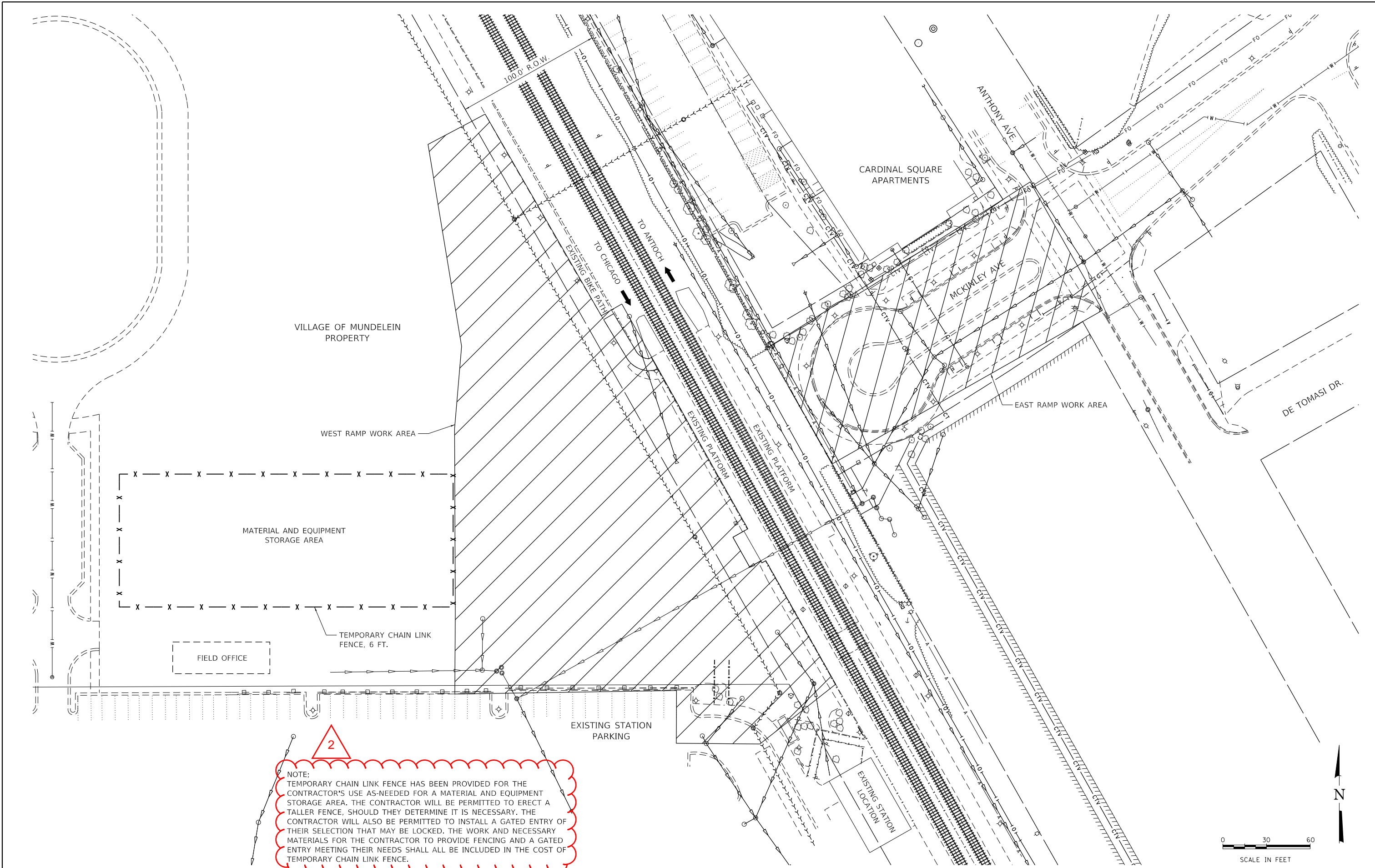


PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	BY	
	FILE NAME	
	TABLET	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE	
	NOTATIS CHKD	
	BY	
	FILE NAME	
	TABLET	

HRG PROJECT NO.: #80756  
 HRG PROJ. CONTACT: #80756\_Sm+Stre+Staging.dgn  
 FILE NAME: #80756\_Sm+Stre+Staging.dgn  
 PEN TABLE: pccrtable.tbl



**2**

NOTE:  
 TEMPORARY CHAIN LINK FENCE HAS BEEN PROVIDED FOR THE CONTRACTOR'S USE AS-NEEDED FOR A MATERIAL AND EQUIPMENT STORAGE AREA. THE CONTRACTOR WILL BE PERMITTED TO ERECT A TALLER FENCE, SHOULD THEY DETERMINE IT IS NECESSARY. THE CONTRACTOR WILL ALSO BE PERMITTED TO INSTALL A GATED ENTRY OF THEIR SELECTION THAT MAY BE LOCKED. THE WORK AND NECESSARY MATERIALS FOR THE CONTRACTOR TO PROVIDE FENCING AND A GATED ENTRY MEETING THEIR NEEDS SHALL ALL BE INCLUDED IN THE COST OF TEMPORARY CHAIN LINK FENCE.



**KMI**  
 Kalsoum Mehdi, Inc.  
 ARCHITECTS • ENGINEERS  
 223 W. Jackson Blvd., Suite 1010 Chicago, IL 60606  
 Tel.: (312)987-5900 Fax: (312)987-5892

DESIGNED	- JJS	REVISED	▲ 01/06/2021
DRAWN	- WJH	REVISED	-
CHECKED	- JJS	REVISED	-
DATE	- 10/5/2020	REVISED	-

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SITE STAGING PLAN**

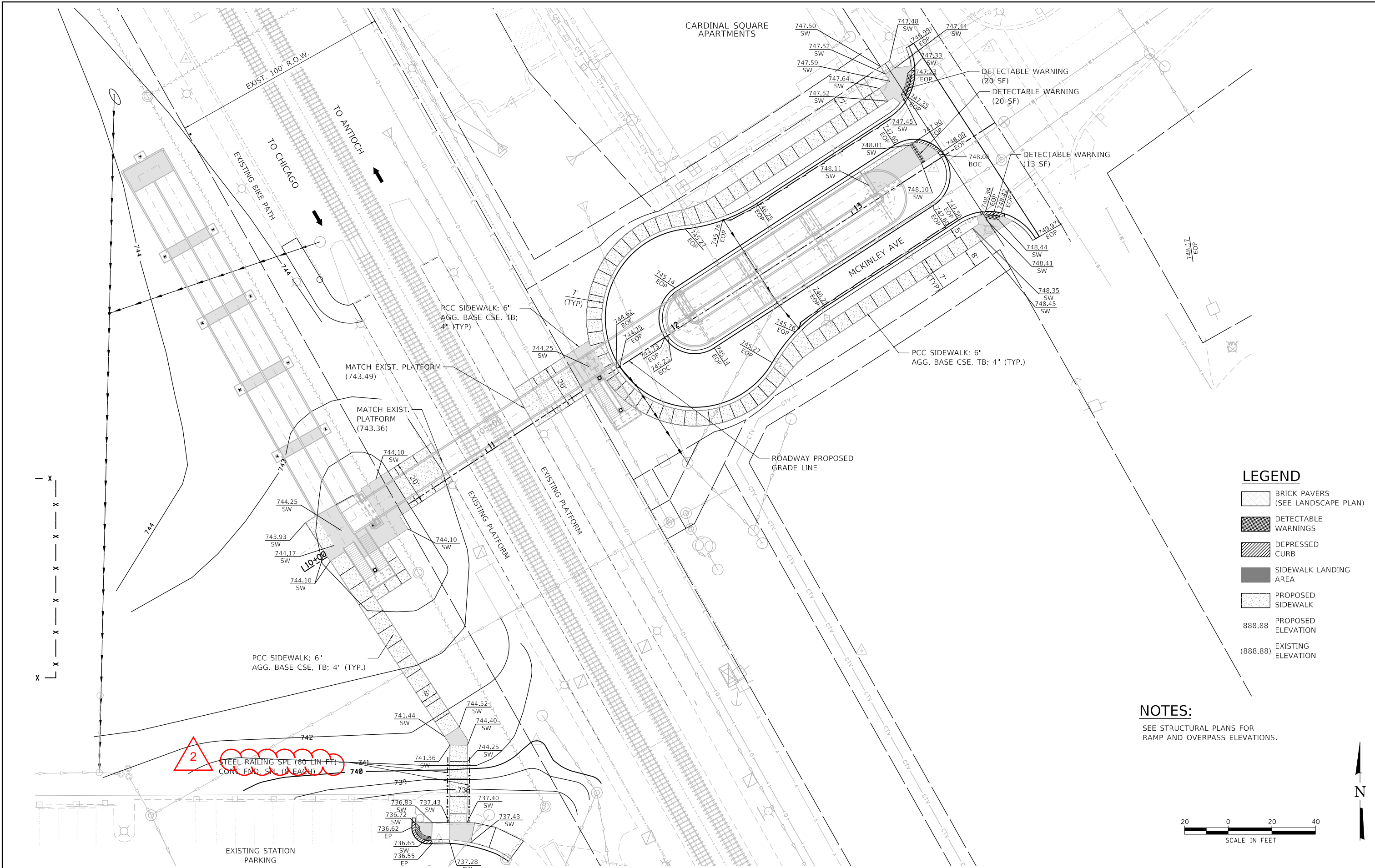
SCALE: 1"=30' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	12-00097-00-BR	LAKE	65	10
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61F89	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILED	
	NO.:	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO.:	

