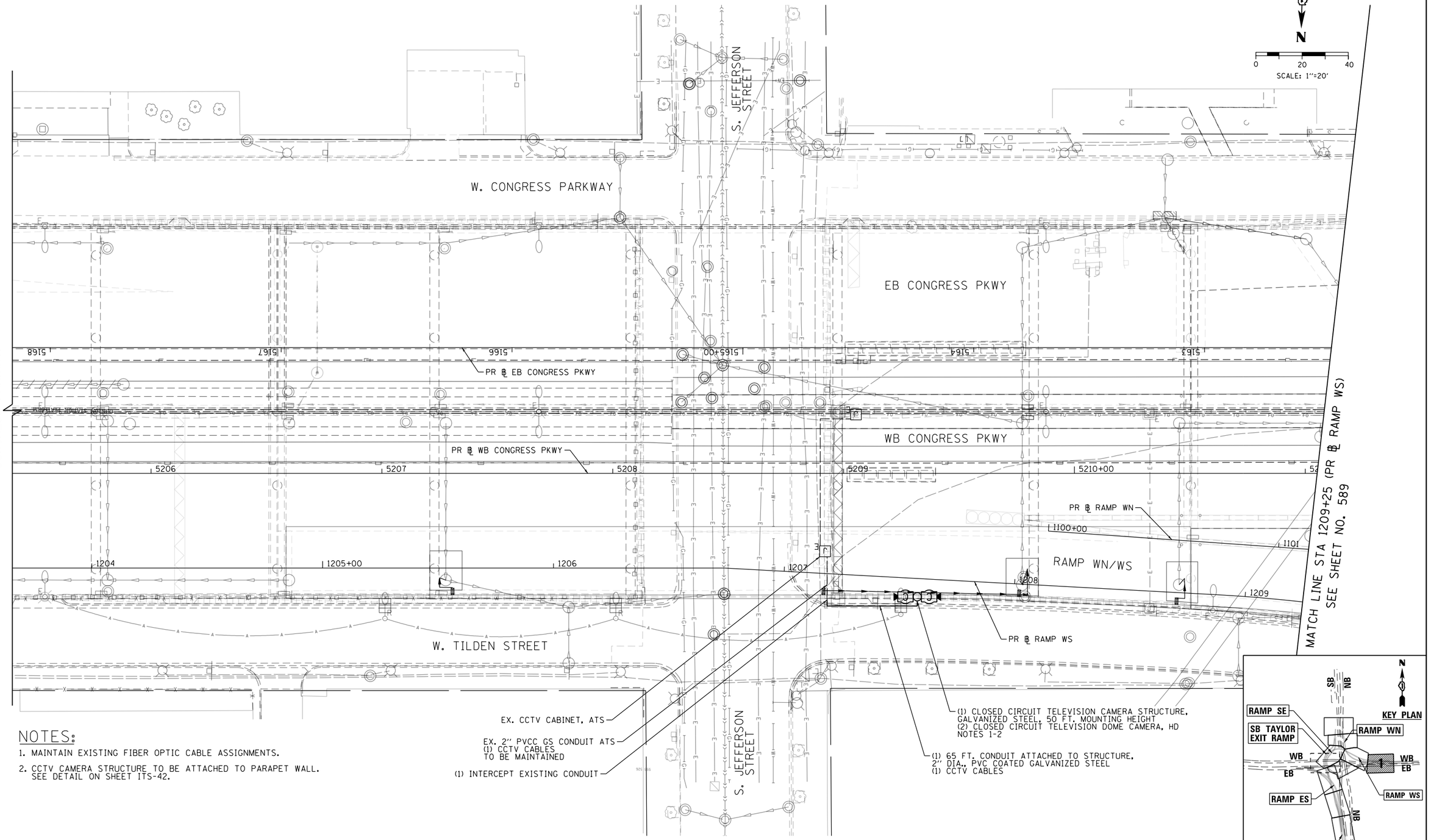
0 20 40
SCALE: 1"=20'

ITS-17

FILE PATH = pw:\\617479-PWINT.aecomonline.local:AECOM.DS02.NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000.CAD\006.Roadway\Sheets\I60x93 Corridor\D160X93-Sht-ITS-17

AECOM 303 EAST WACKER DRIVE, SUITE 1400 CHICAGO, IL 60601-5276 PHONE: (312) 373-7700 FAX: (312) 373-6800	D160X93-Sht-ITS-17	DESIGNED - PTJ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING/TEMPORARY ITS PLAN
	USER NAME = patrick.jordan	DRAWN - CAM	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -		SCALE: 1"=20' SHEET 17 OF 45 SHEETS STA. TO STA.
	PLOT DATE = 7/28/2018	DATE - 7/30/2018	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	587
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. MAINTAIN EXISTING FIBER OPTIC CABLE ASSIGNMENTS.
2. CCTV CAMERA STRUCTURE TO BE ATTACHED TO PARAPET WALL. SEE DETAIL ON SHEET ITS-42.

