

*Unit 3 Stage I & II beams shown raised

**Temporary Shorng shall be measured one each per Pier Cap or Superstructure, one each per Stage I or Stage II and one each per location at Pier 3 or Pier 6 for a total quantity of 8.

TEMPORARY SHORING

DEAD LOAD BEAM REACTIONS

(Service Load (K) - Weight of Existing Structural Steel Each Unit)

Unit	Beam	Loading	Reaction
1	1 thru 12	DL Beam	4.2
2	1 thru 12	DL Beam	7.2
3	1 thru 12	DL Beam	4.8

Dead load reactions provided for Temporary Shoring are bearing reactions with the deck removed. Contractor to add construction dead load and live loads to the reactions.

STAGE I EXISTING PIER CAP SHORING

Service Load Reactions

Loading	Pier 3	Pier 6
DL (k)	38	38
LL (k)	43	43

STAGE II NEW PIER CAP SHORING

Service Load Reactions

Loading	Pier 3	Pier 6
DL (k)	62	62
LL (k)	35	35

SUGGESTED PROCEDURE:

Stage I deck removal.

Determine Stage I existing pier cap bearing seat elevations.

Install temporary shoring for beams 6 thru 12.

For Pier 6 only, raise Stage I Unit 3 beams.

Remove and store lower portion of existing Stage I bearings and bearing shims, including beam 6.

Remove Stage I portion of pier cap.

Construct Stage I portion of pier cap.

Reinstall lower portion of existing bearings and bearing shims for beams 7 thru 12.

Complete Stage I deck construction.

Stage II deck removal.

Determine Stage II existing pier cap bearing seat elevations.

Install temporary shoring for beams 1 thru 5, shoring for beam 6 remains in place.

For Pier 6 only, raise Stage II Unit 3 beams.

Remove and store lower portion of existing Stage II bearings and shim plates.

Remove Stage II portion of pier cap.

Construct Stage II portion of pier cap.

Reinstall lower portion of existing bearings and shim plates.

Complete Stage II deck construction.

NOTES

Pier 3 temporary shoring and pier cap removal details are the same as for Pier 6, except beams and bridge seats in adiacent Units at Pier 3 are not raised.

All work associated with temporarily supporting beams during pier cap replacement shall be paid for as Temporary Shoring. See Special Provision for Temporary Shoring. Temporary pier cap shoring will not be measured for payment and is included in the cost of Temporary Shoring. The work for temporary pier cap shoring shall be according to the applicable requirements of the Special Provision for Temporary Shoring.

See sheet 45 of 59 for Unit 3 superstructure raise details. Raising Unit 3 is included in the Guide Bridge Special Provision "Jacking Existing Superstructure". Temporary Shoring required for supporting beams on the east side of Pier 6 during cap replacement shall be coordinated with the work for jacking the existing Unit 3 superstructure.

See sheet 50 of 59 for removal and reinstallation details for the lower portion of existing bearings. All work for removing the lower portion of the existing bearing, shall be included in the applicable portions of the Guide Bridge Special Provision "Jack and Remove Existing Bearings". Costs for temporarily storing the lower portion of the existing bearings and subsequently reinstalling the lower portion of the existing bearings and shims shall be included in the Jack and Remove and Reinstall Existing Bearings item. New anchor bolts will be paid for separately.

Beam 6 shall be continuously shored during Stage I and Stage II.

Stage I pier cap shoring shall be in place before Stage I existing pier cap removal.

Stage II pier cap shoring for new cap shall be in place before removal of Stage I pier cap construction falsework. See sheets 51 and 53 of 59 for cap details.

Column reinforcing embedded in the existing Pier 3 & Pier 6 shall not be removed. Existing reinforcement shall be cleaned and incorporated into the new pier caps. See sheets 52 and 54 of 59 for existing column section. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer and/or as approved by the Engineer. Cost is included with Concrete Removal.

BILL OF MATERIAL

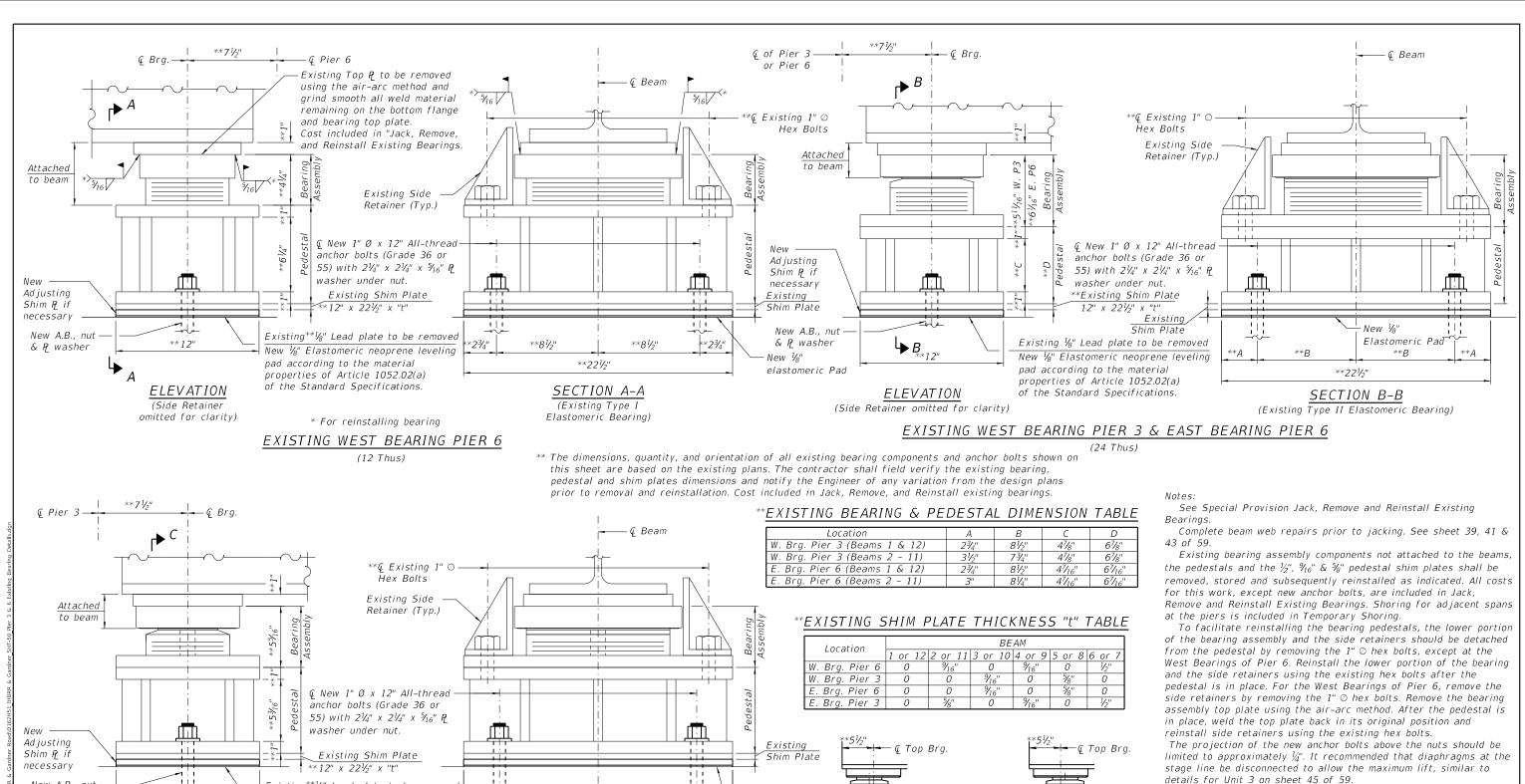
ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	60.4
Temporary Shoring	Each	8

(Sheet 1 of 6)

	USER NAME = Winson	DESIGNED - HB	REVISED -
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ĽĨ BLA, Inc	PLOT SCALE =	DRAWN - HB	REVISED -
	PLOT DATE = 11/5/2020	CHECKED III	REVISED

EXISTING P STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

1 1 01 0)					
PIER 3 AND PIER 6 CAP REMOVAL AND SHORING	F.A.U RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 016-0631		2018-126-BR	соок	194	104
31110C1011L NO. 010-0031			CONTRACT	NO. 62	2H51
SHEET NO. 49 OF 59 SHEETS		ILLINOIS FED. A	ID PROJECT		



Elastomeric Pad ► © Bott. Brg.

BELOW 50° F.

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

EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field. stage line be disconnected to allow the maximum lift, similar to details for Unit 3 on sheet 45 of 59.

Existing removed bearing components, pedestals and indicated shims shall have their beam number, bearing line and pier number marked on them prior to storage. Removed elements of the existing bearings shall be handled in such a manner that they will be protected from damage. Existing 1/8" lead plates shall become the property of the contractor.

The Contractor shall measure and record the thickness of all existing shim plates at each bearing location and make necessary adjustments when reinstalling bearing components. Existing adjusting shims not suitable for reuse shall be replaced.

2 new $\frac{1}{8}$ inch steel adjusting shims and a $\frac{1}{8}$ " elastomeric neoprene pad shall be provided for each existing bearing pedestal in addition to all other plates or shims and placed as shown on bearing details. Cost included in Jack, Remove and Reinstall Existing Bearings.

EXISTING EAST BEARING PIER 3 (12 Thus)

**2¾"

** 81/2"

Existing**1/8" Lead plate to be removed

New 1/8" Elastomeric neoprene leveling

pad according to the material

properties of Article 1052.02(a)

of the Standard Specifications.

BILL OF MATERIAL

** 81/2"

**22½"

SECTION C-C

(Existing Type III

Elastomeric Bearing)

Total 96 Anchor Bolts, 1" Each Jack, Remove, and Reinstal Each 48 Existing Bearings

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ELEVATION

(Side Retainer

omitted for clarity)

New A.B., nut

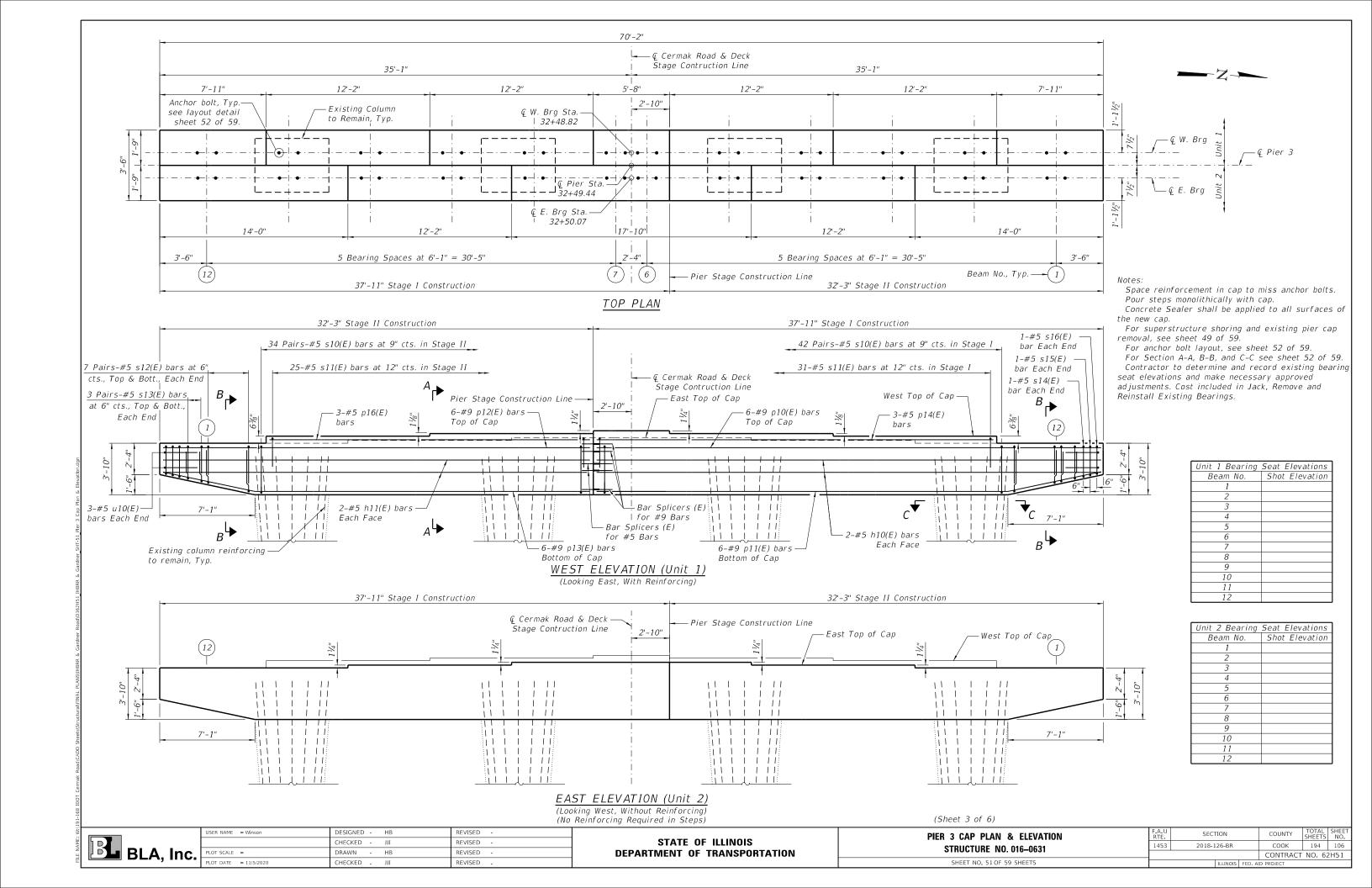
& P_washer

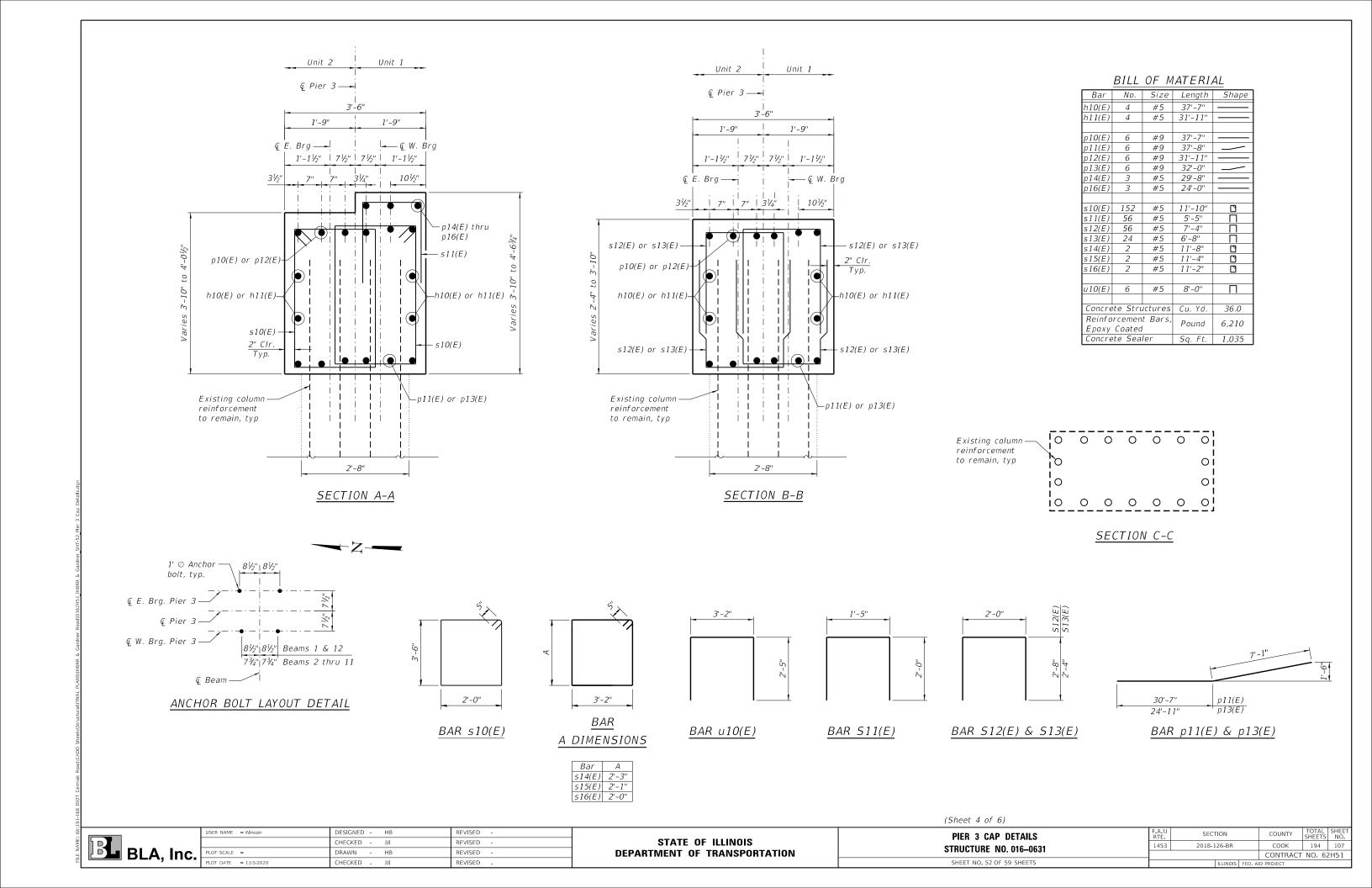
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

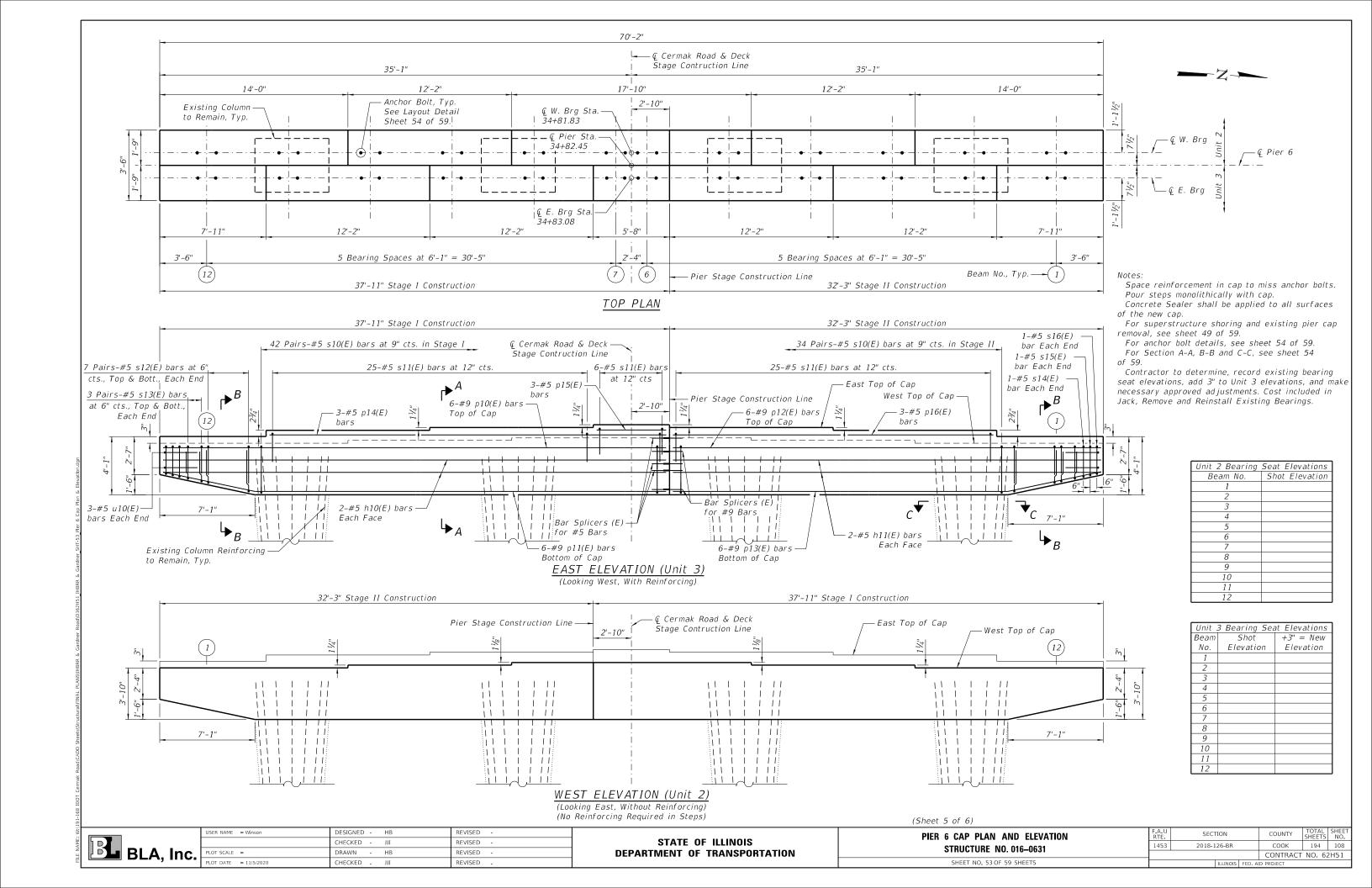
New 1/8"

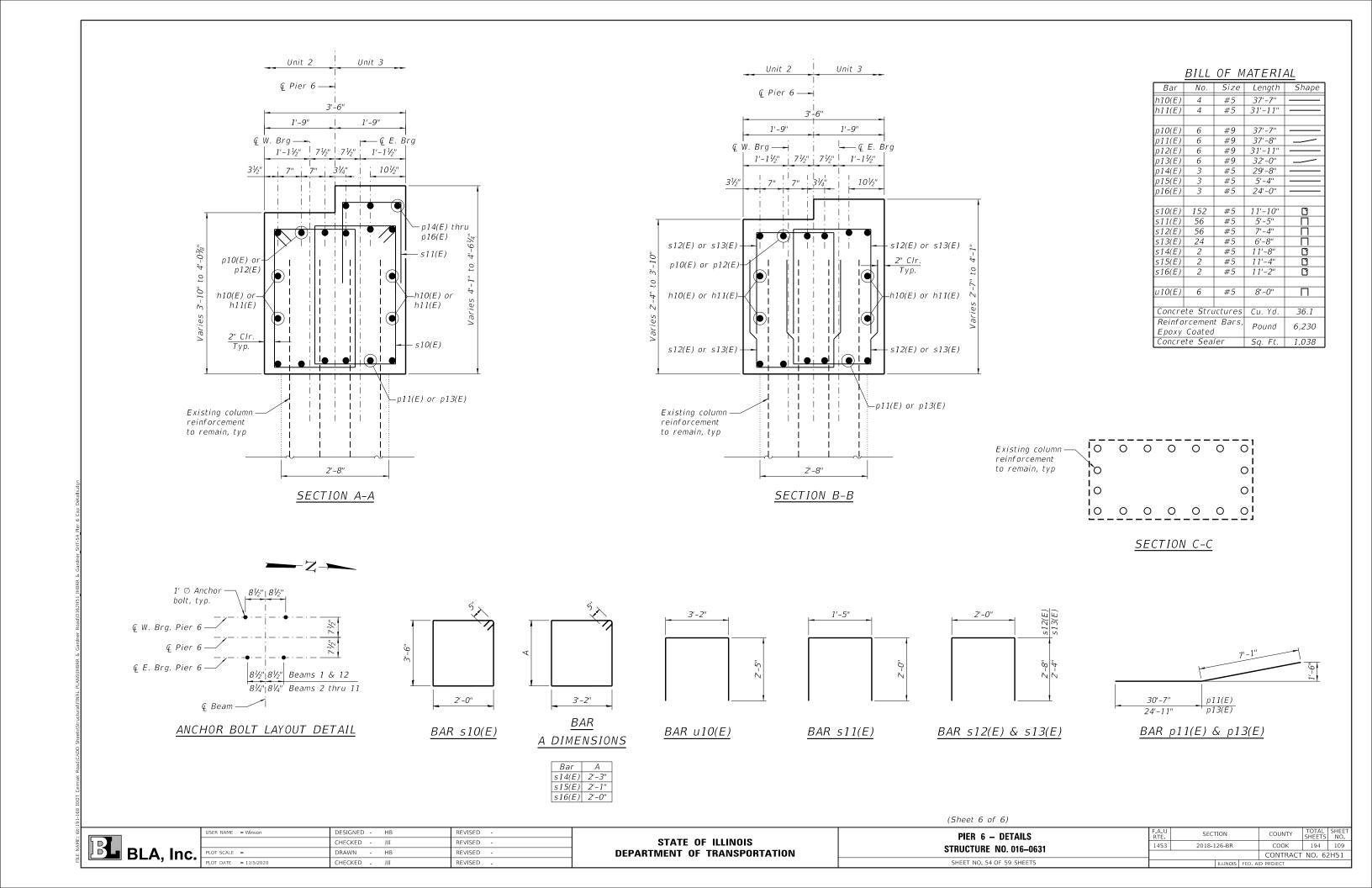
**23/4"

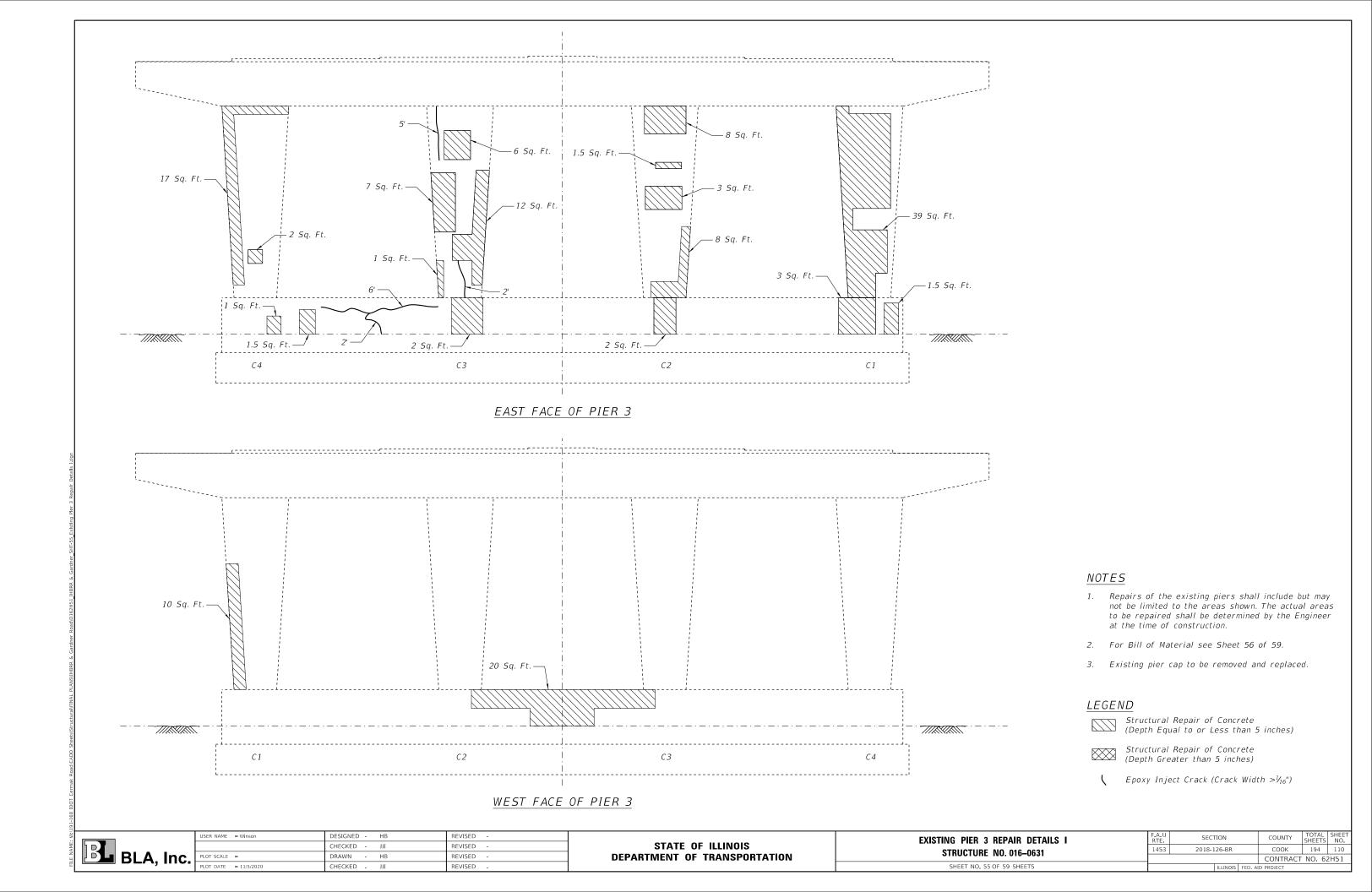
(Sheet 2 of 6)					
EXISTING PIER 3 & PIER 6 BEARING REMOVAL AND REINSTALLATION	F.A.U RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 016-0631		2018-126-BR	соок	194	105
SINUCIONE NO. 010-0031			CONTRAC	T NO. 62	H51
SHEET NO. 50 OF 59 SHEETS		ILLINOIS FE	D. AID PROJECT		

