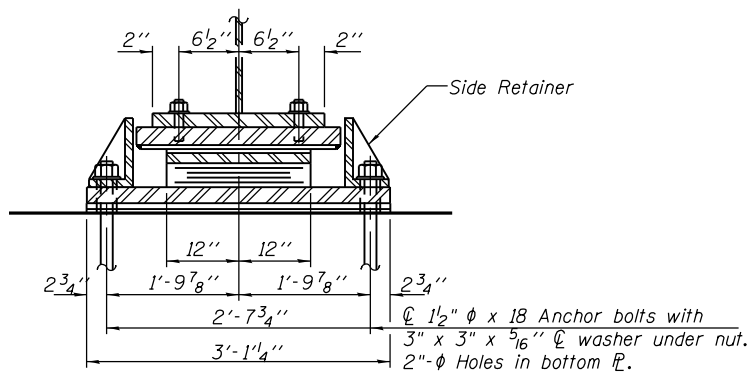
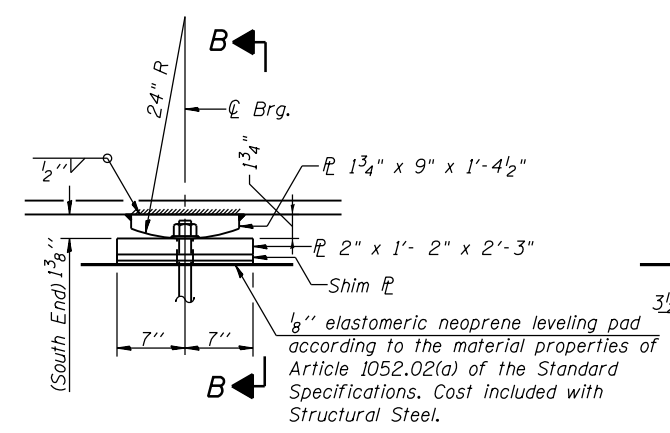


TYPE II ELASTOMERIC EXP. BRG. ELEVATION AT PIER #4

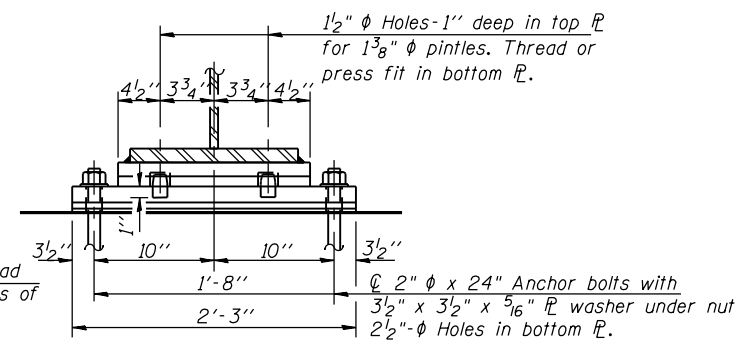


SECTION A-A

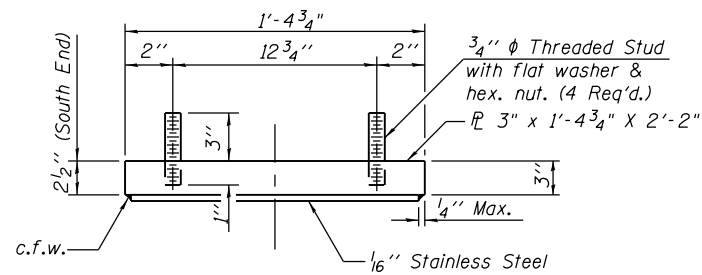


ELEVATION AT PIER

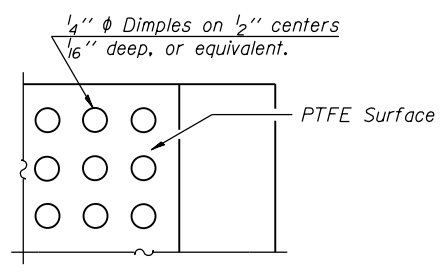
FIXED BEARING AT PIER #2



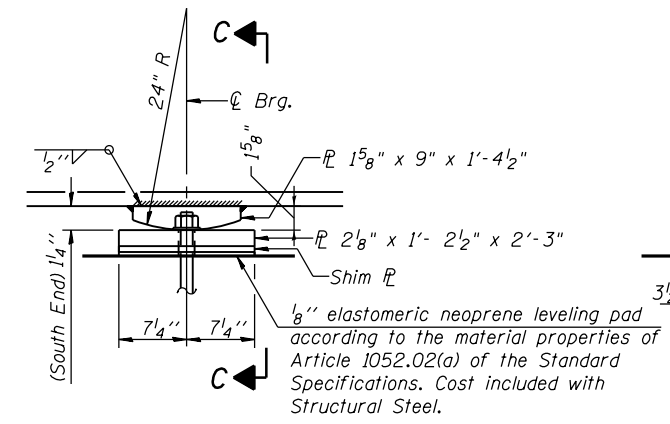
SECTION B-B



TOP BEARING ASSEMBLY

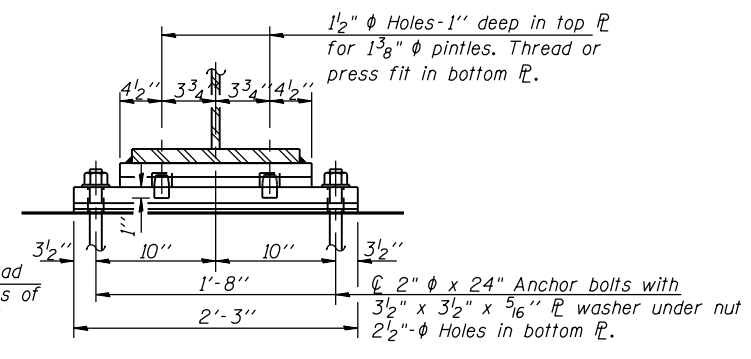


PLAN-PTFE SURFACE



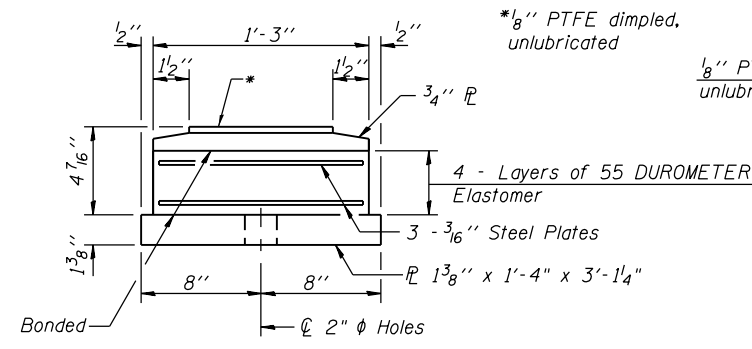
ELEVATION AT PIER

FIXED BEARING AT PIER #3

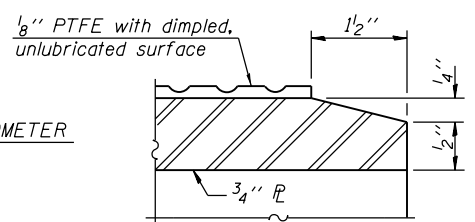


SECTION C-C

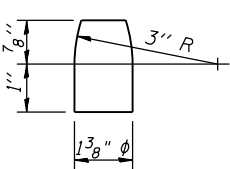
Notes:
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
 Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
 Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
 The structural steel plates and pintles of the Fixed Bearing shall conform to the requirements of AASHTO M 270 Grade 50



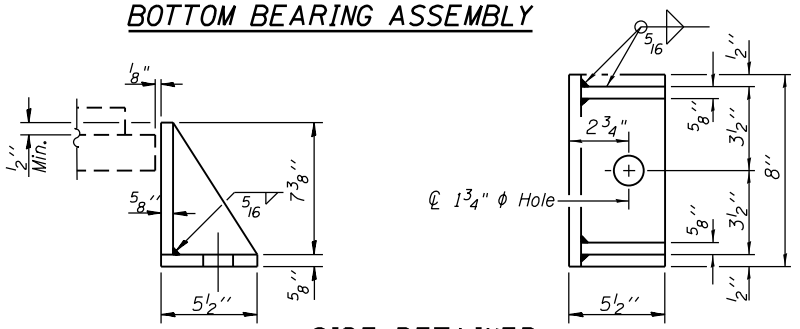
BOTTOM BEARING ASSEMBLY



SECTION THRU PTFE

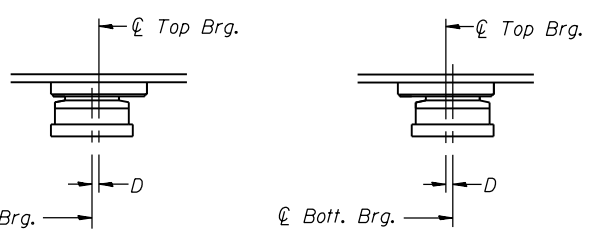


PINTLE



SIDE RETAINER

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



SETTING ANCHOR BOLTS AT EXP. BRG.
 BELOW 50°F. ABOVE 50°F.
 (Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	10
Anchor Bolts, 1 1/2"	Each	20
Anchor Bolts, 2"	Each	40

FILE NAME = W:\191\132\DOT\Western_Ave\CADD_Sheets\Structure\016-0777\44 - Pier 4 and Pier 2 and 3 bearings.dgn

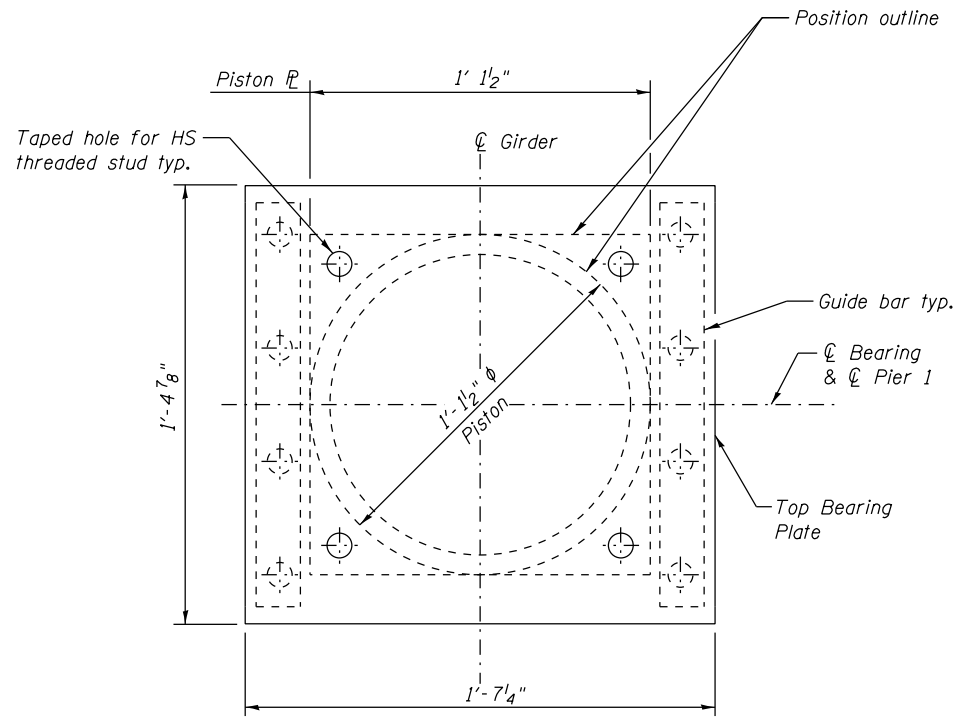


USER NAME =	DESIGNED - JJI	REVISED -
PLOT SCALE =	CHECKED - HB	REVISED -
PLOT DATE = 6/25/2019	DRAWN - HB	REVISED -
	CHECKED - JJI	REVISED -

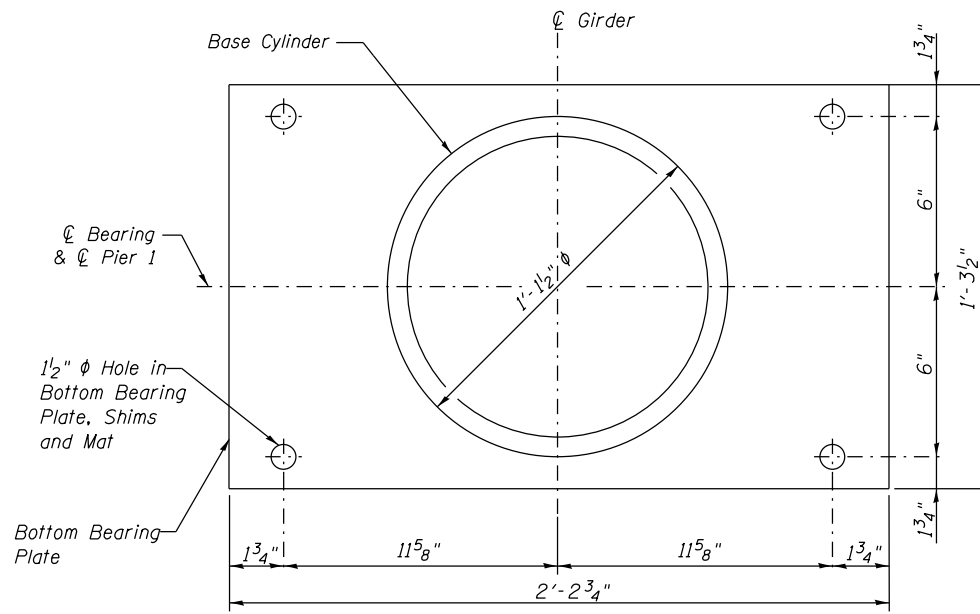
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS AT PIERS 2, 3, & 4
STRUCTURE NO. 016-0777
 SHEET NO. 44 OF 104 SHEETS

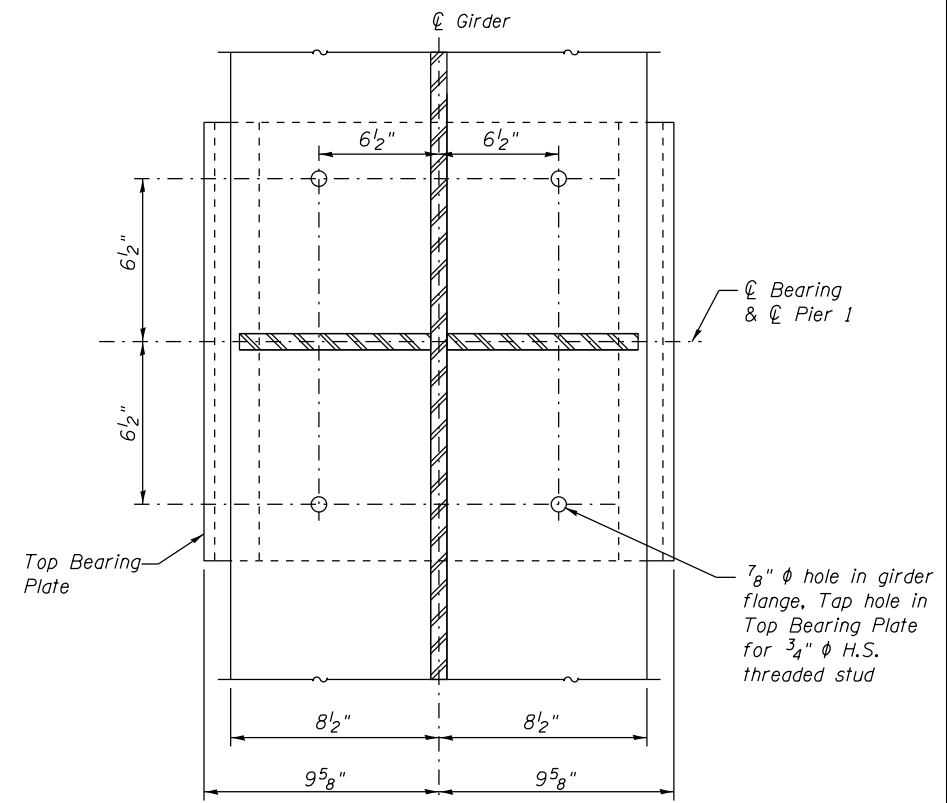
F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY Cook	TOTAL SHEETS 184	SHEET NO. 102
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



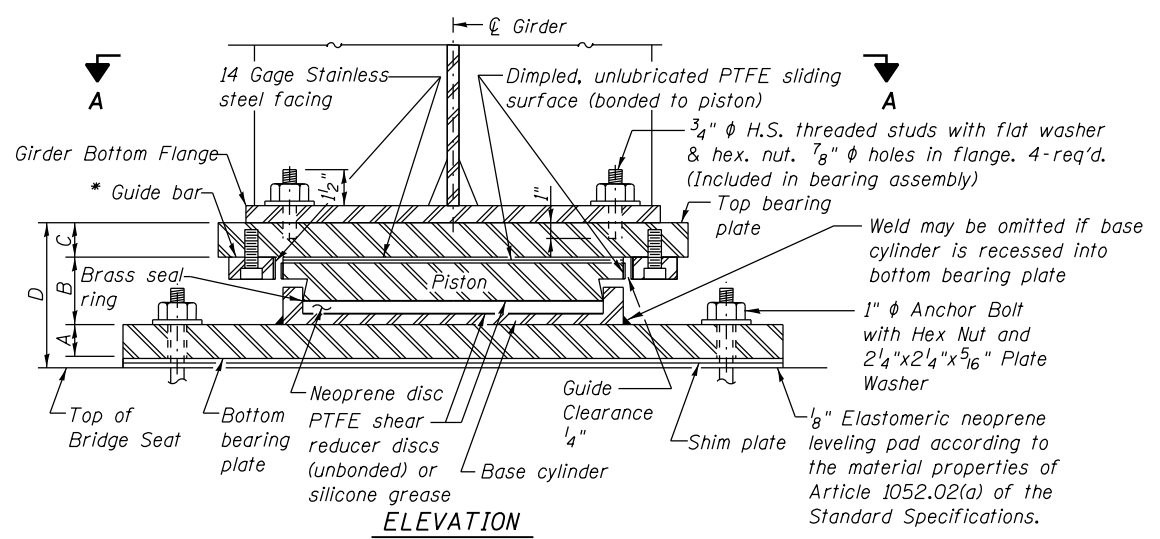
TOP BEARING PLATE AND PISTON PLAN



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN

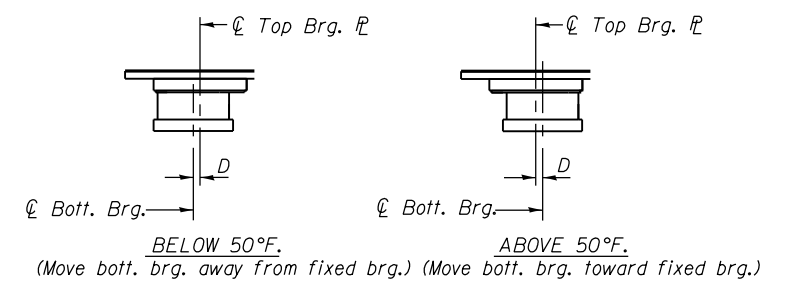


SECTION A-A



ELEVATION

TABLE OF DIMENSIONS	
A =	2 1/8"
B =	4 1/2"
C =	Varies
	From 1 15/16" (South end) to 2 1/2"
D =	8 5/8" at ϕ Bearing



SETTING ANCHOR BOLTS AT EXP. BRG.

$D = 1/8"$ per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

DESIGN DATA

Data	Pier
Vertical Design Load (kips) (service)	329.8
Horizontal Design Load (kips) (strength)	67.2
Total Required Movement (in)	1 3/8"
Maximum Factored Ultimate Strength Design Rotation Θ_u (Radians)	0.01

BILL OF MATERIAL

Item	Unit	Total
High Load Multi-Rotational Bearings, Guided Expansion, 400 K	Each	10
Anchor Bolts, 1"	Each	40

Notes:
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
 Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
 Total bearing height is estimated based on manufacturer data. Actual bearing heights may differ from contract plans. The Contractor shall be responsible for verifying bearing heights and adjusting seat elevations, if required, prior to placing pier concrete with approval by the Engineer. Total bearing height is taken at the ϕ of bearing for beveled top plates.

* As on alternate to bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and bearing plate may be fabricated as a single piece.

FILE NAME = W:\191-132-1001-Master-Ave\CADD_Sheets\Structural\016-0777\45 - Pier 1 Bearing Details.rvt



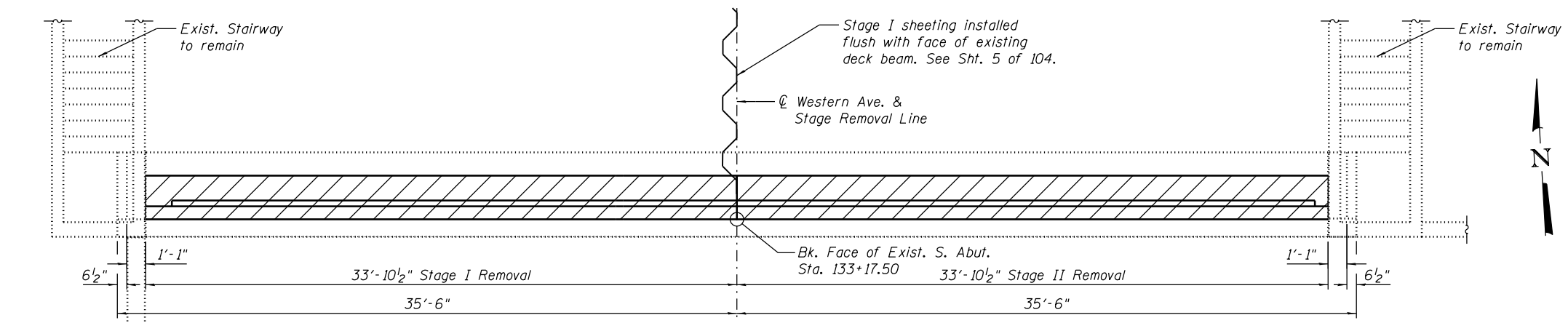
USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

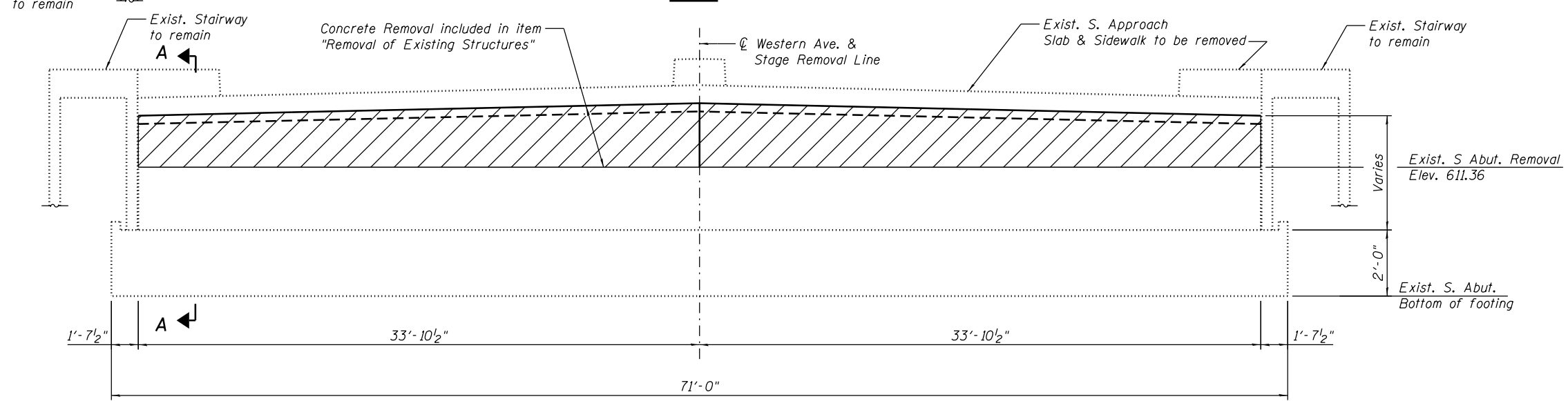
**BEARING DETAILS AT PIER 1
STRUCTURE NO. 016-0777**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	103
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

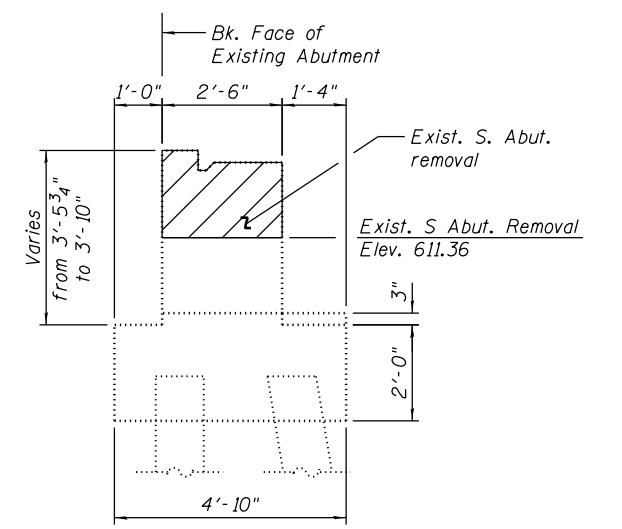
SHEET NO. 45 OF 104 SHEETS



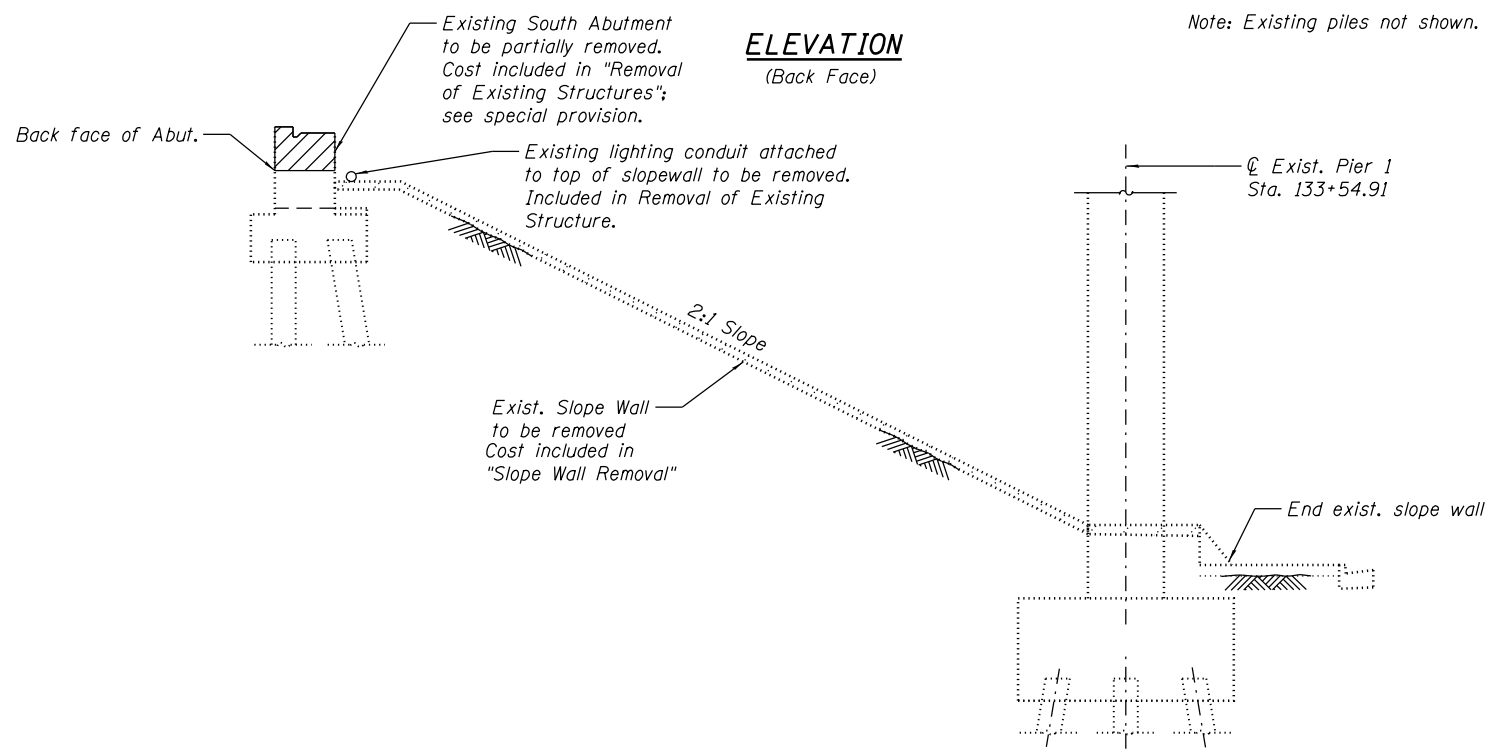
PLAN



ELEVATION
(Back Face)



SECTION A-A



SECTION THRU EXIST. ABUTMENT AND SLOPE WALL

Notes:
Existing Stairways are Supported by Existing Abutment.
For Proposed South Abutment see Sht. 48 & 49 of 104.
For Exist. Stairway details see Sht. 50 of 104.

FILE NAME = W:\191\132\1001\Western_Ave\CADD_Sheets\Structure\016-0777\47 - South Abutment Removal.dgn



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING SOUTH ABUTMENT REMOVAL
STRUCTURE NO. 016-0777**

SHEET NO. 47 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	105
CONTRACT NO. 60K72				

ILLINOIS FED. AID PROJECT

BEARING SEAT ELEVATIONS

Elev. A	609.00
Elev. B	609.14
Elev. C	609.29
Elev. D	609.44
Elev. E	609.58


**SOUTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	10	#6	18'-8"	—
h ₁ (E)	10	#6	17'-8"	—
h ₂ (E)	16	#5	5'-3"	└
h ₃ (E)	16	#5	18'-5"	—
h ₄ (E)	16	#5	17'-5"	—
h ₅ (E)	16	#5	4'-0"	—
p(E)	8	#7	34'-7"	—
p ₁ (E)	8	#7	32'-7"	—
p ₂ (E)	3	#5	14'-8"	—
p ₃ (E)	3	#5	12'-8"	—
s(E)	76	#4	15'-11"	┌
s ₁ (E)	29	#5	8'-5"	┌
u(E)	8	#6	9'-8"	┌
v(E)	136	#5	6'-6"	—
v ₁ (E)	68	#4	3'-1"	┌
v ₂ (E)	68	#5	3'-10"	┌
v ₃ (E)	20	#5	3'-2"	┌
Structure Excavation			Cu. Yd.	12
Concrete Structures			Cu. Yd.	70.6
Concrete Encasement			Cu. Yd.	6.7
Reinforcement Bars, Epoxy Coated			Pound	5,070
Furnishing Steel Piles HP 12x53			Foot	756
Driving Piles			Foot	756
Pile Shoes			Each	19
Test Pile, Steel HP 12x53			Each	1
Concrete Sealer			Sq. Ft.	662
Geocomposite Wall Drain			Sq. Yd.	53
Pipe Drains 4"			Foot	41
Granular Backfill for Structures			Cu. Yd.	71
Pipe Underdrains for Structures 4"			Foot	68

For details of Bar Splicers, see sheet 96 of 104.
For details of piles and encasement see sheet 95 of 104.

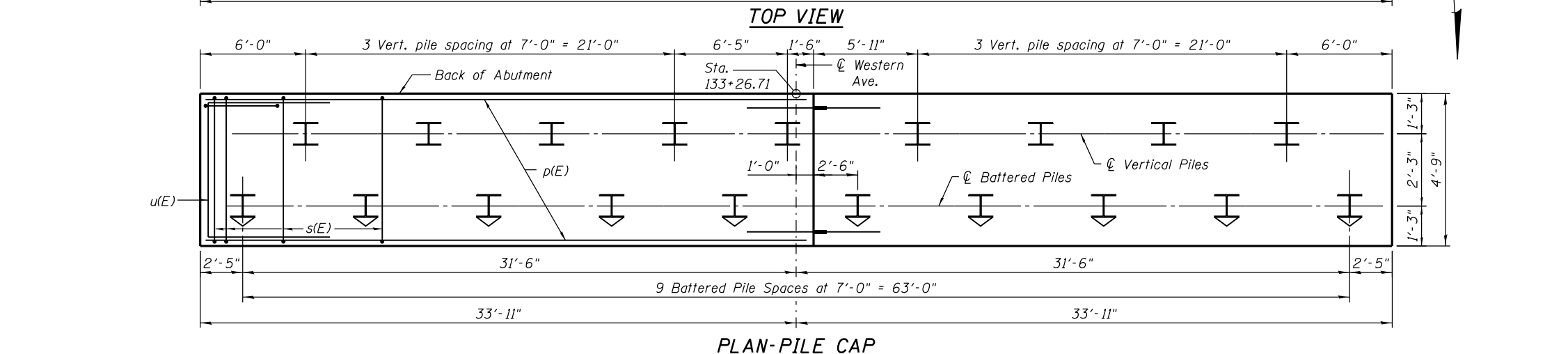
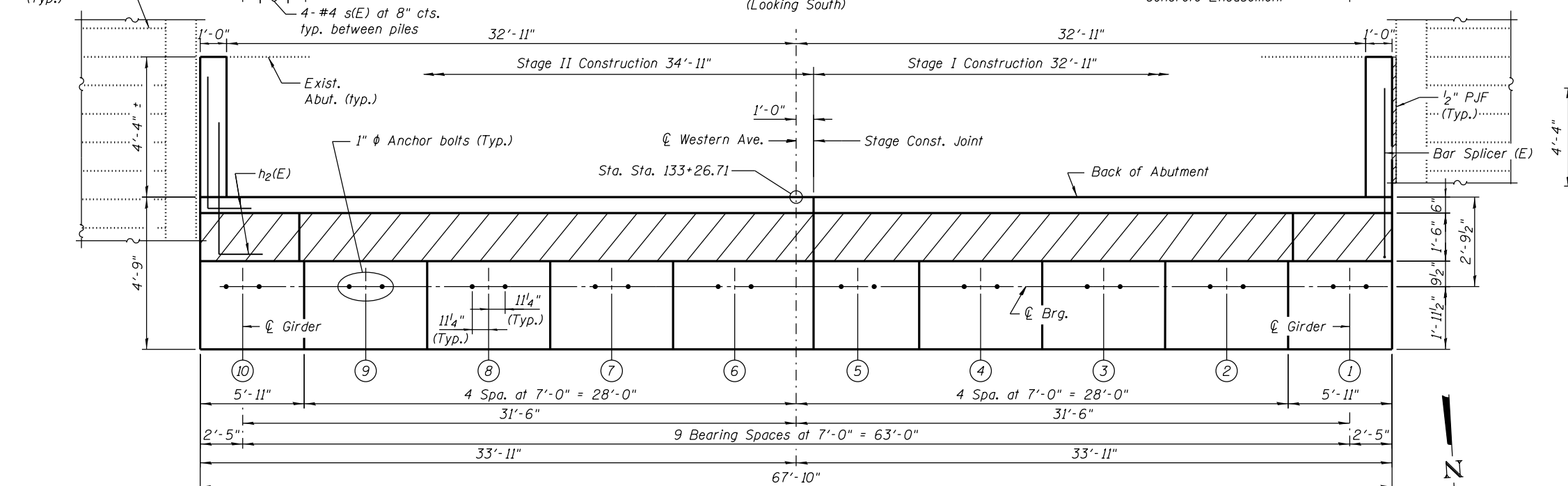
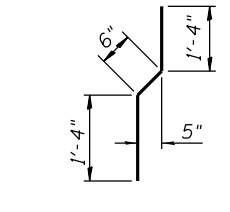
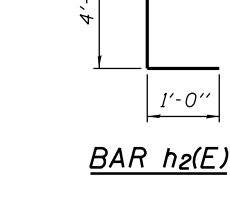
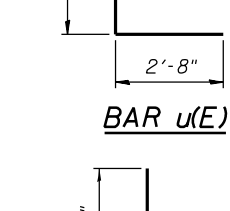
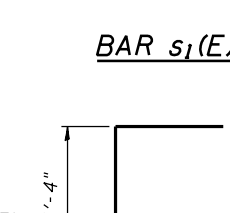
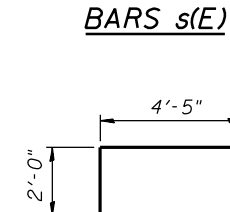
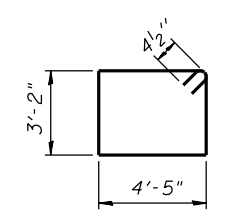
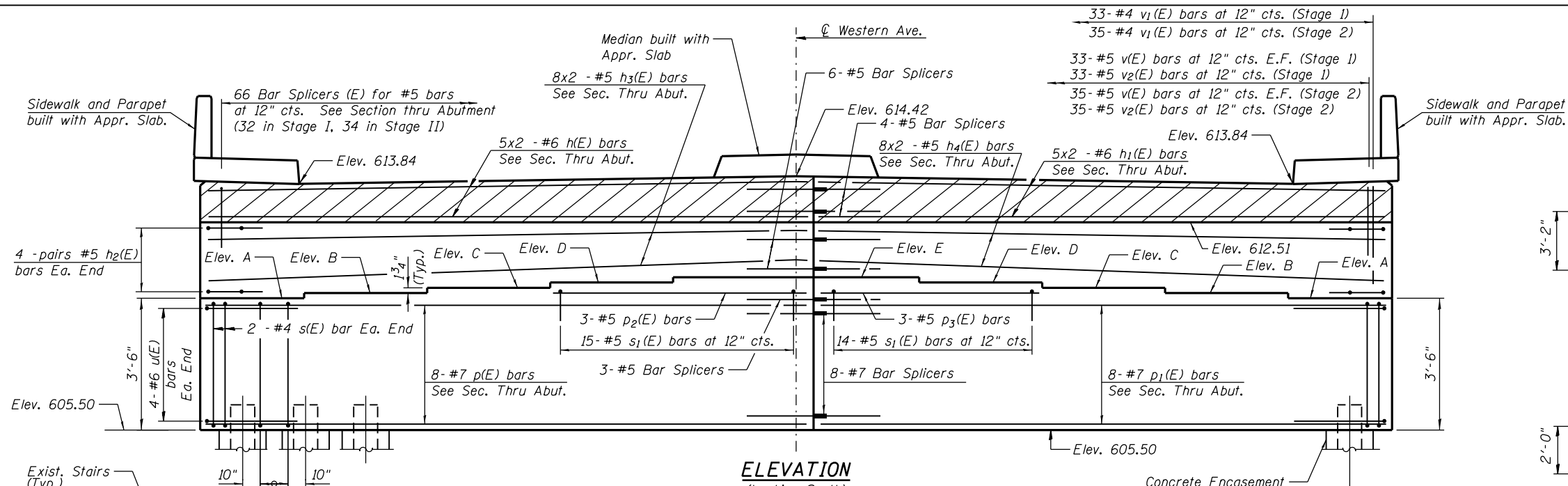
PILE DATA

Type: HP 12x53 with Pile Shoes
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 42 Ft
No. Production Piles: 18
No. Test Piles: 1

-  Denotes Vertical Pile
-  Denotes Battered Pile

MINIMUM BAR LAP

#5 bars = 2'-3"
#6 bars = 2'-8"



FILE NAME = W:\191-132-1001-Western-Ave-CADD-Sheets\Structure\016-0777\48 - South Abutment.dgn



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

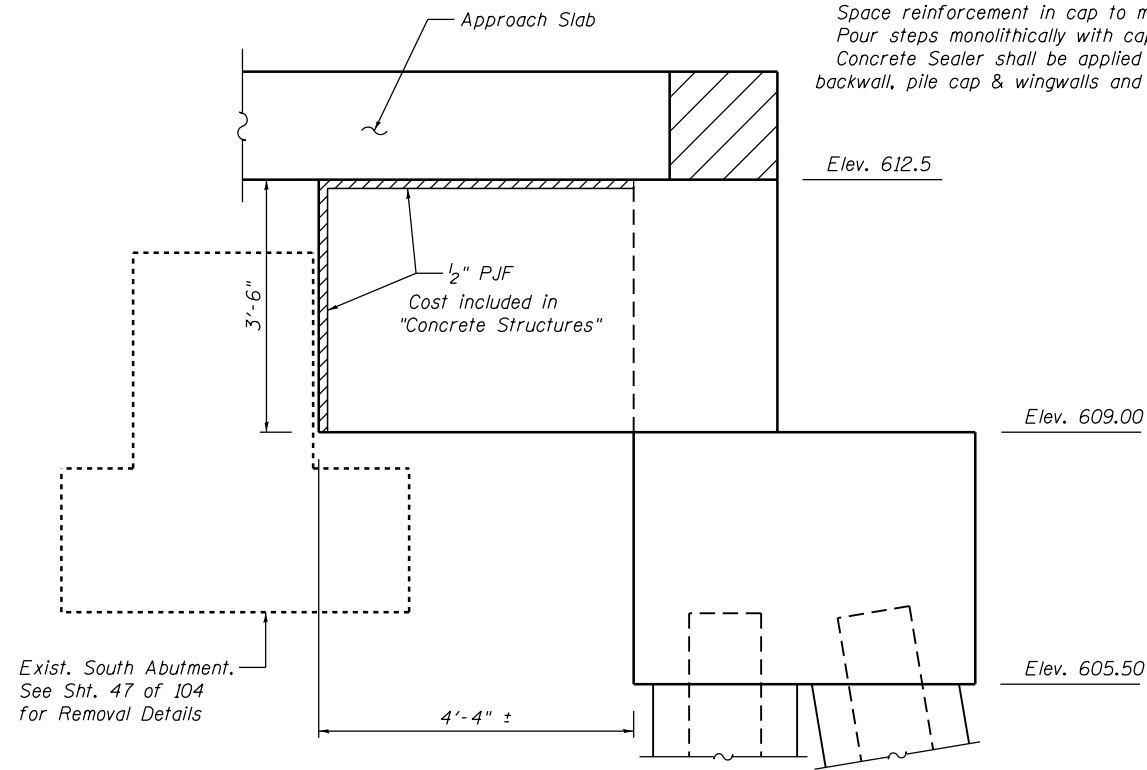
**SOUTH ABUTMENT
STRUCTURE NO. 016-0777**

SHEET NO. 48 OF 104 SHEETS

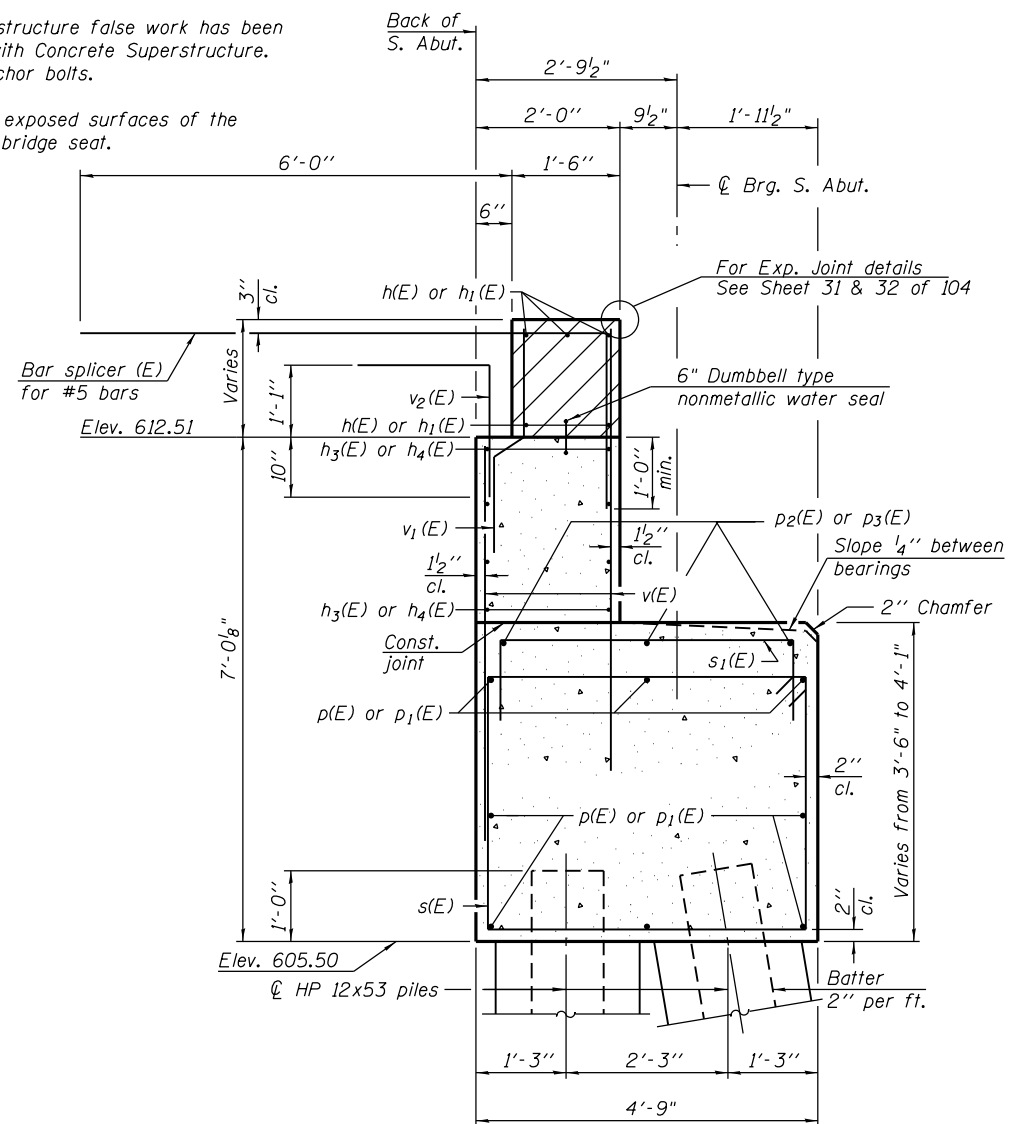
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	106
CONTRACT NO. 60K72				

ILLINOIS FED. AID PROJECT

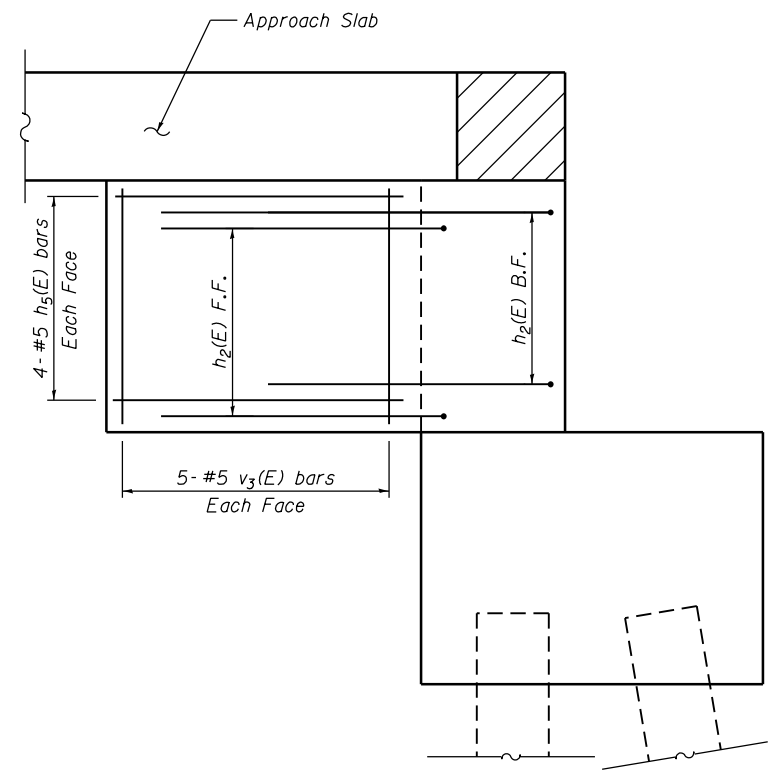
Notes:
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 Concrete Sealer shall be applied to the exposed surfaces of the backwall, pile cap & wingwalls and entire bridge seat.



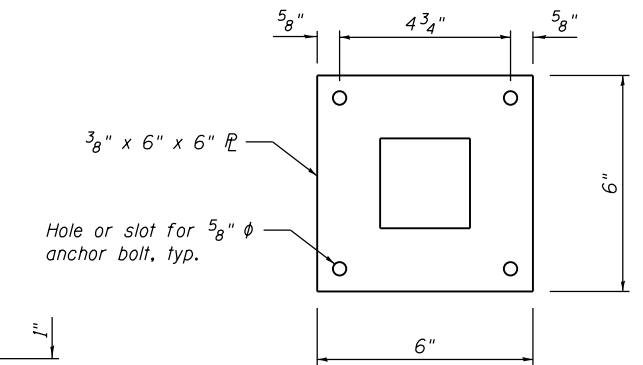
WING WALL ELEVATION
 Showing Dimensions



SEC. THRU ABUT.



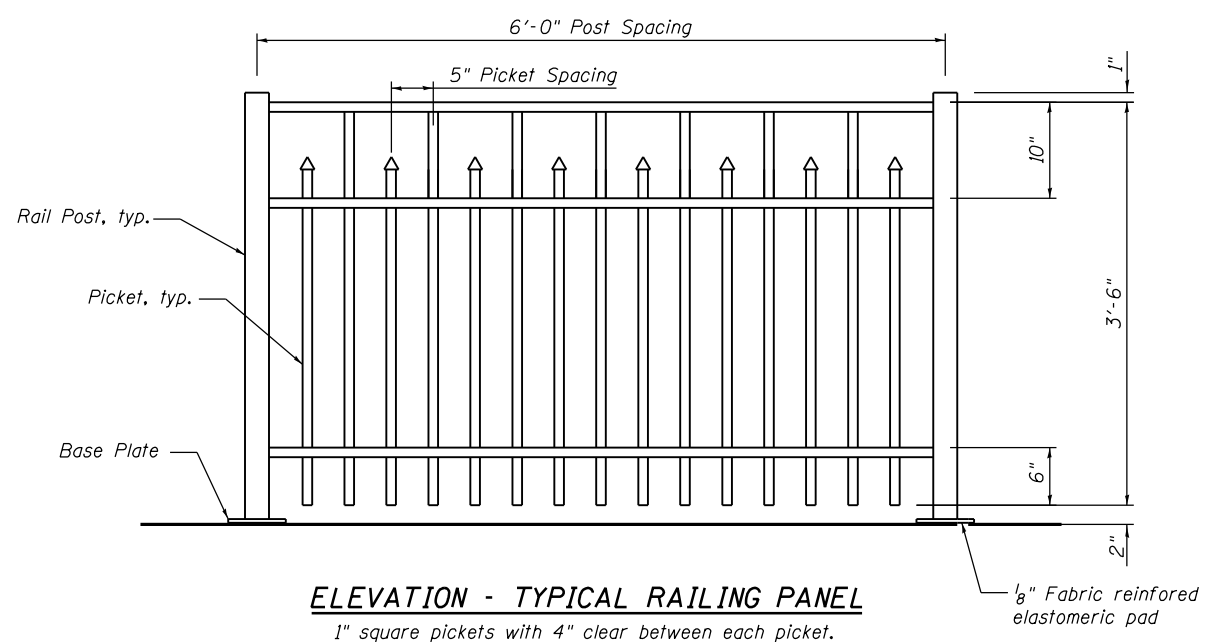
WING WALL ELEVATION
 Showing Reinforcement



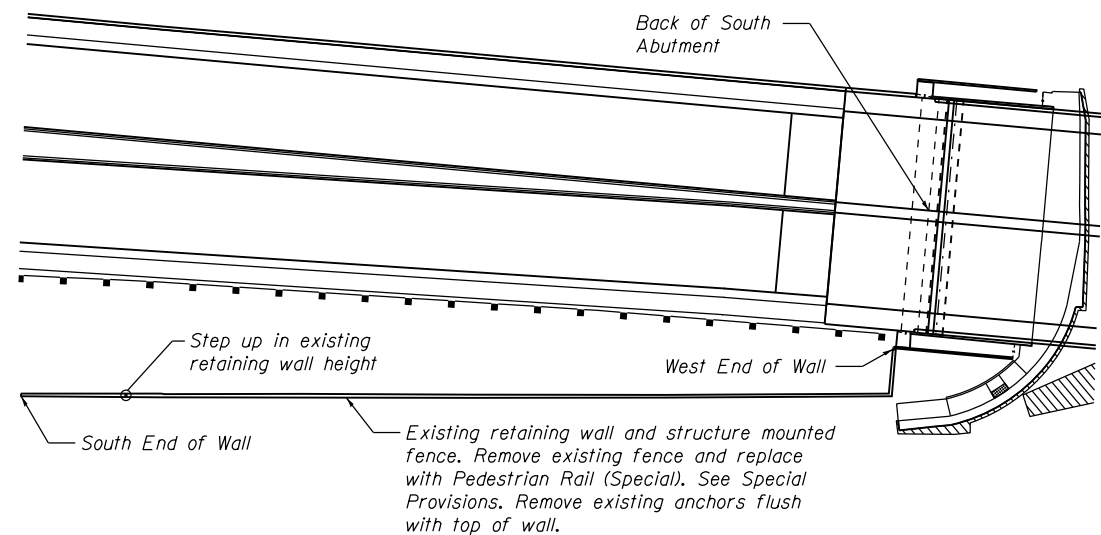
BASE PLATE DETAIL

**BILL OF MATERIAL
 FOR RAILING REPLACEMENT**

Item	Unit	Total
Bridge Rail Removal	Foot	265
Pedestrian Rail (Special)	Foot	265



ELEVATION - TYPICAL RAILING PANEL
 1" square pickets with 4" clear between each picket.



PLAN VIEW - EXISTING RETAINING WALL
 Fence removal included in Bridge Rail Removal

FILE NAME = W:\191\132\1001\Western_Ave\CADD_Sheets\Structure\016-0777\49 - South Abutment Detail.dgn



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

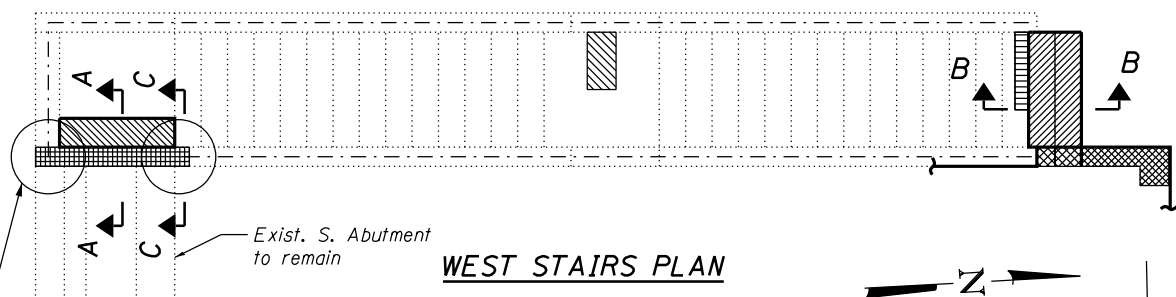
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT AND PEDESTRIAN RAIL (SPECIAL) DETAILS
 STRUCTURE NO. 016-0777**

SHEET NO. 49 OF 104 SHEETS

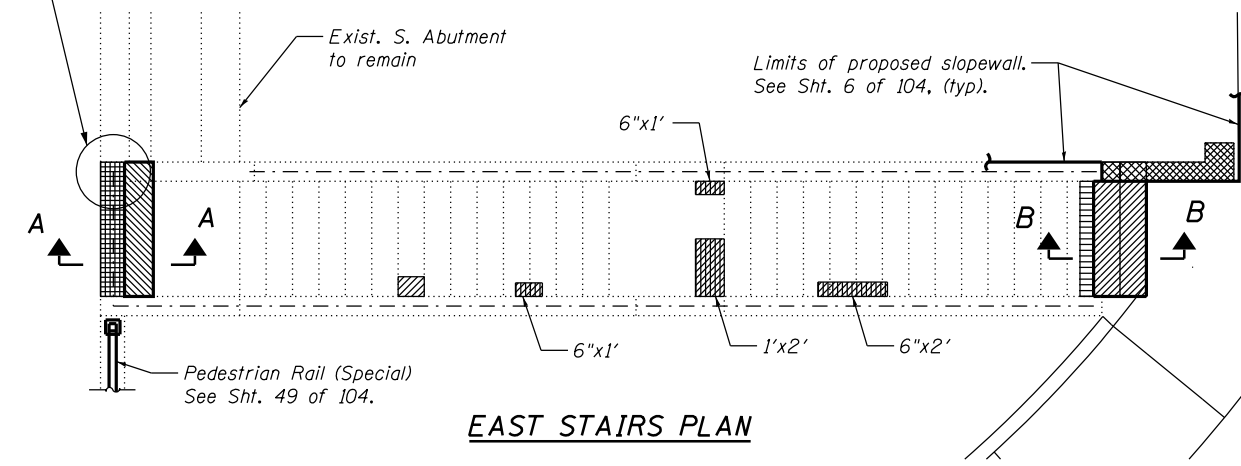
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	107
CONTRACT NO. 60K72				

ILLINOIS FED. AID PROJECT

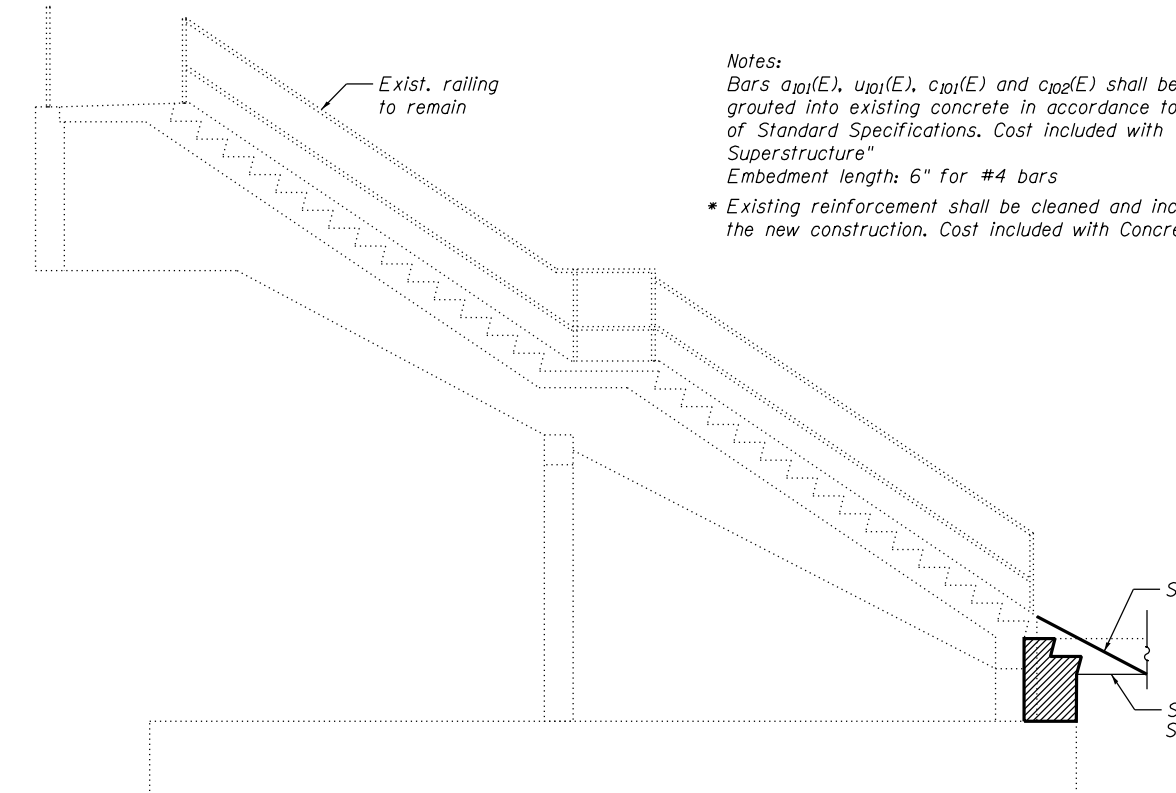


WEST STAIRS PLAN

Replace existing Anchor Bolts at railing posts. The Contractor has the option to cast in place 3/8" Ø galvanized or stainless steel anchor rods, embedded 6" into the new concrete or drill and set galvanized or stainless steel anchor rods according to Article 509.06 of the Standard Specifications. Cost of replacing anchor rods included with Concrete Superstructure.



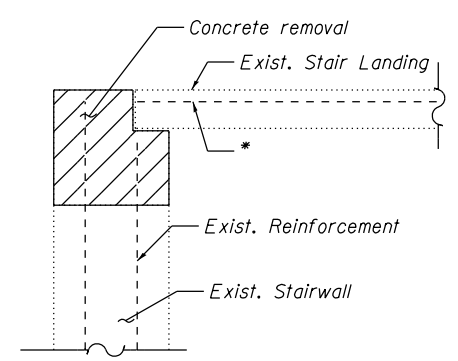
EAST STAIRS PLAN



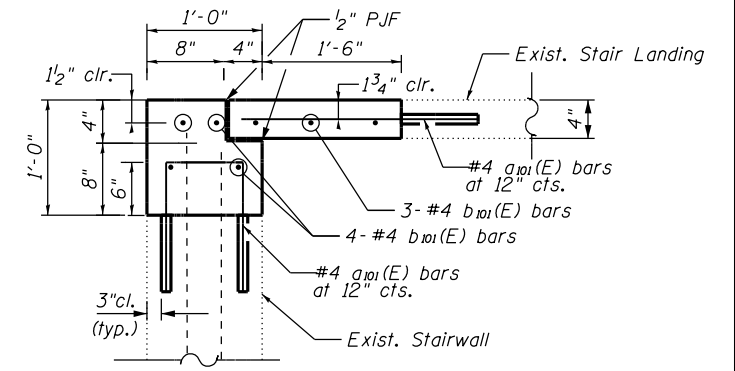
TYP. ELEVATION

Notes:
 Bars a₁₀₁(E), u₁₀₁(E), c₁₀₁(E) and c₁₀₂(E) shall be drilled and grouted into existing concrete in accordance to Article 584 of Standard Specifications. Cost included with "Concrete Superstructure"
 Embedment length: 6" for #4 bars
 * Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

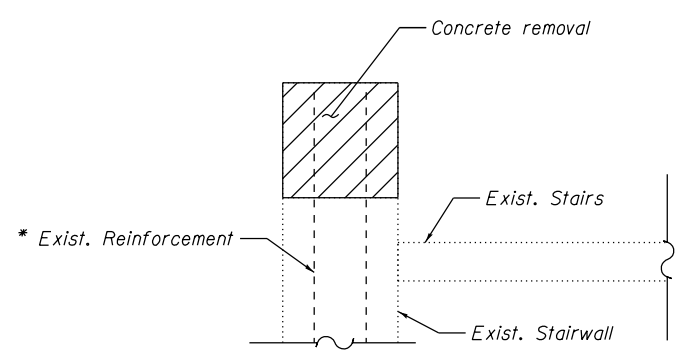
- LEGEND:**
- Concrete Removal
 - Remove and Replace Concrete Stairs
 - Remove and Replace Concrete Stairway Landing
 - Remove and Replace Concrete Stairway Wall
 - Polymer Modified Portland Cement Mortar Repair
 - Structural Repair of Concrete (Depth Greater Than 5")



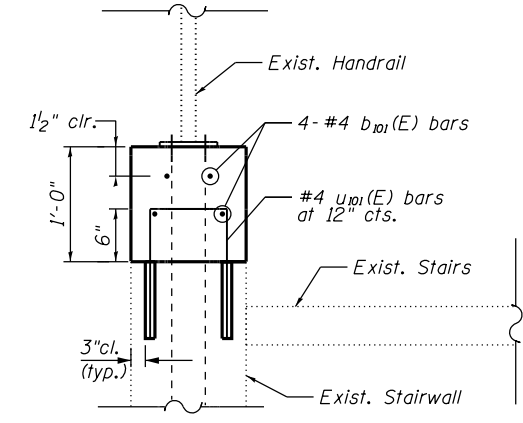
SECTION A-A REMOVAL



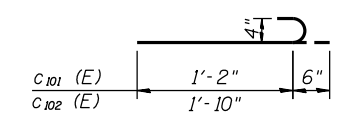
SECTION A-A CONSTRUCTION



SECTION C-C REMOVAL



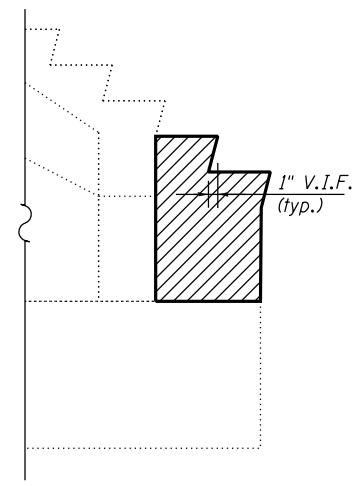
SECTION C-C CONSTRUCTION



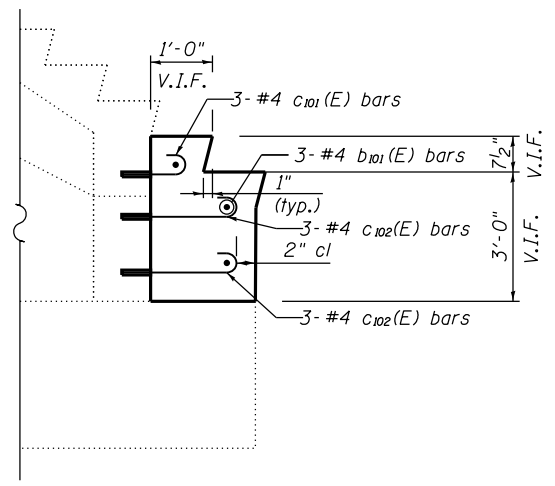
BARS c₁₀₁(E) and c₁₀₂(E)

**EXIST. STAIRWAY REPAIRS
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a ₁₀₁ (E)	8	#4	1'-10"	—
b ₁₀₁ (E)	10	#4	3'-8"	—
c ₁₀₁ (E)	6	#4	1'-8"	⌋
c ₁₀₂ (E)	12	#4	2'-4"	⌋
u ₁₀₁ (E)	8	#4	2'-6"	□
Concrete Removal			Cu. Yd.	2.0
Polymer Modified Portland Cement Mortar			Cu. Ft.	5
Concrete Superstructure			Cu. Yd.	3.0
Reinforcement Bars, Epoxy Coated			Pound	80
Structural Repair of Concrete (Depth Greater Than 5 Inches)			Sq. Ft.	5



SECTION B-B REMOVAL



SECTION B-B CONSTRUCTION

FILE NAME = W:\191\132\DOT\Western_Ave\CADD_Sheets\Structure\016-0777\50 - ExistStairwayRepair.dgn



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EXISTING STAIRWAY RECONSTRUCTION AND REPAIR
 STRUCTURE NO. 016-0777**

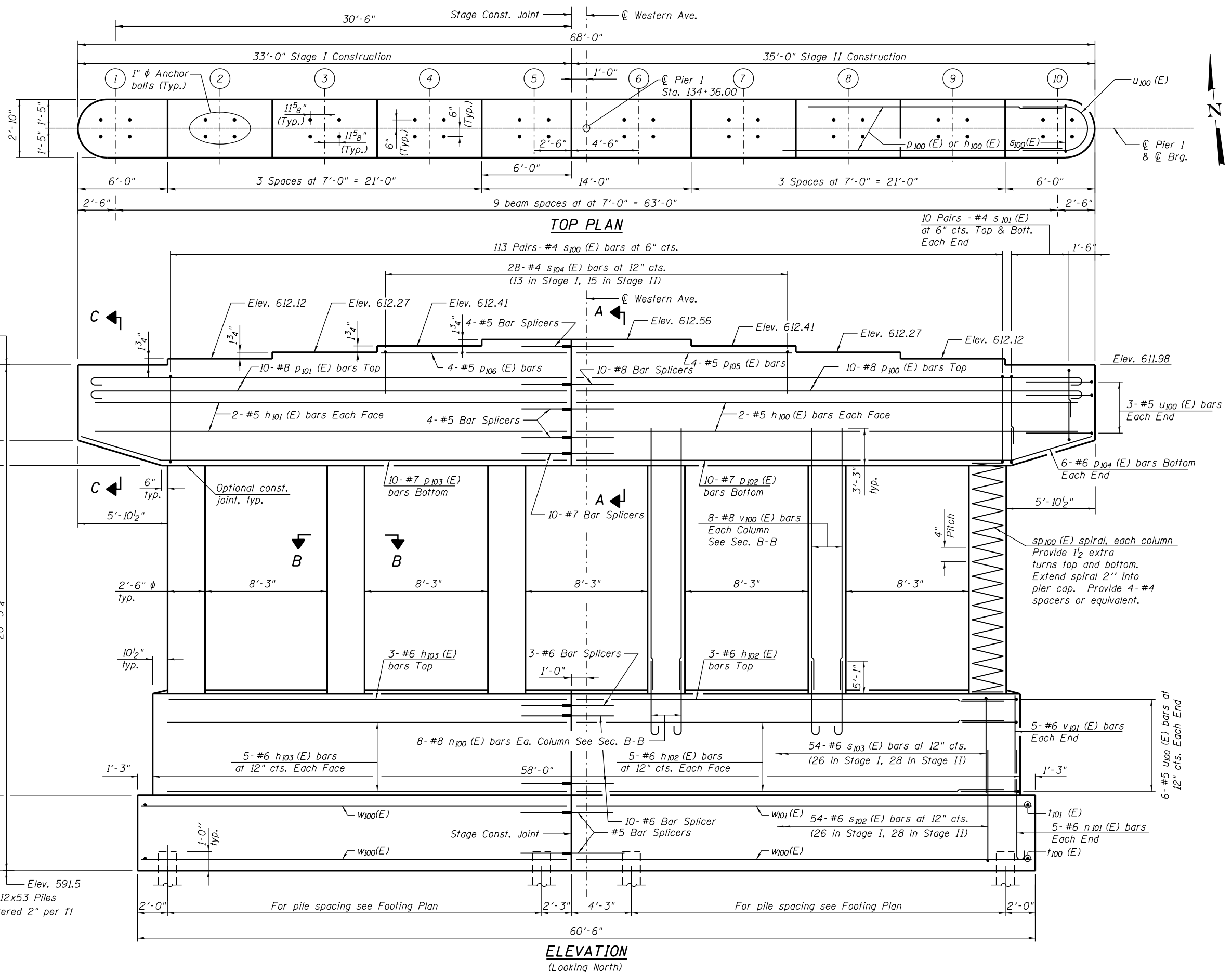
SHEET NO. 50 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	174	108
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of piles, see sheet 95 of 104.