ITS-18

AECOM
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D160X93-Sht-ITS-18	DESIGNED - PTJ	REVISED -	
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 18 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	588
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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NOTES:

1. SEE DETAIL ON SHEET ITS-37 FOR PIER C1 AND PIER 1 ELEVATION VIEW.
2. DISCONNECT AND PULL BACK FIBER OPTIC, POWER, AND DETECTOR CABLES FROM PUMP STATION 5 AND CABINET Z5 TO EXISTING JUNCTION BOXES ON PIER C1. REINSTALL ALL CABLES THROUGH NEW CONDUIT, JUNCTION BOXES, AND HANDHOLES AS SHOWN IN THE PLANS AND RECONNECT TO THE PUMP STATION AND CABINET Z5.
3. THE CONTRACTOR SHALL COORDINATE ALL FIBER OPTIC DISCONNECTION WORK WITH IDOT/OAK PARK TSC. THIS WORK SHALL ONLY OCCUR OVERNIGHT AFTER THE PM PEAK HOUR AND BEFORE THE AM PEAK HOUR THE NEXT MORNING. ALL TERMINATION WORK SHALL BE ACCOMPLISHED IN ONE NIGHT. ALL CABLE ASSIGNMENTS SHALL REMAIN THE SAME.
4. INSTALL 10"x8"x4" JUNCTION BOXES ATTACHED TO STRUCTURE UNDER EACH LOOP.

SEE SHEET NO. 603

CABINET Z4 (RELOCATED BY OTHERS)

PR ℄ RAMP EN

EX RAMP NE

PR ℄ RAMP SE

PR ℄ EB CONGRESS PKWY

WB CONGRESS PKWY

PR ℄ WB CONGRESS PKWY

(2) 30 FT. CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL
(1) 30 FT. CONDUIT ATTACHED TO STRUCTURE, 3" DIA. PVC COATED GALVANIZED STEEL
EX. (2) FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 6 2/C AND NO. 8
EX. (12) ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 19 6-PAIR

EX. (3) JB, ATS
(3) DRILL EXISTING JUNCTION BOX
NOTE 2

(1) 51 FT. PREFORMED INDUCTION LOOP 12'X6' CENTERED IN LANE

(1) JUNCTION BOX, SS, ATS, 10"X8"X4" NOTES 1 & 4

EX RAMP EN

PR ℄ RAMP WN

RAMP WN

EX RAMP WS

RAMP WS

PR ℄ RAMP WS

NB I-90/94

EX ℄ NB I-90/94

MATCH LINE STA 1214+75 (PR ℄ RAMP WS)
SEE SHEET NO. 590

(1) 30 FT. CONDUIT ATTACHED TO STRUCTURE, 1-1/4" DIA. PVC COATED GALVANIZED STEEL
(1) 30 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED

(3) JUNCTION BOX, SS, ATS, 18"X18"X8" NOTE 1

(2) 35 FT. CONDUIT ATTACHED TO STRUCTURE, 2" DIA. PVC COATED GALVANIZED STEEL
(1) 35 FT. CONDUIT ATTACHED TO STRUCTURE, 3" DIA. PVC COATED GALVANIZED STEEL
EX. (2) FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 6 2/C AND NO. 8
EX. (12) ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 19 6-PAIR
(1) 35 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED
NOTES 2 & 3

(1) 25 FT. CONDUIT ATTACHED TO STRUCTURE, 1-1/4" DIA. PVC COATED GALVANIZED STEEL
(1) 25 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED

(1) JUNCTION BOX, SS, ATS, 18"X18"X8"

(1) 30 FT. CONDUIT ATTACHED TO STRUCTURE, 2" DIA. PVC COATED GALVANIZED STEEL
(1) 30 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED
NOTE 1

EX. HDHH
(1) CLEAN EXISTING HANDHOLE

RETAINING WALL 22B
SN 016-1839
CONTRACT 60X79

W. TILDEN STREET

(1) HDHH
STA. 5213+03.75, 66.44' RT
(PR WB CONGRESS ℄)
TOP OF HH LID EL = 586.92

(2) 50 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
(1) 50 FT. UNDERGROUND CONDUIT, GS, 3" DIA.
EX. (2) FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 6 2/C AND NO. 8
EX. (12) ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 19 6-PAIR
(1) 50 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED
NOTES 2 & 3

EX. HDHH
(4) DRILL EXISTING HDHH
(1) CLEAN EXISTING HANDHOLE

EX. (2) 2" PVC CONDUIT
EX. (1) 3" PVC CONDUIT
EX. (2) FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 6 2/C AND NO. 8
EX. (12) ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED
EX. (1) ELECTRIC CABLE IN CONDUIT, NO. 19 6-PAIR
(2) 55 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED
NOTES 2 & 3

(14) 170 FT. REMOVE AND REINSTALL CABLE IN CONDUIT, (POWER, COMMUNICATION, DETECTION)
(2) 425 FT. REMOVE AND REINSTALL CABLE IN CONDUIT, (FIBER OPTIC)

S. DESPLAINES STREET

EX. (1) 1" GS CONDUIT
EX. (2) 2" GS CONDUIT
EX. (2) 4" GS CONDUIT
EX. (3) NO. 6 2/C & NO. 8
EX. (2) NO. 19 6/C
EX. (12) NO. 18 4/C, LEAD-IN
(2) 10 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED

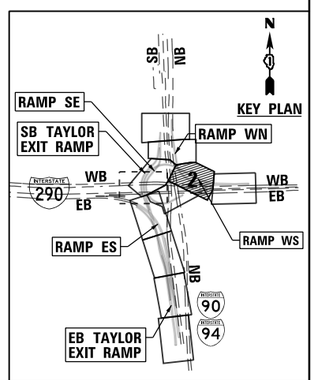
EXISTING CABINET Z5

EX. HDHH
(1) CLEAN EXISTING HANDHOLE

MATCH LINE STA 1209+25 (PR ℄ RAMP WS)
SEE SHEET NO. 588

MATCH LINE STA 2107+00 (PR ℄ RAMP WN)
SEE SHEET NO. 601

0 20 40
SCALE: 1"=20'