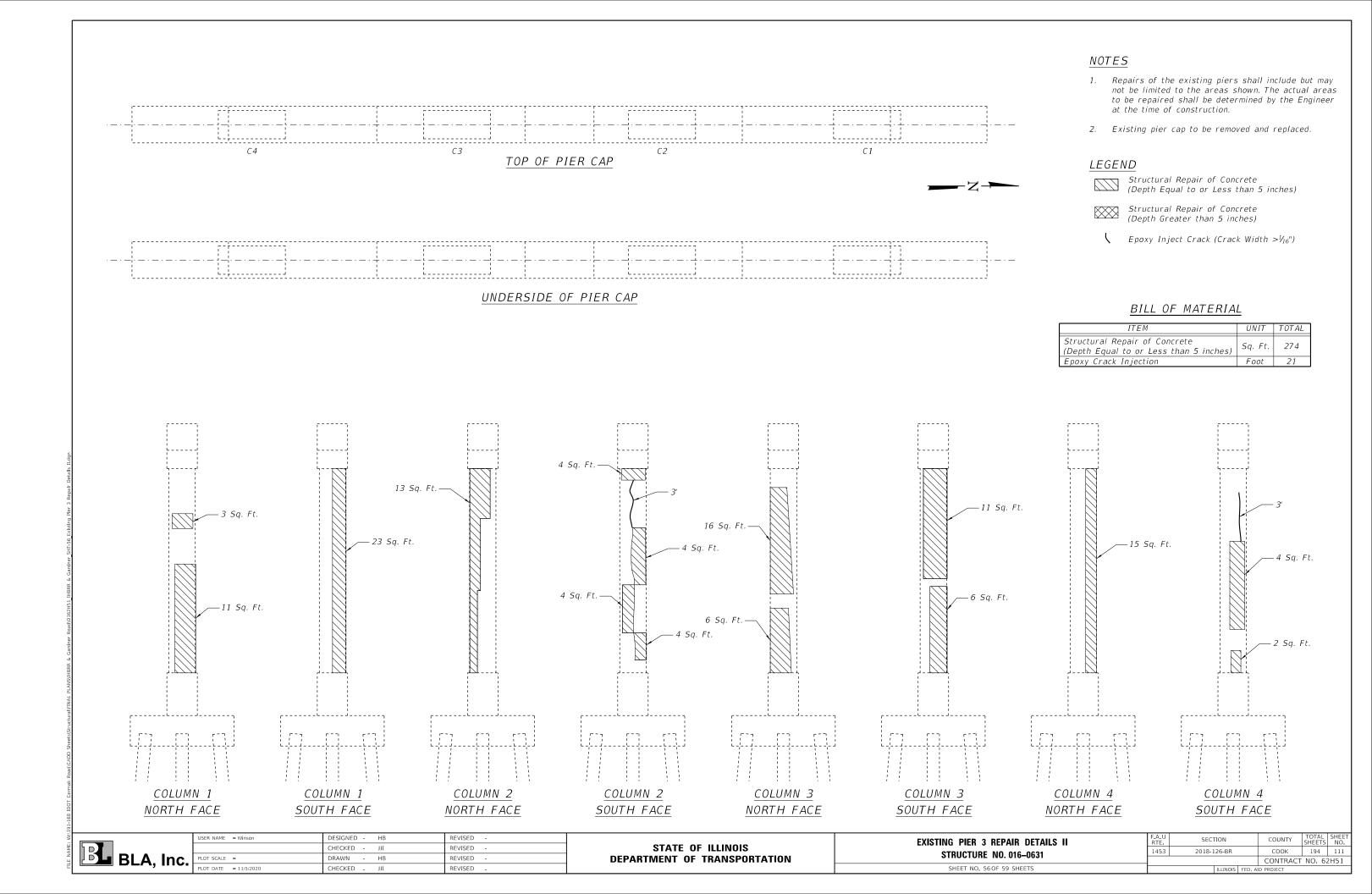


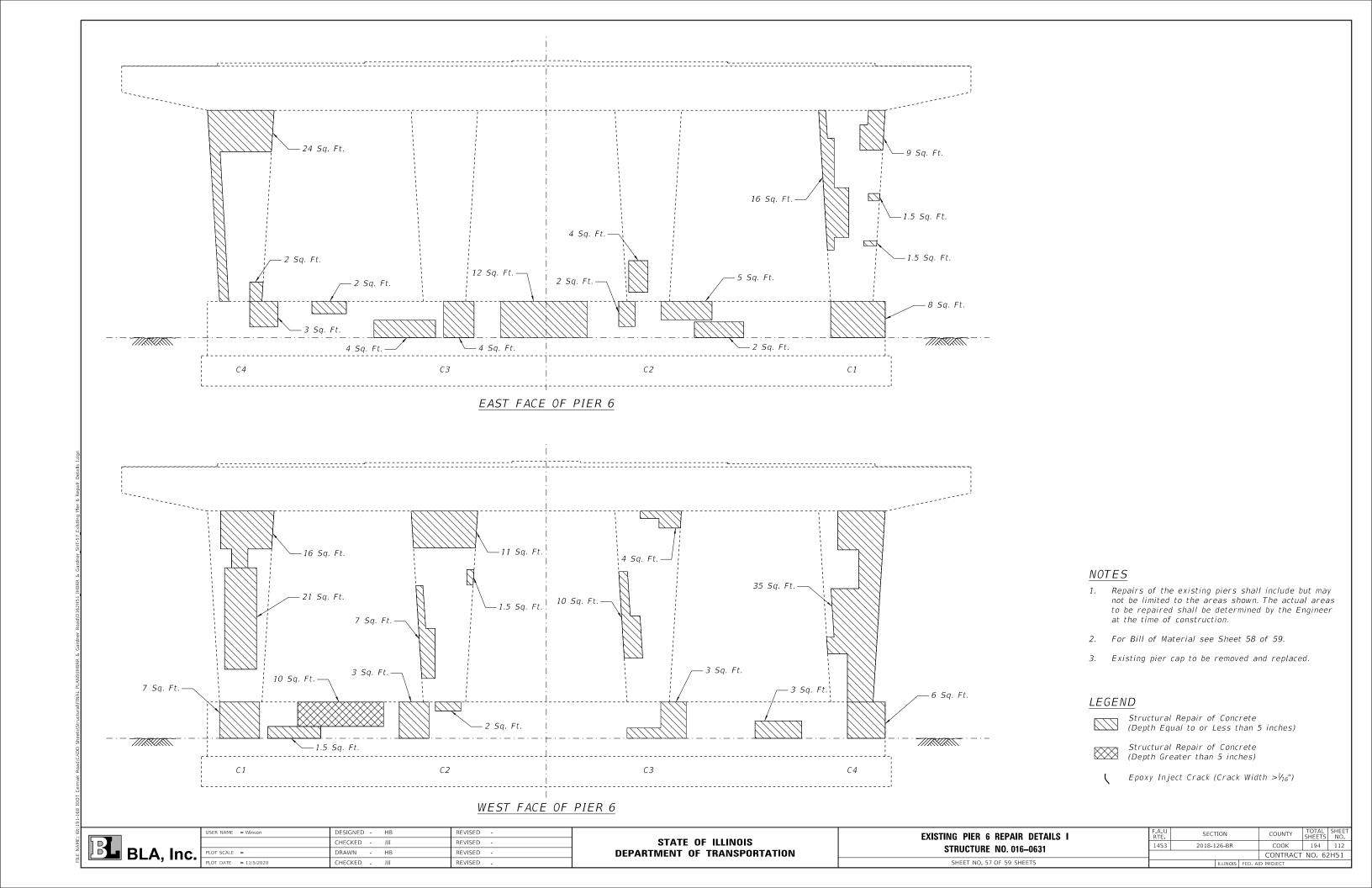


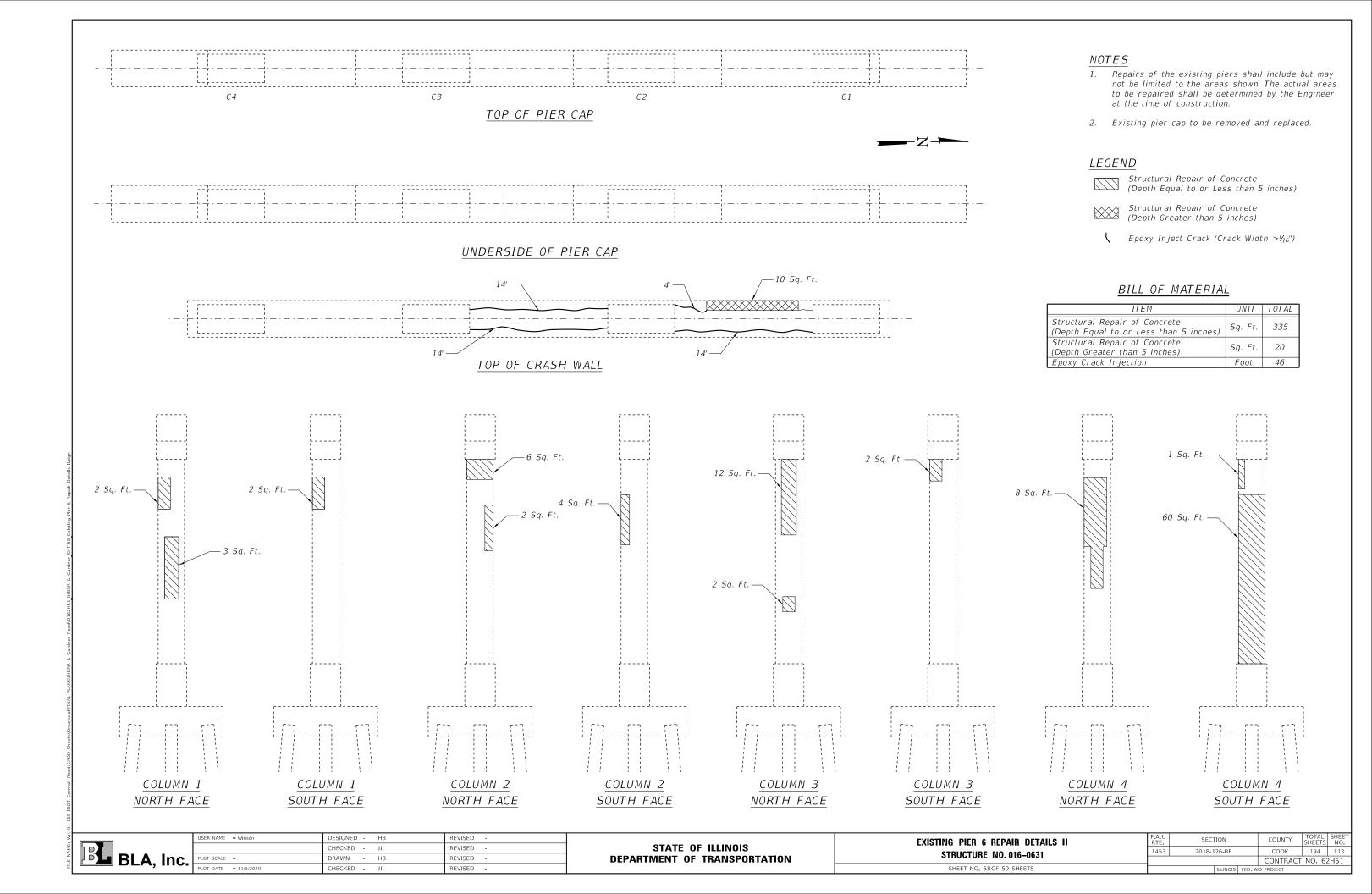












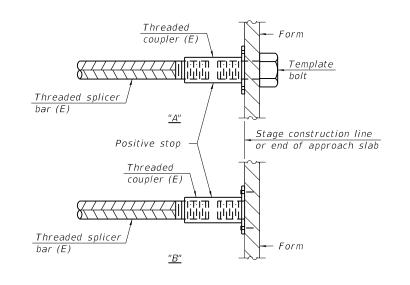
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1½" + thread length

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

Location	Bar	No. assemblies	Minimum
LOCALIOII	size	required	lap length
Unit 1 Deck	#5	476	3'-6"
Unit 2 Deck	#5	713	3'-6"
Unit 3 Deck	#5	759	3'-6"
West Approach Slab	#5	46	3'-0"
West Approach Slab	#8	60	4'-9"
West Approach Slab Footing	#5	40	3'-2"
East Approach Slab	#5	46	3'-0"
East Approach Slab	#8	60	4'-9"
East Approach Slab Footing	#5	40	3'-2"
West Abutment	#6	4	3'-7"
East Abutment	#6	4	3'-7"
Pier 3	#5	7	3'-2"
Pier 3	#9	12	6'-3"
Pier 6	#5	7	3'-2"
Pier 6	#9	12	6'-3"



STANDARD MECHANICAL SPLICER

Stage I construction | Stage II construction

?<<<<<<<<<<<<<<

Reinforcement bar-

Stage line if applicable

Mechanical

splicer (E)

– Reinforcement bar

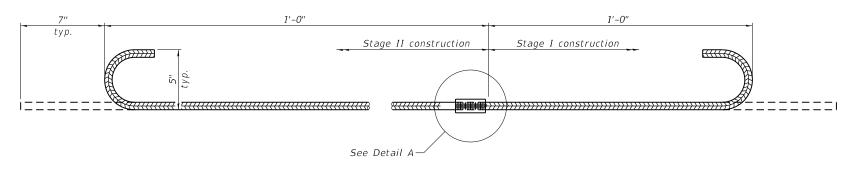
Location	Bar size	No. assemblies required

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.

** The bar splicer assembly shall allow completion of the splice without turning of the hook bars. The stage II splice bar shall be threaded such that the entire coupler can be threaded onto the splice bar.



#5 - BAR SPLICER ASSEMBLY FOR EDGE BEAMS AT STAGE CONSTRUCTION JOINT

___Stage II construction Stage I construction No. required = 18 Min. $\frac{1}{2}$ (coupler length) + $\frac{1}{4}$ " ** Coupler splice threaded end to end

DETAIL A

alternatives.

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

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BLA, Inc.	PLOT SCALE =
	PLOT DATE = 11/5/2020

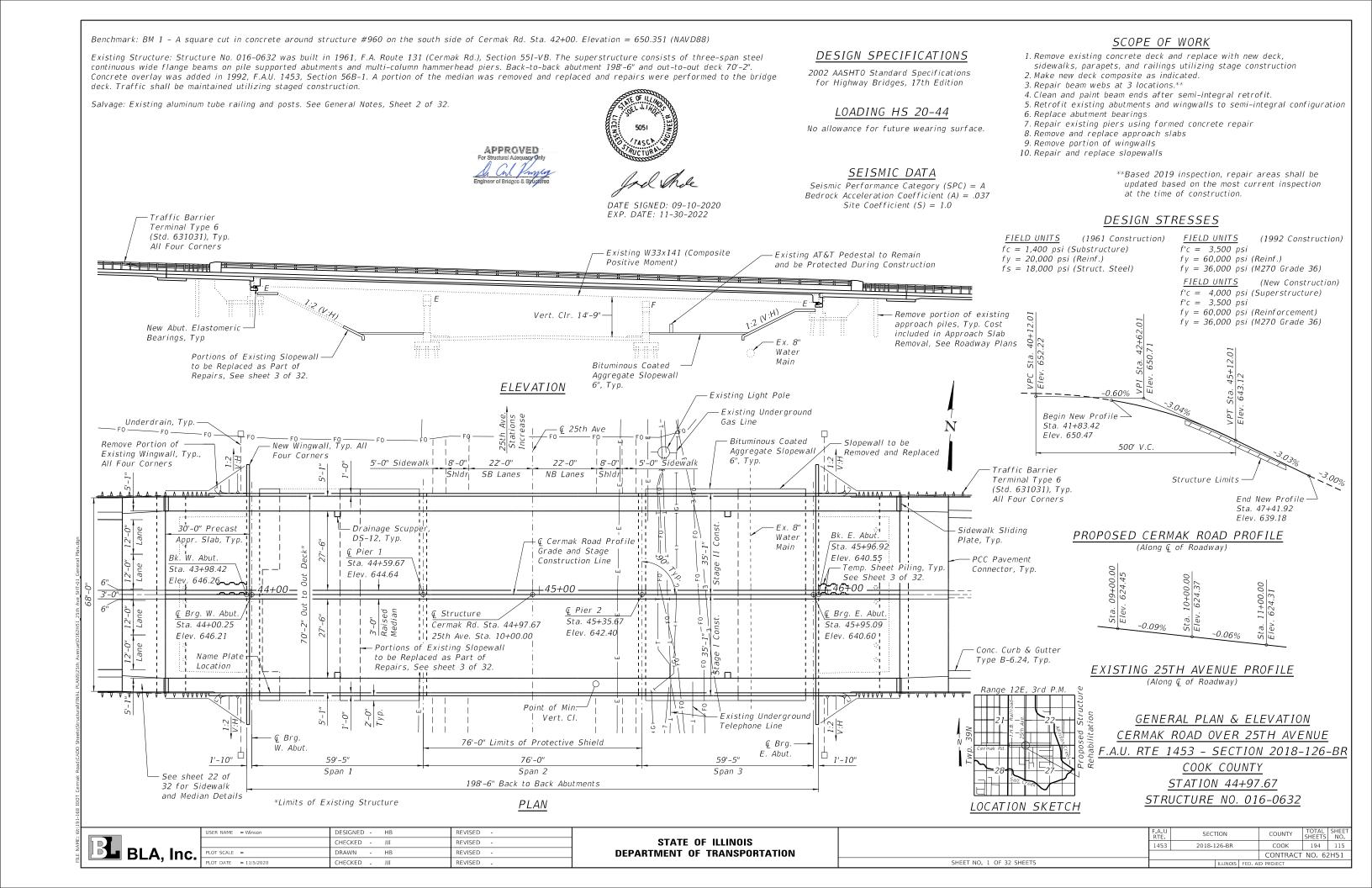
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•	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

STATE OF ILLINOIS

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 016-0631 SHEET NO. 59 OF 59 SHEETS

L.U E.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
53	2018-126-BR	соок	194	114	
			CONTRACT	NO. 62	2H51
	TILLINOIS	EED /	VID PROJECT		

DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $\frac{3}{4}$ in. 0, holes $\frac{13}{6}$ in. 0, unless otherwise

Slip-forming of parapets is not allowed.

Reinforcement bars designated (E) shall be epoxy coated.

No field welding is permitted except as specified in the contract documents.

The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck No. 2. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications

Prior to pouring the new concrete deck and diaphragms, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete. As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testin (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding ¼ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $lak{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.

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

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". After the concrete diaphragms and deck have been cast, all beams within 12 feet (measured along the beam) of beam ends shall be cleaned per Near White Blast Cleaning (SSPC-SP10). The exterior surfaces and the bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning (SSPC-SP15)

Designated areas cleaned per Near White Blast Cleaning (SSPC-SP10) and per Commercial Grade Power Tool Cleaning (SSPC-SP15) shall be painted according to the requirements of Epoxy Mastic Primer/Epoxy Mastic Intermediate Coat/Acrylic Topcoat (FM/FM/AC). The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No 5B. 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beam shall be Reddish Brown, Munsell No 2.5YR, 3/4.

The contractor shall submit a detailed demolition plan for the removal of the existing concrete deck over 25th Avenue in accordance with Article 501.02 of the Standard Specifications, Demolition plan shall include details for each

If the Contractor elects to use cantilever forming brackets on the exterior beams, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

The contractor shall salvage the aluminum railing and posts. Railings shall not be cut. The railings, posts, and attachments shall be transported and unloaded by the Contractor to the District Bridge Yard in Elk Grove at 1101 Biesterfield Road during the weekdays of Monday-Friday, and between the hours of 8am and 2pm. The Contractor shall notify the District Bridge Office 48 hours in advance of the delivery at (847) 956-1443. Cost included in Removal of Existing Concrete Deck No. 2.

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- 1. General Plan & Elevation
- 2. General Data
- 3. Temporary Sheet Piling & Slopewall Details
- 4. Stage Construction Details
- 5. Temporary Concrete Barrier for Stage Construction
- 6. Top of Slab Elevations I
- 7. Top of Slab Elevations II
- 8. Top of Slab Elevations III
- 9. Top of Slab Elevations IV
- 10. Top of West Approach Slab Elevations
- 11. Top of East Approach Slab Elevations
- 12. Superstructure Plan
- 13. Superstructure Cross Sections
- 14. Superstructure Details
- 15. Diaphraam Details
- 16. Precast Bridge Approach Slab
- 17. Precast Bridge Approach Slab
- 18. Precast Bridge Approach Slab
- 19. Drainage Scupper DS-12
- 20. Aluminum Railing, Type L 21. Performed Joint Strip Seal - Sidewalk
- 22. Pavement Connector Sidewalk and Median Details
- 23. Structural Steel
- 24. Structural Steel Details
- 25 Rearing Details
- 26. Abutment Concrete Removal
- 27. Abutment Modifications
- 28. Pier 1 Repair Details I
- 29. Pier 1 Repair Details II
- 30. Pier 2 Repair Details I
- 31. Pier 2 Repair Details II
- 32. Bar Splicer Assembly Details

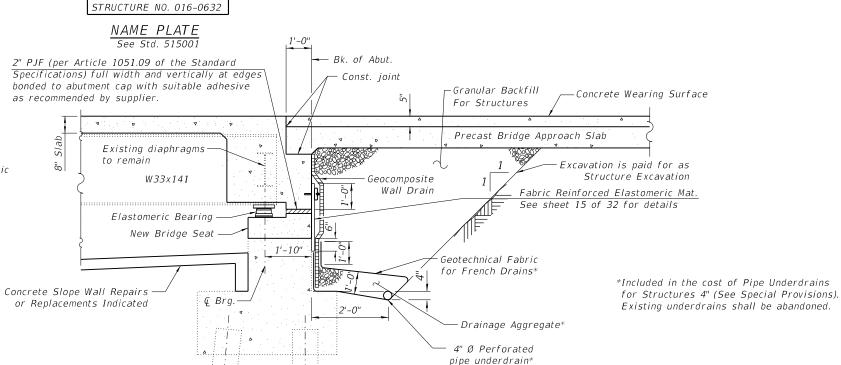
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TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.		46	46
Slopewall Removal	Sq. Yd.		348	348
Removal of Existing Concrete Deck No. 2**	Each	1		1
Protective Shield***	Sq. Yd.	593		593
Structure Excavation	Cu. Yd.		378	378
Concrete Structures	Cu. Yd.		62.3	62.3
Concrete Superstructure	Cu. Yd.	571.4		571.4
Bridge Deck Grooving	Sq. Yd.	1,465		1,465
Protective Coat	Sq. Yd.	2,173		2,173
Stud Shear Connectors	Each	6,840		6,840
Reinforcement Bars, Epoxy Coated	Pound	114,310	10,390	124,700
Bar Splicers	Each	757	8	765
Aluminum Railing, Type L	Foot	438		438
Slopewall, 4 Inch	Sq. Yd.		331	331
Bituminous Coated Aggregate Slopewall 6"	Sq. Yd.		445	445
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	142		142
Elastomeric Bearing Assembly, Type I	Each	24		24
Anchor Bolts, 1"	Each	48		48
Temporary Sheet Piling	Sq. Ft.		832	832
Granular Backfill for Structures	Cu. Yd.		266	266
Geocomposite Wall Drain	Sq. Yd.		182	182
Concrete Wearing Surface, 5"	Sq. Yd.	462		462
Precast Bridge Approach Slab	Sq. Ft.	4,152		4,152
Jack and Remove Existing Bearings	Each	24		24
Structural Steel Repair	Pound	340		340
Containment & Disposal of Lead Paint Cleaning	L Sum	1		1
Residues, No. 2				-
Cleaning & Painting Steel Bridge, No. 2	L Sum	1		1
Structural Repair of Concrete (Depth Equal to	Sq. Ft.		100	100
or Less Than 5 Inches)				
Debris Removal	Cu. Yd.		2	2
Drainage Scuppers, DS-12	Each	4		4
Pipe Underdrains for Structures 4"	Foot		182	182

**Removal of Existing Deck includes timber supports installed under the deck.

***Removal of existing protective shield is included in the cost of Protective Shield.



Existing Concrete

Piles

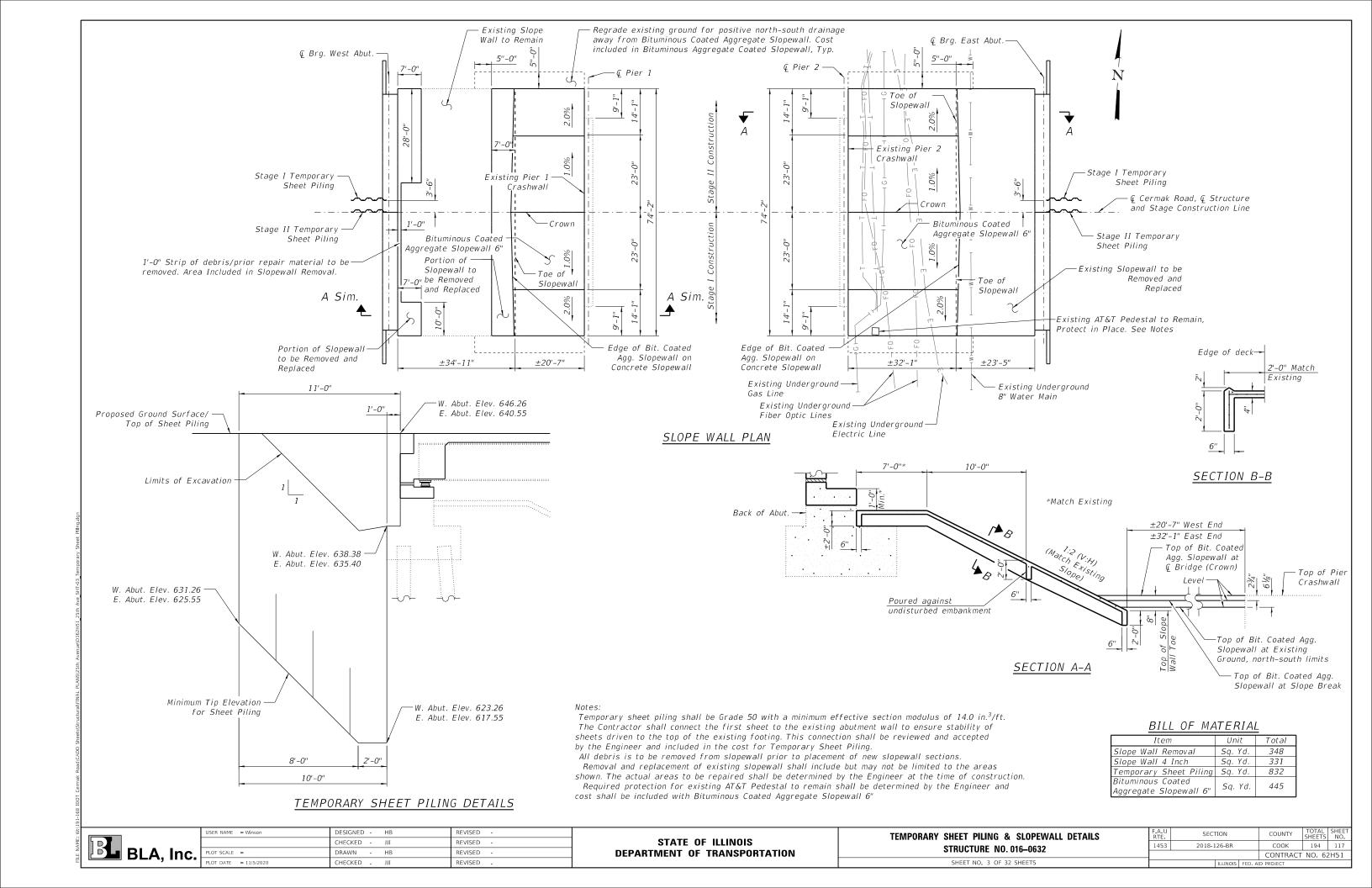
SECTION THRU WEST ABUTMENT (East Similar)

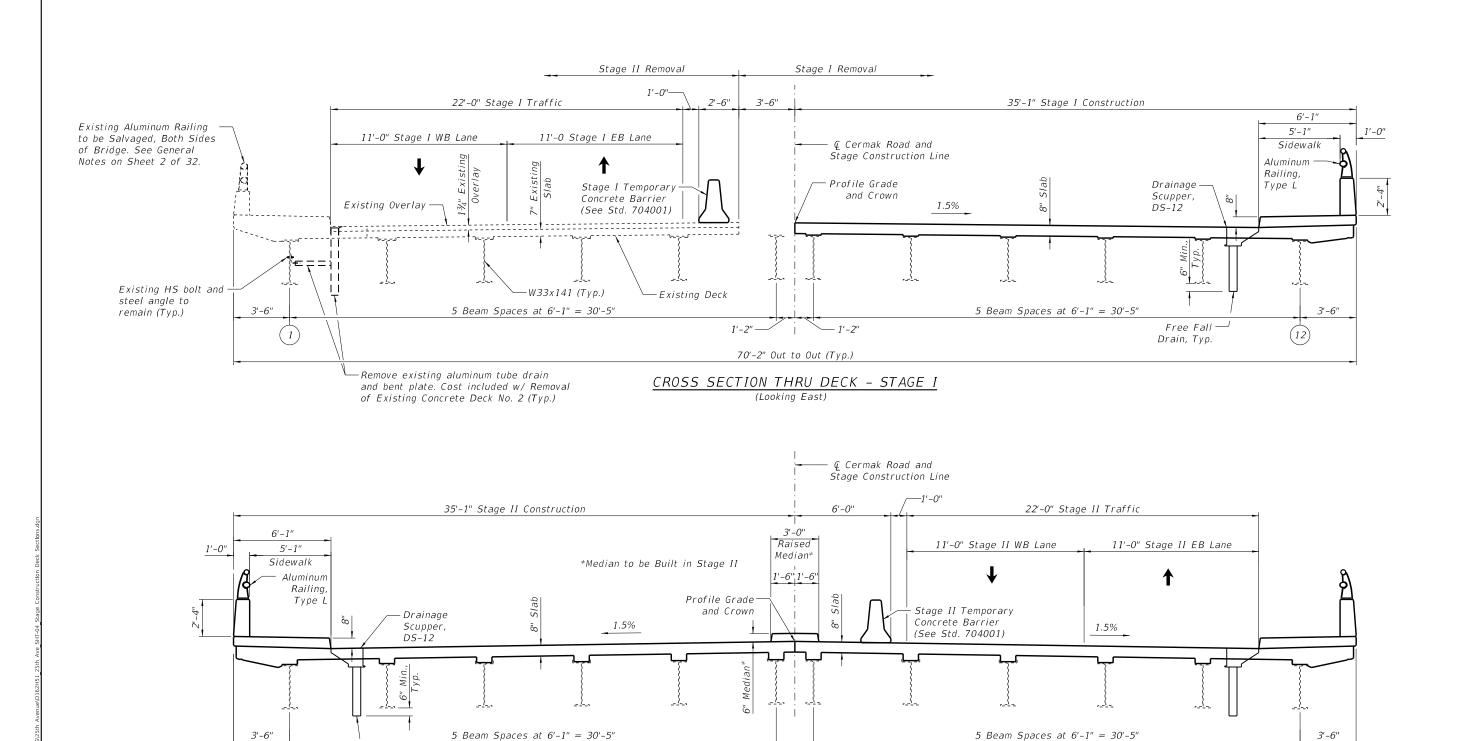
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

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GENERAL DATA	F.A.U RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEE NO.
STRUCTURE NO. 016-0632	1453	2018-1	26-BR		соок	194	116
STRUCTURE NO. 010-0032					CONTRACT	NO. 62	2H51
SHEET NO. 2 OF 32 SHEETS			TUTNOTE	EED AL	D DROJECT		





<u>CROSS SECTION THRU DECK - STAGE II</u>
(Looking East)

70'-2" Out to Out (Typ.)