HRG PROJECT NO.: #80756  
 HRG PROJ. CONTACT: #80756, Srt.-Grading.dgn  
 FILE NAME: 12-00097-00-01.dwg  
 PEN TABLE: pcc.tbl



**LEGEND**

	BRICK PAVERS (SEE LANDSCAPE PLAN)
	DETECTABLE WARNINGS
	DEPRESSED CURB
	SIDEWALK LANDING AREA
	PROPOSED SIDEWALK
888.88	PROPOSED ELEVATION
(888.88)	EXISTING ELEVATION

**NOTES:**  
 SEE STRUCTURAL PLANS FOR RAMP AND OVERPASS ELEVATIONS.



**HRGreen**  
 HRGreen.com  
 Illinois Professional Design Firm  
 #184-001322

**KMI**  
 Katsoumi Mehdi, Inc.  
 ARCHITECTS • ENGINEERS  
 223 W. Jackson Blvd., Suite 1010 Chicago, IL 60606  
 Tel.: (312)987-5900 Fax: (312)987-5892

DESIGNED - JJS	REVISED - 01/06/2021
DRAWN - WJH	REVISED -
CHECKED - JJS	REVISED -
DATE - 10/5/2020	REVISED -

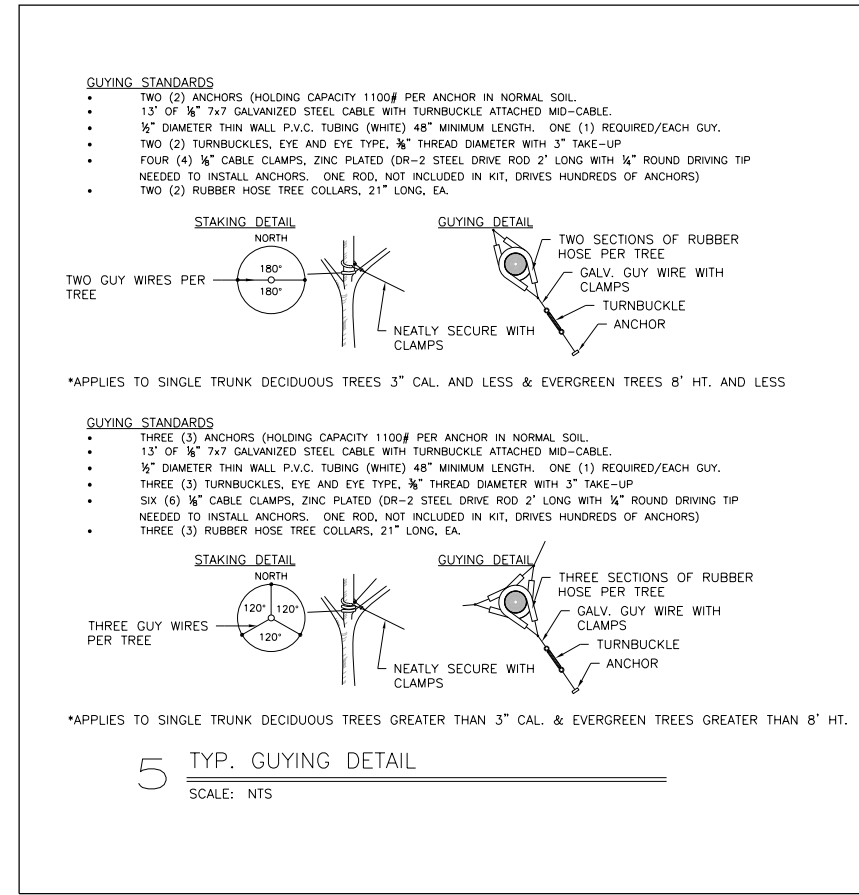
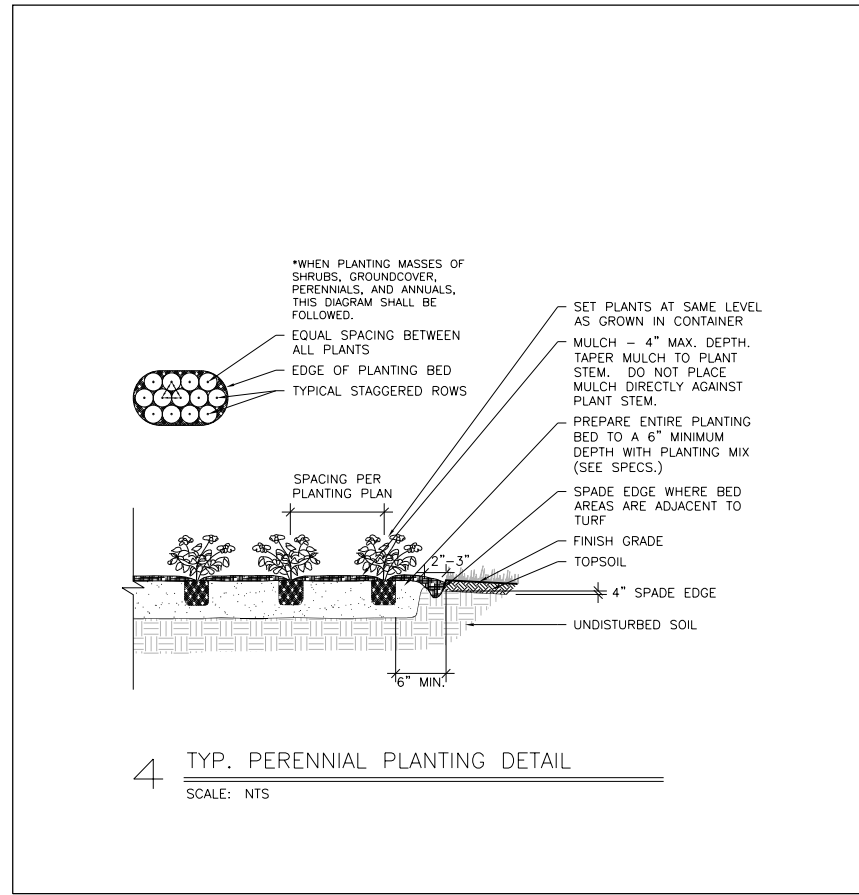
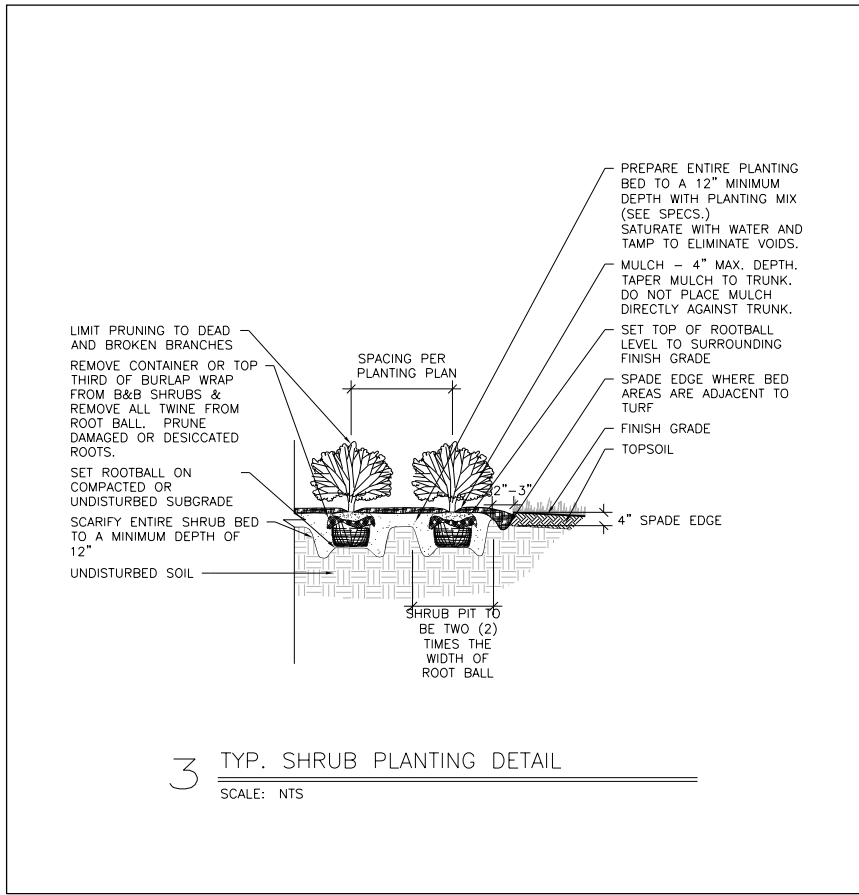
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED SITE AND GRADING PLAN**