ITS-19

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USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
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PLOT DATE = 7/28/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 19 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	589
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. CONNECT 4" CONDUIT TO EXISTING HANDHOLE BY UTILIZING DRILLED HOLE FROM EXISTING THREE FOOT CONDUIT STUBBED AND CAPPED IN A PRIOR CONTRACT. INSTALL 4" CONDUIT UNDER PERMANENT SHOULDER PAVEMENT.
2. SEE DETAIL ON ITS-39.
3. ALL CABLE ASSIGNMENTS SHALL REMAIN THE SAME FOR THE DAN RYAN 96 FIBER AND NO. 19 25-PAIR CABLES.
4. CONNECT 4" CONDUIT BETWEEN NEW HEAVY-DUTY HANDHOLE AND EXISTING JUNCTION BOX ATTACHED TO THE VAN BUREN STREET BRIDGE PIER.

N

0 20 40

SCALE: 1"=20'

MATCH LINE STA 1214+75 (PR ℄ RAMP WS)
SEE SHEET NO. 589

SEE SHEET NO. 603

SEE SHEET NO. 603

MATCH LINE STA 1222+25 (PR ℄ RAMP WS)
SEE SHEET NO. 591

SEE SHEET NO. 601

MATCH LINE STA 1401+50 (PR ℄ RAMP SE)
SEE SHEET NO. 601

SB I-90/94

EX ℄ RAMP NW

PR ℄ WB I-290

EX ℄ SB I-90/94

EX ℄ NB I-90/94

RAMP NW

WB I-290

EB I-290

RAMP SE

RAMP WS

SB TAYLOR EXIT RAMP

PR ℄ RAMP SE

PR ℄ RAMP WS

PR SB TAYLOR EXIT RAMP

CTA BLUE LINE

(1) 5 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
(1) 35 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
(1) 35 FT. FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE
(2) 35 FT. NO 6 1/C & (1) NO. 8 1/C

(1) 90 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
(1) 90 FT. FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE
(2) 90 FT. NO 6 1/C & (1) NO. 8 1/C

(2) 47 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 47 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 47 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) JUNCTION BOX, TYPE J

SEE SHEET 604 FOR PROPOSED ITS PLANS

EX. DOUBLE HANDHOLE NOTE 1

(1) 30 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 30 FT. FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE
(2) 30 FT. NO 6 1/C & (1) NO. 8 1/C

(1) 60 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 60 FT. FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE
(2) 60 FT. NO 6 1/C & (1) NO. 8 1/C

(1) 100 FT. UNDERGROUND CONDUIT, GS, 4" DIA.
(1) 100 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.

(1) 38 FT. CONDUIT ENCASED IN CONCRETE, 4" DIA., PVC
(1) 38 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.

(1) 25 FT. UNDERGROUND CONDUIT, GS, 4" DIA.
(1) 25 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.

(1) DRILL EXISTING HDHH
(1) CLEAN EXISTING HANDHOLE

(1) 135 FT. UNDERGROUND CONDUIT, PVC, 4" DIA. SCH. 80
NOTE 1

(1) INTERCEPT EXISTING CONDUIT

(1) 38 FT. CONDUIT ENCASED IN CONCRETE, 4" DIA., PVC
(1) 38 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.

(1) 25 FT. UNDERGROUND CONDUIT, GS, 4" DIA.
(1) 25 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.

(1) HDHH

(1) 50 FT. CONDUIT ATS, 4" DIA., PVC COATED GS
(1) 50 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
NOTE 4

(1) DRILL EXISTING HDHH
(1) CLEAN EXISTING HANDHOLE

(1) 100 FT. UNDERGROUND CONDUIT, GS, 4" DIA
(1) 100 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 100 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 100 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

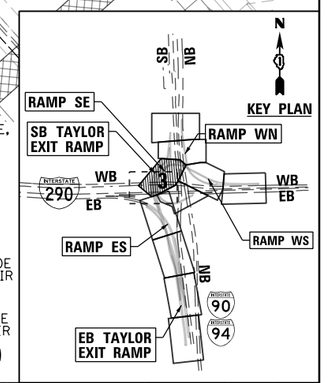
(2) 150 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 150 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 150 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
(1) JUNCTION BOX, TYPE J

(1) JUNCTION BOX, SS, ATS, 18"X18"X8"
NOTE 2

(2) 15 FT. CONDUIT ATS, 2" DIA., PVC COATED GS
(1) 15 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 15 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) 30 FT. CONDUIT ATS, 4" DIA., PVC COATED GS
(1) 30 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 30 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 30 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) HDHH



ITS-20

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D160X93-Sht-ITS-20	DESIGNED - PTJ	REVISED -	
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -	
PLOT DATE = 7/28/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 20 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	590
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

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SEE SHEET NO. 603

SEE SHEET NO. 590
MATCH LINE STA 1222+25 (PR ℄ RAMP WS)

MATCH LINE STA 1227+75 (PR ℄ RAMP WS)
SEE SHEET NO. 592

N

0 20 40
SCALE: 1"=20'

UNDERGROUND CONDUIT, GS, 2" DIA. (PROPOSED BY OTHERS CONTRACT 60X79)

PR ℄ RAMP SE

EX RAMP SE

RAMP SE

EX RAMP EN

PR ℄ RAMP EN

RAMP EN (BY OTHERS)

EX SB I-90/94

HARRISON ST

(2) 355 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 355 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 355 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) JUNCTION BOX, TYPE J