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└─ Free Fall

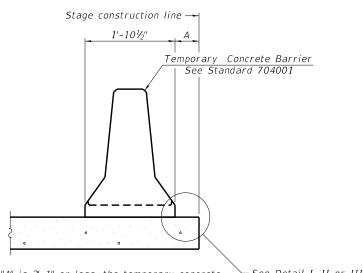
Drain, Typ.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

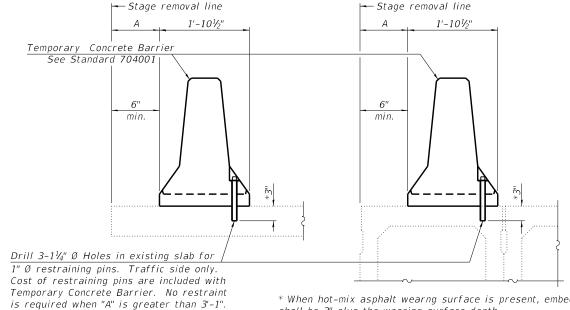
STAGE CONSTRUCTION DETAILS STRUCTURE NO. 016-0632
OTHOOTONE NO. 010 0002
SHEET NO. 4 OF 32 SHEETS

(12)



– See Detail I, II or III When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

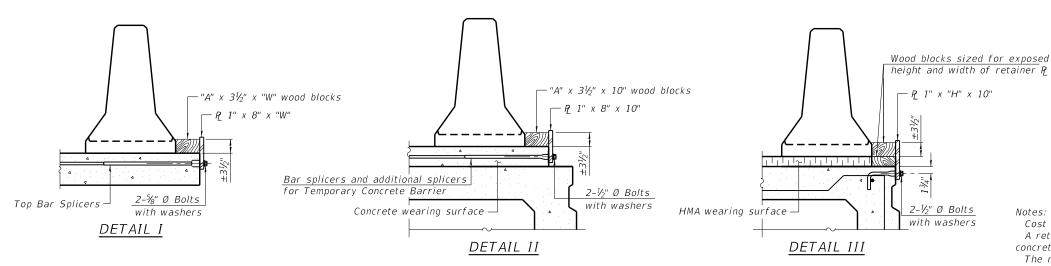
EXISTING DECK BEAM

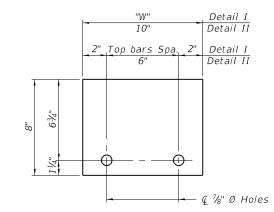
US Std. 11/16" I.D. x 21/2" O.D. x approx. 8 guage thick washer RESTRAINING PIN

1x8 UNC

SECTIONS THRU SLAB OR DECK BEAM

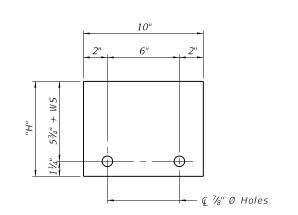
EXISTING SLAB



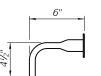


STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)



STEEL RETAINER P 1" x "H" x 10" (Detail III)



BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate Q of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I Installation for a new bridge deck or bridge slab.
- Detail II Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

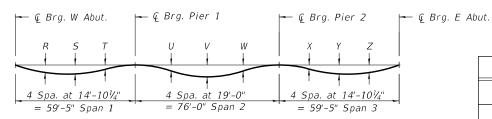
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 016-0632 SHEET NO. 5 OF 32 SHEETS

SECTION 1453 2018-126-BR COOK 194 119 CONTRACT NO. 62H51



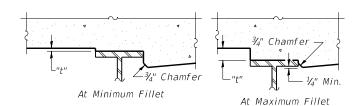
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on 7 thru 9 of 32.

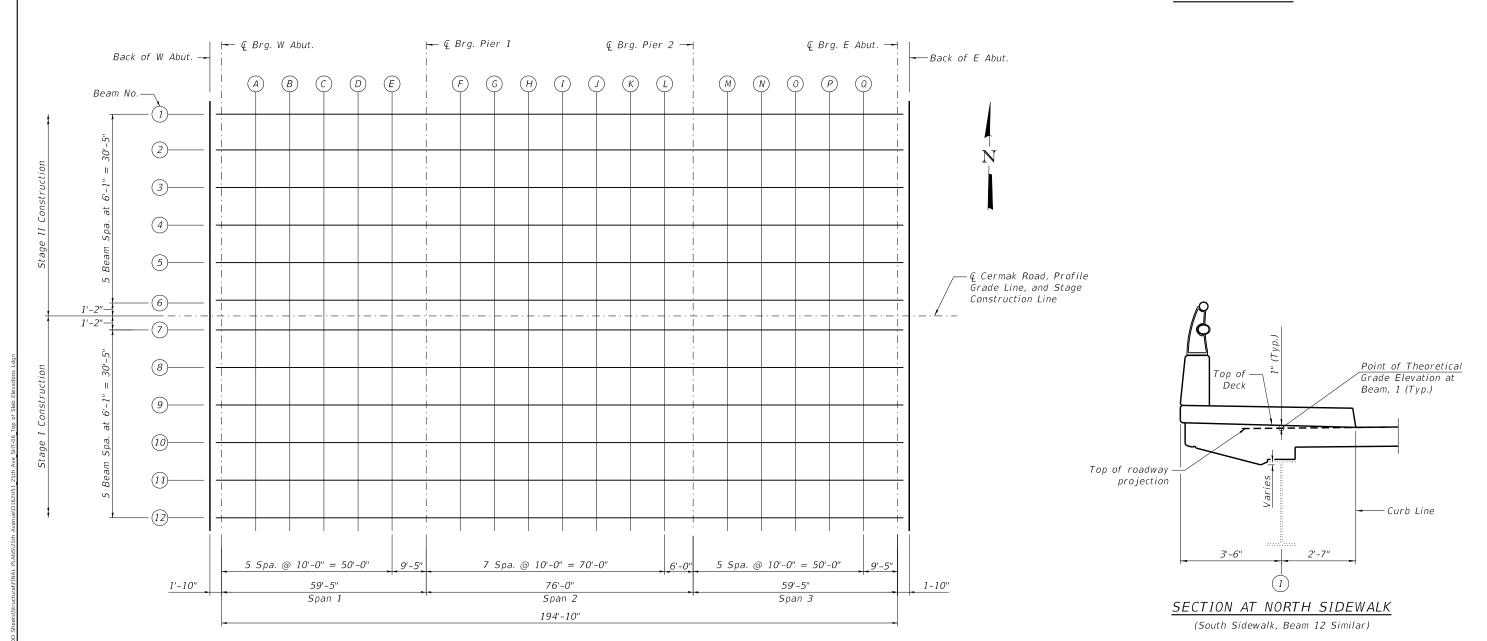
BEAM DEAD LOAD DEFLECTION TABLE

BEAM	R	5	Т	U	V	W	Х	Υ	Z
1) and (12)	3/8"	3/8"	1/8"	3/8"	3/4"	3/8"	1/8"	3/8"	3/8"
6 and 7	1/4"	1/4"	1/8"	1/4"	1/2"	1/4"	1/8"	1/4"	1/4"
2 through 5 and	1/4"	3/8"	1/8"	3/8"	5/8"	3/8"	1/8"	3/8"	1/4"
8) through (11)	. 4	.0	.0	.0	.0	.0	.0	.0	



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 7 thru 9 of 32, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



<u>PLAN</u>

LICE INMINE.	BL	BLA,	Inc	
2		RI A	Inc	Γ

USER NAME = Winson	DESIGNED - HB	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP	0F	SLAB	ELEVATIONS	ı
ST	RUC	TURE	NO. 016-0632	
S	неет	NO. 6	OF 32 SHEETS	

A.U TE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.	
453	3 2018-126-BR		соок	194	120		
CONTRACT NO. 62H51							
	NUMBER SER AND REGISTER						

∉ E. Abut.

Bk. E. Abut

640.13

640.07

ΣF	ΔΙ	M	6	

BEAM 3

Station

43+98.42

44+00.25

44+10.25

44+20.25

44+30.25

44+40.25

44+50.25

44+59.67

44+69.67

44+79.67

44+89.67

44+99.67

45+09.67

45+19.67

45+29.67

45+35.67

45+45.67

45+55.67

45+65.67

45+75.67

45+85.67

45+95.09

45+96.92

€ E. Abut.

Bk. E. Abut.

Offset

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

-19.42

Theoretical Grade

Flevations

Adjusted For Dead

Load Deflection

645.97

645.92

645.69

645.44

645.18

644.90

644.62

644.35

644.08

643.82

643.54

643.25

642.94

642.62

642.31

642.11

641.81

641.53

641.23

640 93

640.62

640.31

640.25

heoretica

Grade

Elevations

645.97

645.92

645.67

645.41

645.15

644.88

644.61

644.35

644.07

643.79

643.50

643.20

642.90

642.60

642.30

642.11

641.81

641.51

641.20

640 90

640.60

640.31

640.25

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Abut.	43+98.42	-13.33	646.06	646.06
€ W. Abut.	44+00.25	-13.33	646.01	646.01
A B C D E	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	-13.33 -13.33 -13.33 -13.33 -13.33	645.76 645.50 645.24 644.98 644.70	645.78 645.53 645.26 645.00 644.70
€ Pier 1	44+59.67	-13.33	644.44	644.44
F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	-13.33 -13.33 -13.33 -13.33 -13.33 -13.33 -13.33	644.16 643.88 643.59 643.29 642.99 642.69 642.39	644.17 643.91 643.63 643.34 643.03 642.71 642.39
€ Pier 2	45+35.67	-13.33	642.20	642.20
M N O P Q	45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	-13.33 -13.33 -13.33 -13.33 -13.33	641.90 641.60 641.29 640.99 640.69	641.91 641.61 641.32 641.02 640.71
€ E. Abut.	45+95.09	-13.33	640.40	640.40
Bk. E. Abut.	45+96.92	-13.33	640.35	640.35

-31.58

-31.58

BEAM 4

640.13

640.07

45+95.09

45+96.92

<u>BEAM 5</u>						
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection		
BK. W. Abut.	43+98.42	-7.25	646.15	646.15		
€ W. Abut.	44+00.25	-7.25	646.10	646.10		
A B C D E	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	-7.25 -7.25 -7.25 -7.25 -7.25	645.85 645.59 645.33 645.07 644.80	645.87 645.62 645.36 645.09 644.81		
∉ Pier 1	44+59.67	-7.25	644.54	644.54		
F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	-7.25 -7.25 -7.25 -7.25 -7.25 -7.25 -7.25	644.26 643.97 643.68 643.38 643.08 642.78 642.48	644.27 643.99 643.73 643.43 643.12 642.81 642.49		
€ Pier 2	45+35.67	-7.25	642.30	642.30		
M N O P Q	45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	-7.25 -7.25 -7.25 -7.25 -7.25	641.99 641.69 641.39 641.08 640.78	642.00 641.71 641.41 641.11 640.80		
Ç E. Abut.	45+95.09	-7.25	640.49	640.49		
Bk. E. Abut.	45+96.92	-7.25	640.44	640.44		

45+95.09

45+96.92

-25.50

-25.50

640.22

640.16

640.22

640.16

<u>BEAM 6</u>						
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection		
BK. W. Abut.	43+98.42	-1.17	646.24	646.24		
₡ W. Abut.	44+00.25	-1.17	646.19	646.19		
A B C D	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	-1.17 -1.17 -1.17 -1.17 -1.17	645.94 645.69 645.42 645.16 644.89	645.96 645.71 645.45 645.17 644.89		
€ Pier 1	44+59.67	-1.17	644.63	644.63		
F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	-1.17 -1.17 -1.17 -1.17 -1.17 -1.17	644.35 644.06 643.77 643.48 643.18 642.87 642.57	644.35 644.08 643.80 643.52 643.21 642.89 642.57		
€ Pier 2	45+35.67	-1.17	642.39	642.39		
M N O P Q	45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	-1.17 -1.17 -1.17 -1.17 -1.17	642.08 641.78 641.48 641.17 640.87	642.08 641.80 641.50 641.19 640.89		
Ç E. Abut.	45+95.09	-1.17	640.58	640.58		
Bk. E. Abut.	45+96.92	-1.17	640.53	640.53		

BLA, Inc.

€ E. Abut.

Bk. E. Abut.

	USER NAME = Winson	DESIGNED - HB	REVISED -
		CHECKED - JJI	REVISED -
C	PLOT SCALE =	DRAWN - HB	REVISED -
C.	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

TOP OF SLAB ELEVATIONS II		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 016-0632	1453	2018-126-BR	соок	194	121
3111001011L 1V0. 010-0032			CONTRACT	NO. 62	2H51
SHEET NO. 7 OF 32 SHEETS		ILLINOIS FED A	ID PROJECT		

7	BEAM
---	------

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection		
BK. W. Abut.	43+98.42	0.00	646.26	646.26		
€ W. Abut.	44+00.25	0.00	646.21	646.21		
A B C D E Q Pier 1	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	0.00 0.00 0.00 0.00 0.00 0.00	645.96 645.70 645.44 645.18 644.90	645.98 645.72 645.47 645.19 644.90		
F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	0.00 0.00 0.00 0.00 0.00 0.00 0.00	644.36 644.08 643.79 643.49 643.19 642.89 642.59	644.36 644.10 643.82 643.53 643.22 642.91 642.59		
€ Pier 2	45+35.67	0.00	642.40	642.40		
M N O P Q	45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	0.00 0.00 0.00 0.00 0.00	642.10 641.80 641.49 641.19 640.89	642.10 641.82 641.51 641.21 640.91		
€ E. Abut.	45+95.09	0.00	640.60	640.60		
Bk. E. Abut. 45+96.92 0.00 640.55 640.55						

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dea Load Deflection
BK. W. Abut.	43+98.42	1.17	646.24	646.24
€ W. Abut.	44+00.25	1.17	646.19	646.19
A B C D E	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	1.17 1.17 1.17 1.17 1.17	645.94 645.69 645.42 645.16 644.89	645.96 645.71 645.45 645.17 644.89
∉ Pier 1	44+59.67	1.17	644.63	644.63
F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	1.17 1.17 1.17 1.17 1.17 1.17	644.35 644.06 643.77 643.48 643.18 642.87 642.57	644.35 644.08 643.80 643.52 643.21 642.89 642.57
€ Pier 2	45+35.67	1.17	642.39	642.39
M N O P Q	45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	1.17 1.17 1.17 1.17 1.17	642.08 641.78 641.48 641.17 640.87	642.08 641.80 641.50 641.19 640.89
€ E. Abut.	45+95.09	1.17	640.58	640.58
Bk. E. Abut.	45+96.92	1.17	640.53	640.53

DEAM 0				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Abut.	43+98.42	7.25	646.15	646.15
€ W. Abut.	44+00.25	7.25	646.10	646.10
A B C D E	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	7.25 7.25 7.25 7.25 7.25	645.85 645.59 645.33 645.07 644.80	645.87 645.62 645.36 645.09 644.81
@ Pier 1	44+59.67	7.25	644.54	644.54
F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	7.25 7.25 7.25 7.25 7.25 7.25 7.25	644.26 643.97 643.68 643.38 643.08 642.78 642.48	644.27 643.99 643.73 643.43 643.12 642.81 642.49
€ Pier 2	45+35.67	7.25	642.30	642.30
M N O P Q	45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	7.25 7.25 7.25 7.25 7.25	641.99 641.69 641.39 641.08 640.78	642.00 641.71 641.41 641.11 640.80
€ E. Abut.	45+95.09	7.25	640.49	640.49
Bk. E. Abut.	45+96.92	7.25	640.44	640.44

R	F	Δ	M	9
L)	_	\boldsymbol{H}	ıvı	

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Abut.	43+98.42	13.33	646.06	646.06
€ W. Abut.	44+00.25	13.33	646.01	646.01
A B C D E	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	13.33 13.33 13.33 13.33 13.33	645.76 645.50 645.24 644.98 644.70	645.78 645.53 645.26 645.00 644.70
€ Pier 1	44+59.67	13.33	644.44	644.44
F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	13.33 13.33 13.33 13.33 13.33 13.33 13.33	644.16 643.88 643.59 643.29 642.99 642.69 642.39	644.17 643.91 643.63 643.34 643.03 642.71 642.39
€ Pier 2	45+35.67	13.33	642.20	642.20
M N O P Q	45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	13.33 13.33 13.33 13.33 13.33	641.90 641.60 641.29 640.99 640.69	641.91 641.61 641.32 641.02 640.71
€ E. Abut.	45+95.09	13.33	640.40	640.40
Bk. E. Abut.	45+96.92	13.33	640.35	640.35

ВЕ	AM	10

	<u> </u>	7 11-1 10		
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Abut.	43+98.42	19.42	645.97	645.97
€ W. Abut.	44+00.25	19.42	645.92	645.92
A B C D E	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	19.42 19.42 19.42 19.42 19.42	645.67 645.41 645.15 644.88 644.61	645.69 645.44 645.18 644.90 644.62
€ Pier 1	44+59.67	19.42	644.35	644.35
F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	19.42 19.42 19.42 19.42 19.42 19.42 19.42	644.07 643.79 643.50 643.20 642.90 642.60 642.30	644.08 643.82 643.54 643.25 642.94 642.62 642.31
€ Pier 2	45+35.67	19.42	642.11	642.11
M N O P Q	45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	19.42 19.42 19.42 19.42 19.42	641.81 641.51 641.20 640.90 640.60	641.81 641.53 641.23 640.93 640.62
∉ E. Abut.	45+95.09	19.42	640.31	640.31
Bk. E. Abut.	45+96.92	19.42	640.25	640.25

<u>BEAM 11</u>

_	DETAIL II				
	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
	BK. W. Abut.	43+98.42	25.50	645.87	645.87
	€ W. Abut.	44+00.25	25.50	645.83	645.83
	A B C D E	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	25.50 25.50 25.50 25.50 25.50	645.58 645.32 645.06 644.79 644.52	645.59 645.35 645.08 644.81 644.52
	€ Pier 1	44+59.67	25.50	644.26	644.26
	F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	25.50 25.50 25.50 25.50 25.50 25.50 25.50	643.98 643.70 643.41 643.11 642.81 642.51 642.20	643.99 643.73 643.45 643.15 642.84 642.53 642.20
	© Pier 2 M N O P Q	45+35.67 45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	25.50 25.50 25.50 25.50 25.50 25.50	642.02 641.72 641.41 641.11 640.81 640.50	642.02 641.73 641.43 641.14 640.84 640.51
	Ç E. Abut.	45+95.09	25.50	640.22	640.22
	Bk. E. Abut.	45+96.92	25.50	640.16	640.16

BLA, Inc.

	USER NAME = WINSON	DESIGNED - HB	KEVISED -
		CHECKED - JJI	REVISED -
C.	PLOT SCALE =	DRAWN - HB	REVISED -
U .	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

F.A.U RTE	SECT	ΓΙΟΝ		COUNTY	TOTAL SHEETS	SHEE NO.
1453	2018-126-BR		соок	194	122	
				CONTRACT	NO. 62	2H51
		ILL INIOIC	EED A	ID DDOLECT		

<u>BEAM 12</u>

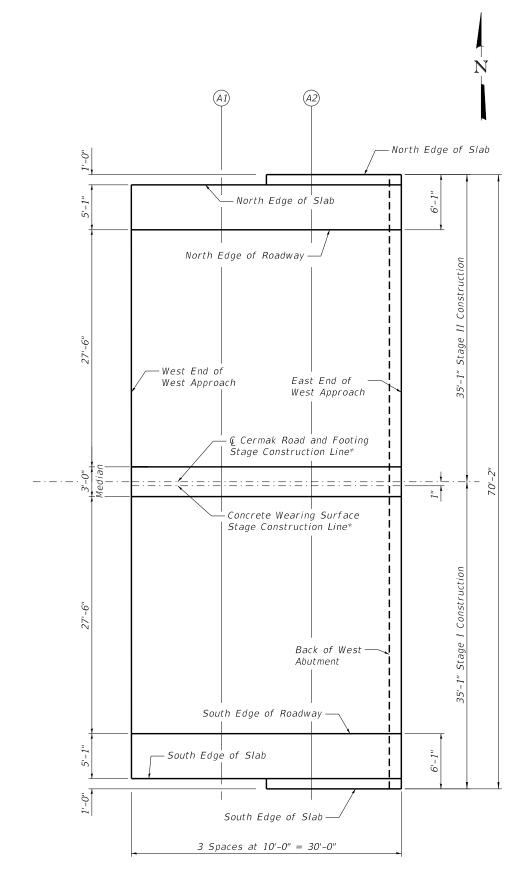
<u> </u>				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Abut.	43+98.42	31.58	645.78	645.78
€ W. Abut.	44+00.25	31.58	645.74	645.74
A B C D	44+10.25 44+20.25 44+30.25 44+40.25 44+50.25	31.58 31.58 31.58 31.58 31.58	645.49 645.23 644.97 644.70 644.43	645.51 645.27 645.01 644.73 644.44
⊈ Pier 1	44+59.67	31.58	644.17	644.17
F G H I J K L	44+69.67 44+79.67 44+89.67 44+99.67 45+09.67 45+19.67 45+29.67	31.58 31.58 31.58 31.58 31.58 31.58 31.58	643.89 643.60 643.31 643.02 642.72 642.42 642.11	643.91 643.63 643.36 643.08 642.77 642.44
€ Pier 2	45+35.67	31.58	641.93	641.93
M N O P Q	45+45.67 45+55.67 45+65.67 45+75.67 45+85.67	31.58 31.58 31.58 31.58 31.58	641.63 641.32 641.02 640.72 640.41	641.63 641.35 641.05 640.76 640.43
€ E. Abut.	45+95.09	31.58	640.13	640.13
Bk. E. Abut.	45+96.92	31.58	640.07	640.07

	USER NAME = Winson	DESIGNED - HB	REVISED -
		CHECKED - JJI	REVISED -
•	PLOT SCALE =	DRAWN - HB	REVISED -
•	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF SLAB	ELEVATIONS - IV
STRUCTURE	NO. 016-0632
CHEET NO. 0	OF 33 CHEETS

F.A.U RTE	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.
1453	2018-126-BR		соок	194	123
			CONTRACT	NO. 62	2H51
	ILLINOIS	FFD A	ID PROJECT		



NORTH EDGE OF SLAB

Location	Station	Offset	Theoretica Grade Elevations
W. End of W. Appr. Slab	43+69.42	-34.08	646.73
A1 A2	43+79.42 43+89.42	-34.08 -35.08	646.49 646.25
E. End of W. Appr. Slab	43+99.42	-35.08	646.00

© CERMAK ROAD & FOOTING STAGE CONSTRUCTION LINE

Location	Station	0ffset	Theoretical Grade Elevations
W. End of W. Appr. Slab	43+69.42	0.00	646.96
A1 A2	43+79.42 43+89.42	0.00 0.00	646.72 646.48
E. End of W. Appr. Slab	43+99.42	0.00	646.23

SOUTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	43+69.42	29.00	646.52
A1 A2	43+79.42 43+89.42	29.00 29.00	646.28 646.04
E. End of W. Appr. Slab	43+99.42	29.00	645.80

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	43+69.42	-29.00	646.52
A1 A2	43+79.42 43+89.42	-29.00 -29.00	646.28 646.04
E. End of W. Appr. Slab	43+99.42	-29.00	645.80

CONCRETE WEARING SURFACE STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	43+69.42	0.08	646.95
A1 A2	43+79.42 43+89.42	0.08 0.08	646.72 646.48
E. End of W. Appr. Slab	43+99.42	0.08	646.23

SOUTH EDGE OF SLAB

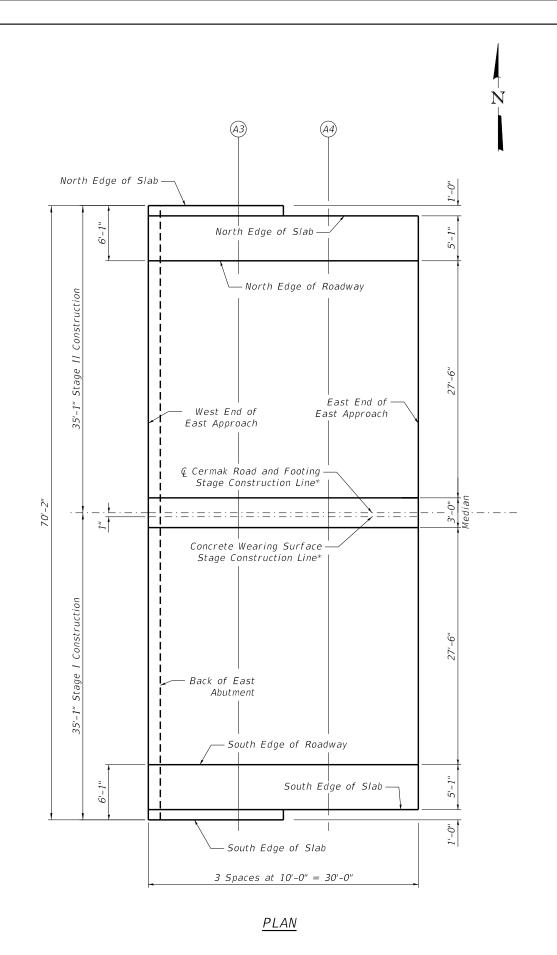
Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	43+69.42	34.08	646.73
A1 A2	43+79.42 43+89.42	34.08 35.08	646.49 646.25
E. End of W. Appr. Slab	43+99.42	35.08	646.00

*See sheets 16 thru 18 of 32 for Approach Slab stage construction details.