PILE DATA

Type: HP 12x53 with Pile Shoes
 Nominal Required Bearing: 418 Kips
 Factored Resistance Available: 230 Kips
 Est. Length: 26 Ft
 No. Production Piles: 24
 No. Test Piles: 0



FILE NAME = W:\191-132-1001-Western-Ave\CADD_Sheets\Structural\016-0777A51 - Pier 1 Plan and Elevation.dgn



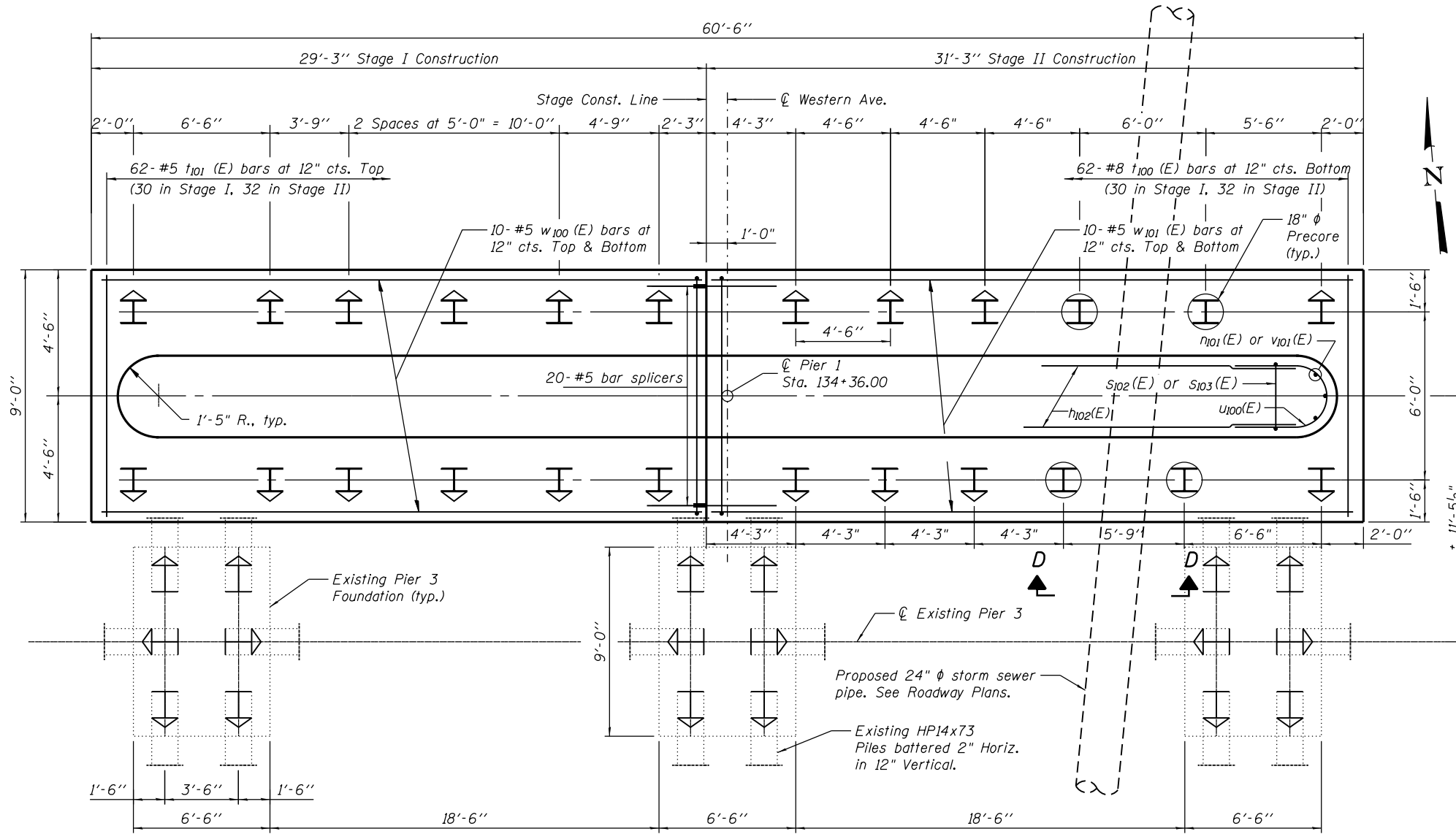
USER NAME =	DESIGNED - JJI	REVISED -
PLOT SCALE =	CHECKED - HB	REVISED -
PLOT DATE = 6/25/2019	DRAWN - HB	REVISED -
	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PIER 1 - PLAN AND ELEVATION
 STRUCTURE NO. 016-0777**

F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY Cook	TOTAL SHEETS 184	SHEET NO. 109
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

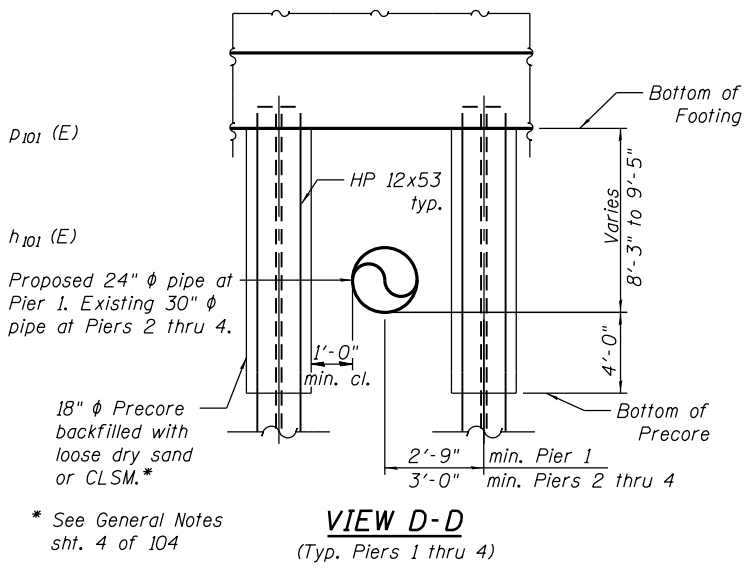
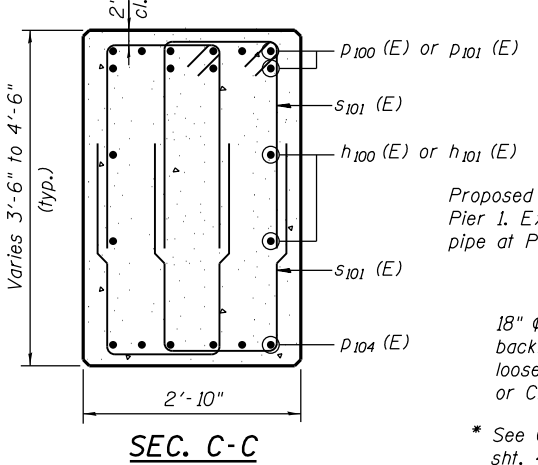
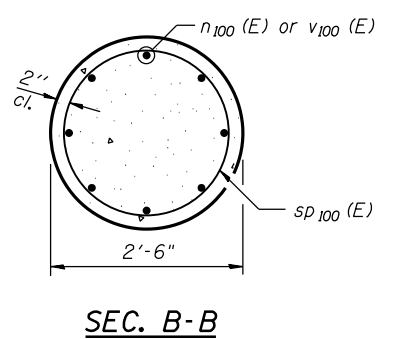
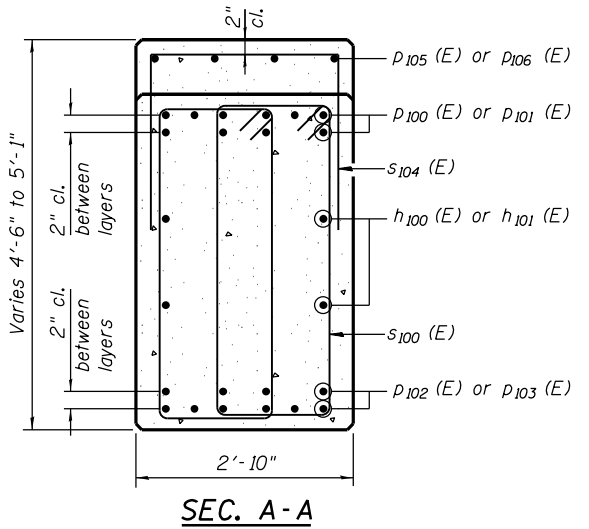
SHEET NO. 51 OF 104 SHEETS



FOOTING PLAN

Note:
 Existing pile location shown for information only.
 Contractor to probe for existing pile locations
 prior to driving new piles and adjust pile location
 as required and approved by the Engineer.
 Cost of probing included in "Driving Piles".

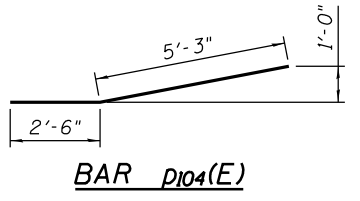
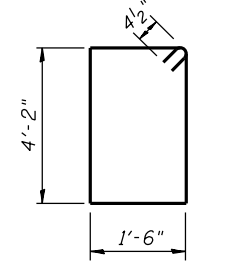
Ground Elev. for Proposed Pier
 Pier 1: Varies 596.4 (W) to 595.8 (E)



A & B DIMENSIONS

Bar	A	B
s101(E)	1'-6"	3'-2"
s102(E)	2'-6"	5'-10"
s103(E)	2'-6"	5'-4"
s104(E)	2'-6"	2'-0"

BARS s101(E) thru s104(E)



**PIER 1
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
n100(E)	4	#5	33'-6"	—
n101(E)	4	#5	31'-6"	—
n102(E)	13	#6	28'-6"	—
n103(E)	13	#6	26'-6"	—
n100(E)	48	#8	8'-1"	U
n101(E)	10	#6	6'-6"	U
p100(E)	10	#8	34'-5"	U
p101(E)	10	#8	32'-5"	U
p102(E)	10	#7	29'-4"	—
p103(E)	10	#7	27'-4"	—
p104(E)	12	#6	7'-9"	—
p105(E)	4	#5	14'-8"	—
p106(E)	4	#5	12'-8"	—
s100(E)	226	#4	12'-1"	□
s101(E)	80	#4	8'-2"	□
s102(E)	54	#6	17'-2"	□
s103(E)	54	#6	13'-2"	□
s104(E)	28	#4	6'-6"	□
sp100(E)	6	#4	7'-2"	W
v100(E)	62	#8	8'-8"	—
v101(E)	62	#5	8'-8"	—
u100(E)	18	#5	10'-2"	U
v100(E)	48	#8	10'-3"	—
v101(E)	10	#6	5'-2"	—
w100(E)	20	#5	28'-11"	—
w101(E)	20	#5	30'-11"	—
Structure Excavation		Cu. Yd.	125	
Concrete Structures		Cu. Yd.	145.5	
Reinforcement Bars, Epoxy Coated		Pound	16,140	
Furnishing Steel Piles HP 12x53		Foot	624	
Driving Piles		Foot	624	
Pile Shoes		Each	24	

** Length is height of spiral.

⏚ Denotes Battered Pile (2" per ft.)

FILE NAME = W:\191\132\1001\Western_Ave\CADD_Sheets\Structure\016-0777\52 - Pier 1 Details.dwg



USER NAME =	DESIGNED - JJI	REVISED -
PLOT SCALE =	CHECKED - HB	REVISED -
PLOT DATE = 6/25/2019	DRAWN - HB	REVISED -
	CHECKED - JJI	REVISED -

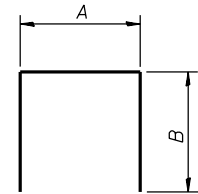
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 1 DETAILS
STRUCTURE NO. 016-0777**

SHEET NO. 52 OF 104 SHEETS

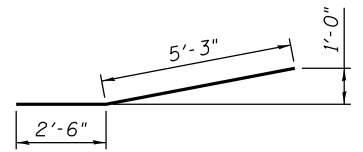
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	110
CONTRACT NO. 60K72			ILLINOIS FED. AID PROJECT	

A & B DIMENSIONS

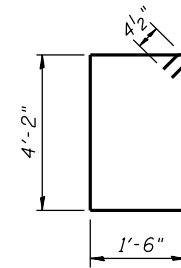


Bar	A	B
s ₁₀₁ (E)	1'-6"	3'-2"
s ₁₀₂ (E)	2'-6"	5'-10"
s ₁₀₃ (E)	2'-6"	5'-4"
s ₁₀₄ (E)	2'-6"	2'-0"

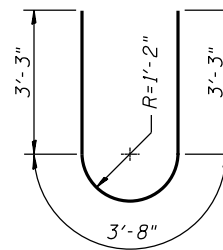
BARS s₁₀₁(E) thru s₁₀₄(E)



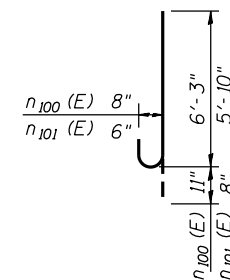
BAR p₁₀₄(E)



BAR s₁₀₀(E)

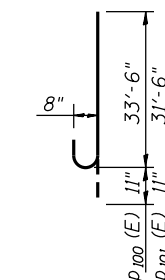


BAR u₁₀₀(E)



BARS n₁₀₀(E)

BAR n₁₀₁(E)



BARS p₁₀₀(E) and p₁₀₁(E)

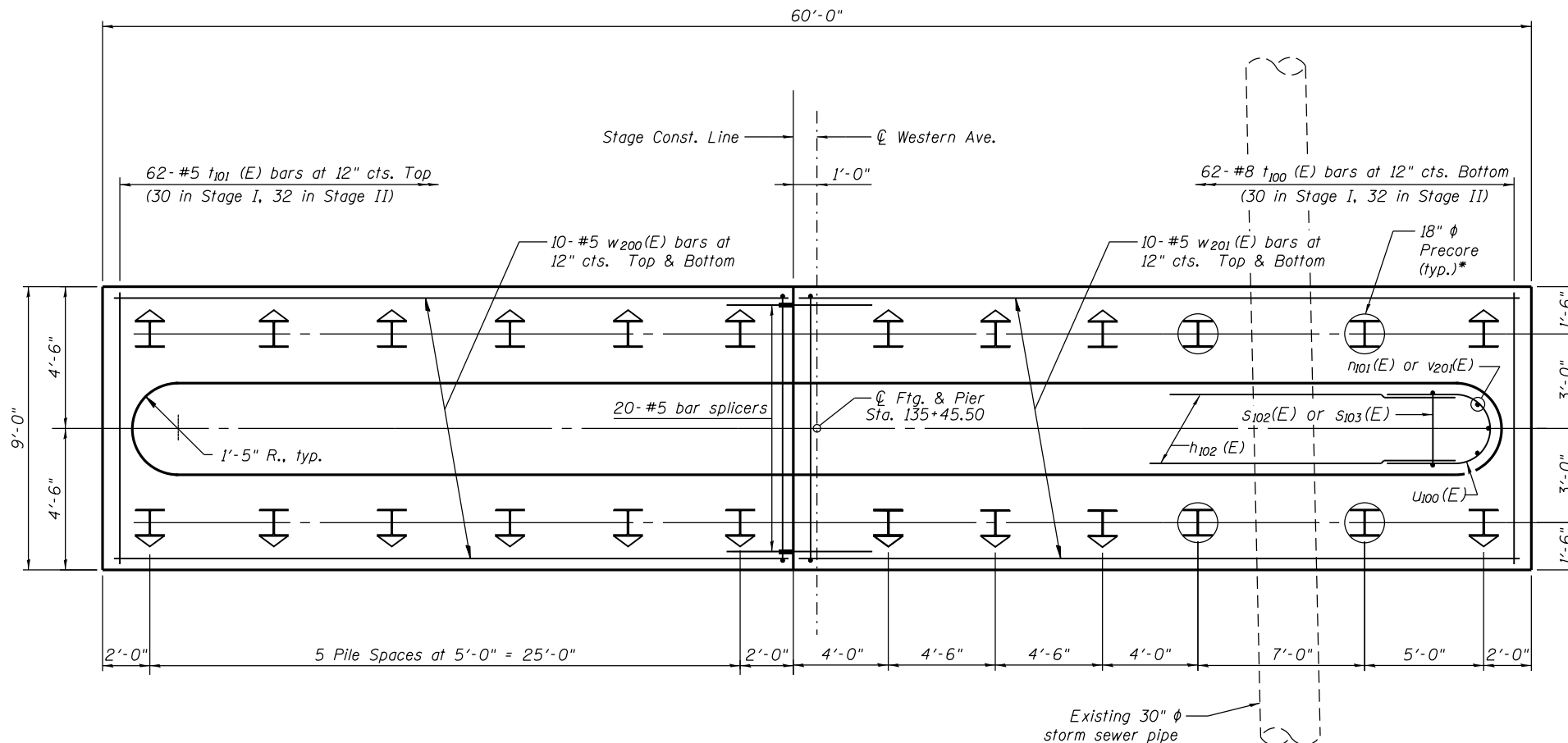
**PIER 2
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h ₁₀₀ (E)	4	#5	33'-6"	—
h ₁₀₁ (E)	4	#5	31'-6"	—
h ₁₀₂ (E)	13	#6	28'-6"	—
h ₁₀₃ (E)	13	#6	26'-6"	—
n ₁₀₀ (E)	48	#8	8'-11"	U
n ₁₀₁ (E)	10	#6	6'-6"	U
p ₁₀₀ (E)	10	#8	34'-5"	U
p ₁₀₁ (E)	10	#8	32'-5"	U
p ₁₀₂ (E)	10	#7	29'-4"	—
p ₁₀₃ (E)	10	#7	27'-4"	—
p ₁₀₄ (E)	12	#6	7'-9"	—
p ₁₀₅ (E)	4	#5	14'-8"	—
p ₁₀₆ (E)	4	#5	12'-8"	—
s ₁₀₀ (E)	226	#4	12'-1"	□
s ₁₀₁ (E)	80	#4	8'-2"	□
s ₁₀₂ (E)	54	#6	17'-2"	□
s ₁₀₃ (E)	54	#6	13'-2"	□
s ₁₀₄ (E)	28	#4	6'-6"	□
sp ₂₀₀ (E)	6	#4	10'-11"	W
t ₁₀₀ (E)	62	#8	8'-8"	—
t ₁₀₁ (E)	62	#5	8'-8"	—
u ₁₀₀ (E)	18	#5	10'-2"	U
v ₂₀₀ (E)	48	#8	13'-9"	—
v ₁₀₁ (E)	10	#6	5'-2"	—
w ₂₀₀ (E)	20	#5	28'-8"	—
w ₂₀₁ (E)	20	#5	30'-8"	—
Structure Excavation	Cu. Yd.		124	
Concrete Structures	Cu. Yd.		148.9	
Reinforcement Bars, Epoxy Coated	Pound		16,690	
Furnishing Steel Piles HP 12x53	Foot		600	
Driving Piles	Foot		600	
Pile Shoes	Each		24	

** Length is height of spiral.

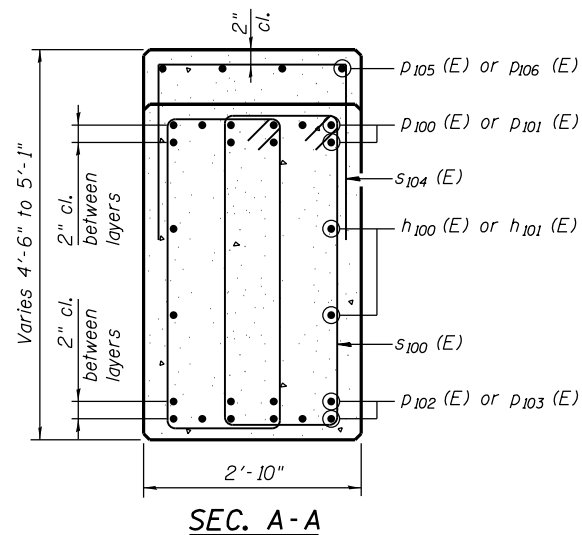
⌋ Denotes Battered Pile (2" per ft.)

* See General Notes
sht. 4 of 104

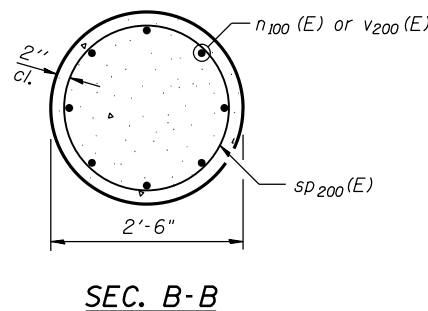


FOOTING PLAN

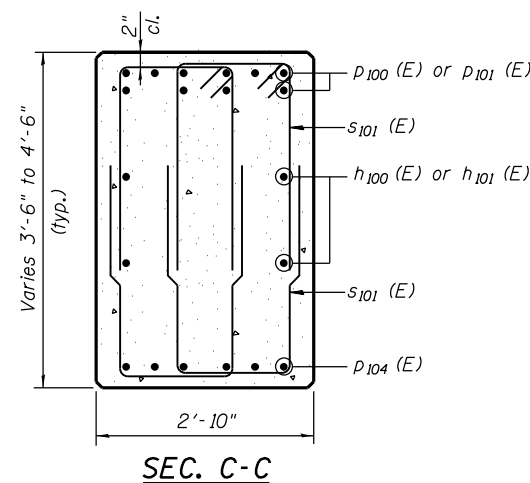
Ground Elev. for Proposed Pier
Pier 2: Varies 596.00 (W) to 595.7 (E)



SEC. A-A



SEC. B-B



SEC. C-C

FILE NAME = W:\191-132-1001-Western-Ave\CADD_Sheets\Structure\016-0777\54 - Pier 2 Detail.dwg



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 2 DETAILS
STRUCTURE NO. 016-0777**

SHEET NO. 54 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	112
				CONTRACT NO. 60K72

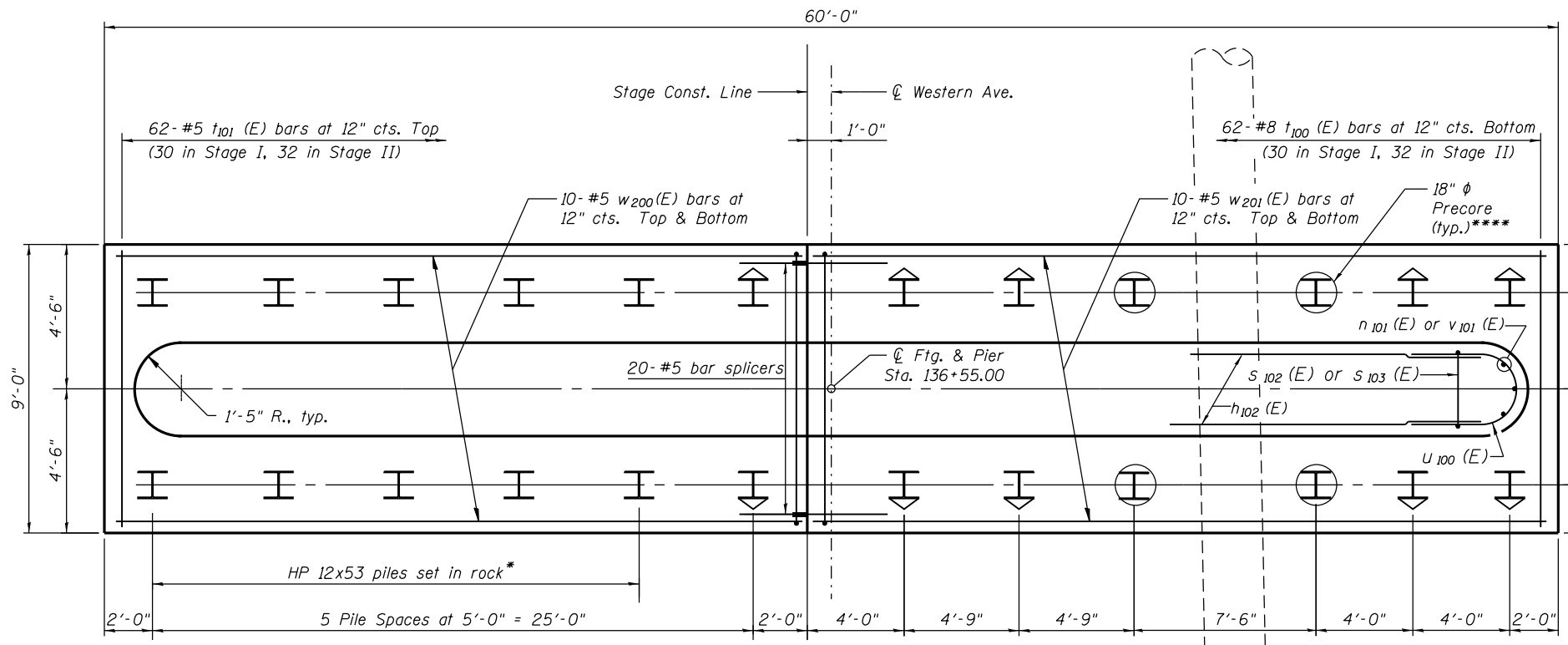
ILLINOIS FED. AID PROJECT



**** See General Notes sht 4 of 104.

A & B DIMENSIONS

Bar	A	B
s ₁₀₁ (E)	1'-6"	3'-2"
s ₁₀₂ (E)	2'-6"	5'-10"
s ₁₀₃ (E)	2'-6"	5'-4"
s ₁₀₄ (E)	2'-6"	2'-0"

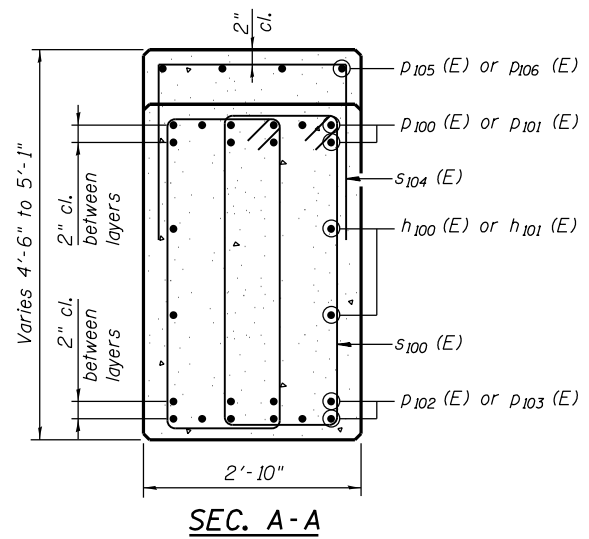


* See General Notes and Special Provisions

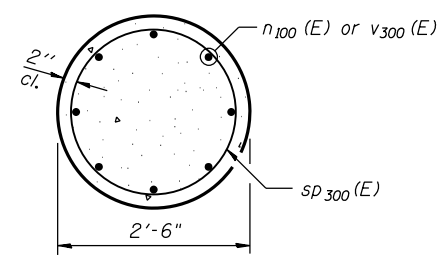
Ground Elev. for Proposed Pier
Pier 3: Varies 594.4 (W) to 594.5 (E)

FOOTING PLAN

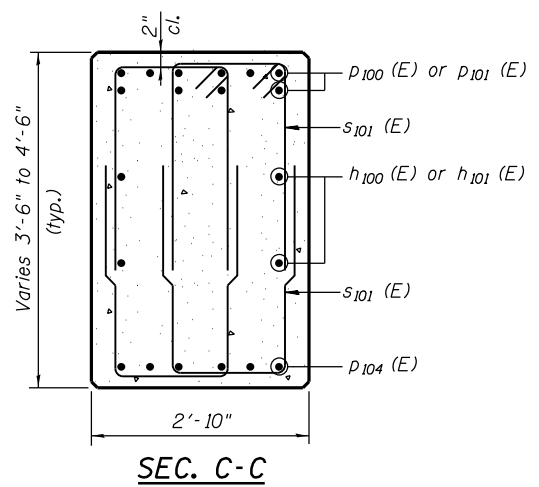
*** Backfill remainder of hole with class SI concrete. Cost included in Setting Piles in Rock.



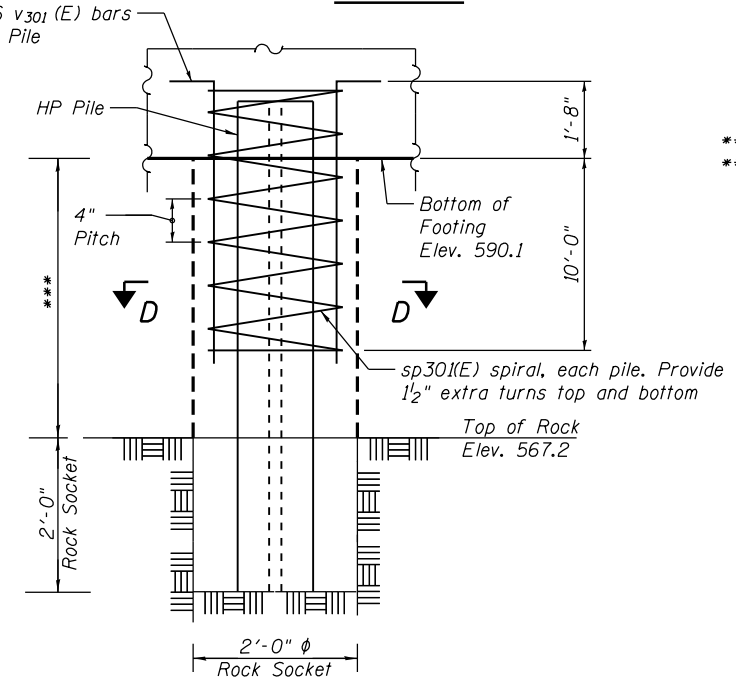
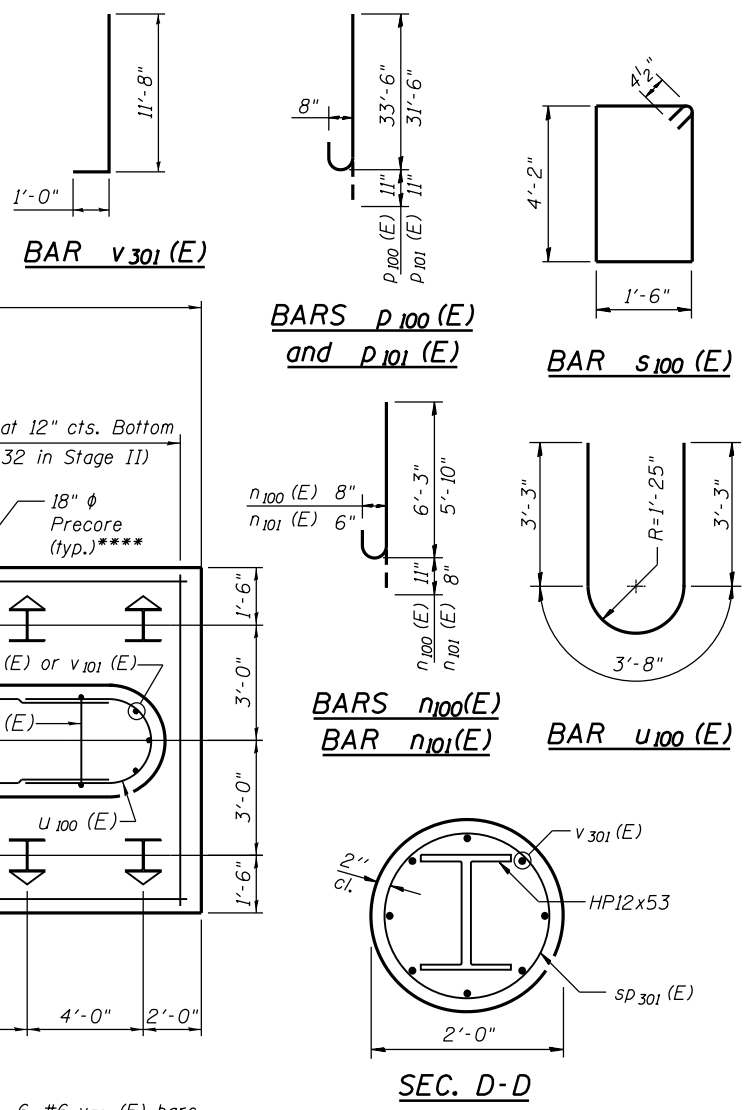
SEC. A-A



SEC. B-B



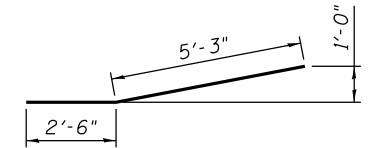
SEC. C-C



SETTING PILES IN ROCK DETAIL

See General Notes and Special Provisions

BARS s₁₀₁(E) thru s₁₀₄(E)



BAR p₁₀₄(E)

PIER 3 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁₀₀ (E)	4	#5	33'-6"	—
h ₁₀₁ (E)	4	#5	31'-6"	—
h ₁₀₂ (E)	13	#6	28'-6"	—
h ₁₀₃ (E)	13	#6	26'-6"	—
n ₁₀₀ (E)	48	#8	8'-1"	U
n ₁₀₁ (E)	10	#6	6'-6"	U
p ₁₀₀ (E)	10	#8	34'-5"	U
p ₁₀₁ (E)	10	#8	32'-5"	U
p ₁₀₂ (E)	10	#7	29'-4"	—
p ₁₀₃ (E)	10	#7	27'-4"	—
p ₁₀₄ (E)	12	#6	7'-9"	—
p ₁₀₅ (E)	4	#5	14'-8"	—
p ₁₀₆ (E)	4	#5	12'-8"	—
s ₁₀₀ (E)	226	#4	12'-1"	□
s ₁₀₁ (E)	80	#4	8'-2"	□
s ₁₀₂ (E)	54	#7	17'-2"	□
s ₁₀₃ (E)	54	#7	13'-2"	□
s ₁₀₄ (E)	28	#4	6'-6"	□
sp ₃₀₀ (E)	6	#4	15'-7"	~
sp ₃₀₁ (E)	10	#4	11'-8"	~
t ₁₀₀ (E)	62	#8	8'-8"	—
t ₁₀₁ (E)	62	#5	8'-8"	—
u ₁₀₀ (E)	18	#5	10'-2"	U
v ₁₀₁ (E)	10	#6	5'-2"	—
v ₃₀₀ (E)	48	#8	18'-8"	—
v ₃₀₁ (E)	60	#6	12'-8"	—
w ₂₀₀ (E)	20	#5	28'-8"	—
w ₂₀₁ (E)	20	#5	30'-8"	—
Structure Excavation		Cu. Yd.	124	
Concrete Structures		Cu. Yd.	154.1	
Reinforcement Bars, Epoxy Coated		Pound	20,110	
Furnishing Steel Piles HP 12x53		Foot	678	
Driving Piles		Foot	378	
Setting Piles in Rock		Each	10	
Pile Shoes		Each	14	

** Length is height of spiral.

⏏ Denotes Battered Pile (2" per ft.)

FILE NAME = W:\191\132\1001\Western_Ave\CADD_Sheets\Structural\016-0777\56 - Pier 3 Detail.dwg



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS
STRUCTURE NO. 016-0777

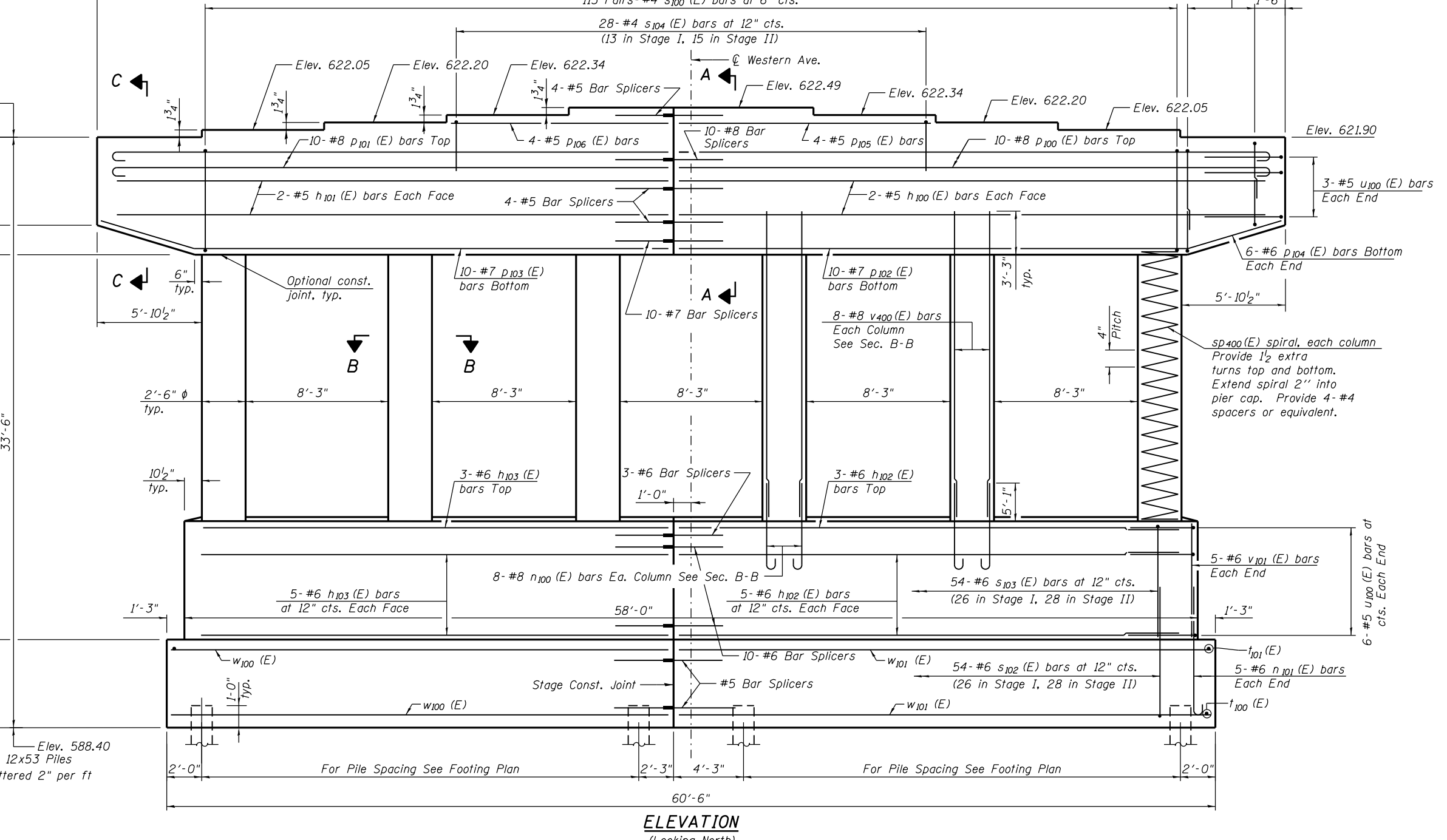
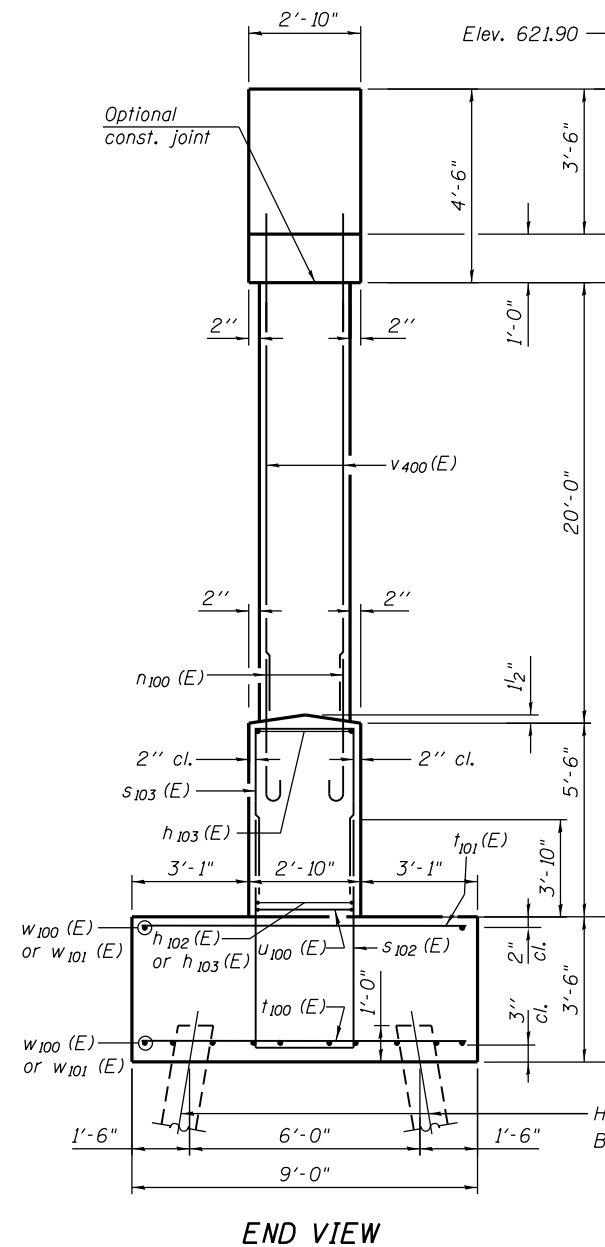
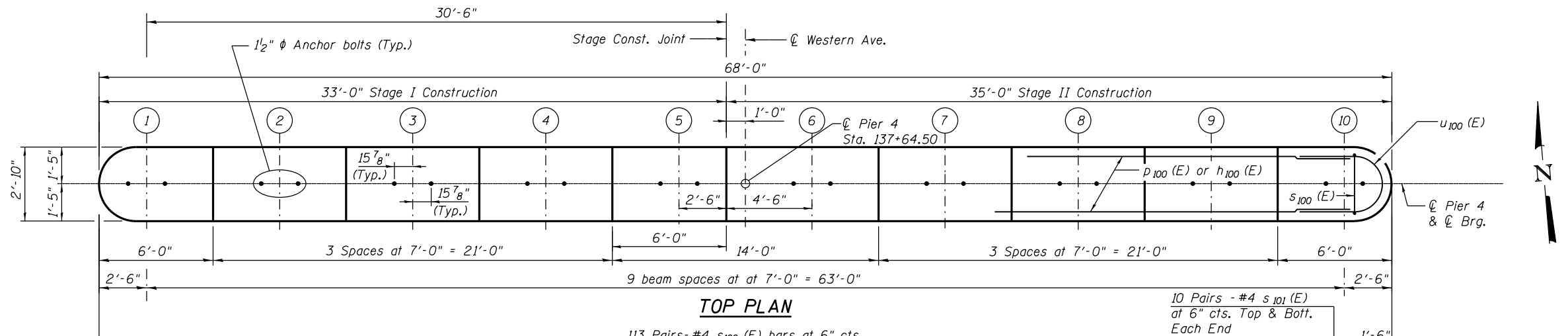
SHEET NO. 56 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	114
			CONTRACT NO. 60K72	
ILLINOIS FED. AID PROJECT				

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of piles, see sheet 95 of 104.

PILE DATA

Type: HP 12x53 with Pile Shoes
 Nominal Required Bearing: 418 Kips
 Factored Resistance Available: 230 Kips
 Est. Length: 24 Ft
 No. Production Piles: 23
 No. Test Piles: 1



FILE NAME = W:\191-132-1001-Western-Ave-CADD-Sheets\Structural\016-0777\57 - Pier 4 Plan and Elevation.dgn



USER NAME =	DESIGNED - JJI	REVISED -
PLOT SCALE =	CHECKED - HB	REVISED -
PLOT DATE = 6/25/2019	DRAWN - HB	REVISED -
	CHECKED - JJI	REVISED -

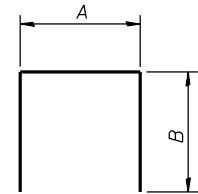
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 4 - PLAN AND ELEVATION
 STRUCTURE NO. 016-0777

F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY Cook	TOTAL SHEETS 184	SHEET NO. 115
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

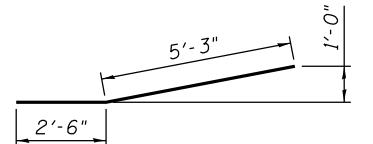
SHEET NO. 57 OF 104 SHEETS

A & B DIMENSIONS

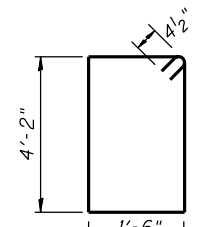


Bar	A	B
s ₁₀₁ (E)	1'-6"	3'-2"
s ₁₀₂ (E)	2'-6"	5'-10"
s ₁₀₃ (E)	2'-6"	5'-4"
s ₁₀₄ (E)	2'-6"	2'-0"

BARS s₁₀₁(E) thru s₁₀₄(E)



BAR p₁₀₄(E)



BAR s₁₀₀(E)

PIER 4

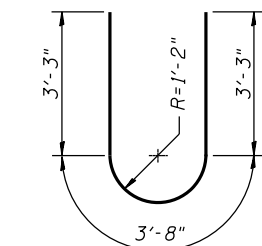
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁₀₀ (E)	4	#5	33'-6"	—
h ₁₀₁ (E)	4	#5	31'-6"	—
h ₁₀₂ (E)	13	#6	28'-6"	—
h ₁₀₃ (E)	13	#6	26'-6"	—
n ₁₀₀ (E)	48	#8	8'-1"	U
n ₁₀₁ (E)	10	#6	6'-6"	U
p ₁₀₀ (E)	10	#8	34'-5"	U
p ₁₀₁ (E)	10	#8	32'-5"	U
p ₁₀₂ (E)	10	#7	29'-4"	—
p ₁₀₃ (E)	10	#7	27'-4"	—
p ₁₀₄ (E)	12	#6	7'-9"	—
p ₁₀₅ (E)	4	#5	14'-8"	—
p ₁₀₆ (E)	4	#5	12'-8"	—
s ₁₀₀ (E)	226	#4	12'-1"	□
s ₁₀₁ (E)	80	#4	8'-2"	□
s ₁₀₂ (E)	54	#6	17'-2"	□
s ₁₀₃ (E)	54	#6	13'-2"	□
s ₁₀₄ (E)	28	#4	6'-6"	□
SP ₄₀₀ (E)	6	#4	20'-0"	~
t ₁₀₀ (E)	62	#8	8'-8"	—
t ₁₀₁ (E)	62	#5	8'-8"	—
u ₁₀₀ (E)	18	#5	10'-2"	U
v ₄₀₀ (E)	48	#8	23'-3"	—
v ₁₀₁ (E)	10	#6	5'-2"	—
w ₁₀₀ (E)	20	#5	28'-11"	—
w ₁₀₁ (E)	20	#5	30'-11"	—
Structure Excavation		Cu. Yd.	125	
Concrete Structures		Cu. Yd.	159.7	
Reinforcement Bars, Epoxy Coated		Pound	18,490	
Furnishing Steel Piles HP 12x53		Foot	552	
Driving Piles		Foot	552	
Pile Shoes		Each	24	
Test Pile, Steel HP 12x53		Each	1	

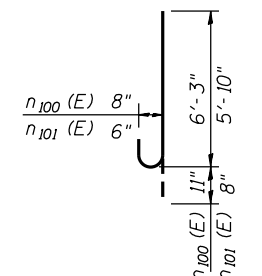
**

** Length is height of spiral.

↓ Denotes Battered Pile (2" per ft.)

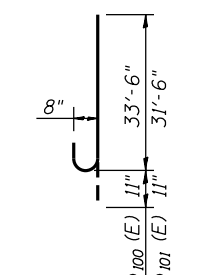


BAR u₁₀₀(E)

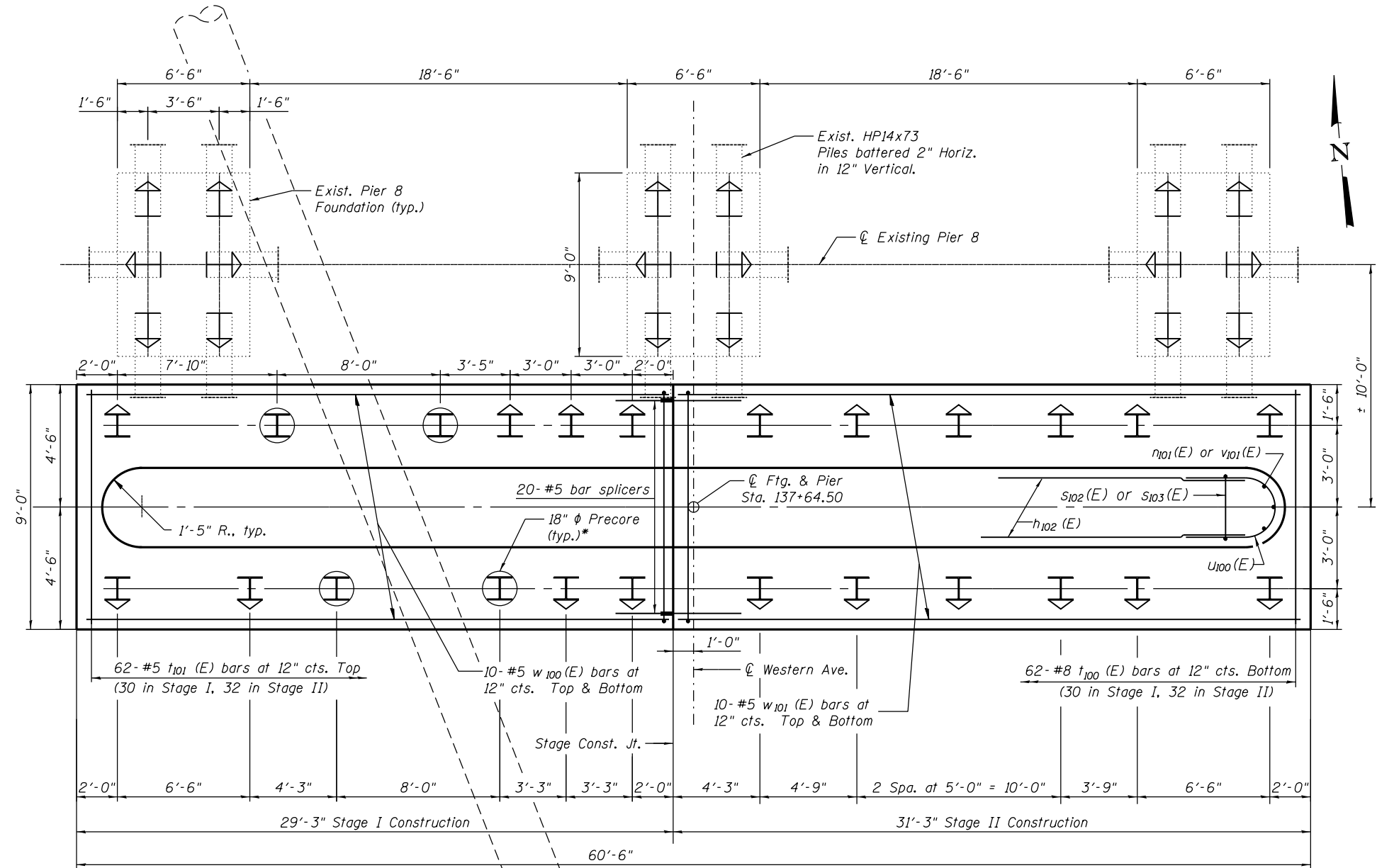


BARS n₁₀₀(E)

BAR n₁₀₁(E)



BARS p₁₀₀(E) and p₁₀₁(E)

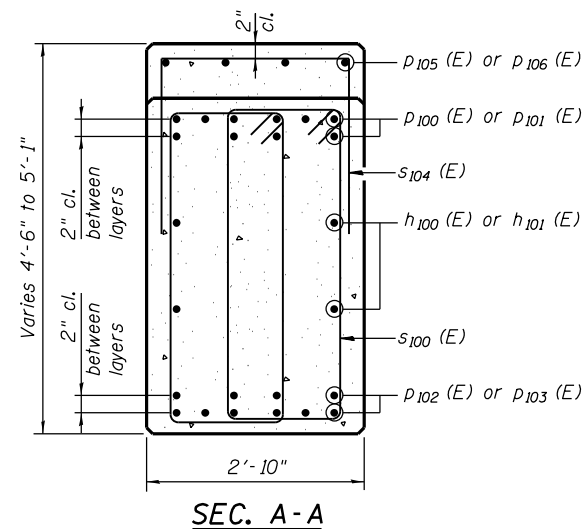


FOOTING PLAN

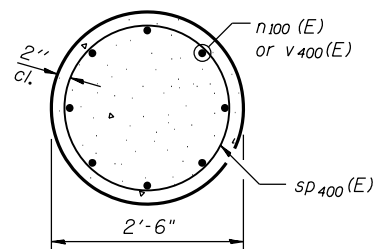
Ground Elev. for Proposed Pier
Pier 4: Varies 592.9 (W) to 592.5 (E)

* See General Notes
sht. 4 of 104

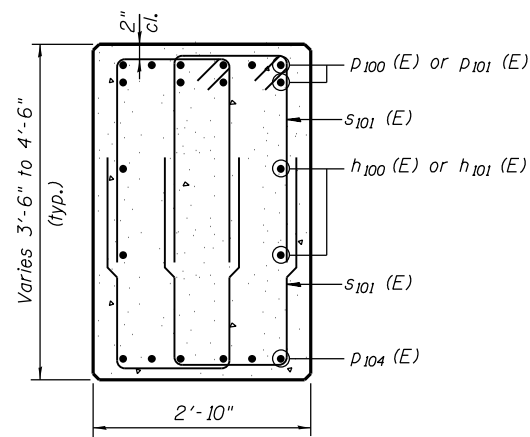
Note:
Existing pile location shown for information only. Contractor to probe for existing pile locations prior to driving new piles and adjust pile location as required and approved by the Engineer. Cost of probing included in "Driving Piles".



SEC. A-A



SEC. B-B



SEC. C-C

FILE NAME = W:\191-132-1001-Western-Ave-CADD_Sheets\Structure\016-0777\58 - Pier 4 Detail.dwg



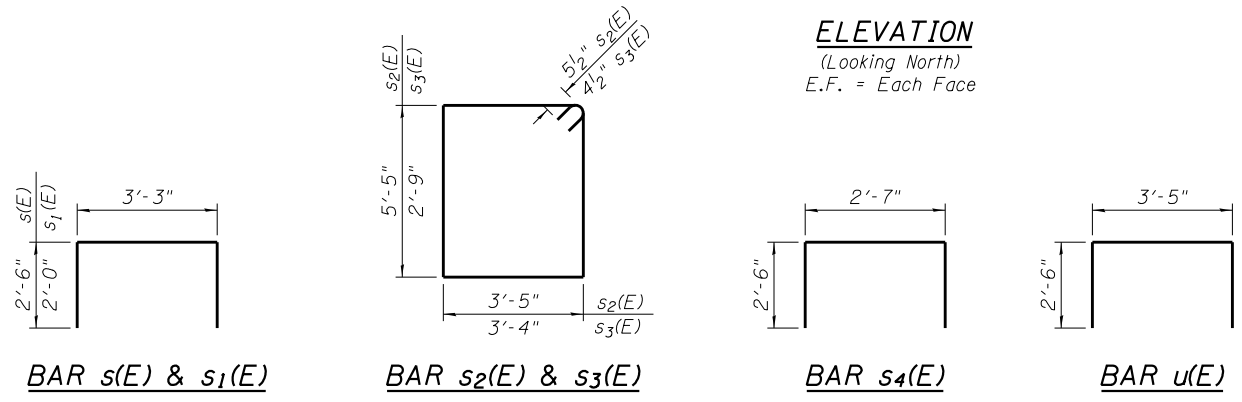
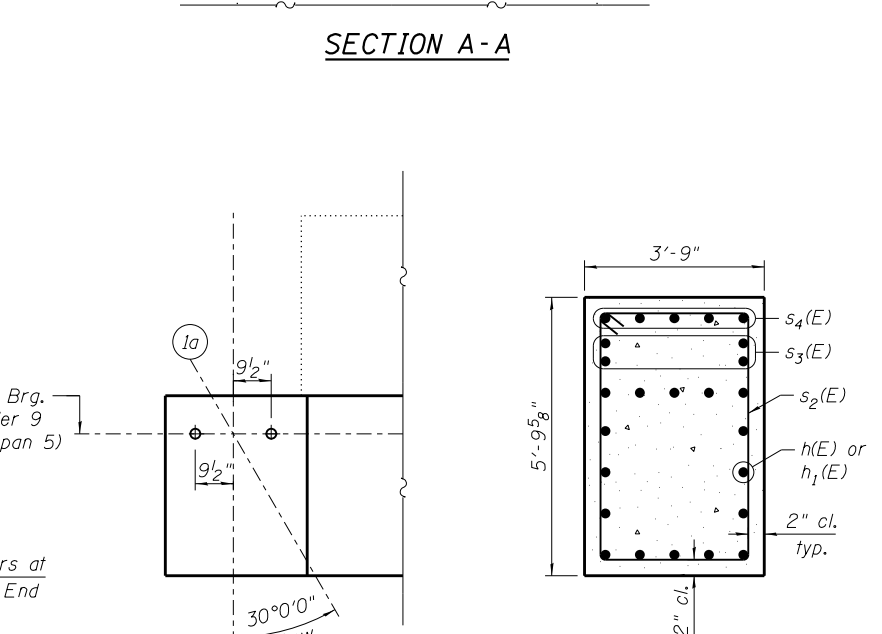
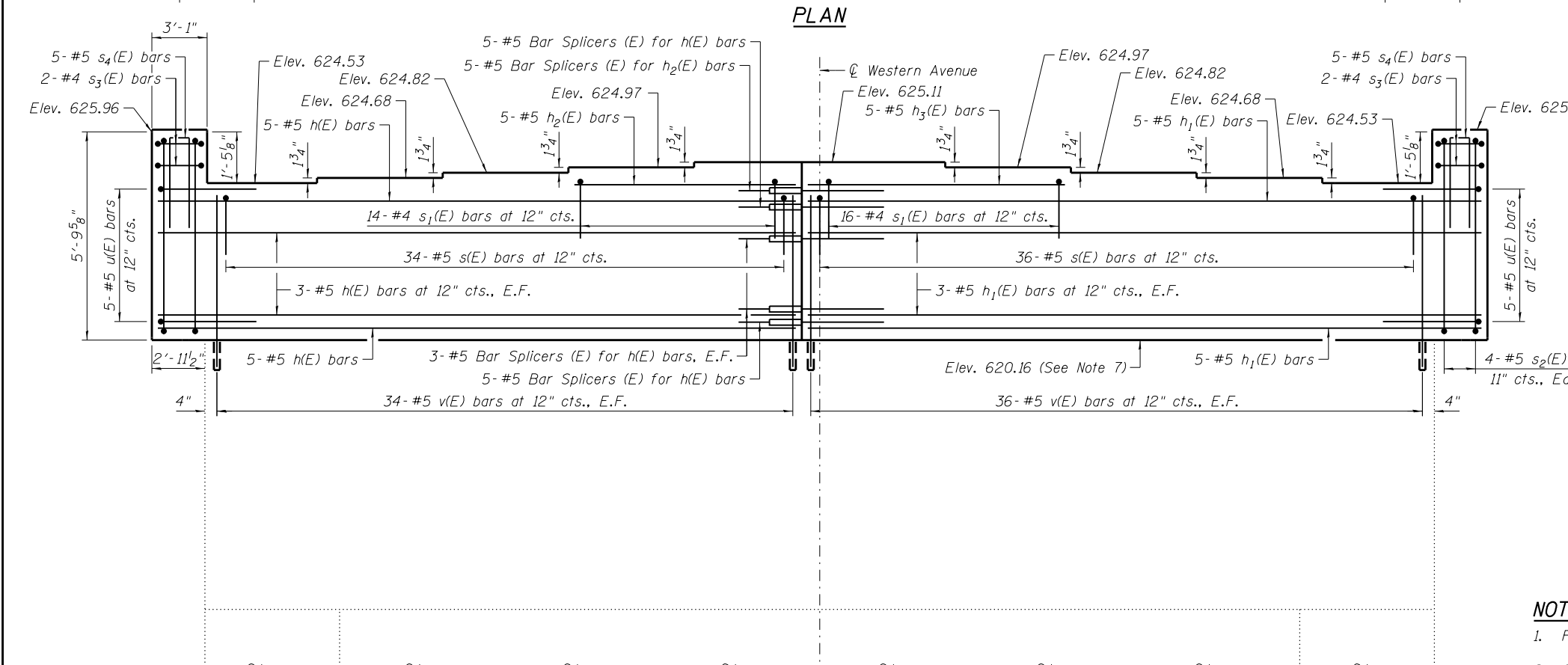
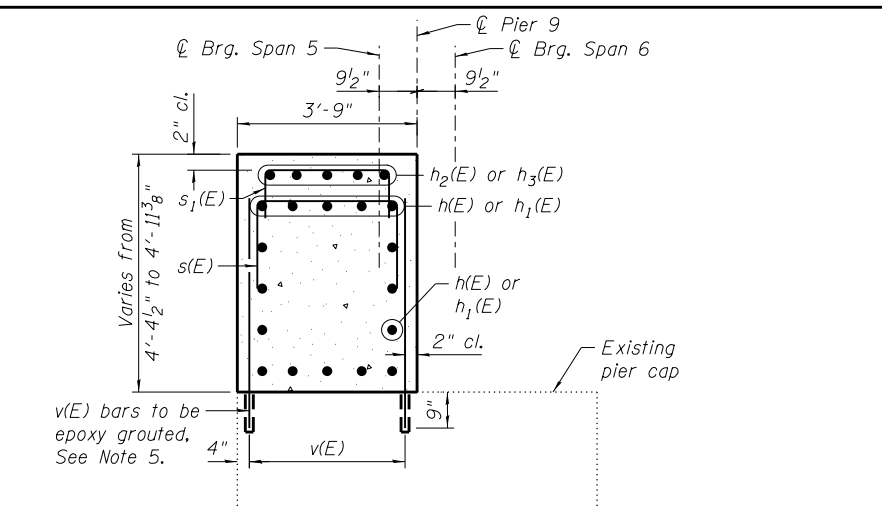
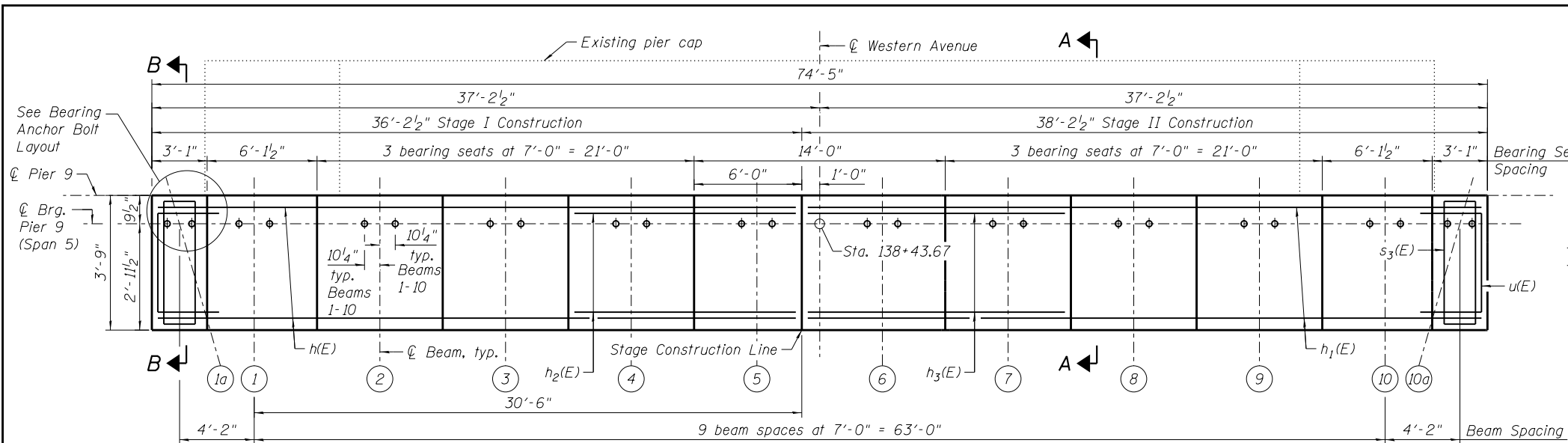
USER NAME =	DESIGNED - JJI	REVISED -
PLOT SCALE =	CHECKED - HB	REVISED -
PLOT DATE = 6/25/2019	DRAWN - HB	REVISED -
	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 4 DETAILS
STRUCTURE NO. 016-0777**

SHEET NO. 58 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	116
				CONTRACT NO. 60K72
ILLINOIS FED. AID PROJECT				



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	16	#5	35'-10"	—
h1(E)	16	#5	37'-10"	—
h2(E)	5	#5	12'-8"	—
h3(E)	5	#5	14'-8"	—
s(E)	70	#5	8'-3"	□
s1(E)	30	#4	7'-3"	□
s2(E)	8	#5	18'-7"	□
s3(E)	4	#4	12'-11"	□
s4(E)	10	#5	7'-7"	□
u(E)	10	#5	8'-5"	□
v(E)	140	#5	4'-11"	—
Concrete Structures			Cu. Yd.	49.3
Reinforcement Bars, Epoxy Coated			Pound	3,200
Concrete Sealer			Sq. Ft.	1,044

- NOTES:**
- Pour steps monolithically with cap.
 - Space reinforcement to miss anchor bolts.
 - For details of Bar Splicers, see Sheet 96.
 - For limits of removal, see Sheets 60 & 61.
 - Drill and grout bars according to Section 584 of the Standard Specifications. Cost included with cost of Reinforcement Bars, Epoxy Coated.
 - Concrete Sealer to be applied on all surfaces of new concrete.
 - Elevation from existing plans. The Contractor shall field verify existing dimensions and make necessary approved adjustments prior to ordering materials.