(2) 190 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 190 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 190 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

EX RAMP WS

PR ℄ RAMP ES

RAMP ES

PR ℄ RAMP WS

(1) 28 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
(2) LOOP WIRE

(1) HDHH

RAMP WS

SB TAYLOR EXIT RAMP

CONDUIT ATS, 2" DIA. (PROPOSED BY OTHERS, CONTRACT 60X79)
(3) 30 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED

HDHH
(PROPOSED BY OTHERS CONTRACT 60X79)

PREFORMED LOOPS
(PROPOSED BY OTHERS CONTRACT 60X79)

EX. JB, ATS

EB TAYLOR EXIT RAMP

RETAINING WALL #10 (SN 016-1729) - BY OTHERS (CONTRACT 62A74)

PR ℄ SB TAYLOR EXIT RAMP

(1) HDHH

(2) PREFORMED INDUCTION LOOP, 6' DIA., CENTERED IN EACH LANE

(1) 45 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
(1) 45 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED

EX RETAINING WALL #13 (SN 016-1802)

(1) PREFORMED INDUCTION LOOP, 6'X12' CENTERED IN LANE

PR ℄ EB TAYLOR EXIT RAMP

(1) 14 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
(1) LOOP WIRE

(1) 90 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
(3) 90 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED

HDHH
(PROPOSED BY OTHERS CONTRACT 60X79)

UNDERGROUND CONDUIT, GS, 2" DIA.
(PROPOSED BY OTHERS CONTRACT 60X79)

EXISTING CONDUIT ATS, 2" DIA.
(3) 106 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED

UNDERGROUND CONDUIT, GS, 2" DIA.
(PROPOSED BY OTHERS, CONTRACT 60X79)
(7) 5 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED

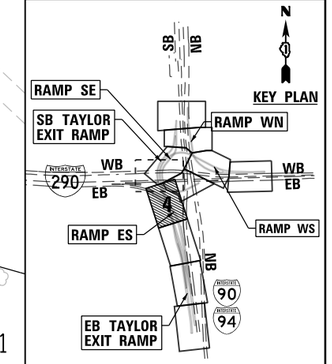
RELOCATED CABINET Z1 (CONTRACT 60X79)
(7) TONE EQUIPMENT - TRANSMITTER
(7) TONE EQUIPMENT - RECEIVER
(2) DIGITAL LOOP DETECTOR SENSOR UNIT, 4-CHANNEL

(1) HDHH

(1) 45 FT. CONDUIT ATTACHED TO STRUCTURE, PVCC GS, 2" DIA.
(3) 45 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C, TWISTED, SHIELDED

HALSTED ST

KEY PLAN



ITS-21

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D160X93-Sht-ITS-21	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/29/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 21 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	591
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

(2) 205 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 205 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 205 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) JUNCTION BOX, TYPE J

(2) 195 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 195 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 195 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

PROPOSED RETAINING WALL 14
SN 016-1803 (SEE STRUCTURAL PLANS)

(1) JUNCTION BOX, TYPE J
(1) 35 FT. CONDUIT ENCASED IN CONCRETE, 4" DIA., PVC
(1) 35 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 35 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 35 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) JUNCTION BOX, TYPE J
(2) 135 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 135 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 135 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

SEE SHEET NO. 591
MATCH LINE STA 1227+75 (PR ℄ RAMP WS)

MATCH LINE STA 1233+25 (PR ℄ RAMP WS)
SEE SHEET NO. 593

EX SB I-90/94

RAMP ES

PR ℄ RAMP ES

RAMP WS

SB TAYLOR EXIT RAMP

PR ℄ RAMP WS

PR ℄ SB TAYLOR EXIT RAMP

PR ℄ EB TAYLOR EXIT RAMP

EB TAYLOR EXIT RAMP

Old ACCESS ROAD

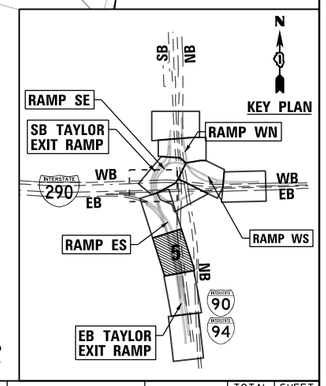
UIC ACCESS ROAD

UIC TENNIS/BASKETBALL COURTS

UIC STUDENT RECREATION FACILITY

RETAINING WALL #10 (SN 016-1729)
- BY OTHERS (CONTRACT 62A74)

0 20 40
SCALE: 1"=20'



ITS-22

FILE PATH = pw:\Vol7479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000_CAD\006_Roadway\Sheets\60X93-Sht-ITS-22

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303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-ITS-22	DESIGNED - PTJ	REVISED -	
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -	
PLOT DATE = 7/29/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 22 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	592
		CONTRACT NO. 60X93		
		ILLINOIS FED. AID PROJECT		

NOTES:

1. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
2. INSTALL NEW DETECTION CABLES THROUGH EXISTING CONDUIT AND CONNECT TO NEW TONE EQUIPMENT IN EXISTING CABINET D4.
3. DETECTION AND TELEPHONE CABLES SHALL BE INSTALLED IN A SEPARATE CONDUIT FROM POWER AND GROUND CABLES.
4. JUNCTION BOXES AND CONDUIT ARE TO BE EMBEDDED IN THE EB TAYLOR EXIT BARRIER WALL.