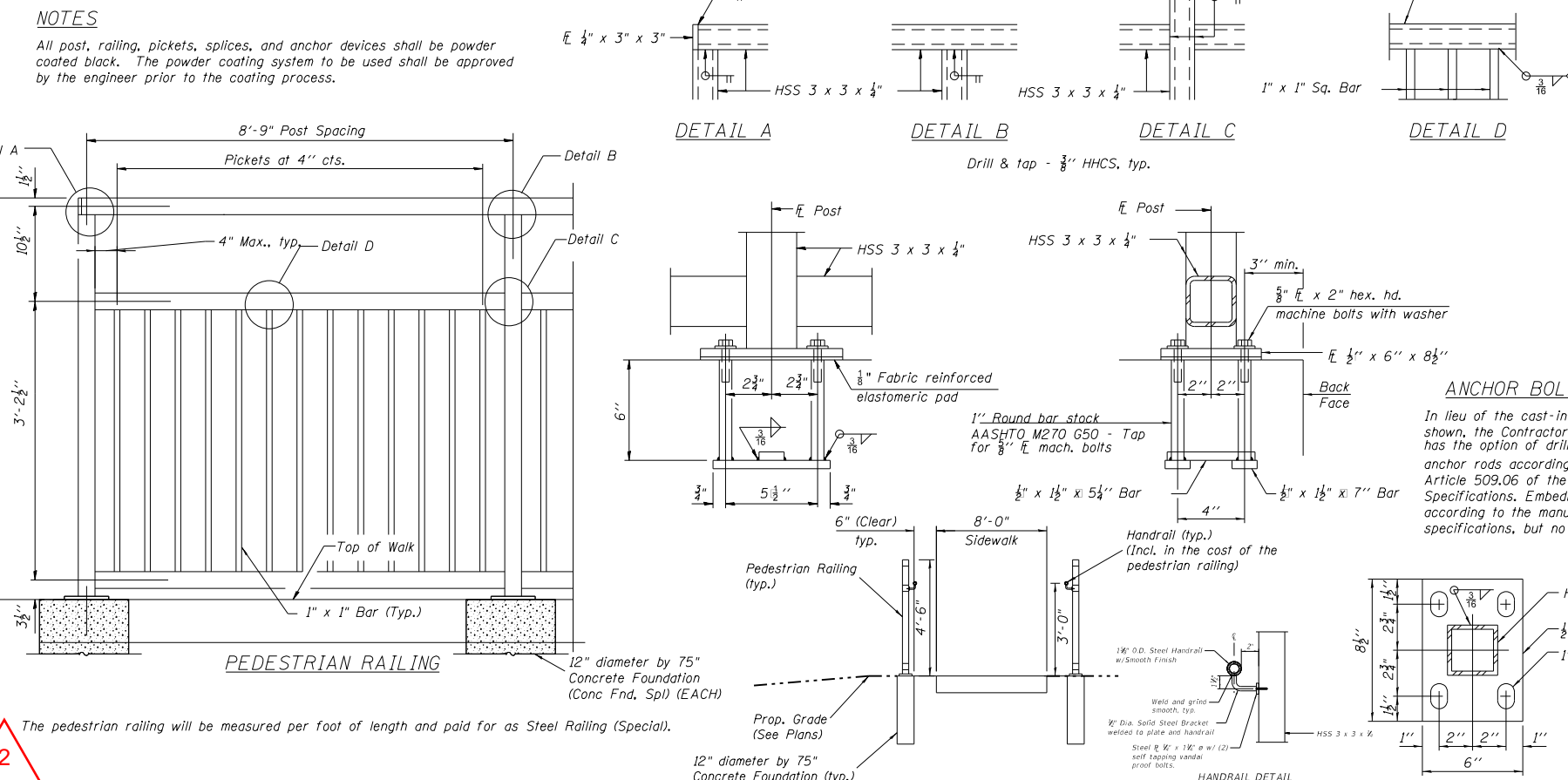
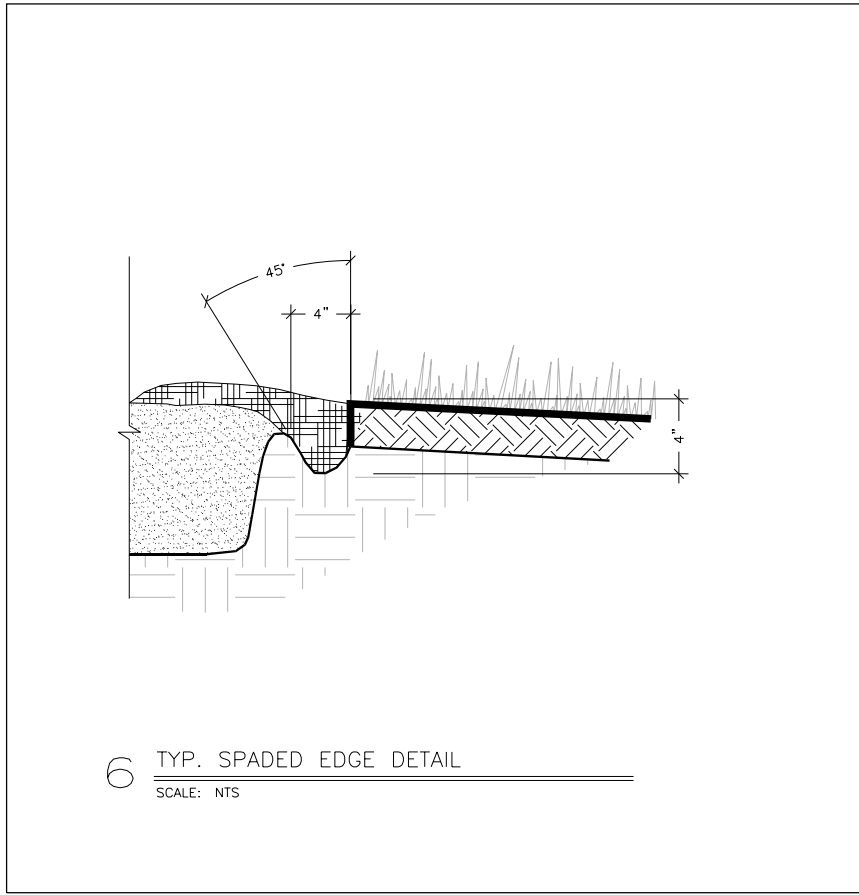
SCALE: 1"=20'	SHEET 1 OF 1 SHEETS	STA. TO STA.
---------------	---------------------	--------------

F.A.U. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	12-00097-00-BR	LAKE	65	15
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61F89	

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



DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	CHECKED
	FILED
	DATE
NOTE BOOK NO.	
FILE NAME	
PROJECT NO.	
DATE	



HRG PROJECT NO.: #80756  
HRG PROJ. CONTACT: #80756, Smt. Debra L. Smith  
FILE NAME: #80756\_Smt. Debra L. Smith.dgn  
PEN TABLE: pen.tbl