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_59.dgn

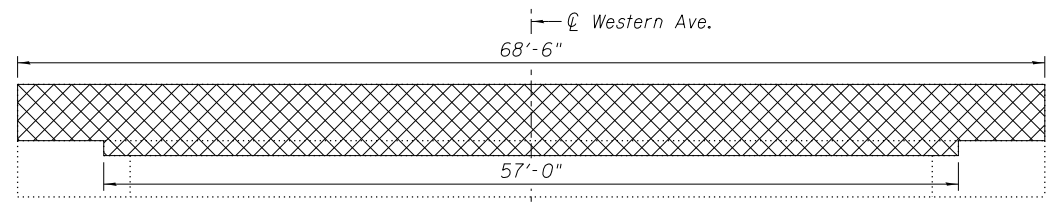


USER NAME = sailgood	DESIGNED - NG	REVISED -
PLOT SCALE = 8:0.0000 '1' = 1"	CHECKED - BWS	REVISED -
PLOT DATE = 4/11/2016	DRAWN - SBA	REVISED -
	CHECKED - BWS	REVISED -

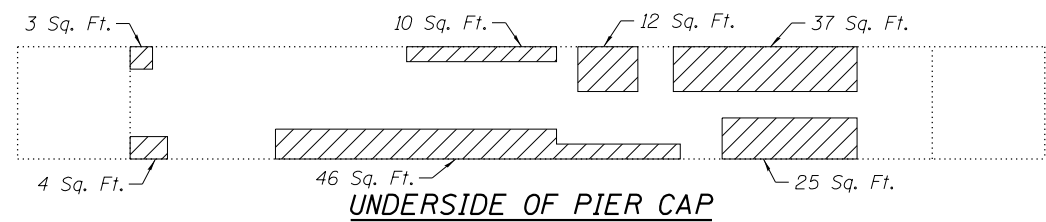
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PIER 9 MODIFICATIONS
STRUCTURE NO. 016-0777
SHEET NO. 59 OF 104 SHEETS

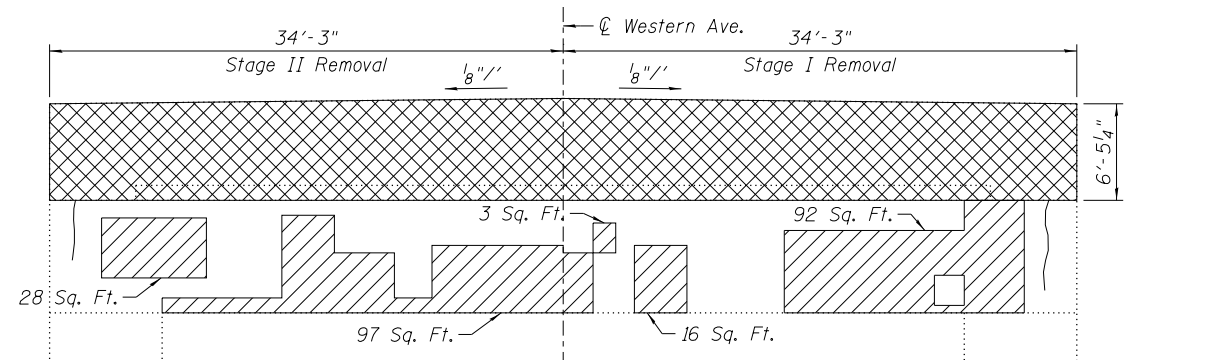
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	117
CONTRACT NO. 60K72			ILLINOIS FED. AID PROJECT	



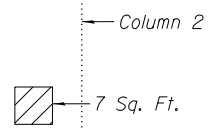
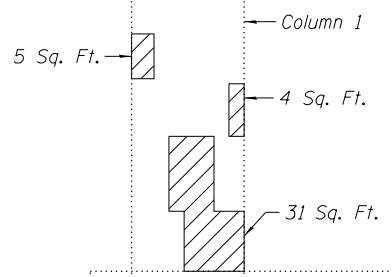
TOP OF PIER CAP



UNDERSIDE OF PIER CAP



NORTH FACE OF PIER 9



NOTES

- Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction and added to As-Built plans.
- For Bill of Material for Pier 9, see Sheet 61.
- All concrete and reinforcing bars to be removed within the limits of Concrete Removal areas shown.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Concrete Removal
- Hairline Crack - Not to be sealed

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_60.dgn



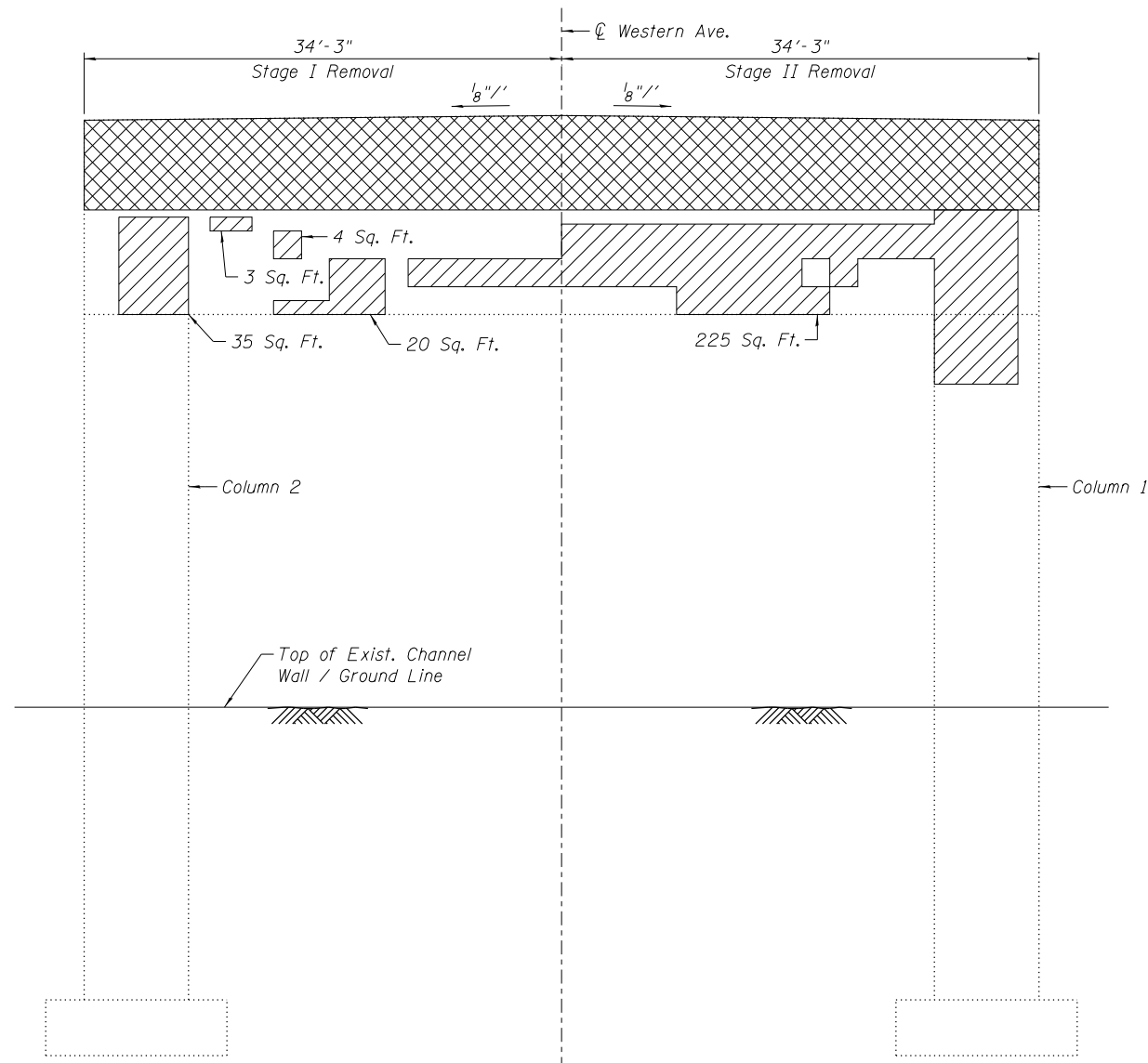
USER NAME = kaisneros	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 12:9.6000 '1' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

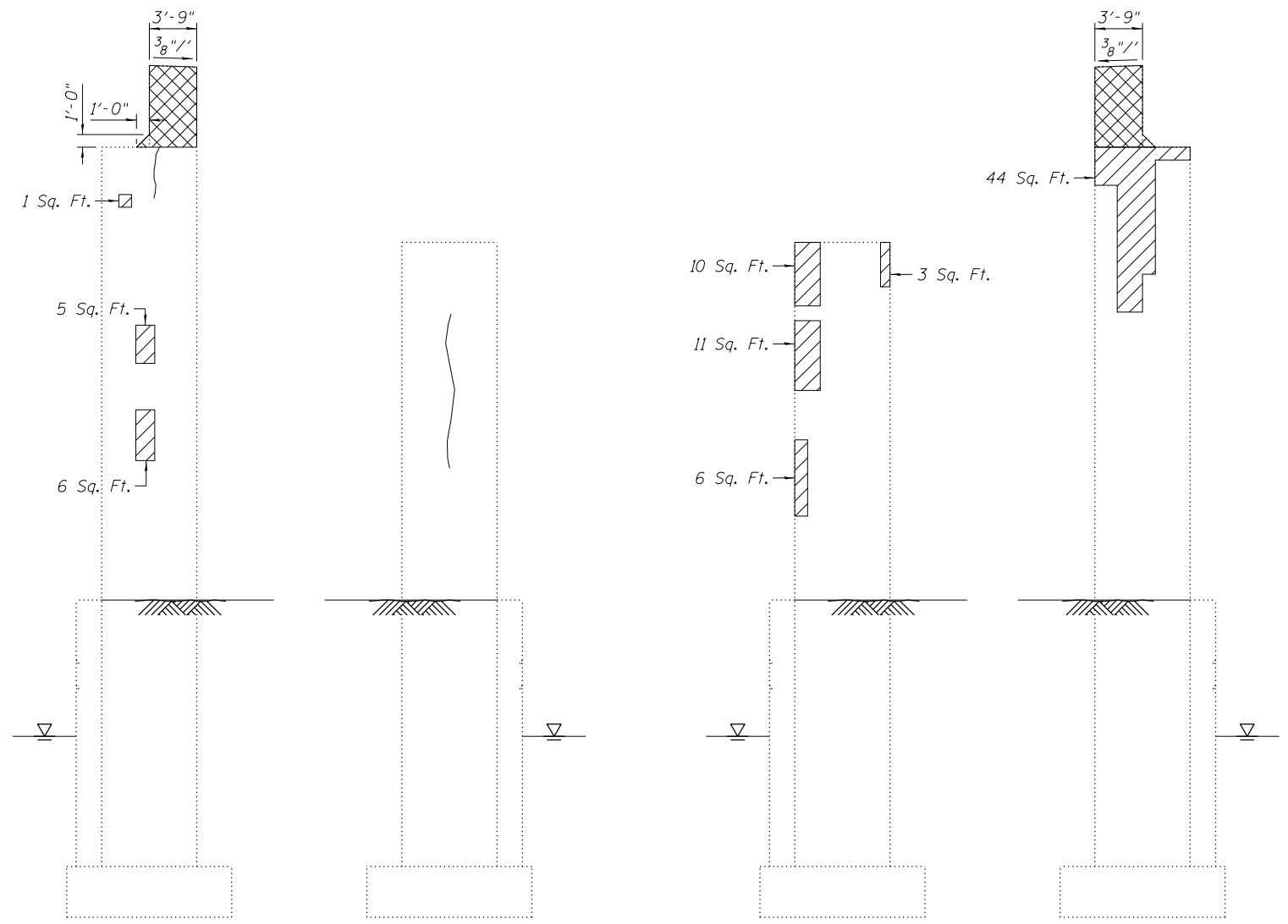
**EXISTING PIER 9 REPAIR DETAILS I
STRUCTURE NO. 016-0777**

SHEET NO. 60 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	118
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



SOUTH FACE OF PIER 9



WEST FACE

EAST FACE

WEST FACE

EAST FACE

COLUMN 2

COLUMN 1

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Concrete Removal
- Hairline Crack - Not to be sealed

NOTES

1. Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction and added to As-Built plans.
2. All concrete and reinforcing bars to be removed within the limits of Concrete Removal areas shown.

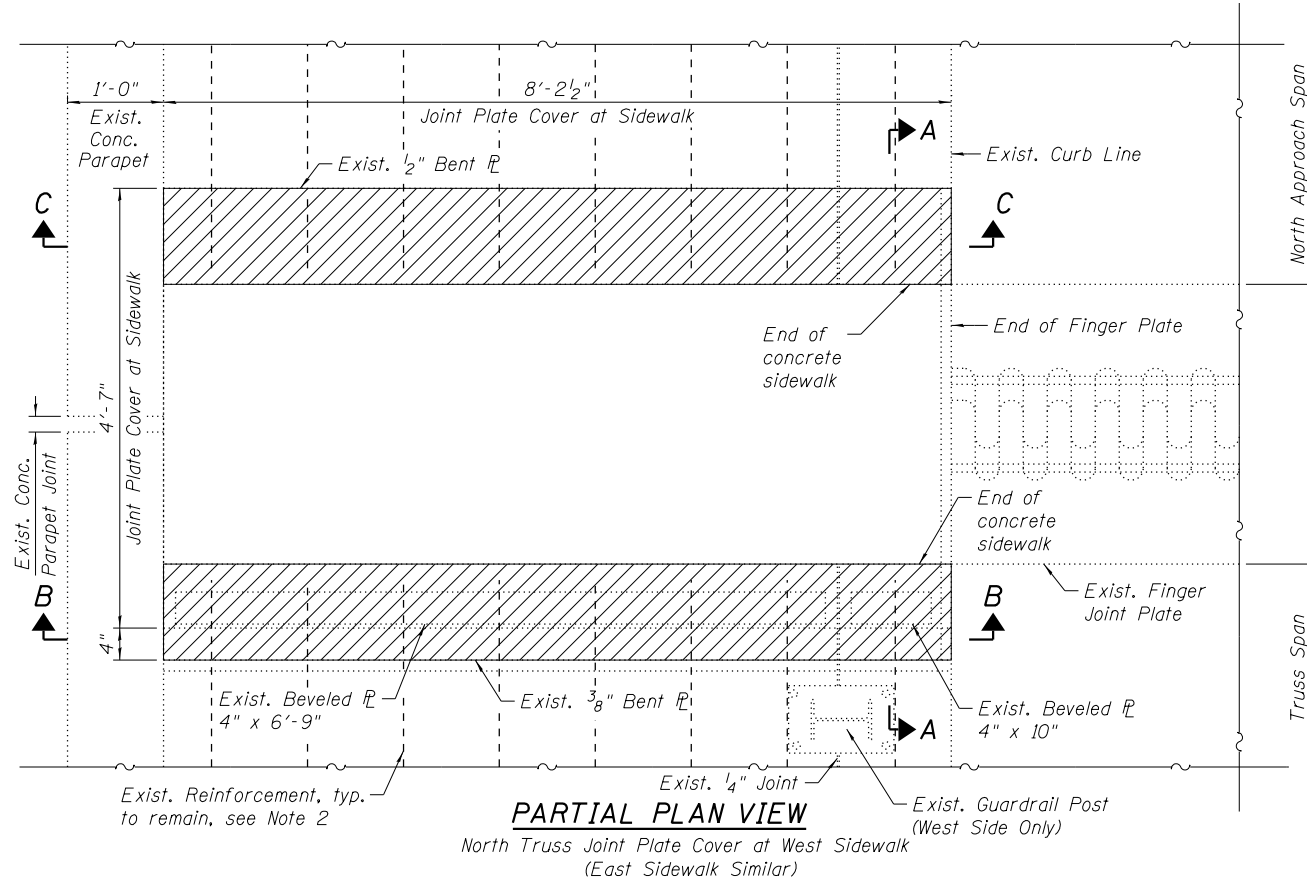
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	793
Concrete Removal	Cu. Yd.	63.5

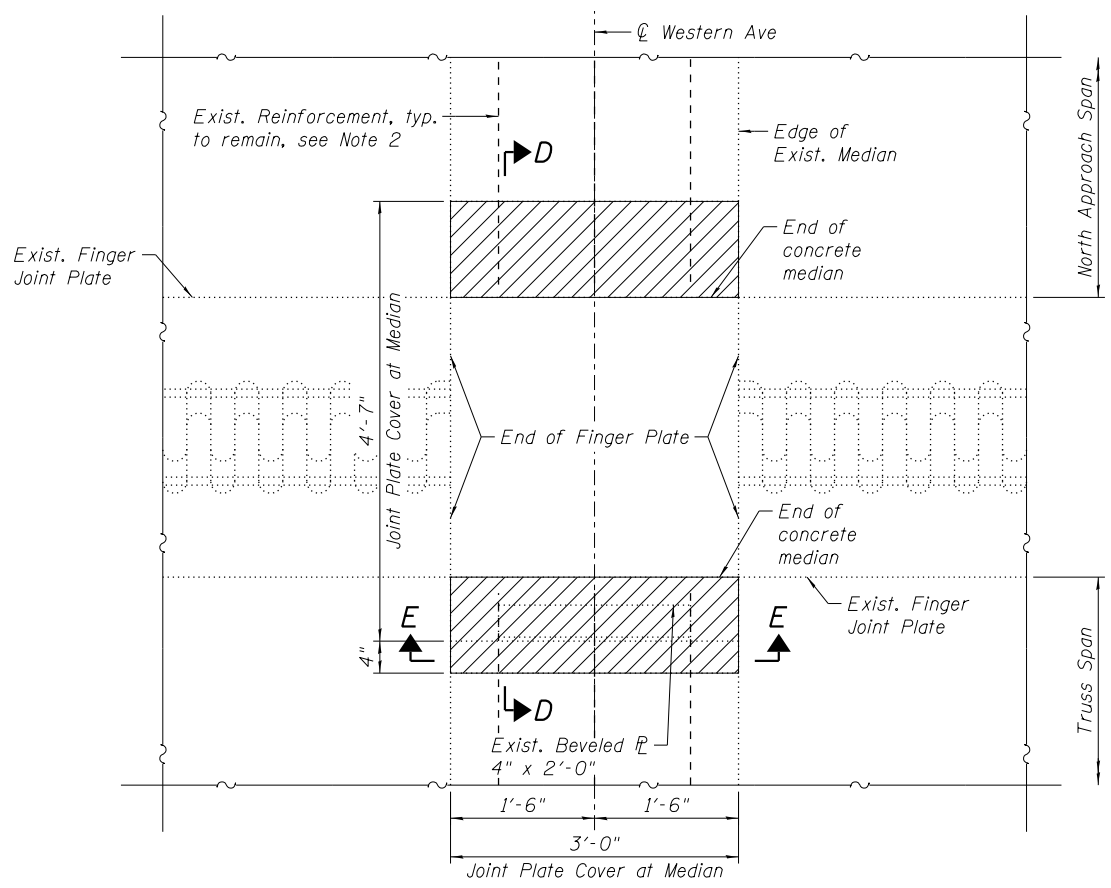
N:\PROJECTS\20020056\01\Design\Structural\CAD\016-0777_60K72_61.dgn

USER NAME = kaisneros	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 12:9.6000 '1' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

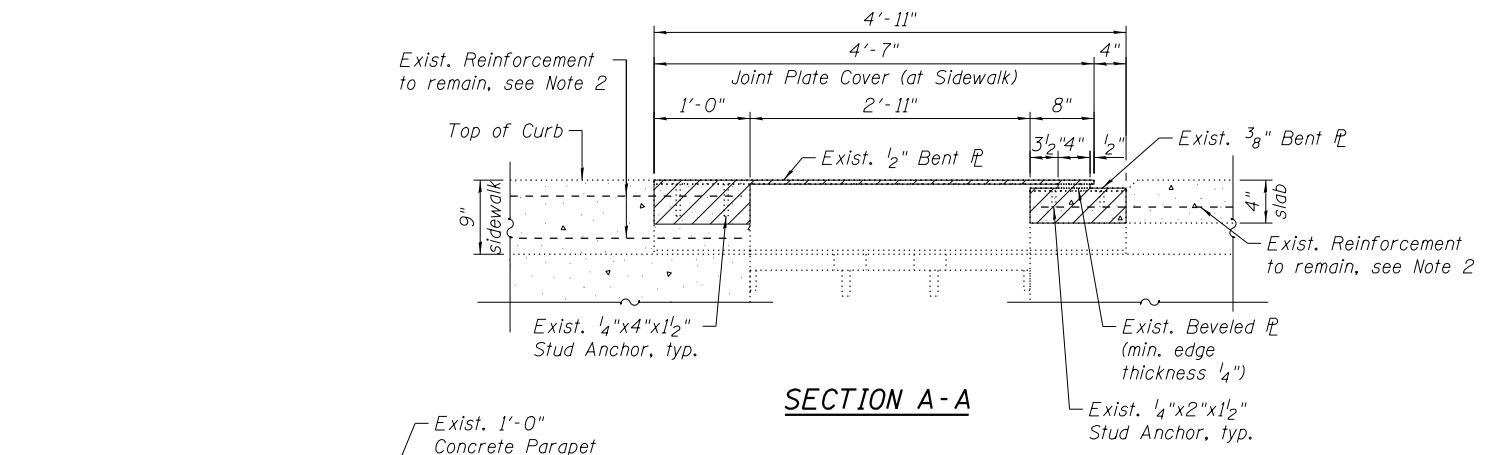
F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY Cook	TOTAL SHEETS 184	SHEET NO. 119
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



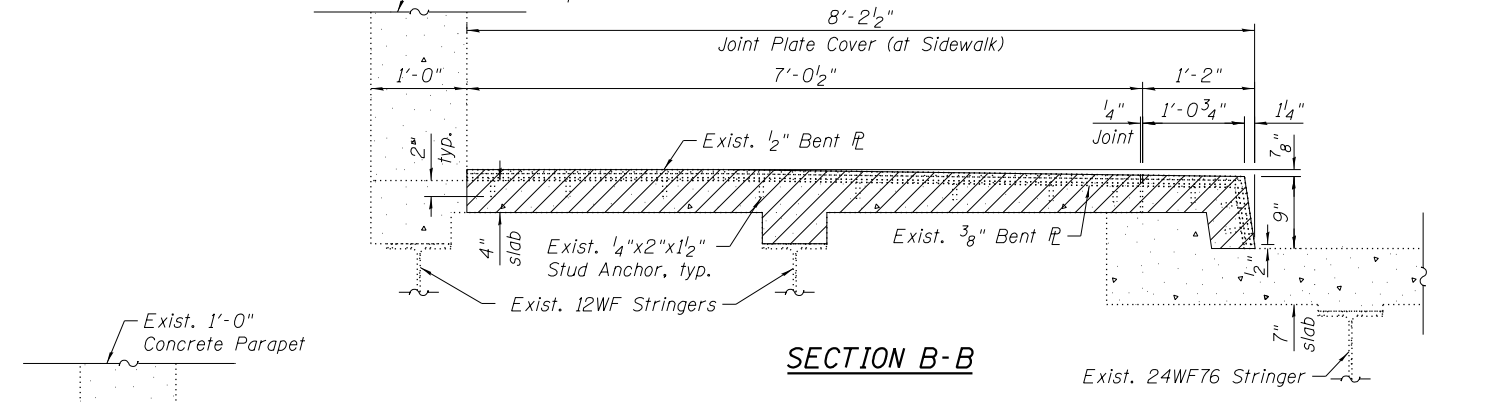
PARTIAL PLAN VIEW
North Truss Joint Plate Cover at West Sidewalk
(East Sidewalk Similar)



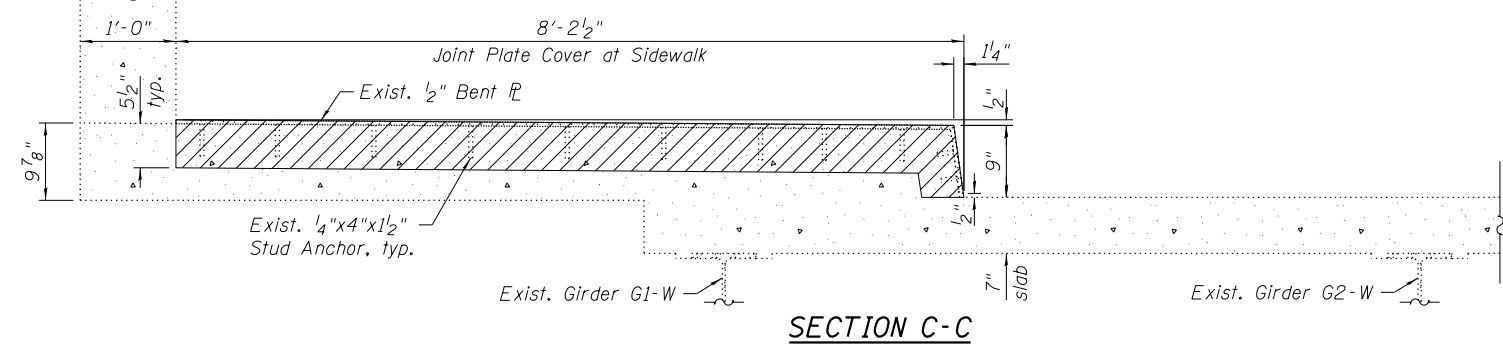
PARTIAL PLAN VIEW
North Truss Joint Plate Cover at Median



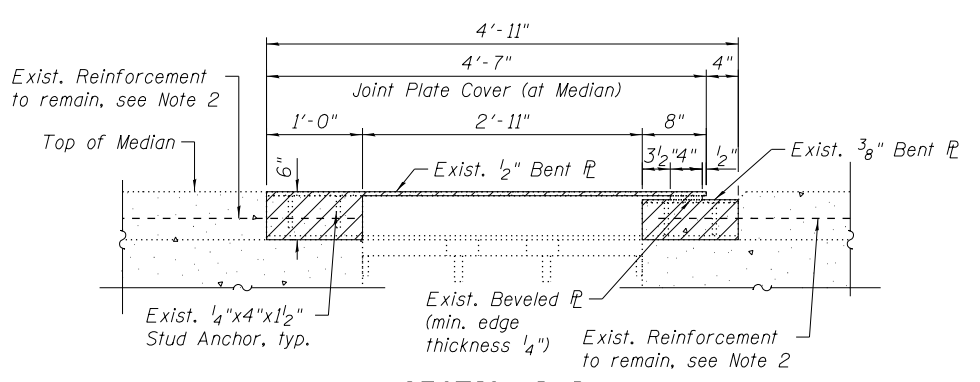
SECTION A-A



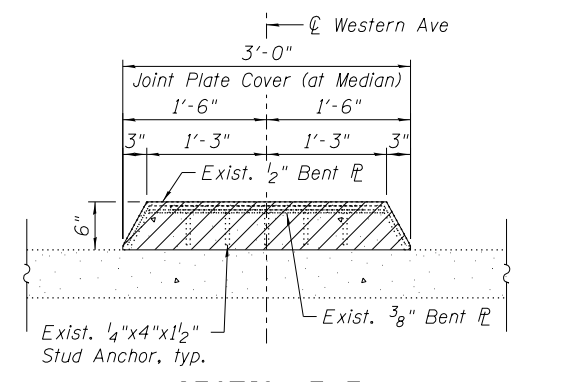
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

NOTES:

- Existing stud anchors and structural steel plates to be removed at the time of the concrete removal. Cost included with Concrete Removal.
- Existing Reinforcement Bars are to be cleaned and incorporated into new construction. Cost included with Concrete Removal.
- Details based on existing plans. The Contractor shall field verify existing conditions and make necessary approved adjustments.

LEGEND

Concrete Removal

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	0.6

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_62.dgn

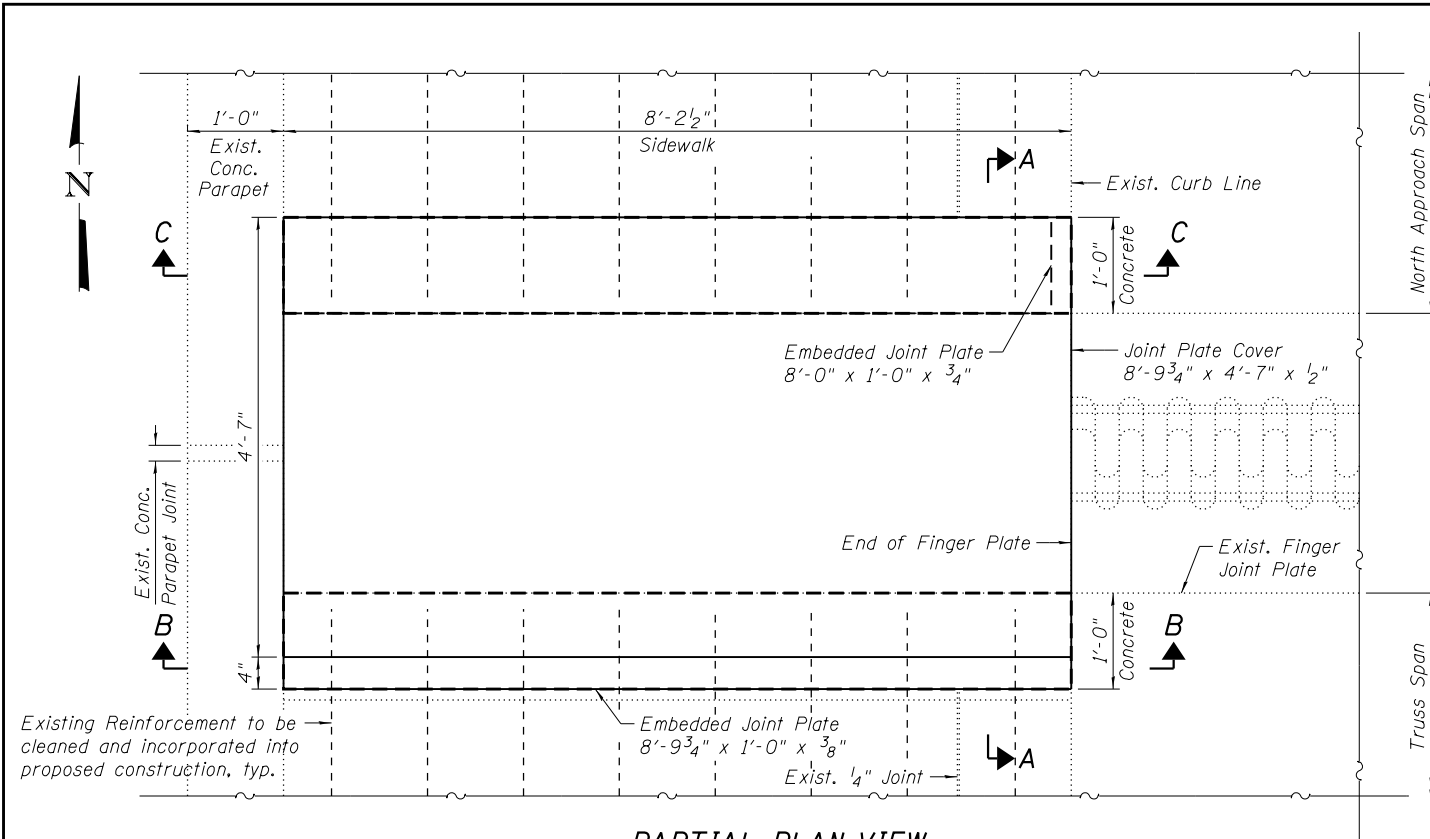


USER NAME = kaisneros	DESIGNED - NG	REVISED -
PLOT SCALE = 2:0.0000 1' = 1/4\"/>		
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH TRUSS JOINT PLATE COVER REMOVAL
STRUCTURE NO. 016-0777
SHEET NO. 62 OF 104 SHEETS

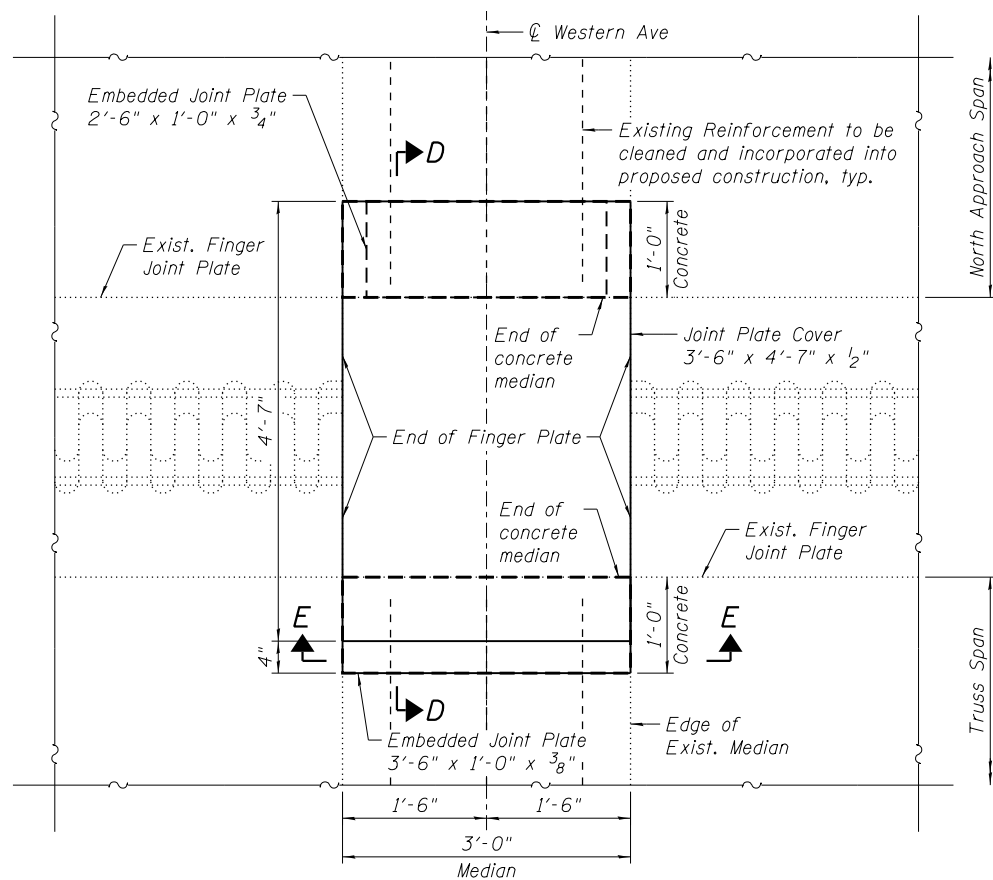
F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY Cook	TOTAL SHEETS 184	SHEET NO. 120
CONTRACT NO. 60K72				ILLINOIS FED. AID PROJECT



PARTIAL PLAN VIEW

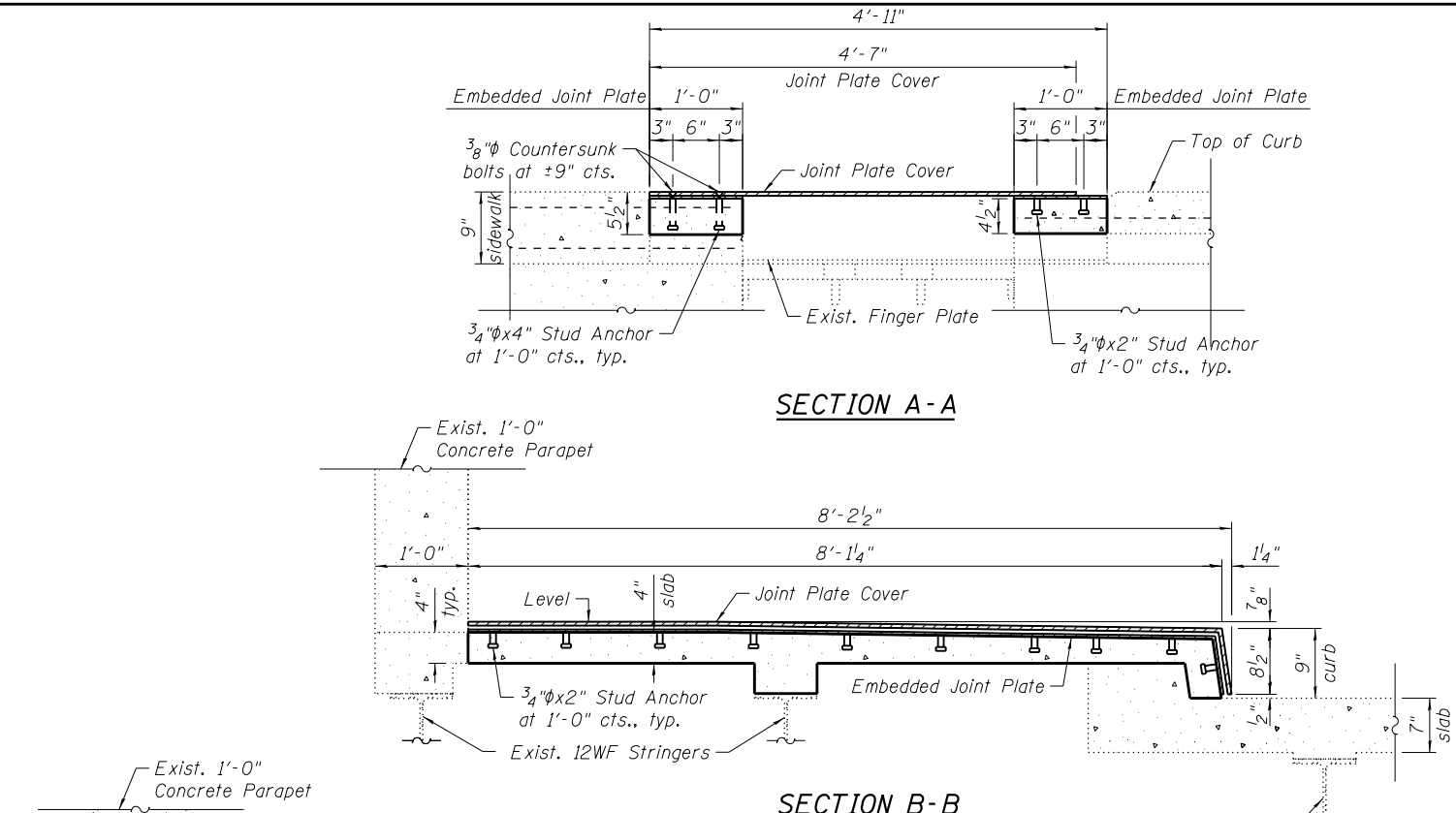
North Truss Joint Plate Cover at Sidewalk

Existing Reinforcement to be cleaned and incorporated into proposed construction, typ.

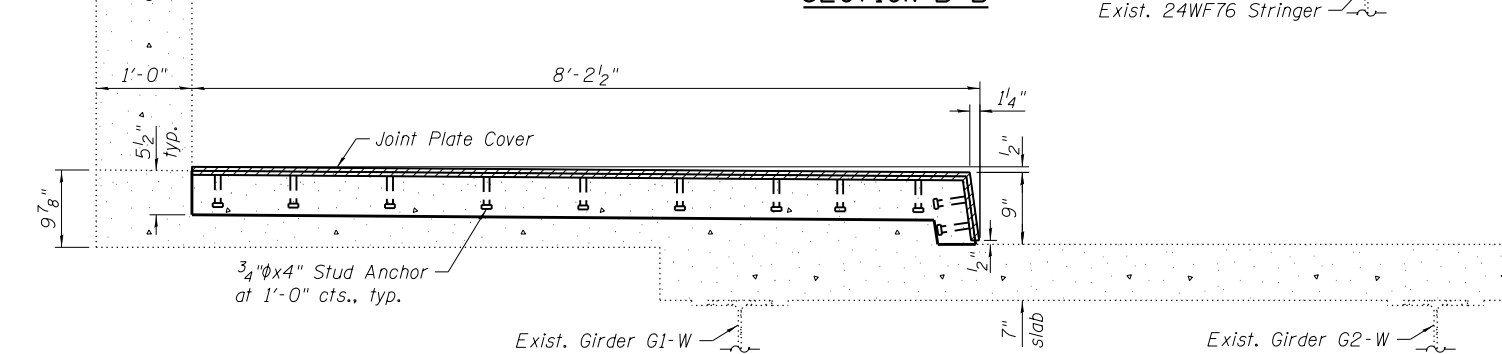


PARTIAL PLAN VIEW

North Truss Joint Plate Cover at Median



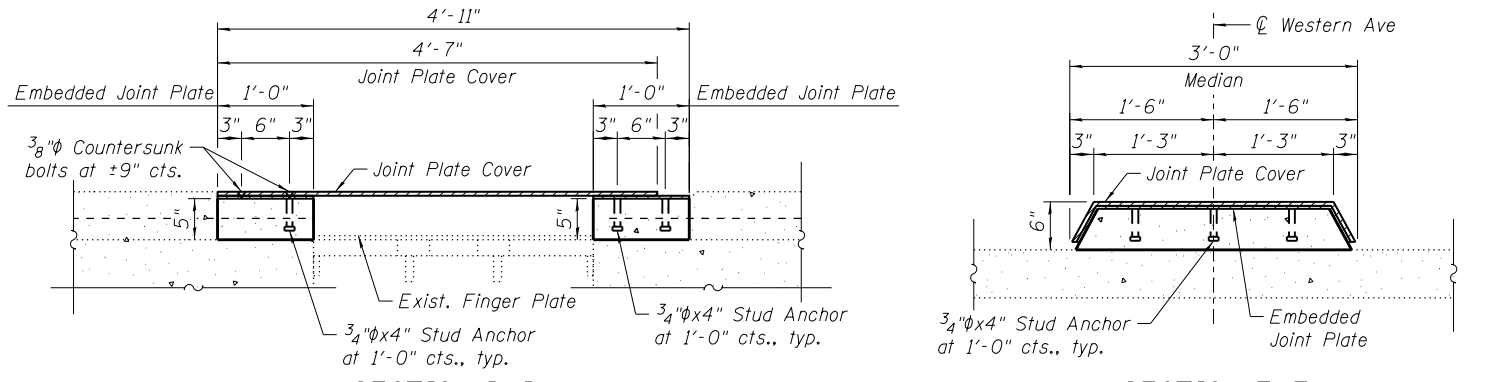
SECTION A-A



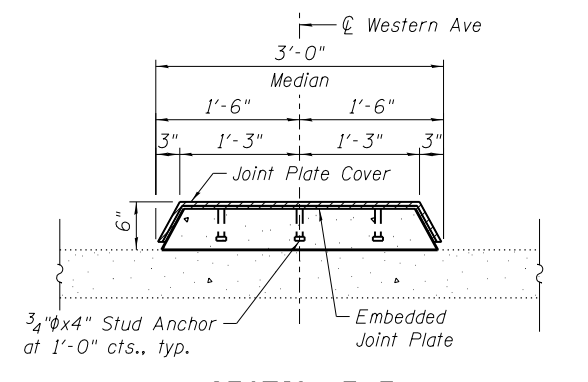
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

NOTES:

- All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
- Stud Anchors shall be granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications, automatically end welded.
- Details based on existing plans. The Contractor shall field verify existing conditions and make necessary approved adjustments prior to ordering materials.

BILL OF MATERIAL

Item	Unit	Total
Concrete Superstructure	Cu. Yd.	0.6
Furnishing and Erecting Structural Steel	Pounds	2,870

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_63.dgn



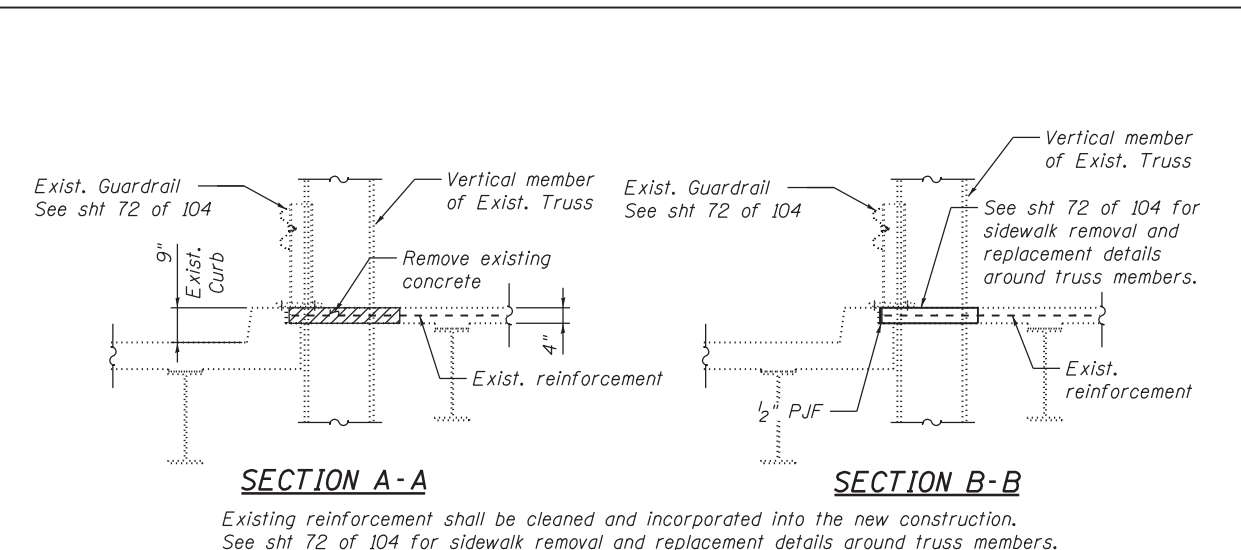
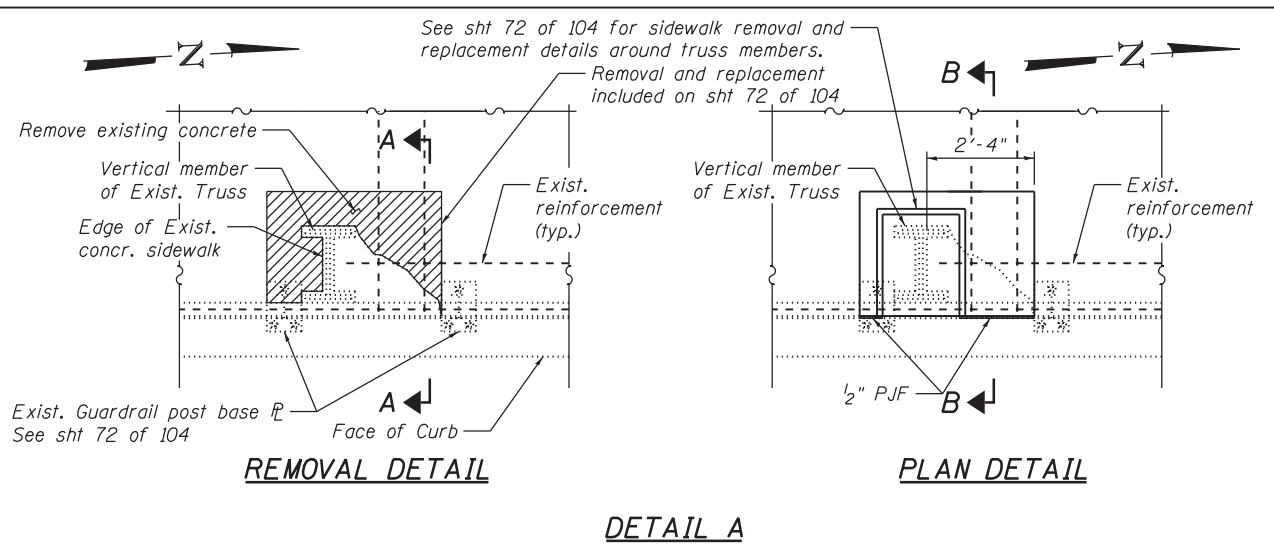
USER NAME = kaisneros	DESIGNED - NG	REVISED -
PLOT SCALE = 2:0.0000 1" = 1'-0"	CHECKED - BWS	REVISED -
PLOT DATE = 4/11/2016	DRAWN - SBA	REVISED -
	CHECKED - BWS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

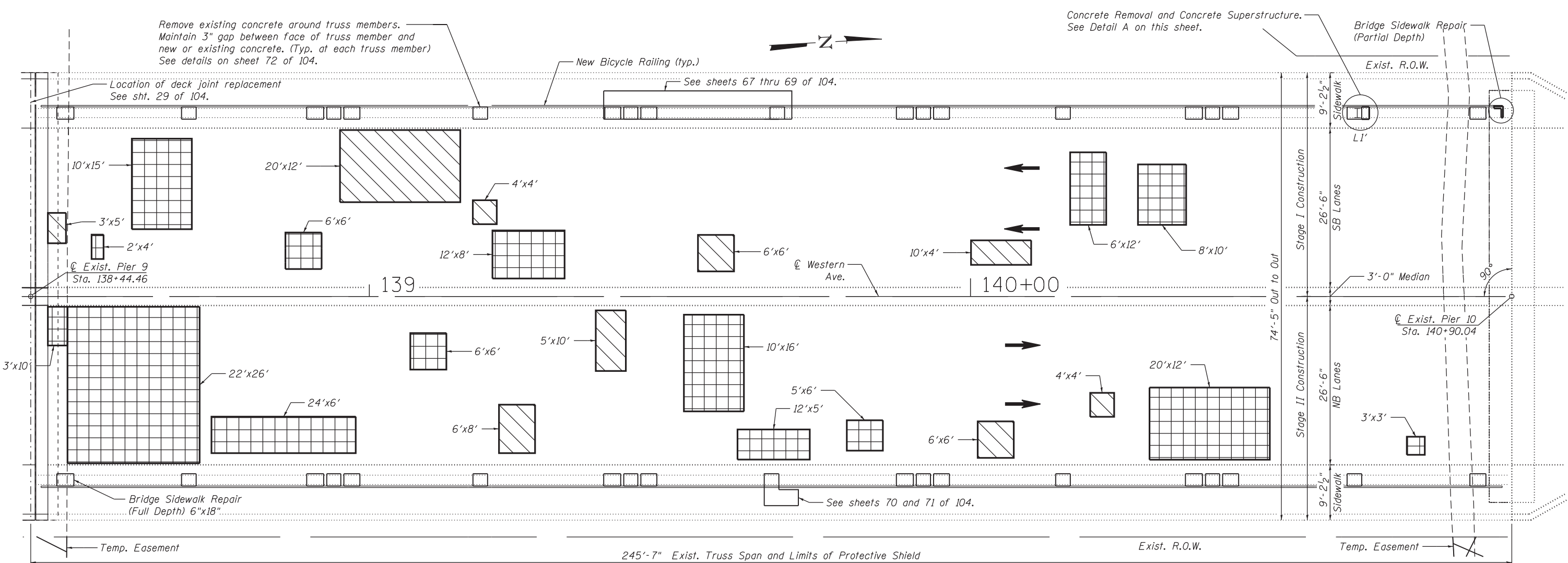
**NORTH TRUSS JOINT PLATE COVER DETAILS
STRUCTURE NO. 016-0777**

SHEET NO. 63 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	121
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



Existing reinforcement shall be cleaned and incorporated into the new construction.
 See sht 72 of 104 for sidewalk removal and replacement details around truss members.



LEGEND

	Concrete Removal
	Deck Slab Repair (Partial Depth)
	Deck Slab Repair (Full Depth, Type II)

PLAN
 (Existing Truss Span - Deck Repairs)

BILL OF MATERIAL

Item	Unit	Total
Bridge Sidewalk Repair (Full Depth)	Sq. Ft.	1
Bridge Sidewalk Repair (Partial Depth)	Sq. Ft.	2
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	192
Deck Slab Repair (Partial)	Sq. Yd.	56

See Special Provisions for Deck Slab Repair and Bridge Sidewalk Repair

FILE NAME = W:\191-132-1001-Western-Ave-CADD-Sheets\Structure\016-0777\64 - Truss Deck Repair-Plan.dgn

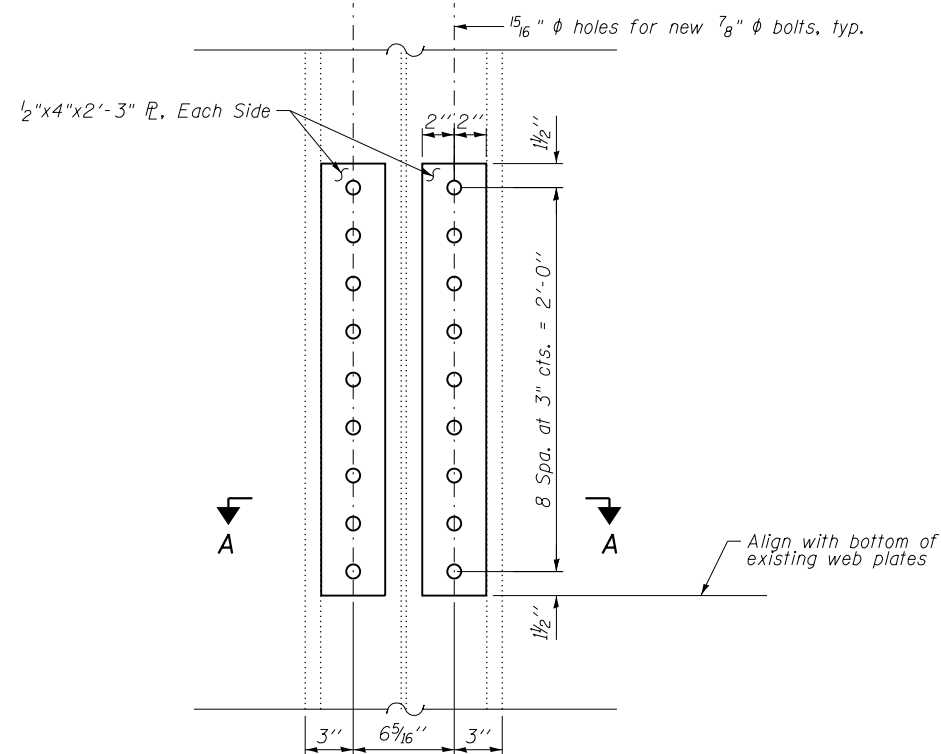
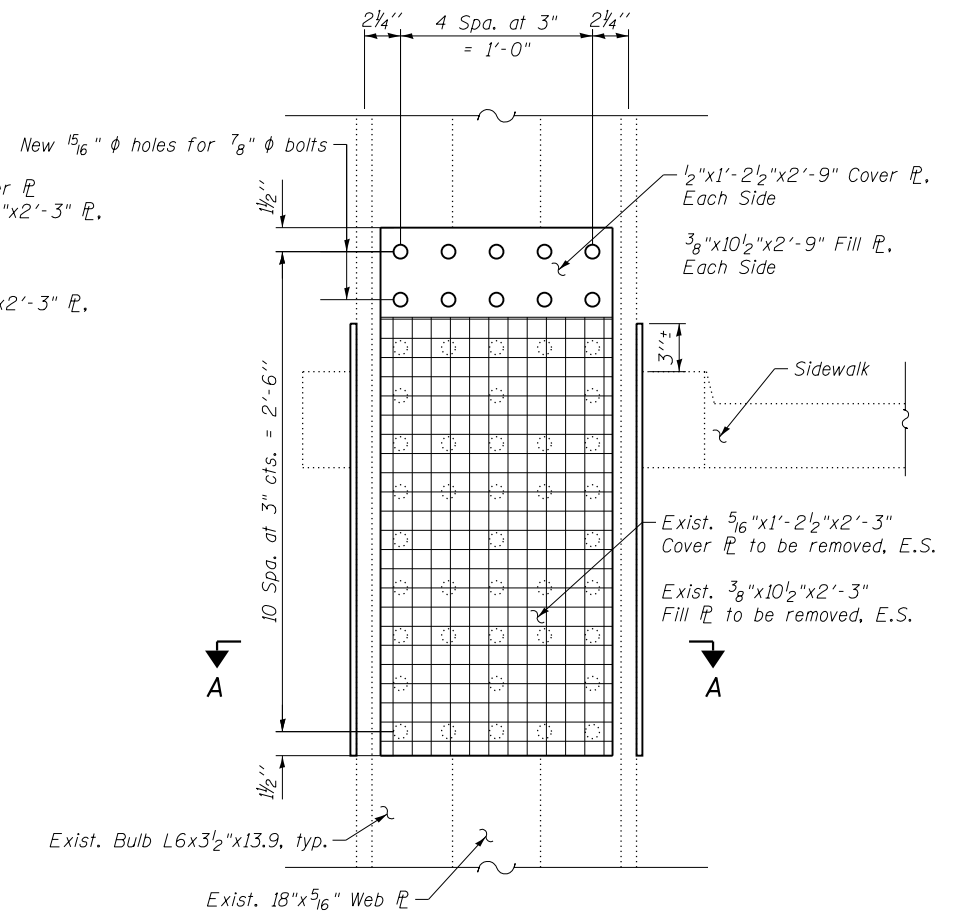
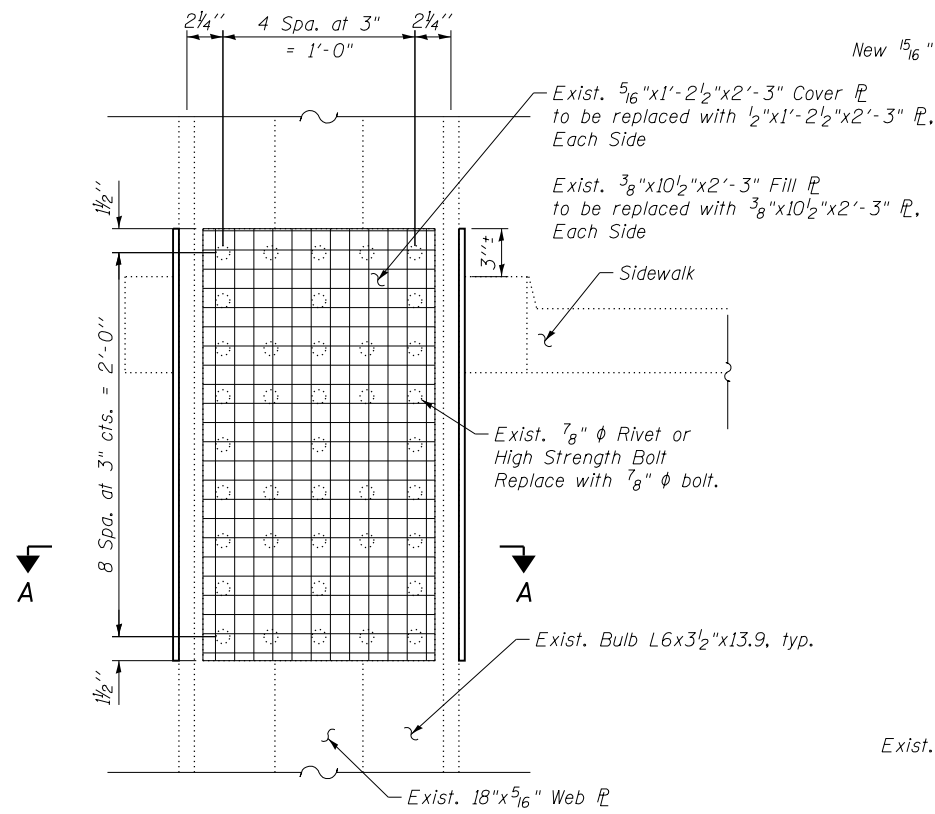
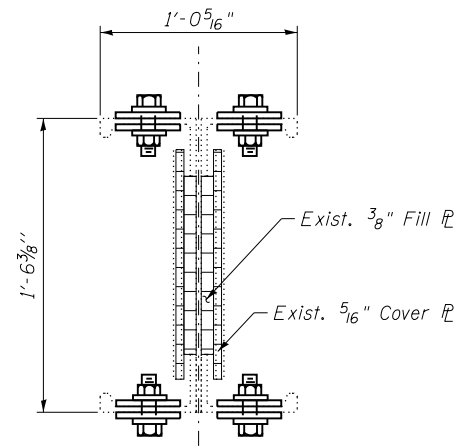


USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 8/6/2019	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS DECK REPAIR PLAN
STRUCTURE NO. 016-0777
 SHEET NO. 64 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	122
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



VERTICAL TRUSS MEMBER WEB DETAIL
 U1-L1 (West Truss), U3-L3 (West Truss),
 U1'-L1' (West Truss), U5-L5 (East Truss)

VERTICAL TRUSS MEMBER WEB DETAIL
 U3-L3 (East Truss)

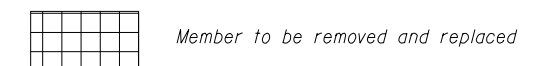
NOTES:

- All dimensions shall be verified in the field before ordering plates.
- Repairs should include but not be limited to the areas shown. The actual areas to be determined by the ENGINEER at the time of construction and added to As-Built plans.
- Cost of Materials, drilling holes, and removing rivets are included in the cost of "Structural Steel Repair."
- Flange Plates shall be installed before the existing web plates are removed and replaced.
- For Sidewalk Removal details, see Sheets 72 and 73.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	1,910

LEGEND:



Required at U1-L1 (West Truss), U3-L3 (East Truss),
 U3'-L3' (West Truss), U5-L5 (East Truss), U1'-L1' (West Truss)

USER NAME = kaisneros	DESIGNED - APD	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN - KEC	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

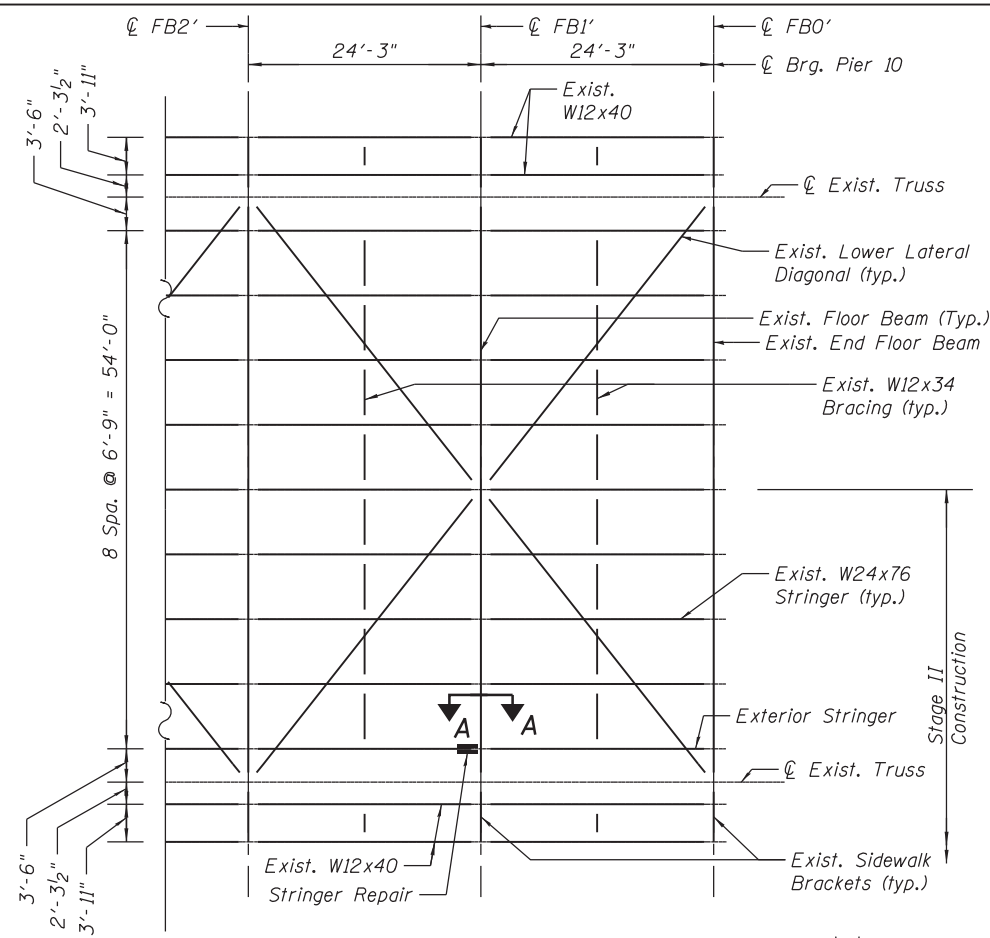
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS STRUCTURAL STEEL REPAIRS I
STRUCTURE NO. 016-0777

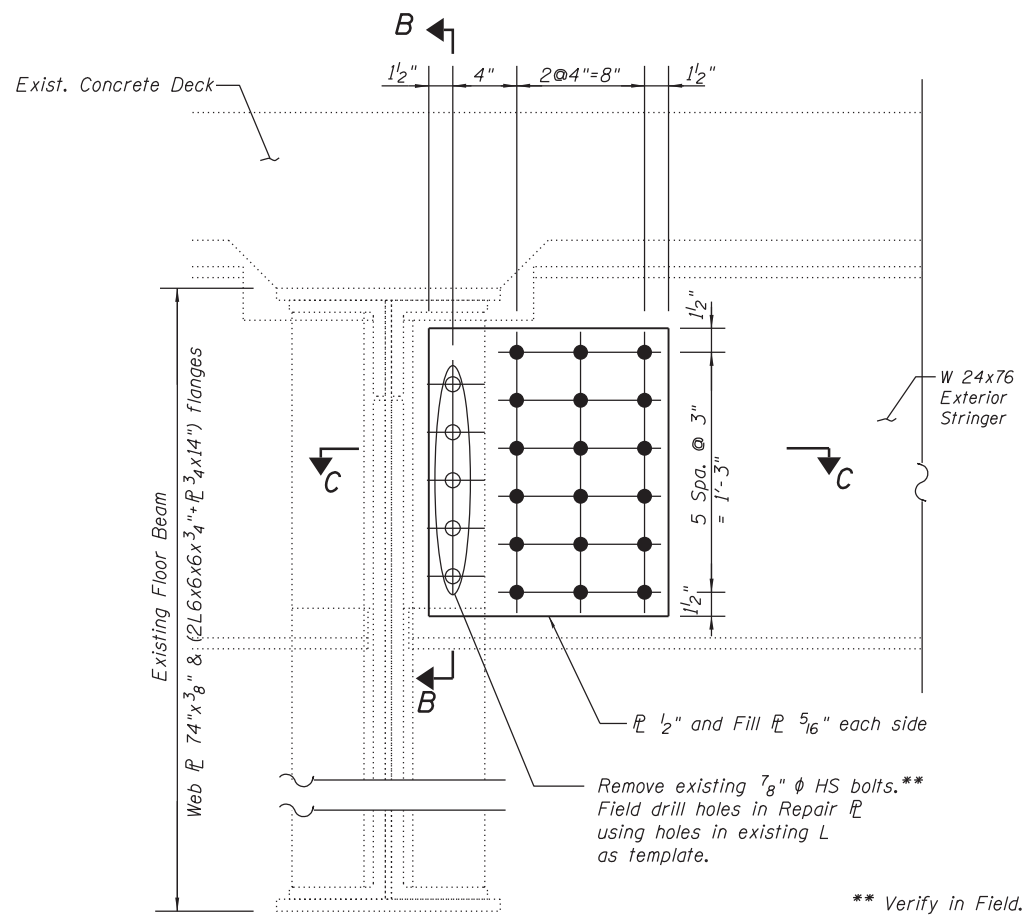
SHEET NO. 65 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	123
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

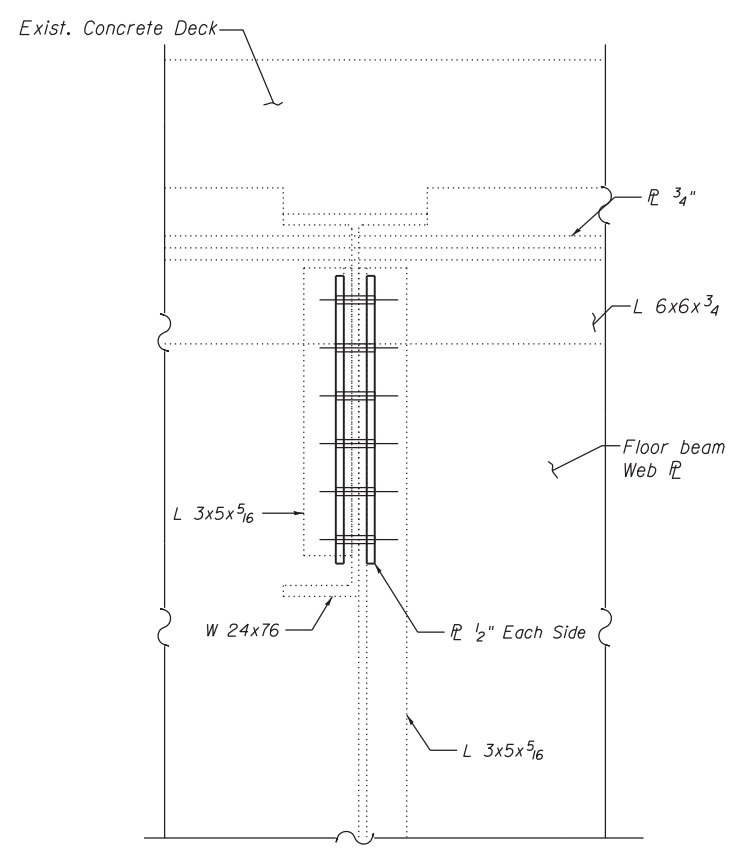
\\svr503\mpshares\pub\lrc\PROJ\00220096\01\Design\Structural\CAD\016-0777_60K72_65.dgn



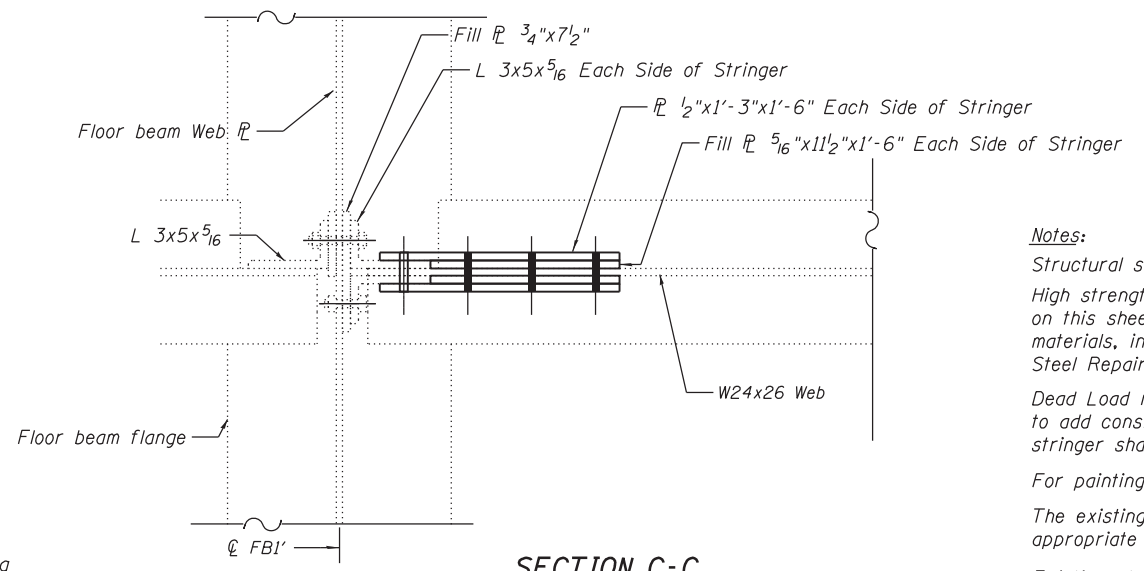
PARTIAL FLOOR FRAMING PLAN
(North End of Existing Truss Span)



SECTION A-A



SECTION B-B



SECTION C-C

EXTERIOR STRINGER
Service Load Reactions @ Floor Beam From One Stringer*

LOADING	REACTION
DL (K)	11.3
LL (K)	27
I (K)	8.1
Min. Shoring and Cribbing Capacity (K)	46.4

* REACTIONS from 1962 Plans.