SEE SHEET NO. 592
MATCH LINE STA 1233+25 (PR ℄ RAMP WS)

BREAKLINE - SEE DETAIL A

(1) CLEAN EXISTING HANDHOLE

ACCIDENT INVESTIGATION SITE

EX. 2" CONDUIT
(3) 110 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN
NO. 18 4/C, TWISTED, SHIELDED

(1) INTERCEPT EXISTING CONDUIT

(1) 90 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
(3) 90 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN
NO. 18 4/C, TWISTED, SHIELDED

PR ℄ RAMP ES

209 208 207 206

EX SB I-90/94

(1) PREFORMED INDUCTION LOOP,
6'X12' CENTERED IN LANE

RAMP ES

(1) 25 FT. UNDERGROUND CONDUIT,
GS, 2" DIA.
(1) LOOP WIRE

(1) PREFORMED INDUCTION LOOP,
6'X12' CENTERED IN LANE

(1) 10 FT. UNDERGROUND CONDUIT,
GS, 2" DIA.
(1) LOOP WIRE

(1) HDHH

1234 1235+00 1236 1237 1238

RAMP WS

PR ℄ SB TAYLOR EXIT RAMP

PR ℄ RAMP WS

6422 6423 6424

SB TAYLOR EXIT RAMP

7317 7318 7319 7320+00 7321 732

EB TAYLOR EXIT RAMP

PR ℄ EB TAYLOR EXIT RAMP

PR RETAINING WALL 16
SN 016-1805 (SEE STRUCTURAL PLANS)

205+00

EX ROW

(1) PREFORMED INDUCTION LOOP,
6'X12' CENTERED IN LANE

(1) 10 FT. UNDERGROUND CONDUIT,
GS, 2" DIA.
(1) LOOP WIRE

(1) 10 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
(3) 10 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN,
NO. 18 4/C, TWISTED, SHIELDED

(1) JUNCTION BOX, TYPE J

(1) 35 FT. CONDUIT ENCASED IN CONCRETE, 4" DIA., PVC
(1) 35 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 35 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 35 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
(3) 35 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN,
NO. 18 4/C, TWISTED, SHIELDED

(1) JUNCTION BOX, TYPE J, NOTE 4

(2) 85 FT. CONDUIT EMBEDDED IN STRUTURE, 2" DIA., PVC
(1) 85 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 85 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(2) 135 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 135 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 135 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
NOTE 4

(1) HDHH

JUNCTION BOX, TYPE J, NOTE 4

(1) 8 FT. UNDERGROUND CONDUIT, GS, 2" DIA.
(3) 8 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN,
NO. 18 4/C, TWISTED, SHIELDED

(2) 170 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 170 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 170 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
(3) 170 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN
NO. 18 4/C, TWISTED, SHIELDED
NOTE 4

(2) 155 FT. CONDUIT EMBEDDED IN STRUTURE,
2" DIA., PVC
(1) 155 FT. FIBER OPTIC CABLE 96 FIBERS,
SINGLE MODE
(1) 155 FT. ELECTRIC CABLE IN CONDUIT,
NO. 19 25 PAIR

(1) JUNCTION BOX, TYPE J

(1) 45 FT. CONDUIT ENCASED IN CONCRETE,
4" DIA., PVC
(1) 45 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 45 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 45 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) JUNCTION BOX, TYPE J, NOTE 4

MATCH LINE STA 1238+75 (PR ℄ RAMP WS)
SEE SHEET NO. 594

N

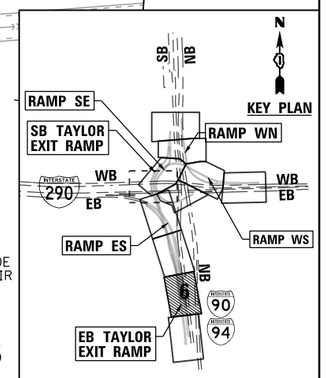
0 20 40
SCALE: 1"=20'

EX. ITS CABINET D4
(1) DIGITAL LOOP DETECTOR SENSOR
UNIT, 4-CHANNEL
(3) TONE EQUIPMENT - TRANSMITTER
(3) TONE EQUIPMENT - RECEIVER

EX. (3) 2" P-DUCT
EX. NO. 19 6/C
(3) 30 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN
NO. 18 4/C, TWISTED, SHIELDED

EX. UNDERGROUND CONDUIT, GS, 2" DIA.
EX. NO. 19 6/C
(3) 145 FT. ELECTRIC CABLE IN CONDUIT, LEAD-IN
NO. 18 4/C, TWISTED, SHIELDED

BREAKLINE - DETAIL A



ITS-23

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D160X93-Sht-ITS-23	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/29/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 23 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	593
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

EX NB I-90/94

EX SB I-90/94

RAMP ES

RAMP WS

TAYLOR EXIT RAMP

EX ℄ NB I-90/94

EX ℄ SB I-90/94

PR ℄ RAMP WS

PR RETAINING WALL 16
SN 016-1805 (SEE STRUCTURAL PLANS)

PR ℄ EB TAYLOR EXIT RAMP

EX ROW

EX RETAINING WALL #12

EX RETAINING WALL #17

TAYLOR STREET

SEE SHEET NO. 593
MATCH LINE STA 1238+75 (PR ℄ RAMP WS)

MATCH LINE STA 198+25 (EX ℄ NB I-90/94)
SEE SHEET NO. 595

(2) 415 FT. CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
(1) 415 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 415 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
(1) JUNCTION BOX, SS, ATS, 18"x18"x12"
NOTE 1