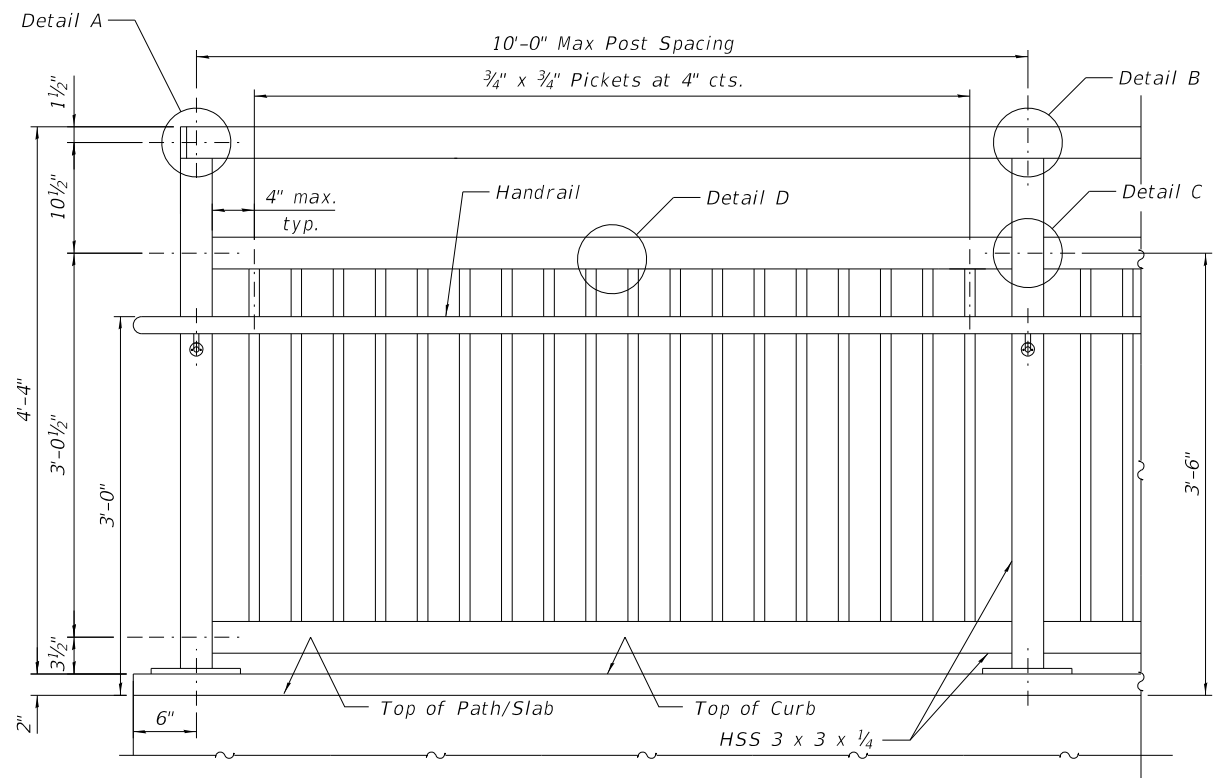
**HRGreen**  
HRGreen.com  
Micro Professional Design Firm  
#184-001322

**KMI**  
Kalsoum Mehdi, Inc.  
ARCHITECTS • ENGINEERS  
223 W. Jackson Blvd., Suite 1010 Chicago, IL 60606  
Tel: (312)987-5900 Fax: (312)987-5892

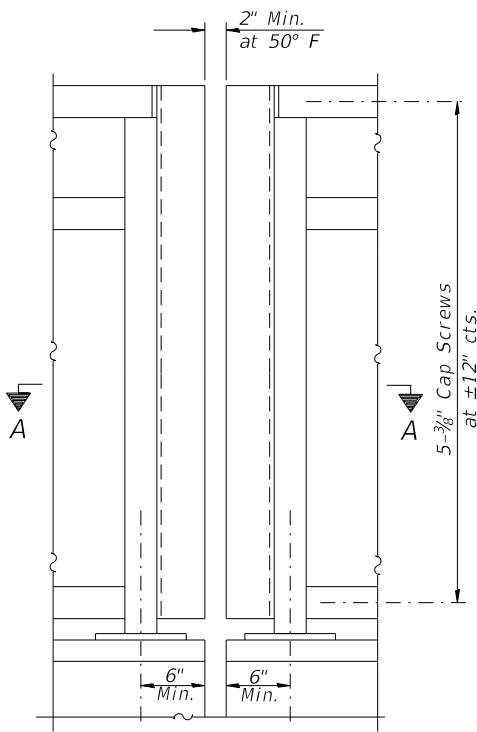
DESIGNED	- JJS	REVISED	01/06/2021
DRAWN	- WJH	REVISED	-
CHECKED	- JJS	REVISED	-
DATE	- 10/5/2020	REVISED	-

STATE OF ILLINOIS	CONSTRUCTION DETAILS
DEPARTMENT OF TRANSPORTATION	SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

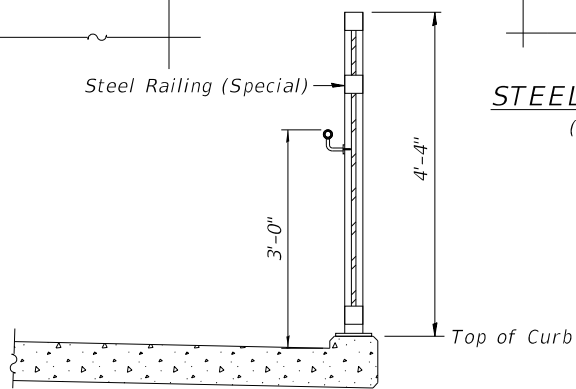
F.A.U.R.T.E.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	12-00097-00-BR	LAKE	65	22
CONTRACT NO. 61F89				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



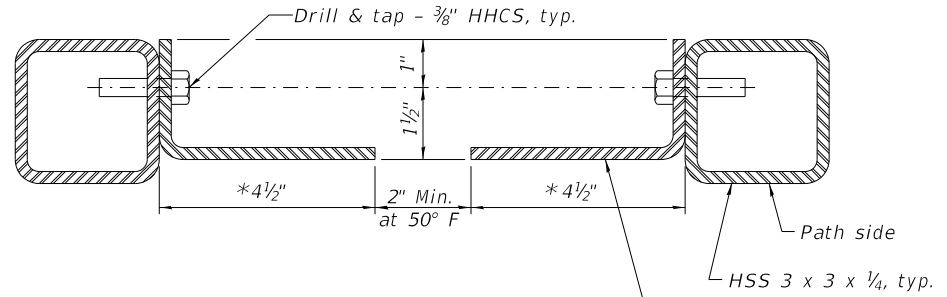
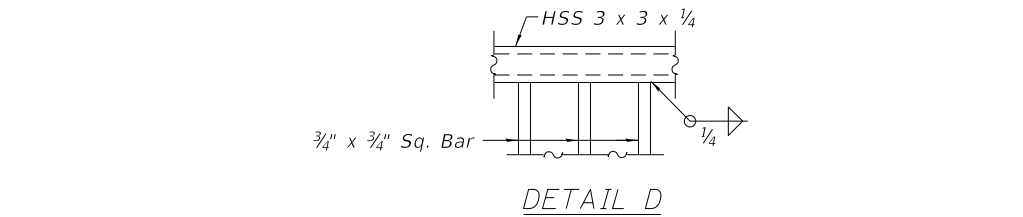
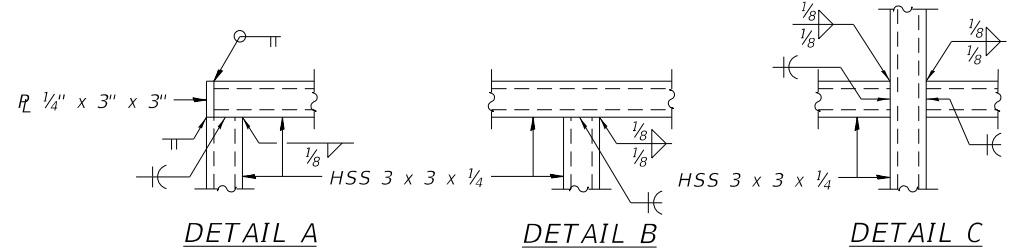
**STEEL RAILING (SPECIAL)**



**STEEL RAILING (SPECIAL)**  
(at Expansion Joints)

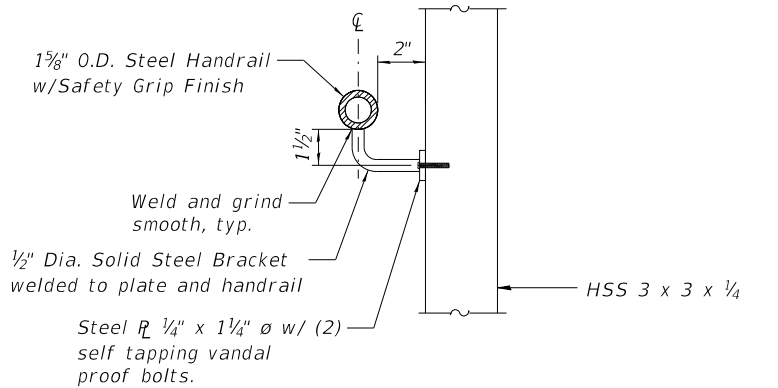


**SECTION THRU DECK**



**SECTION A-A**

\*Attach similar angles between west ramp railing and end of pedestrian truss. Typical angle sizes at south railing joint between pedestrian truss and ramp. 8" long leg angles at north railing joint between pedestrian truss and ramp railing.