<u>PLAN</u>



A.U TE.	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
153	2018-1	26-BR		соок	194	124
				CONTRACT	NO. 62	2H51
		ILLIMOIS	EED A	ID PROJECT		



NORTH EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	45+95.92	-35.08	640.35
A3 A4	46+05.92 46+15.92	-35.08 -34.08	640.05 639.74
E. End of E. Appr. Slab	46+25.92	-34.08	639.44

<u>G CERMAK ROAD & FOOTING</u> STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	45+95.92	0.00	640.58
A3 A4	46+05.92 46+15.92	0.00 0.00	640.27 639.97
E. End of E. Appr. Slab	46+25.92	0.00	639.67

SOUTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	45+95.92	29.00	640.14
A3 A4	46+05.92 46+15.92	29.00 29.00	639.84 639.53
E. End of E. Appr. Slab	46+25.92	29.00	639.23

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	
W. End of E. Appr. Slab	45+95.92	-29.00	640.14	
A3 A4	46+05.92 46+15.92	-29.00 -29.00	639.84 639.53	
E. End of E. Appr. Slab	46+25.92	-29.00	639.23	

CONCRETE WEARING SURFACE STAGE CONSTRUCTION LINE

Location	Station	Station Offset	
W. End of E. Appr. Slab	45+95.92	0.08	640.57
A3 A4	46+05.92 46+15.92	0.08 0.08	640.27 639.97
E. End of E. Appr. Slab	46+25.92	0.08	639.66

SOUTH EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations	
W. End of E. Appr. Slab	45+95.92	35.08	640.35	
A3 A4	46+05.92 46+15.92	35.08 34.08	640.05 639.74	
E. End of E. Appr. Slab	46+25.92	34.08	639.44	

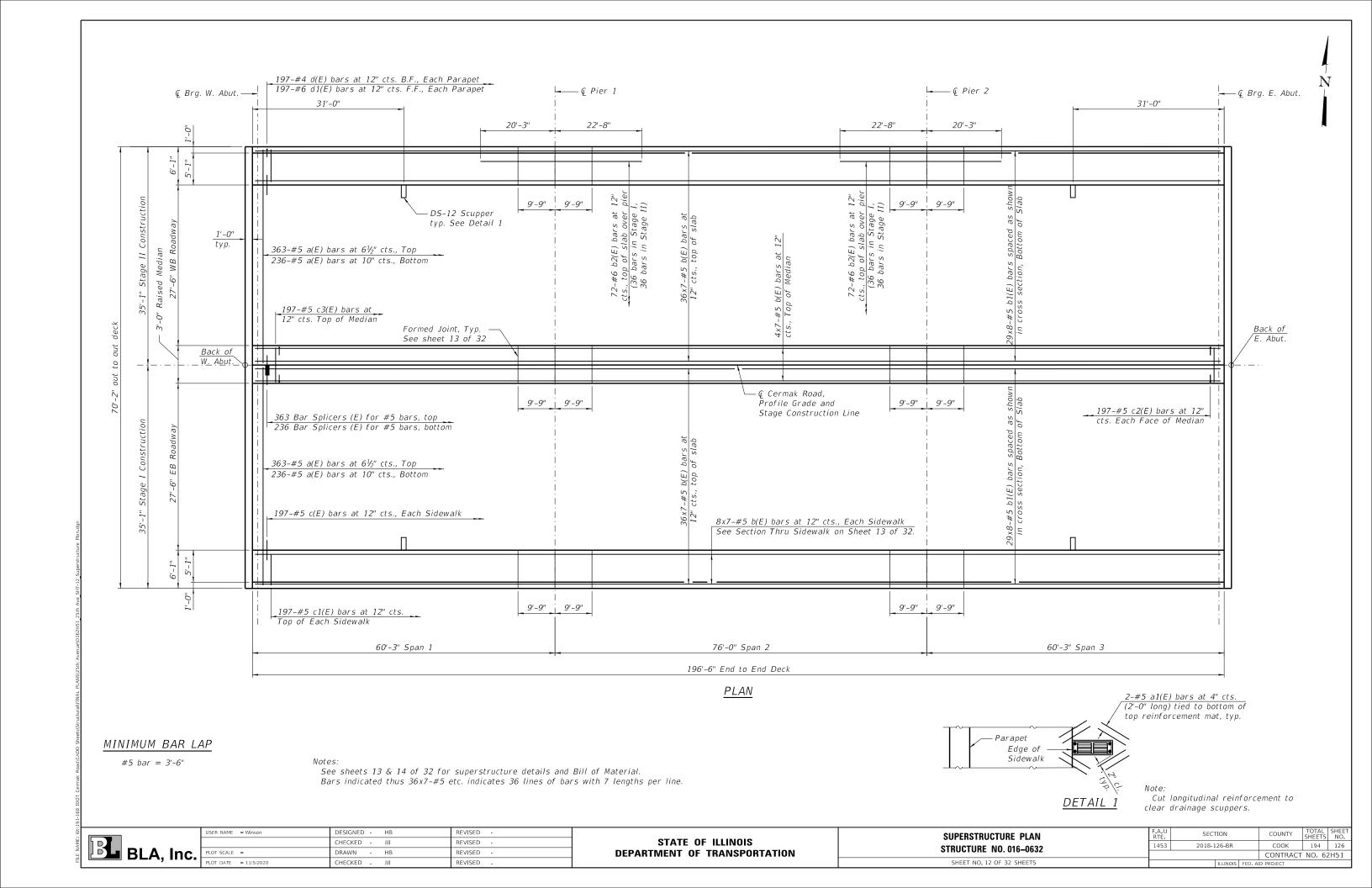
*See sheets 16 thru 18 of 32 for Approach Slab stage construction details.

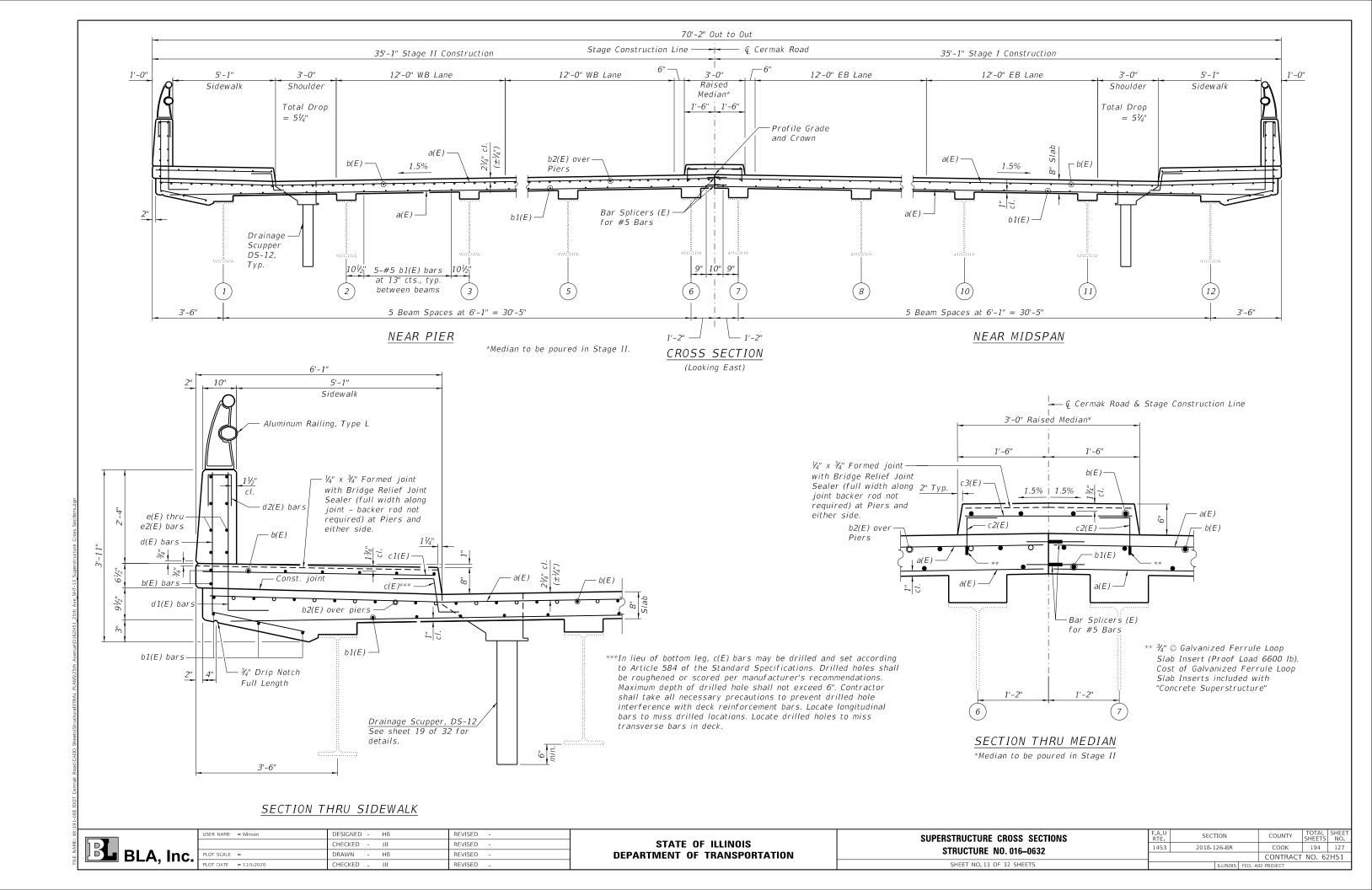
BLA, Inc.

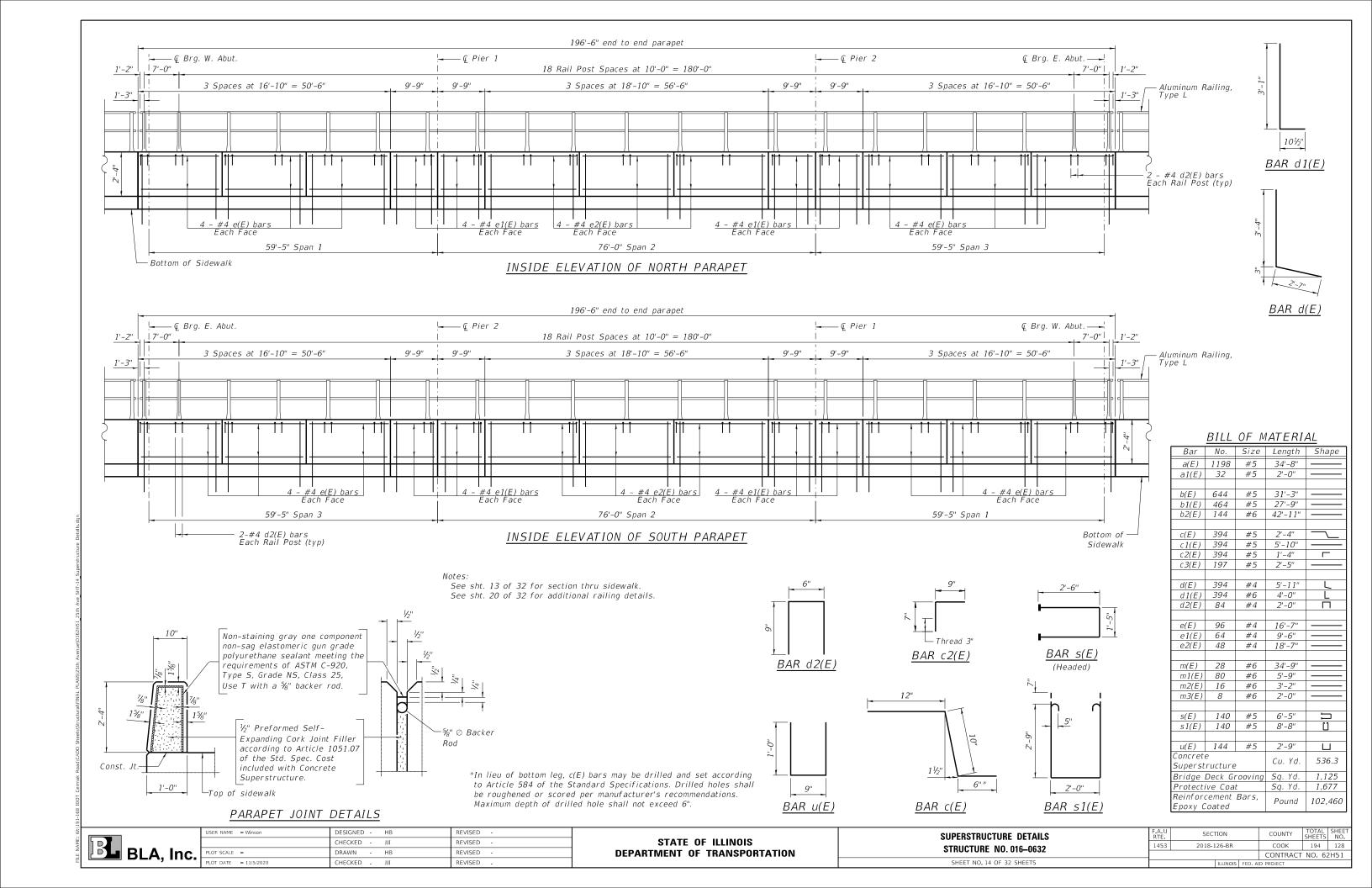
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

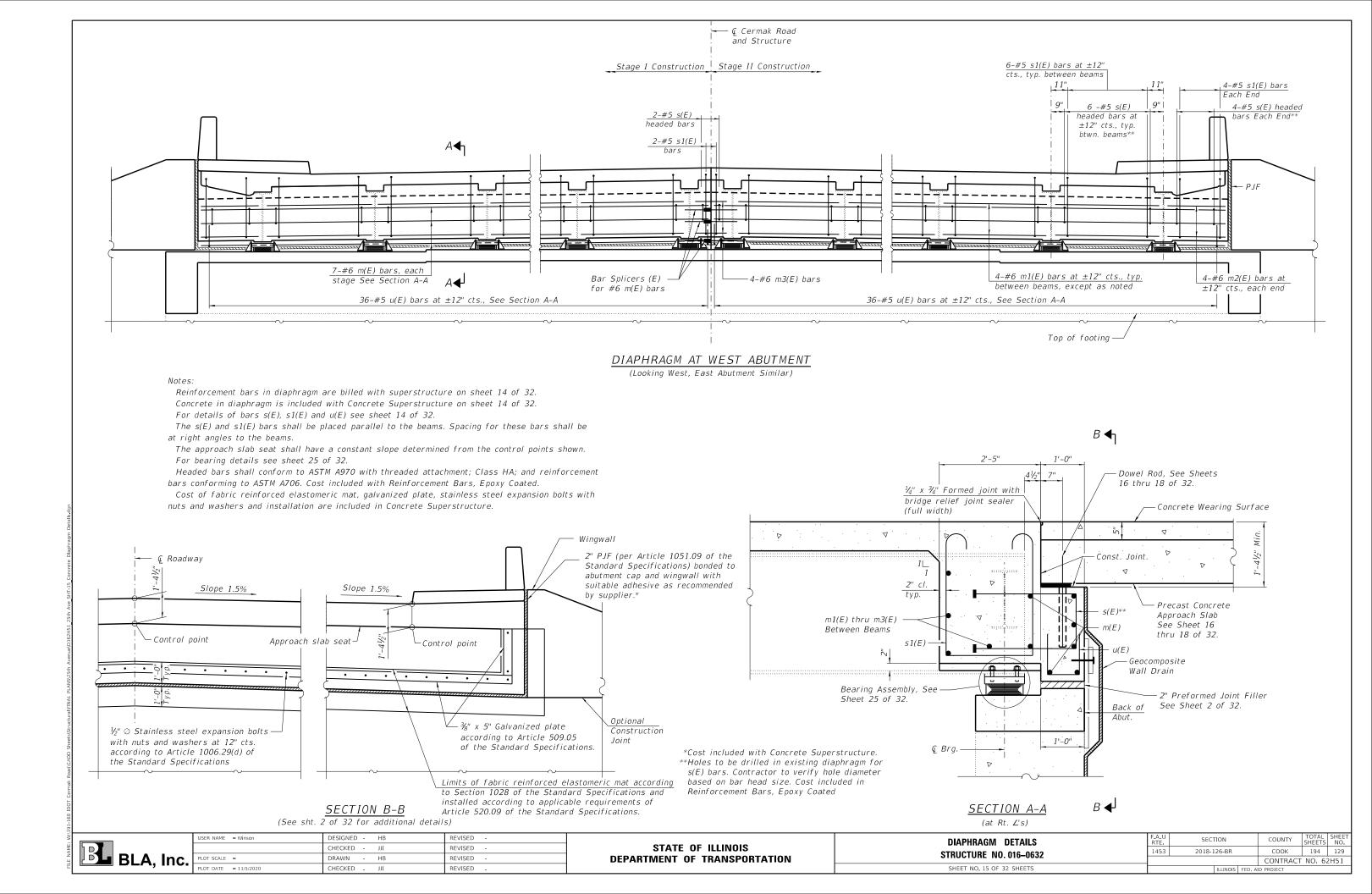
TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-0632

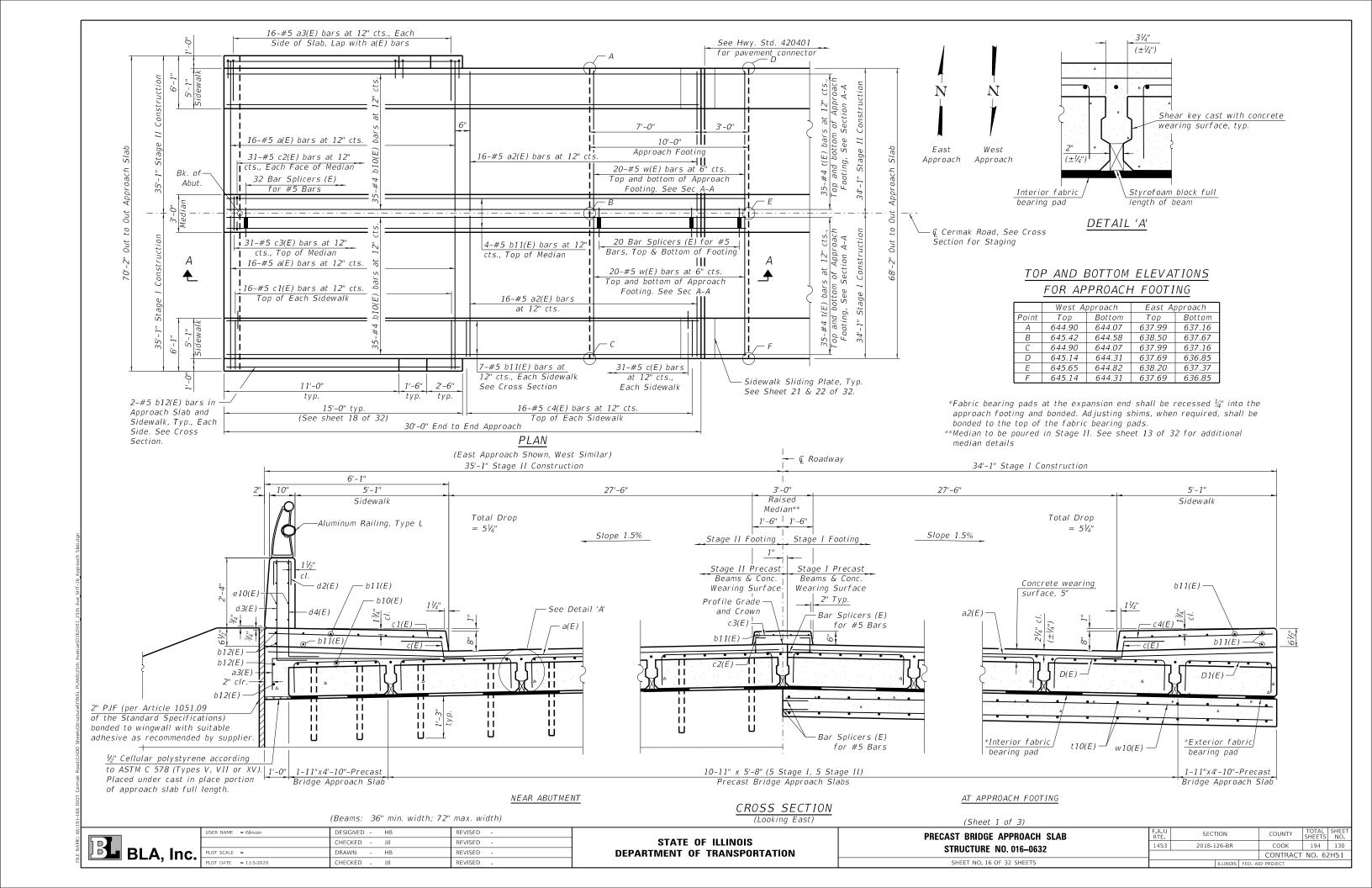
SHEET NO. 11 OF 32 SHEETS

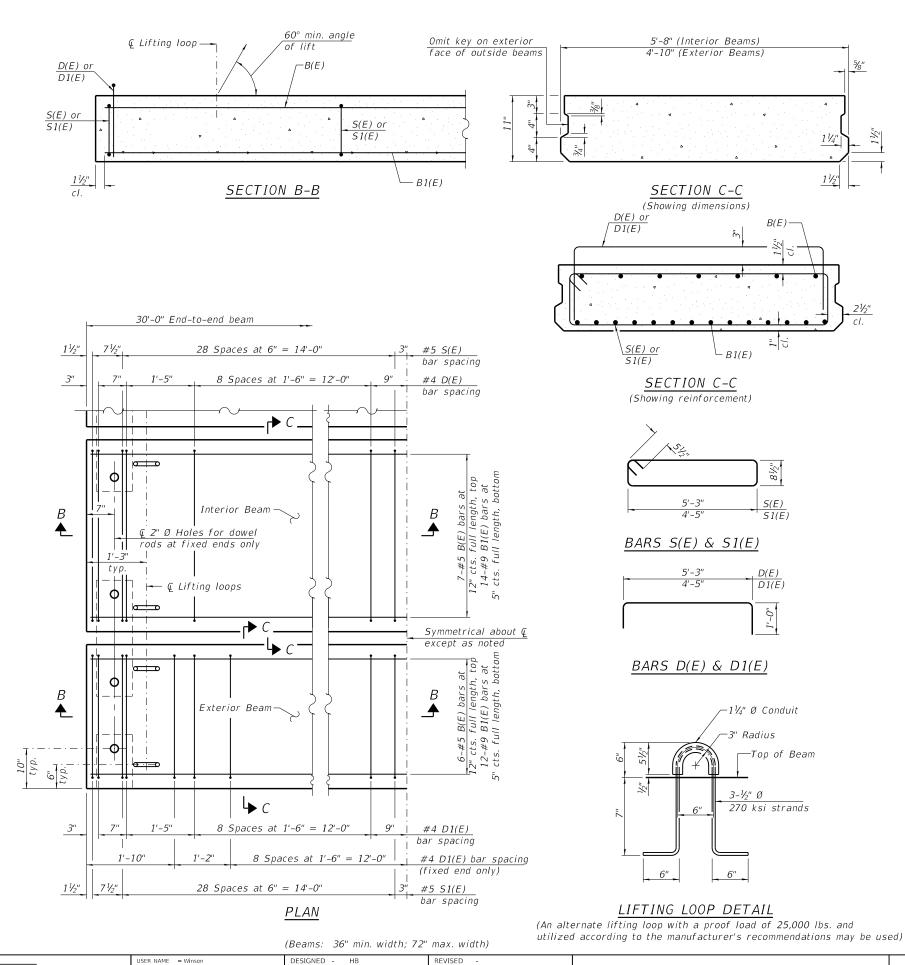












REVISED

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CHECKED - JJI

DRAWN

CHECKED -

BLA, Inc.

Notes:

The precast bridge approach slab shall be according to Section 504 of the Standard Specifications and shall be paid for at the contract unit price per square foot for Precast Bridge Approach Slab.

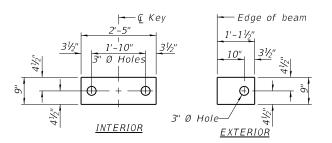
Cast-in-place substitution of Precast Bridge Approach Slab is not allowed. The top surface of precast bridge approach slabs shall be finished similar to precast prestressed deck beams with concrete wearing surface as specified in the IDOT "Manual for Fabrication of Precast Prestressed Concrete Products."

Two $\frac{1}{8}$ " fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. Cost included with Precast Bridge Approach Slab.

A minimum 2 ½" Ø lifting pins shall be used to engage the lifting loops during handling.

Compressive strength of precast concrete, f'c shall be 6,000 psi.

Compressive strength of precast concrete during initial lifting, f'ci shall be 5,000 psi.



FABRIC BEARING PAD

Bearing pads at fixed end shall be $\frac{1}{2}$ " thick and bearing pads at expansion end shall be $\frac{3}{4}$ " thick. Omit holes for fabric bearing pads at approach slab footing end of beams.

BAR LIST EACH INTERIOR BEAM (For information only)

Bar	No.	Size	Length	Shap
B(E)	7	#5	29'-8"	
B1(E)	14	#9	29'-8"	
D(E)	22	#4	7'-3"	
S(E)	58	#5	12'-10"	

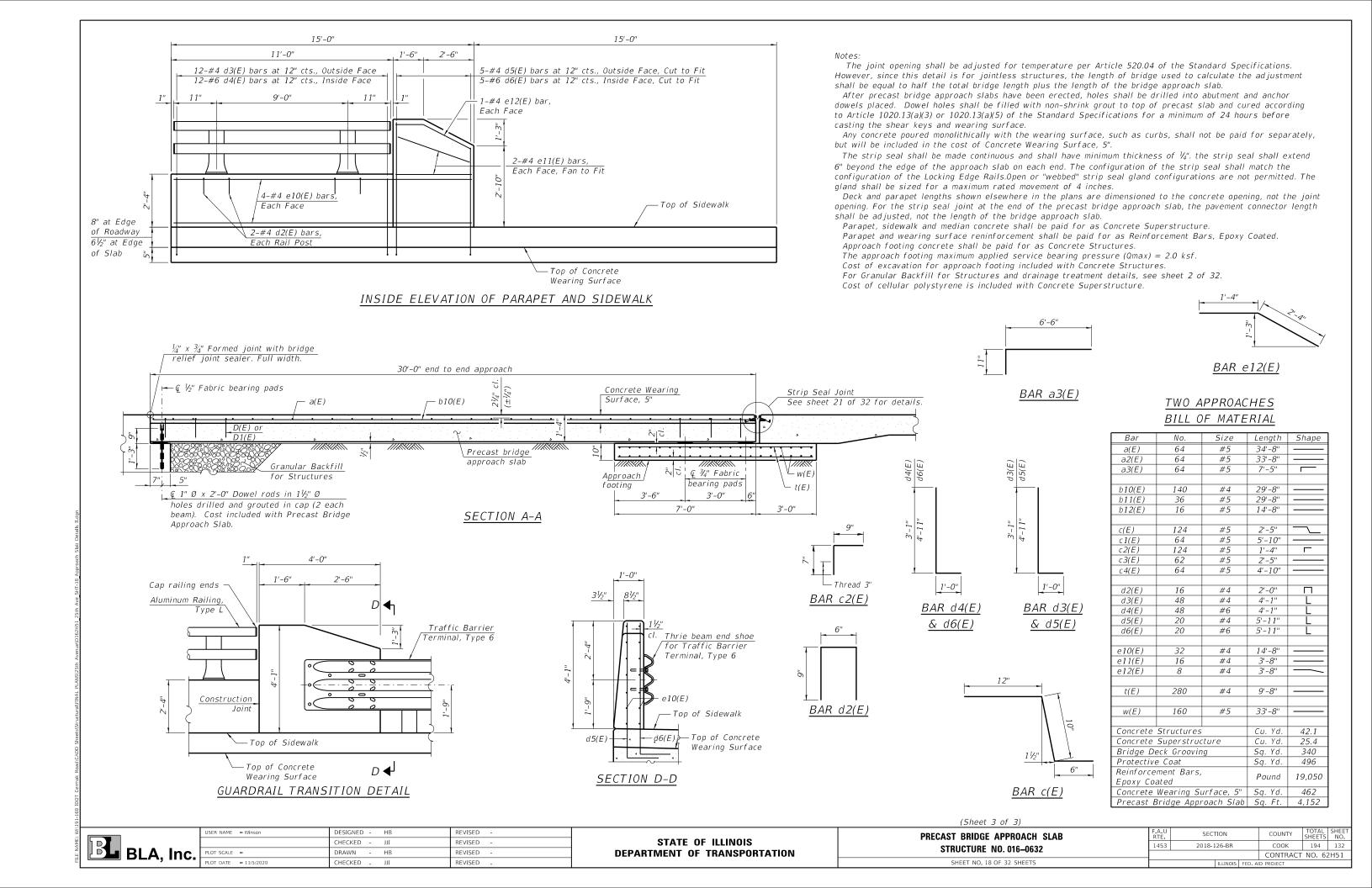
BAR LIST EACH EXTERIOR BEAM

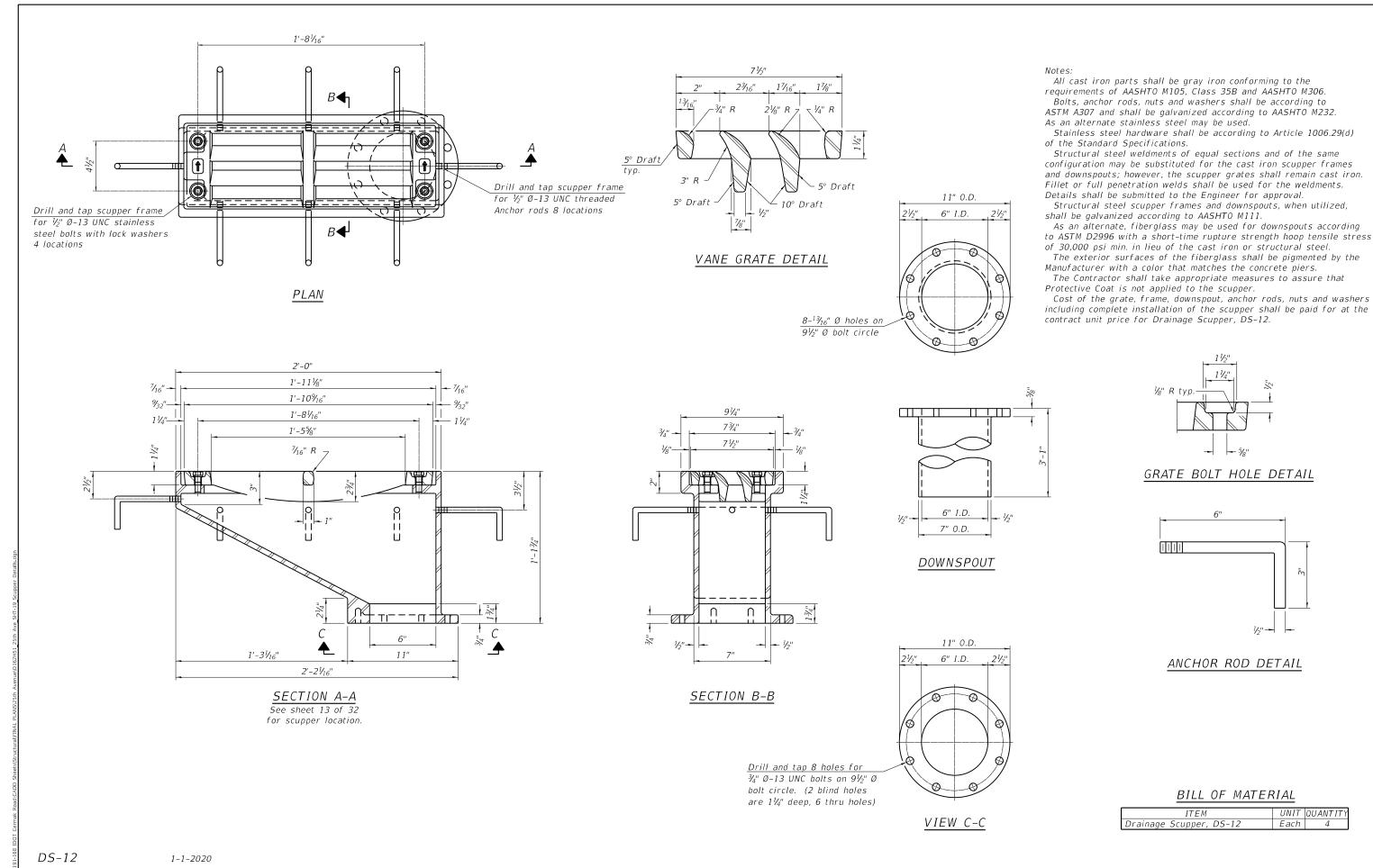
(For information only)

Bar	No.	Size	Length	Shape
B(E)	6	#5	29'-8"	
B1(E)	12	#9	29'-8"	
D1(E)	32	#4	6'-5"]
S1(E)	58	#5	11'-2"	

(Sheet 2 of 3)

SECTION PRECAST BRIDGE APPROACH SLAB STATE OF ILLINOIS 1453 2018-126-BR COOK 194 131 STRUCTURE NO. 016-0632 **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 62H51 SHEET NO. 17 OF 32 SHEETS





BLA, Inc.