(1) 15 FT. CONDUIT ATS, 4" DIA., PVC COATED GS
(1) 15 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 15 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 15 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) DRILL EXISTING JUNCTION BOX

EX. (1) 3" PVCC GS CONDUIT ATS
EX. (1) 1" INNERDUCT
(1) 75 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 75 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
NOTE 1

EX. (1) 3" PVCC GS CONDUIT ATS
EX. (1) 1" INNERDUCT
(1) 40 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 40 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) CLEAN EXISTING HANDHOLE

EX. (1) 3" GS CONDUIT
EX. (1) 1" INNERDUCT
(1) 63 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 63 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

0 20 40
SCALE: 1"=20'

KEY PLAN
RAMP SE
SB TAYLOR EXIT RAMP
RAMP WN
WB
EB
INTERSTATE 290
WB
EB
RAMP ES
RAMP WS
NB
SB
INTERSTATE 90
INTERSTATE 94
EB TAYLOR EXIT RAMP

NOTES:

1. SEE DETAIL ON ITS-38 FOR ELEVATION VIEW OF CONDUIT ROUTING ACROSS TAYLOR STREET ABUTMENT AND INTO RETAINING WALL 16.

ITS-24

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D160X93-Sht-ITS-24	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/29/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 24 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	594
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. SPLICE NO. 19 6-PAIR CABLE TO NO. 19 25-PAIR CABLE IN HANDHOLE. DISCONNECT EXISTING NO. 19 6/C CABLE AND CONNECT NEW NO. 19 6-PAIR CABLE IN CABINET.

RUBLE ST.

EX NB I-90/94

EX SB I-90/94

EX ℄ NB I-90/94

SEE SHEET NO. 594
MATCH LINE STA 198+25 (EX ℄ NB I-90/94)

SEE SHEET NO. 596
MATCH LINE STA 192+75 (EX ℄ NB I-90/94)

198 197 196 195+00 194 193

1807 1806 1805+00 1804 1803 1802

EX. (1) 3" GS CONDUIT
EX. (1) 1" INNERDUCT
(1) 146 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 146 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) 135 FT. UNDERGROUND CONDUIT, 4" DIA., G.S.
(1) 135 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 135 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 135 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

EX. 2" GS CONDUIT
(1) 13 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 6 PAIR
NOTE 1

(1) DRILL EXISTING HDHH
(1) CLEAN EXISTING HANDHOLE

(1) 265 FT. UNDERGROUND CONDUIT, 4" DIA., G.S.
(1) 265 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 265 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 265 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) HDHH

N

0 20 40
SCALE: 1"=20'

ITS-25

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303 EAST WACKER DRIVE, SUITE 1400
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USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/29/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 25 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	595
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. SEE DETAIL ON ITS-38 FOR ELEVATION VIEW OF CONDUIT ROUTING ACROSS ROOSEVELT RD. ABUTMENT.

RUBLE ST.

ROOSEVELT RD.

EX NB I-90/94

EX SB I-90/94

℄ NB I-90/94

192 | 191 | 190+00 | 189 | 188

1801 | 1800+00

SEE SHEET NO. 595
MATCH LINE STA 192+75 (EX ℄ NB I-90/94)

MATCH LINE STA 187+25 (EX ℄ NB I-90/94)
SEE SHEET NO. 597

(1) 215 FT. CONDUIT ATS, GS, 4" DIA.
(1) 215 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 215 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 215 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

(1) JUNCTION BOX, SS, ATS, 18"x18"x12"
NOTE 1

(1) 95 FT. CONDUIT ATS, 4" DIA., PVC COATED GS
(1) 95 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 95 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 95 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
NOTE 1

(1) JUNCTION BOX, SS, ATS, 18"x18"x12"
NOTE 1

(1) 275 FT. UNDERGROUND CONDUIT, GS, 4" DIA.
(1) 275 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 275 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 275 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR

N

0 20 40
SCALE: 1"=20'

ITS-26

FILE PATH = pw:\V617479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase_II\000.CAD\006.Roadway\Sheets\60X93 Concrete\D160X93-Sht-ITS-26