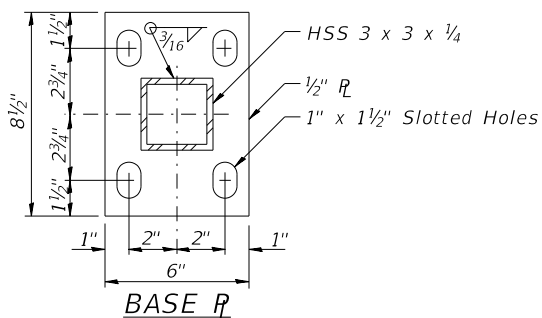


**HANDRAIL DETAIL**

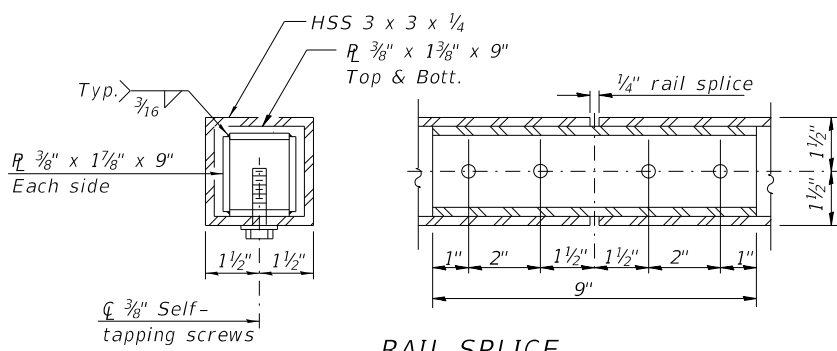
(Handrail to be painted same color & using same process as railing)

**NOTES:**

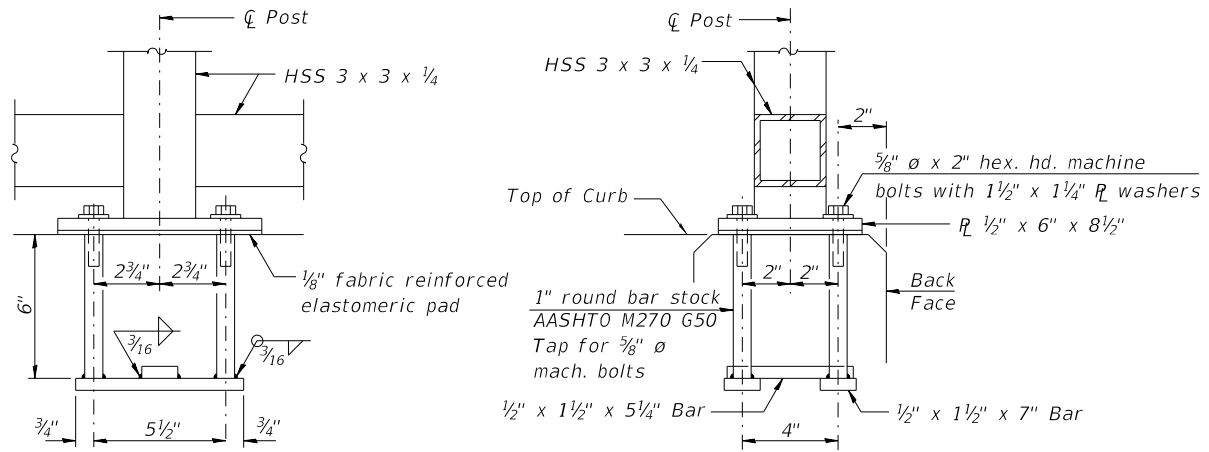
Space reinforcement to miss anchor rods. All post, railing, splices, anchor devices, and bent plates shall be painted using one coat of zinc rich primer and two coats of black acrylic enamel paint. The exact color shall be submitted to the Engineer for approval prior to painting any railing elements.



**BASE PLATE**



**RAIL SPLICE**



**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" diameter anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing (Special)	Foot	1,372

Note: The Steel Railing (Special) quantity above includes 145 foot of wall mounted handrail and/or back side of railing mounted handrail specified for the west ramp.



HRG PROJECT NO.: 80756  
HRG PROJ. CONTACT: 80756 Str. Railing Details.dgn  
FILE NAME: IL.pdf, bw.pdf, cf.pdf  
PLOT DRIVER: plg-fabell.tbl  
PEN TABLE:



**KMI**  
Kalsoum Mehdi, Inc.  
ARCHITECTS & ENGINEERS  
223 W. Jackson Blvd., Suite 1010 Chicago, IL 60606  
Tel.: (312) 987-5900 Fax.: (312) 987-5892

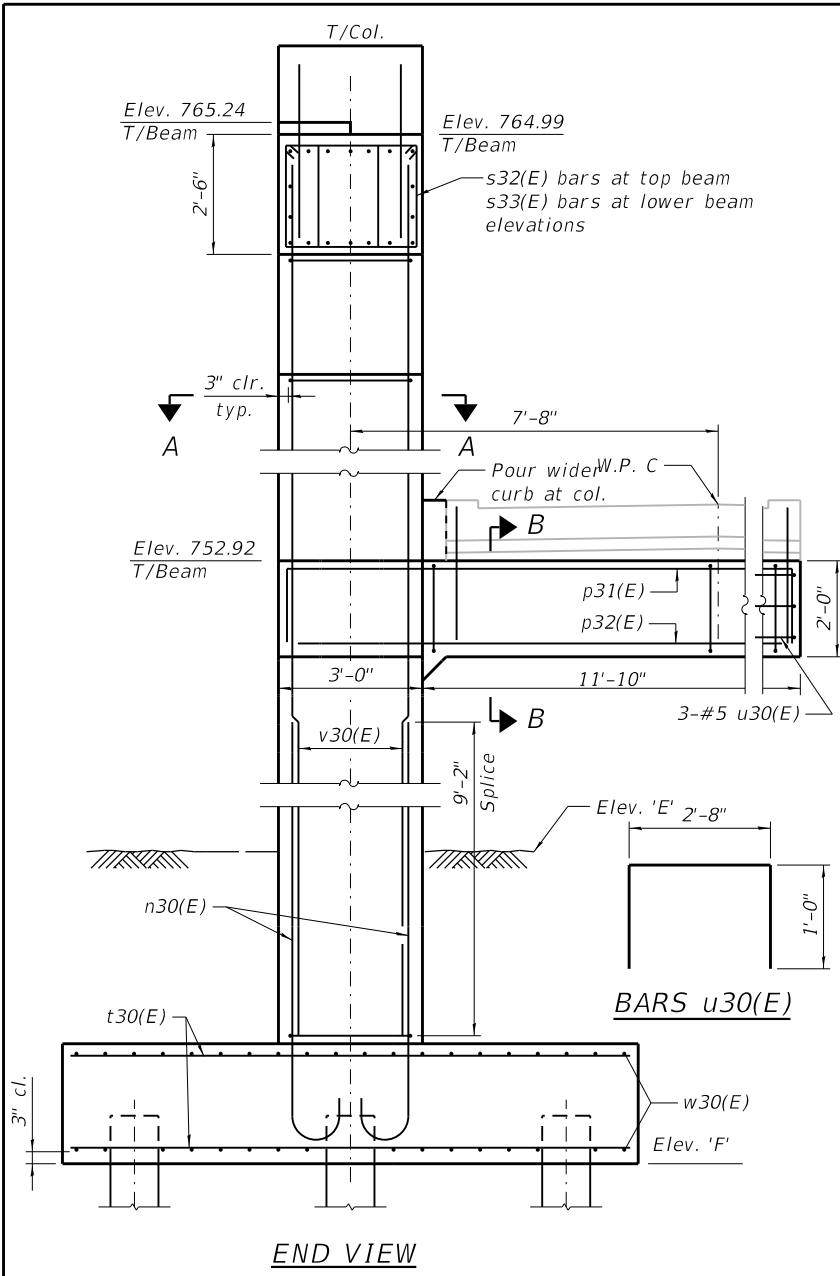
DESIGNED - JMW/OS	REVISED - 01/06/2021
CHECKED - AEU	REVISED -
DRAWN - WJH	REVISED -
DATE - 10/5/2020	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