BOLT HOLE LEGEND

- - Holes to be shop drilled.
- - Holes to be field drilled using existing holes as template. Cost of drilling included in Structural Steel Repair.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pounds	140
Temporary Shoring and Cribbing	Each	1

Notes:
Structural steel for repair plates and fill plates may be AASHTO M270 Grade 36. High strength ASTM A325 3/4" phi bolts shall be used for the indicated repairs on this sheet unless noted otherwise. Holes shall be 13/16" phi. All work and materials, including steel plates and bolts are included in the pay item "Structural Steel Repair".
Dead Load reactions provided for temporary shoring and cribbing. Contractor to add construction live loads. All work associated with temporarily supporting stringer shall be paid for as Temporary Shoring and Cribbing. See Special Provisions.
For painting new Structure Steel see General Notes.
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required for primary connections by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

(Sheet 1 of 1)

FILE NAME = W:\191\132\DOT\Western\Ave\CAD\Drawings\016-0777\66 - Truss Struc Stl Repairs II.dgn



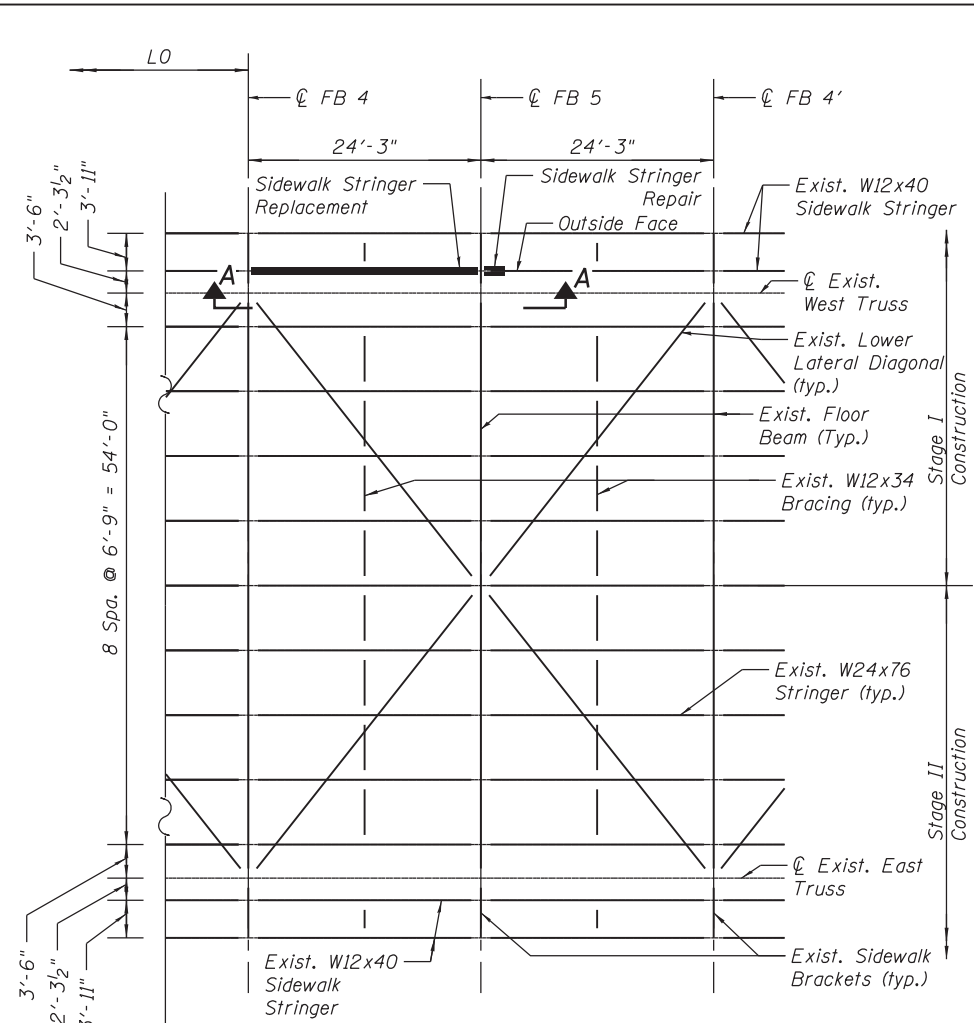
USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 8/1/2019	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS STRUCTURAL STEEL REPAIRS II
STRUCTURE NO. 016-0777

SHEET NO. 66 OF 104 SHEETS

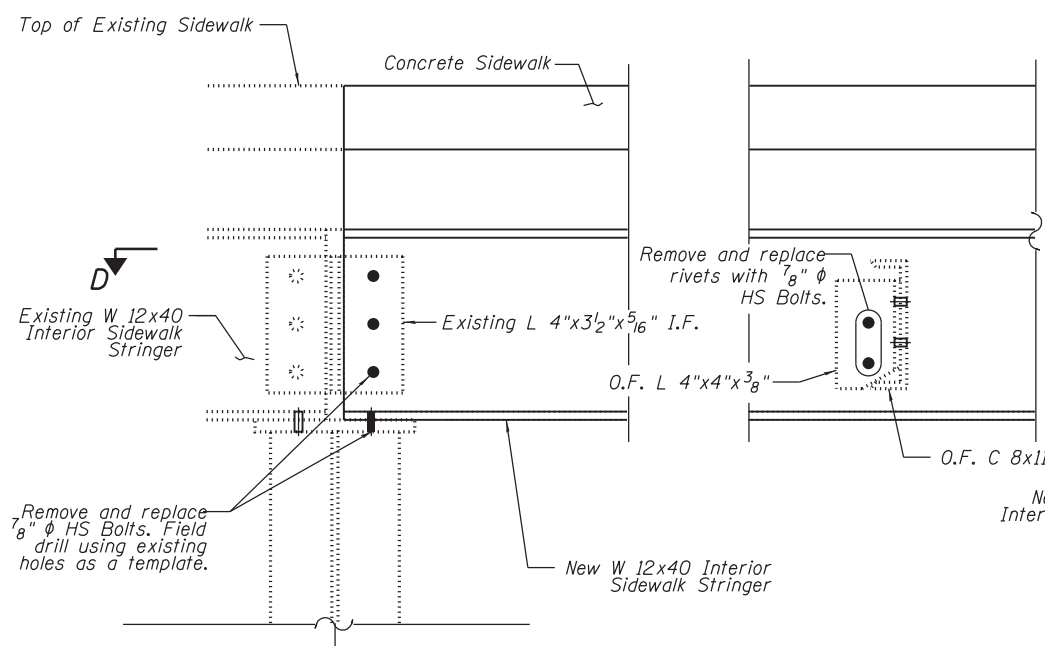
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	124
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



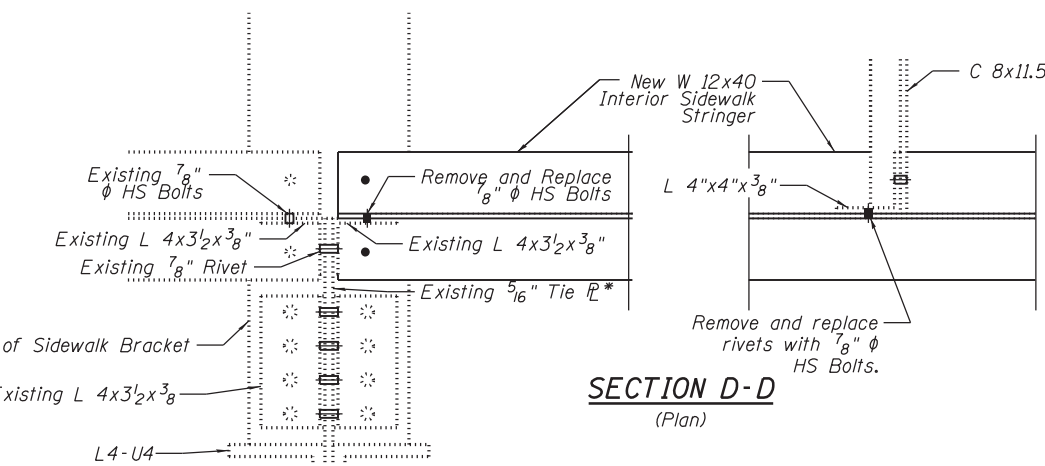
PARTIAL FLOOR FRAMING PLAN
(Center of Existing Truss Span)

LEGEND

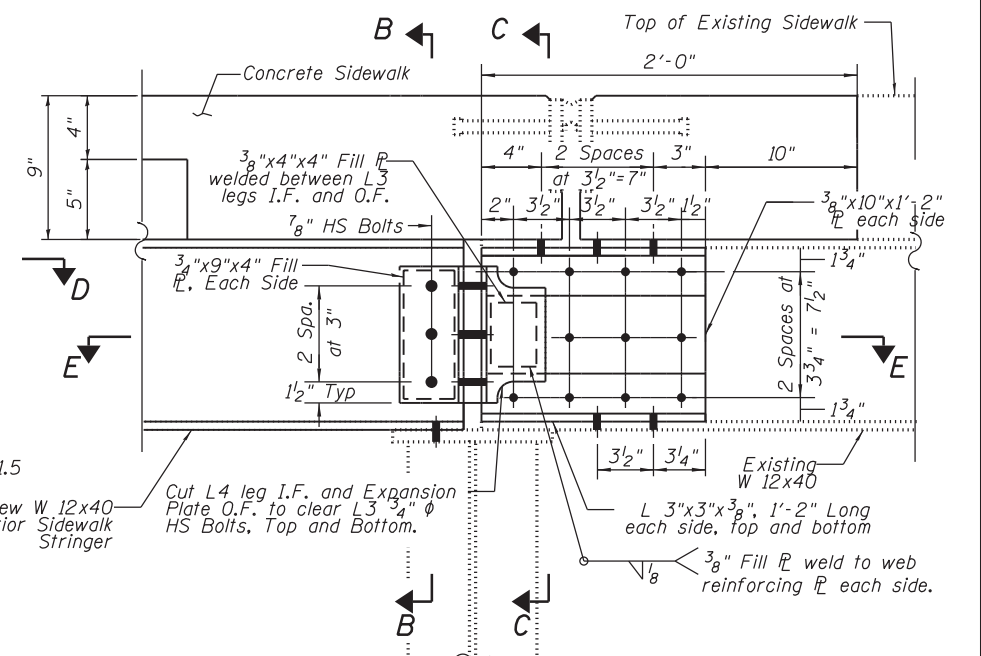
- - New 3/4" or 7/8" HS Bolt
- - Existing Rivet or Bolt
- O.F. indicates Outside Face
- I.F. indicates Inside Face
- V.I.F. indicates Verify in Field



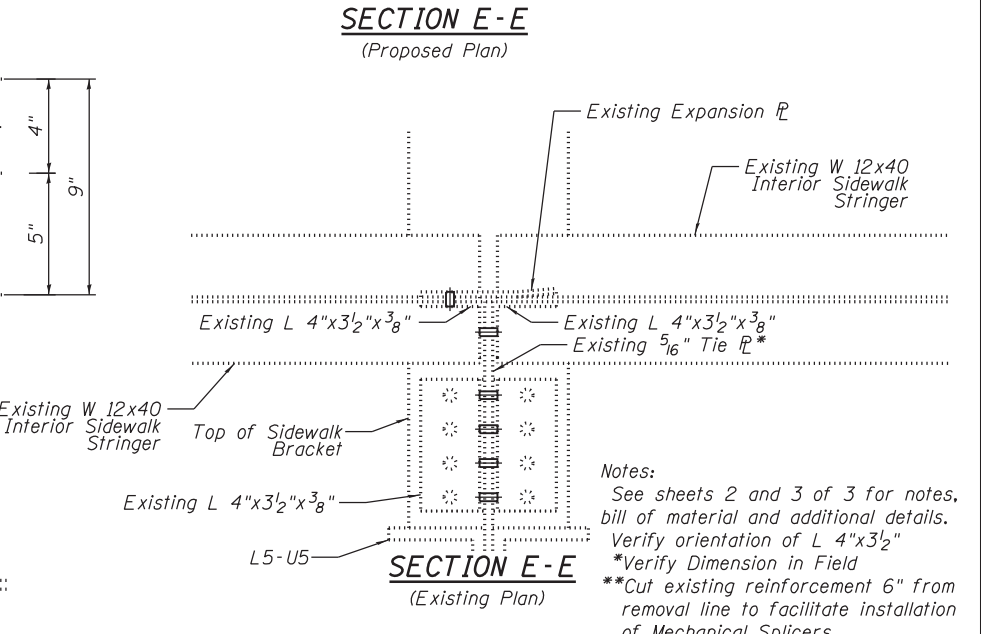
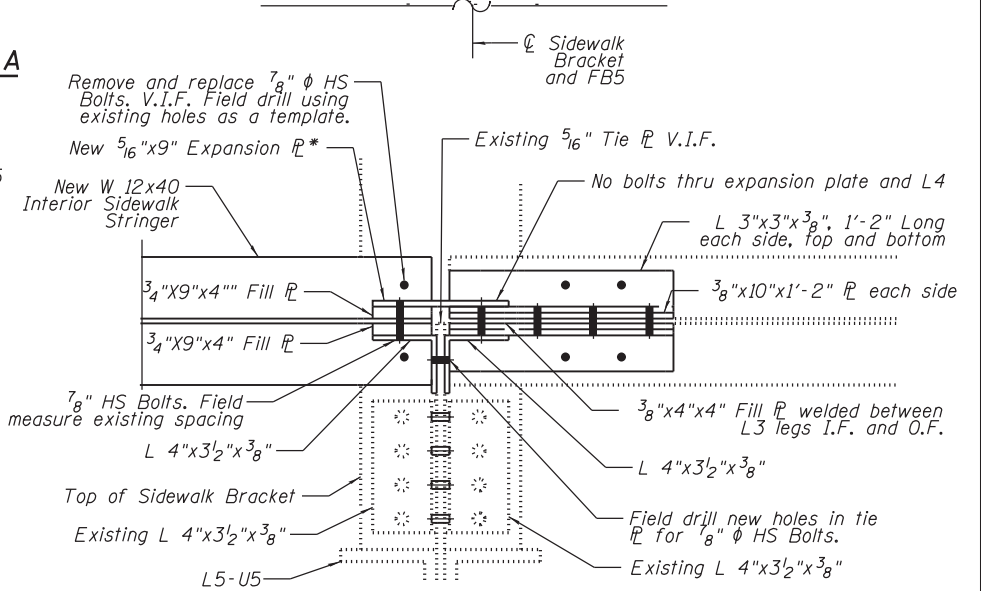
SECTION A-A
(Elevation)



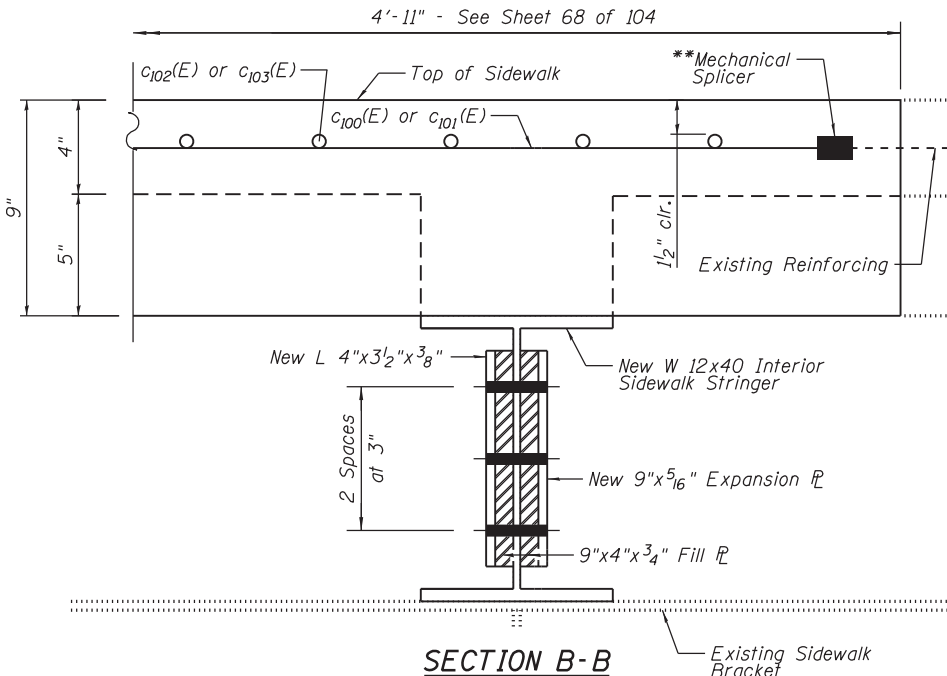
SECTION D-D
(Plan)



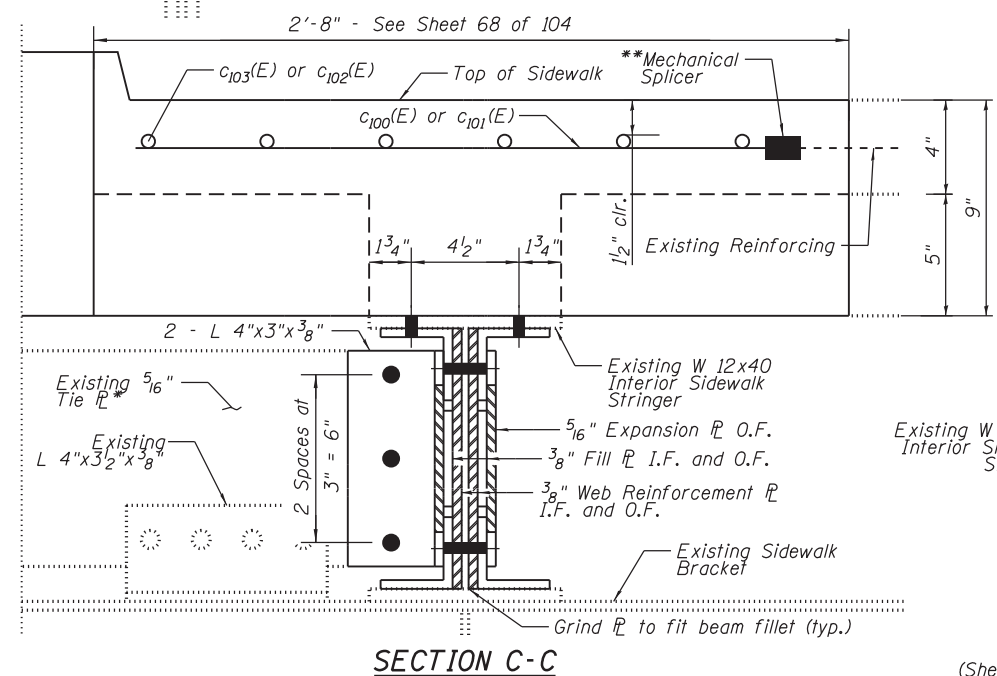
SECTION E-E
(Proposed Plan)



Notes:
See sheets 2 and 3 of 3 for notes, bill of material and additional details.
Verify orientation of L 4x3 1/2
*Verify Dimension in Field
**Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.



SECTION B-B



SECTION C-C

(Sheet 1 of 3)

FILE NAME = W:\191\132\1001\Western_Ave\CADD_Sheets\Structure\016-0777\67 - Truss Struc Stl Repairs III.dwg



USER NAME =	DESIGNED - JJI	REVISED -
CHECKED - HB	REVISOR -	
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 8/1/2019	CHECKED - JJI	REVISED -

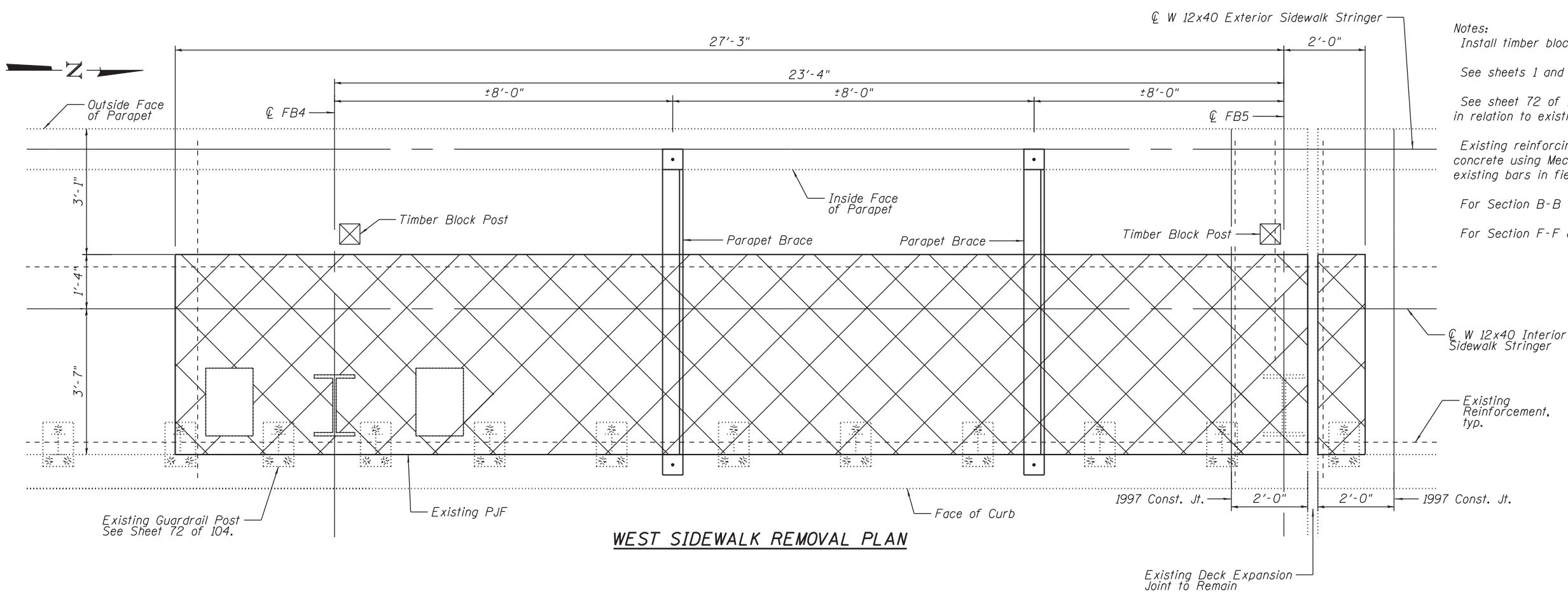
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS STRUCTURAL STEEL REPAIRS III
STRUCTURE NO. 016-0777

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	125
CONTRACT NO. 60K72				

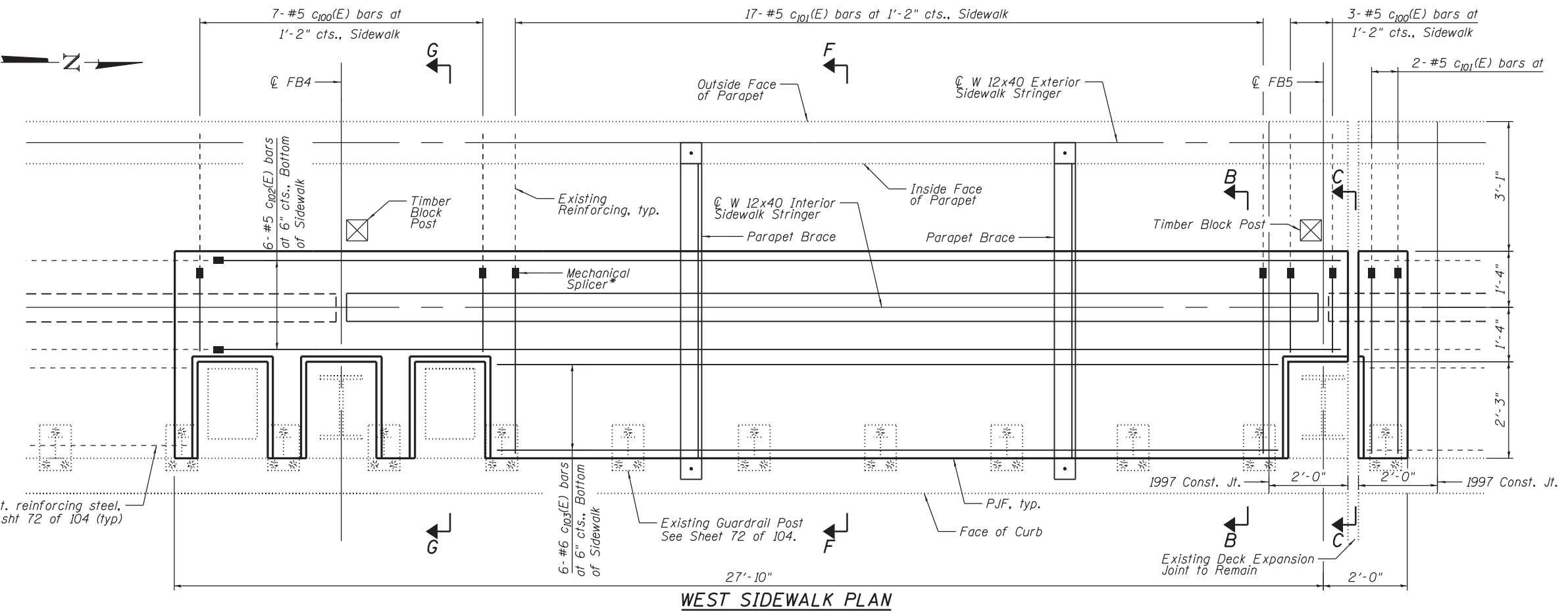
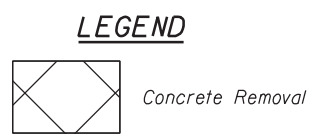
SHEET NO. 67 OF 104 SHEETS

ILLINOIS FED. AID PROJECT



WEST SIDEWALK REMOVAL PLAN

Notes:
 Install timber block posts and L4 braces prior to concrete removal
 See sheets 1 and 3 of 3 for additional details.
 See sheet 72 of 104 for existing reinforcement and concrete details in relation to existing truss members.
 Existing reinforcing is to be cleaned and incorporated into new concrete using Mechanical Splicers. Contractor shall verify size of existing bars in field.
 For Section B-B and C-C, see sheet 67 of 104.
 For Section F-F and G-G, see sheet 69 of 104.



WEST SIDEWALK PLAN

(Railing Omitted for Clarity)

* Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.

FILE NAME = W:\191\132\DOT\Western_Ave\CADD_Sheets\Structure\016-0777\68 - Truss Struc. Stl Repairs IV.dgn



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 8/1/2019	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

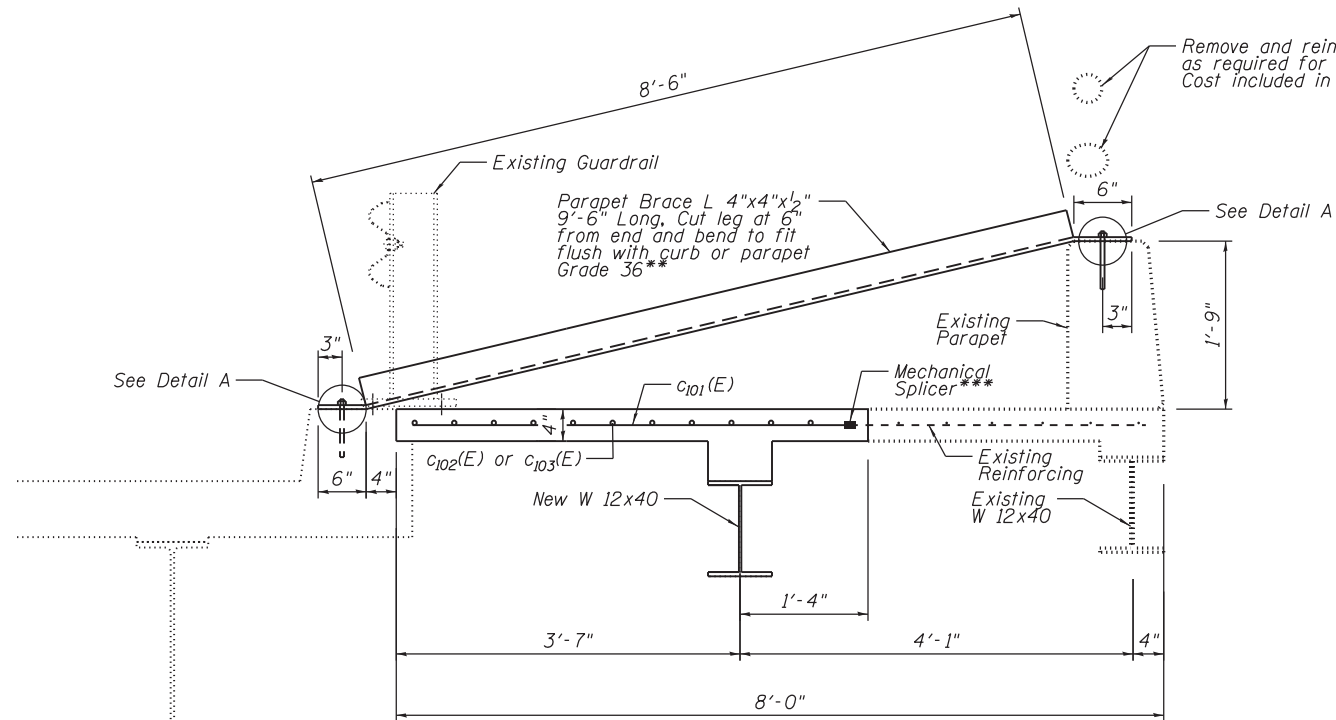
TRUSS STRUCTURAL STEEL REPAIRS IV
STRUCTURE NO. 016-0777

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	126
CONTRACT NO. 60K72				

SHEET NO. 68 OF 104 SHEETS

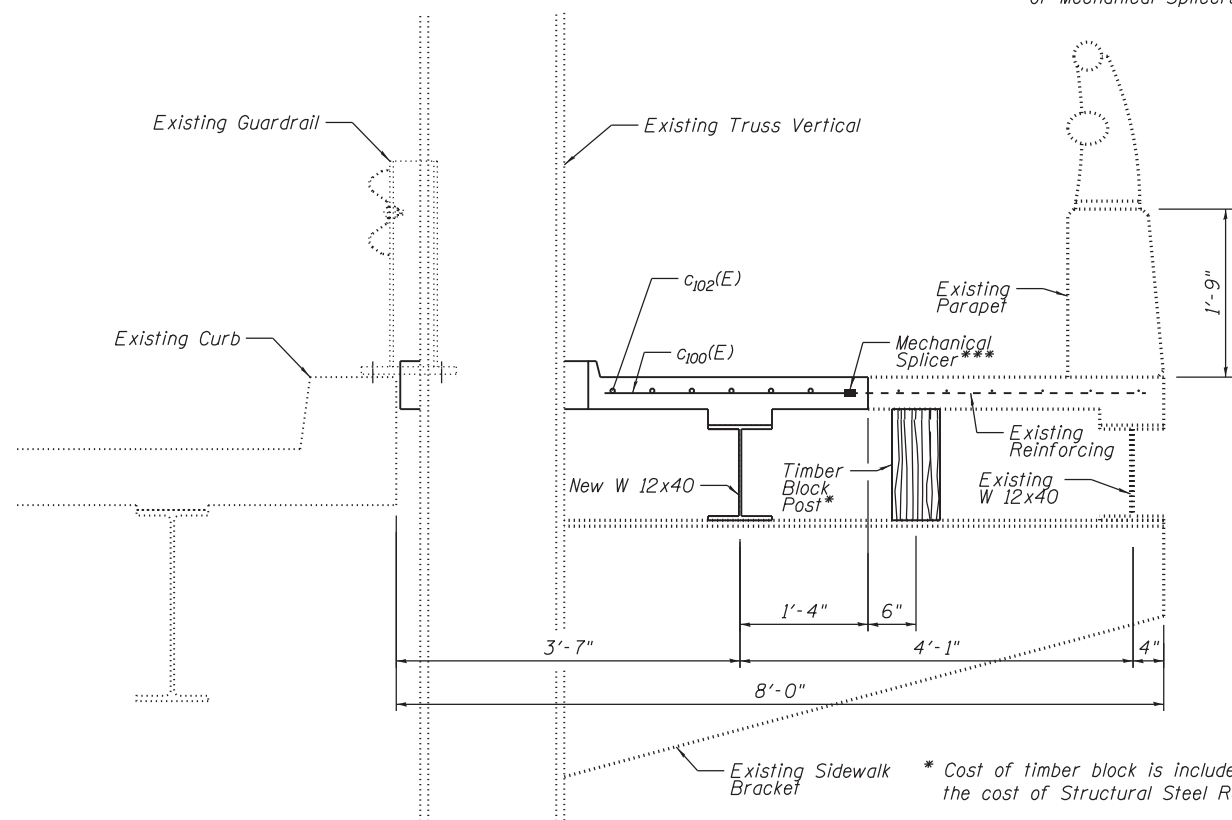
ILLINOIS FED. AID PROJECT

(Sheet 2 of 3)



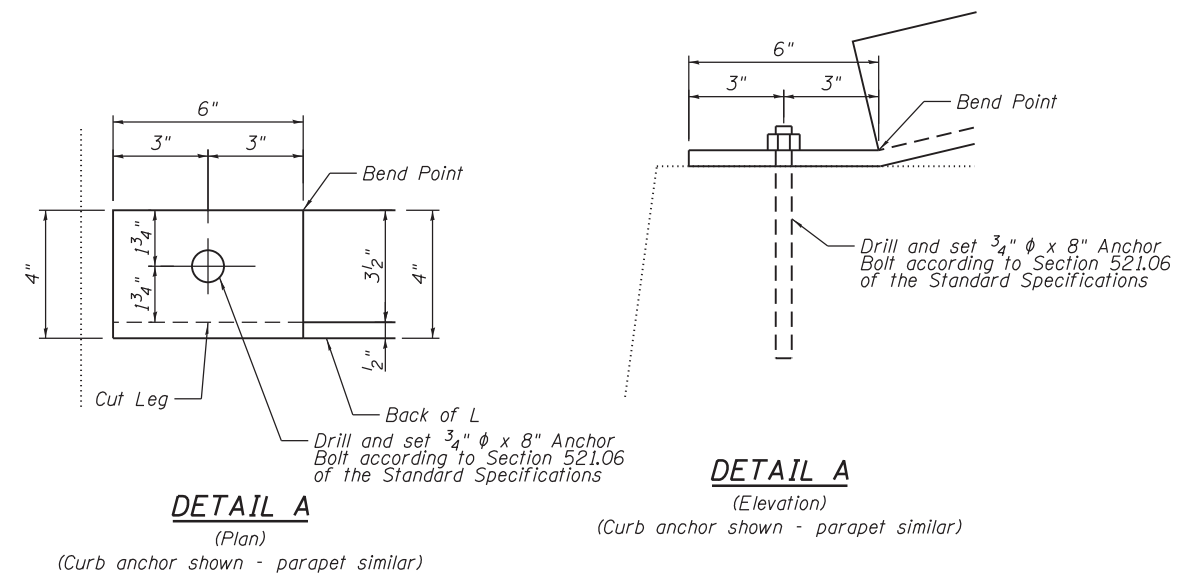
SECTION F-F

** Cost of parapet brace and anchor bolts included in the cost of Structural Steel Repair.
 *** Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.



SECTION G-G

* Cost of timber block is included in the cost of Structural Steel Repair



DETAIL A

(Plan)
 (Curb anchor shown - parapet similar)

DETAIL A

(Elevation)
 (Curb anchor shown - parapet similar)

Notes:

See sheet 72 of 104 for sidewalk removal and replacement details.

Anchor bolts shall be drilled and set according to Section 521.06 of the standard specifications.

Structural steel for repair plates, angles, and fill plates may be AASHTO M270 Grade 36.

High strength ASTM A325 3/4" phi bolts shall be used for the indicated repairs on sheet 1 of 3, unless noted otherwise. Holes shall be 13/16" phi. All work and materials, including steel plates and bolts are included in the pay item "Structural Steel Repair".

For painting new Structure Steel see General Notes.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required for primary connections by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
C100(E)	10	#5	2'-3"	
C101(E)	19	#5	4'-8"	
C102(E)	6	#5	27'-6"	
C103(E)	6	#5	18'-7"	
Concrete Removal			Cu. Yd.	1.9
Concrete Superstructure			Cu. Yd.	1.9
Reinforcement Bars, Epoxy Coated			Pound	410
Structural Steel Repair			Pound	1,200

(Sheet 3 of 3)

FILE NAME = W:\191\132\DDOT\Western\Ave\CADD_Sheets\Structural\016-0777\69 - Truss Struc Stl Repairs V.dgn



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 8/1/2019	CHECKED - JJI	REVISED -

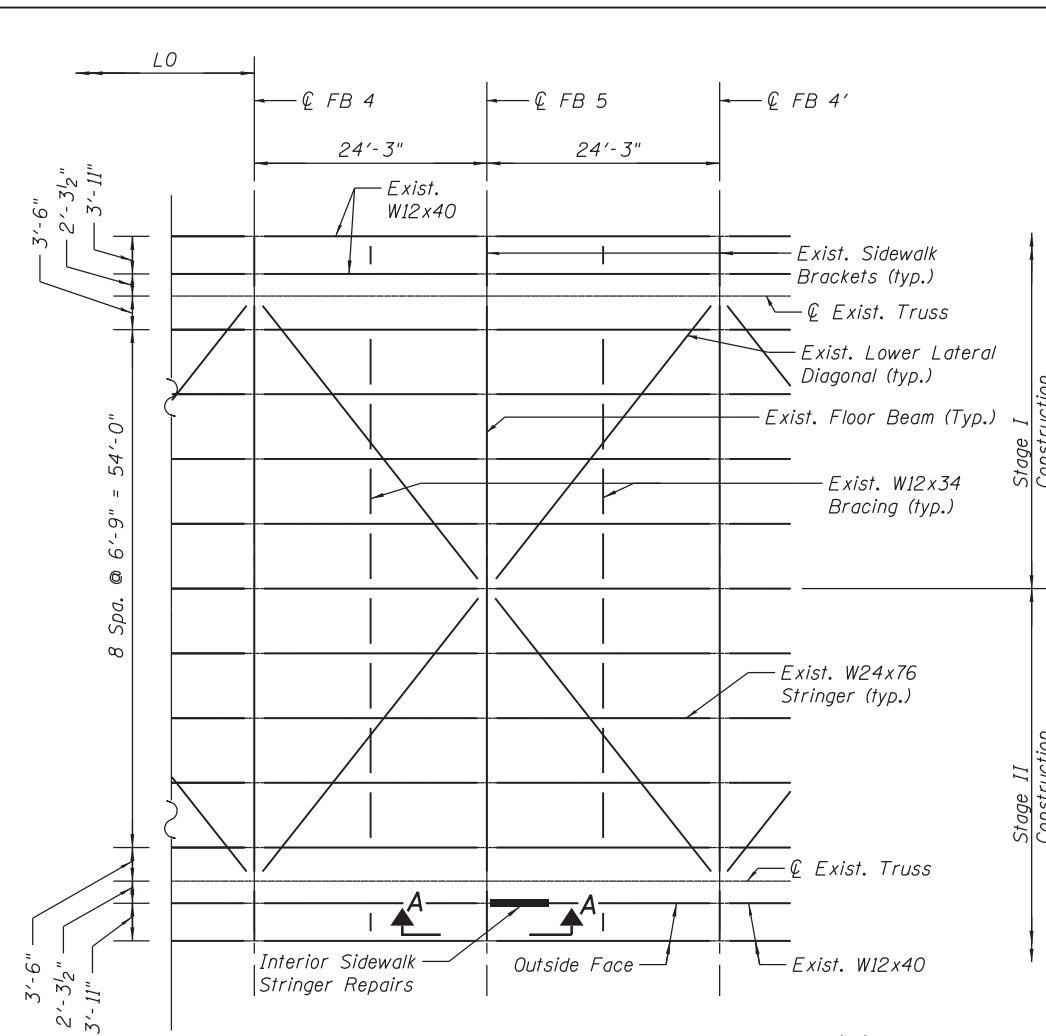
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TRUSS STRUCTURAL STEEL REPAIRS V
 STRUCTURE NO. 016-0777**

SHEET NO. 69 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	127
CONTRACT NO. 60K72				

ILLINOIS FED. AID PROJECT

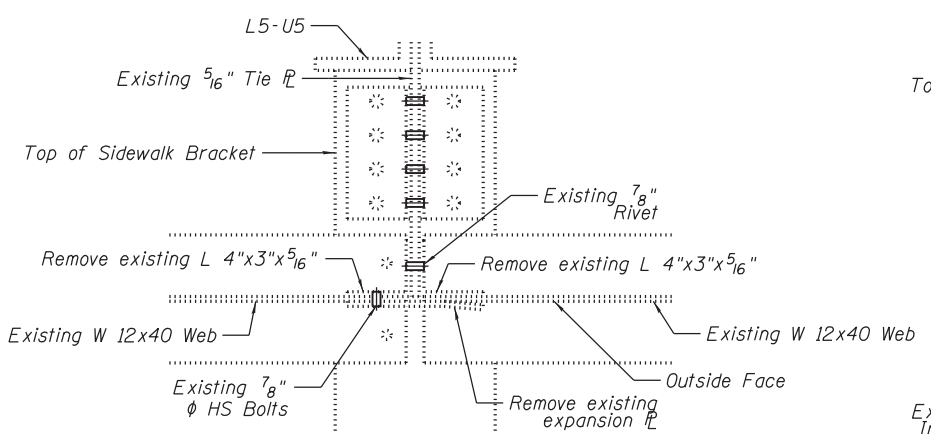


PARTIAL FLOOR FRAMING PLAN
(Center of Existing Truss Span)

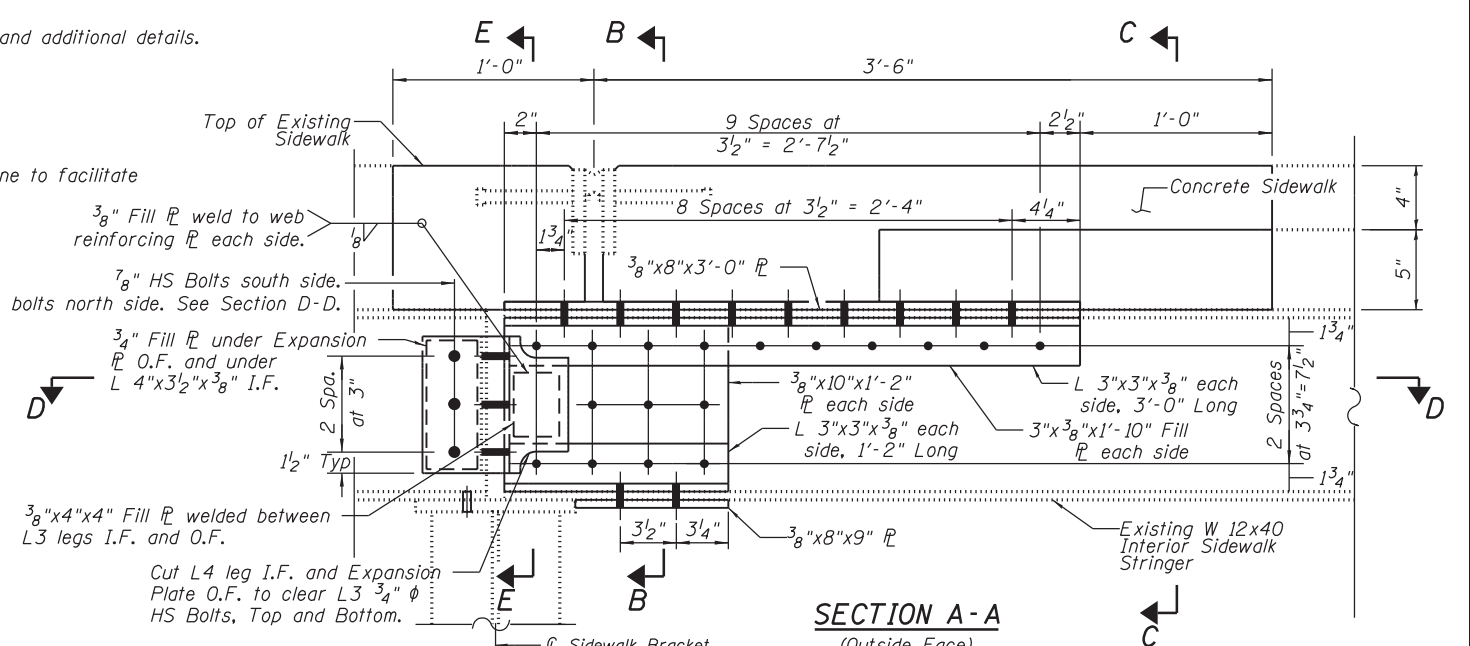
Notes:
See sheet 2 of 2 for notes, bill of material and additional details.
Verify orientation of L 4"x3 1/2"
O.F. indicates Outside Face
I.F. indicates Inside Face
V.I.F. indicates Verify In Field
*Verify Dimension in Field
**Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.

BOLT LEGEND

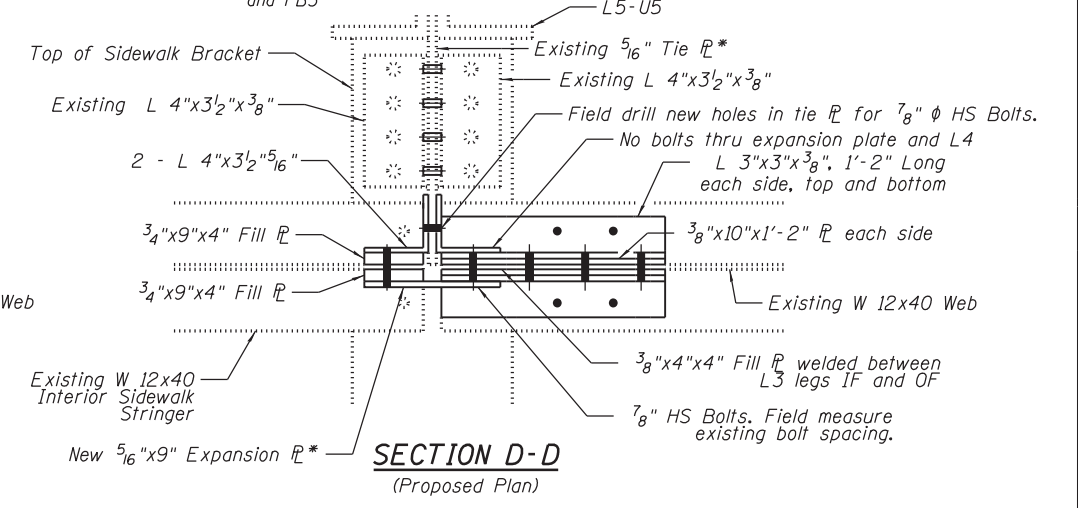
- - New 3/4" or 7/8" HS Bolt
- - Existing Rivet or Bolt



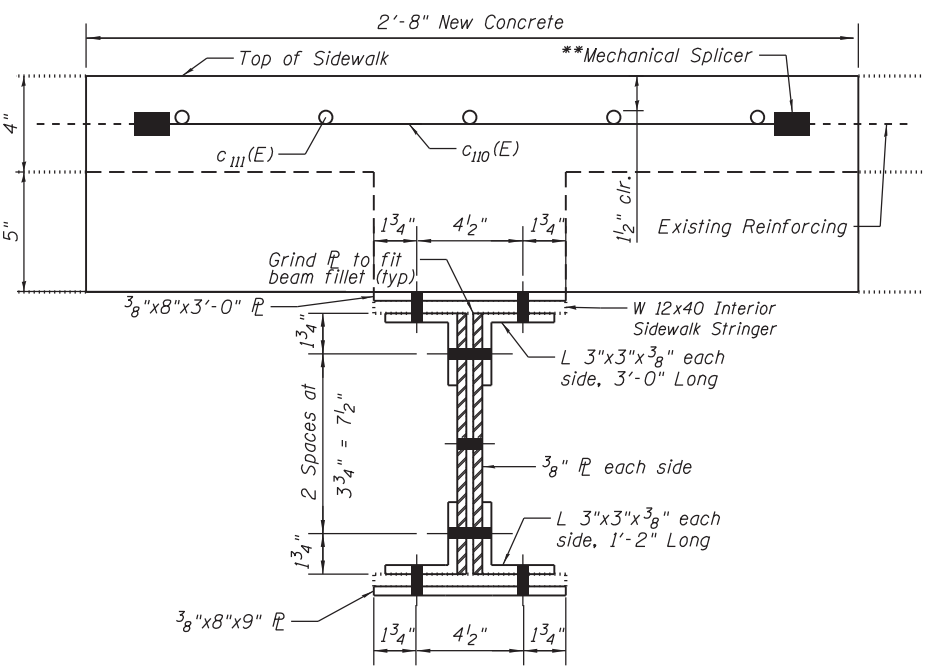
SECTION D-D
(Existing Plan)



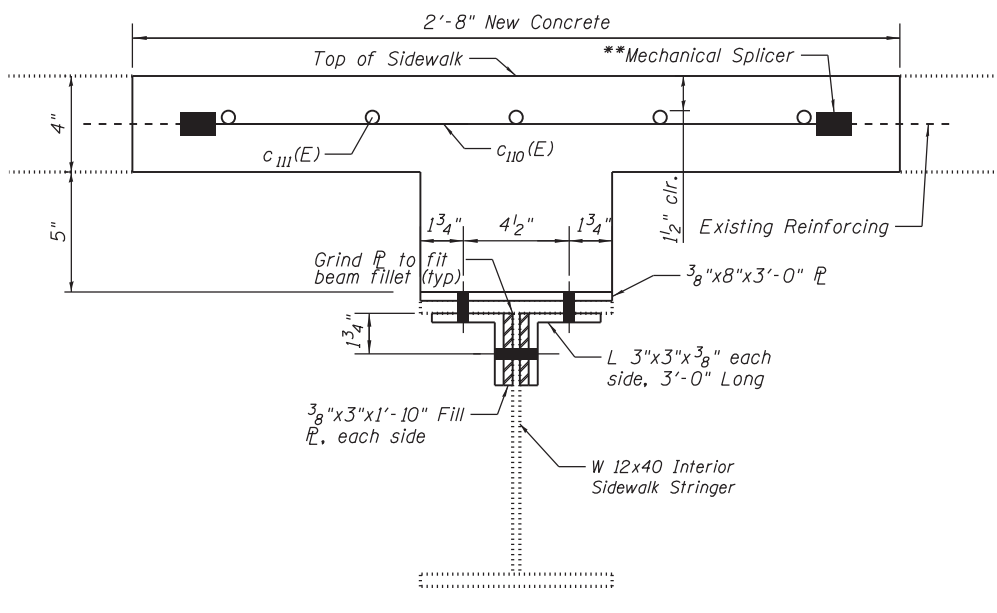
SECTION A-A
(Outside Face)



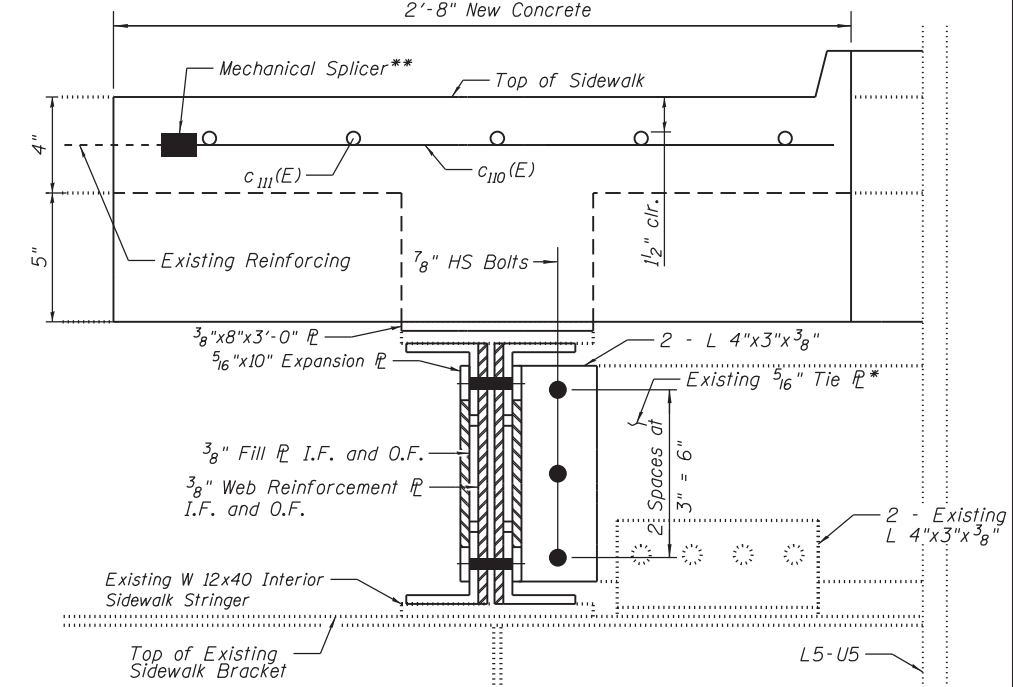
SECTION D-D
(Proposed Plan)



SECTION B-B



SECTION C-C



SECTION E-E

(Sheet 1 of 2)

FILE NAME = W:\191-132-1001_Meistran_Ave\CADD_Sheets\Structure\016-0777\70 - Truss Struc. Stl Repairs VI.dwg



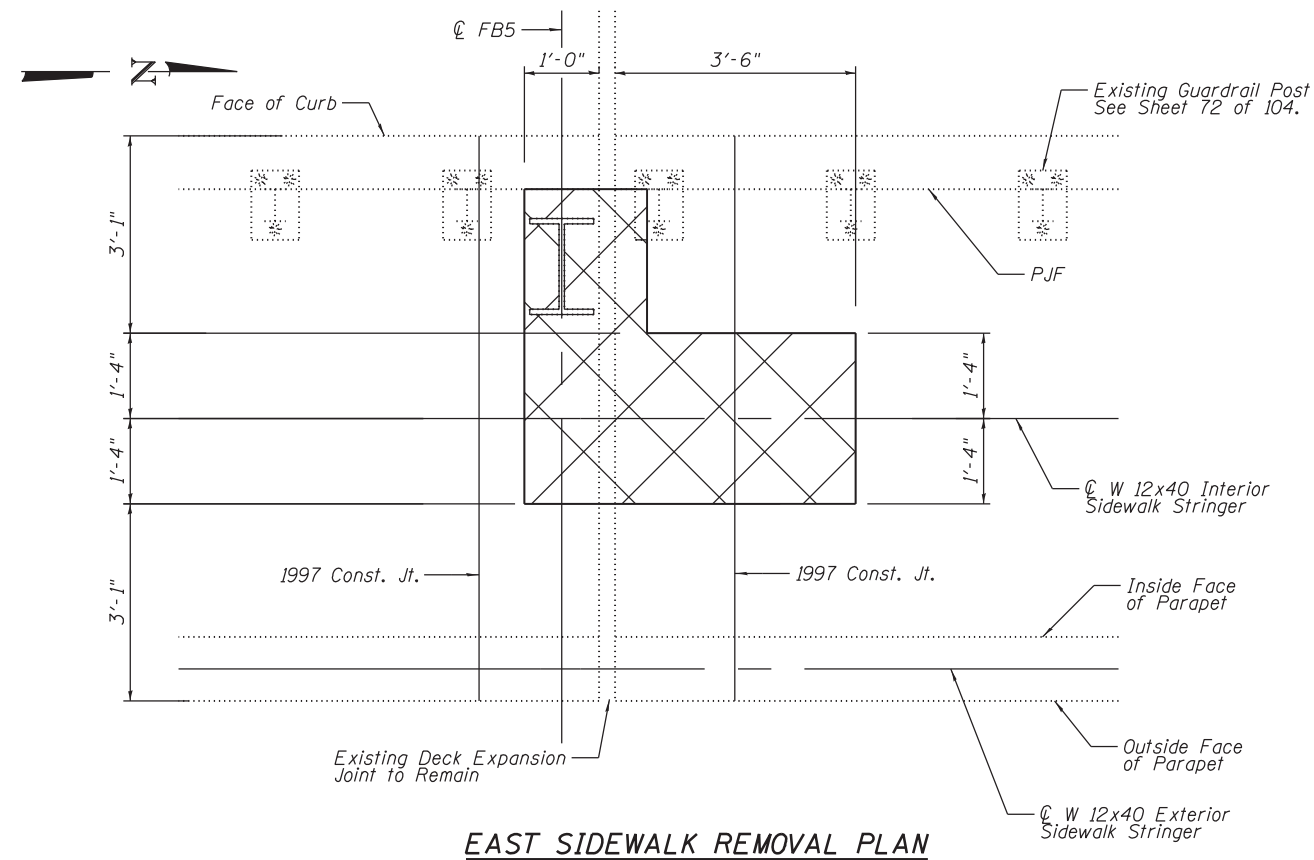
USER NAME =	DESIGNED - JJI	REVISED -
PLOT SCALE =	CHECKED - HB	REVISED -
PLOT DATE = 8/1/2019	DRAWN - HB	REVISED -
	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

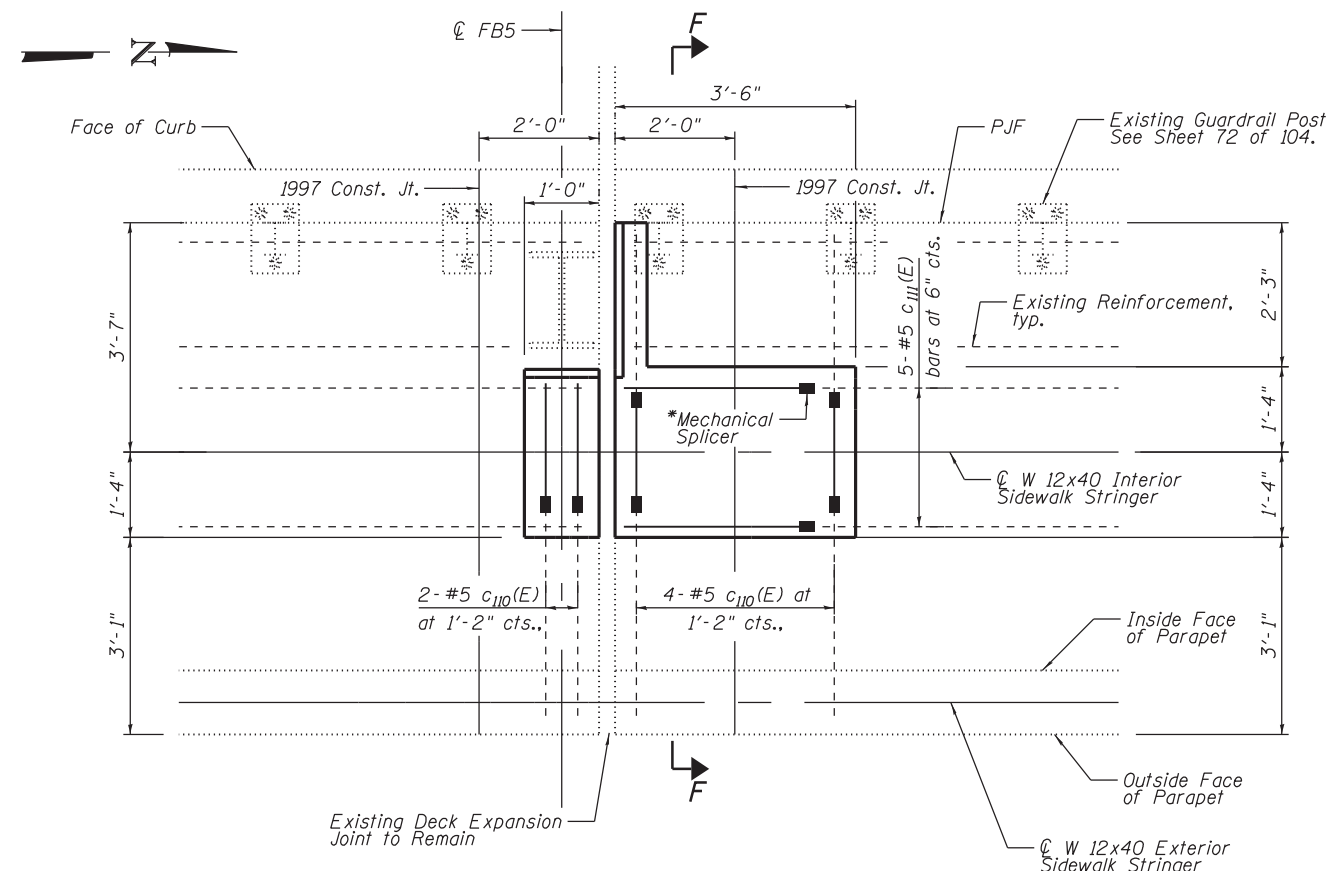
TRUSS STRUCTURAL STEEL REPAIRS VI
STRUCTURE NO. 016-0777

SHEET NO. 70 OF 104 SHEETS

F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY Cook	TOTAL SHEETS 184	SHEET NO. 128
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60K72	

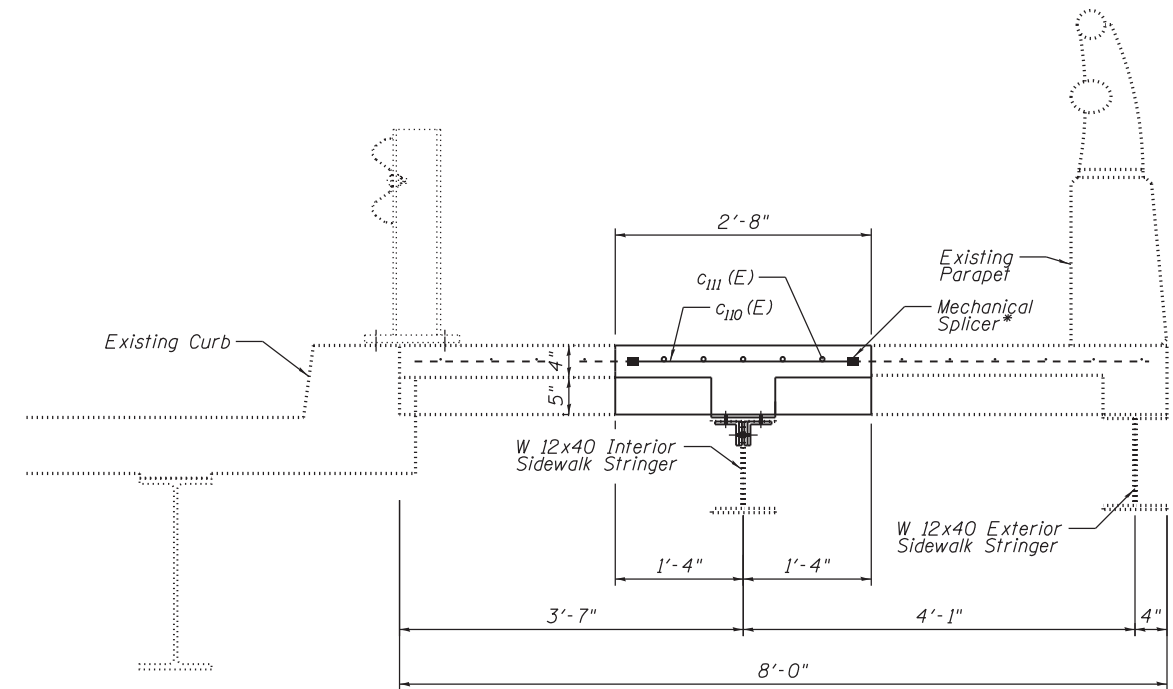


EAST SIDEWALK REMOVAL PLAN



EAST SIDEWALK PLAN

(Railing Omitted for Clarity)



SECTION F-F

* Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.

Notes:

See sheet 72 of 104 for sidewalk removal and replacement details.

Structural steel for repair plates and fill plates may be AASHTO M270 Grade 36.

See sheet 72 of 104 for existing reinforcement and concrete details in relation to existing truss members.

Existing reinforcing is to be cleaned and incorporated into new concrete using Mechanical Splicers. Contractor shall verify size of existing bars in field.

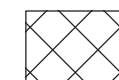
High strength ASTM A325 $\frac{3}{4}$ " ϕ bolts shall be used for the indicated repairs on sheet 1 of 2, unless noted otherwise. Holes shall be $\frac{13}{16}$ " ϕ . All work and materials, including steel plates and bolts are included in the pay item "Structural steel Repair".

For painting new Structure Steel see General Notes.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required for primary connections by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

LEGEND



Concrete Removal

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
cII(E)	6	#5	2'-3"	—
cIII(E)	5	#5	3'-3"	—
Concrete Removal			Cu. Yd.	0.4
Concrete Superstructure			Cu. Yd.	0.4
Reinforcement Bars, Epoxy Coated			Pound	40
Structural Steel Repair			Pound	180

(Sheet 2 of 2)

FILE NAME = W:\191\132\DOT\Western_Ave\CADD_Sheets\Structure\016-0777\71 - Truss Struc Stl Repairs VII.dgn



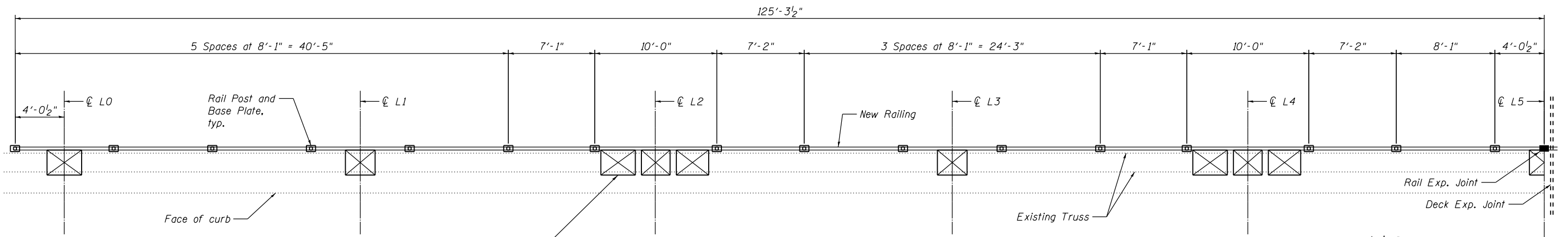
USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 8/1/2019	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRUSS STRUCTURAL STEEL REPAIRS VII
STRUCTURE NO. 016-0777**

SHEET NO. 71 OF 104 SHEETS

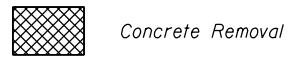
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	129
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



PLAN - TRUSS MEMBERS AND BICYCLE RAILING POST SPACING*
(North Sidewalk Shown, South Similar)

*Bicycle railing post spacing is based on existing plans. Base plate locations in relation to existing truss members shall be verified in the field prior to fabrication to ensure adequate clear cover for anchor bolts. Revise post spacing as approved by the Engineer. See sht 73 of 104 for railing details.

LEGEND



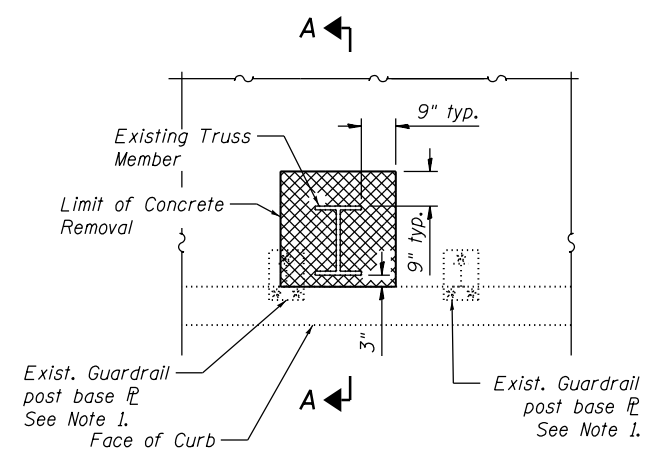
Remove existing concrete around truss members. Maintain 3" gap between face of truss member and new or existing concrete. (Typ. at each truss member)

Notes:

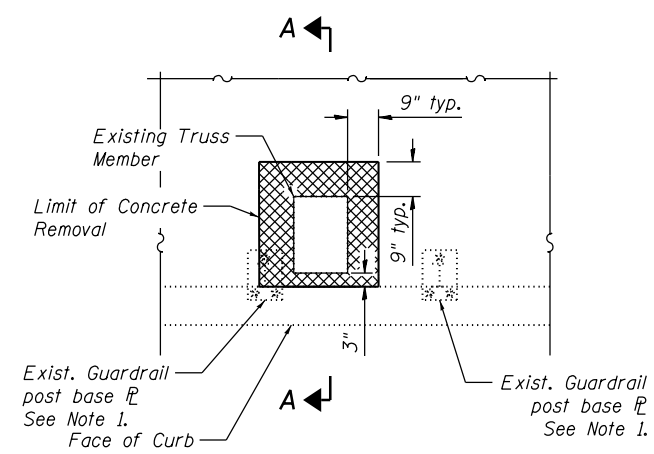
1. Perimeters of concrete removal areas shall be saw cut 3/4" prior to the removal of the concrete. Existing reinforcement extending into removal area shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.
2. Disconnect and reconnect existing guardrail as needed. Cost included in Concrete Removal.
3. Remove and reinstall guardrail base plates and anchor bolts as needed. Cost included in Concrete Removal.