 USER NAME
 = Winson
 DESIGNED
 HB
 REVISED

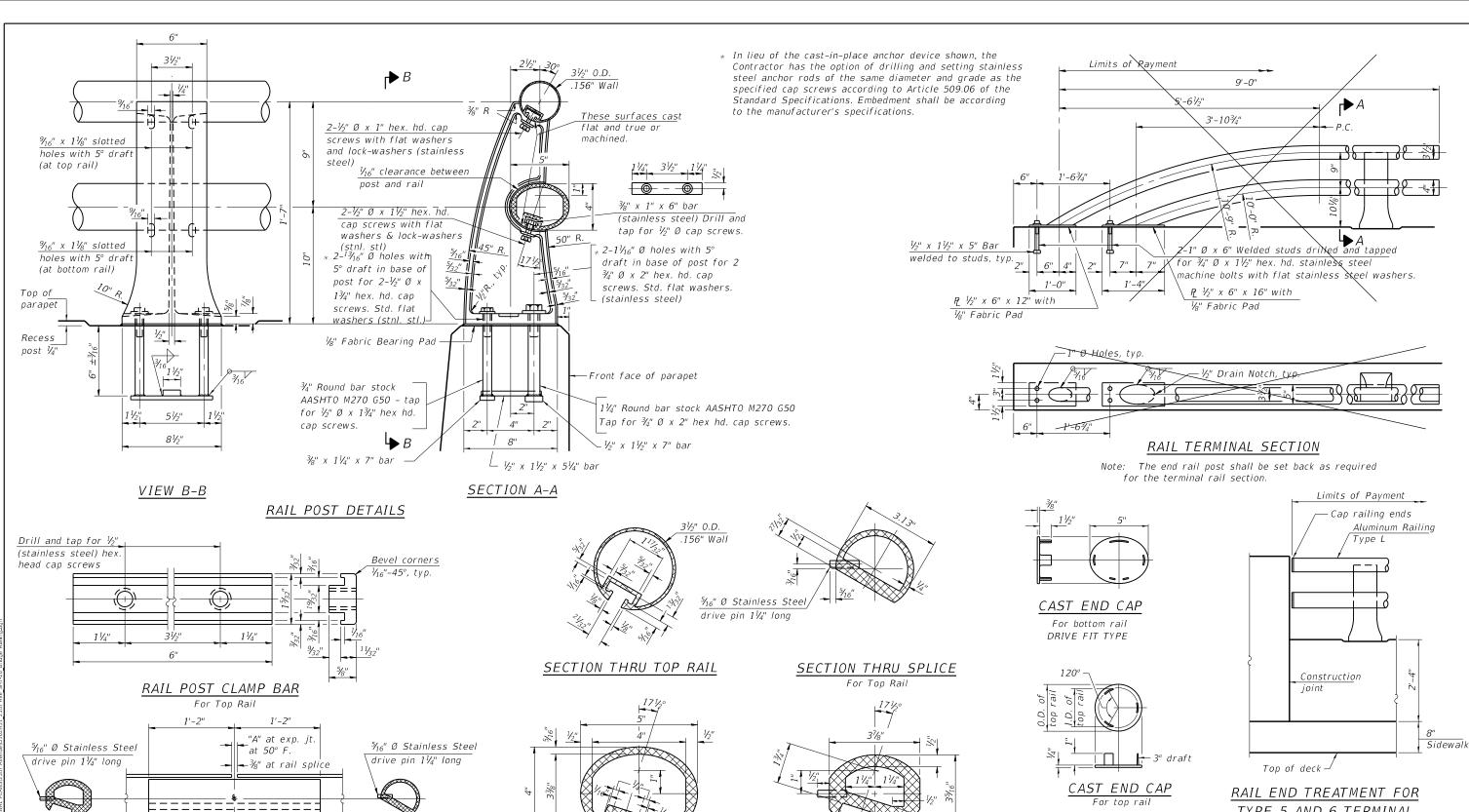
 CHECKED
 JJI
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 PLOT SCALE
 =
 DRAWN
 HB
 REVISED

 PLOT DATE
 =
 11/5/2020
 CHECKED
 JJI
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-12 STRUCTURE NO. 016-0632 SHEET NO. 19 OF 32 SHEETS

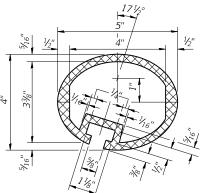


RAIL SPLICE

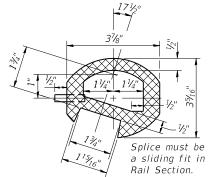
< 4" $> 4'' \le 6\frac{1}{2}'' 3\frac{3}{4}''$ $> 6^{1}/_{2}^{"} \le 9^{"}$ > 9" ≤ 13"

TOP RAIL

T = Total movement at expansion joint as shown on the design plans.



SEC. THRU ELLIPTICAL RAIL SECTION



SEC. THRU SPLICE

TYPE 5 AND 6 TERMINAL

Notes:

All Posts shall be normal to parapet All joints in rail shall be spliced per detail. All exposed rail ends shall be capped per detail.

Provide $1-\frac{1}{8}$ " and $2-\frac{1}{16}$ " Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.

See sheet 14 and 18 of 32 for rail post spacing.

BILL OF MATERIAL

_					_
	Item			Unit	Quantity
Aluminum	Railing,	Type L	-	Foot	438

2-17-2017 (7'-0" to 10'-0" Post spacing) BLA, Inc.

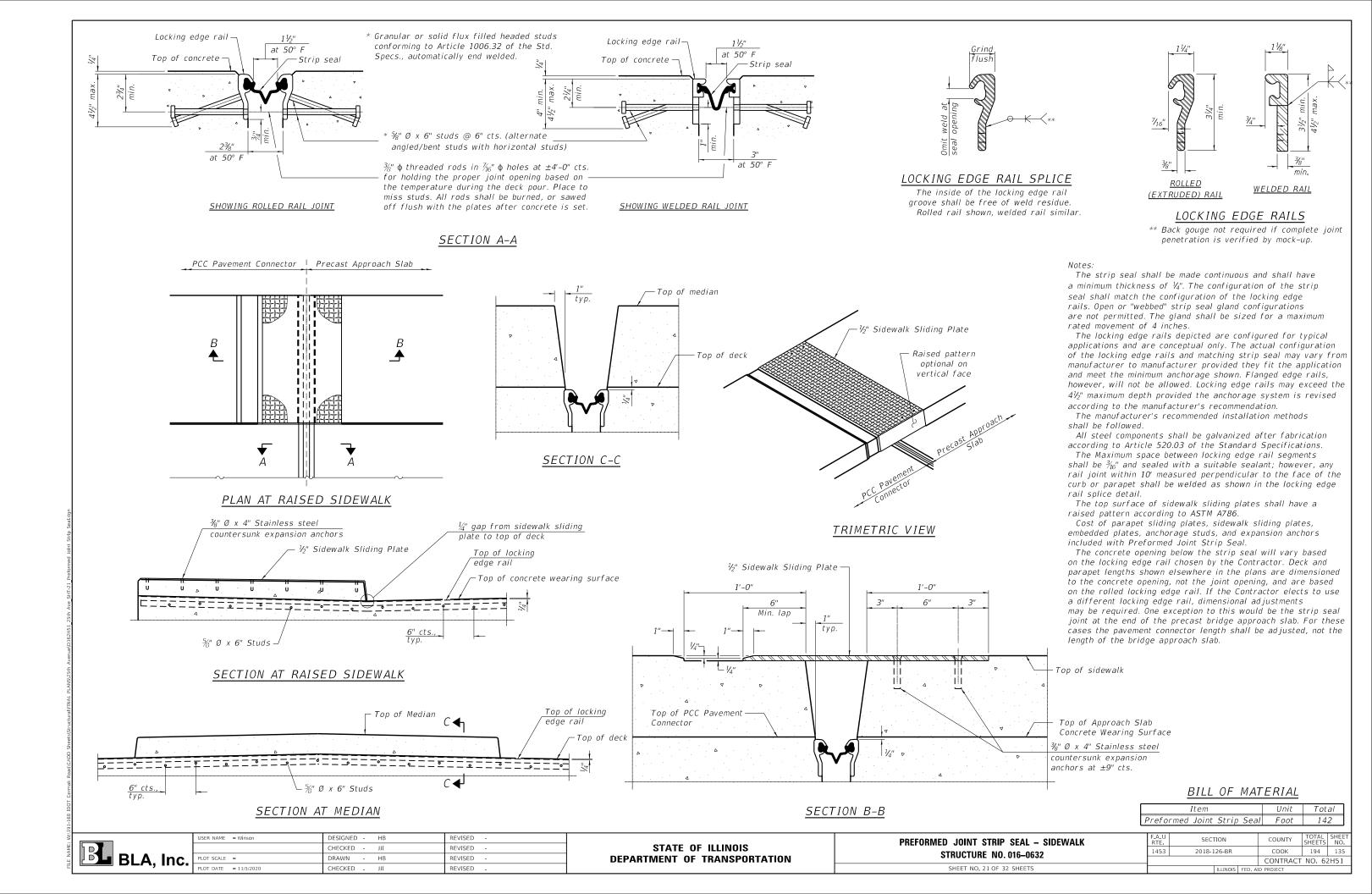
R-20

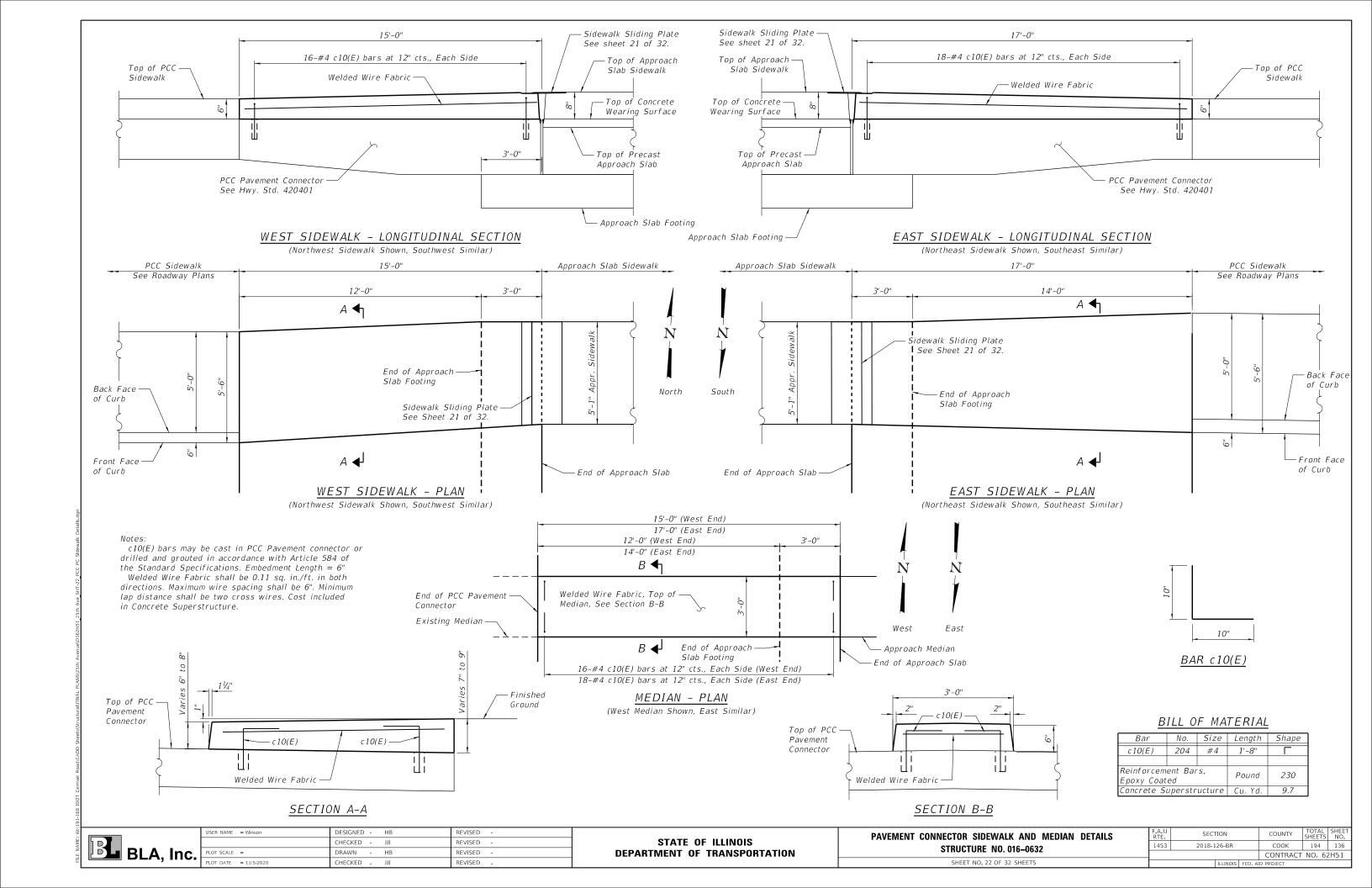
BOTTOM RAIL

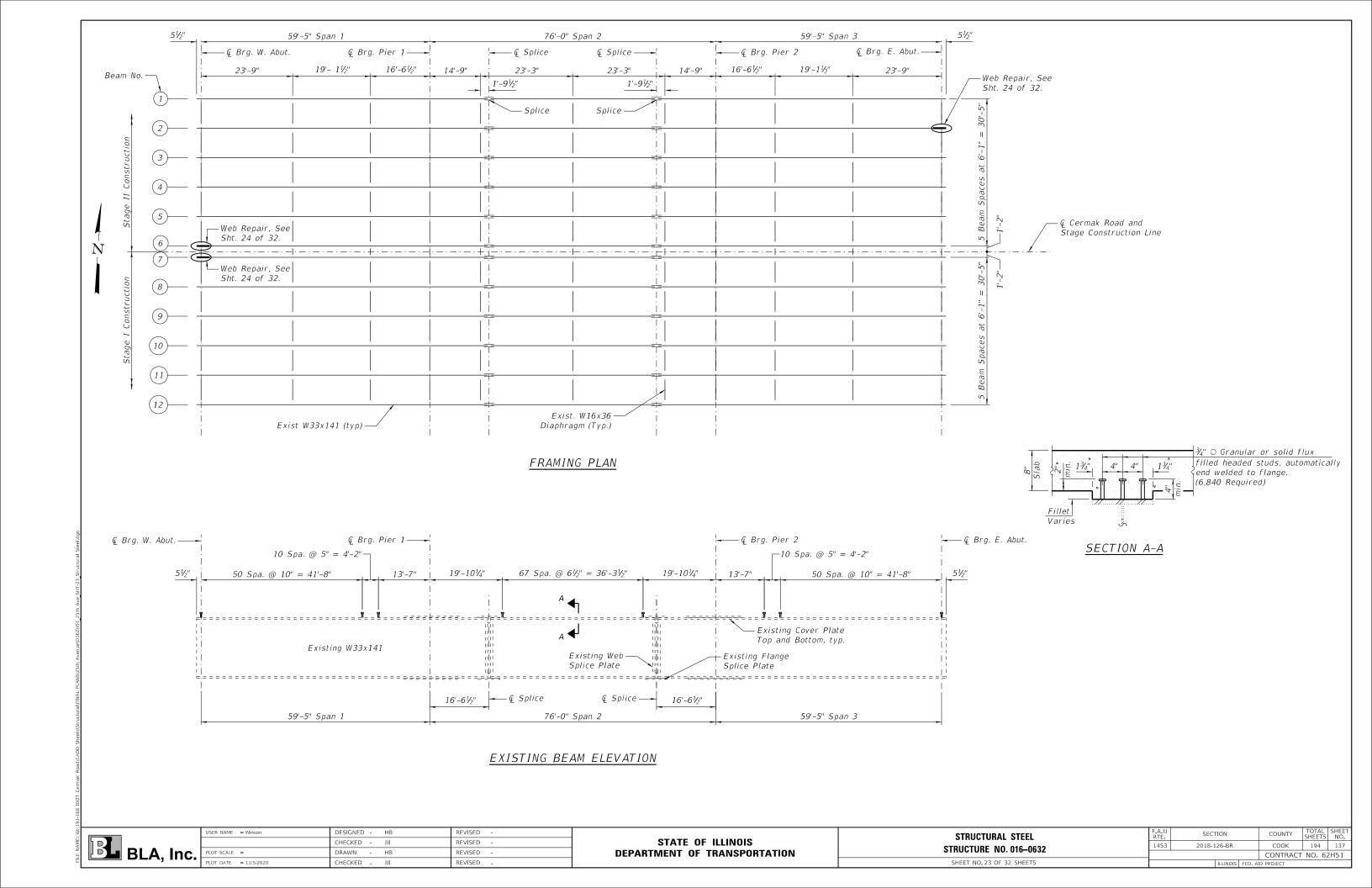
DESIGNED - HB CHECKED - JJI REVISED -DRAWN REVISED CHECKED - JJI REVISED

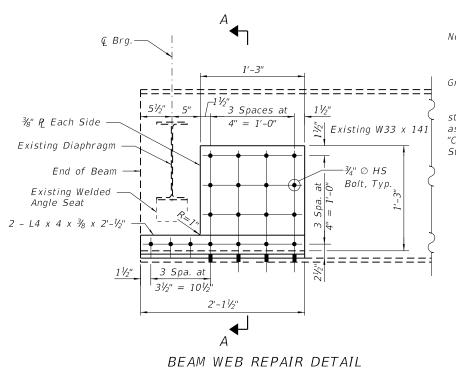
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** ALUMINUM RAILING, TYPE L STRUCTURE NO. 016-0632 SHEET NO. 20 OF 32 SHEETS

A.U TE			COUNTY	TOTAL SHEETS	SHEET NO.	
453	2018-126-BR			соок	194	134
CONTRACT NO. 62H51						
	HUMOS EED AID DROJECT					









(3 required)

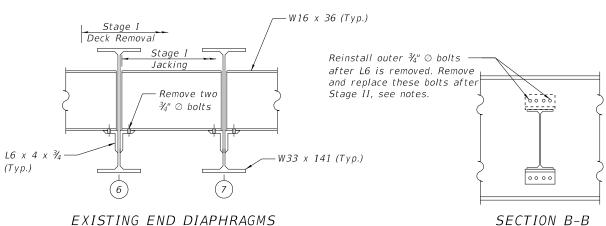
Notes:

See Special Provision for "Structural Steel Repair". See sheet 23 of 32 for repair locations and beam sizes Structural Steel for Web Repairs shall be AASHTO M270 Grade 36 or Grade 50.

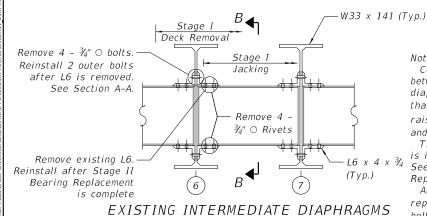
For painting new structural steel see General Notes. Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required for primary connections by the Special Provision "Cleaning and Painting contact Surfaces Areas of Existing Steel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

Legend:

- New ¾" ⊘ HS Bolt



(Looking East)



BLA, Inc.

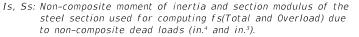
Note.

Contractor has the option to disconnect existing diaphragms between beams 6 and 7 to facilitate bearing replacement. If diaphragms are not disconnected, beams may not be raised more than 1/8". If diaphragms are disconnected, beams may not be raised more than ¾". See Guide Bridge Special Provision "Jack and Remove Existing Bearings".

The cost of disconnecting and reconnecting existing diaphragms is included in the cost of Jack and Remove Existing Bearings. ³/₄ See applicable portion of the special provision "Structural Steel Repair" for existing rivet and bolt removal requirements.

After Stage II jacking and installation of bearings is complete, replace all rivets and bolts removed in Stage I with new¾" ⊘ HS bolts.

OPTIONAL DIAPHRAGM DISCONNECTION DETAILS



Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total and Overload) due to short-term composite live loads (in.4 and in.3).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total and Overload) due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

> Z: Plastic Section Modulus of the steel section in non-composite areas (in.3).

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

MP: Un-factored moment due to non-composite dead load (kip-ft.).

sP: Un-factored long-term composite (superimposed) dead load (kips/ft.)

M₅ P: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

Mt: Un-factored live load moment (kip-ft.).

MI: Un-factored moment due to impact (kip-ft.).

Ma: Factored design moment (kip-ft.).

1.3 [MP + MSP + $\frac{5}{3}$ (Mt + MI)]

fs (Overload): Sum of stresses as computed from the moments below (ksi). $MQ + MSQ + \frac{5}{5}(ML + MI)$

fs (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).

 $1.3 [MP + MsP + \frac{5}{5} (ML + MI)]$

VR: Maximum½ + impact shear range within the composite portion of the span for stud shear connector design (kips).

SECTION A-A

Grind L4 heel

if necessary

-Existing W33 x 141

2 - PL 3/8" x 1'-3" x 2'-11/2"

2 - L4 x 4 x 3/8

INTERIOR BEAM MOMENT TABLE						
		0.4 Span 1 & 0.6 Span 3	Pier 1 & Pier 2	0.5 Span 2		
Is	(in⁴)	7,450	10,618	7,450		
Ic(n)	(in⁴)	25,515	-	25,515		
Ic(3n)	(in⁴)	17,807	_	17,807		
Ss	(in³)	448	619	448		
Sc(n)	(in³)	766	-	766		
Sc(3n)	(in³)	676	-	676		
Ζ	(in³)	_	700	_		
P	(k/')	0.828	1.023	0.828		
МP	('k)	192	468	202		
s P	(k/')	0.195	-	0.195		
Ms₽	('k)	54	-	69		
ΜŁ	('k)	378	226	397		
MIM	('k)	113	68	119		
⁵ 3 [MŁ + 1]	('k)	818	490	860		
Ма	('k)	1,384	1,245	1,470		
fs⊉non-comp	(ksi)	5.14	9.07	5.41		
fsॡ (comp)	(ksi)	0.96	-	1.22		
fs ⁵ 3 [M Ł + M _I]	(ksi)	12.82	9.50	13.47		
fs (Overload)	(ksi)	18.92	18.57	20.11		
fs (Total)	(ksi)	24.60	24.14	26.14		
VR	(k)	46	_	36		

EXTERIOR BEAM MOMENT TABLE						
		0.4 Span 1 &	Pier 1 &	0.5 Span 2		
		0.6 Span 3	Pier 2			
Is	(in⁴)	7,450	10,618	7,450		
Ic(n)	(in⁴)	22,915	-	22,915		
Ic(3n)	(in⁴)	16,402	-	16,402		
Ss	(in³)	448	619	448		
Sc(n)	(in³)	713	-	713		
Sc(3n)	(in³)	636	-	636		
Ζ	(in³)	-	700	-		
₽	(k/')	1.019	1.214	1.019		
MP	('k)	237	561	249		
s P	(k/')	0.195	-	0.195		
Ms P	('k)	53	-	67		
ΜŁ	('k)	374	231	392		
MIM	('k)	112	69	118		
⁵ 3 [M½ + 1]	('k)	810	500	850		
Ма	('k)	1,430	1,379	1,516		
fs₽non-comp	(ksi)	6.35	10.88	6.67		
fs₽ (comp)	(ksi)	1.00	-	1.26		
fs ⁵ 3 [M Ł + M _I]	(ksi)	13.63	9.69	14.31		
fs (Overload)	(ksi)	20.98	20.57	22.24		
fs (Total)	(ksi)	27.27	26.74	28.92		
VR	(k)	46	-	36		

BEAM REACTION TABLE							
		Abutment		Piers			
		Interior	Exterior	Interior	Exterior		
R₽	(k)	22.5	26.7	77.1	91.7		
R Ł	(k)	<i>33.2</i>	32.5	38.2	38.1		
Rı	(k)	10.0	9.8	11.5	11.5		
RTotal	(k)	65.7	69.0	126.8	141.3		

** Braced non-compact and partially braced section

BILL OF MATERIAL

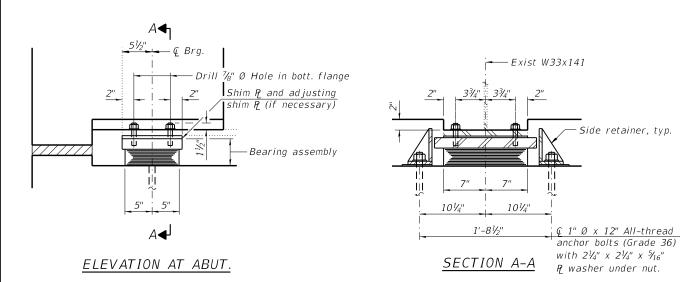
ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	340

(, 0,	GSC	a ar ring	bear mg	T CITIOV GIT	ama	- cpracement
(For	use	durina	hearing	removal	and	replacement)

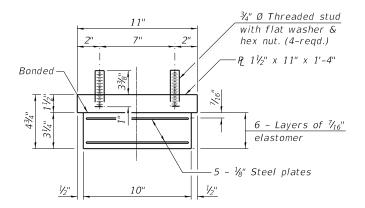
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	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** STRUCTURAL STEEL DETAILS STRUCTURE NO. 016-0632 SHEET NO. 24 OF 32 SHEETS

F.A.U RTE	SECT	TION			COUNTY	TOTAL SHEETS	SHEET NO.
1453	2018-1	2018-126-BR			соок	194	138
					CONTRACT	NO. 62	2H51
		TELIMOTE	EED	A	D DROJECT		



TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Shim plates shall not be placed under bearing assembly.