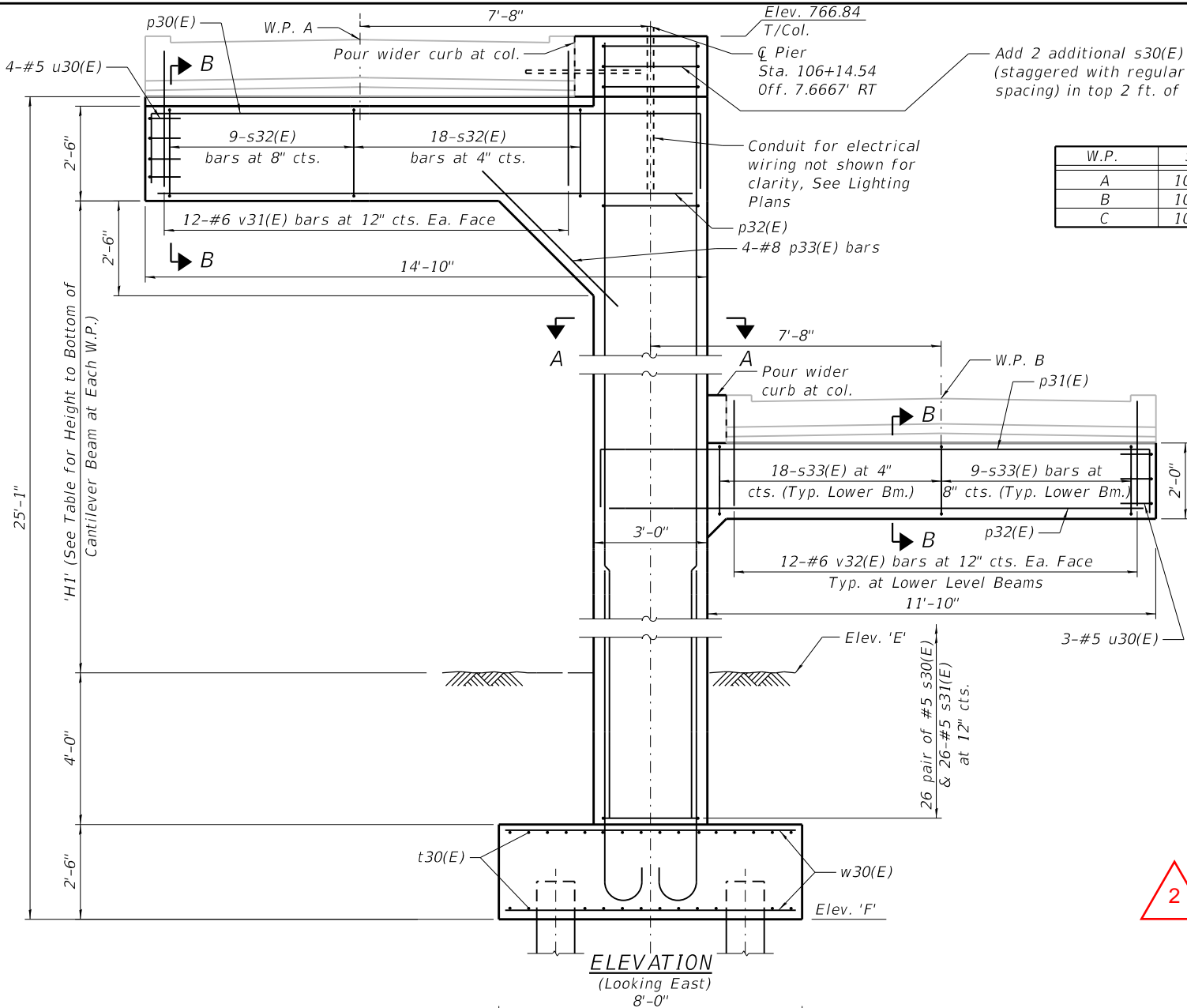
**BRIDGE RAILING DETAILS**

SHEET NO. S-13 OF S-35 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	12-00097-00-BR	LAKE	65	35
CONTRACT NO.			61F89	
ILLINOIS FED. AID PROJECT				



END VIEW



ELEVATION  
(Looking East)

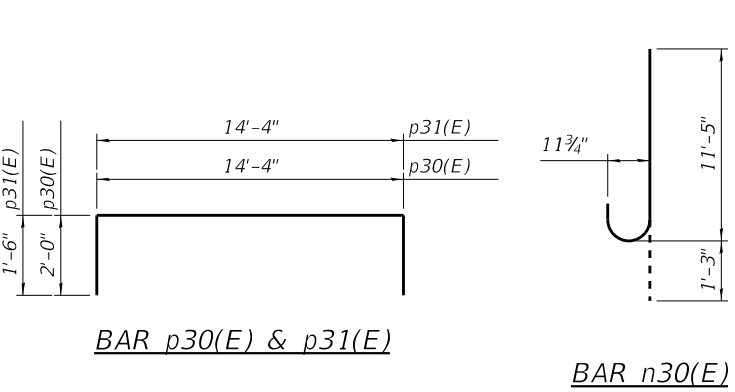
**PIER TABLE**

W.P.	Sta.	W.P. Elev.	Elev. E	Elev. F	H1 (FT)
A	106+14.54	766.75	745.64	739.14	16'-10 1/4"
B	108+38.63	754.43			5'-3 1/4"
C	108+62.70	754.43			5'-3 1/4"

**BILL OF MATERIAL**

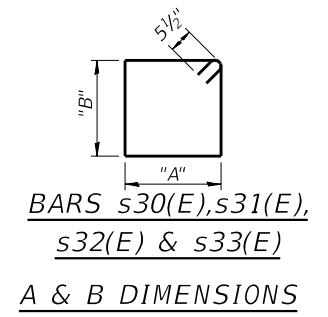
Bar	No.	Size	Length	Shape
n30(E)	20	#9	13'- 7 3/4"	
p30(E)	6	#10	18'- 4"	
p31(E)	12	#8	17'- 4"	
p32(E)	24	#8	14'- 4"	
p33(E)	4	#8	7'- 6"	
s30(E)	54	#5	9'- 1"	
s31(E)	26	#5	7'- 2"	
s32(E)	27	#5	10'- 7"	
s33(E)	54	#5	9'- 7"	
t30(E)	40	#9	7'- 6"	
u30(E)	10	#5	4'- 8"	
v30(E)	20	#9	25'- 11"	
v31(E)	24	#6	3'- 7"	
v32(E)	24	#6	2'- 10"	
w30(E)	32	#8	11'- 6"	
Structure Excavation		Cu. Yd.	39	
Concrete Structures		Cu. Yd.	23.6	
Reinforcement Bars, Epoxy Coated		Pound	8,544	
Furnished Metal Shell Piles 14" dia. x 0.250 in.		Foot	240	
Driving Piles		Foot	240	
Form Liner Textured Surface		Sq. Ft.	303	
Staining Concrete Structures		Sq. Ft.	306	
Test Piles		Each	1	

**NOTES:**  
 See Sheet S-28 for Architectural Details.  
 See Sheet S-29 for Metal Shell Pile Details.



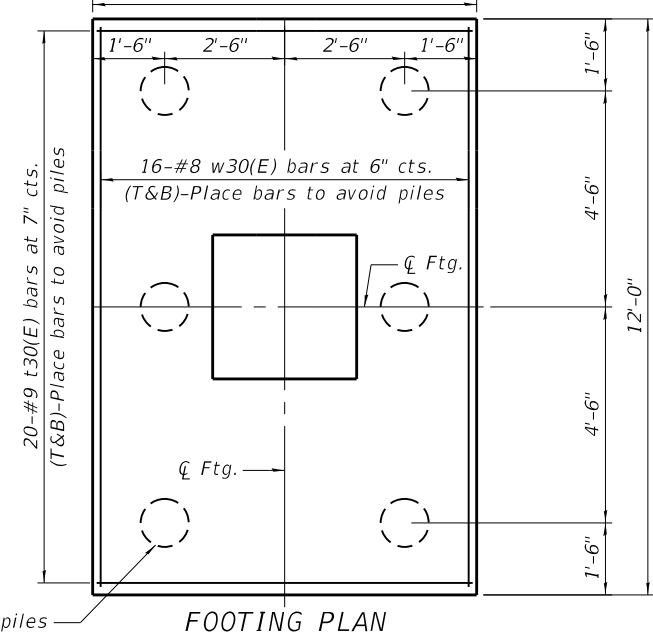
BAR p30(E) & p31(E)