BILL OF MATERIAL

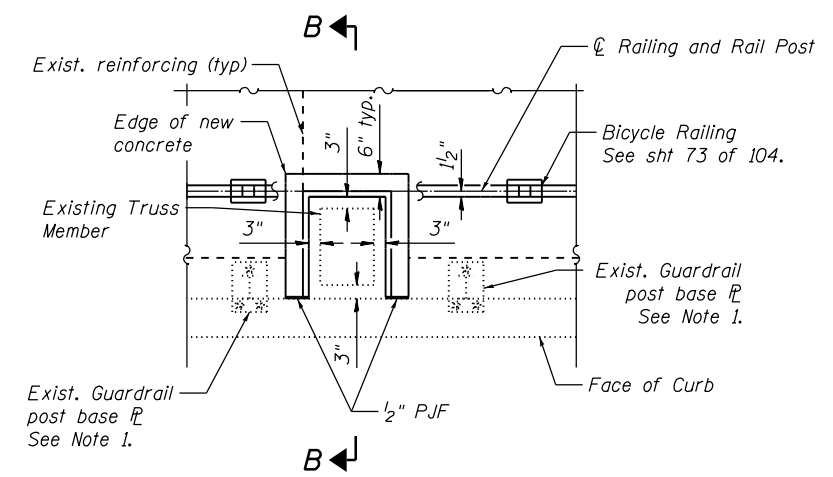
Item	Unit	Total
Concrete Removal	Cu. Yd.	2.4
Concrete Superstructure	Cu. Yd.	1.9



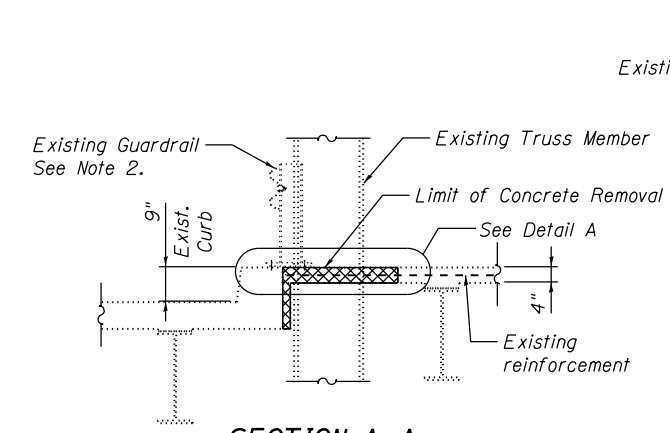
SIDEWALK REMOVAL PLAN AT I TRUSS MEMBERS



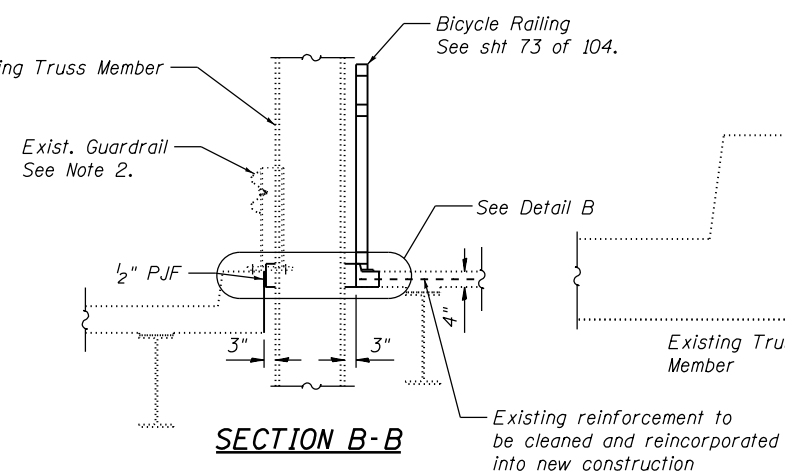
SIDEWALK REMOVAL PLAN AT BOX TRUSS MEMBERS



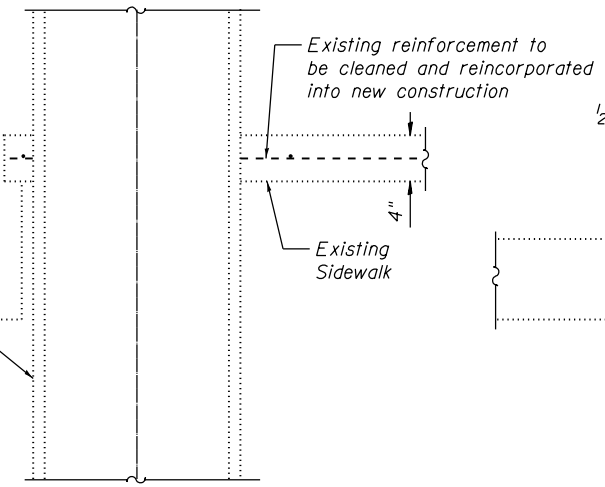
PLAN



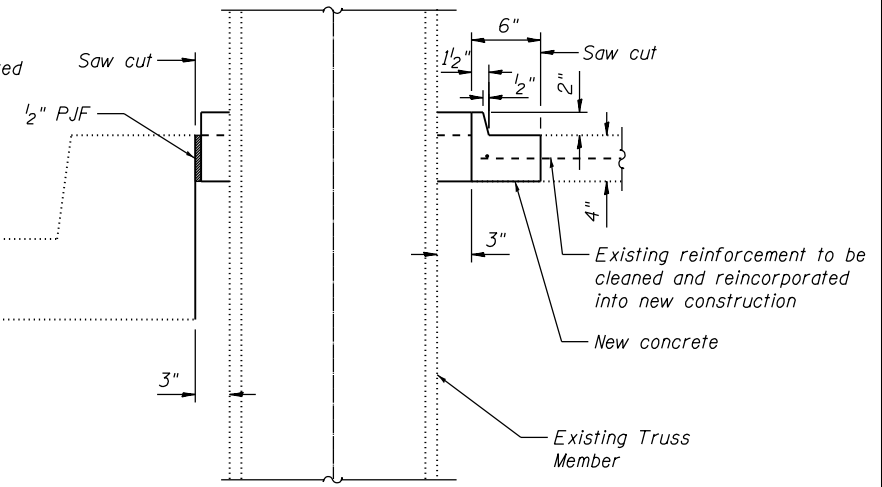
SECTION A-A (Existing)



SECTION B-B



DETAIL A



DETAIL B

(Sheet 1 of 2)

FILE NAME = W:\191-132-1001-Heaven-Ave-CADD-Sheets\Structural\016-0777\72 - Sidewalk Removal Detail.dgn



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

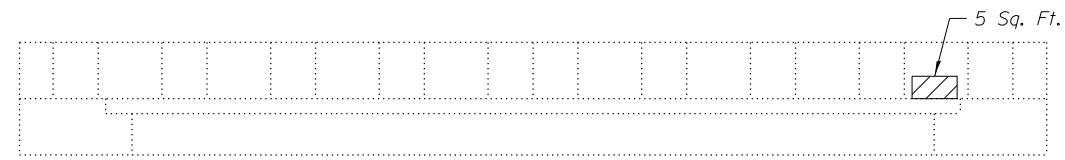
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRUSS SIDEWALK REMOVAL DETAILS I
STRUCTURE NO. 016-0777**

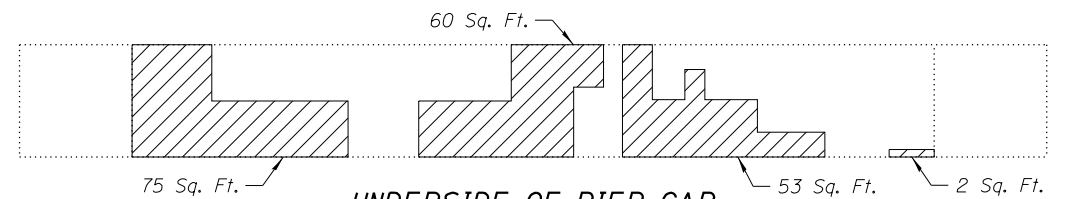
SHEET NO. 72 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	130

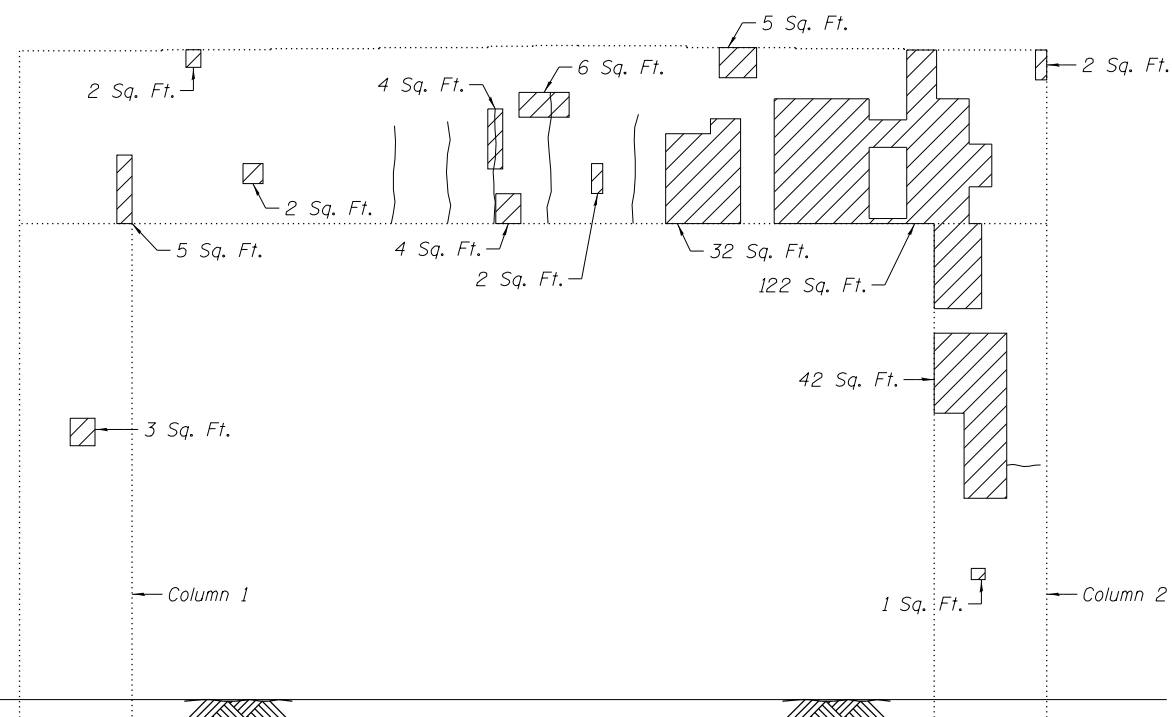
CONTRACT NO. 60K72
ILLINOIS FED. AID PROJECT



TOP OF PIER CAP



UNDERSIDE OF PIER CAP



NORTH FACE OF PIER 10

NOTES

- Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction and added to As-Built plans.
- For Bill of Material for Pier 10, see Sheet 75.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_74.dgn



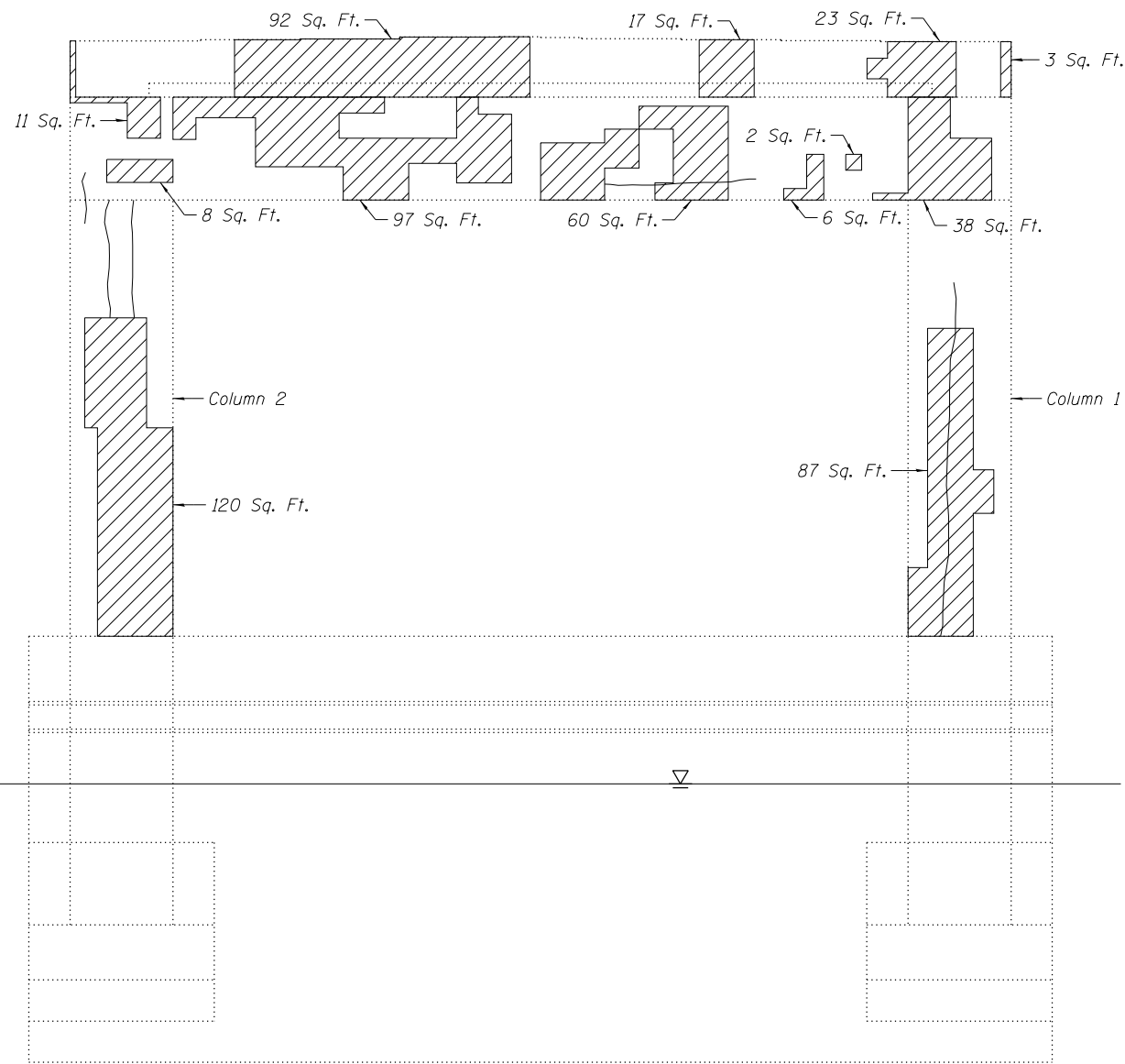
USER NAME = kaisneros	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 12x9.6000 '1' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

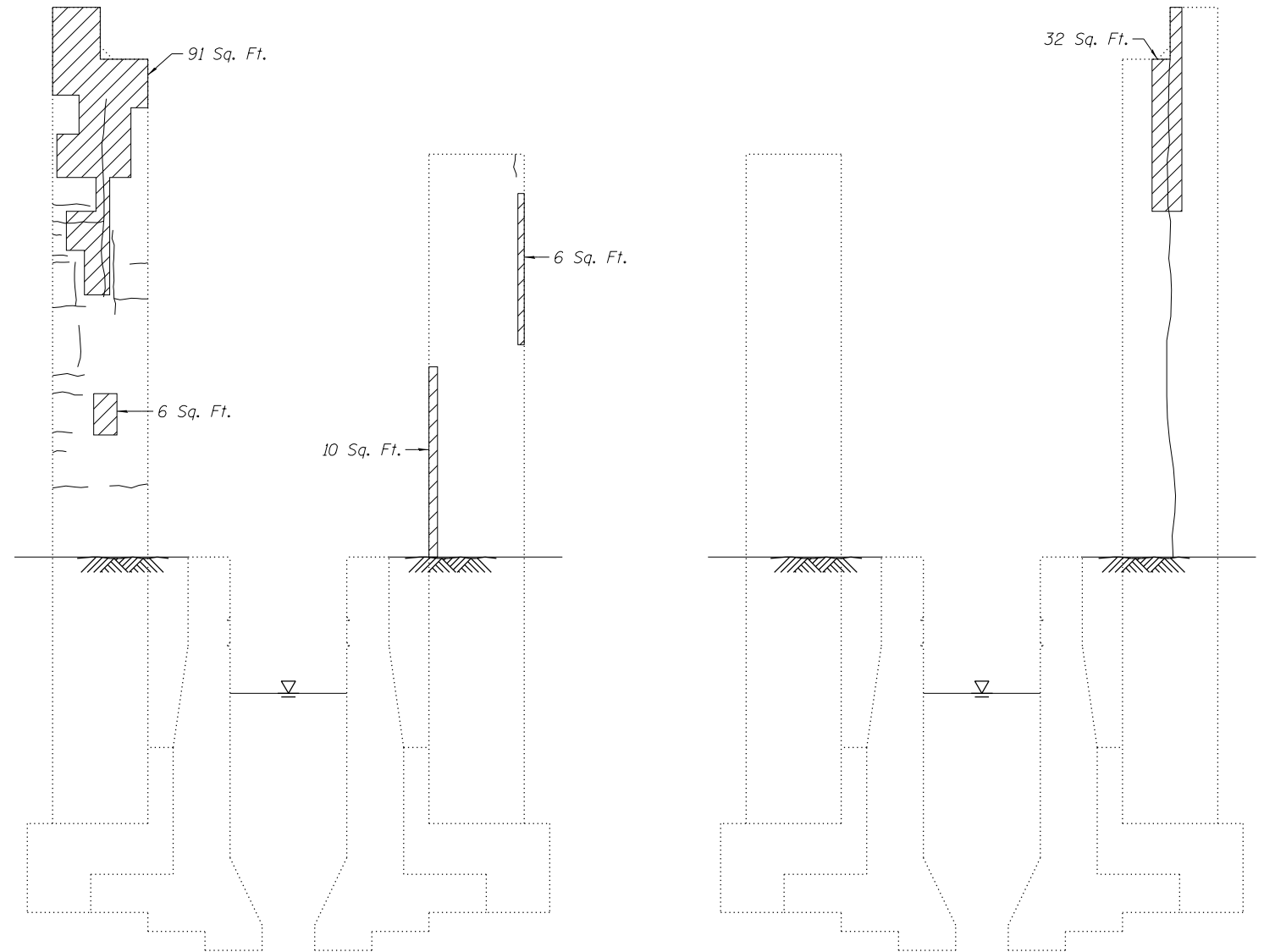
**EXISTING PIER 10 REPAIR DETAILS I
STRUCTURE NO. 016-0777**

SHEET NO. 74 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	132
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



SOUTH FACE OF PIER 10



WEST FACE

EAST FACE

WEST FACE

EAST FACE

COLUMN 2

COLUMN 1

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed

NOTE

1. Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction and added to As-Built plans.

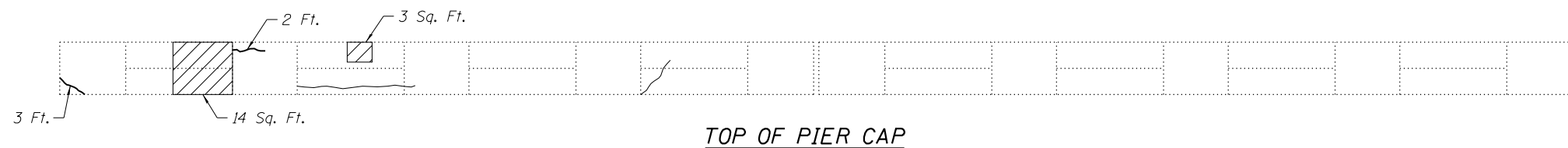
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	1,136

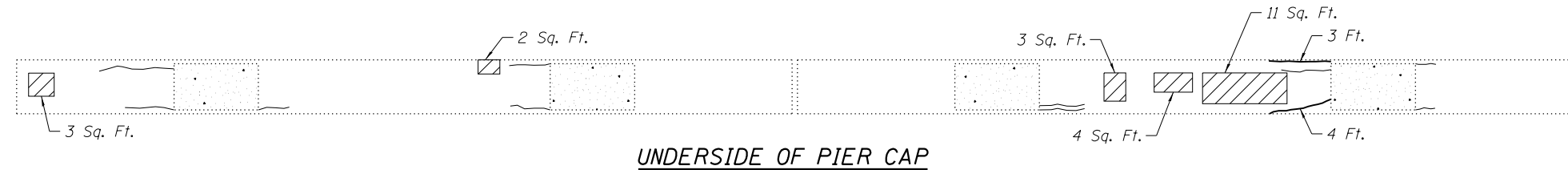
N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_75.dgn

USER NAME = kaisneros	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 12:9.6000 '1' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	133
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



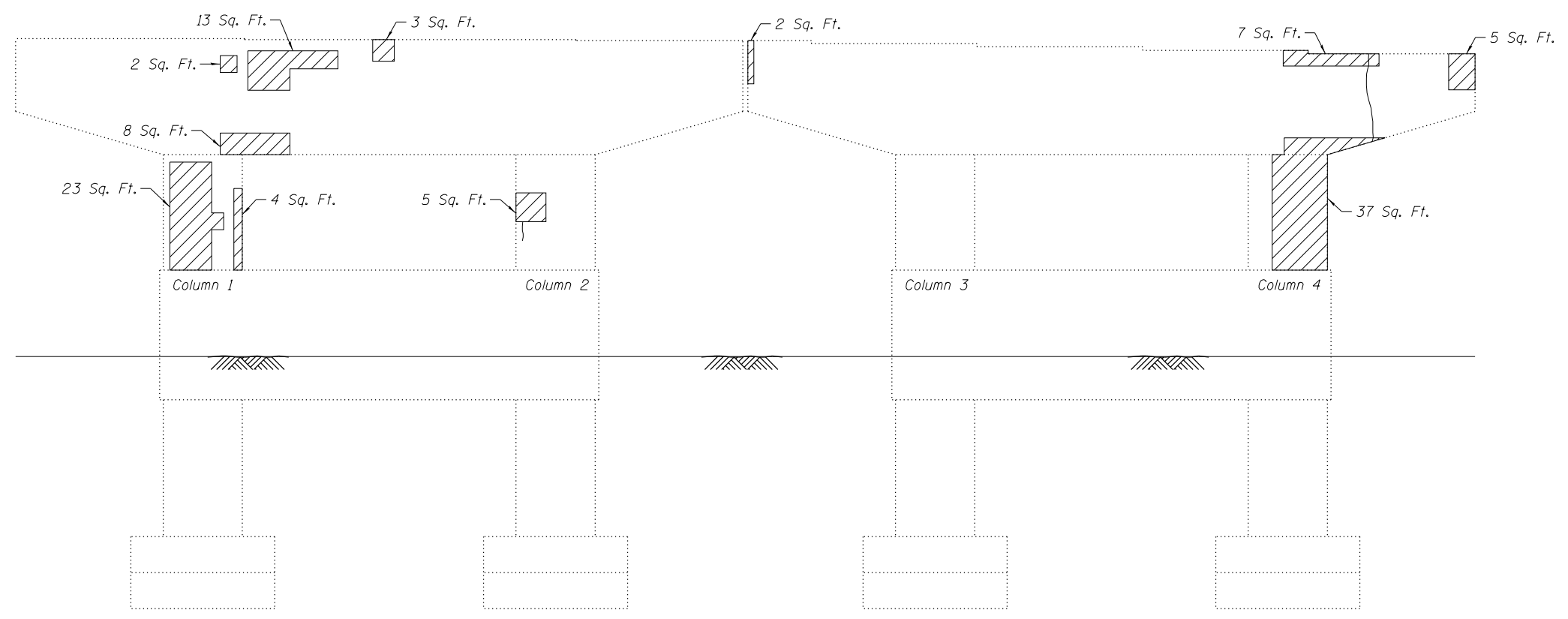
TOP OF PIER CAP



UNDERSIDE OF PIER CAP



TOP OF CRASH WALL



NORTH FACE OF PIER 11

NOTES

- Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.
- For Bill of Material for Pier 11, see Sheet 77.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed
- Epoxy Inject Crack (Crack Width > 1/16")

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_76.dgn



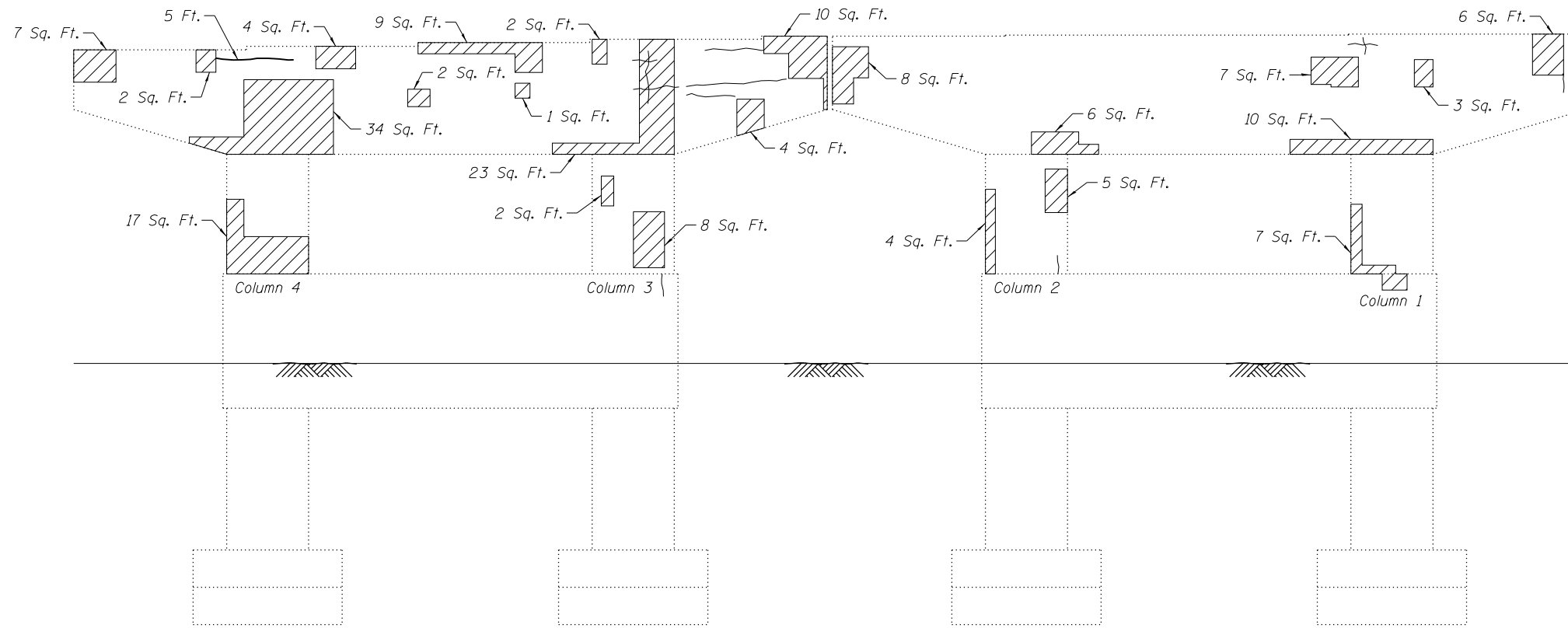
USER NAME = sollgood	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 10x0.0000 '1' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

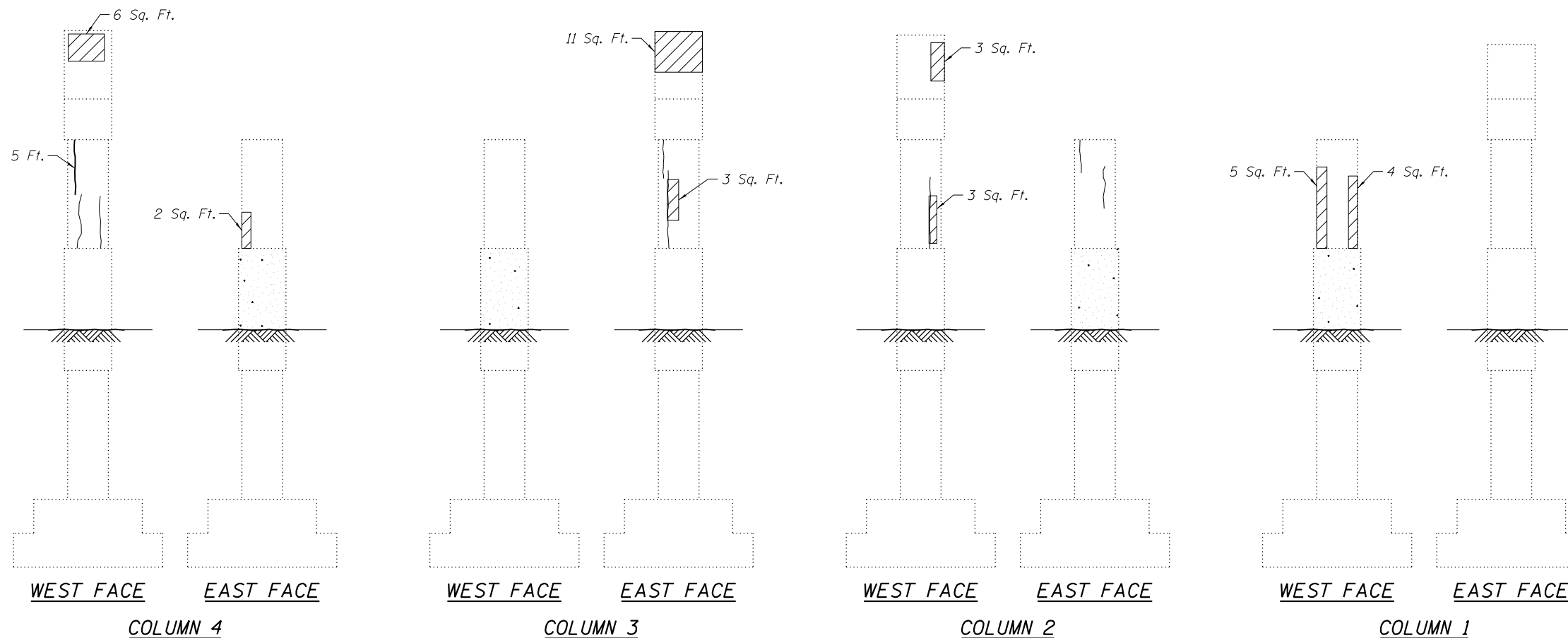
**EXISTING PIER 11 REPAIR DETAILS I
STRUCTURE NO. 016-0777**

SHEET NO. 76 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	134
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



SOUTH FACE OF PIER 11



NOTE

1. Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed
- Epoxy Inject Crack (Crack Width > 1/16")

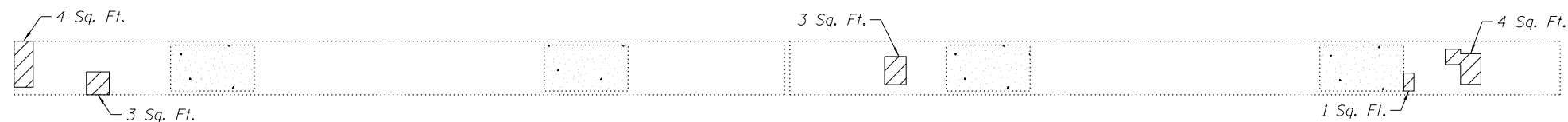
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	369
Epoxy Crack Injection	Foot	22

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_77.dgn



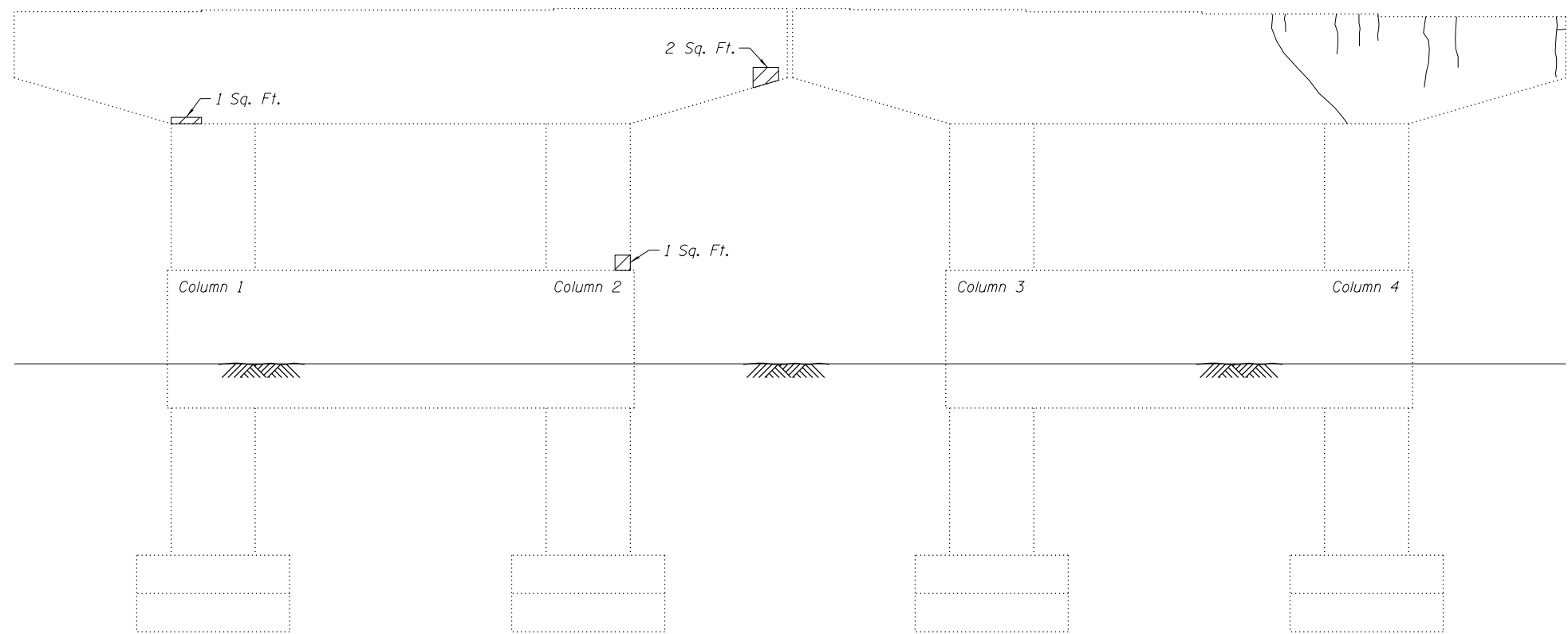
TOP OF PIER CAP



UNDERSIDE OF PIER CAP



TOP OF CRASH WALL



NORTH FACE OF PIER 12

NOTES

- Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.
- For Bill of Material for Pier 12, see Sheet 79.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_78.dgn



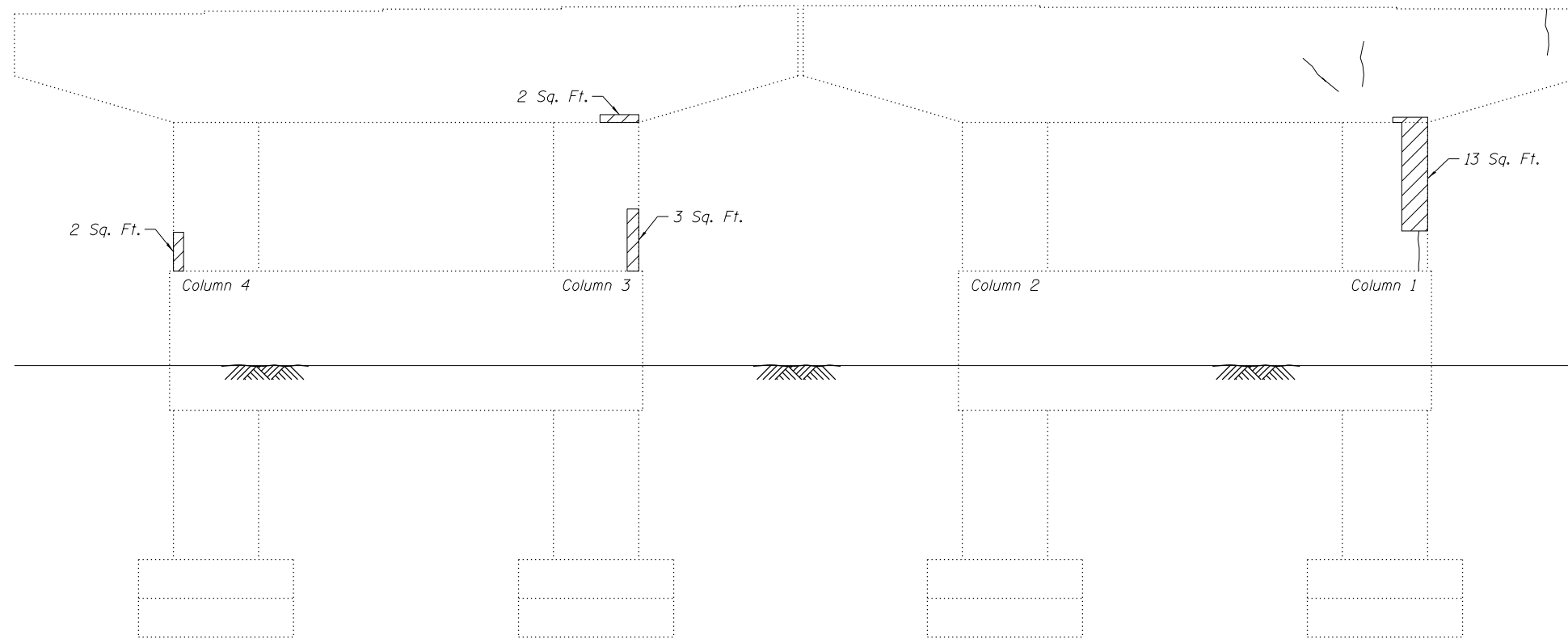
USER NAME = sallgood	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 10x0.0000 '1' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

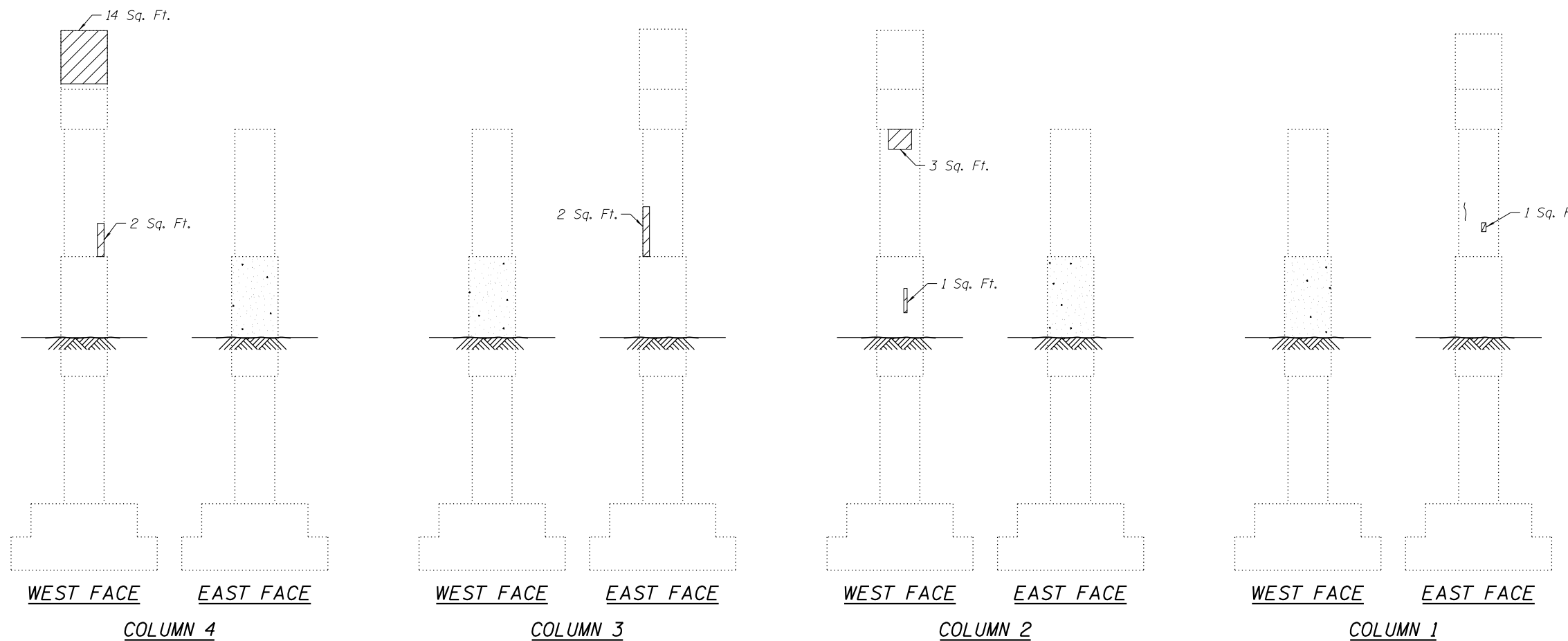
**EXISTING PIER 12 REPAIR DETAILS I
STRUCTURE NO. 016-0777**

SHEET NO. 78 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	136
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



SOUTH FACE OF PIER 12



NOTE

1. Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	62

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_79.dgn



USER NAME = sallgood	DESIGNED - NG	REVISED -
PLOT SCALE = 10x0.0000 '1' / in.	CHECKED - BWS	REVISED -
PLOT DATE = 4/11/2016	DRAWN - SBA	REVISED -
	CHECKED - BWS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

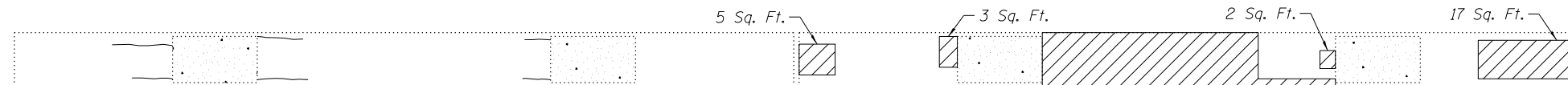
**EXISTING PIER 12 REPAIR DETAILS II
STRUCTURE NO. 016-0777**

SHEET NO. 79 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	137
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



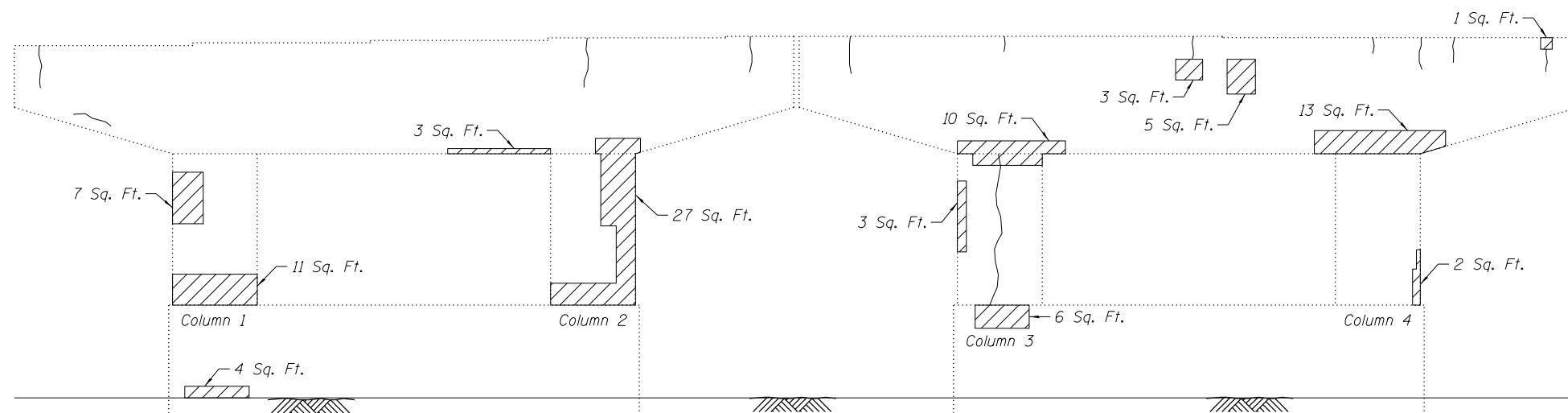
TOP OF PIER CAP



UNDERSIDE OF PIER CAP



TOP OF CRASH WALL



NORTH FACE OF PIER 13

NOTES

- Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.
- For Bill of Material for Pier 13, see Sheet 81.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_80.dgn



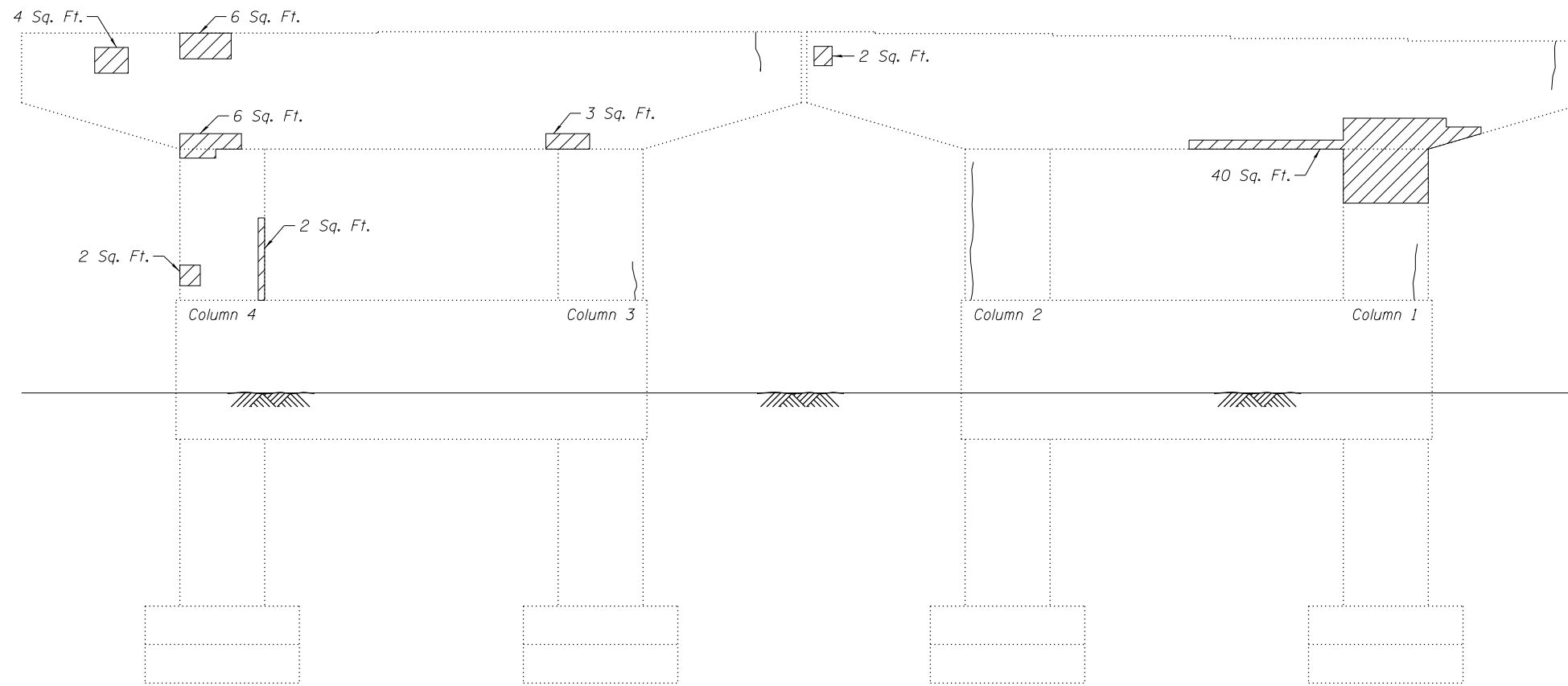
USER NAME = sallgood	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 10x0.0000 '1' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

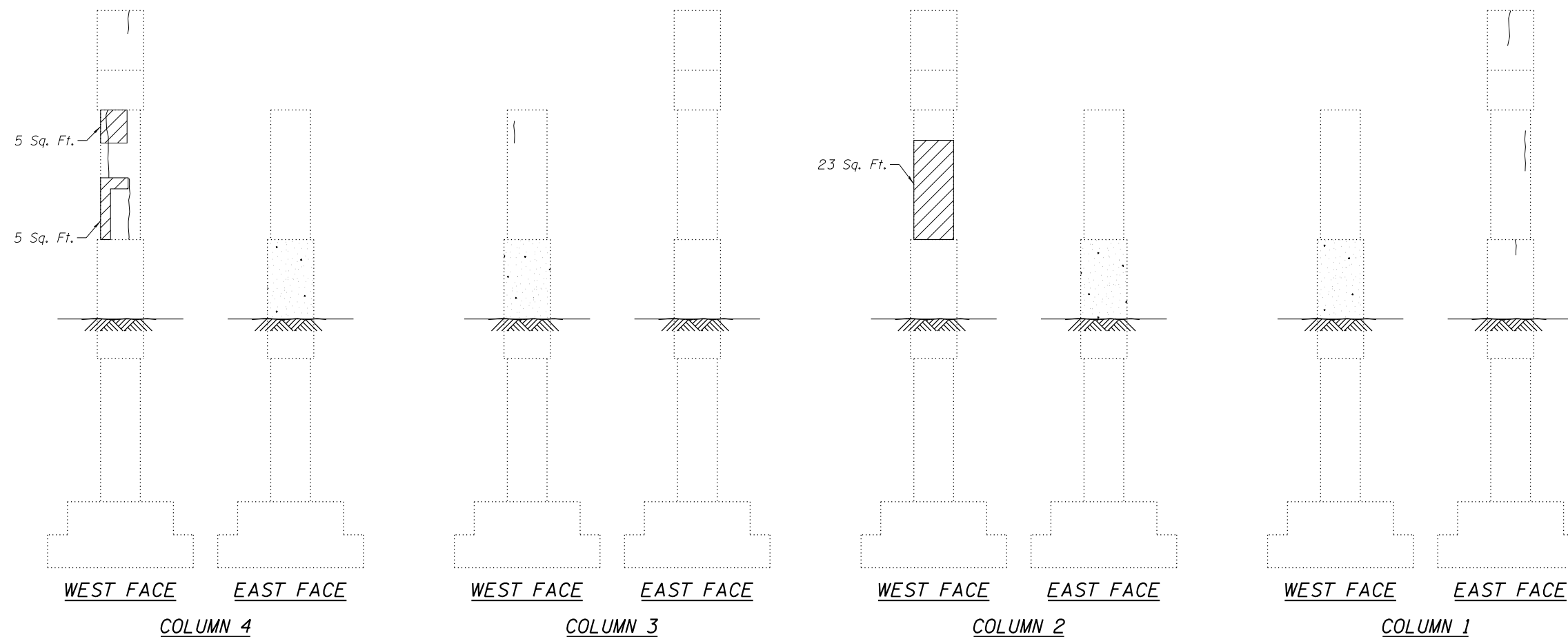
**EXISTING PIER 13 REPAIR DETAILS I
STRUCTURE NO. 016-0777**

SHEET NO. 80 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	138
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



SOUTH FACE OF PIER 13



NOTE

1. Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	272

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_81.dgn



USER NAME = sallgood	DESIGNED - NG	REVISED -
PLOT SCALE = 10x0.0000 '1' / in.	CHECKED - BWS	REVISED -
PLOT DATE = 4/11/2016	DRAWN - SBA	REVISED -
	CHECKED - BWS	REVISED -

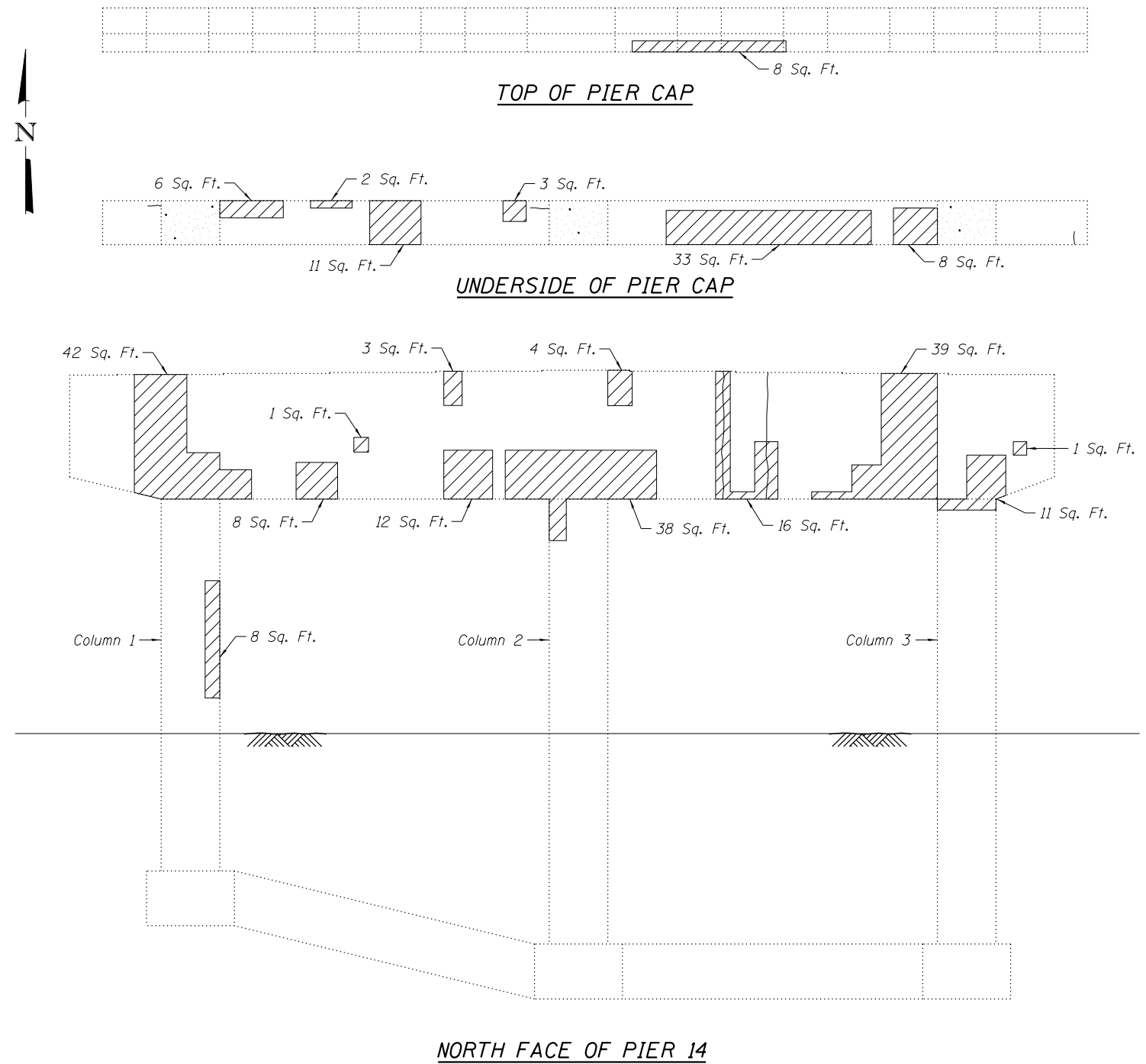
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING PIER 13 REPAIR DETAILS II
STRUCTURE NO. 016-0777**

SHEET NO. 81 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	139
CONTRACT NO. 60K72				

ILLINOIS FED. AID PROJECT



NOTES

- Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.
- For Bill of Material for Pier 14, see Sheet 83.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed

N:\PROJECTS\2016\016-0777_60K72_82.dgn



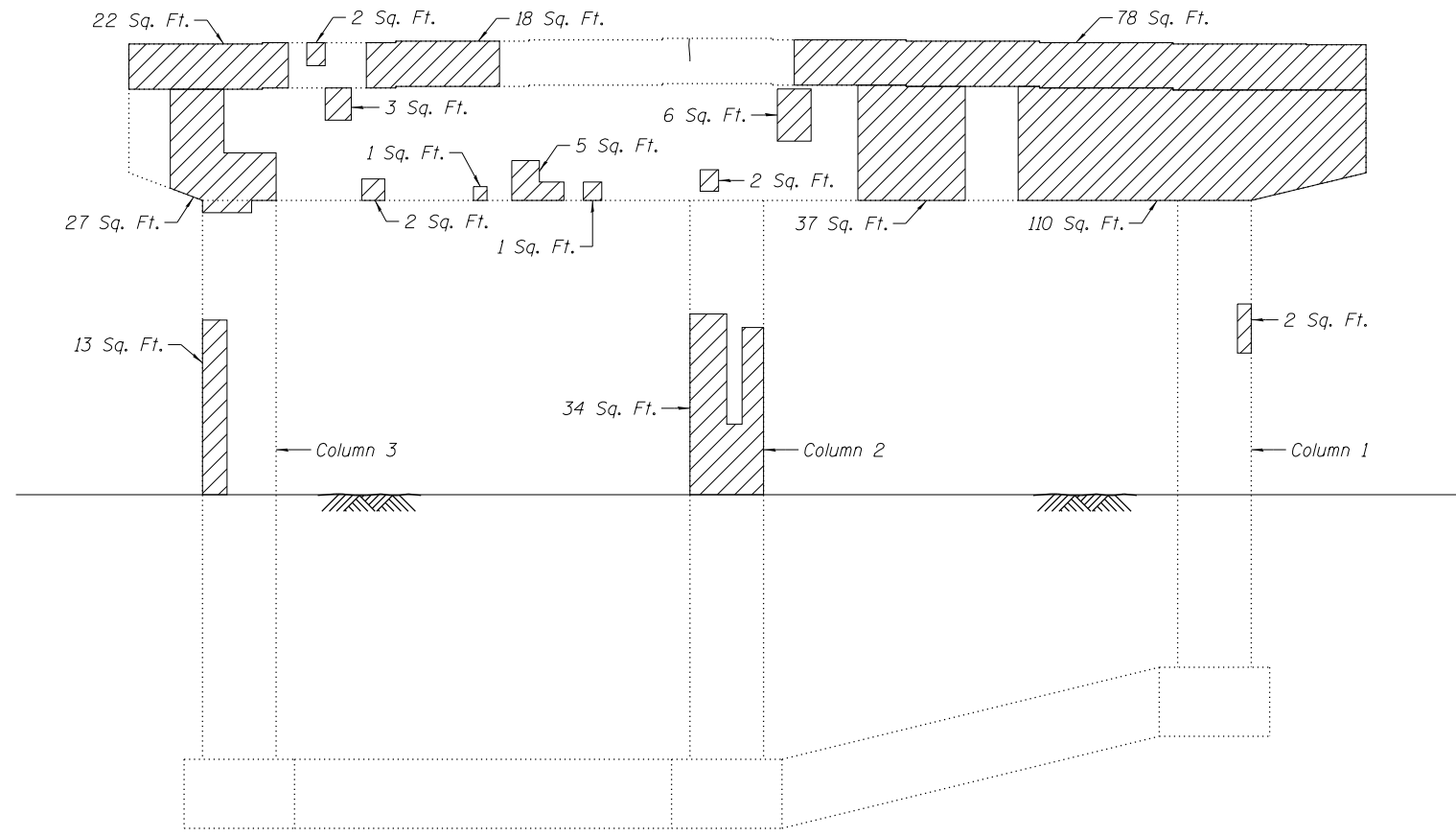
USER NAME = sallgood	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 10x0.0000 '1' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

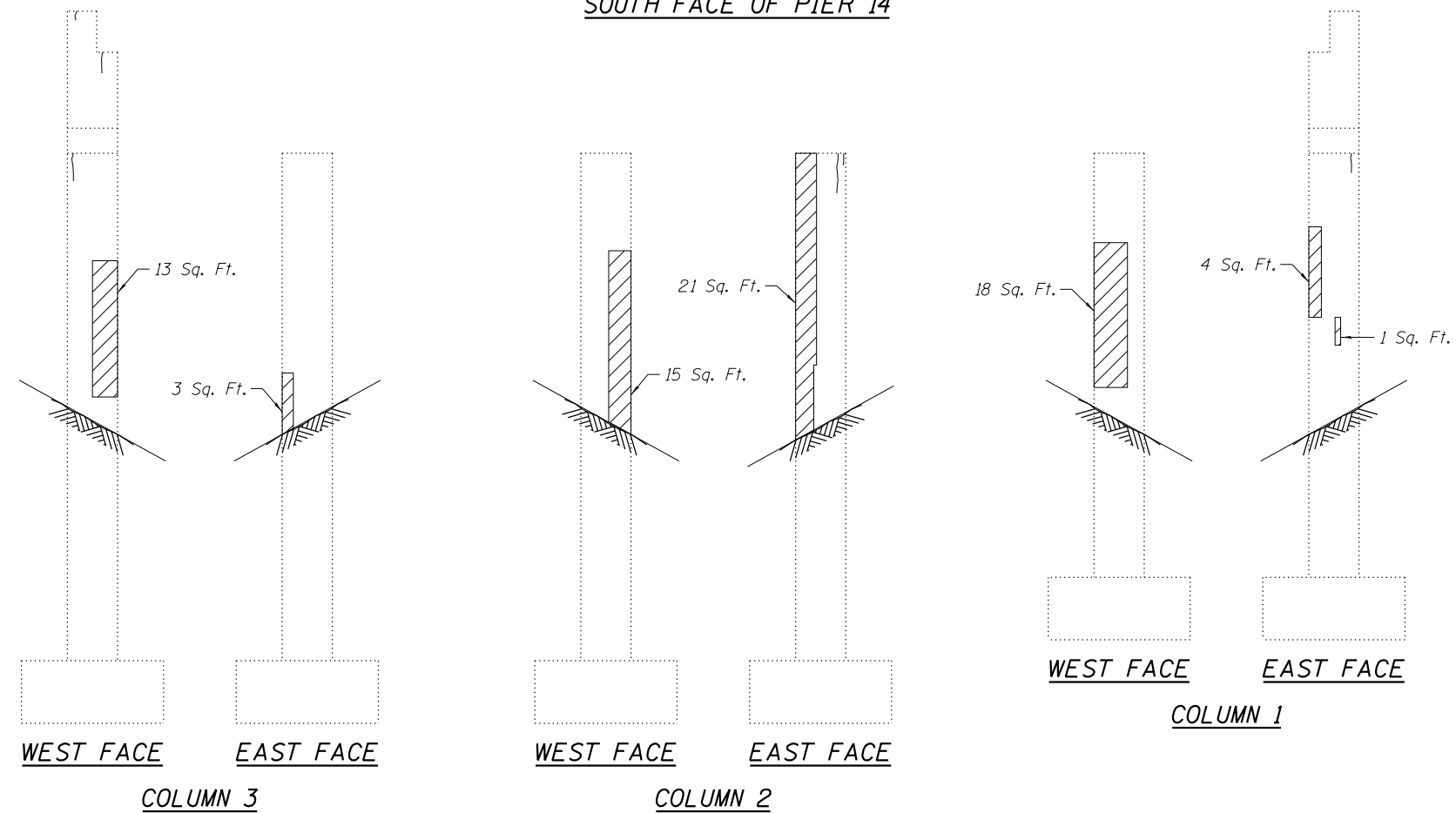
**EXISTING PIER 14 REPAIR DETAILS I
STRUCTURE NO. 016-0777**

SHEET NO. 82 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	140
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



SOUTH FACE OF PIER 14



NOTE

1. Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed

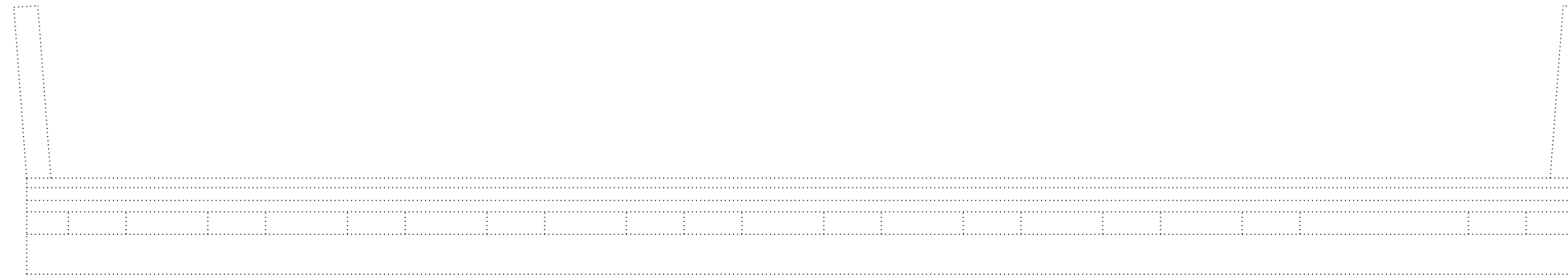
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	692

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_83.dgn

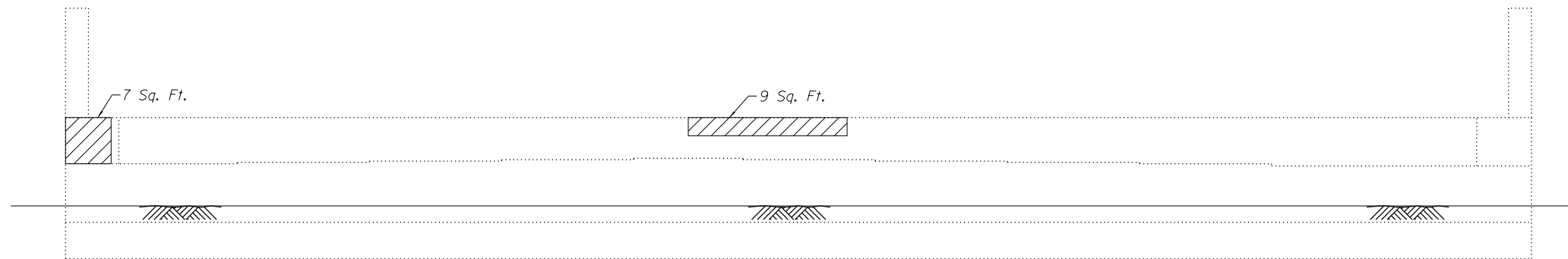
USER NAME = sallgood	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 10x0.0000 '1' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	141
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



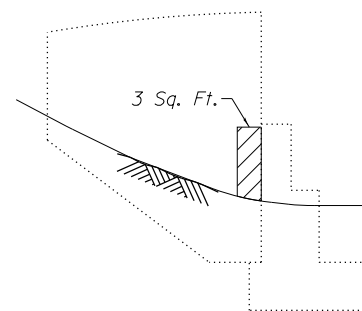
PLAN VIEW OF NORTH ABUTMENT

(Slope wall Omitted for Clarity)

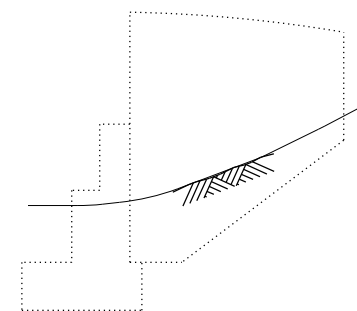


SOUTH FACE OF NORTH ABUTMENT

(Slopewall Omitted for Clarity)



ELEVATION VIEW OF NORTHWEST WINGWALL



ELEVATION VIEW OF NORTHEAST WINGWALL

NOTE

- Repairs of the existing abutment shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Hairline Crack - Not to be sealed

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	19

N:\PROJECTS\2016\016-0777_60K72_84.dgn



USER NAME = sallgood	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 8:0.0000 'ft' / 1" =	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

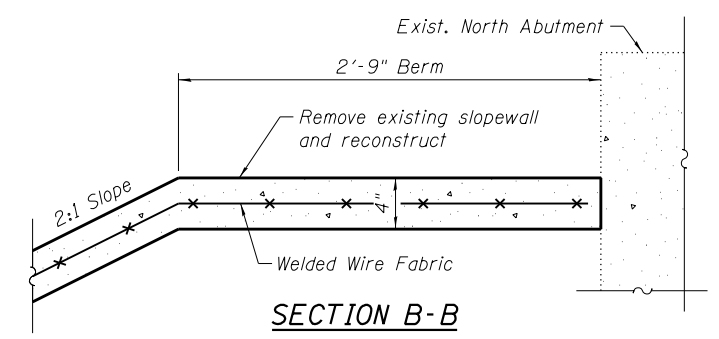
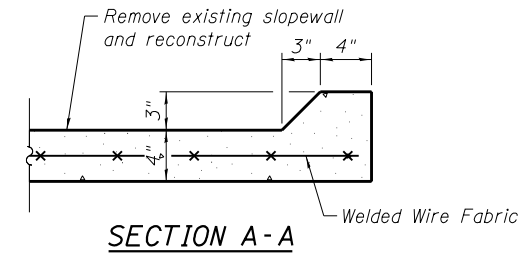
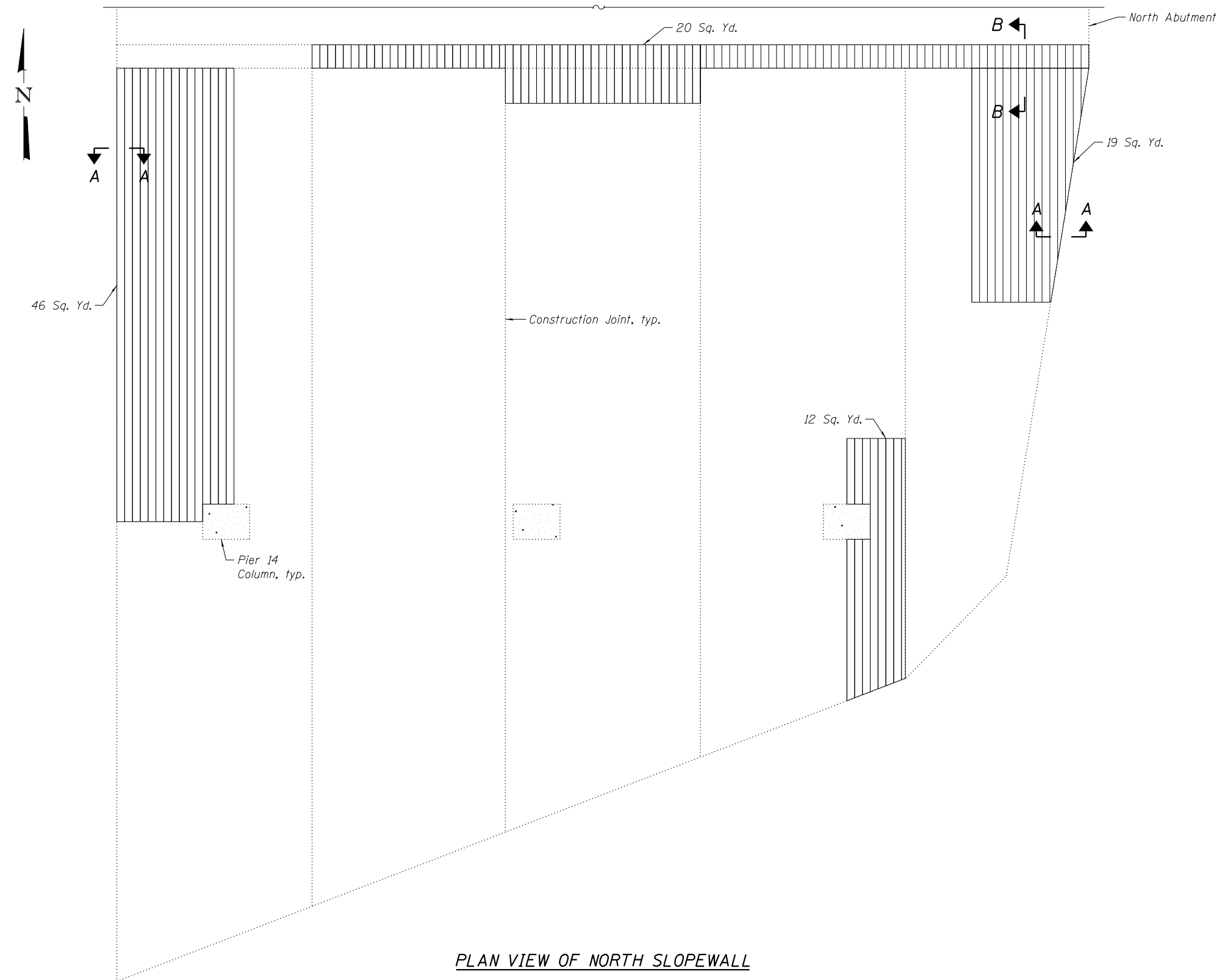
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING NORTH ABUTMENT REPAIR DETAILS
STRUCTURE NO. 016-0777**

SHEET NO. 84 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	142
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

N:\PROJECTS\20020056\01\Design\Structural\CAD\016-0777_60K72_85.dgn



PLAN VIEW OF NORTH SLOPEWALL

NOTES

- Slopewall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
- Repairs of the existing slopewall shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.