€ 11/4" Ø Hole 1/4" Stainless steel plate, A240, Type 304, 51/2" No. 1 finish.

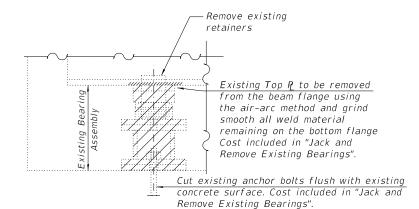
SIDE RETAINER

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

Field drilling holes for studs, side retainers and stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

**Prior to jacking or shoring beams, the Contractor shall determine and record the existing bottom of beam elevations at the center line of bearing at each abutment and make necessary approved adjustments to the bearing shim plate thicknesses and the new beam seat elevations. See sheet 27 of 32. Cost included with "Jack and Remove Existing Bearings".



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

ABUTMENT BEAM REACTION TABLE

		W Abut.	E. Abut.
R 12 *	(k/beam)	5.2	5.2

* Service Load Weight of Existing Structural Steel

**JACKING EXISTING SUPERSTRUCTURE & REMOVING BEARING NOTES:

Complete beam web repairs prior to jacking. See sheet 23 of 32.

Jack and Remove Existing Bearings shall be conducted according to the Guide Bridge Special Provision "Jack and Remove Existing Bearings", following the procedure for deck removed. See Beam Reaction Table for loads.

Jacking and removing existing bearings shall be done after deck removal.

The existing anchor bolts shall be cut off flush with the existing bridge seat. The bearing, top plate and bolster shall be removed.

All Stage I or Stage II beams shall be lifted simultaneously.

The Contractor's jacking and cribbing system shall remain in place for all beams in the stage until bridge seats have been raised and new bearings are installed.

Existing diaphragms at the stage construction line may be disconnected as necessary prior to jacking and reconnected using new H.S. bolts after jacking is completed. Cost included with "Jack and Remove Existing Bearings". See Sht. 24 for details.

**SHIM PLATE THICKNESS

	Bm 1	Bm 2	Bm 3	Bm 4	Bm 5	Bm 6	Bm 7	Bm 8	Bm 9	Bm 10	Bm 11	Bm 12
West Abutment	0	1/4"	0	5/8"	0	3/4"	3/4"	1/4"	5/8"	0	³ / ₁₆ "	0
East Abutment	0	5/8"	0	7/8"	0	5/8"	3/8"	1/8"	1/2"	0	¹³ / ₁₆ "	0

**Cost included wth Elastomeric Bearing Assembly, Type I

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	24
Anchor Bolts, 1"	Each	48
Jack and Remove Existing Bearings	Each	24

I-2E-1

6-15-2019

	USER NAME = Winson	DESIGNED - HB	REVISED -
BLA, Inc.		CHECKED - JJI	REVISED -
	PLOT SCALE =	DRAWN - HB	REVISED -
	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

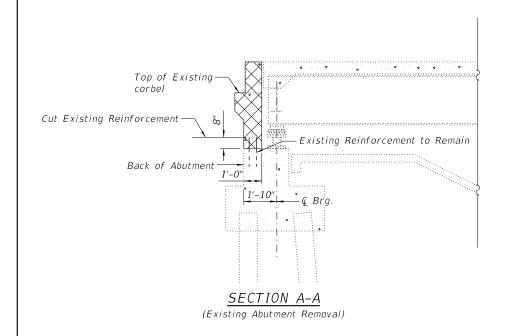
STATE OF ILLINOIS

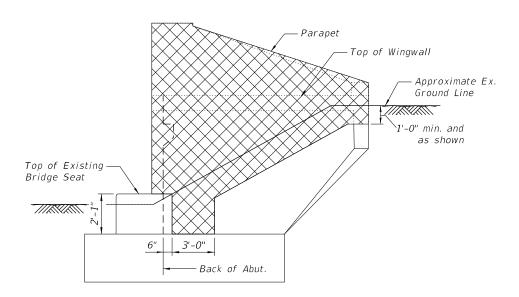
BEARING DETAILS STRUCTURE NO. 016-0632

SECTION COUNTY 1453 2018-126-BR COOK 194 139 CONTRACT NO. 62H51

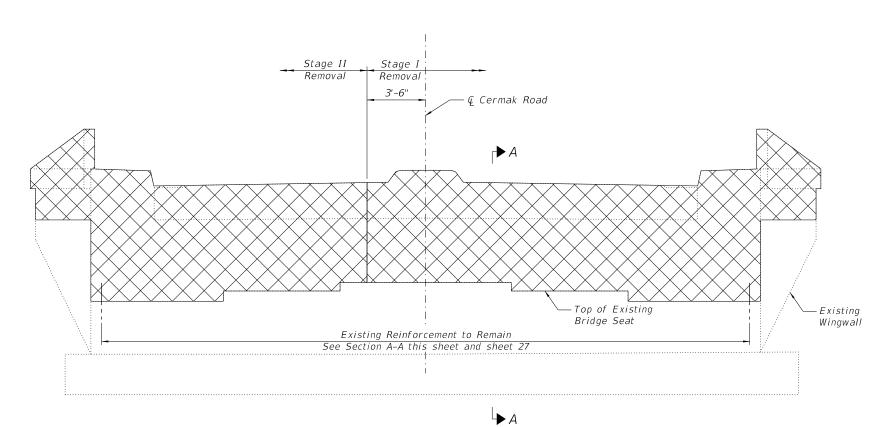
DEPARTMENT OF TRANSPORTATION

SHEET NO. 25 OF 32 SHEETS





ELEVATION - EXISTING WINGWALL REMOVAL



<u>ELEVATION - EXISTING EAST ABUTMENT REMOVAL</u> (Looking East, West Abutment opposite hand)

Notes:

Existing reinforcement as noted shall be cut, cleaned and incorporated into the new construction. Any reinforcement bars that are damaged shall be repaired or replaced using an approved bar splicer or anchorage system. Costs included in "Concrete Removal."

LEGEND

Concrete Removal

TWO ABUTMENTS BILL OF MATERIAL

Item	Unit	Quantity	
Concrete Removal	Cu. Yd.	46	

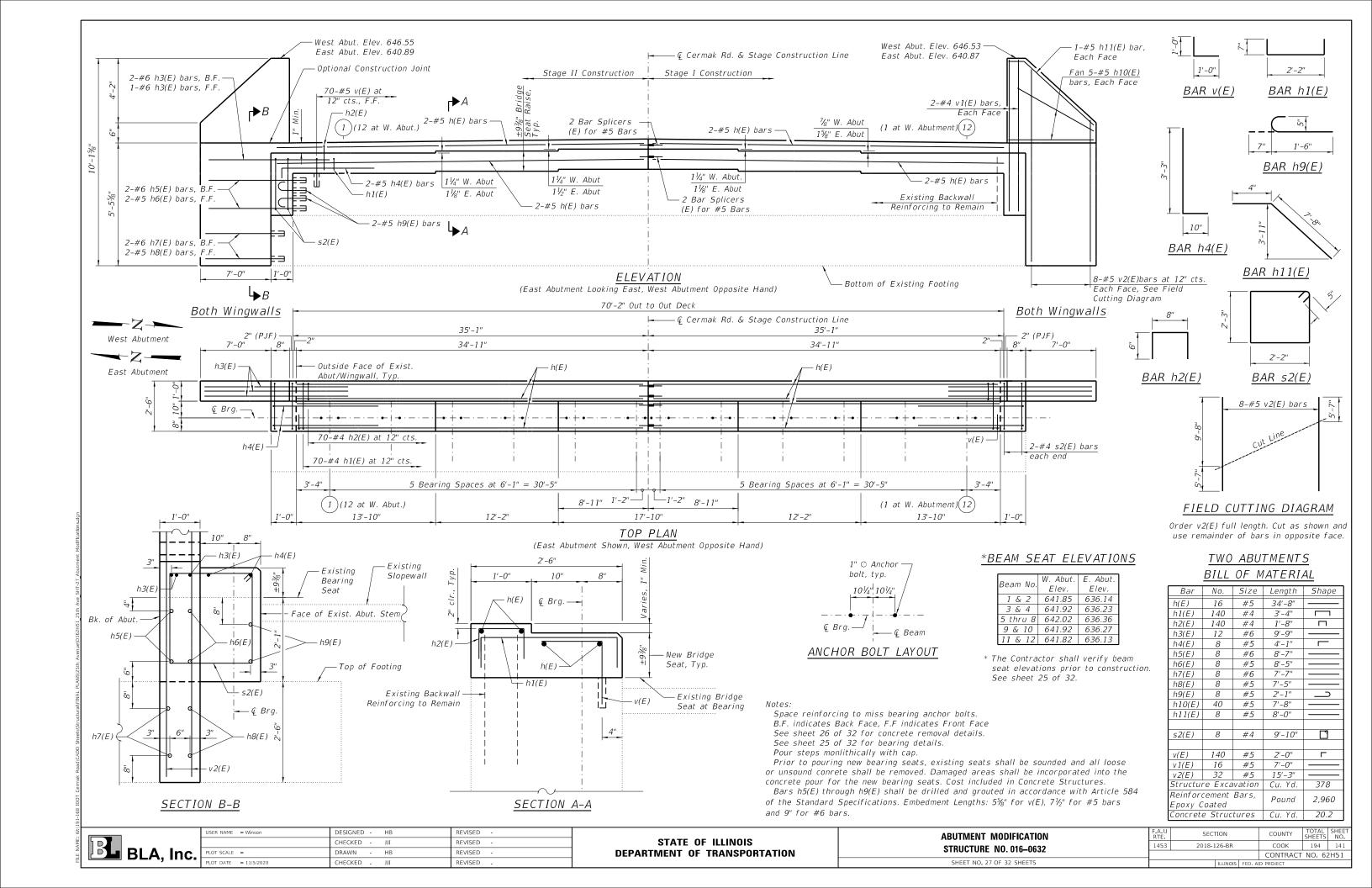
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		1110.

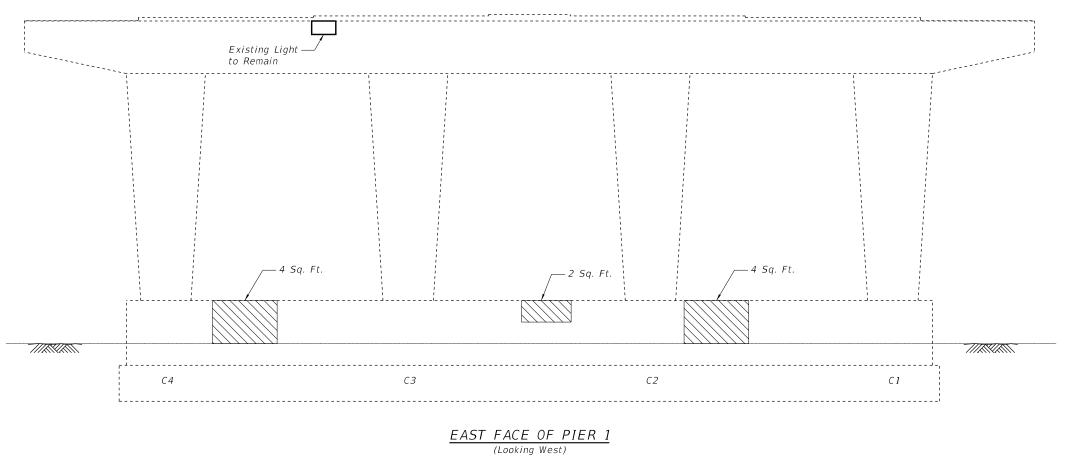
USER NAME = Winson	DESIGNED - HB	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ABUTMENT CONCRETE REMOVAL STRUCTURE NO. 016–0632
SHEET NO. 26 OF 32 SHEETS

.U E.	SECTIO	N		COUNTY	TOTAL SHEETS	SHEET NO.
53	3 2018-126-BR		соок	194	140	
				CONTRACT	NO. 62	2H51
	l n r	INIOIE	EED A	ID DROJECT		

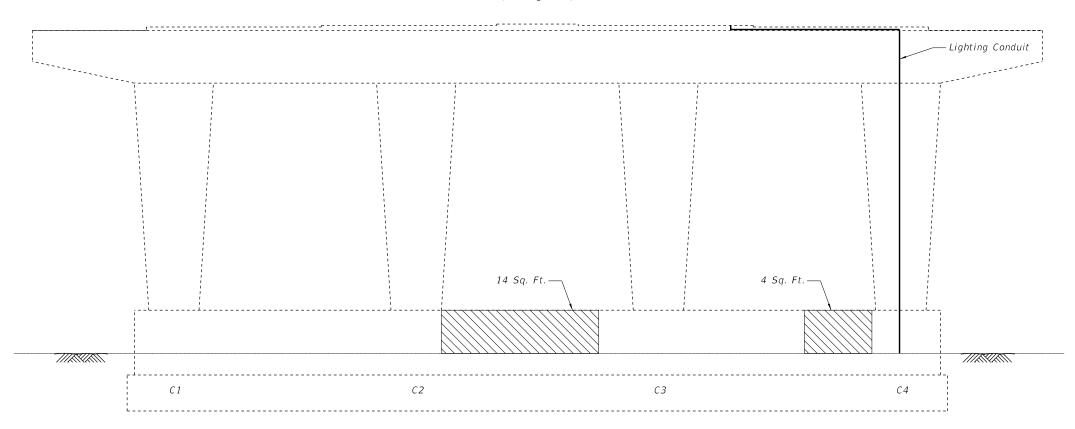




See Sheet 29 of 32 for Bill of Material. Repairs of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired shall be determined by the Engineer at the time of construction.

<u>LEGEND</u>

Structural Repair of Concrete (Depth Equal to or Less than 5 inches)



WEST FACE OF PIER 1 (Looking East)

1		
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	BLA, Inc.	P
1		F

	USER NAME = Winson	DESIGNED - HB	REVISED -
		CHECKED - JJI	REVISED -
	PLOT SCALE =	DRAWN - HB	REVISED -
1	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

PIER	1 – RE	EPAIR D	ETAILS I	
STR	RUCTUR	E NO. 0	16-0632	
SI	HEET NO.	28 OF 32 9	SHEETS	

F.A.U RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEE NO.
1453	2018-1	26-BR		соок	194	142
				CONTRACT	NO. 62	2H51
		ILL TALOTS	550 A	D DDOLEGE		



Note:

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.

<u>LEGEND</u>

Structural Repair of Concrete (Depth Equal to or Less than 5 inches)

BILL OF MATERIAL

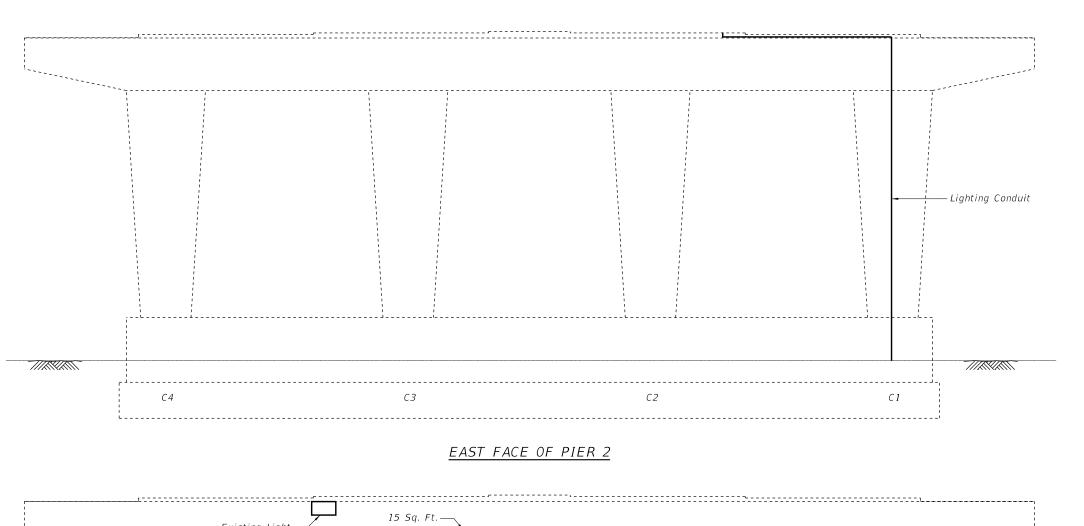
Item	Unit	Quantity
tructural Repair of Concrete Depth Equal to or Less than 5 inches)	Sq. Ft.	32



USER NAME = WINSON	DESIGNED - HB	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

PIER 1 – REPAIR Structure no	
SHEET NO. 29 OF 3	2 SHEETS

U	SECT	ΓΙΟΝ			COUNTY	TOTAL SHEETS	SHEE NO.
3	3 2018-126-BR		соок	194	143		
					CONTRACT	NO. 62	2H51
		TELINOIS	EED 1	A I	D DROJECT		

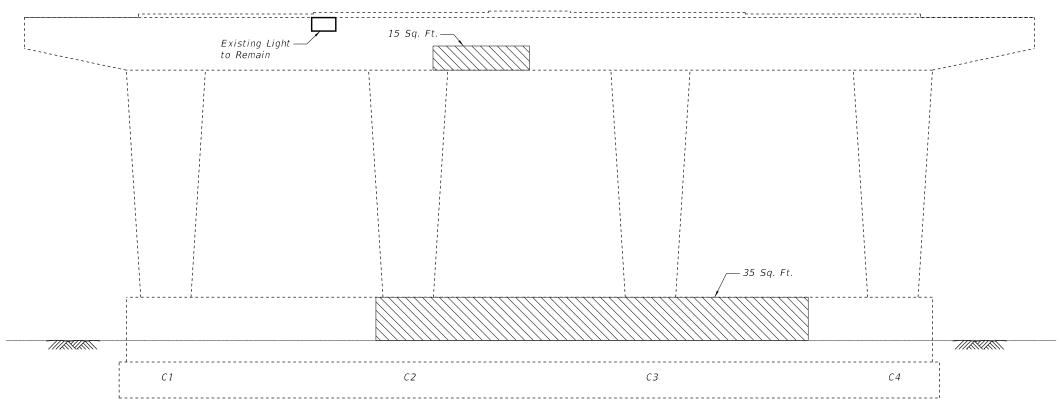


Note:

See Sheet 31 of 32 for Bill of Material. 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.

<u>LEGEND</u>

Structural Repair of Concrete (Depth Equal to or Less than 5 inches)

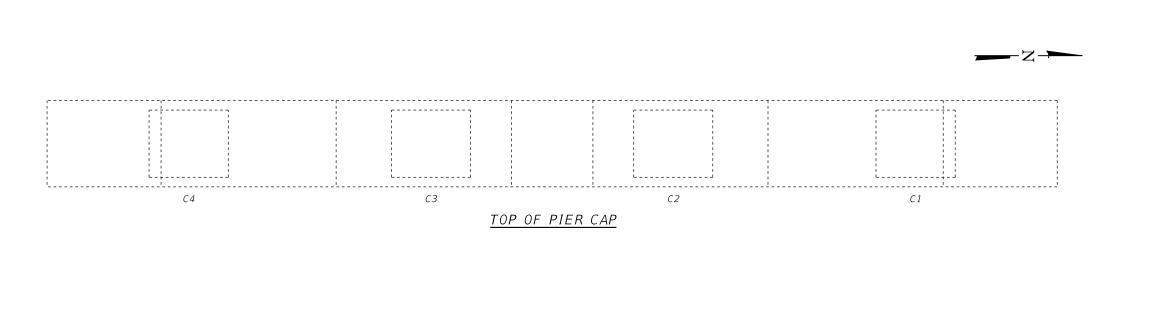


WEST FACE OF PIER 2

	USER NAME = Winson	DESIGNED - HB	REVISED -
BLA. Inc.		CHECKED - JJI	REVISED -
BLA, Inc.	PLOT SCALE =	DRAWN - HB	REVISED -
	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 – REPAIR DETAILS I STRUCTURE NO.016–0632	F.A.U RTE			COUNTY	TOTAL SHEETS	SHEE NO.	
	1453	2018-	26-BR		соок	194	144
					CONTRAC	T NO. 6:	2H51
SHEET NO 30 OF 32 SHEETS			ILLINIOIC.	EED AL	ID DROJECT		



<u>LEGEND</u>

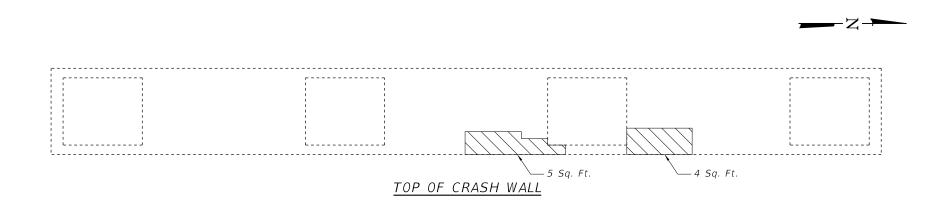
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)

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.

UNDERSIDE OF PIER CAP

6 Sq. Ft.—



BILL OF MATERIAL

Item	Unit	Quantity	
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	68	

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BLA, Inc.	Р
	Р

USER NAME = Winson	DESIGNED - HB	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

PIER 2 - REPAIR DETAILS II STRUCTURE NO.016-0632
SHEET NO. 31 OF 32 SHEETS

U	SECT	ΓΙΟΝ			COUNTY	TOTAL SHEETS	SHEE NO.
3	3 2018-126-BR		соок	194	145		
					CONTRACT	NO. 62	2H51
		TELINOIS	EED (ΛI	D DROJECT		

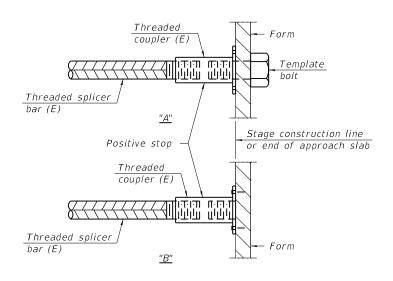
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + $1\frac{1}{2}$ " + thread length

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

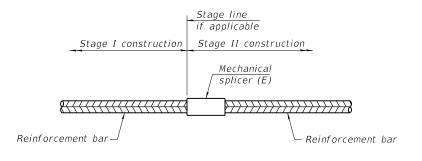
Location	Bar	No. assemblies	Minimum
Location	size	required	lap length
Deck Slab	#5	599	3'-6"
West Diaphragm	#6	7	3'-7"
East Diaphragm	#6	7	3'-7"
West Approach	#5	32	3'-0"
West Approach Footing	#5	40	3'-2"
East Approach	#5	32	3'-0"
East Approach Footing	#5	40	3'-2"
West Abutment	#5	4	3'-2"
Fast Abutment	#5	4	3'-2"



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

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.

BSD-1

1-1-2020

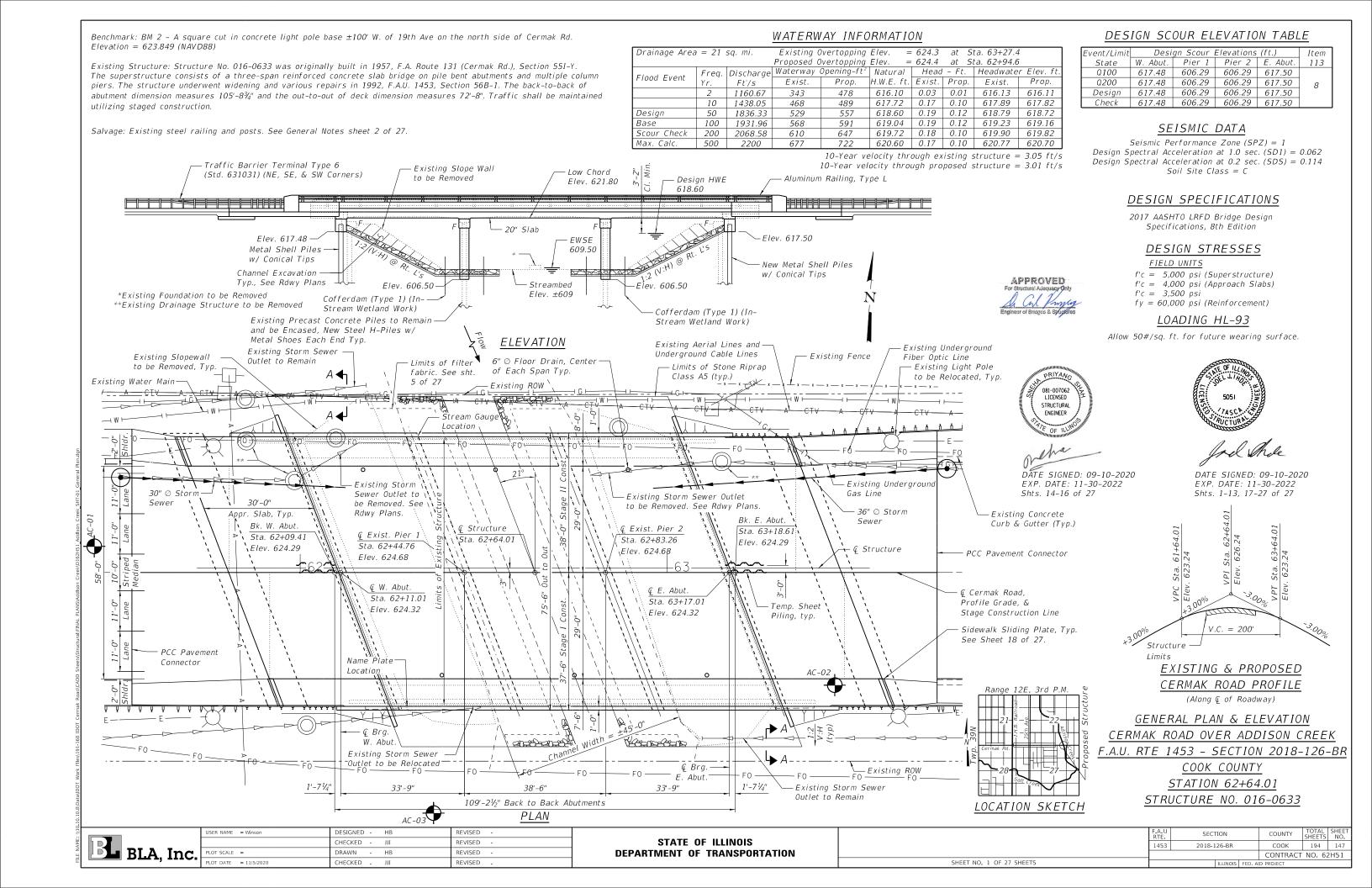
	USER NAME = Winson	DESIGNED - HB	REVISED -
BLA, Inc.		CHECKED - JJI	REVISED -
	PLOT SCALE =	DRAWN - HB	REVISED -
BE, t, mor	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

STATE OF ILLINOIS

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 016-0632 SHEET NO. 32 OF 32 SHEETS

A.U RTE	SECT	TION			COUNTY	TOTAL SHEETS	SHE
1453	2018-126-BR			соок	194	146	
					CONTRACT	NO. 62	2H51
		TELIMOIS	EED	Λ	D DROJECT		

DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

Slip-forming of parapets is not allowed.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The Contractor shall make allowances for the deflection of forms, shrinkage, and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of approach slabs.

The southernmost pile of the West Abutment that is adjacent to the existing 36 inch diameter storm sewer shall have a 24 inch diameter precore to a depth of 5 feet below the storm sewer pipe. The contractor shall accurately locate the storm sewer prior to precoring and any necessary adjustments to the pile locations shall be made as approved by the Engineer. See sheet 5 and 20 of 27 for details. Pile driving shall begin from the bottom of the hole. The annular space between the pile and the bore hole shall be backfilled with Porous Granular Embankment (clean dry sand) or controlled low-strength material (CLSM). Cost of locating the storm sewer, precoring and backfilling shall be included in the item Driving Piles.

Removal of Existing Structures includes the existing bridge except pier piles, removal of guardrail attached to bridge sidewalk, slopewall removal, removal of existing foundation in the center of the channel, and removal existing broken concrete in the channel

The existing Buddy Bear Car Wash building northeast of the bridge shall be monitored for vibrations during the installation of all piles for the abutments and piers. This work shall be according to the applicable provisions of the special provision 'Construction Vibration Monitoring'. Pile driving shall be stopped when the threshold peak particle velocity of 0.5 inches per second is reached. The contractor shall submit the course of action to reduce the vibrations including abandance pile installation by driving and installing his contractor. abandoning pile installation by driving and installing by setting in rock socket.