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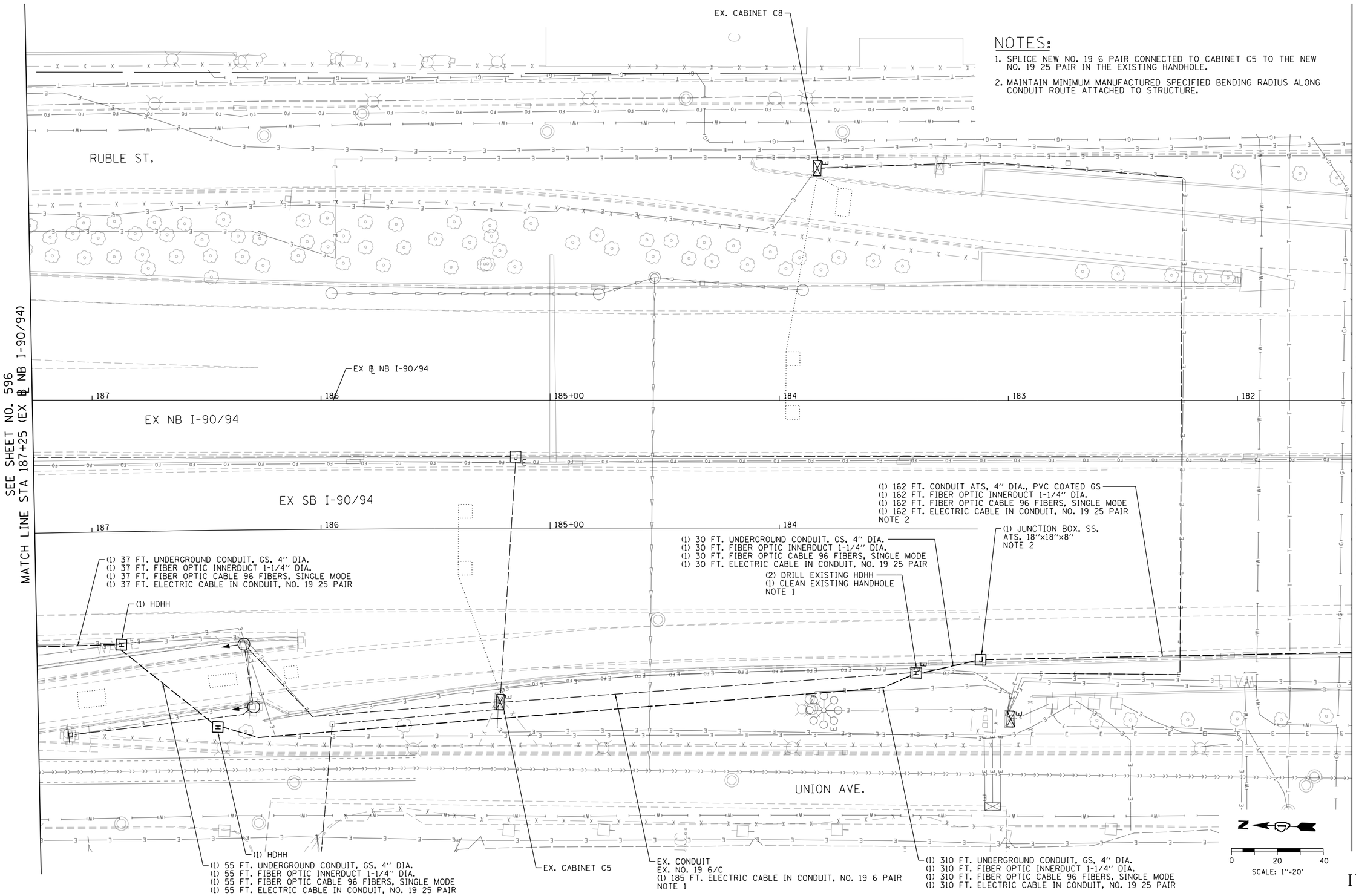
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/29/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 26 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	596
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. SPLICE NEW NO. 19 6 PAIR CONNECTED TO CABINET C5 TO THE NEW NO. 19 25 PAIR IN THE EXISTING HANDHOLE.
2. MAINTAIN MINIMUM MANUFACTURED SPECIFIED BENDING RADIUS ALONG CONDUIT ROUTE ATTACHED TO STRUCTURE.

ITS-27

FILE PATH = pw:\\Bl7479-PWINT.aecomonline.local:AECOM_DS02_NA\Documents\01 Americas\Transportation\60269938 Circle\Phase II\000_CAD\006_Roadway\Sheets\60X93 Conduct\DI60X93-Sht-ITS-27

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DI60X93-Sht-ITS-27	DESIGNED - PTJ	REVISED -	
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -	
PLOT DATE = 7/29/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

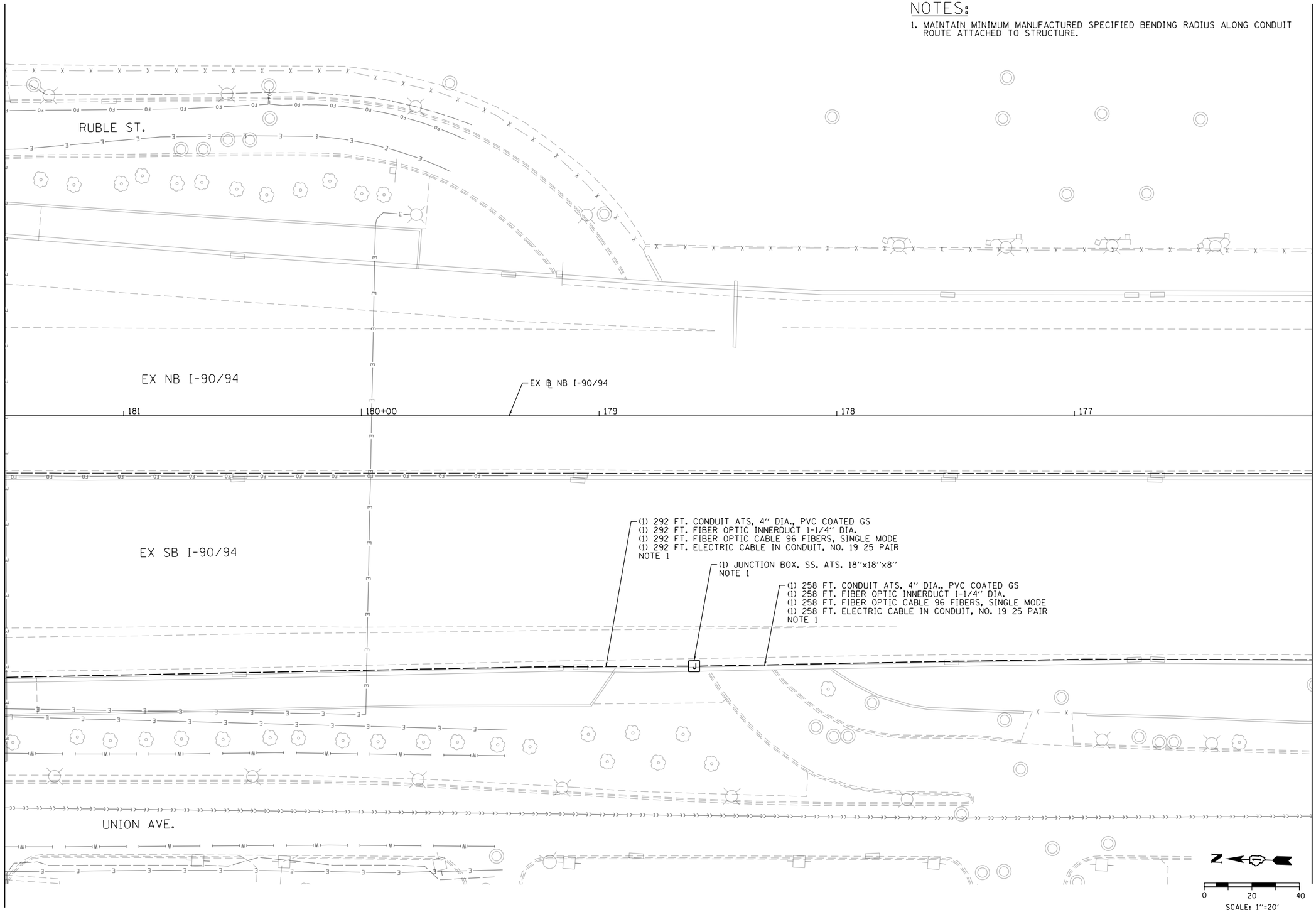
PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 27 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	597
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. MAINTAIN MINIMUM MANUFACTURED SPECIFIED BENDING RADIUS ALONG CONDUIT ROUTE ATTACHED TO STRUCTURE.