LEGEND

Slope Wall Repair (Remove and Reconstruct)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Slope Wall Repair	Sq. Yd.	97



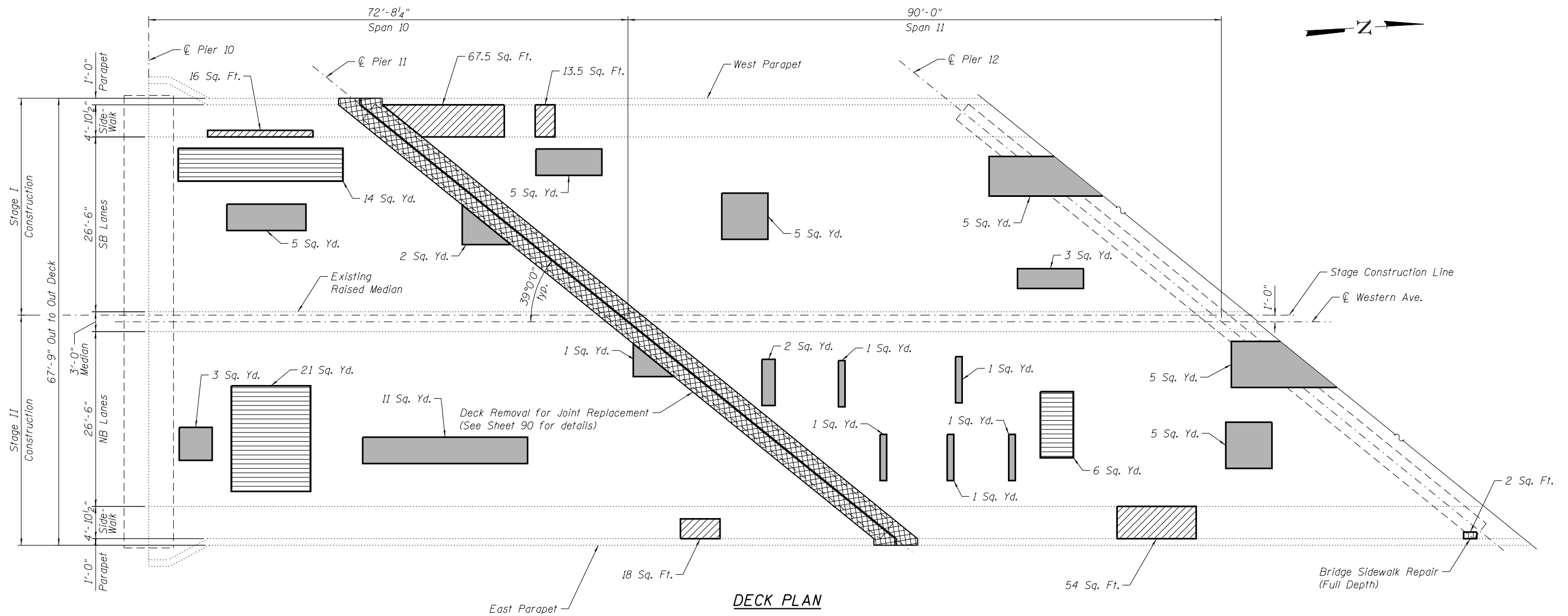
USER NAME = sallgood	DESIGNED - NG	REVISED -
PLOT SCALE = 10x0.0000 '1' / in.	CHECKED - BWS	REVISED -
PLOT DATE = 4/11/2016	DRAWN - SBA	REVISED -
	CHECKED - BWS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING NORTH SLOPEWALL REPAIR DETAILS
STRUCTURE NO. 016-0777**

SHEET NO. 85 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	143
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



LEGEND:

-  Concrete Removal for Expansion Joint Replacement
-  Bridge Sidewalk Repair (Partial Depth)
-  Bridge Sidewalk Repair (Full Depth)
-  Deck Slab Repair (Partial)
-  Deck Slab Repair (Full Depth, Type II)

NOTES:

1. Repairs shall include but not be limited to the areas shown. The actual areas are to be determined by the Engineer at the time of construction and added to As-Built plans.
2. The Engineer shall record the actual deck repair areas in order to document as-built conditions for the future reference.
3. For expansion joint rehabilitation, see Sheet 90 thru 93.
4. For parapet repairs see Sheet 88 and 89.
5. Concrete Removal includes deck and parapet removal.
6. Contractor shall use extreme care in the concrete removal operation. Any spalling or damage to beams, shear studs or rebar caused by this operation shall be repaired by the Contractor to the satisfaction of the Engineer at no additional cost to the Department.
7. Existing reinforcement in the deck shall be cleaned and incorporated into the repairs. Cost included with concrete removal.

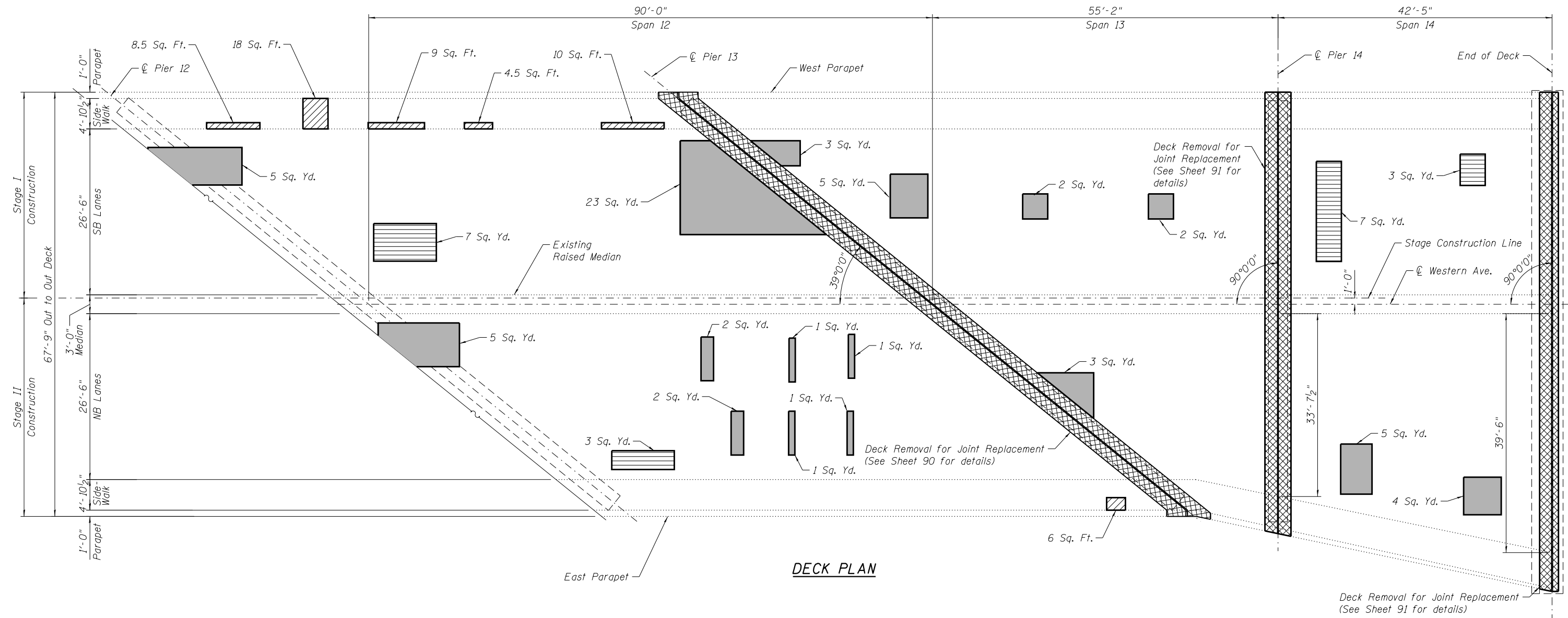
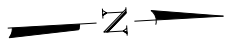
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	5.4
Bridge Sidewalk Repair (Full Depth)	Sq. Ft.	2
Bridge Sidewalk Repair (Partial Depth)	Sq. Ft.	169
Deck Slab Repair (Partial)	Sq. Yd.	41
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	57

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_86.dgn

USER NAME = rasfahani	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 16.0000' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	144
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



DECK PLAN

LEGEND:

- Concrete Removal for Expansion Joint Replacement
- Bridge Sidewalk Repair (Partial Depth)
- Bridge Sidewalk Repair (Full Depth)
- Deck Slab Repair (Partial)
- Deck Slab Repair (Full Depth, Type II)

NOTES:

1. Repairs shall include but not be limited to the areas shown. The actual areas are to be determined by the Engineer at the time of construction.
2. The Engineer shall record the actual deck repair areas in order to document as-built conditions for the future reference.
3. For expansion joint rehabilitation, see Sheet 90 thru 93.
4. For parapet repairs see Sheet 88 and 89.
5. Concrete Removal includes deck and parapet removal.
6. Contractor shall use extreme care in the concrete removal operation. Any spalling or damage to beams, shear studs or rebar caused by this operation shall be repaired by the Contractor to the satisfaction of the Engineer at no additional cost to the Department.
7. Existing reinforcement in the deck shall be cleaned and incorporated into the repairs. Cost included with concrete removal.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	21.7
Bridge Sidewalk Repair (Partial Depth)	Sq. Ft.	56
Deck Slab Repair (Partial)	Sq. Yd.	20
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	65

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_87.dgn



USER NAME = rasfehoni	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 16.0000' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

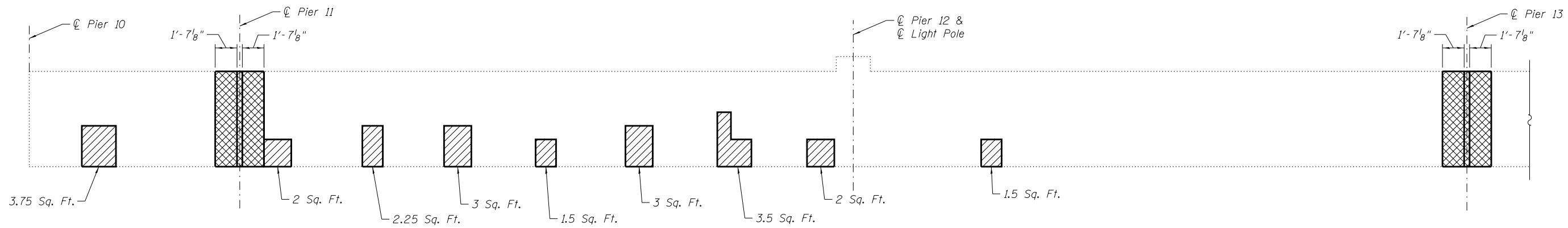
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**NORTH APPROACH REPAIRS II
STRUCTURE NO. 016-0777**

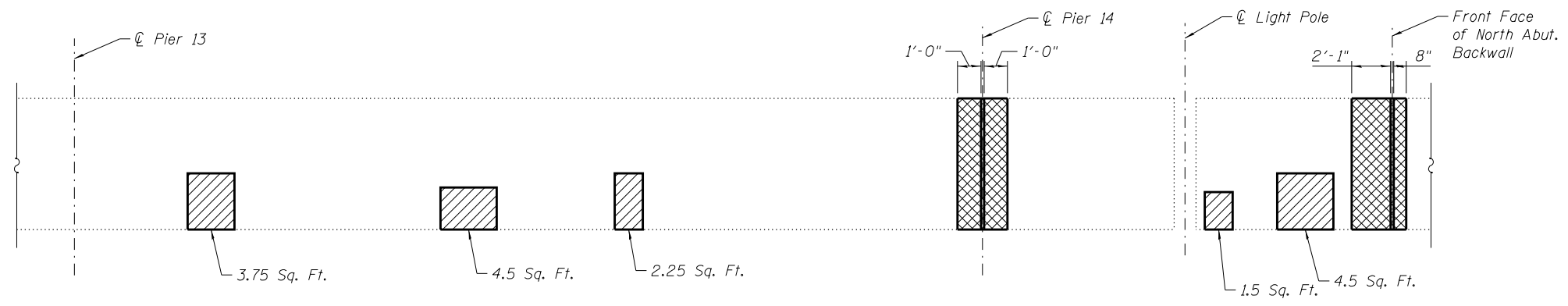
SHEET NO. 87 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	145
CONTRACT NO. 60K72				

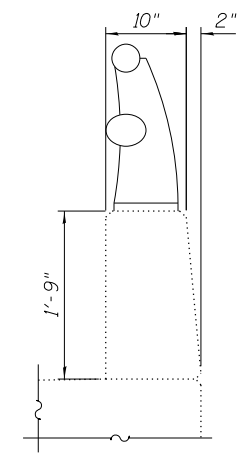
ILLINOIS FED. AID PROJECT



INSIDE FACE OF WEST PARAPET
(Looking West)



INSIDE FACE OF WEST PARAPET
(Looking West)



SECTION THRU PARAPET
(Looking South)

LEGEND:

- Concrete Removal for Expansion Joint Replacement
- Structural Repair of Concrete (Depth equal to or less than 5 inches)

NOTES:

1. Repairs shall include but not limited to the areas shown. The actual areas to be repaired will be determined by engineer at the time of construction.
2. Removal and reattachment of railing, if necessary to perform concrete repairs or concrete removal, shall be included respectively with Structural Repair of Concrete (Depth equal to or less than 5 inches) or Concrete Removal.
3. Quantities for Concrete Removal given on Sheets 86 and 87.
4. Contractor shall use extreme care in the concrete removal operation. Any spalling or rebar damage caused by this operation will be repaired by the Contractor and at no additional cost to the Department.
5. For sidewalk face repairs see Sheets 86 and 87.
6. Vertical scale for parapets is eight times greater than horizontal scale to show defects.
7. Protective Coat shall be applied to repaired areas of concrete.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	39

N:\PROJECTS\20020056\01\Design\Structural\CAD\016-0777_60K72_88.dgn



USER NAME = sallgood	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 16.0000' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

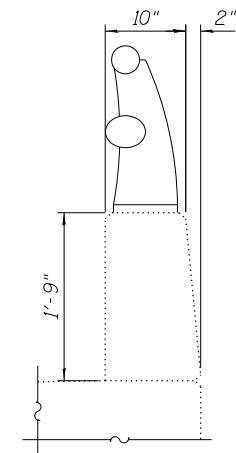
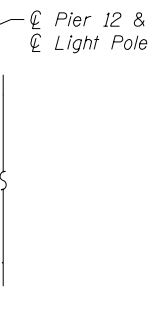
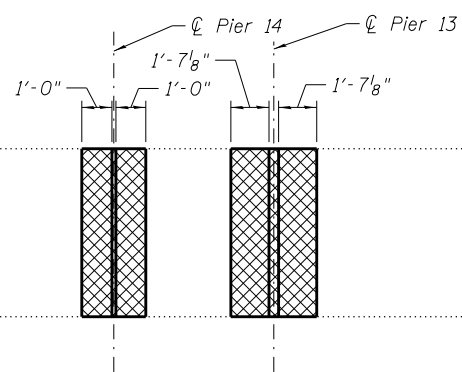
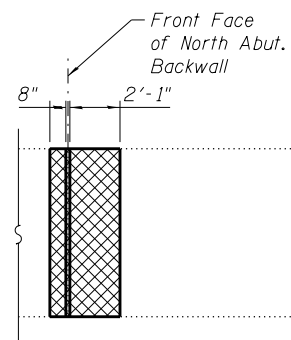
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH APPROACH REPAIRS III
STRUCTURE NO. 016-0777

SHEET NO. 88 OF 104 SHEETS

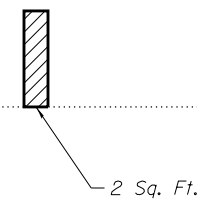
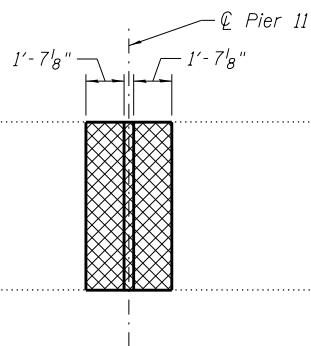
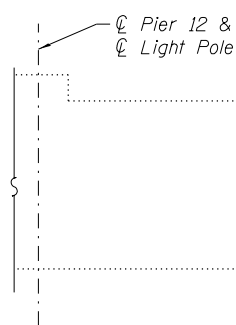
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	146
CONTRACT NO. 60K72				

ILLINOIS FED. AID PROJECT



INSIDE FACE OF EAST PARAPET
(Looking East)

SECTION THRU PARAPET
(Looking North)



INSIDE FACE OF EAST PARAPET
(Looking East)

NOTES:

- Repairs shall include but not limited to the areas shown. The actual areas to be repaired will be determined by engineer at the time of construction.
- Removal and reattachment of railing, if necessary to perform concrete repairs or concrete removal, shall be included respectively with Structural Repair of Concrete (Depth equal to or less than 5 inches) or Concrete Removal.
- Quantities for Concrete Removal given on Sheets 86 and 87.
- Contractor shall use extreme care in the concrete removal operation. Any spalling or rebar damage caused by this operation will be repaired by the Contractor and at no additional cost to the Department.
- For sidewalk face repairs see Sheets 86 and 87.
- Vertical scale for parapets is eight times greater than horizontal scale to show defects.
- Protective Coat shall be applied to repaired areas of concrete.

LEGEND:

- Concrete Removal for Expansion Joint Replacement
- Structural Repair of Concrete (Depth equal to or less than 5 inches)

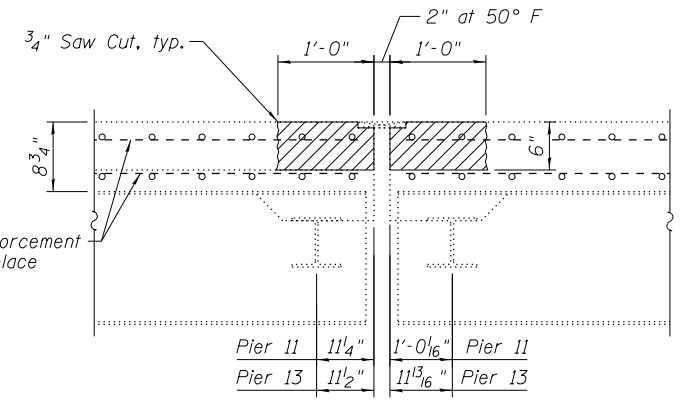
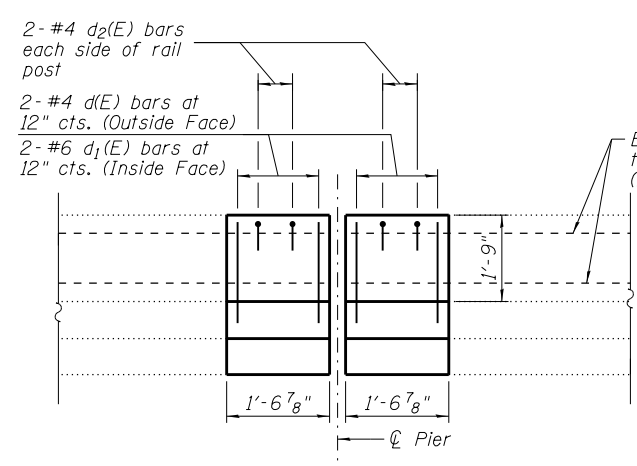
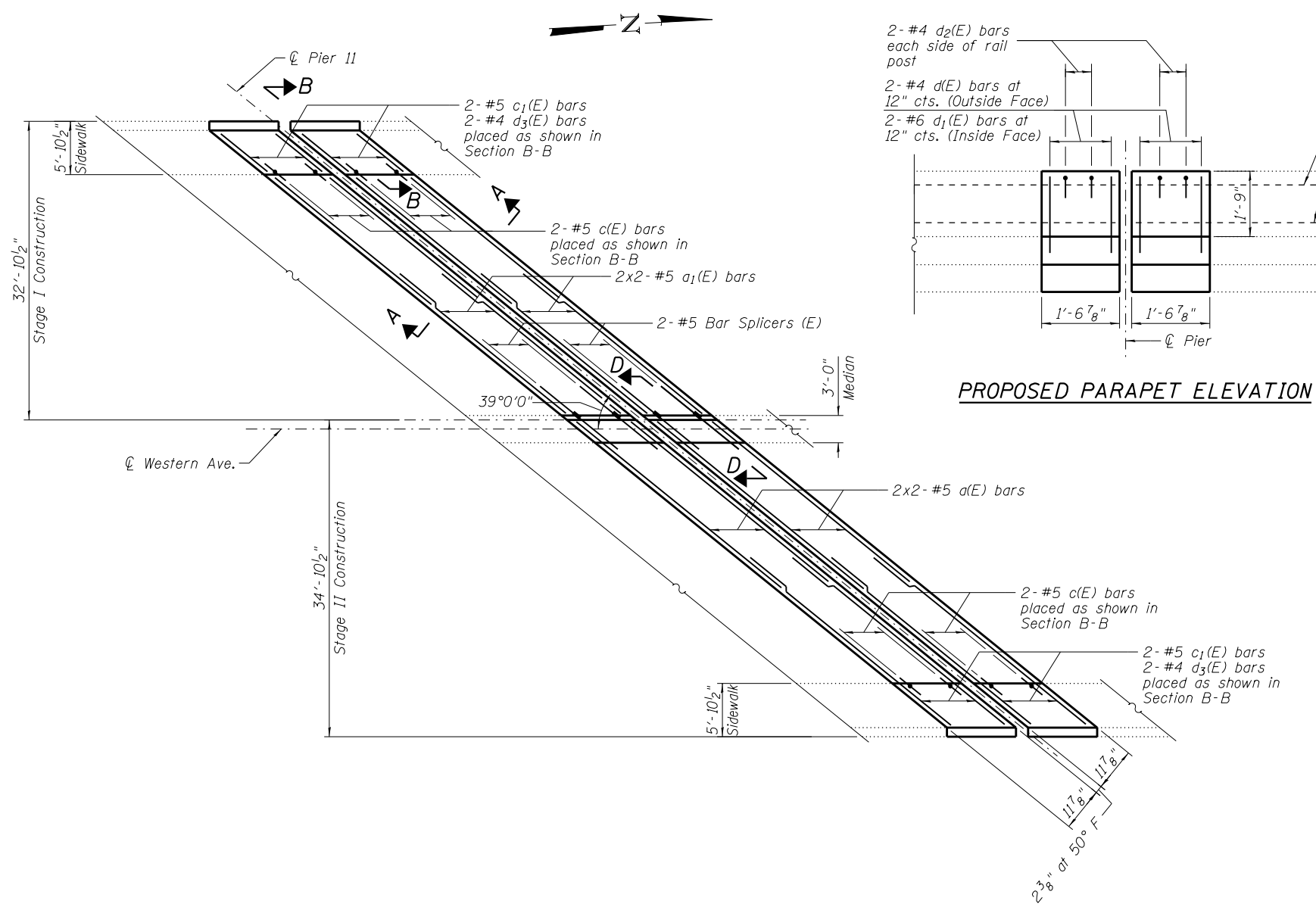
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	2

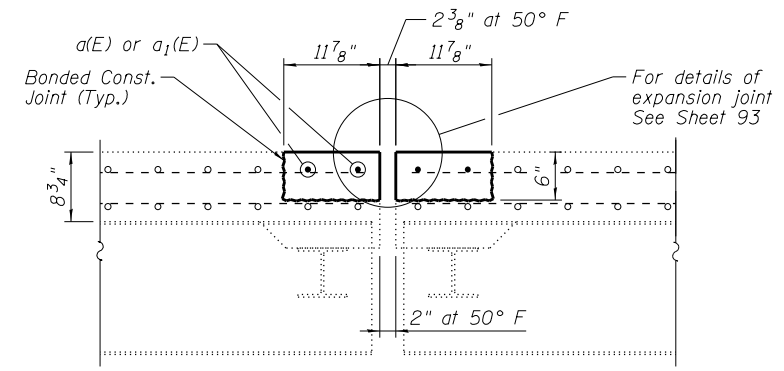
N:\PROJECTS\20020056\01\Design\Structural\CAD\016-0777_60K72_89.dgn

USER NAME = sallgood	DESIGNED - NG	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 16.0000' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 4/11/2016	CHECKED - BWS	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	147
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



EXPANSION JOINT REMOVAL
(Dimensions at Rt. L's to Joint)



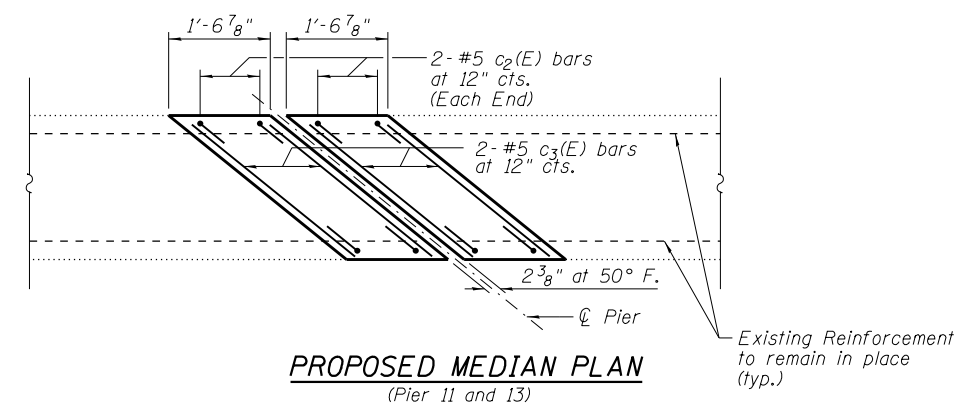
PROPOSED EXPANSION JOINT
(Dimensions at Rt. L's to Joint)

SECTION A-A

NOTES:

- For Sections B-B & D-D, see Sheet 92.
For Preformed Joint Strip Seal details, see Sheet 93.
- Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
- For Bar Bending Diagrams see Sheet 92.
- No vehicular load will be allowed on the section of approach span under construction after concrete removal has begun for the block-out at the approach span and before the proposed concrete has attained the required strength.
- Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on base Sheet 93.
- For Concrete Removal quantity, see Sheet 86 and 87 of 104.

PROPOSED EXPANSION JOINT REINFORCEMENT PLAN
(Pier 11 shown, Pier 13 Similar)



PROPOSED MEDIAN PLAN
(Pier 11 and 13)

LEGEND:

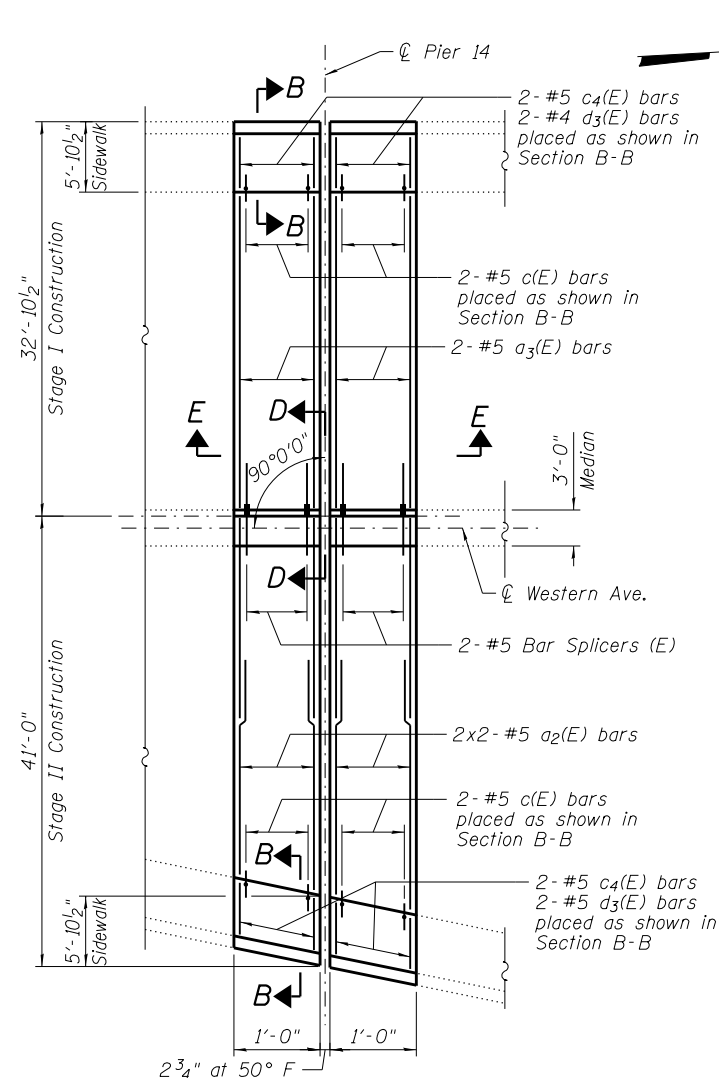
Concrete Removal for Expansion Joint Replacement

MIN. BAR LAP
#5 bars - 2'-7"

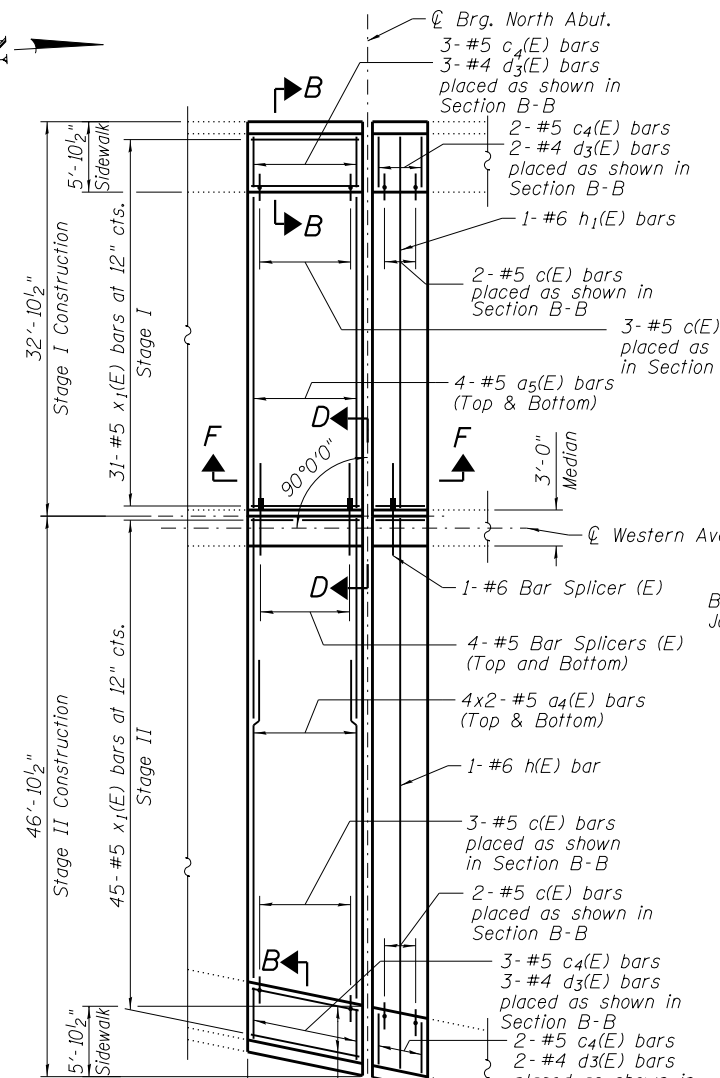
BILL OF MATERIAL

Bar	No.	Size	Length (ft)	Shape
a(E)	16	# 5	26'-10"	—
a1(E)	16	# 5	25'-3"	—
c(E)	16	# 5	2'-4"	—
c1(E)	16	# 5	8'-9"	—
c2(E)	16	# 5	1'-4"	—
c3(E)	8	# 5	3'-8"	—
d(E)	16	# 4	4'-4"	—
d1(E)	16	# 6	3'-0"	—
d2(E)	16	# 4	2'-0"	—
d3(E)	16	# 4	4'-3"	—
Protective Coat			Sq. Yd.	54
Concrete Superstructure			Cu. Yd.	10.6
Reinforcement Bars, Epoxy Coated			Pound	1300

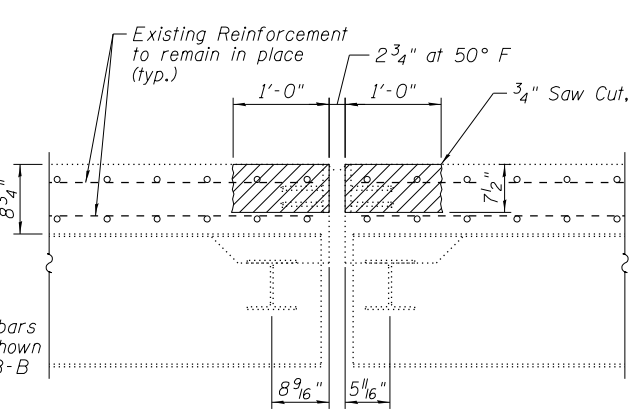
N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_90.dgn



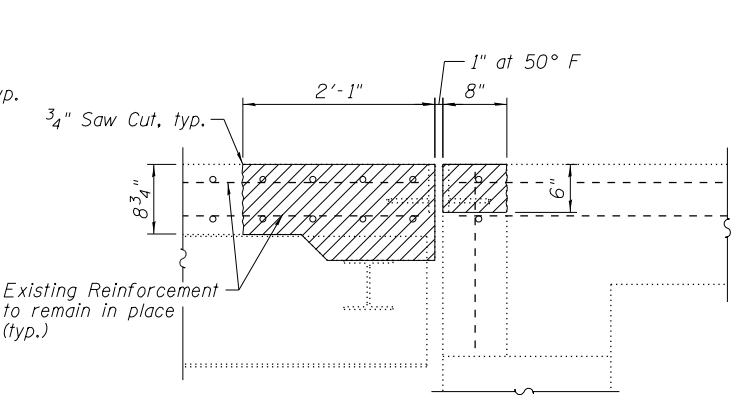
PROPOSED EXPANSION JOINT REINFORCEMENT PLAN
(Pier 14)



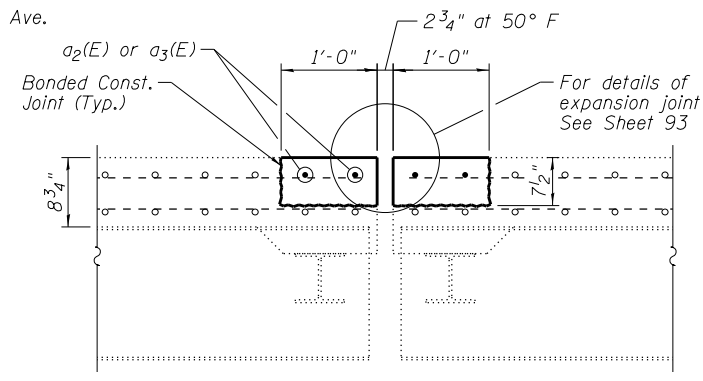
PROPOSED EXPANSION JOINT REINFORCEMENT PLAN
(North Abutment)



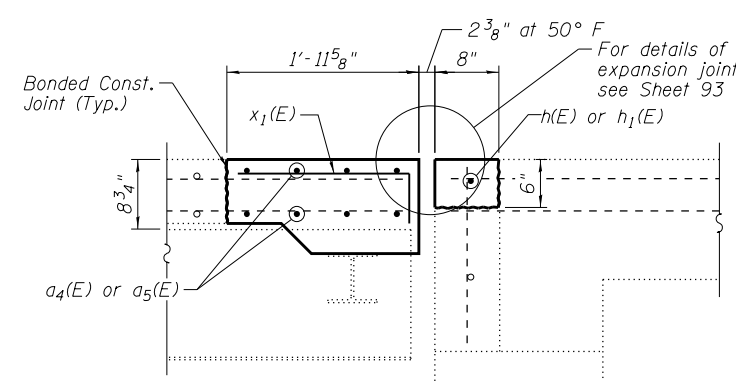
EXPANSION JOINT REMOVAL
(Dimensions at Rt. L's to Joint)



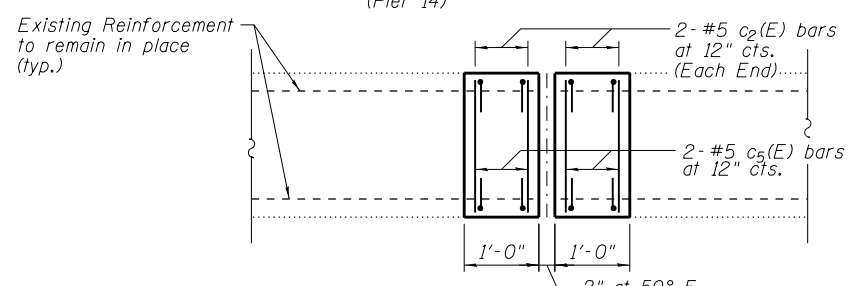
EXISTING N. ABUTMENT REMOVAL
(Dimensions at Rt. L's to Joint)



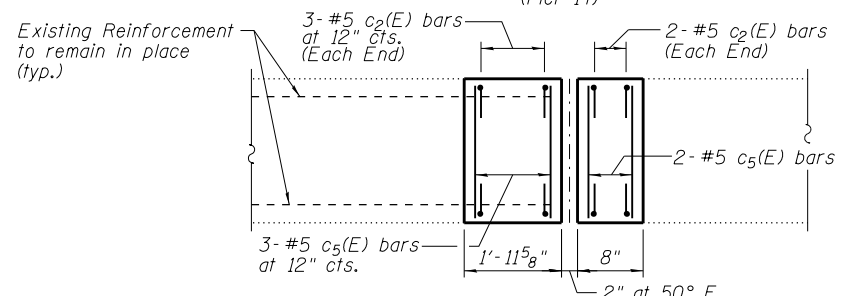
PROPOSED EXPANSION JOINT SECTION E-E
(Dimensions at Rt. L's to Joint)



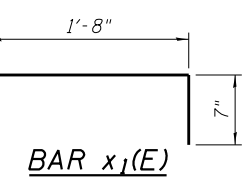
PROPOSED N. ABUTMENT JOINT SECTION F-F
(Dimensions at Rt. L's to Joint)



PROPOSED MEDIAN PLAN
(Pier 14)

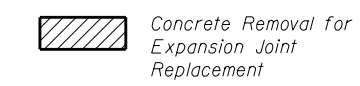


PROPOSED MEDIAN PLAN
(North Abutment)



BAR x1(E)

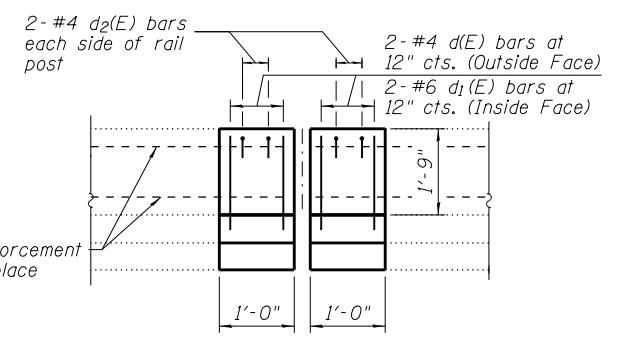
LEGEND:



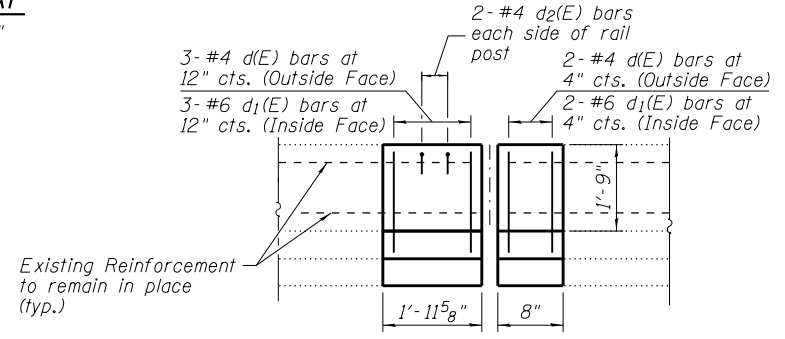
MIN. BAR LAP
#5 bars - 2'-7"

NOTES:

- For Sections B-B & D-D, see Sheet 92. For Preformed Joint Strip Seal details, see Sheet 93.
- Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
- For Bar Bending Diagrams see Sheet 92.
- No vehicular load will be allowed on the section of approach span under construction after concrete removal has begun for the block-out at the approach span and before the proposed concrete has attained the required strength.
- Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on base Sheet 93.
- For Concrete Removal quantity, see Sheet 86 and 87 of 104.



PROPOSED PARAPET ELEVATION
(Pier 14)



PROPOSED PARAPET ELEVATION
(North Abutment)

BILL OF MATERIAL

Bar	No.	Size	Length (ft)	Shape
a2(E)	8	# 5	20'-4"	—
a3(E)	4	# 5	30'-0"	—
a4(E)	16	# 5	23'-4"	—
a5(E)	8	# 5	30'-0"	—
c(E)	18	# 5	2'-4"	—
c2(E)	18	# 5	1'-4"	—
c4(E)	18	# 5	5'-6"	—
c5(E)	9	# 5	2'-4"	—
d(E)	18	# 4	4'-4"	—
d1(E)	18	# 6	3'-0"	—
d2(E)	12	# 4	2'-0"	—
d3(E)	18	# 4	4'-3"	—
h(E)	1	# 6	46'-3"	—
h1(E)	1	# 6	32'-3"	—
x1(E)	96	# 5	2'-3"	—
Protective Coat		Sq. Yd.	43	
Concrete Superstructure		Cu. Yd.	11.8	
Reinforcement Bars, Epoxy Coated		Pound	1680	

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_91.dgn

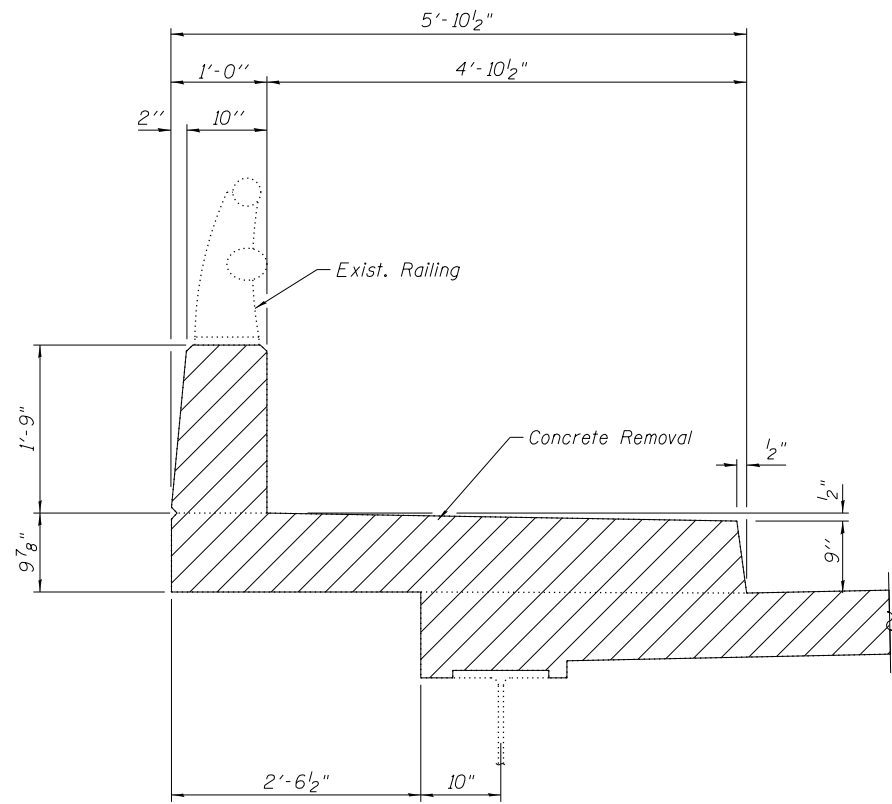


USER NAME = kaisneros	DESIGNED - NG	REVISED -
PLOT SCALE = 16.0000' / in.	CHECKED - BWS	REVISED -
PLOT DATE = 4/11/2016	DRAWN - SBA	REVISED -
	CHECKED - BWS	REVISED -

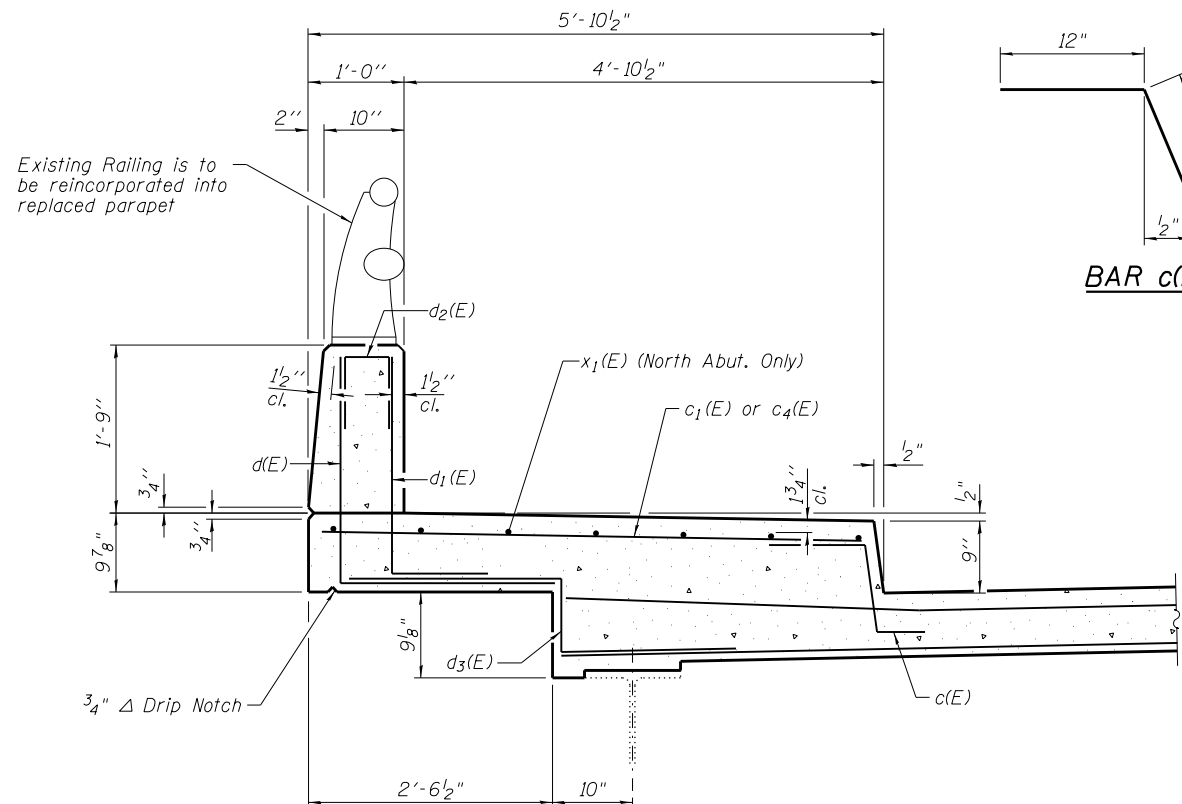
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT II
STRUCTURE NO. 016-0777
SHEET NO. 91 OF 104 SHEETS

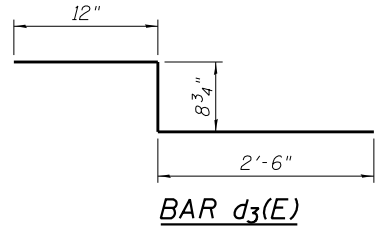
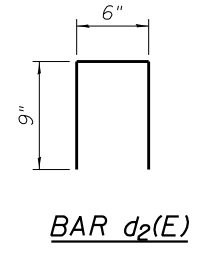
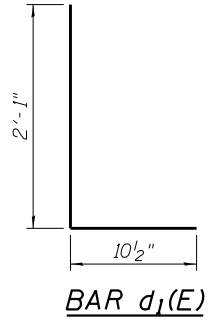
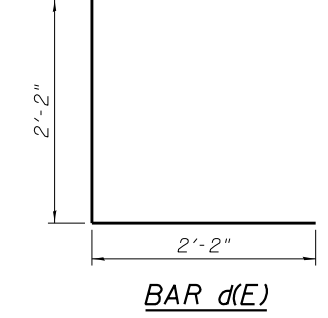
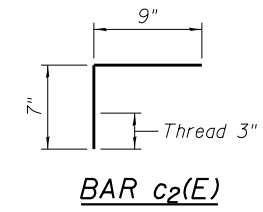
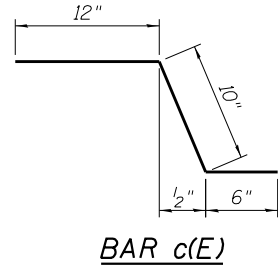
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	149
				CONTRACT NO. 60K72
ILLINOIS FED. AID PROJECT				



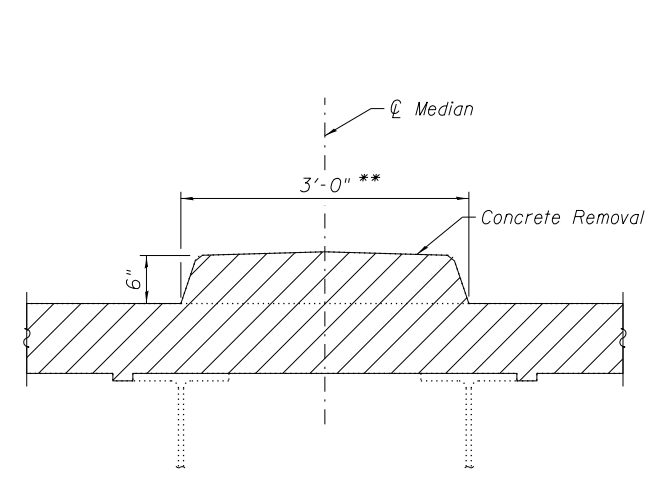
SIDEWALK AND PARAPET REMOVAL



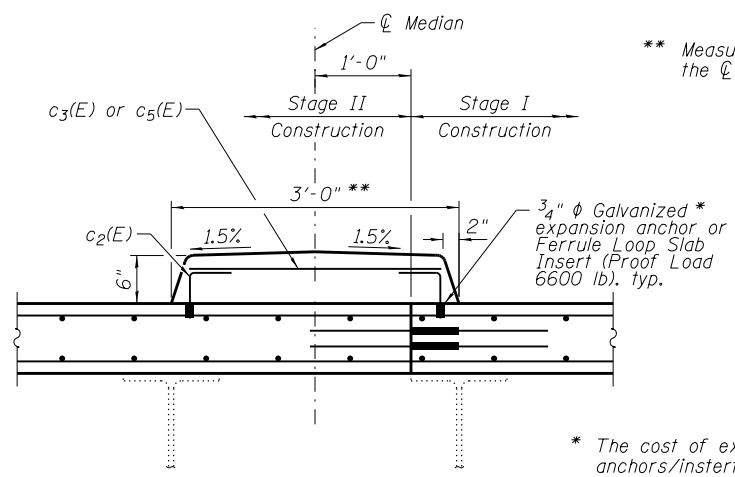
PROPOSED SIDEWALK AND PARAPET REINFORCEMENT



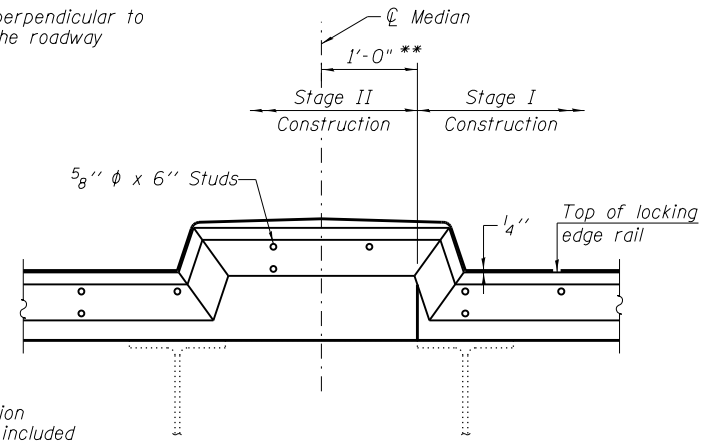
SECTION B-B



MEDIAN REMOVAL



PROPOSED MEDIAN (Looking South)



TYPICAL JOINT TREATMENT AT MEDIAN (Looking South)

NOTES:

1. Work this sheet with Sheets 90 & 91.
2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
3. No construction live load will be allowed on the section of approach span under construction after concrete removal has begun for the block-out at the approach span and before the proposed concrete has attained the required strength.

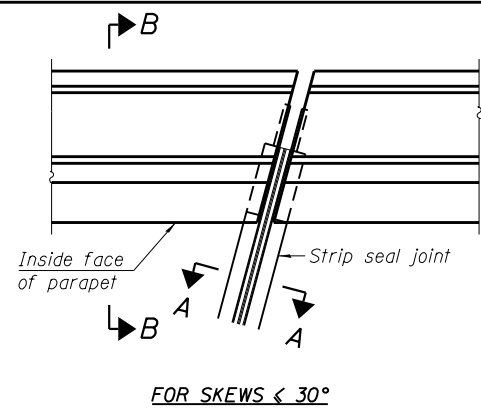
LEGEND:

Concrete Removal for Expansion Joint Replacement

N:\PROJECTS\20020056\01\Design\Structural\CAD\016-0777_60K72_92.dgn

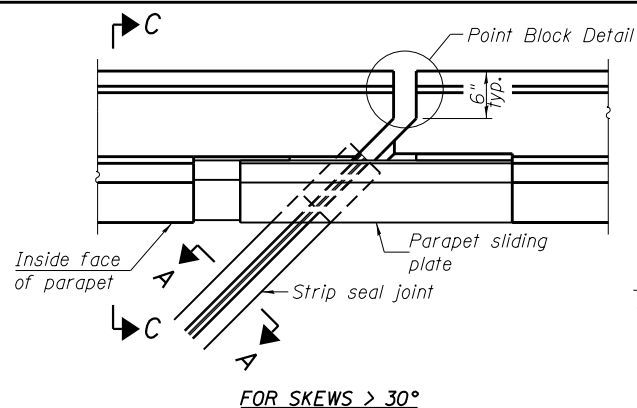
USER NAME = sallgood	DESIGNED - NG	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED - BWS	REVISED -
PLOT DATE = 4/11/2016	DRAWN - SBA	REVISED -
	CHECKED - BWS	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	150
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

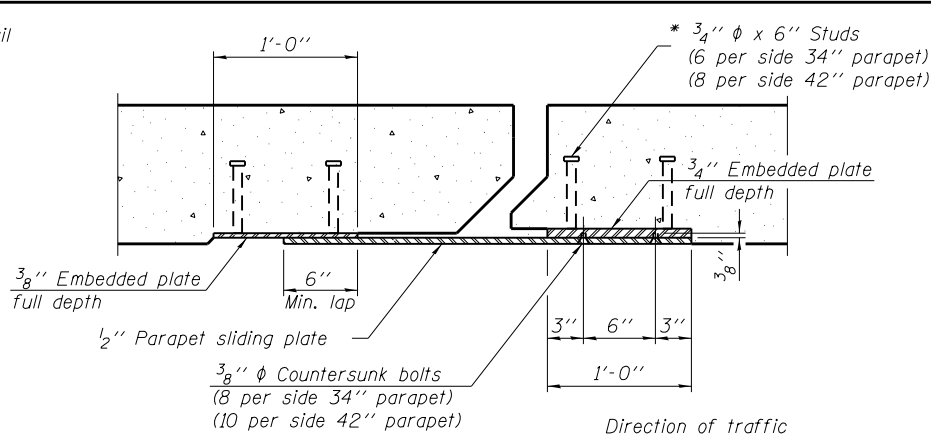


FOR SKEWS < 30°

PLAN AT PARAPET

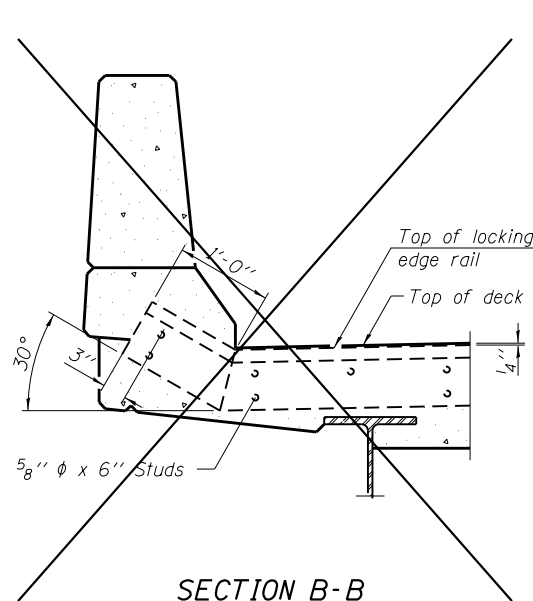


FOR SKEWS > 30°

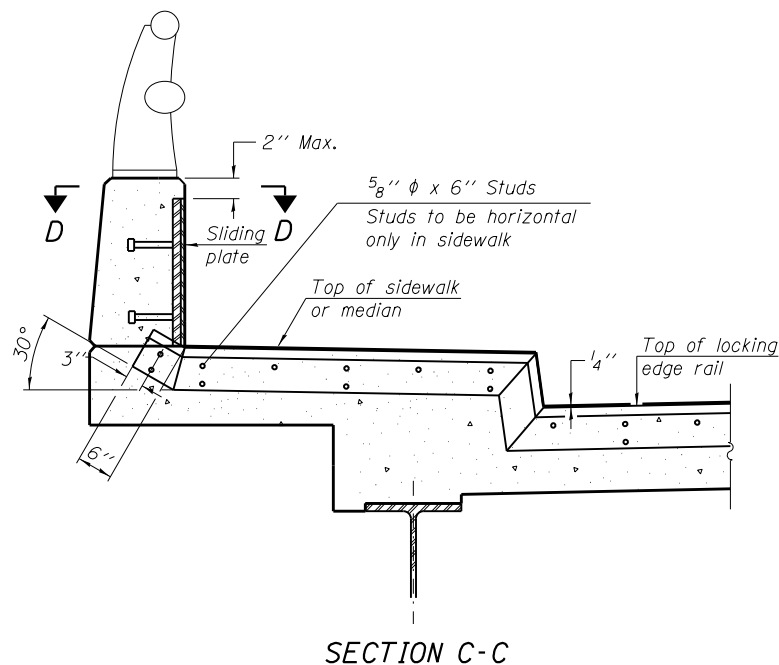


SECTION D-D

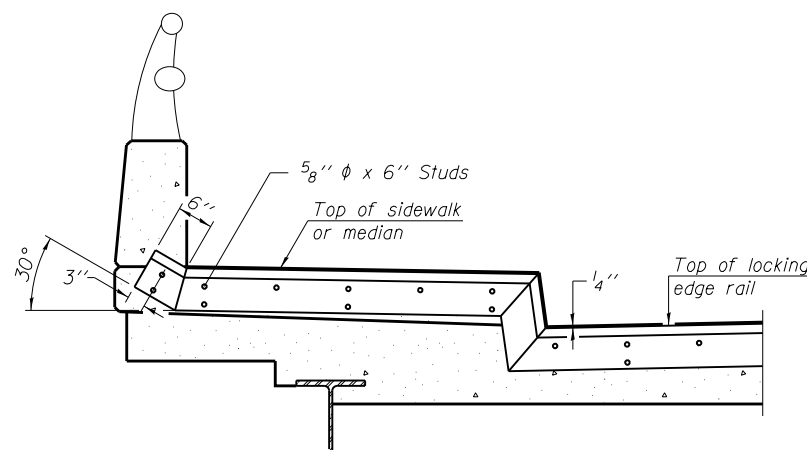
Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.
 The manufacturer's recommended installation methods shall be followed.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.



SECTION B-B

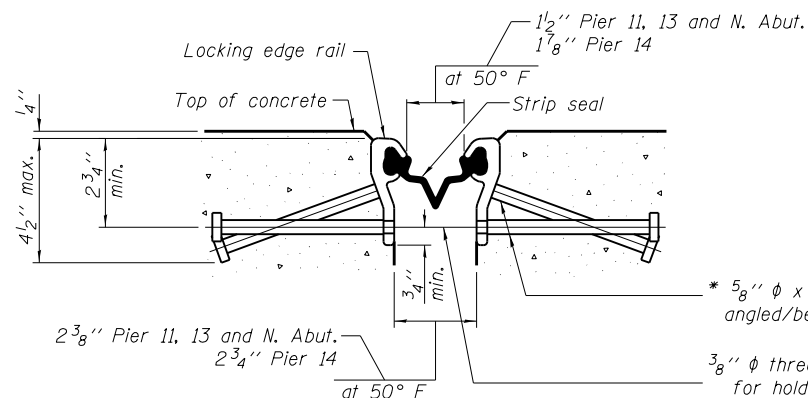


SECTION C-C



TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

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



SHOWING ROLLED RAIL JOINT

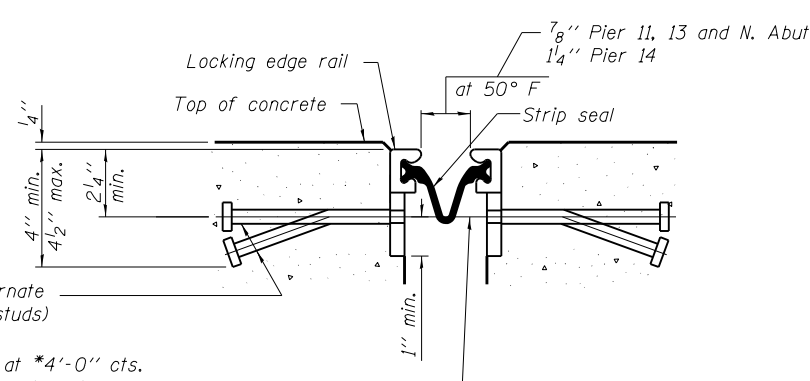
* 5/8" diameter x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

3/8" diameter threaded rods in 7/16" diameter holes at 4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

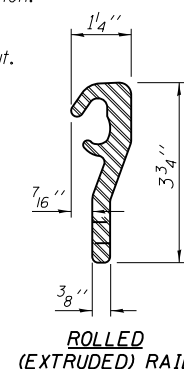
SECTION A-A

SECTION THRU SHALLOW STRIP SEAL JOINT AT PIER 11, 13, 14 AND N. ABUT.

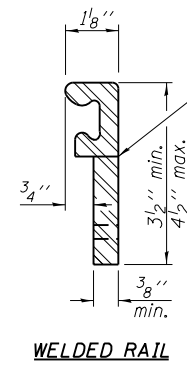
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SHOWING WELDED RAIL JOINT



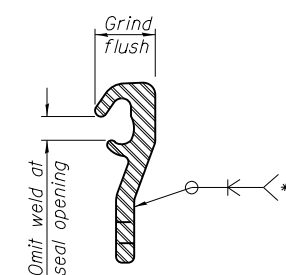
ROLLED (EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

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

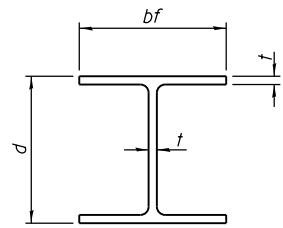
BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	373

N:\PROJ\10020056\01\Design\Structural\CAD\016-0777_60K72_93.dgn

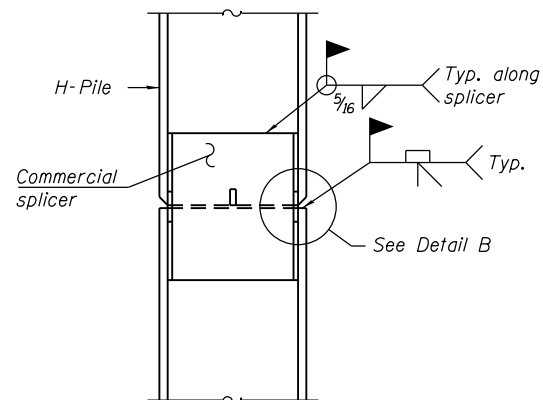
USER NAME = sailgood	DESIGNED - NG	REVISED -
PLOT SCALE = 16.0000' / in.	CHECKED - BWS	REVISED -
PLOT DATE = 4/11/2016	DRAWN - SBA	REVISED -
	CHECKED - BWS	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	151
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

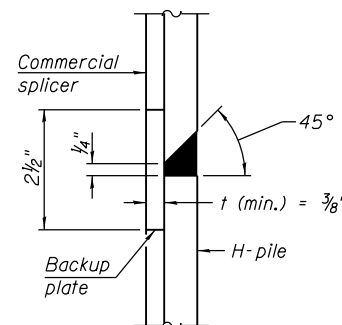


STEEL PILE TABLE

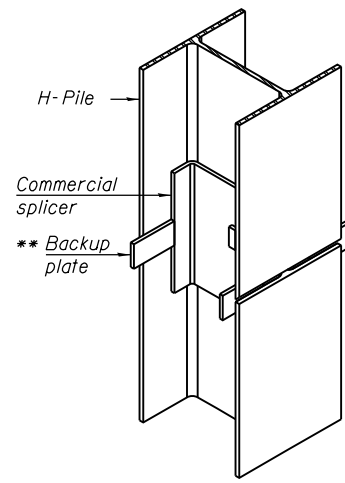
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION

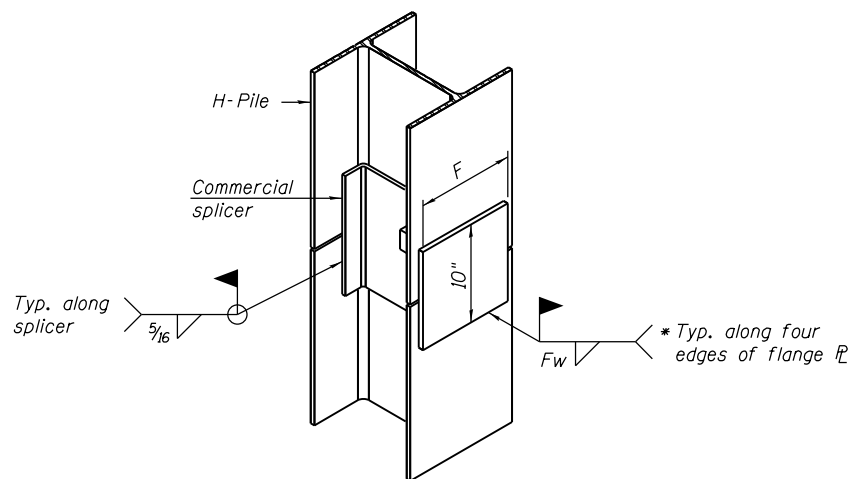


DETAIL "B"



ISOMETRIC VIEW

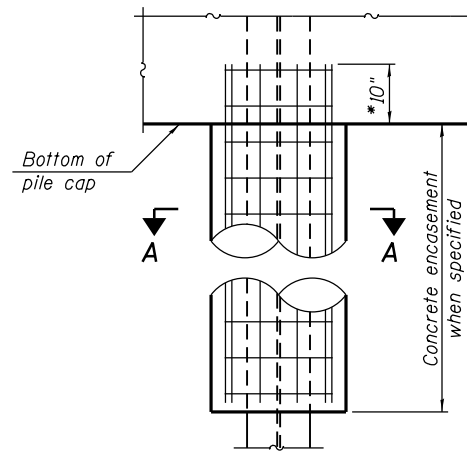
WELDED COMMERCIAL SPLICE



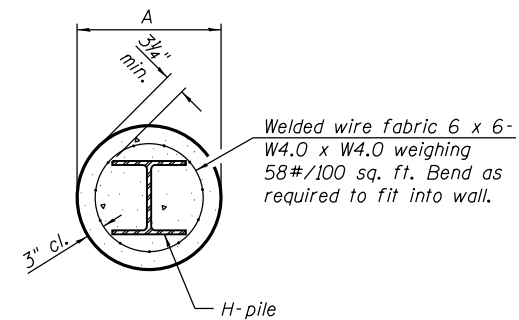
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).



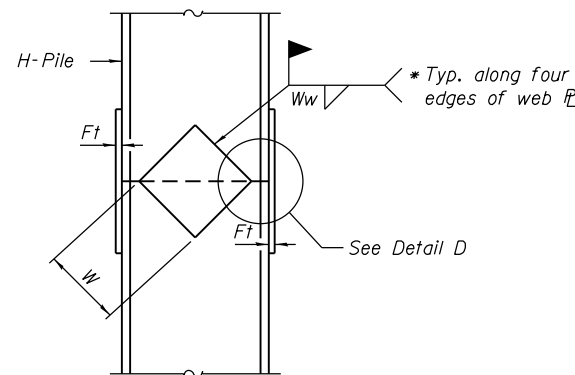
ELEVATION



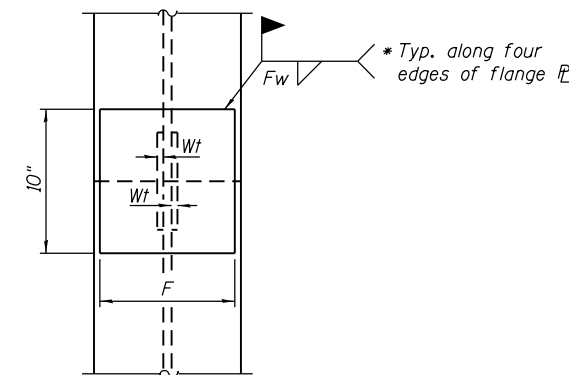
SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASUREMENT

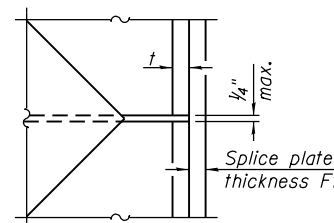
(Forms for encasement may be omitted when soil conditions permit).