The contractor shall salvage the steel tube railing and posts located along the outside face of the bridge and along the inside face of the south sidewalk. Railings shall not be cut. The railings, posts, and attachments shall be transported and unloaded by the Contractor to the District Bridge Yard in Elk Grove at 1101 Biesterfield Road during the weekdays of Monday-Friday, and between the hours of 8am and 2pm. The Contractor shall notify the District Bridge Office 48 hours in advance of the delivery at (847) 956-1443. Cost included in Removal of Existing

Pier 1 Cap 31/2" 6 | 1 | 9 End Pier Wall 8

Stream Gauge Notes:

The gauge plates shall be porcelain enameled iron plate graduated in feet and tenths, unnumbered, and 3½" wide. Gauge plates shall be "Watermark" Style "E" or approved equivalent.

Each individual number plate should be a black numeral on 2" x 3" white porcelain enameled iron plate. Number plates shall be "Watermark" Style "E" or approved equivalent.

Both the gauge plates and number plates shall be fastened directly to the pier with a $\frac{1}{4}$ " diameter, $1\frac{1}{2}$ " long masonry screw with a hex washer head.

Three digit elevations to be installed at the top of the gauge and at every elevation ending with O. At all of the other whole elevations, place the last digit as shown in the example to the left.

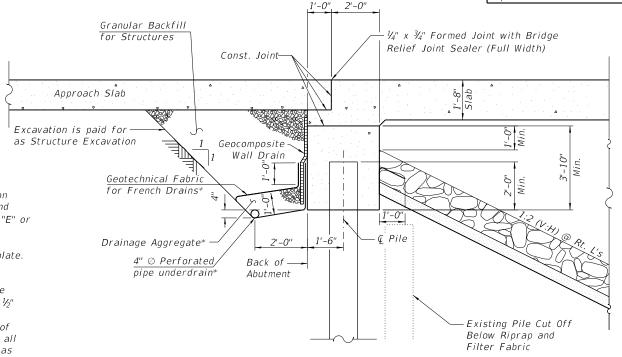
See Special Provisions.

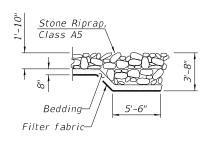
INDEX OF SHEETS

- 1. General Plan & Elevation
- 2. General Data
- 3. Stage Construction Details
- 4. Temporary Concrete Barrier For Stage Construction
- 5. Foundation Layout
- 6. Top of Slab Elevations
- 7. Top of West Approach Slab Elevations
- 8. Top of East Approach Slab Elevations
- 9. Superstructure Plan
- 10. Superstructure Cross Sections
- 11. North Sidewalk Plan and Parapet Elevation 12. South Sidewalk Plan and Parapet Elevation
- 13. Superstructure Details
- 14. West Bridge Approach Slab Details
- 15. East Bridge Approach Slab Details
- 16. Bridge Approach Slab Details 17. Aluminum Railing, Type L
- 18. Sidewalk Sliding Plate Details
- 19. Pavement Connector Sidewalk Details
- 20. West Abutment
- 21. East Abutment
- 22. Pier 1 & 2
- 23. HP Pile Details
- 24. Metal Sheet Pile Details
- 25. Bar Splicer Assembly and Mechanical Splicer Details
- 26. Boring Logs
- 27. Boring Logs

TOTAL BILL OF MATERIAL

TOTAL BILL OF	1-17 (1 L	NIAL		
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	Sq. Yd.		1,052	1,052
Filter Fabric	Sq. Yd.		956	956
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yd.		292	292
Cofferdam Excavation	Cu. Yd.		218	218
Floor Drains	Each	6		6
Concrete Structures	Cu. Yd.		389.2	389.2
Concrete Superstructure	Cu. Yd.	642.5		642.5
Bridge Deck Grooving	Sq. Yd.	1,067		1,067
Protective Coat	Sq. Yd.	1,522		1,522
Concrete Superstructure (Approach Slab)	Cu. Yd.	231.2		231.2
Reinforcement Bars, Epoxy Coated	Pound	227,780	42,070	269,850
Bar Splicers	Each	518	192	710
Aluminum Railing, Type L	Foot	258		258
Furnishing Metal Shell Piles 14"x0.312"	Foot		388	388
Furnishing Steel Piles HP10x57	Foot		135	135
Driving Piles	Foot		523	523
Test Pile Metal Shells	Each		1	1
Test Pile Steel HP10x57	Each		1	1
Pile Shoes	Each		24	24
Name Plates	Each	1		1
Temporary Sheet Piling	Sq. Ft.		782	782
Granular Backfill for Structures	Cu. Yd.		174	174
Geocomposite Wall Drain	Sq. Yd.		110	110
Construction Vibration Monitoring	L Sum		1	1
Stream Gauge	Each		1	1
Cofferdam (Type 1) (In-Stream/Wetland Work)	Each		4	4
Pipe Underdrains for Structures 4"	Foot		218	218





SECTION A-A

SECTION THRU ABUTMENT (Horiz, dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

STREAM GAUGE DETAIL

9

6 1 0

BLA, Inc.

(Pier 1, North End, East Face. See Sheet 5 of 27.)

USER NAME = Winson	DESIGNED - HB	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

STATION 62+64.01

BUILT 202 BY

STATE OF ILLINOIS F.A.U. RTE. 1453

SEC. 2018-126-BR

LOADING HL-93

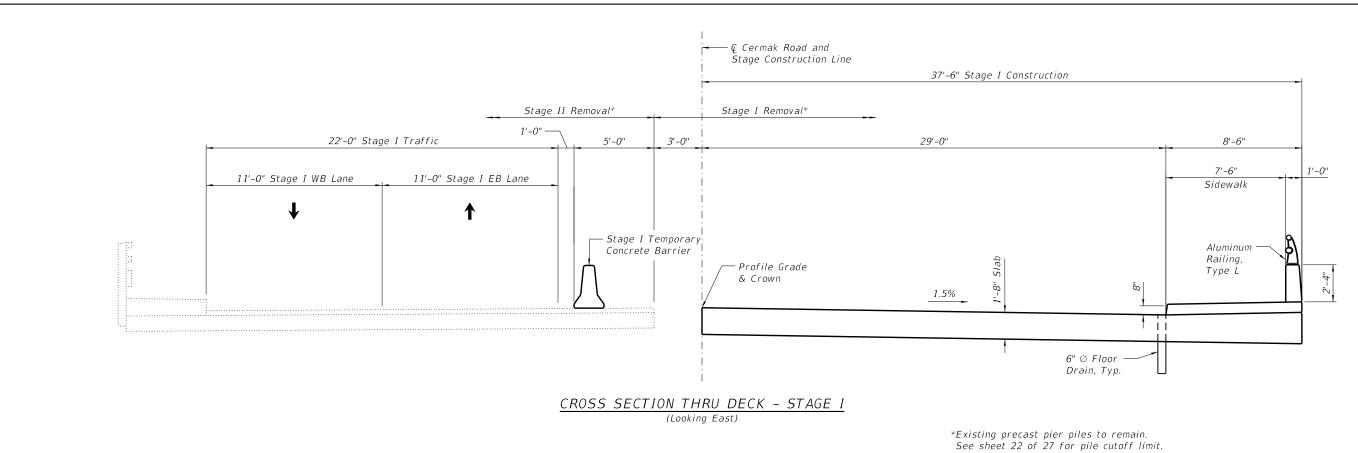
STRUCTURE NO. 016-0633

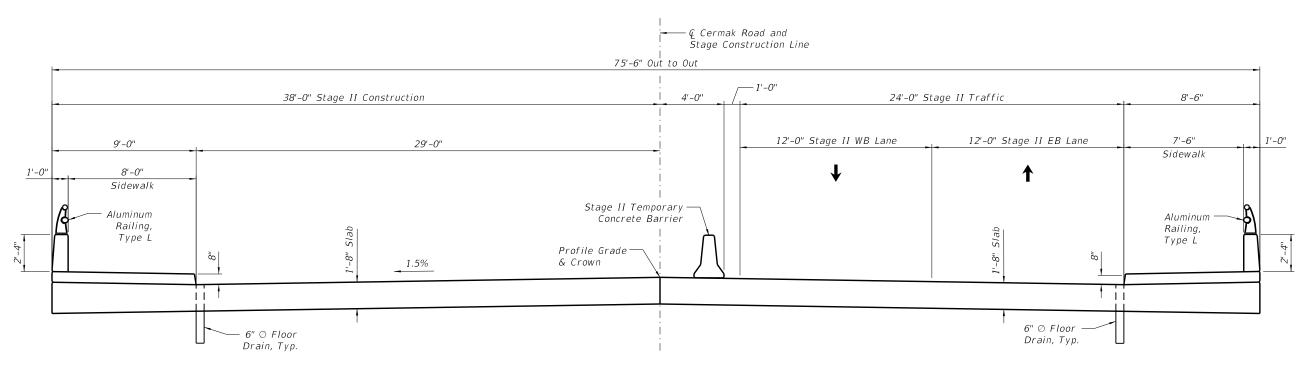
NAME PLATE

See Std. 515001

GENERAL DATA STRUCTURE NO. 016-0633
SHEET NO. 2 OF 27 SHEETS

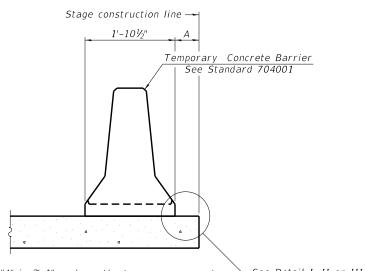
SECTION COUNTY 1453 2018-126-BR COOK 194 148 CONTRACT NO. 62H51





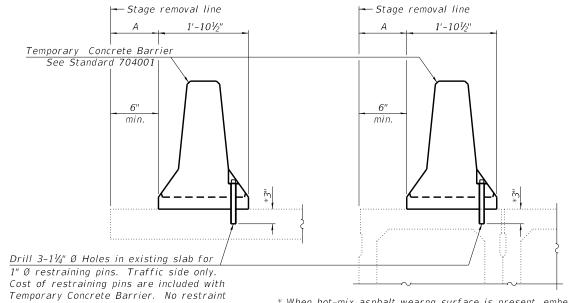
CROSS SECTION THRU DECK - STAGE II (Looking East)

WA/15	USER NAME = Winson	DESIGNED - HB	REVISED -		STAGE CONSTRUCTION DETAILS	F.A.U RTE	SECTION	COUNTY	TOTAL SHEET
		CHECKED - JJI	REVISED -	STATE OF ILLINOIS	STRUCTURE NO. 016-0633	1453	2018-126-BR	соок	194 149
BLA, Inc.	PLOT SCALE = 11/5/2020	DRAWN - HB	REVISED -	DEPARTMENT OF TRANSPORTATION	SHEET NO. 3 OF 27 SHEETS		THE PROPERTY OF THE PARTY OF TH	CONTRAC?	T NO. 62H51
	1101 DATE = 11/3/2020	CHECKED - JII	NEVIDED -		3/1EE/ NO. 3 OF 27 3/1EE/3	1	ILLINOIS FED. A	ID PROJECT	



— See Detail I, II or III When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

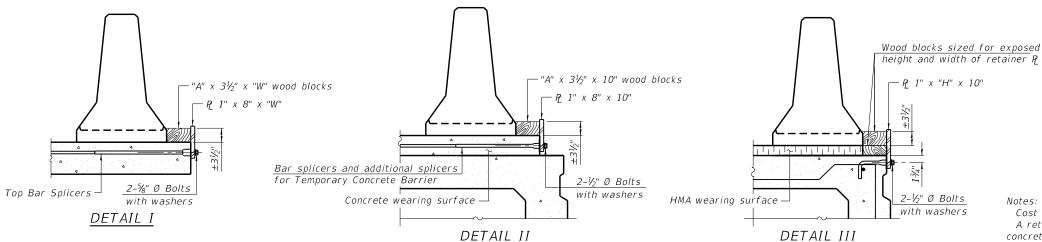
EXISTING DECK BEAM

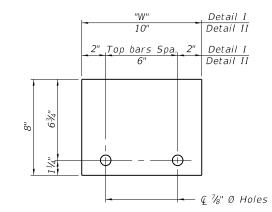
1x8 UNC US Std. $1\frac{1}{16}$ " I.D. x $2\frac{1}{2}$ " O.D. x approx. 8 guage thick washer RESTRAINING PIN

SECTIONS THRU SLAB OR DECK BEAM

is required when "A" is greater than 3'-1".

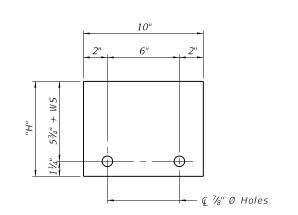
EXISTING SLAB



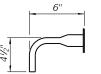


STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)



STEEL RETAINER P 1" x "H" x 10" (Detail III)



BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate Q of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I Installation for a new bridge deck or bridge slab.
- Detail II Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27

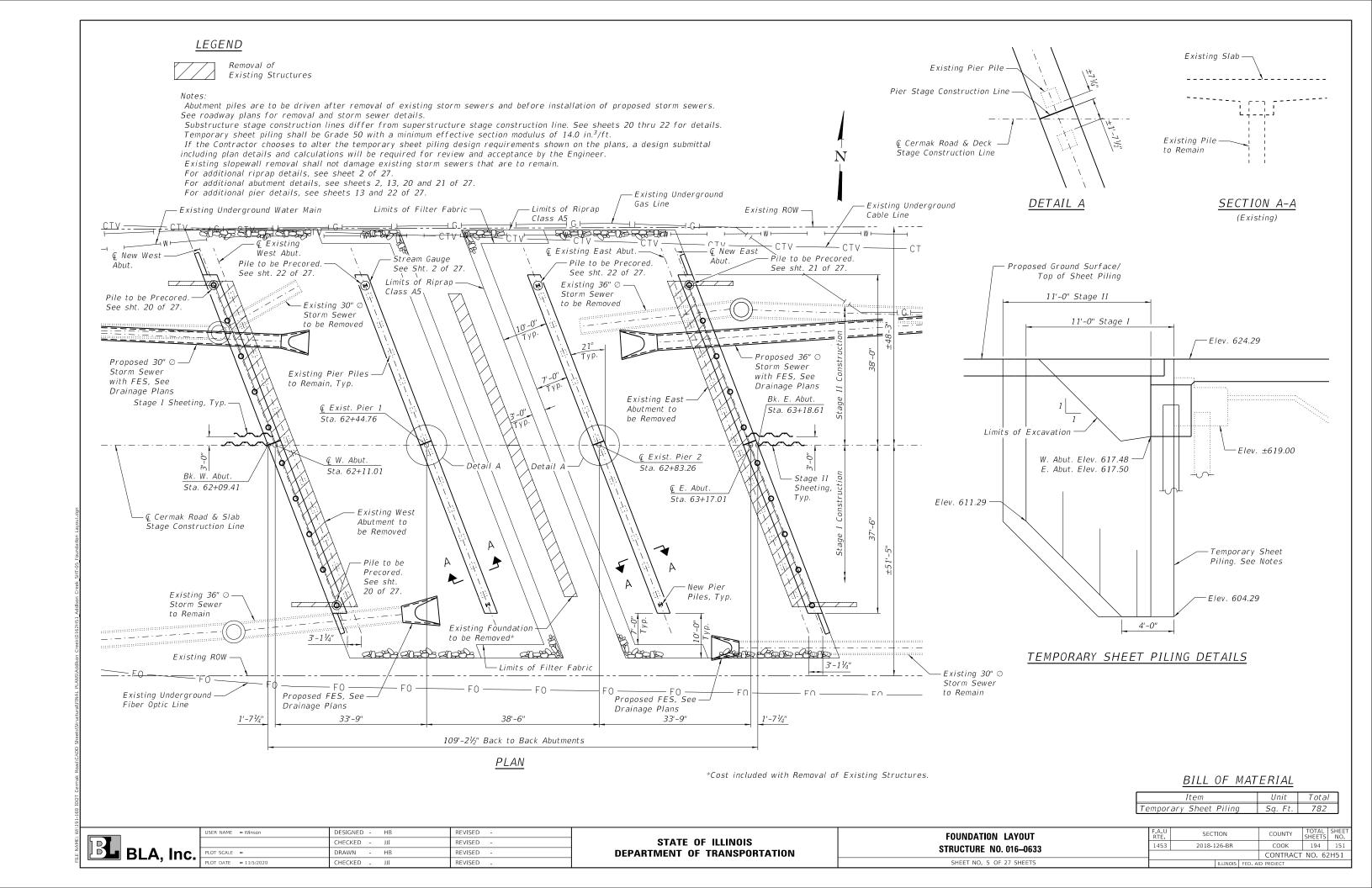
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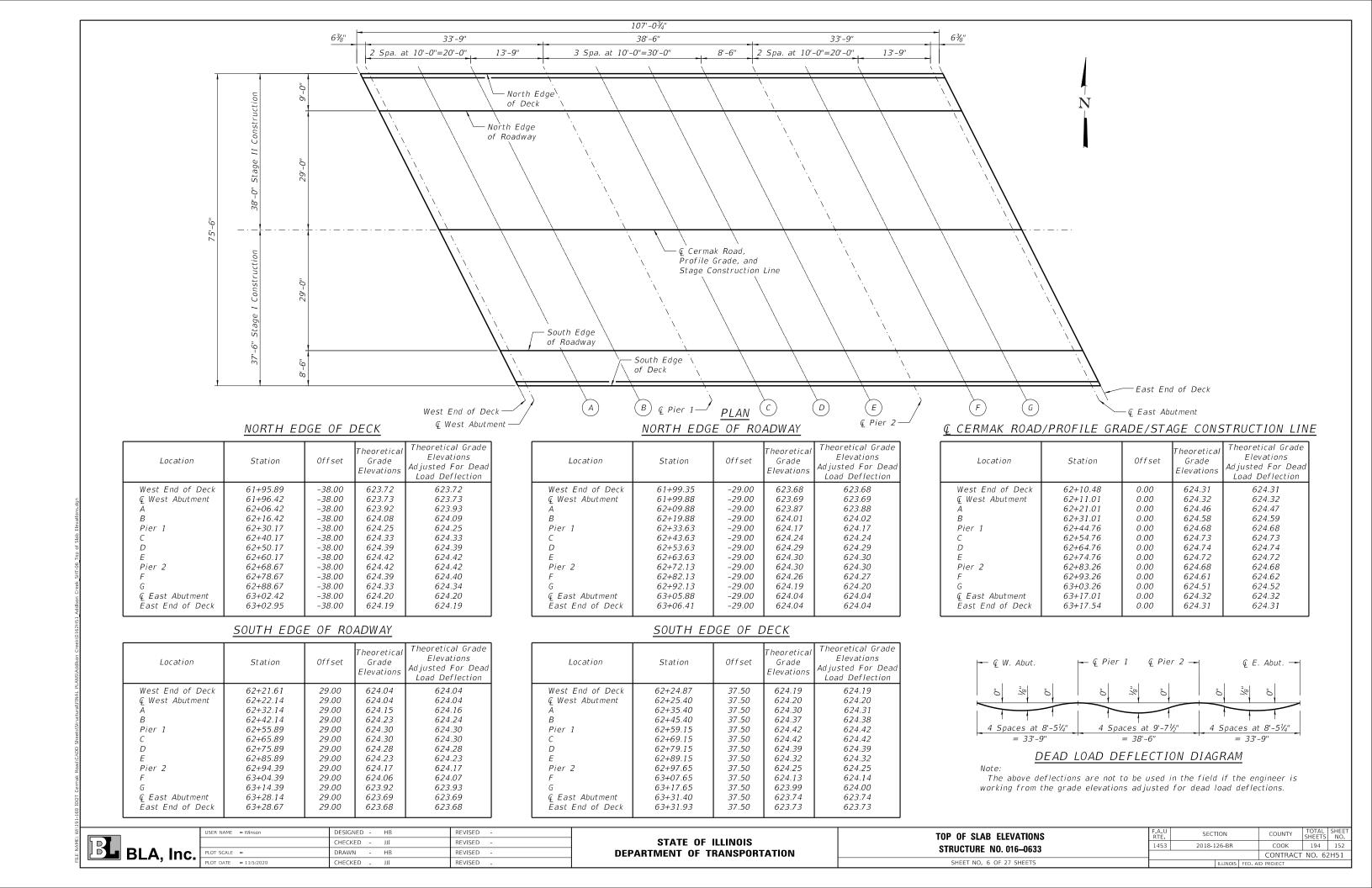
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BLA, Inc.		CHECKED - JJI	REVISED
	PLOT SCALE =	DRAWN - HB	REVISED
	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 016-0633	
SHEET NO. 4 OF 27 SHEETS	Π

	F.A.U RTE	SECT	TION		COUNTY	TOTAL SHEETS	SHEET NO.
	1453 2018-126-BR		соок	194	150		
					CONTRACT	NO. 62	2H51
П			IL LINLOYS	550 4	ID DOOLEGE		





NORTH EDGE OF SLAB

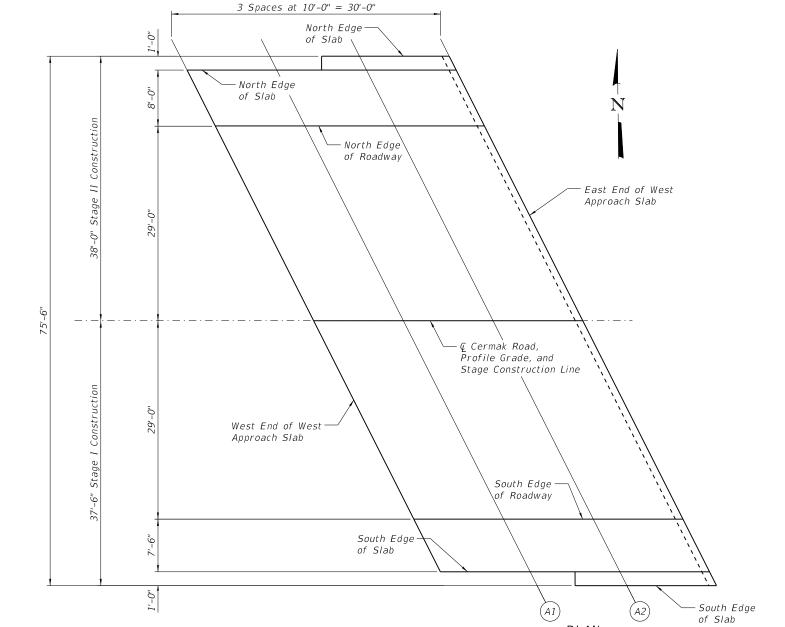
Location	Station	Offset	Theoretical Grade Elevations
W. End of W Appr. Slab	61+66.28	-37.00	622.99
A1 A2	61+76.28 61+85.89	-37.00 -38.00	623.27 623.50
E. End of W Appr. Slab	61+95.89	-38.00	623.72

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoreticai Grade Elevations
W. End of W Appr. Slab	61+69.35	-29.00	622.96
A1 A2	61+79.35 61+89.35	-29.00 -29.00	623.23 623.47
E. End of W Appr. Slab	61+99.35	-29.00	623.68

© CERMAK ROAD/PROFILE GRADE/STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W Appr. Slab	61+80.48	0.00	623.69
A1 A2	61+90.48 62+00.48	0.00 0.00	623.93 624.13
E. End of W Appr. Slab	62+10.48	0.00	624.31



SOUTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End of W Appr. Slab	61+91.61	29.00	623.52
A1 A2	62+01.61 62+11.61	29.00 29.00	623.72 623.89
E. End of W Appr. Slab	62+21.61	29.00	624.04

SOUTH EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
W. End of W Appr. Slab	61+94.49	36.50	623.69
A1 A2	62+04.49 62+14.87	36.50 37.50	623.89 624.06
E. End of W Appr. Slab	62+24.87	37.50	624.19

BL	BLA,	Inc
	,	

USER NAME = Winson	DESIGNED - HB	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

<u>PLAN</u>

F.A.U RTE.	SECT	TION		COUNTY	TOTAL SHEETS	SHEET NO.
1453 2018-126-BR			соок	194	153	
			CONTRACT	NO. 62	2H51	
		ILLINOIS	FED. A	ID PROJECT		

NORTH EDGE OF SLAB

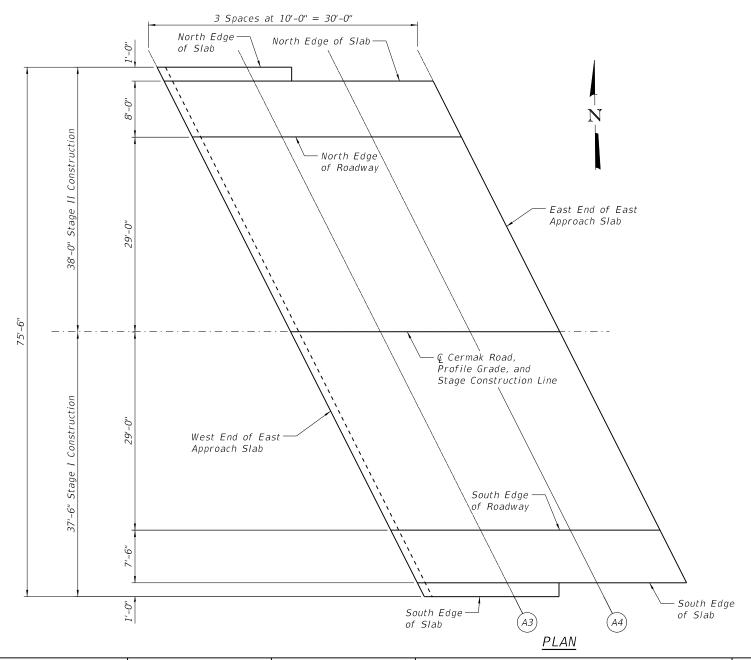
Location	Station	Offset	Theoretical Grade Elevations
W. End of E Appr. Slab	63+02.95	-38.00	624.19
A3 A4	63+12.95 63+23.34	-38.00 -37.00	624.06 623.89
E. End of E Appr. Slab	63+33.34	-37.00	623.70

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretica Grade Elevations
W. End of E Appr. Slab	63+06.41	-29.00	624.04
A3 A4	63+16.41 63+26.41	-29.00 -29.00	623.89 623.72
E. End of E Appr. Slab	63+36.41	-29.00	623.52

© CERMAK ROAD/PROFILE GRADE/STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E Appr. Slab	63+17.54	0.00	624.31
A3 A4	63+27.54 63+37.54	0.00 0.00	624.13 623.93
E. End of E Appr. Slab	63+47.54	0.00	623.69



SOUTH EDGE OF ROADWAY

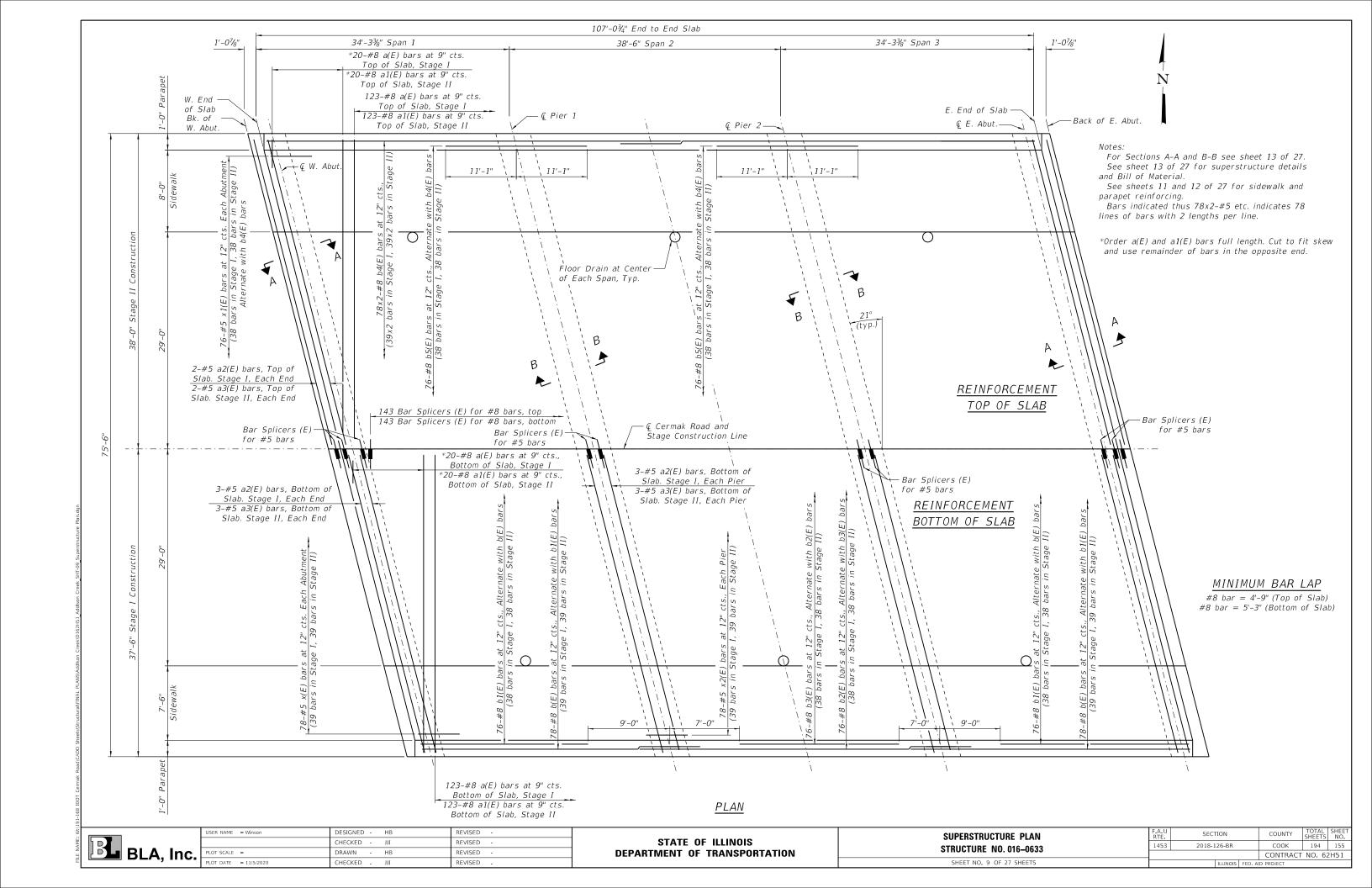
Location	Station	Offset	Theoretical Grade Elevations
W. End of E Appr. Slab	63+28.67	29.00	623.68
A3 A4	63+38.67 63+48.67	29.00 29.00	623.47 623.23
E. End of E Appr. Slab	63+58.67	29.00	622.96