BAR n30(E)

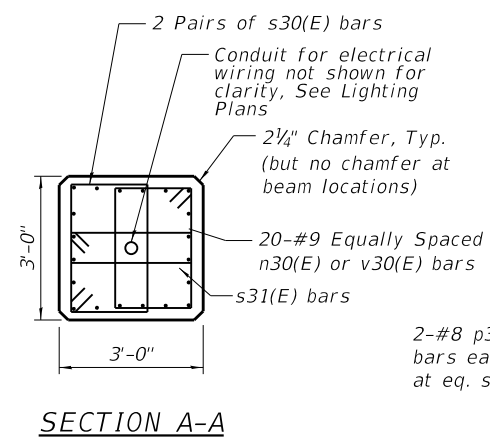


BARS s30(E), s31(E), s32(E) & s33(E)  
 A & B DIMENSIONS

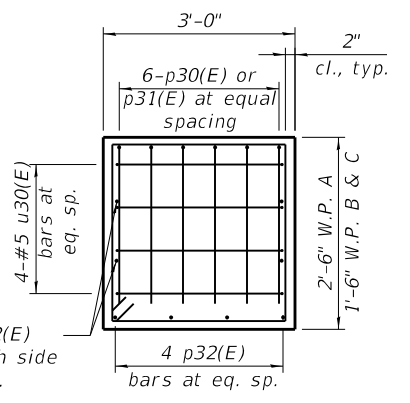
Bar	"A"	"B"
s30(E)	1'-7"	2'-6"
s31(E)	7 1/2"	2'-6"
s32(E)	2'-8"	2'-2"
s33(E)	2'-8"	1'-8"



FOOTING PLAN



SECTION A-A



SECTION B-B

Section Thru Beams Only (Deck Not Shown)  
 W.P. letter corresponds to beam level / location

HRG PROJECT NO.: 80756  
 HRG PROJ. CONTACT: 80756 Str. Pier 2 Details.dgn  
 FILE NAME: IL.pdf.bw.pdf.ctb  
 PLOT DRIVER: pldtbl.tbl  
 PEN TABLE:

**PILE DATA**  
 Type & Size: Metal Shell - 14 in. dia. x 0.250 in. walls  
 Nominal Required Bearing: 324 kips  
 Factored Resistance Available: 178 kips  
 Est. Length: 46 ft.  
 No. Production Piles: 5  
 No. Test Piles: 1



**KMI**  
 Kalsoum Mehdi, Inc.  
 ARCHITECTS & ENGINEERS  
 223 W. Jackson Blvd., Suite 1010 Chicago, IL 60606  
 Tel.: (312) 987-5900 Fax: (312) 987-8892

DESIGNED - JMW/OS	REVISED - 01/05/2021
CHECKED - AEU	REVISED -
DRAWN - WJH	REVISED -
DATE - 10/5/2020	REVISED -

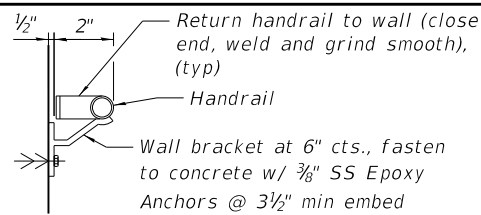
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PIER 2  
 SHEET NO. S-19 OF S-35 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	12-00097-00-BR	LAKE	65	41
CONTRACT NO. 61F89			ILLINOIS FED. AID PROJECT	

Benchmark #1: Cut square in concrete base of light pole located approximately 840 feet west of centerline of the railroad tracks along the north of the Mundelein Metra Station parcel. Elevation = 742.60 (NAVD88)

Benchmark #2: Arrow bolt on fire hydrant located at the north corner of the intersection of McKinley Avenue and Anthony Avenue. Elevation = 751.06 (NAVD88)



**WALL MOUNTED HANDRAIL SECTION**

-Measured and paid for as part of Steel Railing (Special).  
Paint rail, brackets and hardware same as Steel Railing (Special).

**DESIGN SPECIFICATIONS**

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

**LOADING H5 AND PEDESTRIAN**

90 psf Pedestrian Loading MSE wall shall be designed for a min. surcharge of 85 psf and an equivalent fluid pressure of 50 psf.

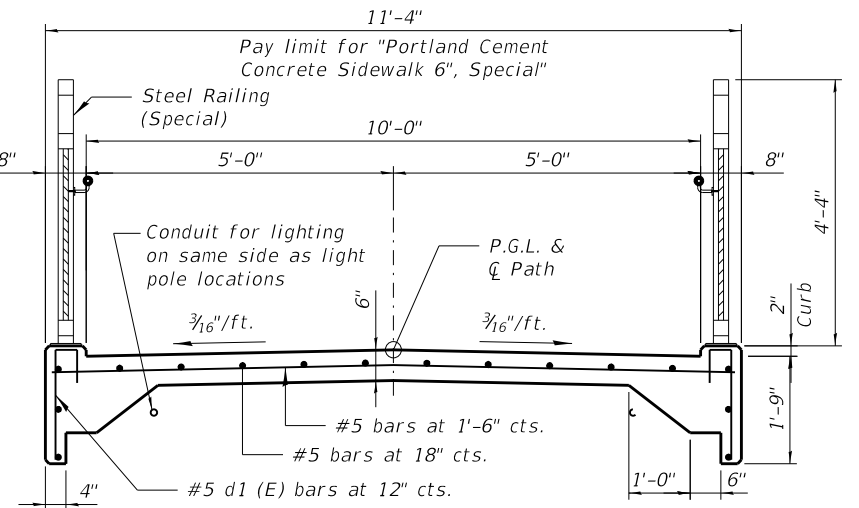
**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)

**PRECAST UNITS**

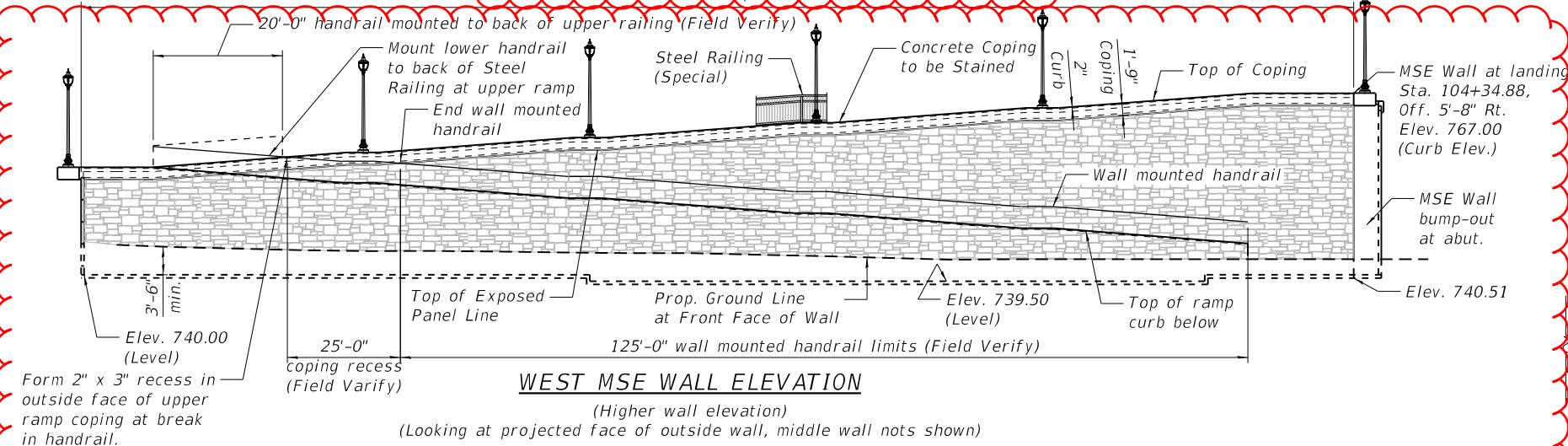
$f'_c = 4,500$  psi (Precast Panels)