ELEVATION



END VIEW



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

F - HP

8-11-2017



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

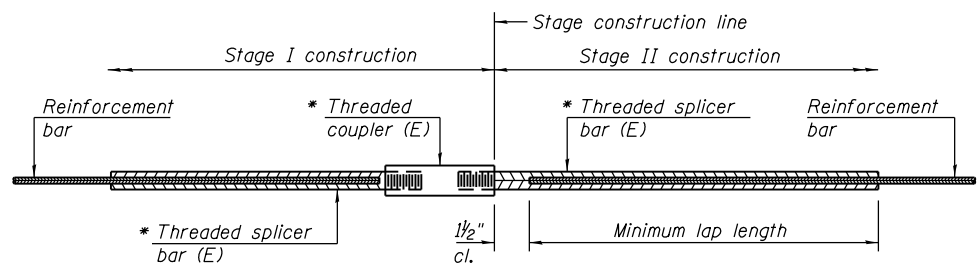
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 016-0777

SHEET NO. 95 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	153
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

FILE NAME = W:\191\132\1001\Master\Ave\CAD\Drawings\Structural\016-0777\95 - HP Pile Details.dgn

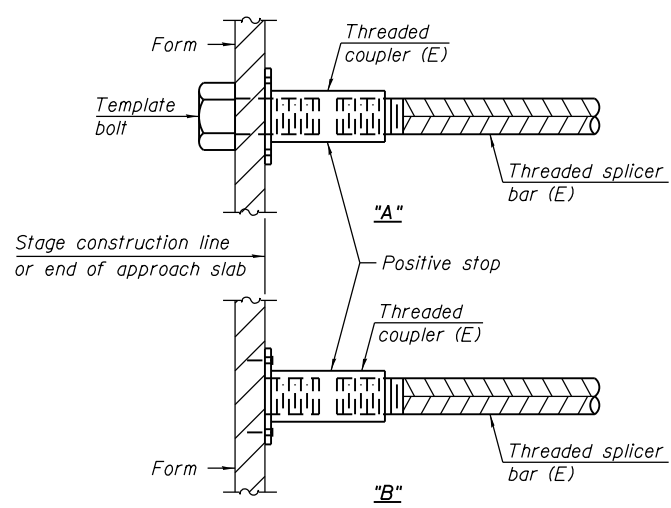


STANDARD BAR SPLICER ASSEMBLY

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

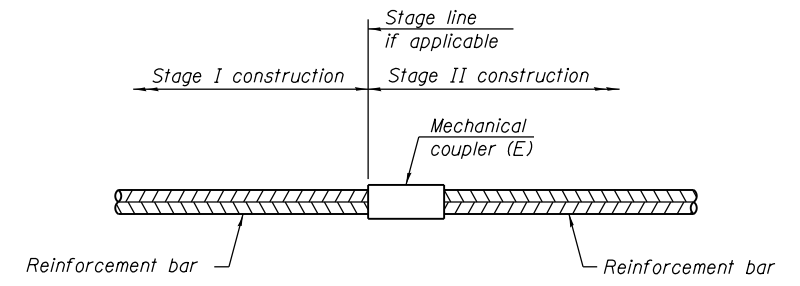
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
S. Appr. Slab	#4	25	2'-8"
S. Appr. Slab	#5	86	3'-7"
Bridge Deck	#5	1651	3'-7"
Truss Deck Joint Replacement	#5	11	3'-7"
S. Abutment	#5	13	3'-7"
S. Abutment	#7	8	5'-0"
Pier 1	#5	28	3'-7"
Pier 1	#6	13	4'-4"
Pier 1	#8	10	5'-9"
Pier 1	#7	10	5'-0"
Pier 2	#5	28	3'-7"
Pier 2	#6	13	4'-4"
Pier 2	#8	10	5'-9"
Pier 2	#7	10	5'-0"
Pier 3	#5	28	3'-7"
Pier 3	#6	13	4'-4"
Pier 3	#8	10	5'-9"
Pier 3	#7	10	5'-0"
Pier 4	#5	28	3'-7"
Pier 4	#6	13	4'-4"
Pier 4	#8	10	5'-9"
Pier 4	#7	10	5'-0"
Pier 9	#5	21	3'-7"
Joint 11	#5	4	3'-7"
Joint 13	#5	4	3'-7"
Joint 14	#5	4	3'-7"
N. Abutment	#5	9	3'-7"



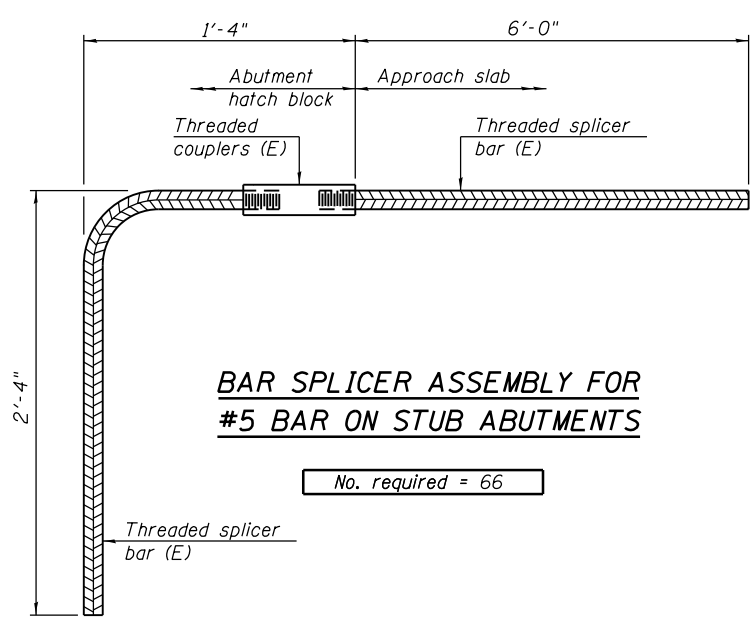
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Deck-South Abut.	#5	3 (a ₉ (E) & a ₁₀ (E))
Deck-Exist. Pier 9	#5	3 (a ₉ (E) & a ₁₀ (E))
West Truss SW	#5	10 (c ₁₀₀ (E))
West Truss SW	#5	19 (c ₁₀₁ (E))
West Truss SW	#5	6 (c ₁₀₂ (E))
East Truss SW	#5	8 (c ₁₁₀ (E))
East Truss SW	#5	5 (c ₁₁₁ (E))



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 66

NOTES

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

FILE NAME : W:\191\132\1001\Western_Ave\CADD_Sheets\Structure\016-0777\96 - Bar Splicers.dgn

BSD-1 2-17-2017



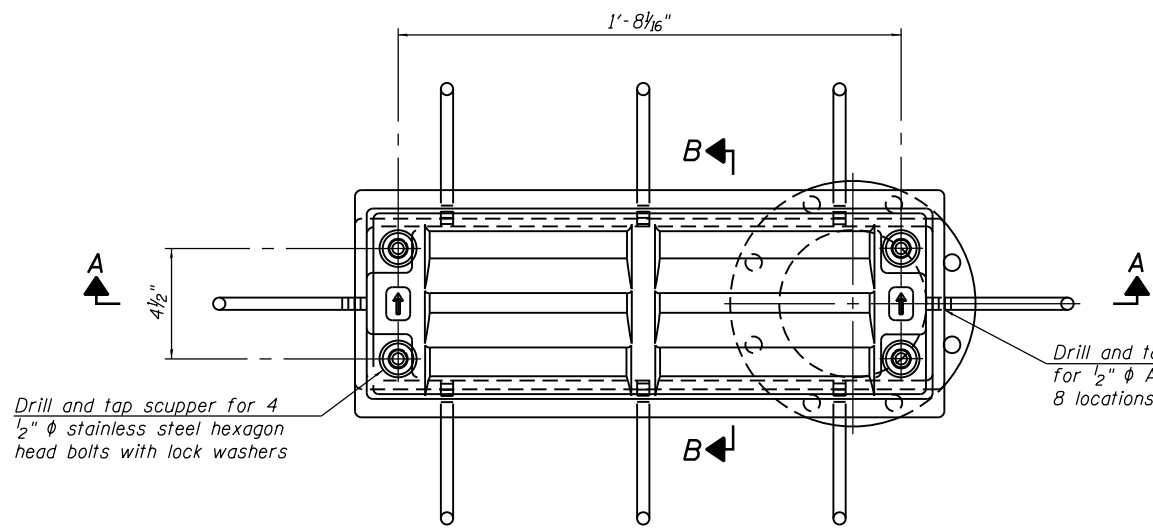
USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

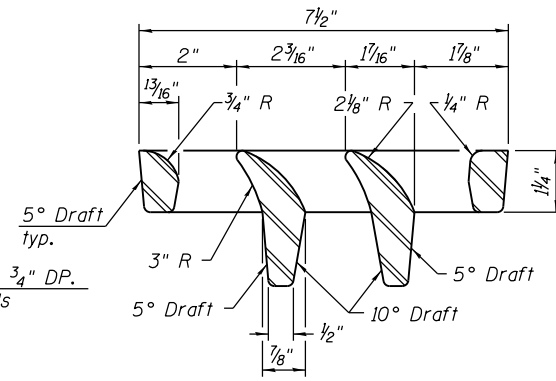
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-0777

SHEET NO. 96 OF 104 SHEETS

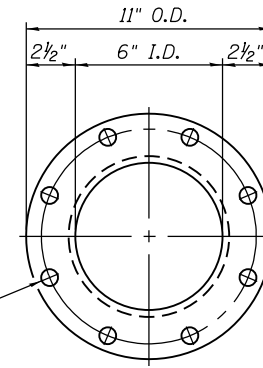
F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY Cook	TOTAL SHEETS 184	SHEET NO. 154
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				



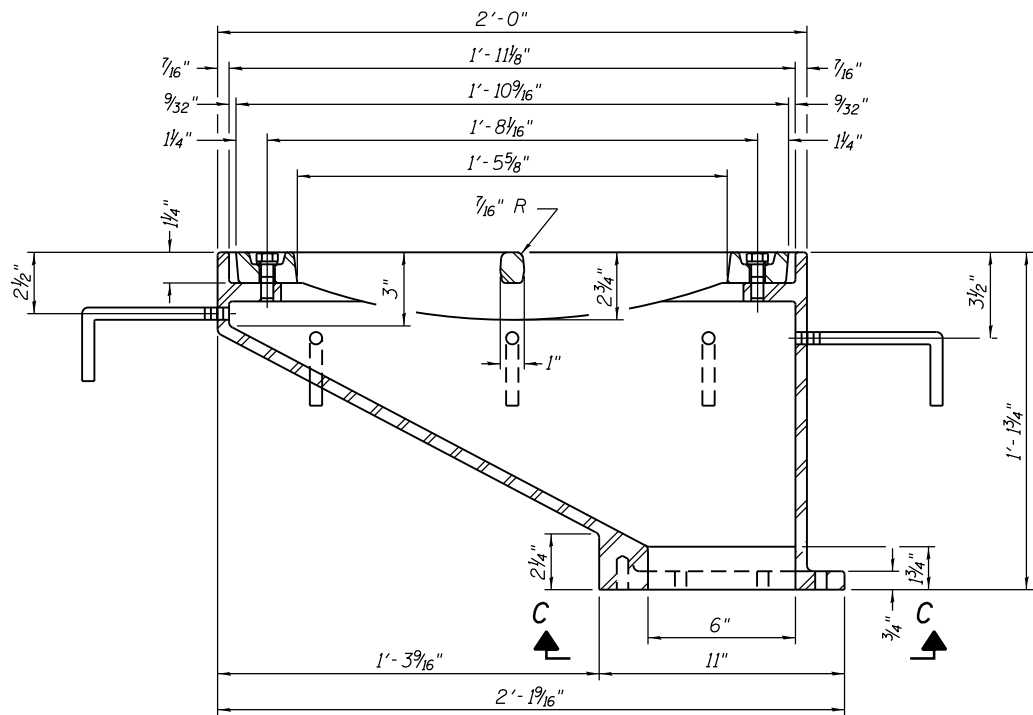
PLAN



VANE GRATE DETAIL

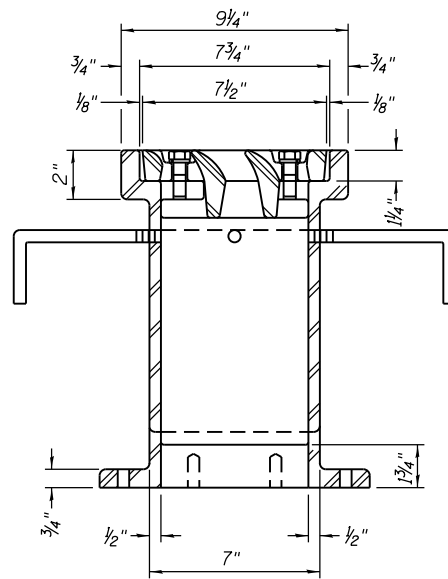


VIEW C-C

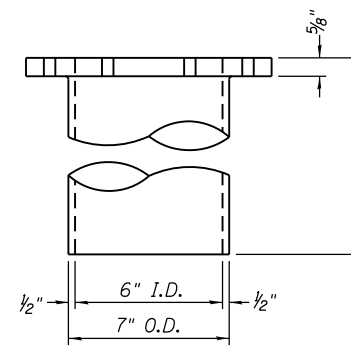


SECTION A-A

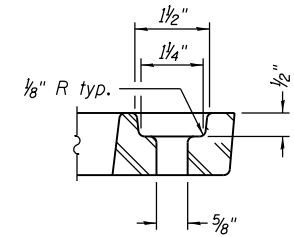
See sheet 19 of 104 for scupper location relative to parapet.



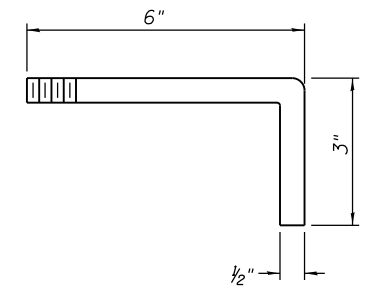
SECTION B-B



DOWNSPOUT



BOLT HOLE DETAIL



ANCHOR STUD DETAIL

Drill and tap 8 holes for 1/2"-13 bolts on a 9 1/2" φ bolt circle. (2 blind holes are 1/4" deep, 6 thru holes)

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
 Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.
 Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	8

FILE NAME = W:\191\132\DDOT\Western_Ave\CADD_Sheets\Structural\016-0777\97 - Scupper Details.dgn

DS-12

2-17-2017



USER NAME =	DESIGNED - JJI	REVISED -
	CHECKED - HB	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-12
STRUCTURE NO. 016-0777

SHEET NO. 97 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	155
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

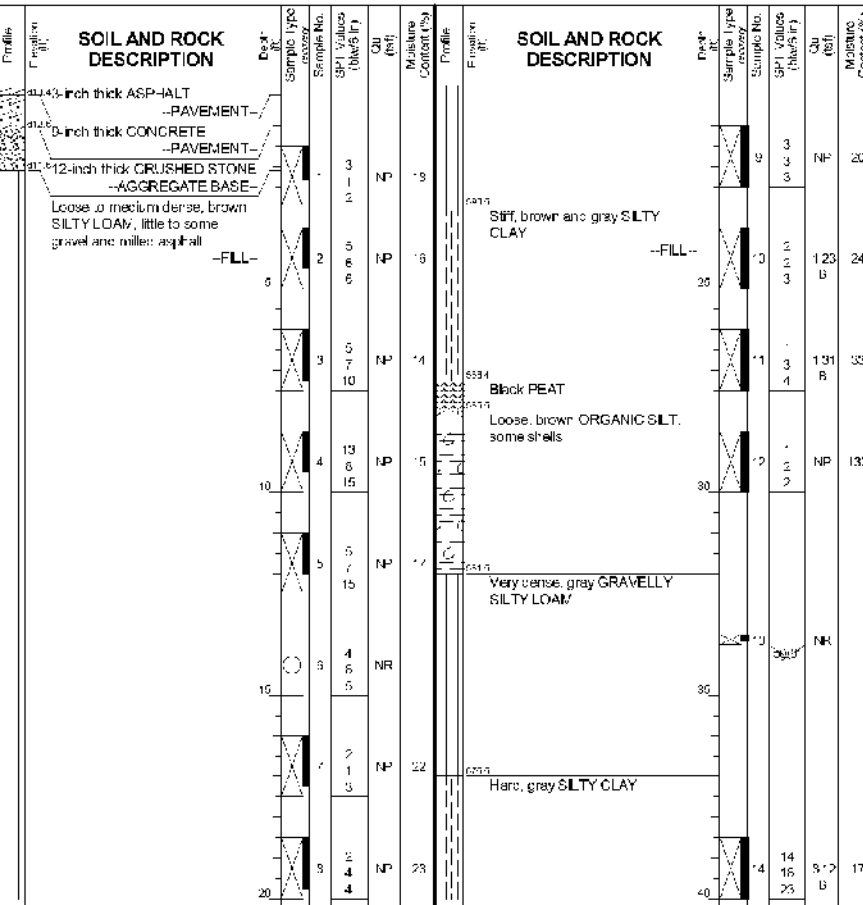
**BORING LOG BSB-01**

Page 1 of 1

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9693

Client: **Bollinger, Leach, and Associates**
Project: **Western Avenue/Cal Sag South Approach**
Location: **Blue Island, Illinois**

Datum: NAD 83
Elevation: 613.65 ft
North: 18°58'51.49" N
East: 1°27'34.63" E
Station: 134+49.78
Offset: 2' 89" RI



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-17-2012	Complete Drilling	12-17-2012
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 TMR
Driller	R&N	Logger	B. Wilson
Checked by	M. Snider	Time After Drilling	NA
Drilling Method	2.25 ID SSA to 10', mud rotary 1.0' to rock, boring grouted upon completion	Depth to Water	NA
		The stratigraphic log represents the approximate boundary between soil types. It is not intended to be used for design.	

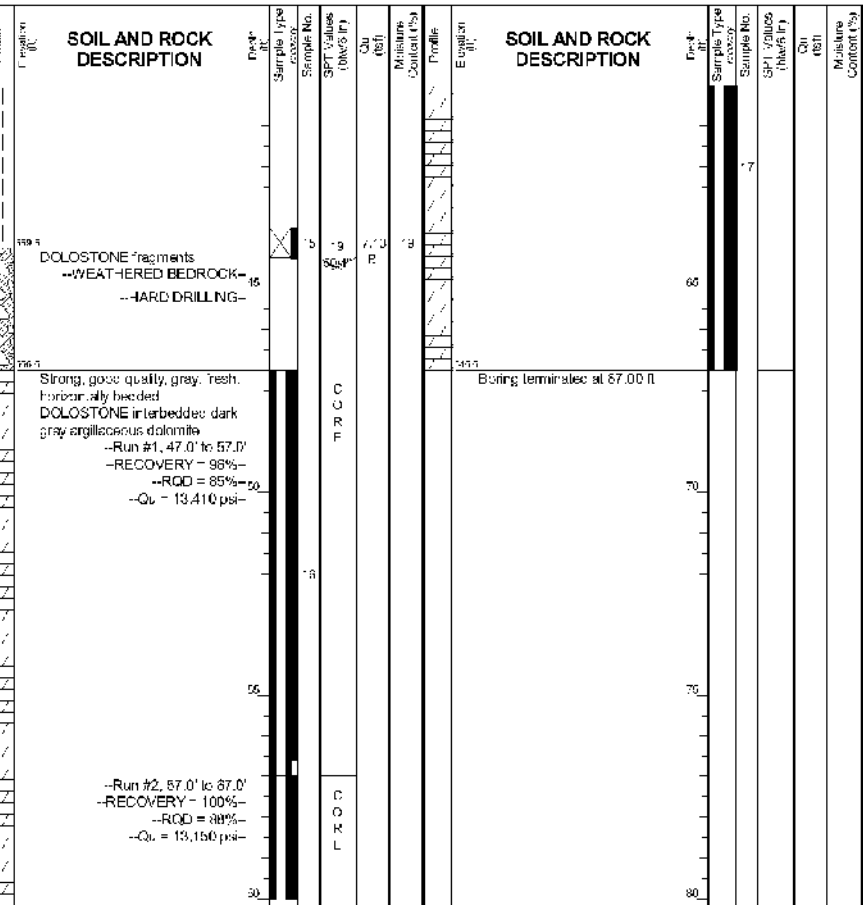
**BORING LOG BSB-01**

Page 2 of 1

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9693

Client: **Bollinger, Leach, and Associates**
Project: **Western Avenue/Cal Sag South Approach**
Location: **Blue Island, Illinois**

Datum: NAD 83
Elevation: 613.65 ft
North: 18°58'51.49" N
East: 1°27'34.63" E
Station: 134+49.78
Offset: 2' 89" RI



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-17-2012	Complete Drilling	12-17-2012
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 TMR
Driller	R&N	Logger	B. Wilson
Checked by	M. Snider	Time After Drilling	NA
Drilling Method	2.25 ID SSA to 10', mud rotary 1.0' to rock, boring grouted upon completion	Depth to Water	NA
		The stratigraphic log represents the approximate boundary between soil types. It is not intended to be used for design.	

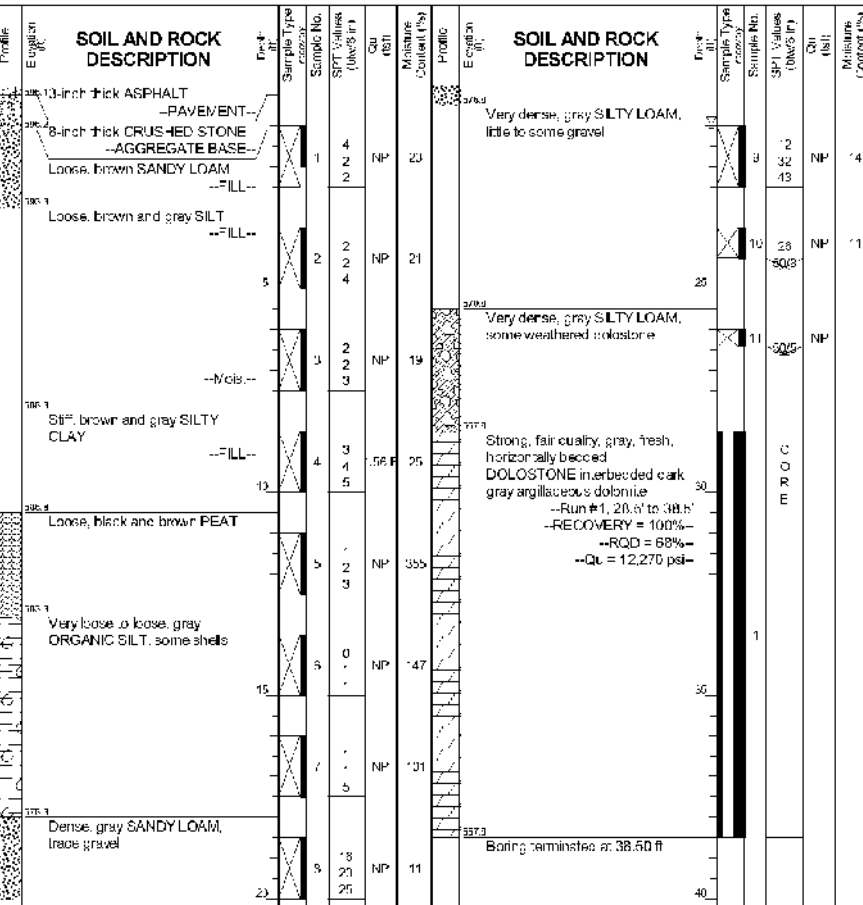
**BORING LOG BSB-02**

Page 1 of 1

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9693

Client: **Bollinger, Leach, and Associates**
Project: **Western Avenue/Cal Sag South Approach**
Location: **Blue Island, Illinois**

Datum: NAD 83
Elevation: 606.93 ft
North: 18°58'29.63" N
East: 1°27'25.68" E
Station: 134+49.78
Offset: 54.3' LI



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-13-2012	Complete Drilling	12-13-2012
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 TMR
Driller	R&N	Logger	B. Wilson
Checked by	M. Snider	Time After Drilling	NA
Drilling Method	2.25 ID SSA to 10', mud rotary 1.0' to rock, boring grouted upon completion	Depth to Water	21.00 ft
		The stratigraphic log represents the approximate boundary between soil types. It is not intended to be used for design.	

FILE NAME = W:\191-132-1001-Western_Ave_CADD_Sheets\Structure\016-0777A_98 - Boring01.dwg



USER NAME =	DESIGNED -	REVISIONS
	JJI	
	CHECKED -	REVISIONS
	HB	
PLOT SCALE =	DRAWN -	REVISIONS
	HB	
PLOT DATE = 6/25/2019	CHECKED -	REVISIONS
	JJI	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS I
STRUCTURE NO. 016-0777
SHEET NO. 98 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	156
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

BORING LOG BSB-03

WEI Job No.: 165-03-01

Client: **Bollinger, Lach, and Associates**
 Project: **Western Avenue/Cal Sag South Approach**
 Location: **Blue Island, Illinois**

Datum: NAD83
 Elevation: 594.50 ft
 North: 16° 00' 24" N
 East: 1° 28' 23.23" E
 Station: 136444.22
 Offset: 38.30 ft

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	CU	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	CU	Moisture Content (%)
594.50	Brown SILTY LOAM, trace wood chips	0.0					594.50	Very dense, gray SANDY LOAM, some weathered dolomite fragments	0.0	1	16	NP	11
594.00	Loose, brown SILT	1.0	1	4	NP	20	594.00	Strong, good quality, gray, fresh, horizontally bedded DOLOSTONE interbedded dark gray argillaceous dolomite, trace shale partings	1.0	3	34	NP	11
593.50	Loose, brown and gray LOAM	2.0	2	5	NP	19	593.50	---WEATHERED BEDROCK---	2.0	13	25	NP	11
593.00	Stiff to very stiff, brown and gray SILTY CLAY	3.0	3	5	NP	20	593.00	---WEATHERED BEDROCK---	3.0	11	15	NP	8
592.50	Dark brown PEAT	4.0	4	4	NP	35	592.50	---WEATHERED BEDROCK---	4.0	15	25	NP	8
592.00	Very loose, brown ORGANIC SILT, some shells	5.0	5	NP	NP	19	592.00	---WEATHERED BEDROCK---	5.0	11	15	NP	8
591.50	Medium stiff, gray SILTY CLAY	6.0	6	6.50	NP	73	591.50	---WEATHERED BEDROCK---	6.0	11	15	NP	8
591.00	Dense to very dense, gray SILTY LOAM, little gravel	7.0	7	NP	NP	13	591.00	---WEATHERED BEDROCK---	7.0	11	15	NP	8

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2012	Complete Drilling	12-12-2012	While Drilling	21.00 ft		
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 TMR	At Completion of Drilling	MUD		
Driller	R&J	Logger	B. Wilson	Time After Drilling	NA		
Drilling Method	2.25 ID SSA to 10', mud rotary 10' to rock boring			Depth to Water	NA		
	grouted upon completion			The "at rock" has represent the approximate boundary between soil types. The "at rock" may be a color.			

BORING LOG BSB-03

WEI Job No.: 165-03-01

Client: **Bollinger, Lach, and Associates**
 Project: **Western Avenue/Cal Sag South Approach**
 Location: **Blue Island, Illinois**

Datum: NAD83
 Elevation: 594.50 ft
 North: 16° 00' 24" N
 East: 1° 28' 23.23" E
 Station: 136444.22
 Offset: 38.30 ft

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	CU	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	CU	Moisture Content (%)
594.50	Boring terminated at 45.00 ft	45.00					594.50						

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2012	Complete Drilling	12-12-2012	While Drilling	21.00 ft		
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 TMR	At Completion of Drilling	MUD		
Driller	R&J	Logger	B. Wilson	Time After Drilling	NA		
Drilling Method	2.25 ID SSA to 10', mud rotary 10' to rock boring			Depth to Water	NA		
	grouted upon completion			The "at rock" has represent the approximate boundary between soil types. The "at rock" may be a color.			

BORING LOG BSB-04

WEI Job No.: 165-03-01

Client: **Bollinger, Lach, and Associates**
 Project: **Western Avenue/Cal Sag South Approach**
 Location: **Blue Island, Illinois**

Datum: NAD83
 Elevation: 594.50 ft
 North: 16° 00' 24" N
 East: 1° 28' 23.23" E
 Station: 136444.22
 Offset: 38.30 ft

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	CU	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	CU	Moisture Content (%)
594.50	Medium dense, brown GRAVELLY to SANDY LOAM	0.0					594.50	Very dense, gray SANDY GRAVEL, weathered dolomite fragments	0.0	9	33	NP	11
594.00	Loose, brown SANDY LOAM	1.0	1	8	NP	16	594.00	---WEATHERED BEDROCK---	1.0	3	34	NP	11
593.50	Very soft to stiff, brown SILTY CLAY, some gravel	2.0	2	3	NP	21	593.50	Strong, excellent quality, gray, fresh, horizontally bedded DOLOSTONE interbedded dark gray argillaceous dolomite	2.0	16	20	NP	8
593.00	Very loose, brown ORGANIC SILTY LOAM, some shells	3.0	3	NP	NP	20	593.00	---WEATHERED BEDROCK---	3.0	11	15	NP	8
592.50	Dense, gray, fine SAND	4.0	4	2	NP	26	592.50	---WEATHERED BEDROCK---	4.0	11	15	NP	8
592.00	Hard, gray SILTY CLAY LOAM, some gravel	5.0	5	NP	NP	21	592.00	---WEATHERED BEDROCK---	5.0	11	15	NP	8

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	11-30-2012	Complete Drilling	11-30-2012	While Drilling	15.00 ft		
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 TMR	At Completion of Drilling	MUD		
Driller	R&J	Logger	F. Borzaga	Time After Drilling	NA		
Drilling Method	2.25 ID SSA to 10', mud rotary 10' to rock boring			Depth to Water	NA		
	grouted upon completion			The "at rock" has represent the approximate boundary between soil types. The "at rock" may be a color.			

FILE NAME = W:\191-132-1001-Western_Ave_CADD_Sheets\Structure\016-0777A\99 - Boring02.dgn



USER NAME =	DESIGNED - JJI	REVISED -
PLOT SCALE =	CHECKED - HB	REVISED -
PLOT DATE = 6/25/2019	DRAWN - HB	REVISED -
	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS II
 STRUCTURE NO. 016-0777
 SHEET NO. 99 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	157
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

SBOR-02

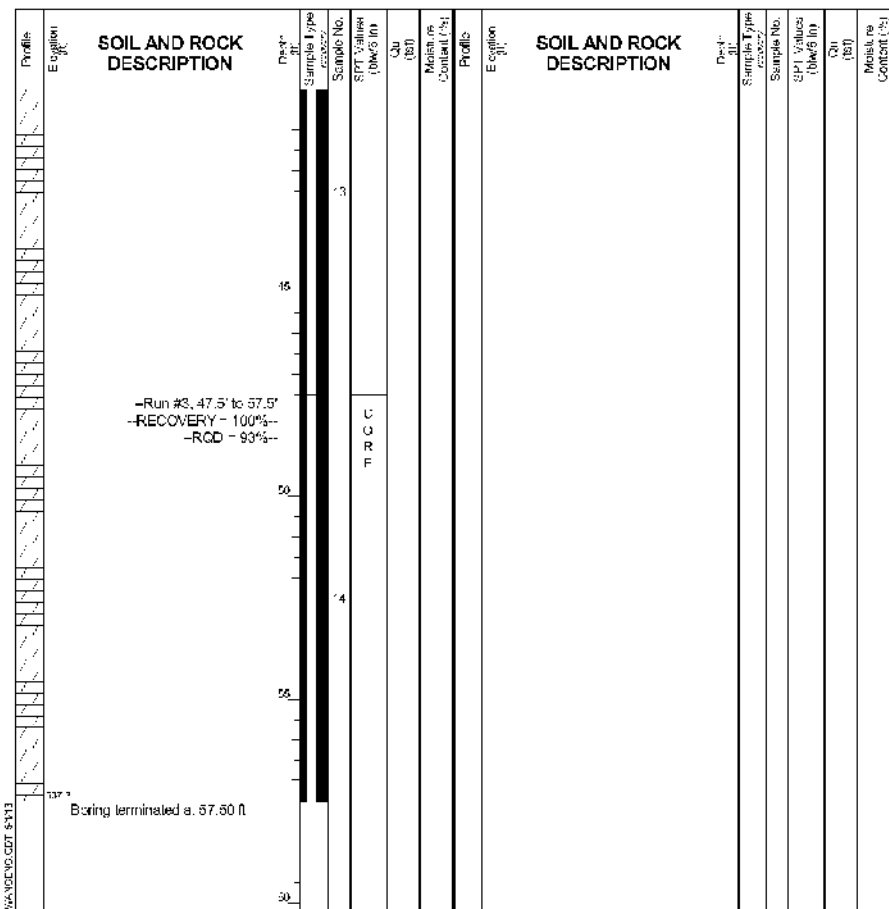
BORING LOG BSB-04

Page 2 of 2

WEI Job No.: 165-03-01

Client: **Bollinger, Lach, and Associates**
 Project: **Western Avenue/Cal Sag South Approach**
 Location: **Blue Island, Illinois**

Datum: NAD83
 Elevation: 594.0 ft
 North: 16° 51' 43.45" W
 East: 1° 52' 58.64" E
 Station: 136444.22
 Offset: 38.30 ft



GENERAL NOTES

WATER LEVEL DATA

Begin Drilling	11-30-2012	Complete Drilling	11-30-2012
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 TMR
Driller	R&N	Logger	F. Borzaga
Checked by	M. Snider		
Drilling Method	2.25 ID SSA to 10', mud rotary 10' to rock boring		
	grouted upon completion		

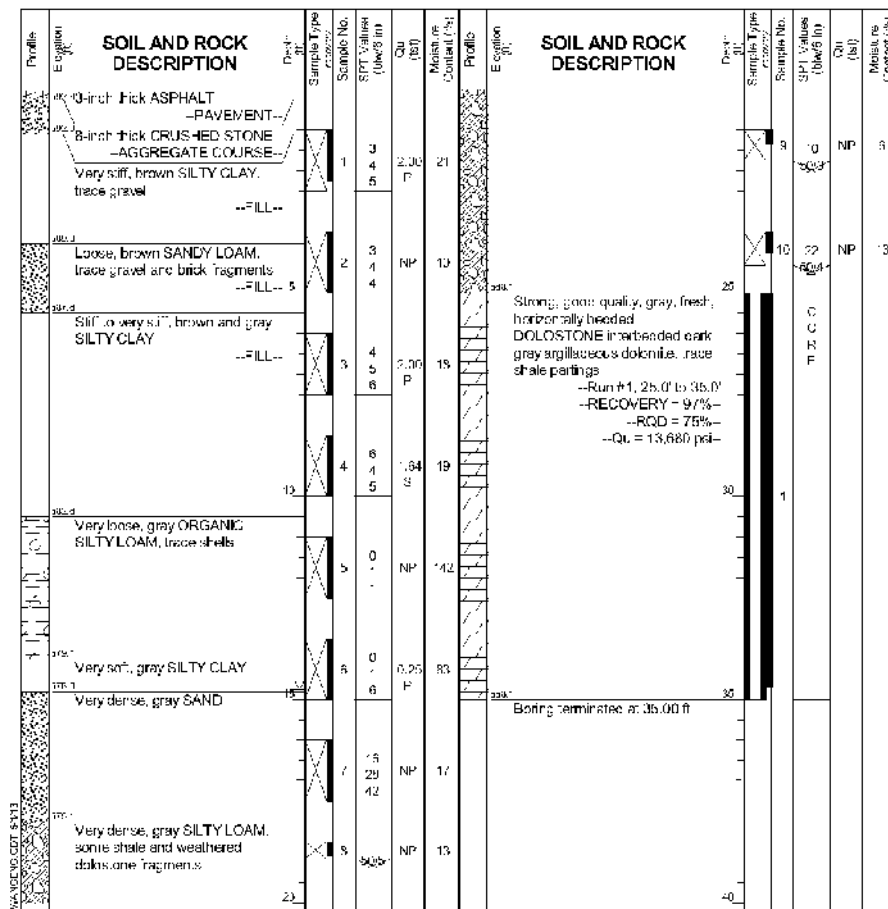
BORING LOG BSB-05

Page 1 of 1

WEI Job No.: 165-03-01

Client: **Bollinger, Lach, and Associates**
 Project: **Western Avenue/Cal Sag South Approach**
 Location: **Blue Island, Illinois**

Datum: NAD83
 Elevation: 595.0 ft
 North: 16° 52' 59.91" W
 East: 1° 52' 58.64" E
 Station: 137466.30
 Offset: 38.34 ft



GENERAL NOTES

WATER LEVEL DATA

Begin Drilling	12-13-2012	Complete Drilling	12-13-2012
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 TMR
Driller	R&N	Logger	B. Wilson
Checked by	M. Snider		
Drilling Method	2.25 ID SSA to 10', mud rotary 10' to rock boring		
	grouted upon completion		

FILE NAME = W:\191-132-1001-Western_Ave_CADD_Sheets\Structure\016-0777\180 - Boring03.dgn



USER NAME =	DESIGNED -	JJI	REVISED -	
	CHECKED -	HB	REVISED -	
PLOT SCALE =	DRAWN -	HB	REVISED -	
PLOT DATE = 6/25/2019	CHECKED -	JJI	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS III
 STRUCTURE NO. 016-0777**

SHEET NO. 100 OF 104 SHEETS

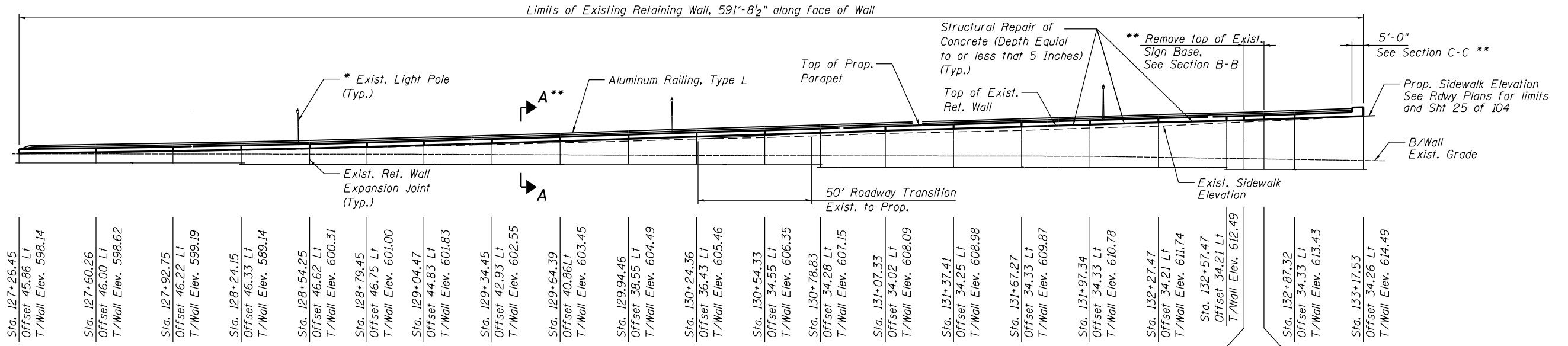
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	158
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

Benchmark: TBM #16 Cut Cross on NW flange bolt of fire hydrant @ NW corner of Canal Street & Rexford Street. Elev. 596.18.

Scope of Work: Removal of Steel Railing on top of existing retaining wall and replacing it with a standard concrete parapet and aluminum railing.

Salvage: Existing light poles are to be removed and reinstalled.

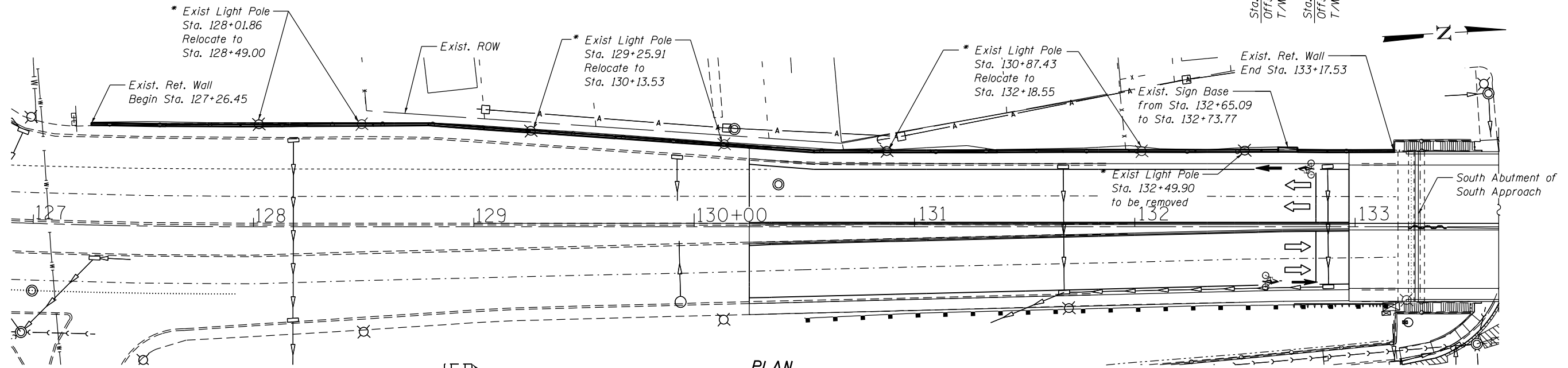
** For proposed parapet sections, see Shts. 102 and 103 of 104



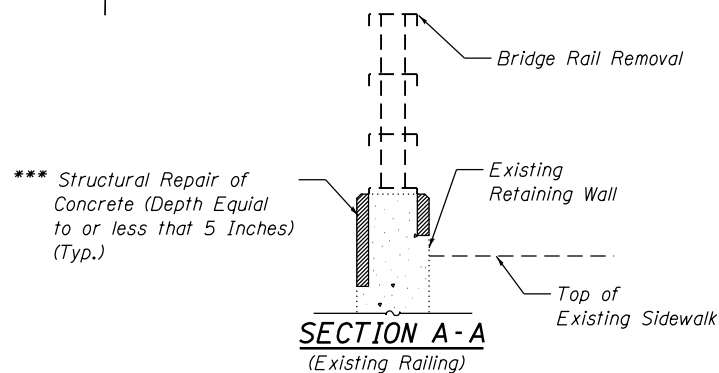
Sta. 127+26.45 Offset 45.86 Lt T/Wall Elev. 598.14	Sta. 127+60.26 Offset 46.00 Lt T/Wall Elev. 598.62	Sta. 127+92.75 Offset 46.22 Lt T/Wall Elev. 599.19	Sta. 128+24.15 Offset 46.33 Lt T/Wall Elev. 589.14	Sta. 128+54.25 Offset 46.62 Lt T/Wall Elev. 600.31	Sta. 128+79.45 Offset 46.75 Lt T/Wall Elev. 601.00	Sta. 129+04.47 Offset 44.83 Lt T/Wall Elev. 601.83	Sta. 129+34.45 Offset 42.93 Lt T/Wall Elev. 602.55	Sta. 129+64.39 Offset 40.86 Lt T/Wall Elev. 603.45	Sta. 129+94.46 Offset 38.55 Lt T/Wall Elev. 604.49	Sta. 130+24.36 Offset 36.43 Lt T/Wall Elev. 605.46	Sta. 130+54.33 Offset 34.55 Lt T/Wall Elev. 606.35	Sta. 130+78.83 Offset 34.28 Lt T/Wall Elev. 607.15	Sta. 131+07.33 Offset 34.02 Lt T/Wall Elev. 608.09	Sta. 131+37.41 Offset 34.25 Lt T/Wall Elev. 608.98	Sta. 131+67.27 Offset 34.33 Lt T/Wall Elev. 609.87	Sta. 131+97.34 Offset 34.33 Lt T/Wall Elev. 610.78	Sta. 132+27.47 Offset 34.21 Lt T/Wall Elev. 611.74	Sta. 132+57.47 Offset 34.21 Lt T/Wall Elev. 612.49	Sta. 132+87.32 Offset 34.33 Lt T/Wall Elev. 613.43	Sta. 133+17.53 Offset 34.26 Lt T/Wall Elev. 614.49
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

ELEVATION

* Existing Light Poles to be removed and reinstalled with new luminaries as specified in lighting schedule. Cost is included in "Relocate Existing Lighting Unit" and "Luminaire, Sodium Vapor, Horizontal Mount, 250 Watt".



PLAN



DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition, with 2013 Interims

DESIGN STRESSES

FIELD UNITS

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

*** Estimated quantity. Actual quantity to be determined by the Engineer in the Field.

GENERAL PLAN & ELEVATION
WESTERN AVE. OVER CAL-SAG CHANNEL
EXISTING SOUTHWEST RETAINING WALL
F.A.P. RTE 370 - SECTION 0103BR-1
COOK COUNTY
STATION 130+21.99

FILE NAME = W:\191-132-1001-Western-Ave-CADD-Sheets\Structure\016-0777\101 - Retaining wall Plan and Elevation.dwg



USER NAME =	DESIGNED - JJI	REVISD -
	CHECKED - HB	REVISD -
PLOT SCALE =	DRAWN - HB	REVISD -
PLOT DATE = 6/25/2019	CHECKED - JJI	REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 101 OF 104 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	Cook	184	159
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

BROADWAY STREET

NOTE: THE CONTRACTOR SHALL UTILIZE HIGHWAY STANDARDS 424011-02 AND 424016-02 AND/OR THE DIRECTION OF THE ENGINEER FOR THE ADA COMPLIANT CURB RAMP.



ADA RAMP GRADING PLAN			
ELEVATION TABLE			
POINT NO.	STATION	OFFSET	ELEV.
A	133+20.00	55.00' RT	595.21
B	133+20.91	59.92' RT	595.14
C	133+34.27	52.35' RT	595.08
D	133+35.85	57.10' RT	595.01
E	133+44.93	46.42' RT	595.01
F	133+45.22	46.82' RT	594.51
G	133+48.11	50.90' RT	594.51
H	133+48.39	43.67' RT	595.04
I	133+48.72	44.05' RT	594.54
J	133+52.03	47.80' RT	594.54
K	133+52.93	39.75' RT	595.12
L	133+56.75	42.98' RT	595.04
M	133+54.11	38.30' RT	595.15
N	133+54.17	34.73' RT	595.21

LEGEND

- DETECTABLE WARNINGS
- PROPOSED SIDEWALK W/ AGGREGATE BASE COURSE
- PROPOSED SIDE CURB

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24

WESTERN AVENUE

133

PACKARD DRIVE

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WESTERN AVENUE OVER CAL-SAG CHANNEL
ADA RAMP DETAIL**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	163
CONTRACT NO. 60K72				

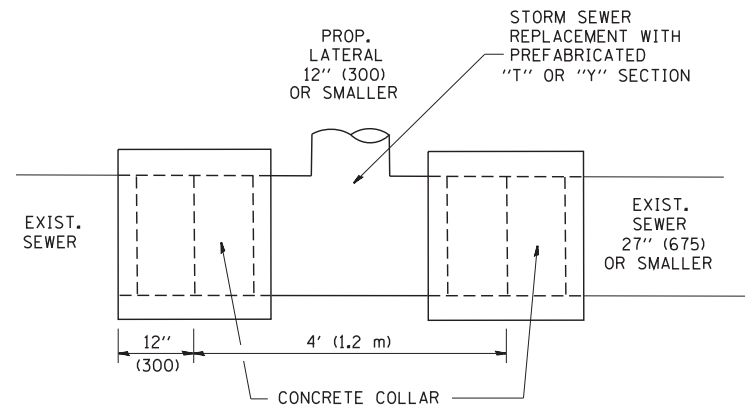
SCALE: 1"=5' SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

ILLINOIS FED. AID PROJECT

FILE NAME = W:\191\132\1001\Western_Ave\CADD_Sheets\0160K72 - sht - detail01 - ada_ramp.dgn

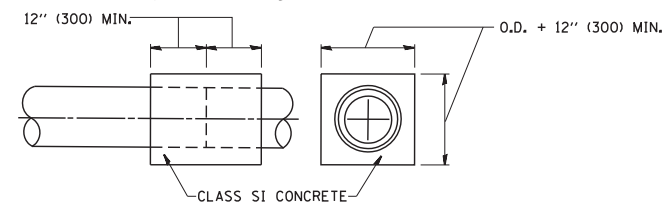
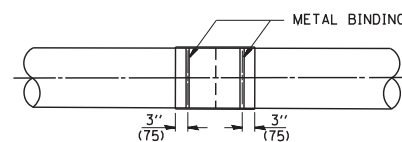
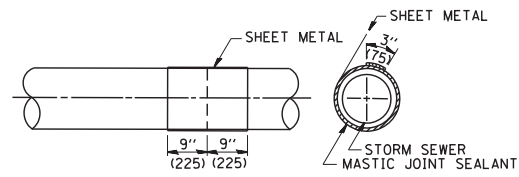
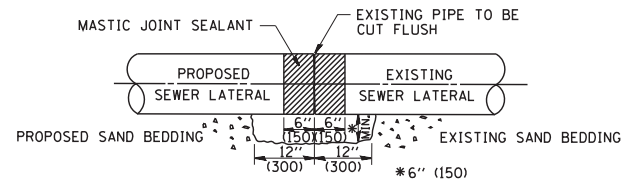


USER NAME = WTeng	DESIGNED - MTC	REVISED -
DRAWN - MTC	REVISIONS -	
PLOT SCALE = 10.0000' / in.	CHECKED - JIP	REVISED -
PLOT DATE = 6/20/2019	DATE - 06/20/2019	REVISED -



DETAIL "A"

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

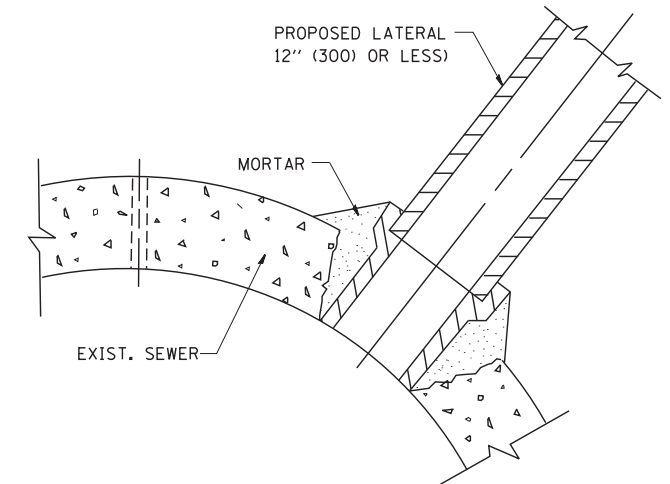


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

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



DETAIL "C"

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

NOTES

MATERIAL

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

CONSTRUCTION METHODS

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

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

GENERAL

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

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

BASIS OF PAYMENT

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

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

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

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

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

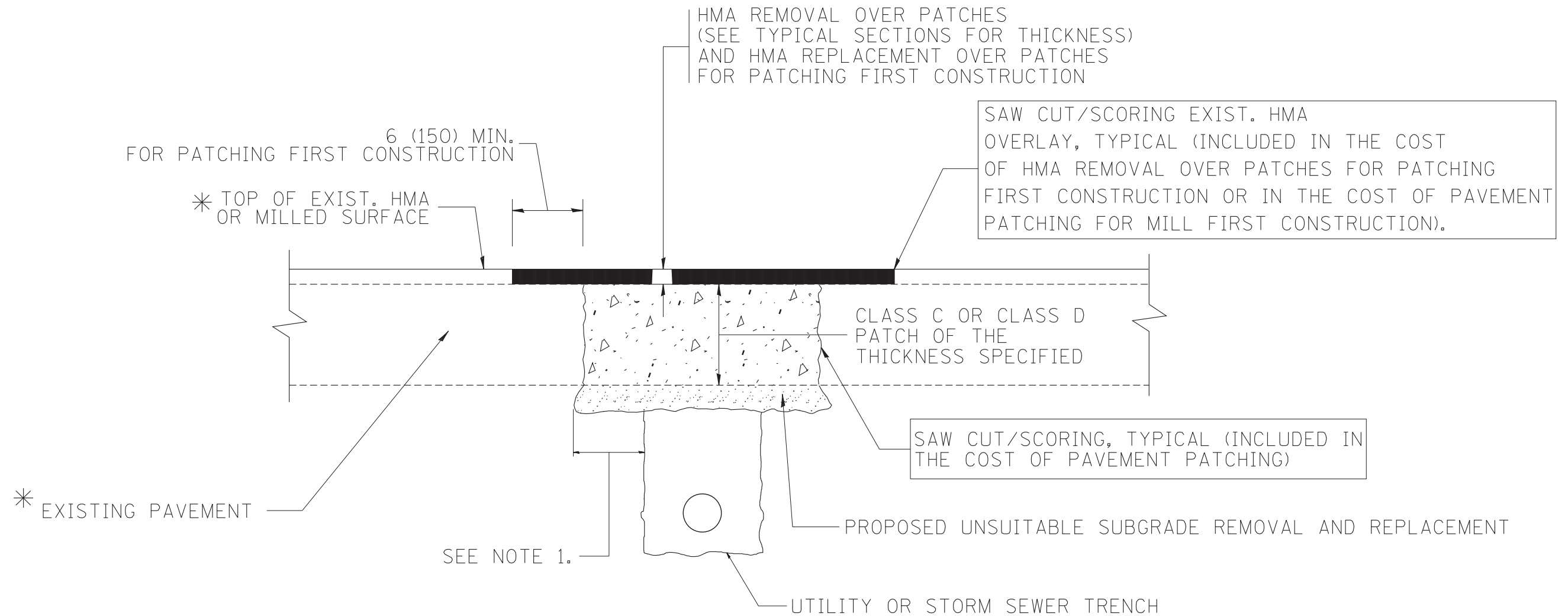
FILE NAME = W:\diststd\22x34\bd07.dgn	USER NAME = geglionbt	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92
		DRAWN -	REVISED - R. SHAH 09-09-94
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF STORM SEWER
CONNECTION TO EXISTING SEWER**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	164
BD500-01 (BD-7)		CONTRACT NO. 60K72		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
		DRAWN -	REVISED - R. BORO 01-01-07
		PLOT SCALE = 50.000' / IN.	REVISED - R. BORO 09-04-07
		PLOT DATE = 10/27/2008	REVISED - K. ENG 10-27-08

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

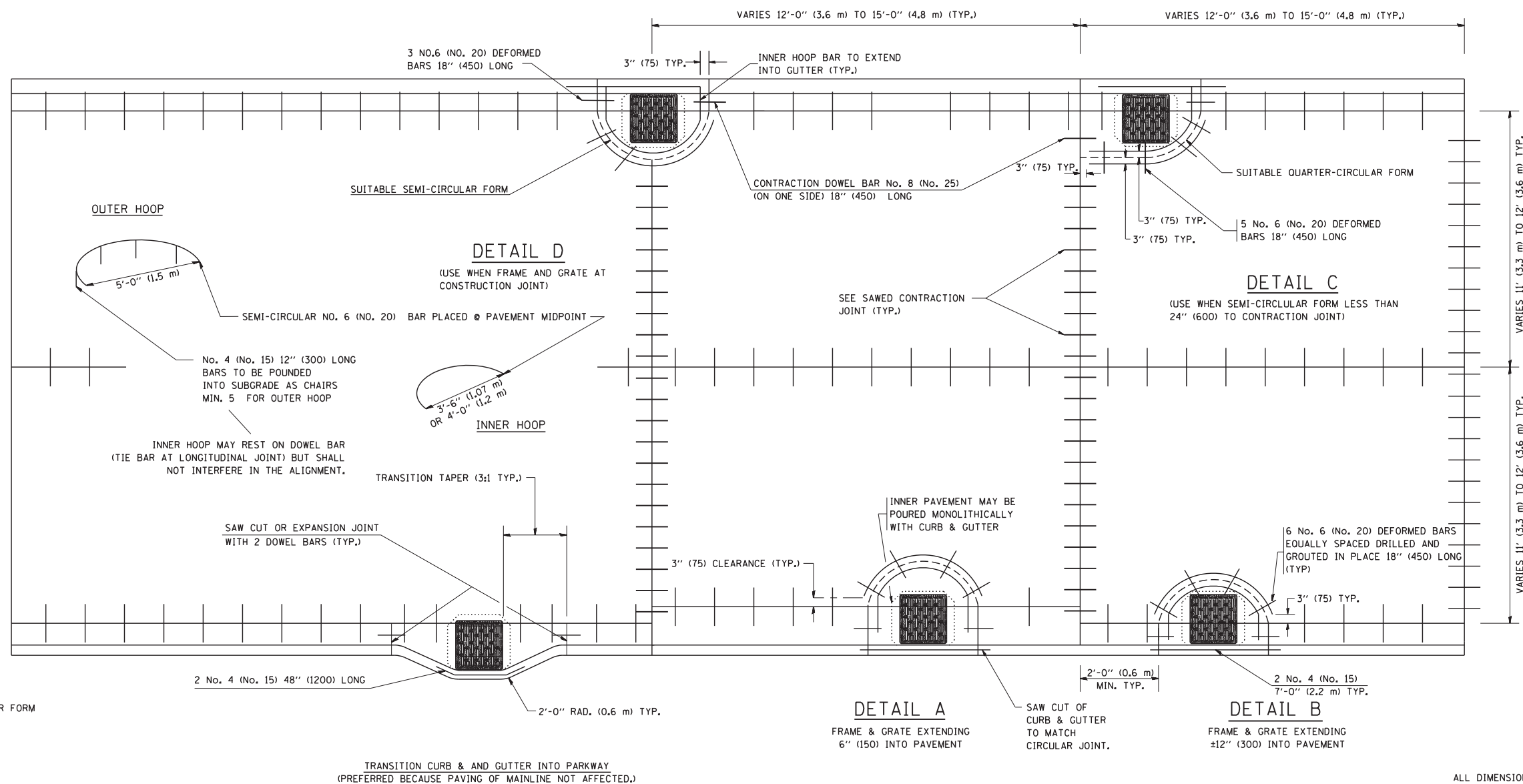
F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY COOK	TOTAL SHEETS 184	SHEET NO. 165
BD400-04 (BD-22)		CONTRACT NO. 60K72		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FRAME EXTENSION INTO PAVEMENT	INNER HOOP REINFORCEMENT DIAMETER	SEMI CIRCULAR FORM DIAMETER	OUTER HOOP REINFORCEMENT DIAMETER
UP TO 8" (200)	3'-6" (1.1 m)	4'-0" (1.2 m)	5'-0" (1.5 m)
> 8" (200) TO 14" (360)	4'-0" (1.2 m)	4'-6" (1.4 m)	5'-0" (1.5 m)

DESIGNER NOTE:
THIS DETAIL IS TO BE USED
WHEN THE GUTTER FLAG IS
LESS THAN 24"

NOTES :

1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
2. TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT. EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 12" (300) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
5. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 2" (50) CLEARANCE.
6. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.
7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.



LEGEND:

- CASTING
- SUITABLE SEMI-CIRCULAR FORM

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

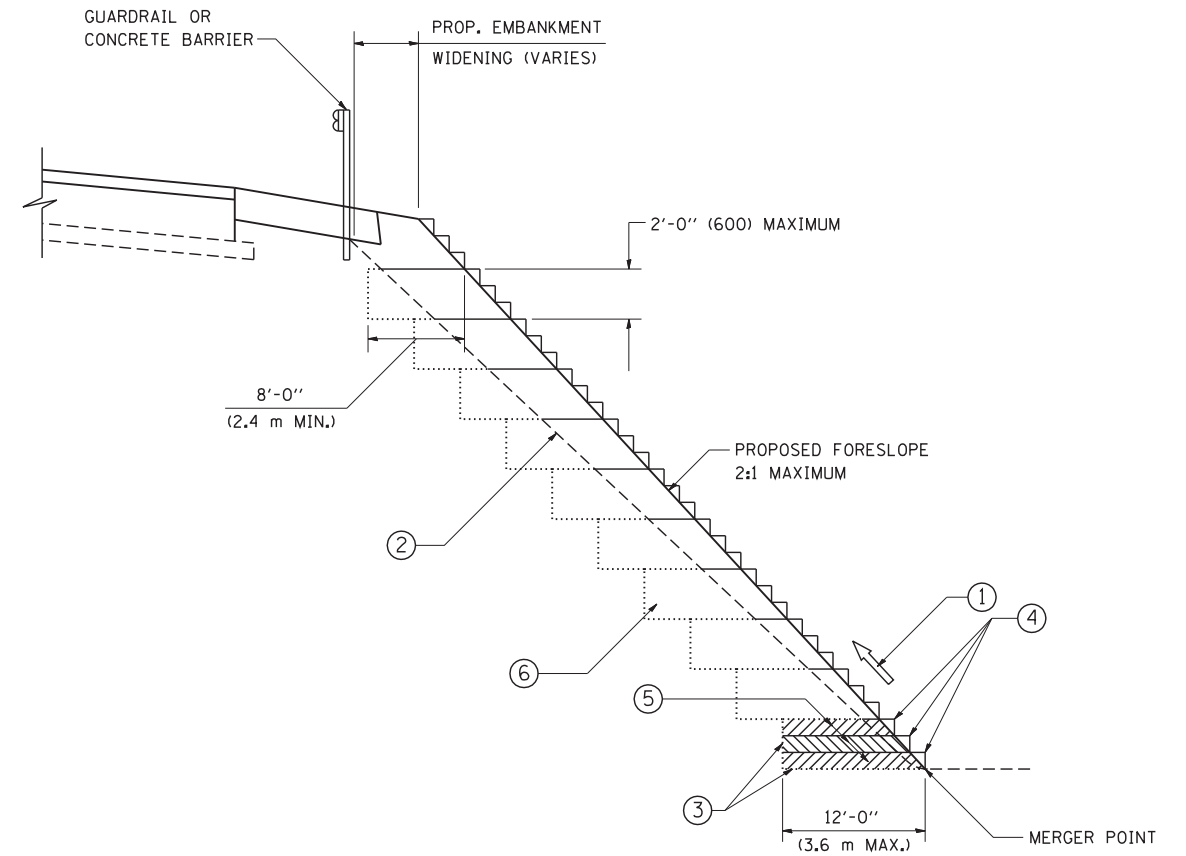
FILE NAME = W:\diststd\22x34\bd48.dgn	USER NAME = gajlonobt	DESIGNED - A. ABBAS	REVISED - T. MATOUSEK 08-28-00
		DRAWN - TOM MATOUSEK	REVISED - T. MATOUSEK 10-02-00
	PLOT SCALE = 50.0000' / IN.	CHECKED - A. ABBAS	REVISED - T. MATOUSEK 04-25-02
	PLOT DATE = 1/4/2008	DATE - 01-04-99	REVISED - P. LAFLEUR 08-27-02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PCC PAVEMENT ROUNDOUTS AT
CURB AND GUTTER

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	166
BD-48		CONTRACT NO. 60K72		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TYPICAL BENCHING DETAIL
FOR EMBANKMENT

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

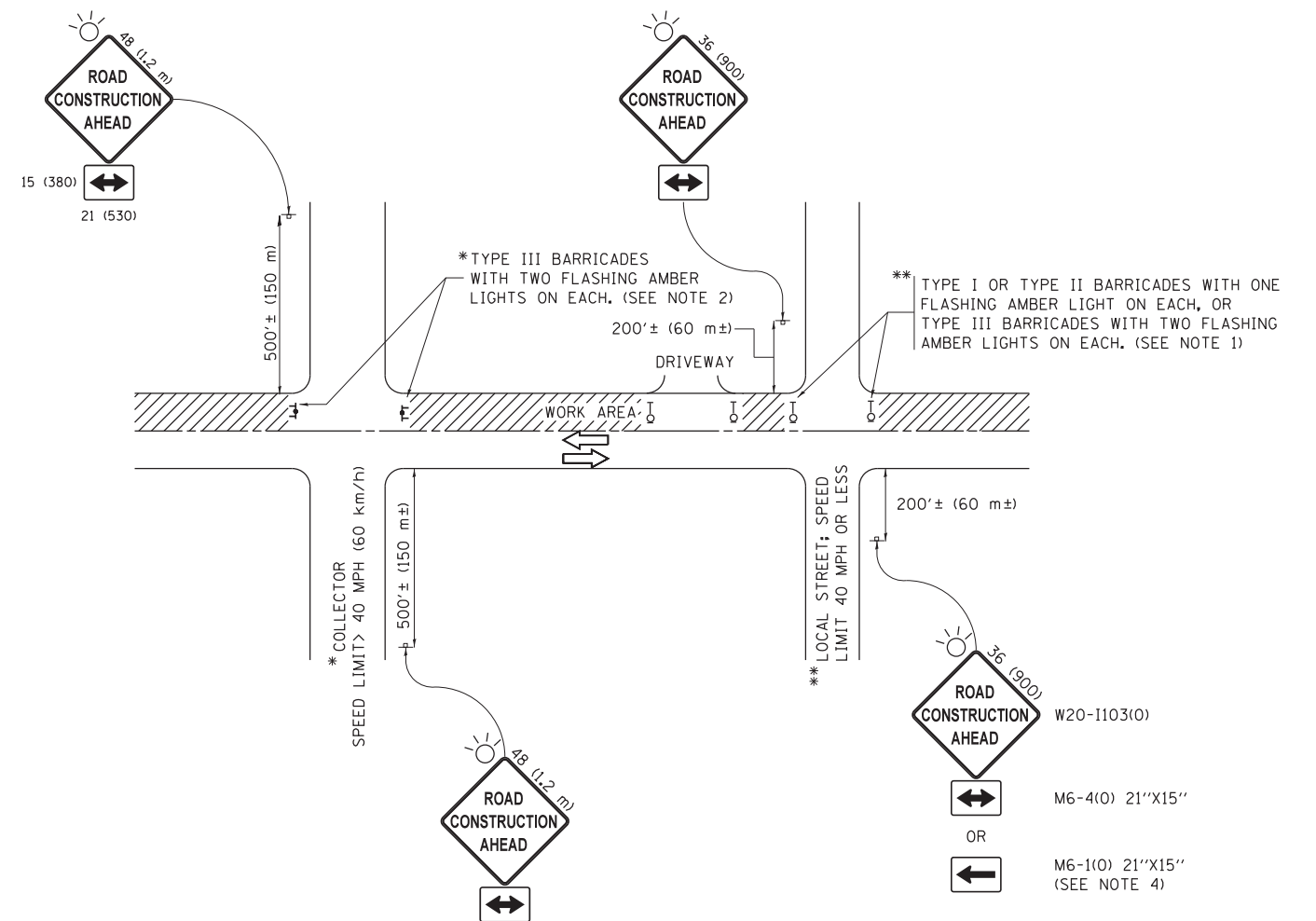
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gegl10nbt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
		CHECKED - S.E.B.	REVISED -
		DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL			
FOR EMBANKMENT WIDENING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	167
BD-51		CONTRACT NO. 60K72		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

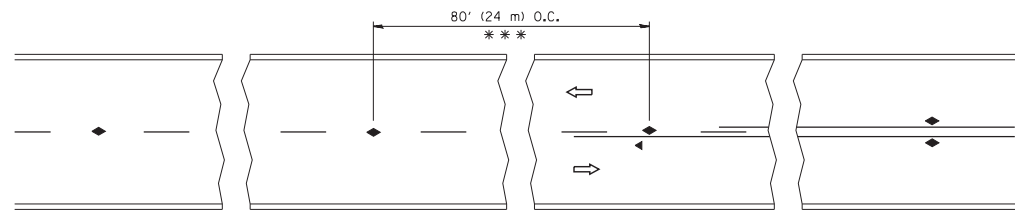
FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
p:\11084EBID\INTEG\illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist 1\DRW\CADData\CADsheets\tc10.dgn			REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

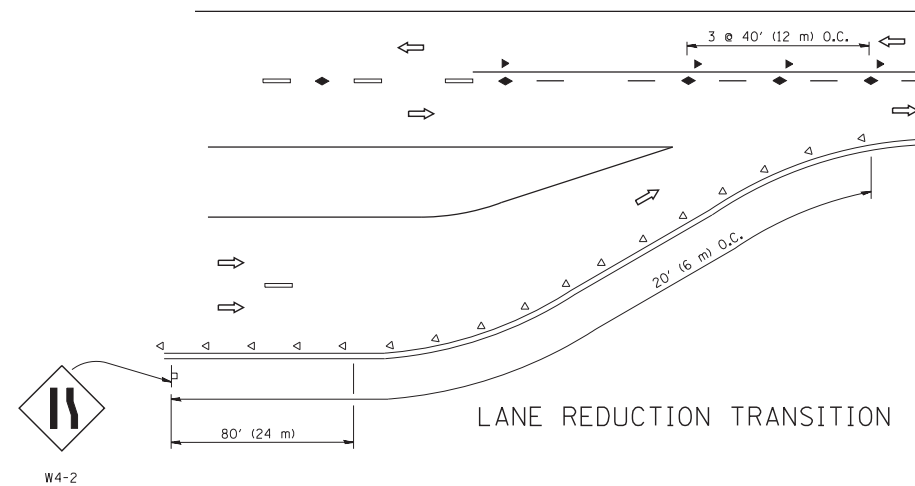
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	168
TC-10			CONTRACT NO. 60K72	
ILLINOIS FED. AID PROJECT				

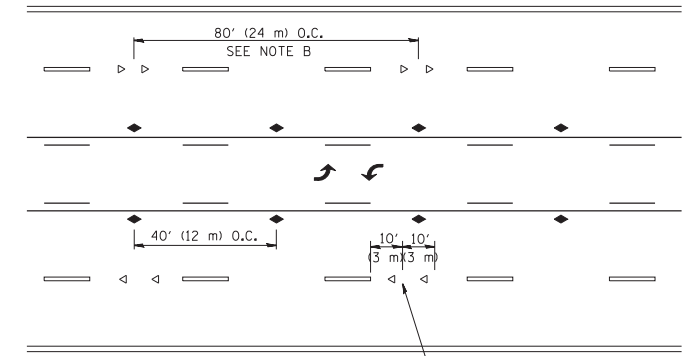


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

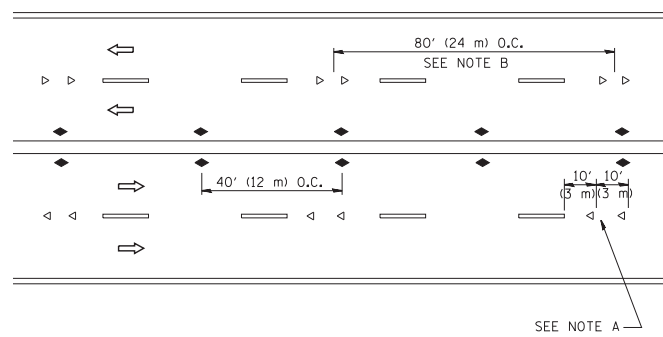
TWO-LANE/TWO-WAY



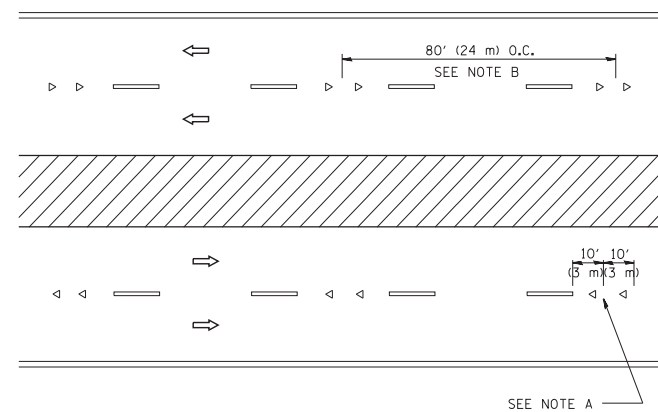
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