SEE SHEET NO. 597
MATCH LINE STA 181+50 (EX ℄ NB I-90/94)

MATCH LINE STA 176+00 (EX ℄ NB I-90/94)
SEE SHEET NO. 599

ITS-28

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D160X93-Sht-ITS-28	DESIGNED - PTJ	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 28 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	598
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. MAINTAIN MINIMUM MANUFACTURED SPECIFIED BENDING RADIUS ALONG CONDUIT ROUTE ATTACHED TO STRUCTURE.

MATCH LINE STA 176+00 (EX ℄ NB I-90/94)
SEE SHEET NO. 598

MATCH LINE STA 170+00 (EX ℄ NB I-90/94)
SEE SHEET NO. 600

14TH PL.

EX ℄ NB I-90/94

EX NB I-90/94

176 | 175+00 | 174 | 173 | 172 | 171

(1) 192 FT. CONDUIT ATS, 4" DIA., PVC COATED GS
(1) 192 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 192 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 192 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
NOTE 1

(1) JUNCTION BOX, SS, ATS, 18"x18"x8"
NOTE 1

(1) 408 FT. CONDUIT ATS, 4" DIA., PVC COATED GS
(1) 408 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 408 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 408 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
NOTE 1

EX SB I-90/94

UNION AVE.

N

0 20 40

SCALE: 1"=20'

ITS-29

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DI60X93-Sht-ITS-29	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 29 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	599
		CONTRACT NO. 60X93		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. SEE DETAIL ON ITS-40 FOR ELEVATION VIEW OF CONDUIT ROUTING AT PIER.
2. MAINTAIN MINIMUM MANUFACTURED SPECIFIED BENDING RADIUS ALONG CONDUIT ROUTE ATTACHED TO STRUCTURE.

SEE SHEET NO. 599

MATCH LINE STA 170+00 (EX ℄ NB I-90/94)

EX NB I-90/94

EX ℄ NB I-90/94

170+00 | 169 | 168 | 167 | 166 | 165+00

I-90/94

(1) 155 FT. CONDUIT ATS, 4" DIA., PVC COATED GS
(1) 155 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 155 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 155 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
NOTE 1

(2) INTERCEPT EXISTING CONDUIT

(1) JUNCTION BOX, SS, ATS, 24"x24"x10"
(1) FIBER OPTIC SPLICE, MAINLINE
NOTE 1

EX. (1) PVCC GS CONDUIT ATS, 2" DIA.
EX. (1) NO. 19 6/C
NOTE 1

(1) 42 FT. CONDUIT ATS, 4" DIA., PVC COATED GS
(1) 42 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 42 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 42 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
NOTE 2

(1) JUNCTION BOX, SS, ATS, 18"x18"x8"
NOTE 2

EX SB I-90/94

(1) 533 FT. CONDUIT ATS, 4" DIA., PVC COATED GS
(1) 533 FT. FIBER OPTIC INNERDUCT 1-1/4" DIA.
(1) 533 FT. FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE
(1) 533 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 25 PAIR
NOTE 2

(1) JUNCTION BOX, SS, ATS, 18"x18"x8"

N

0 20 40

SCALE: 1"=20'

ITS-30

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AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

D160X93-Sht-ITS-30	DESIGNED - PTJ	REVISED -	
USER NAME = myersc	DRAWN - CAM	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MJL	REVISED -	
PLOT DATE = 7/26/2018	DATE - 7/30/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ITS PLAN

SCALE: 1"=20' | SHEET 30 OF 45 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	600
		CONTRACT NO. 60X93		
		ILLINOIS FED. AID PROJECT		