**TYPICAL SLAB SECTION**

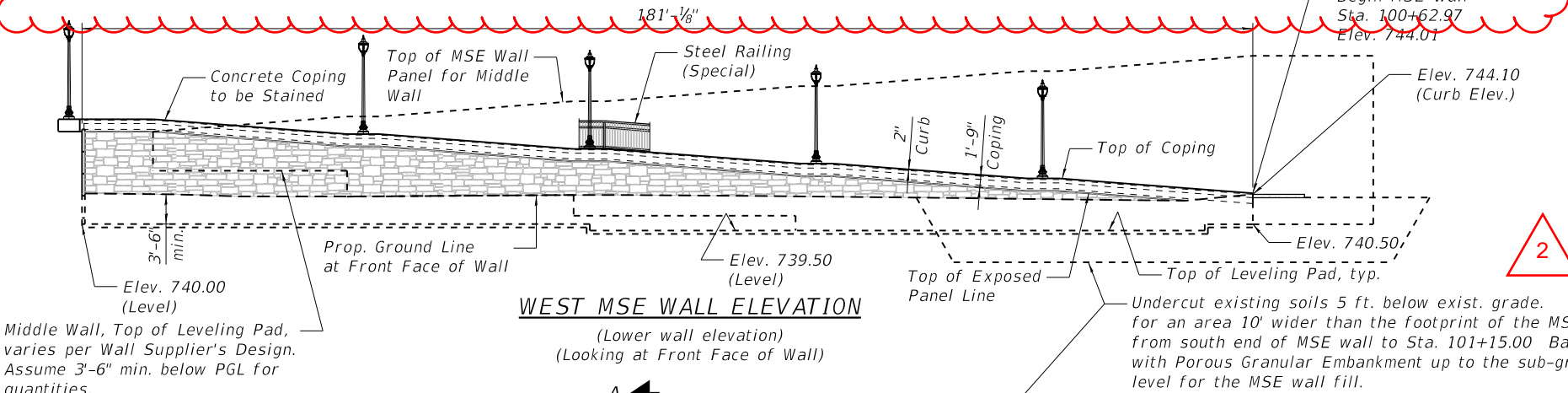
(Portland Cement Concrete Sidewalk 6 inch, Special)  
Cost of Reinforcement Bars, Epoxy Coated is included in the pay item "Portland Cement Concrete Sidewalk 6", Special".

**BAR d1(E)**



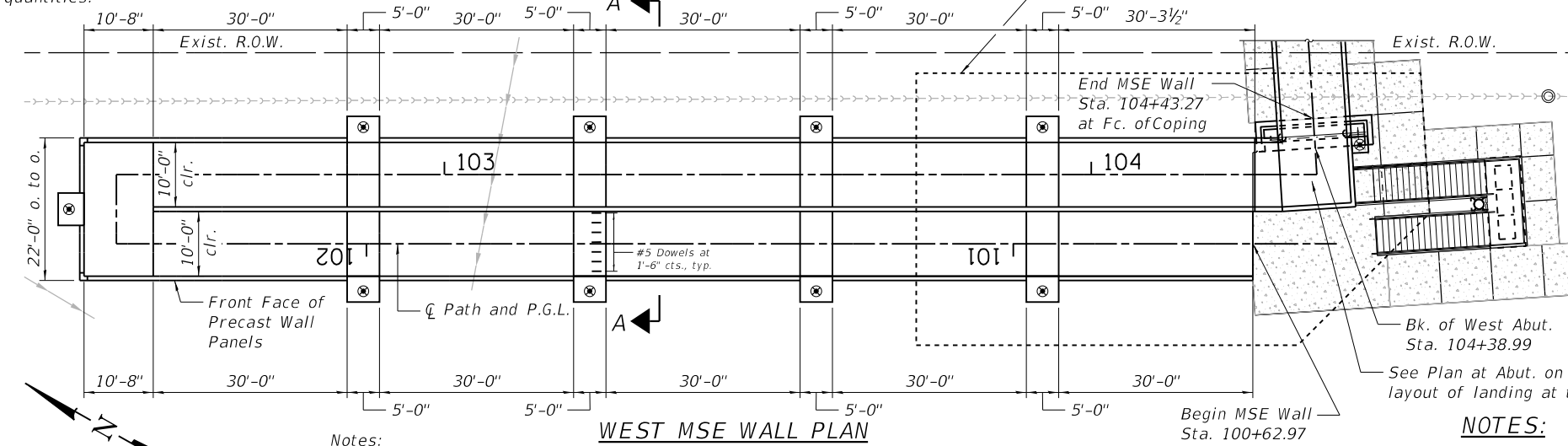
**WEST MSE WALL ELEVATION**

(Higher wall elevation)  
(Looking at projected face of outside wall, middle wall not shown)



**WEST MSE WALL ELEVATION**

(Lower wall elevation)  
(Looking at Front Face of Wall)

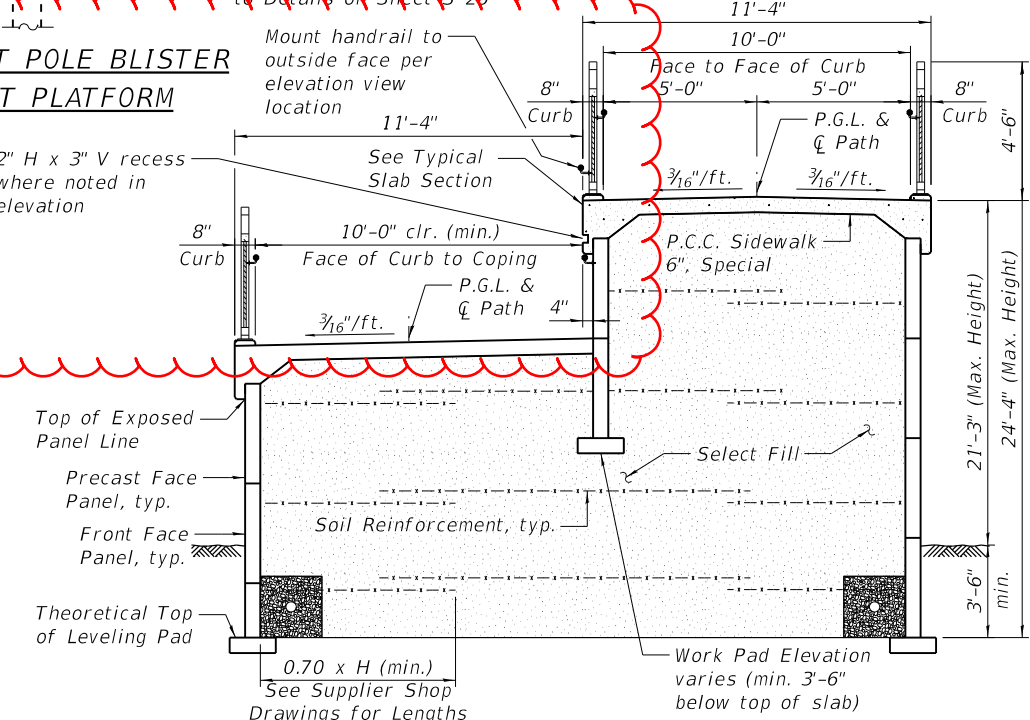


**WEST MSE WALL PLAN**

Notes:  
Wall offsets are measured from  $\zeta$  path to front face of precast panels.

**LIGHT POLE BLISTER AT PLATFORM**

2" H x 3" V recess where noted in elevation



**SECTION A-A**

**BILL OF MATERIAL**

ITEM	UNIT	Total
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	10,796
Structure Excavation	Cu. Yd.	632
Portland Cement Concrete Sidewalk 6", Special	Sq. Ft.	4,316
Staining Concrete Structures	Sq. Yd.	1,349
Removal and Disposal of Unsuitable Material	Cu. Yd.	350
Porous Granular Embankment	Cu. Yd.	350

**NOTES:**

- See Sheet S-28 for Architectural Details.
- See Sheet S-25 for details.

HRC PROJECT NO.: 80756  
 HRC PROJ. CONTACT: 80756 Str. MSE Wall Plan - West04.dgn  
 FILE NAME: IL.pdf, b.w.p, c.f.g  
 PLOT DRIVER: pld-table.tbl  
 PEN TABLE:

**HRGreen.com**  
 Multi Professional Design Firm  
 #184-001322

**KMI**  
 Katsouni Mehd, Inc.  
 ARCHITECTS & ENGINEERS  
 223 W. Jackson Blvd., Suite 1010 Chicago, IL 60606  
 Tel.: (312)987-5900 Fax: (312)987-5892

DESIGNED - JMW/OS	REVISED - 01/06/2021
CHECKED - AEU	REVISED -
DRAWN - WJH	REVISED -
DATE - 10/5/2020	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**WEST MSE WALL PLAN AND DETAILS**

SHEET NO. S-24 OF S-35 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	12-00097-00-BR	LAKE	65	46
CONTRACT NO.			61F89	
ILLINOIS FED. AID PROJECT				