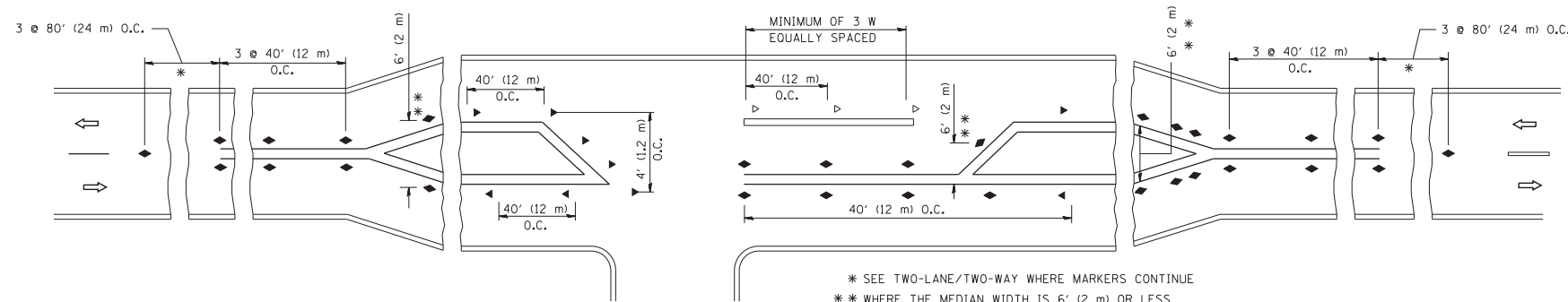
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

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

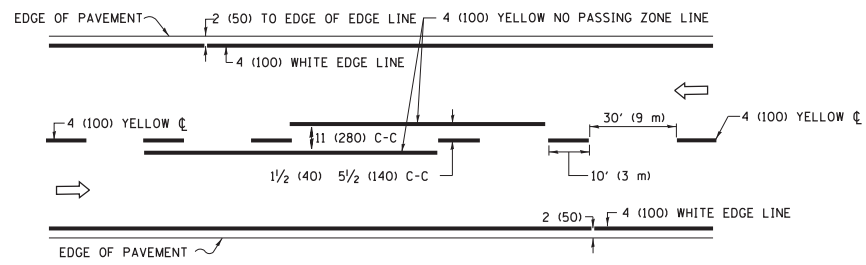
FILE NAME =	USER NAME = lryso	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
ct:\pw\work\p\dot\lryso\d0108315\tc11.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

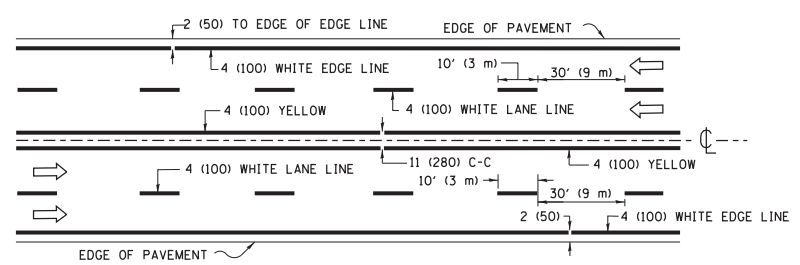
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

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

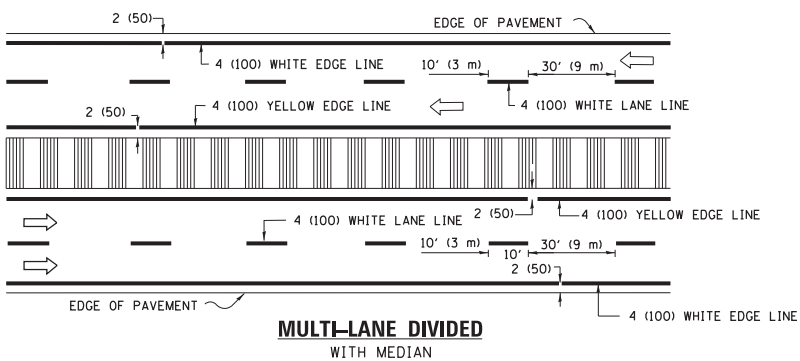
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	169
TC-11		CONTRACT NO. 60K72		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

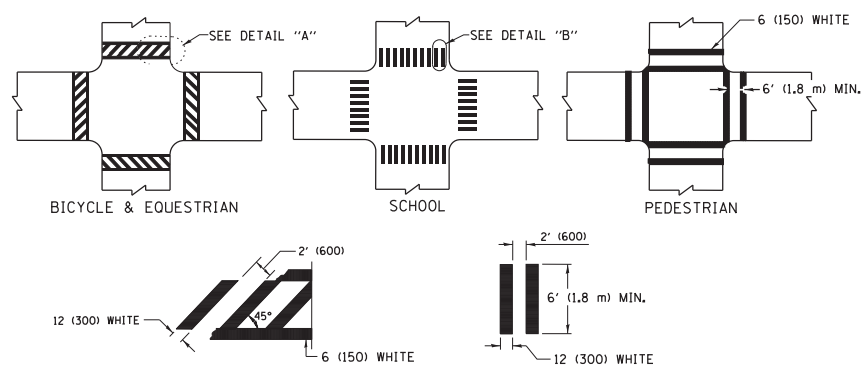


MULTI-LANE UNDIVIDED



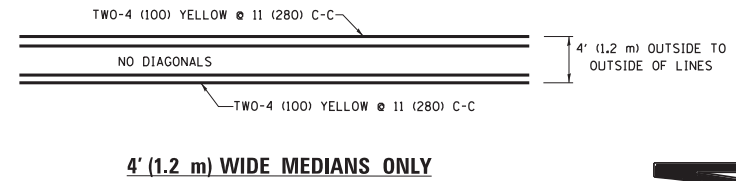
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

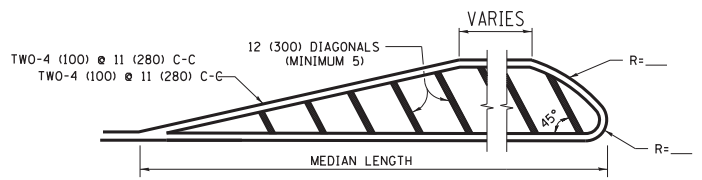


TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

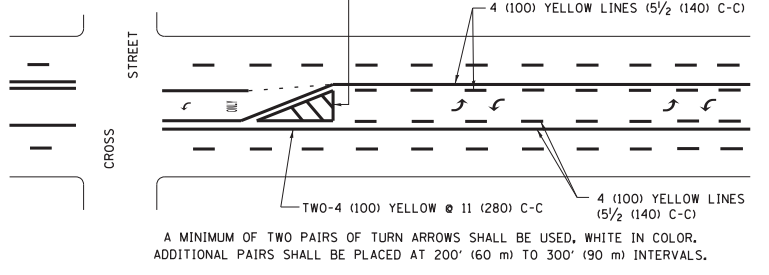


4' (1.2 m) WIDE MEDIANS ONLY

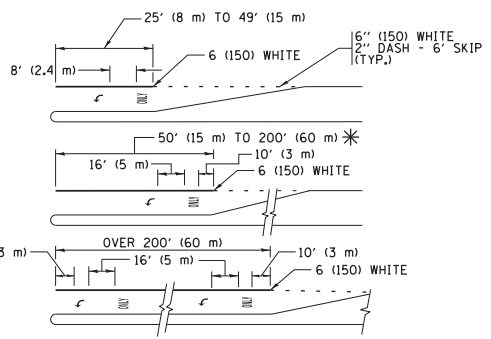


MEDIANS OVER 4' (1.2 m) WIDE

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

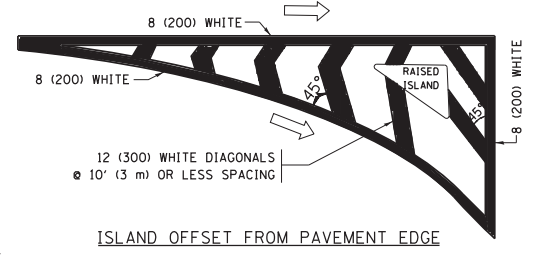


MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING

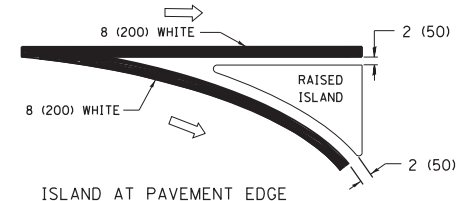


TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING

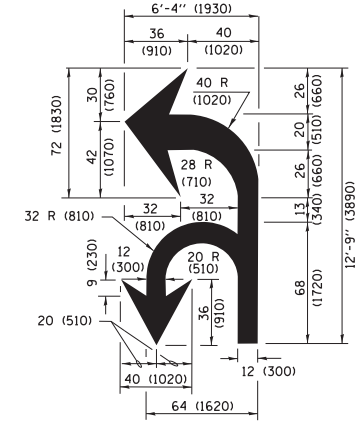
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



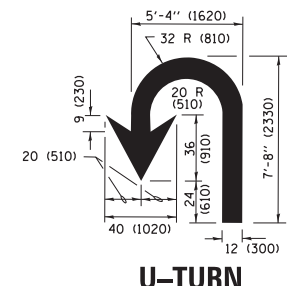
ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS; 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

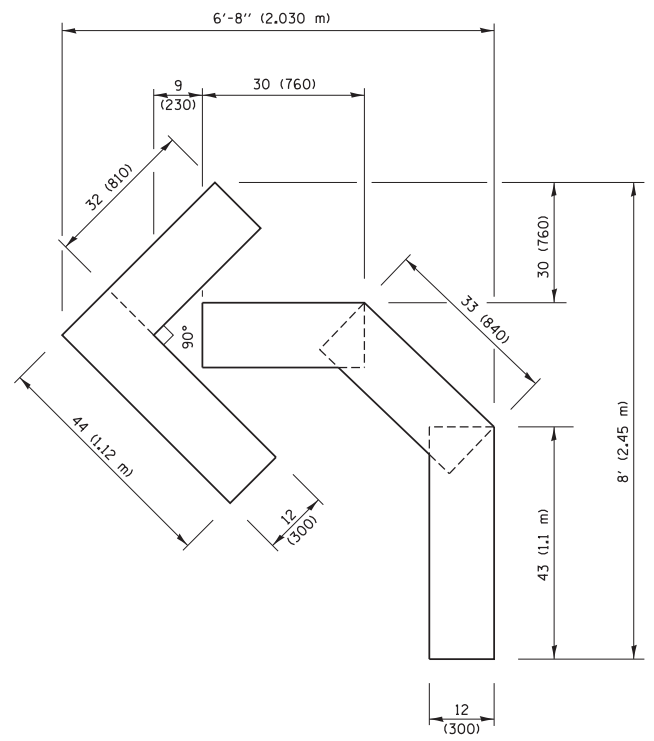
FILE NAME =	USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
pw:\IL084EBID\INTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\Dist 1\DRAWING\CADDData\CAD\Sheets\tc13.dgn		CHECKED -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 50.0000' / in.	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 4/13/2016		REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

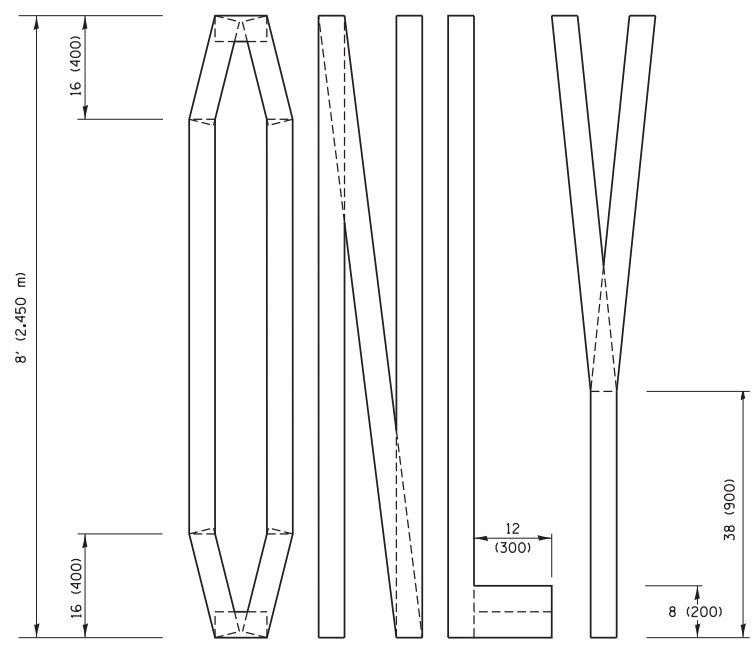
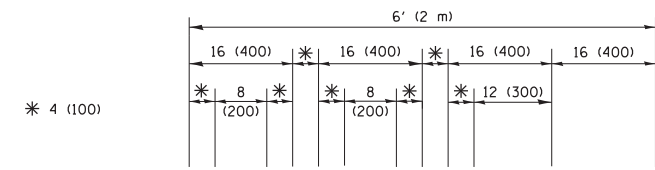
DISTRICT ONE TYPICAL PAVEMENT MARKINGS

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

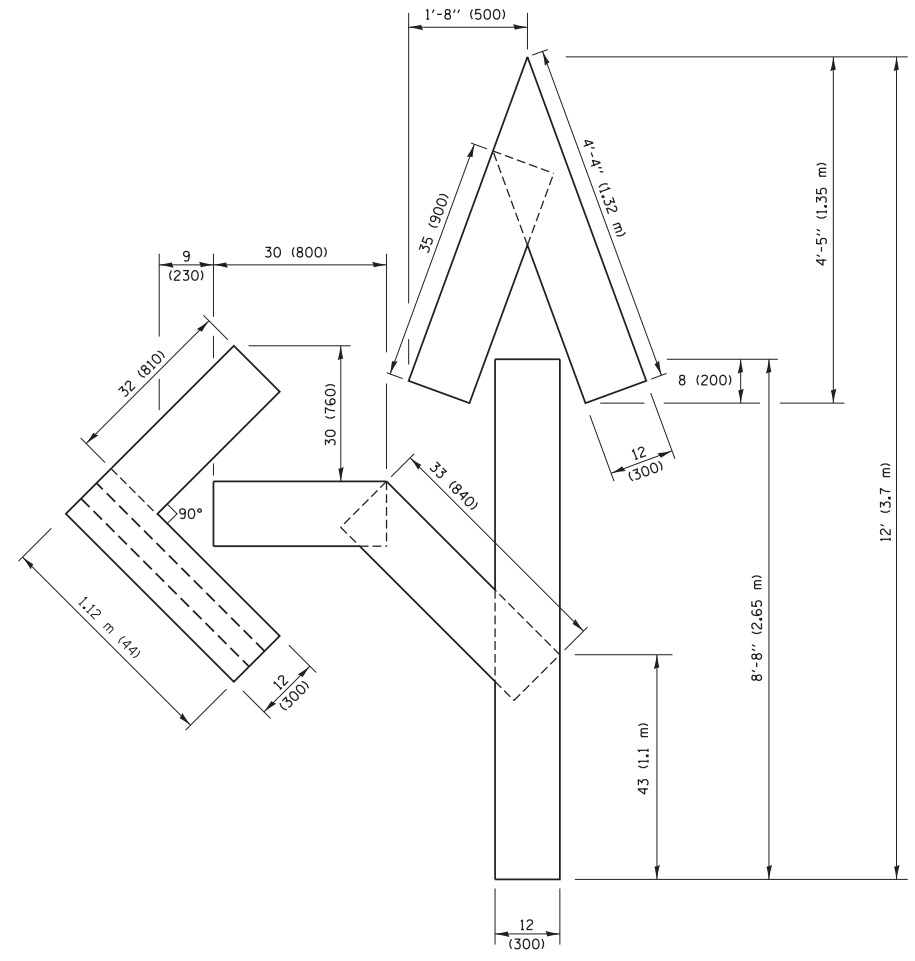
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	170
TC-13		CONTRACT NO.	60K72	
ILLINOIS FED. AID PROJECT				



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.41 sq. m)

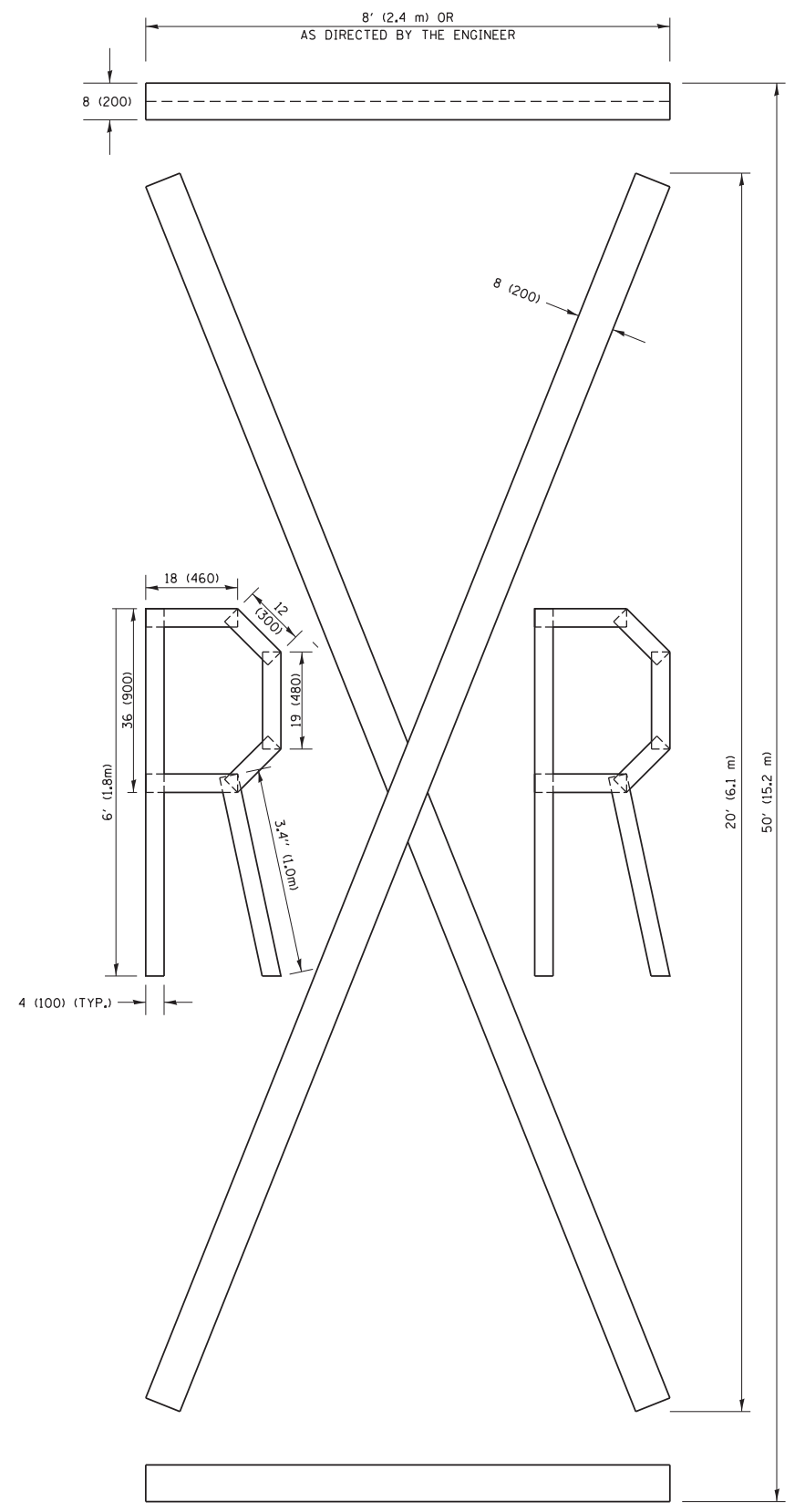


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.1 m)
 27.5 sq. ft. (2.53 sq. m)

NOTE:
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY
 4 (100) LINE = 225.9 ft. (68.9 m)
 75.3 sq. ft. (6.99 sq. m)

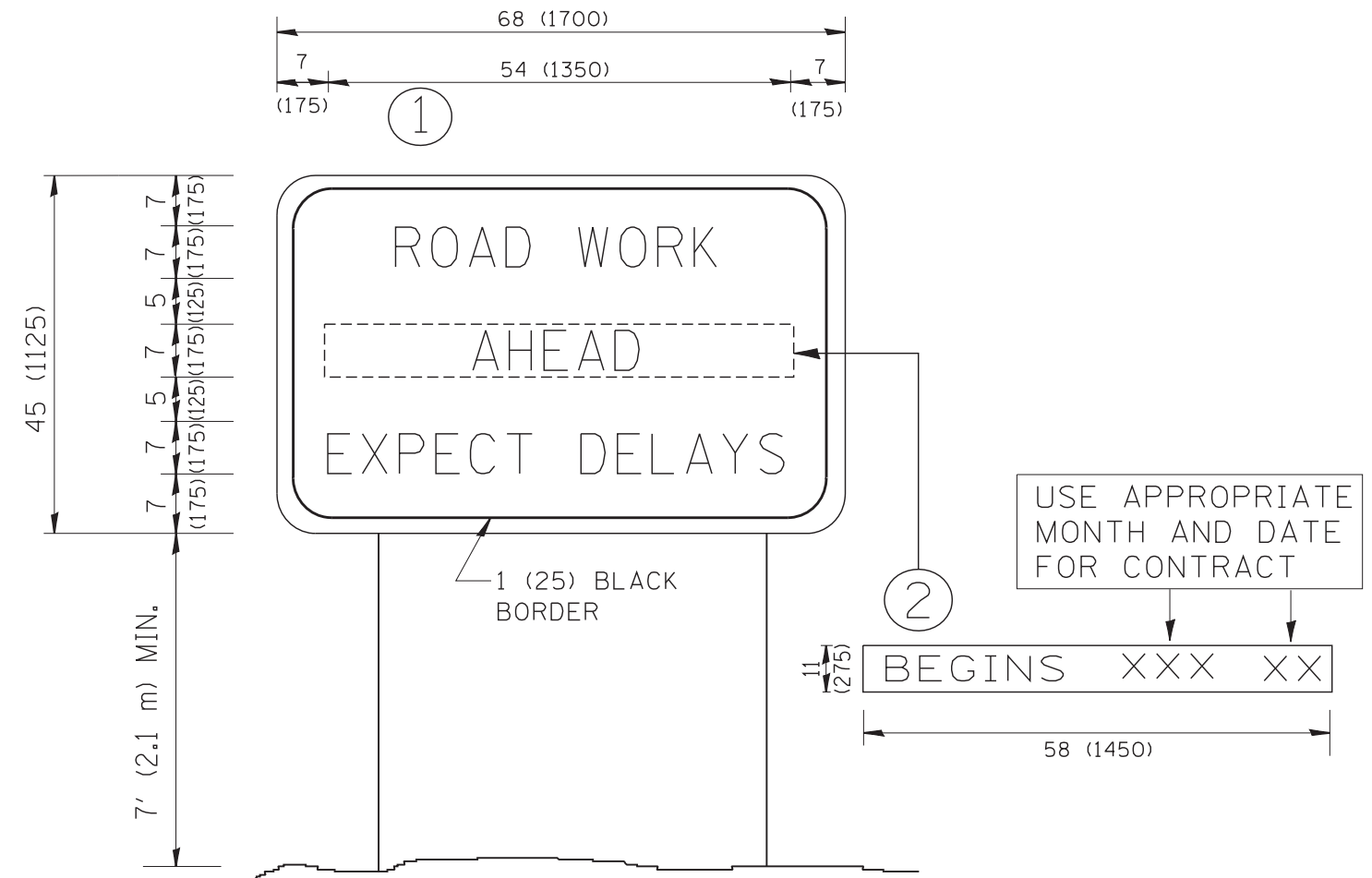
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
p:\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\Dist 1\084EBIDINTEG\CADD\Drawings\Tape\Tape.dgn		CHECKED -	REVISED - E. GOMEZ 08-28-00
		DATE -	REVISED - E. GOMEZ 08-28-00
			REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	172
TC-16			CONTRACT NO. 60K72	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

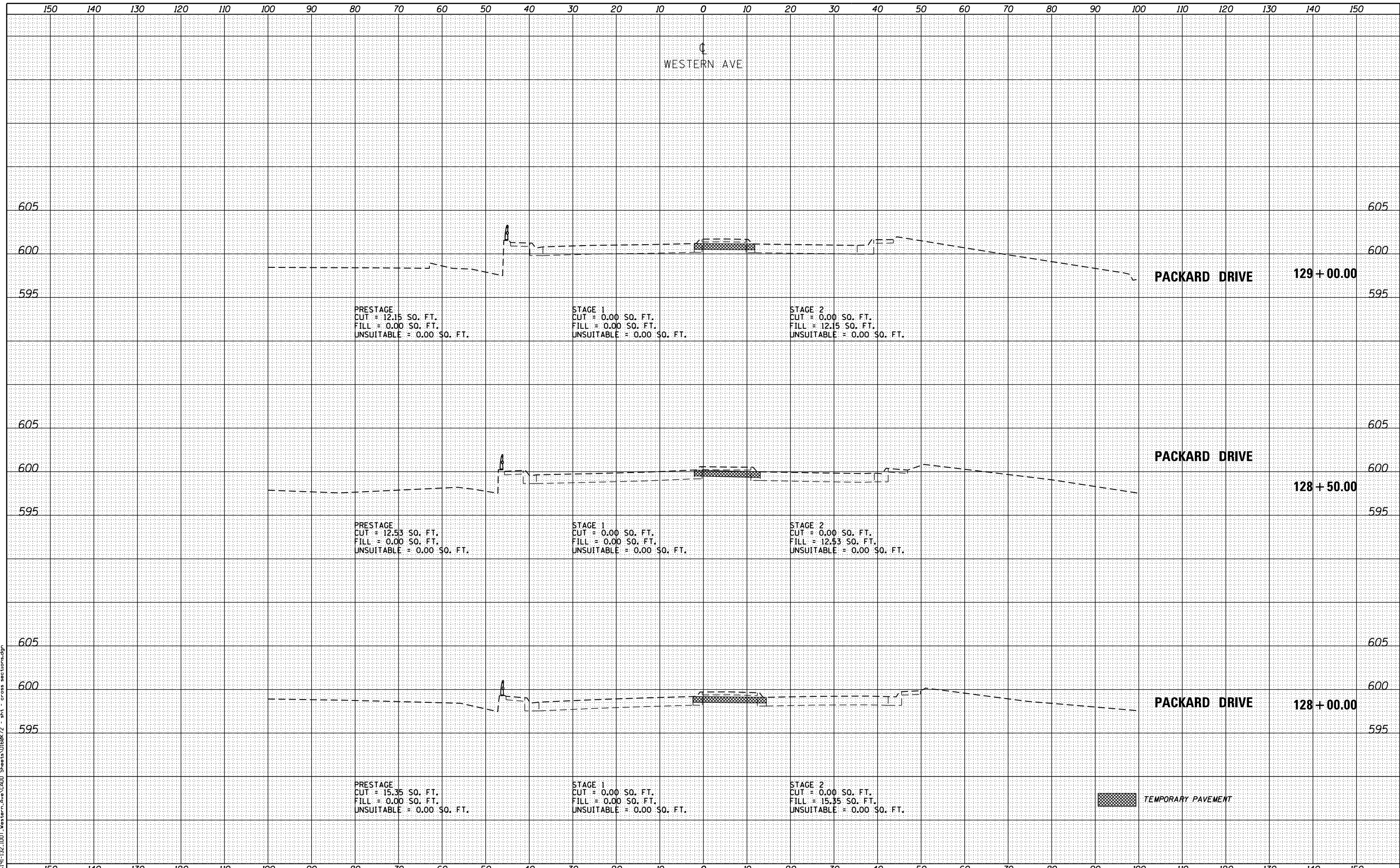
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gegl1onobt	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. MIRS 12-11-97		370	0103BR-1	COOK	184	173			
		PLOT SCALE = 50.000' / IN.	REVISED - T. RAMMACHER 02-02-99		TC-22			CONTRACT NO. 60K72				
		PLOT DATE = 1/4/2008	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY NO.	
NOTE BOOK NO.	
AREAS CHECKED	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY NO.	
NOTE BOOK NO.	
AREAS CHECKED	

FILE NAME = W:\191-132-1001-Western-Ave\CADD-Sheets\0103BR-1-INT-Cross-sections.dgn



BLA, Inc.
ITASCA, ILLINOIS

USER NAME = wteng	DESIGNED - MTC	REVISED -
	DRAWN - MTC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JIP	REVISED -
PLOT DATE = 6/20/2019	DATE - 06/20/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

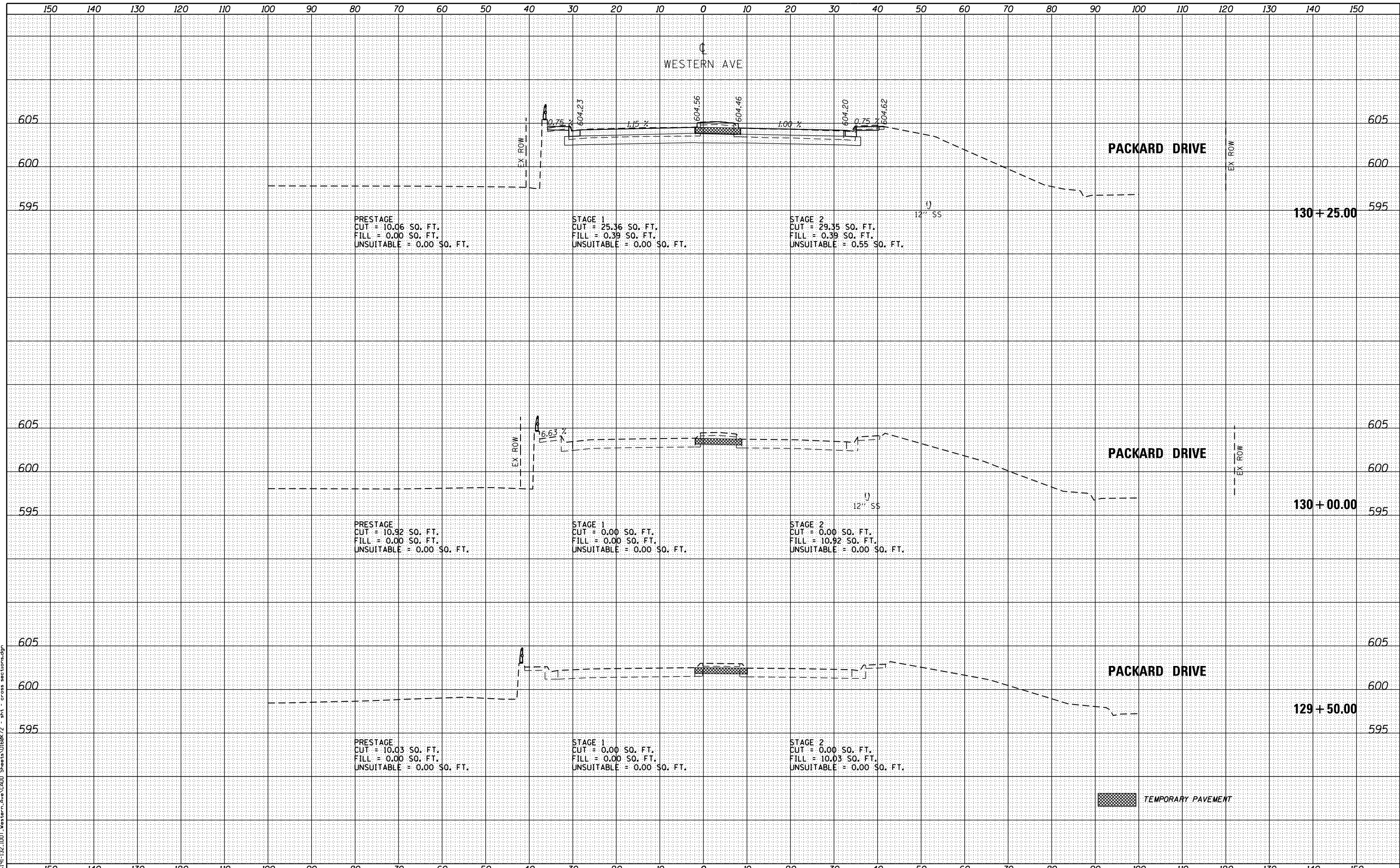
WESTERN AVENUE OVER CAL-SAG CHANNEL	
CROSS SECTIONS	
HORZ. 1"=10'	SCALE: VERT. 1"=5'
SHEET 1 OF 11 SHEETS	STA. 128+00.00 TO STA. 129+00.00

F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY COOK	TOTAL SHEETS 184	SHEET NO. 174
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

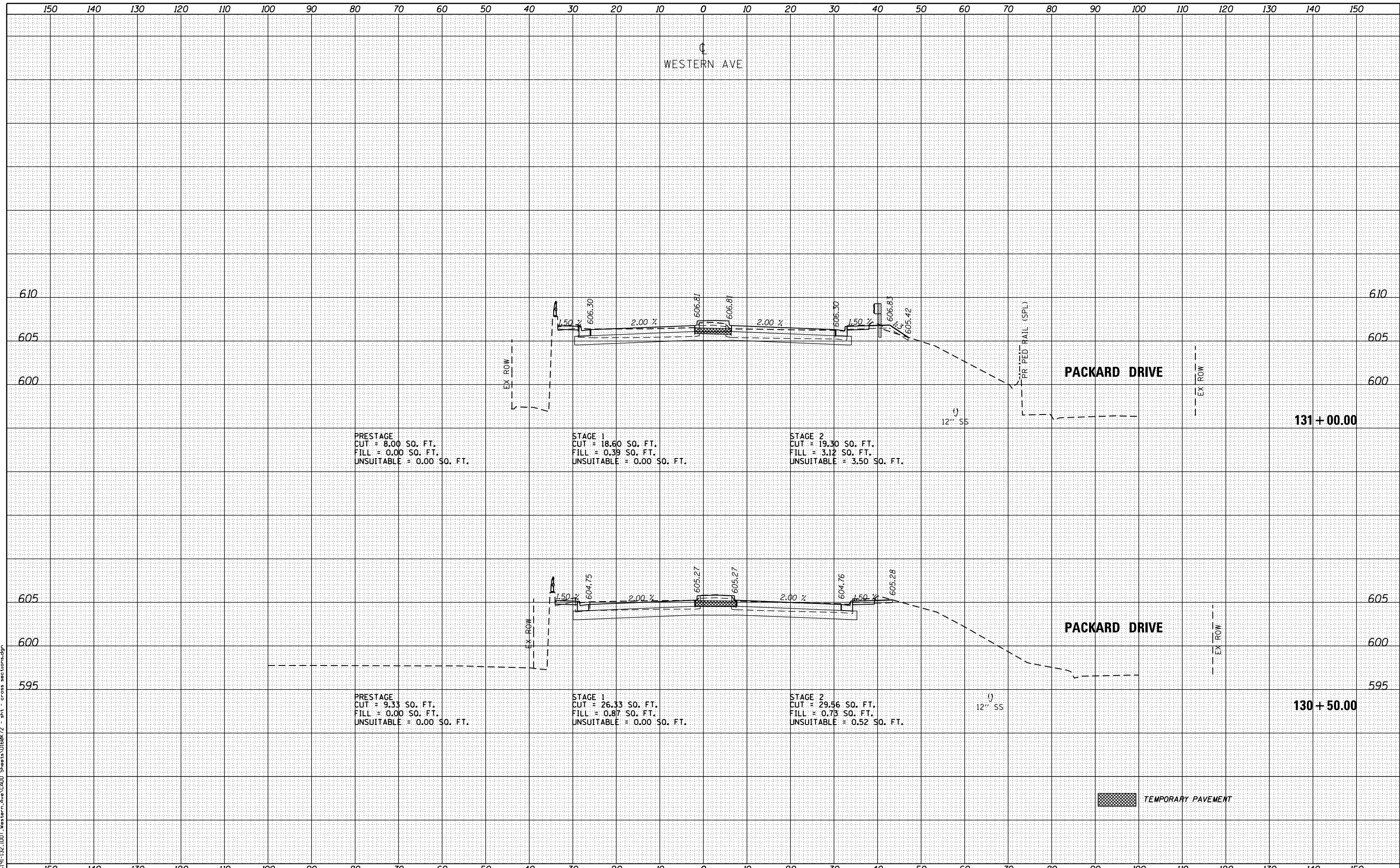
FILE NAME = W:\191-132-1001-Western-Ave\CADD-Sheets\0103BR-1-INT-Cross-sections.dgn



DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

FILE NAME = W:\191-132-1001-Western-Ave\CADD-Sheets\0103BR-1-INT-Cross-sections.dgn



BLA, Inc.
ITASCA, ILLINOIS

USER NAME = wteng	DESIGNED - MTC	REVISED -
	DRAWN - MTC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JIP	REVISED -
PLOT DATE = 6/20/2019	DATE - 06/20/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

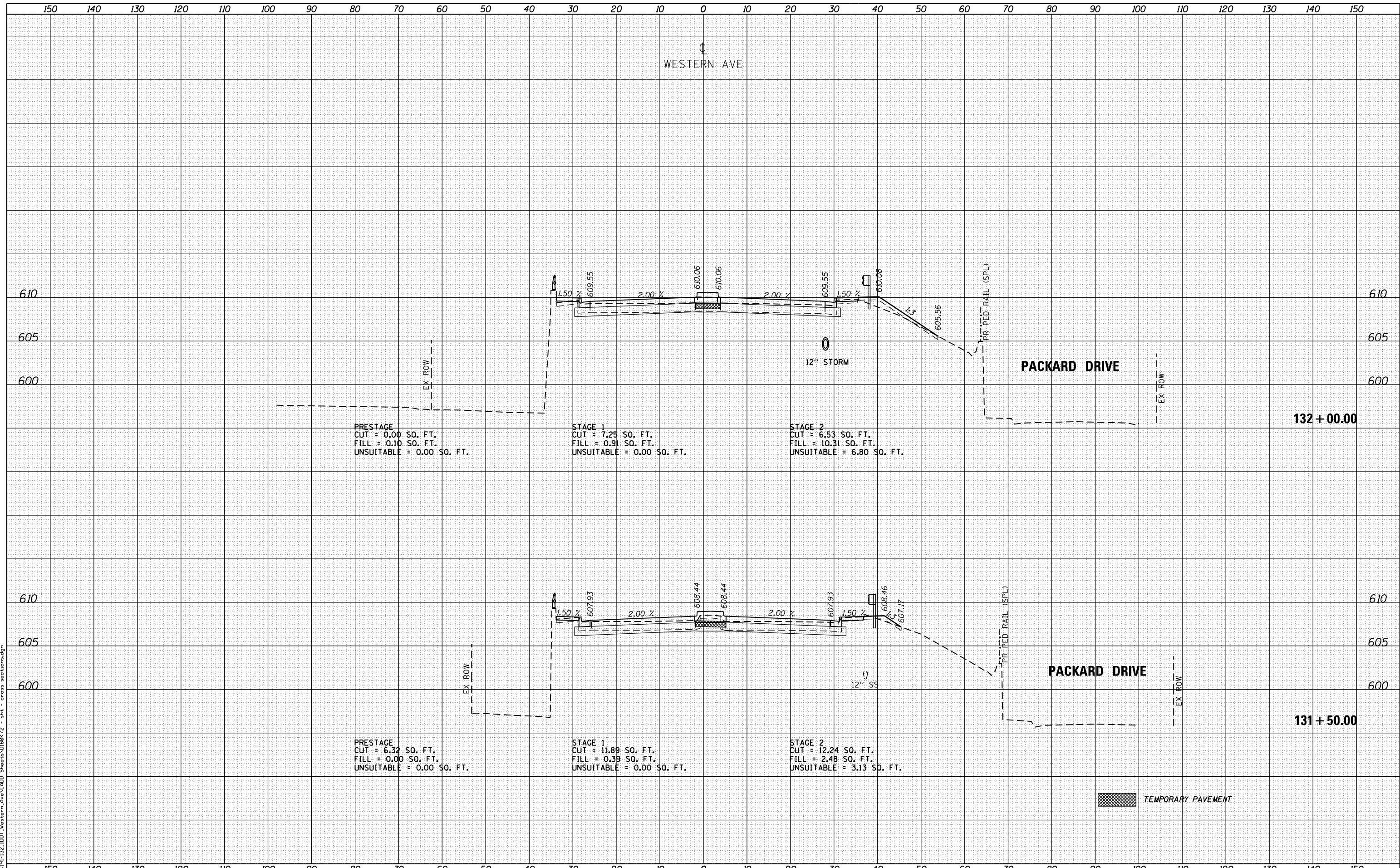
WESTERN AVENUE OVER CAL-SAG CHANNEL	
CROSS SECTIONS	
HORZ. 1"=10'	SCALE: VERT. 1"=5'
SHEET 3	OF 11 SHEETS
STA. 130+50.00	TO STA. 131+00.00

F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY COOK	TOTAL SHEETS 184	SHEET NO. 176
CONTRACT NO. 60K72				ILLINOIS FED. AID PROJECT

DATE	
BY	
FINAL SURVEY	
SURVEY PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
SURVEY PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

FILE NAME = W:\191-132-1001-Western-Ave\CADD-Sheets\0103BR-1.dwg - 3rd - cross section.dwg



BLA, Inc.
ITASCA, ILLINOIS

USER NAME = wteng	DESIGNED - MTC	REVISD -
	DRAWN - MTC	REVISD -
PLOT SCALE = 20.0000' / in.	CHECKED - JIP	REVISD -
PLOT DATE = 6/20/2019	DATE - 06/20/2019	REVISD -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

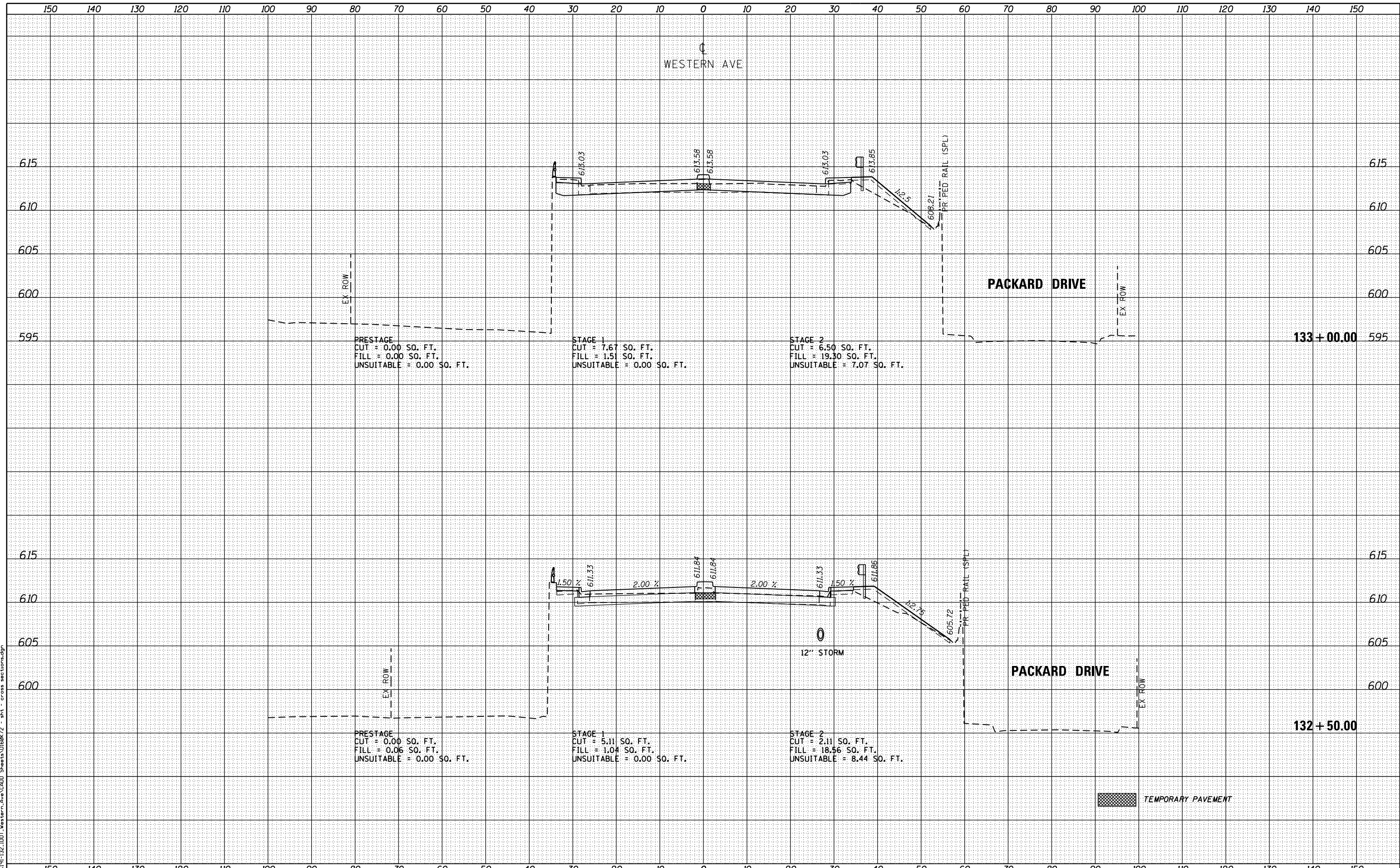
WESTERN AVENUE OVER CAL-SAG CHANNEL	
CROSS SECTIONS	
HORIZ. 1"=10'	SCALE: VERT. 1"=5'
SHEET 4	OF 11 SHEETS
STA. 131+50.00	TO STA. 132+00.00

F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY COOK	TOTAL SHEETS 184	SHEET NO. 177
CONTRACT NO. 60K72				ILLINOIS FED. AID PROJECT

DATE	
BY	
FINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

FILE NAME = W:\191-132-1001-Western-Ave\CADD-Sheets\0103BR-1-INT-Cross-sections.dgn



BLA, Inc.
ITASCA, ILLINOIS

USER NAME = wteng	DESIGNED - MTC	REVISED -
	DRAWN - MTC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JIP	REVISED -
PLOT DATE = 6/20/2019	DATE - 06/20/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

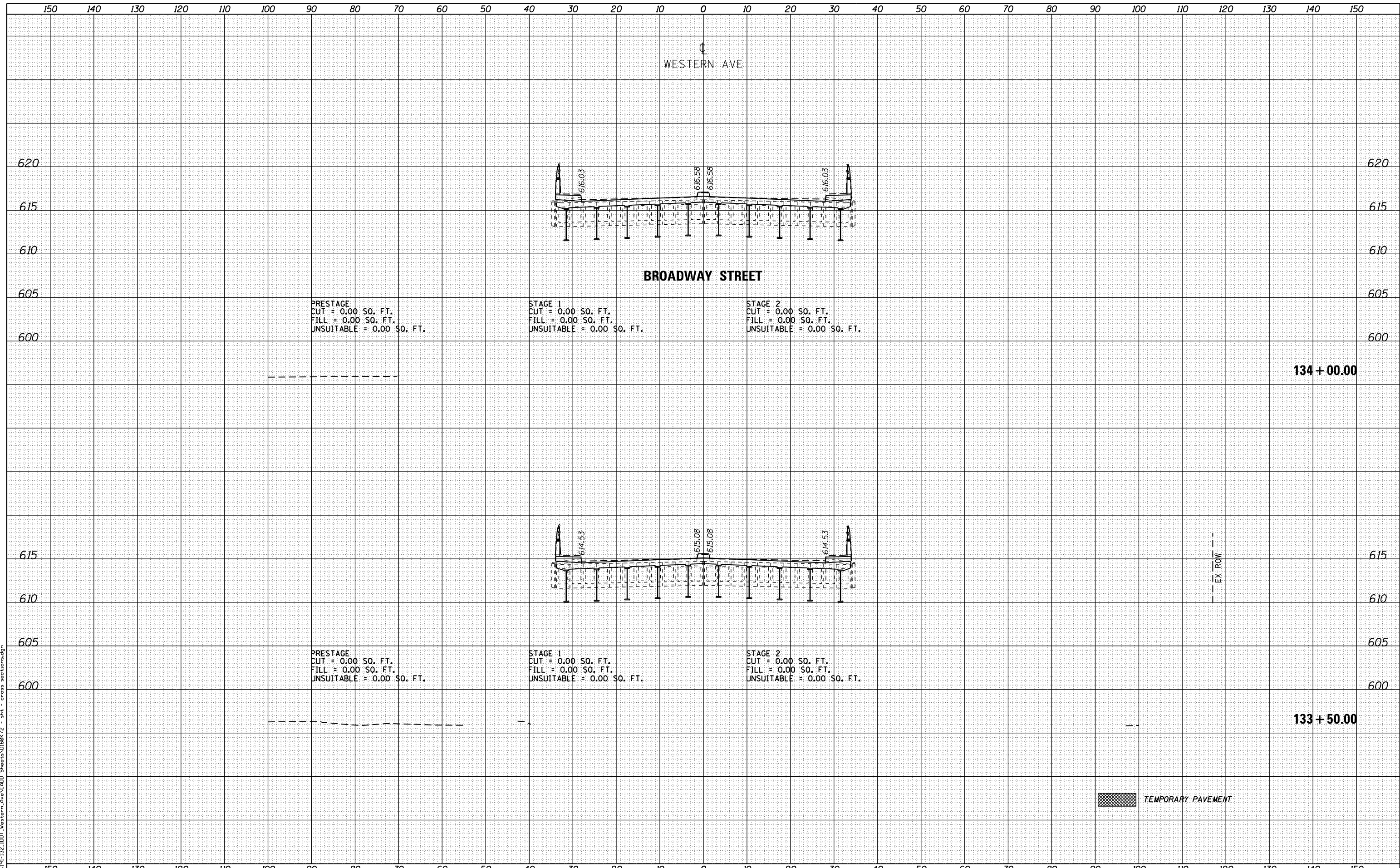
WESTERN AVENUE OVER CAL-SAG CHANNEL	
CROSS SECTIONS	
HORIZ. 1"=10'	SCALE: VERT. 1"=5'
SHEET 5	OF 11 SHEETS
STA. 132+50.00	TO STA. 133+00.00

F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY COOK	TOTAL SHEETS 184	SHEET NO. 178
			CONTRACT NO. 60K72	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

FILE NAME = W:\191-132-1001-Western-Ave\CADD-Sheets\0160K72 - 3rd - cross sections.dgn



PRESTAGE
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

STAGE 1
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

STAGE 2
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

PRESTAGE
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

STAGE 1
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

STAGE 2
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

TEMPORARY PAVEMENT



USER NAME =	wteng
DESIGNED -	MTC
DRAWN -	MTC
CHECKED -	JIP
DATE -	06/20/2019
REVISIONS	
REVISED -	
REVISED -	
REVISED -	
REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

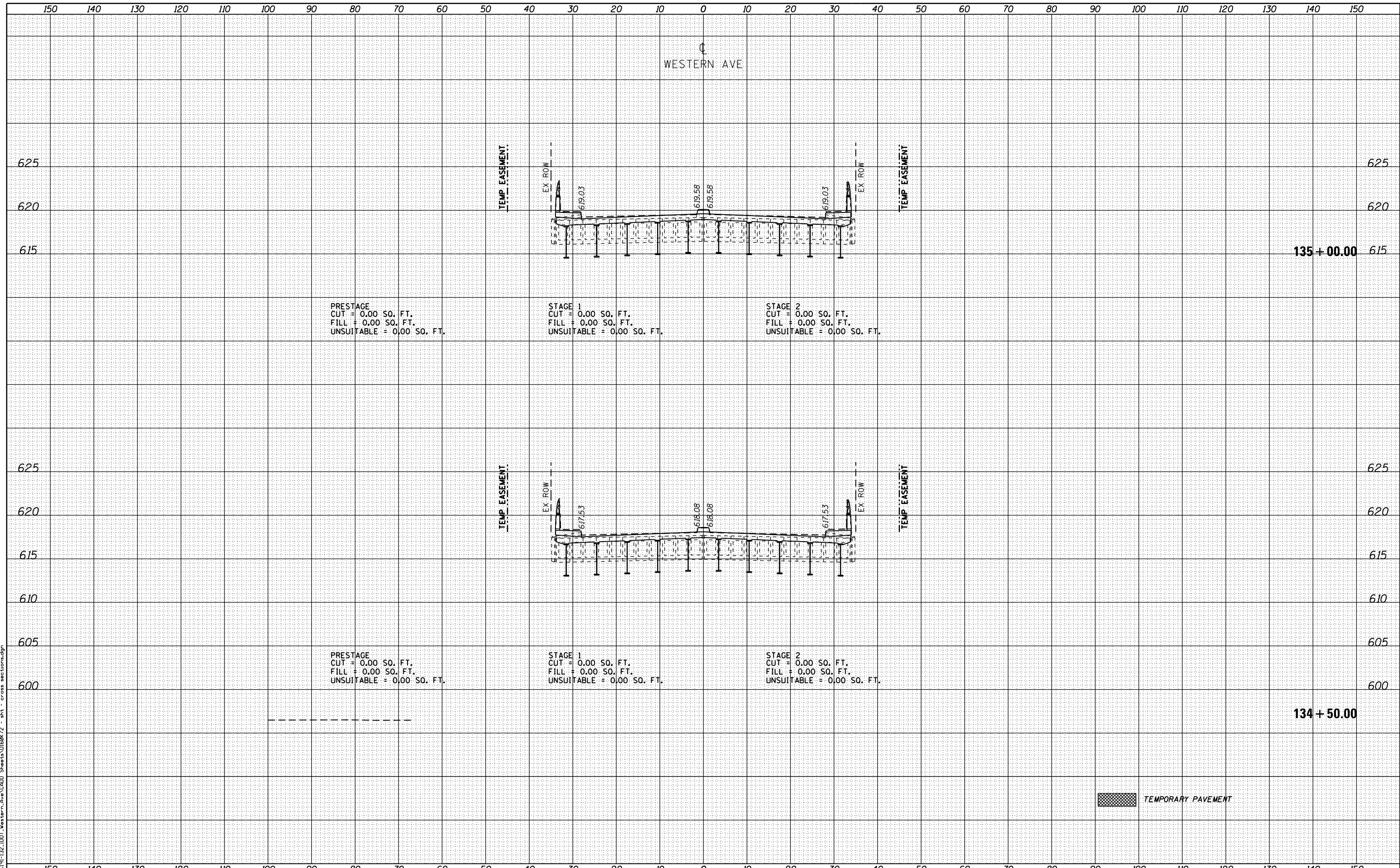
WESTERN AVENUE OVER CAL-SAG CHANNEL	
CROSS SECTIONS	
HORZ. 1"=10'	SCALE: VERT. 1"=5'
SHEET 6	OF 11 SHEETS
STA. 133+50.00	TO STA. 134+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	179
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED

FILE NAME = W:\191-132-1001-Western-Ave\CADD-Sheets\0103BR-1-INT-Cross-sections.dgn



PRESTAGE
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

STAGE 1
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

STAGE 2
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

PRESTAGE
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

STAGE 1
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

STAGE 2
CUT = 0.00 SQ. FT.
FILL = 0.00 SQ. FT.
UNSUITABLE = 0.00 SQ. FT.

TEMPORARY PAVEMENT



USER NAME = wteng	DESIGNED - MTC	REVISED -
	DRAWN - MTC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JIP	REVISED -
PLOT DATE = 6/20/2019	DATE - 06/20/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

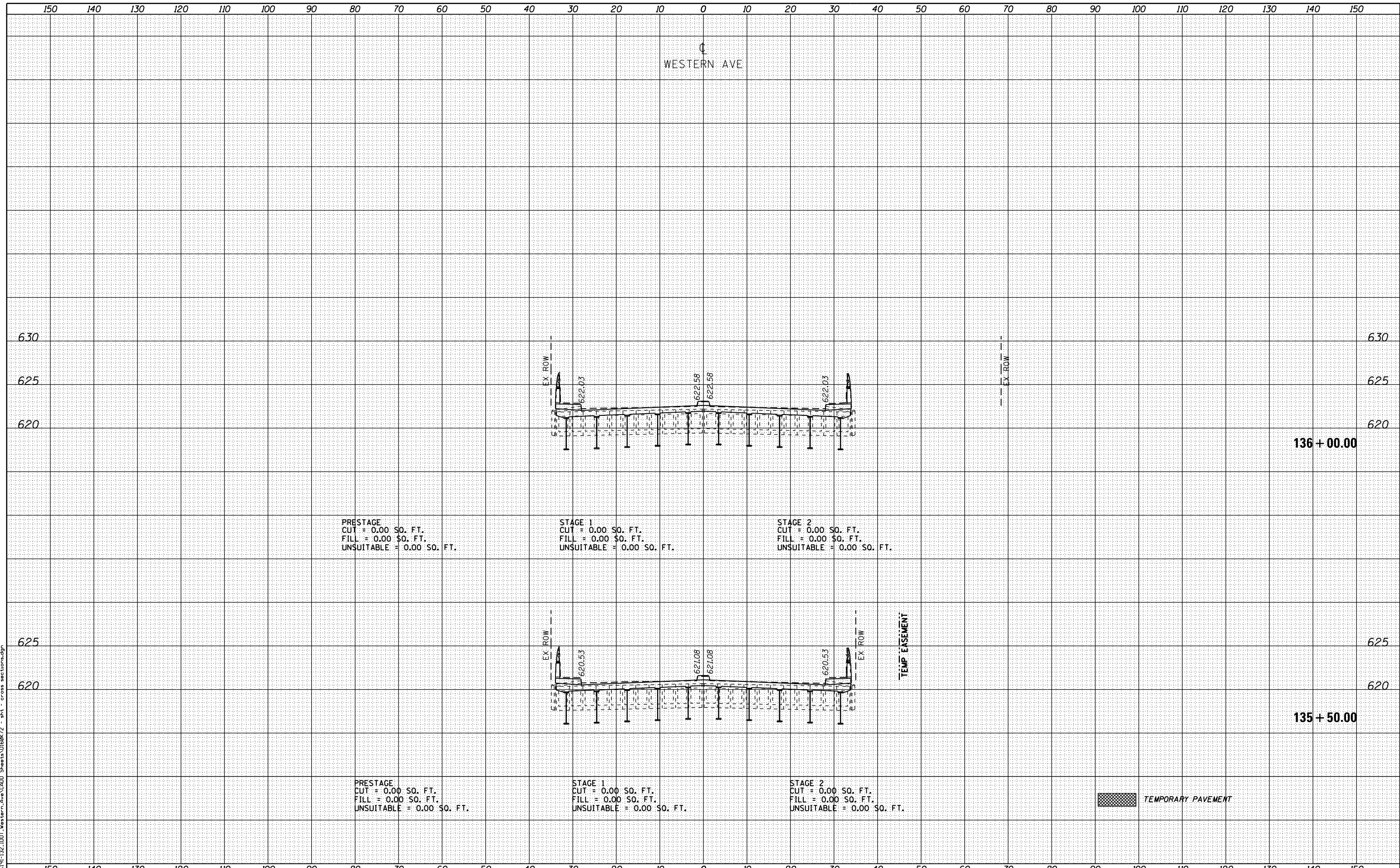
WESTERN AVENUE OVER CAL-SAG CHANNEL	
CROSS SECTIONS	
HORZ. 1"=10'	SCALE: VERT. 1"=5'
SHEET 7	OF 11 SHEETS
STA. 134+50.00	TO STA. 135+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103BR-1	COOK	184	180
CONTRACT NO. 60K72				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
NOTE BOOK NO.	
TEMPLATE AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
NOTE BOOK NO.	
TEMPLATE AREAS CHECKED	

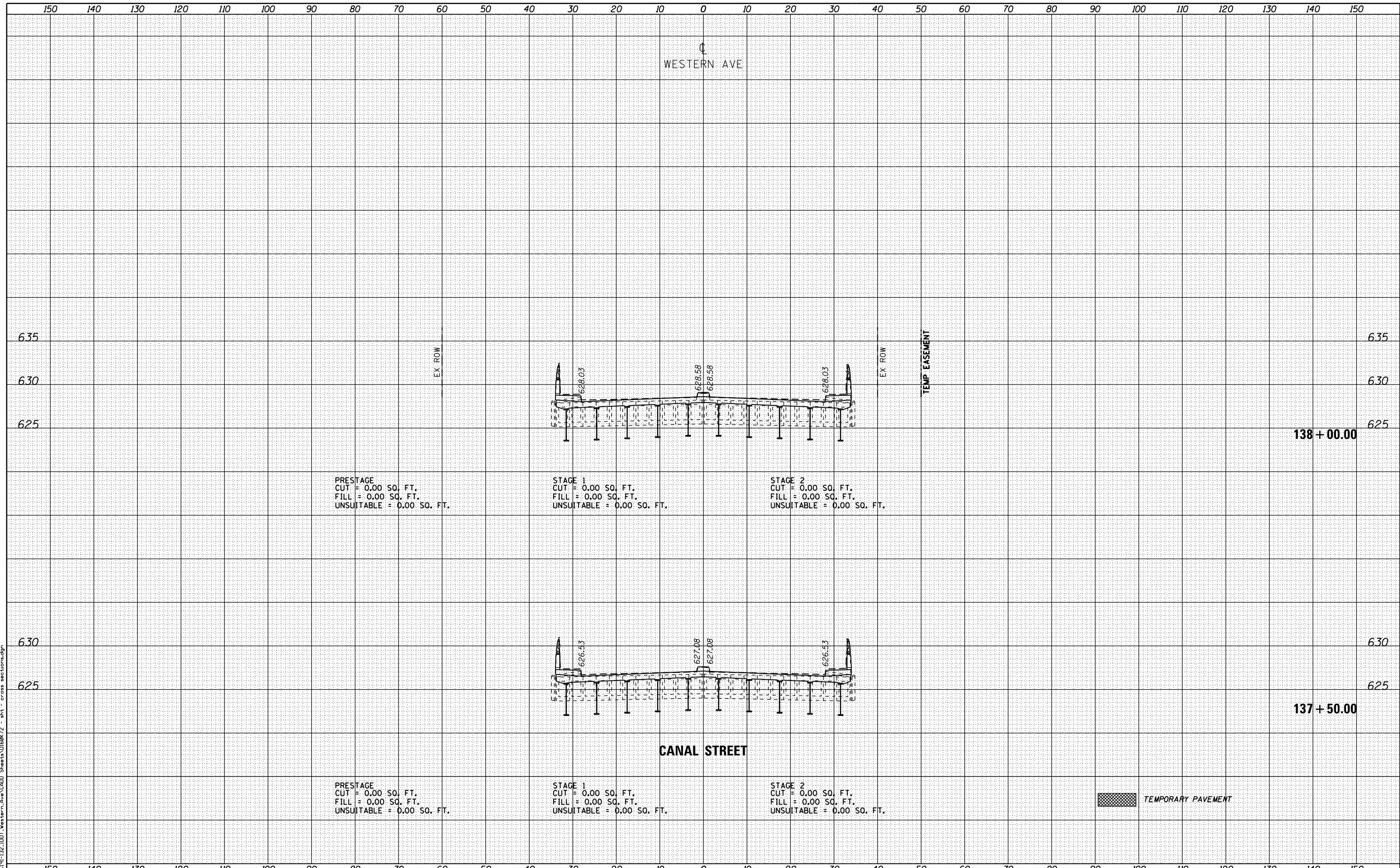
FILE NAME = W:\191-132-1001-Western-Ave\CADD-Sheets\0103BR-1-INT - cross sections.dgn



DATE	
BY	
FINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	

FILE NAME = W:\191-132-1001-Western-Ave\CAD Sheets\0103BR-1.dwg - 3rd - cross section.dwg



BLA, Inc.
ITASCA, ILLINOIS

USER NAME = wteng	DESIGNED - MTC	REVISED -
	DRAWN - MTC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JIP	REVISED -
PLOT DATE = 6/20/2019	DATE - 06/20/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

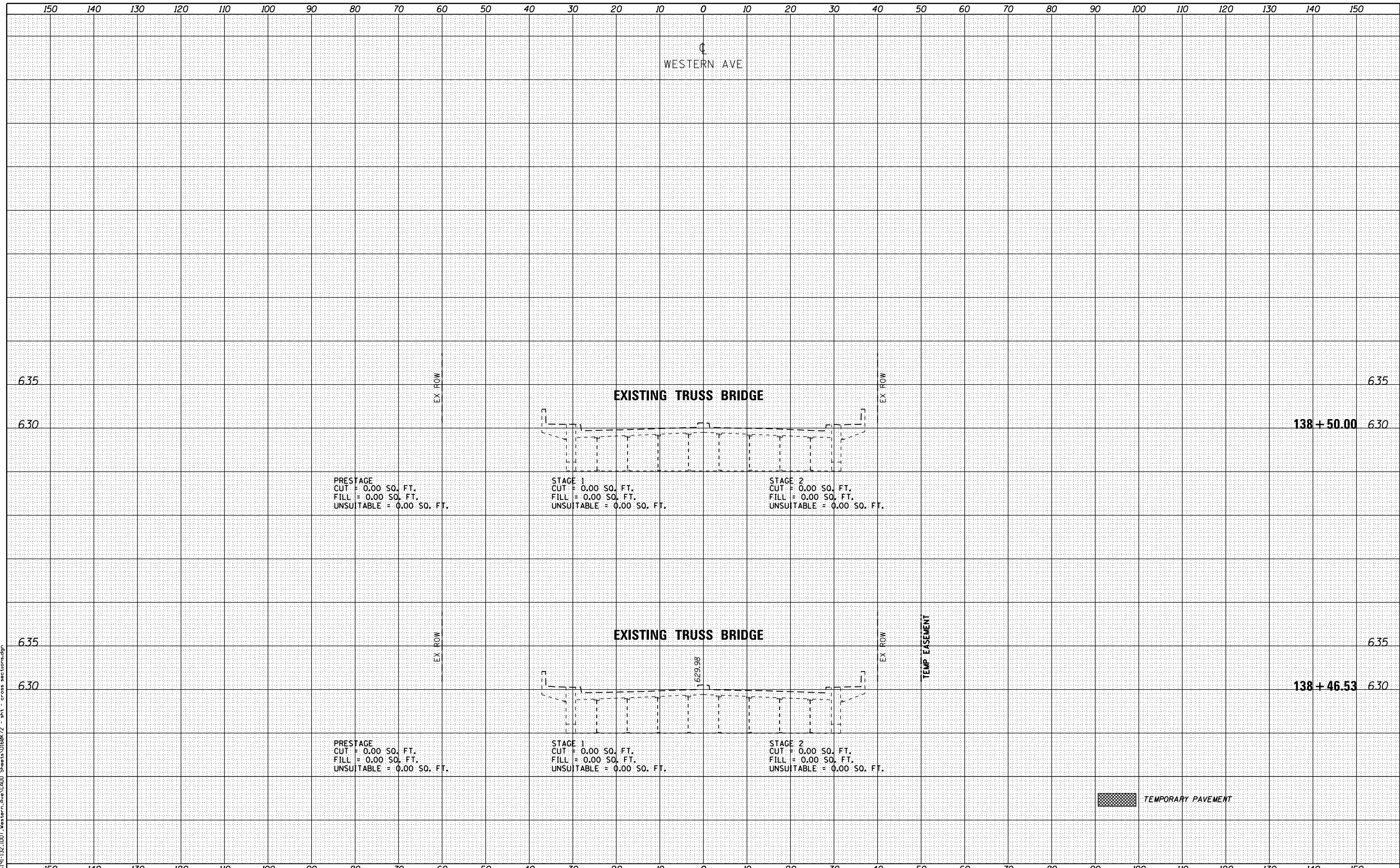
WESTERN AVENUE OVER CAL-SAG CHANNEL	
CROSS SECTIONS	
HORIZ. 1"=10'	SCALE: VERT. 1"=5'
SHEET 10	OF 11 SHEETS
STA. 137+50.00	TO STA. 138+00.00

F.A.P. RTE. 370	SECTION 0103BR-1	COUNTY COOK	TOTAL SHEETS 184	SHEET NO. 183
			CONTRACT NO. 60K72	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	

FILE NAME = W:\191-132-1001-Western-Ave\CADD-Sheets\0103BR-1-1.dwg - 3rd - cross section.dwg



BLA, Inc. ITASCA, ILLINOIS	USER NAME = wteng DESIGNED - MTC DRAWN - MTC CHECKED - JIP DATE - 06/20/2019	REVISIONS REVISION NO. DATE DESCRIPTION 1 2 3 4	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WESTERN AVENUE OVER CAL-SAG CHANNEL CROSS SECTIONS		F.A.P. RTE. 370 SECTION 0103BR-1 COUNTY COOK CONTRACT NO. 60K72	TOTAL SHEETS 184 SHEET NO. 184
	PLOT SCALE = 20.0000' / in. PLOT DATE = 6/20/2019	HORZ. 1"=10' SCALE: VERT. 1"=5'		SHEET 11 OF 11 SHEETS STA. 138+46.53 TO STA. 138+50.00	ILLINOIS FED. AID PROJECT		