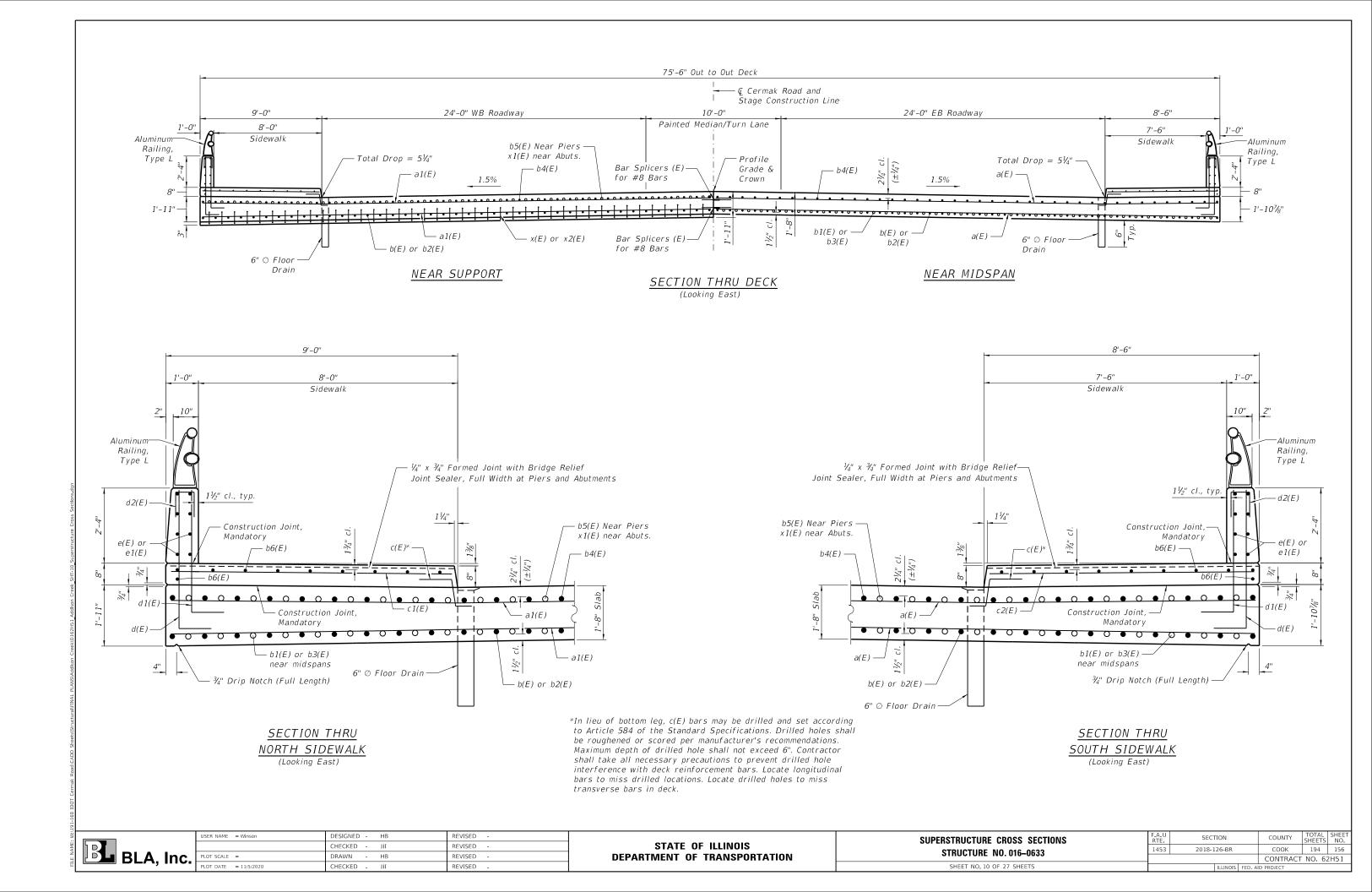
SOUTH EDGE OF SLAB

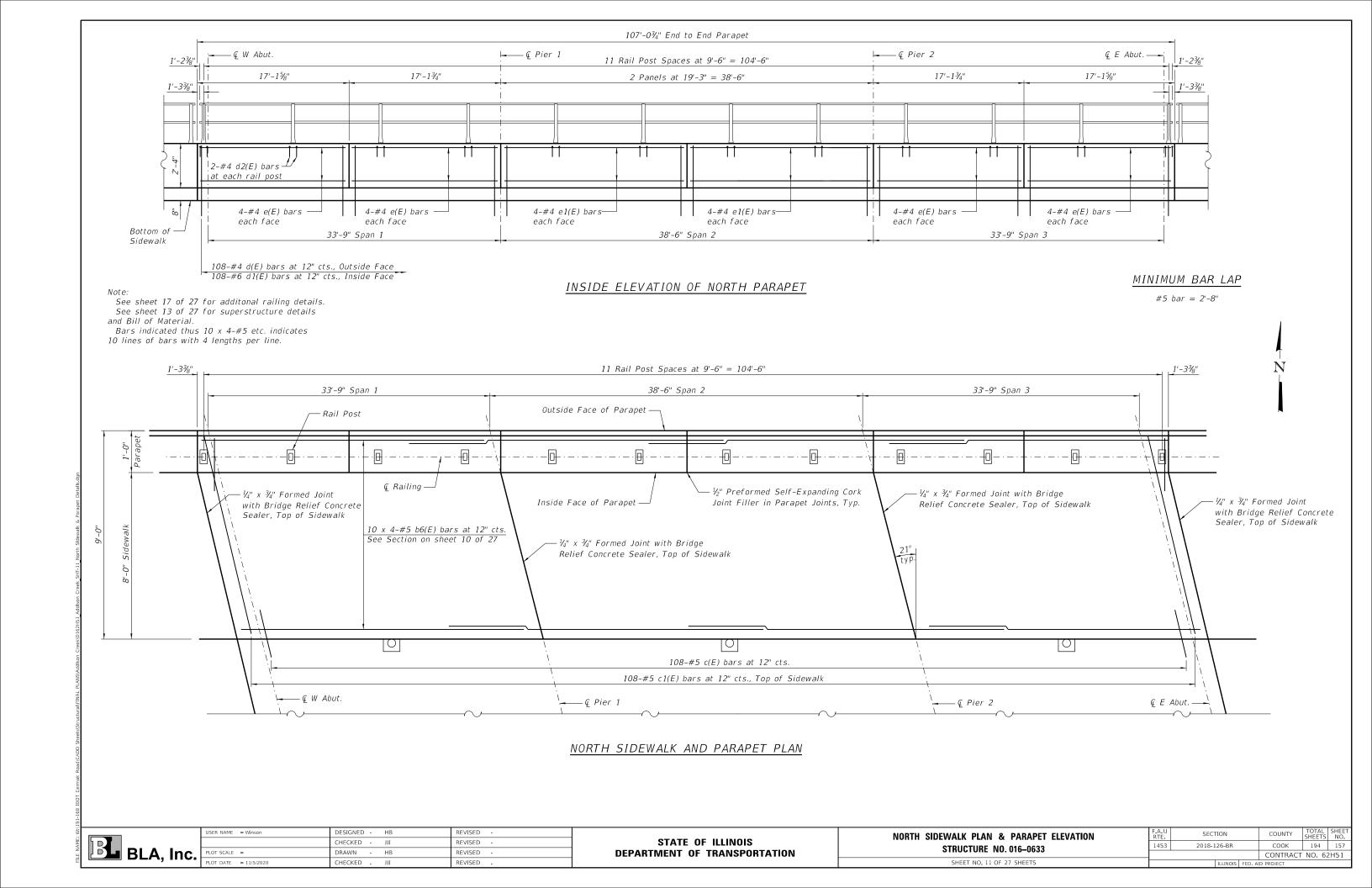
Location	Station	Offset	Theoretical Grade Elevations
W. End of E Appr. Slab	63+31.93	37.50	623.73
A3 A4	63+41.93 63+51.55	37.50 36.50	623.51 623.27
E. End of E Appr. Slab	63+61.55	36.50	622.99

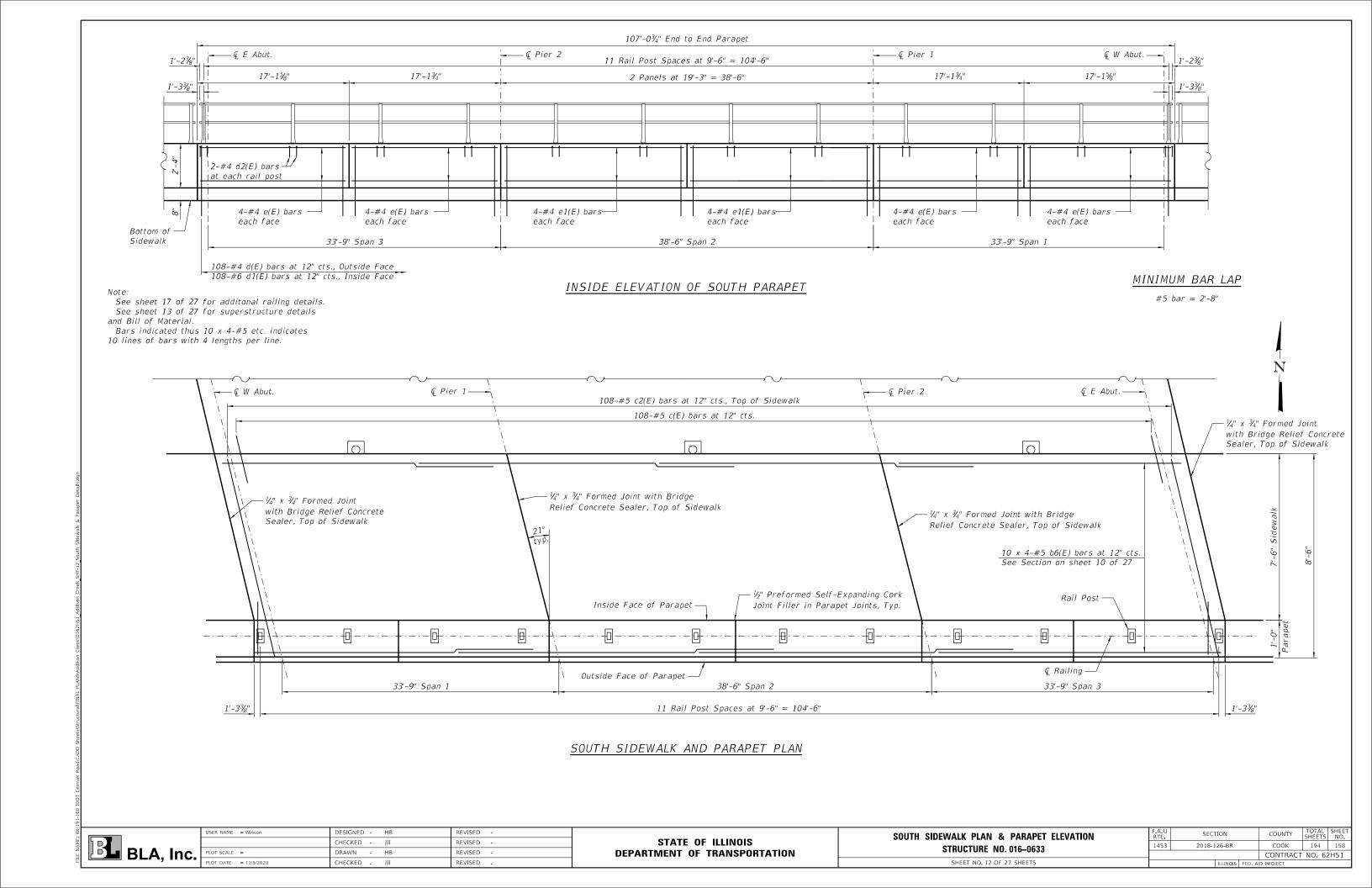
BL	BLA,	Inc.
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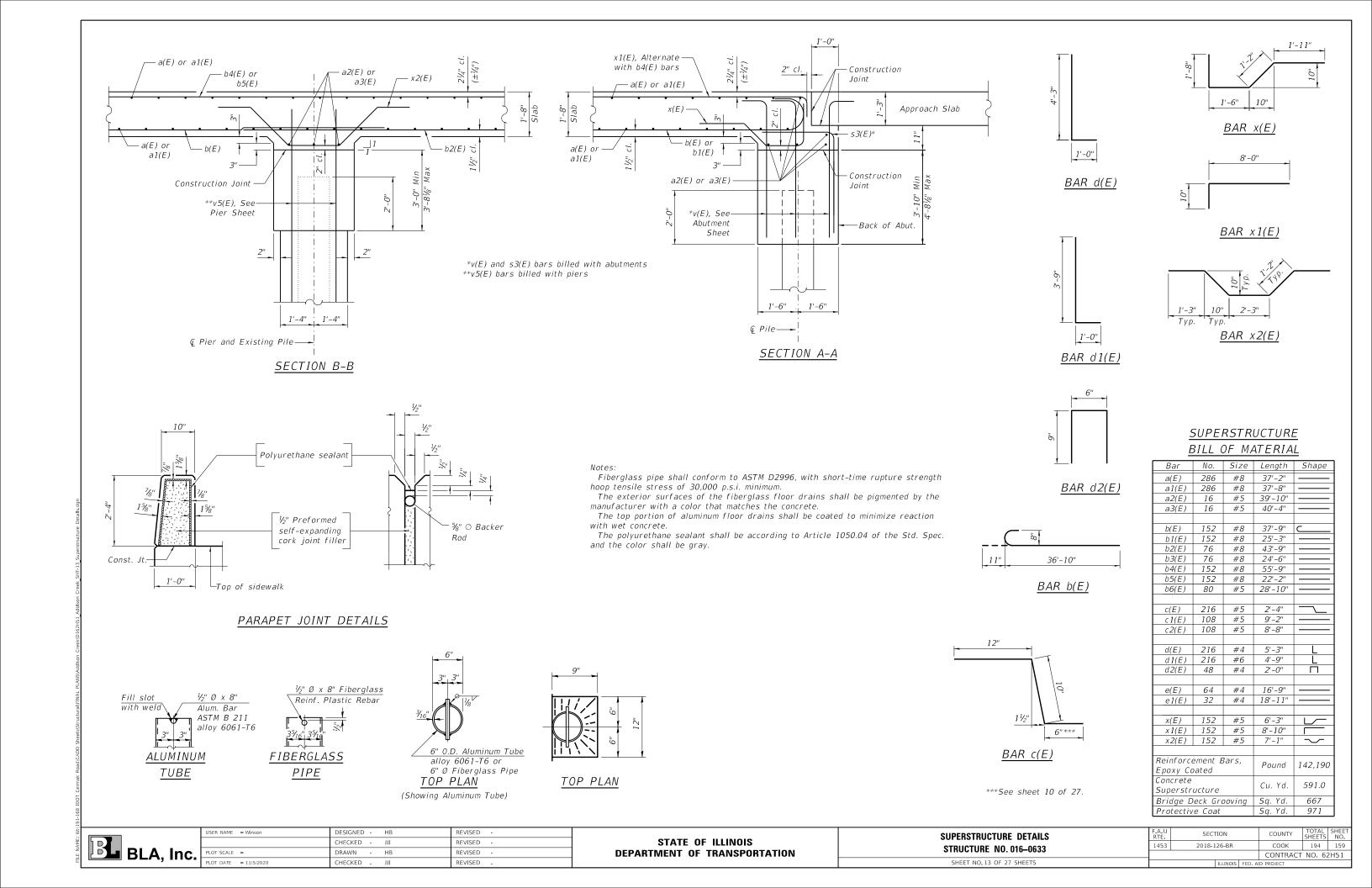
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		CHECKED - JJI	REVISED -
:	PLOT SCALE =	DRAWN - HB	REVISED -
•	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

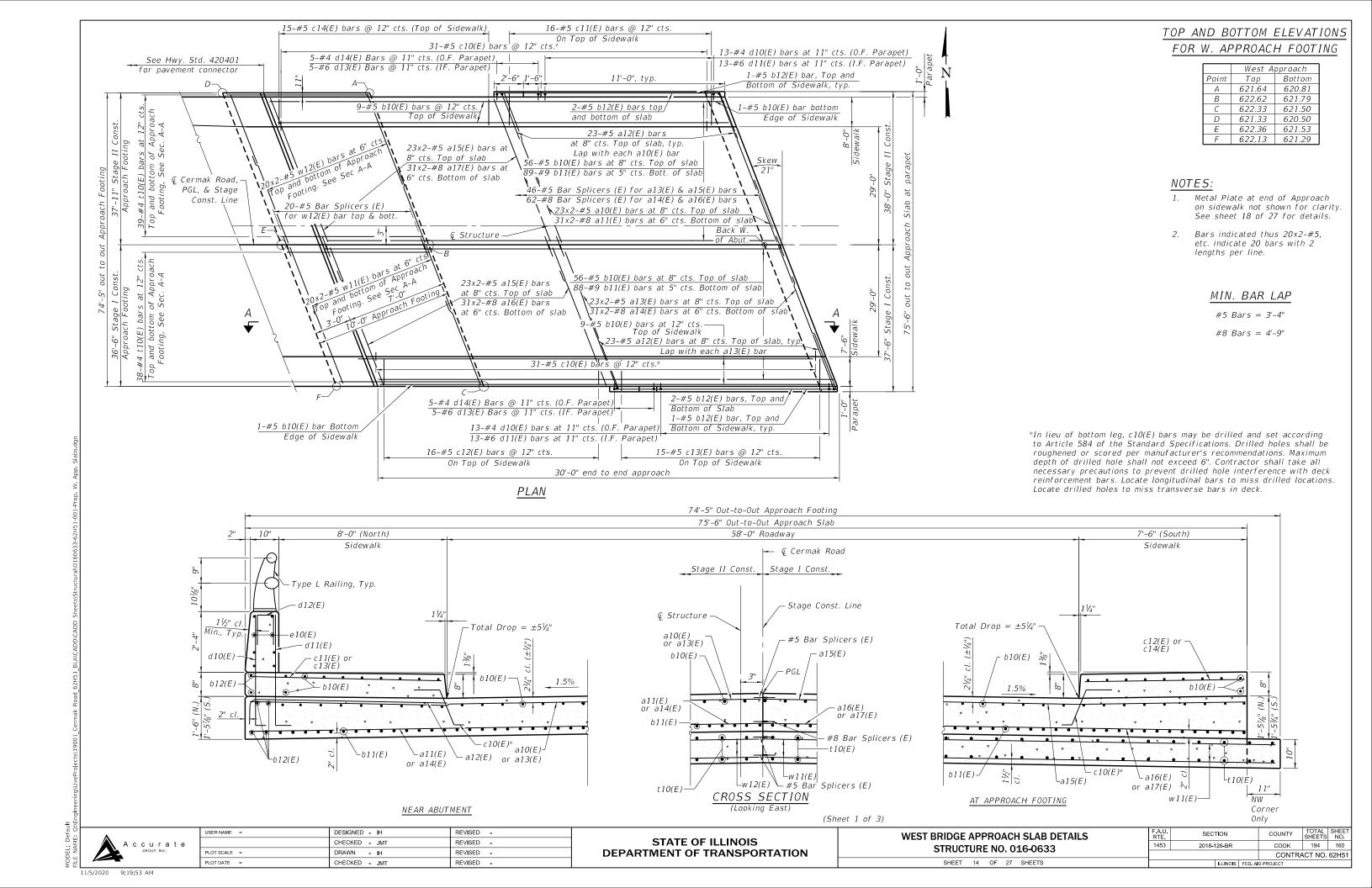


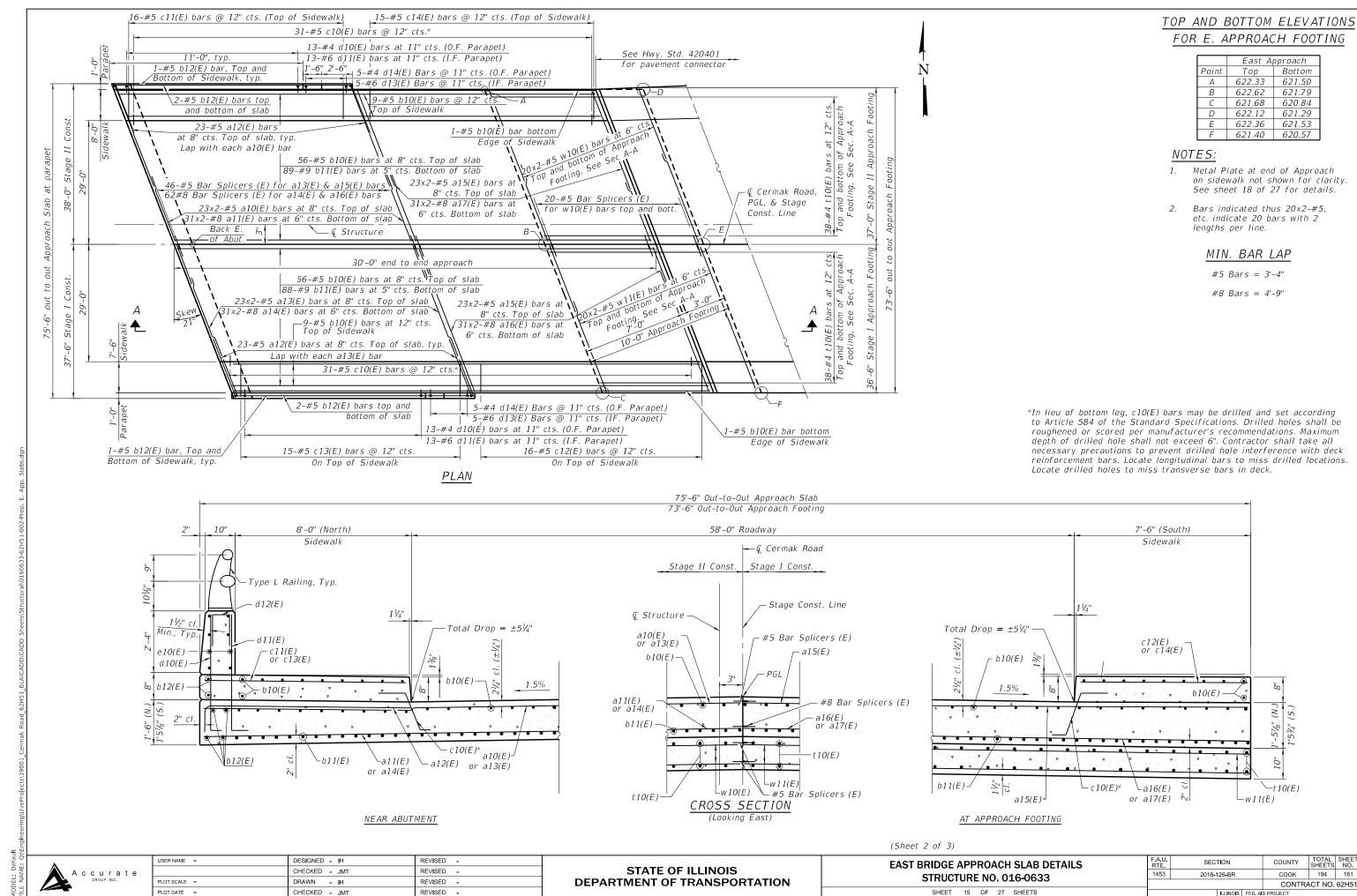




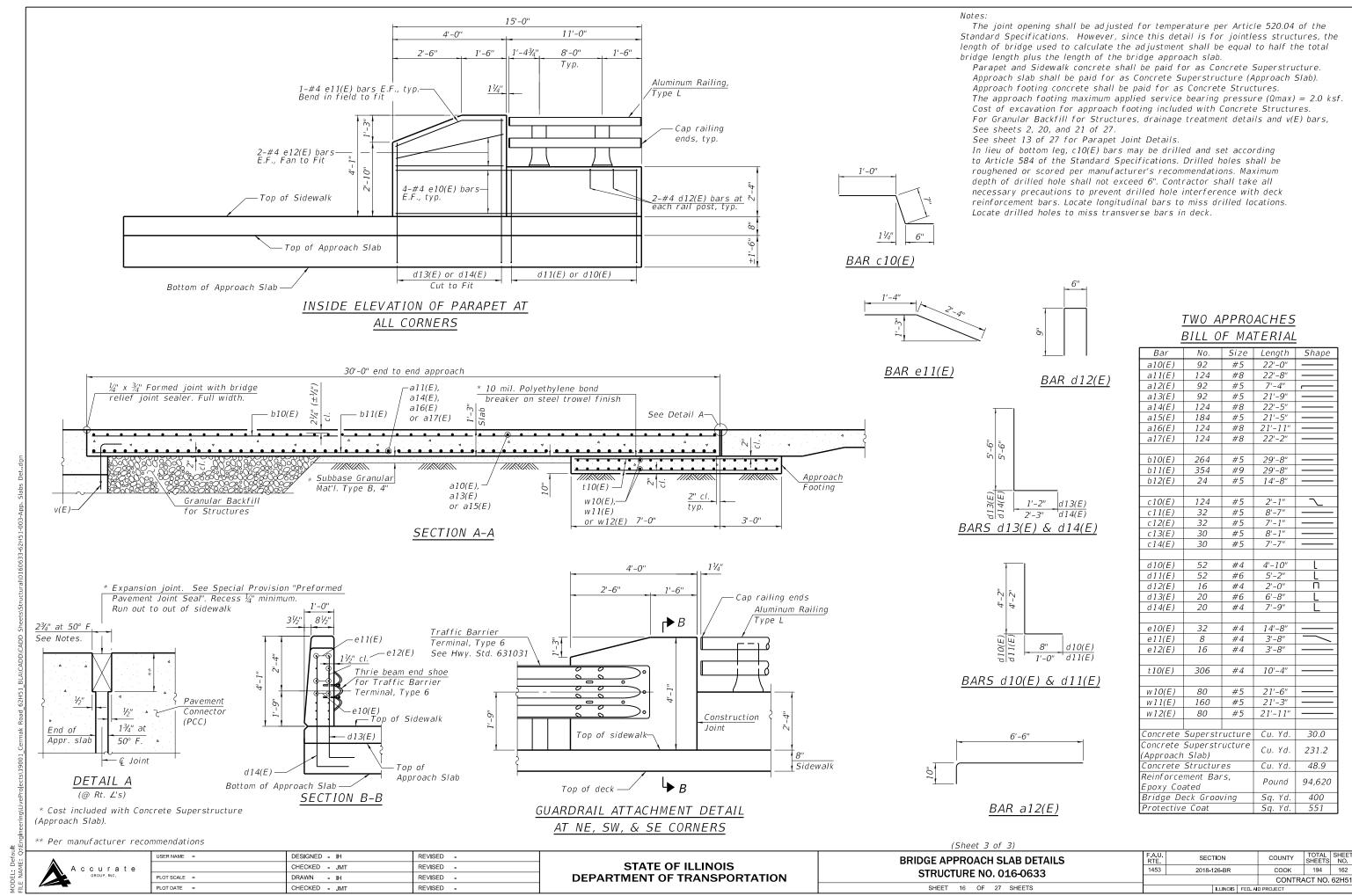


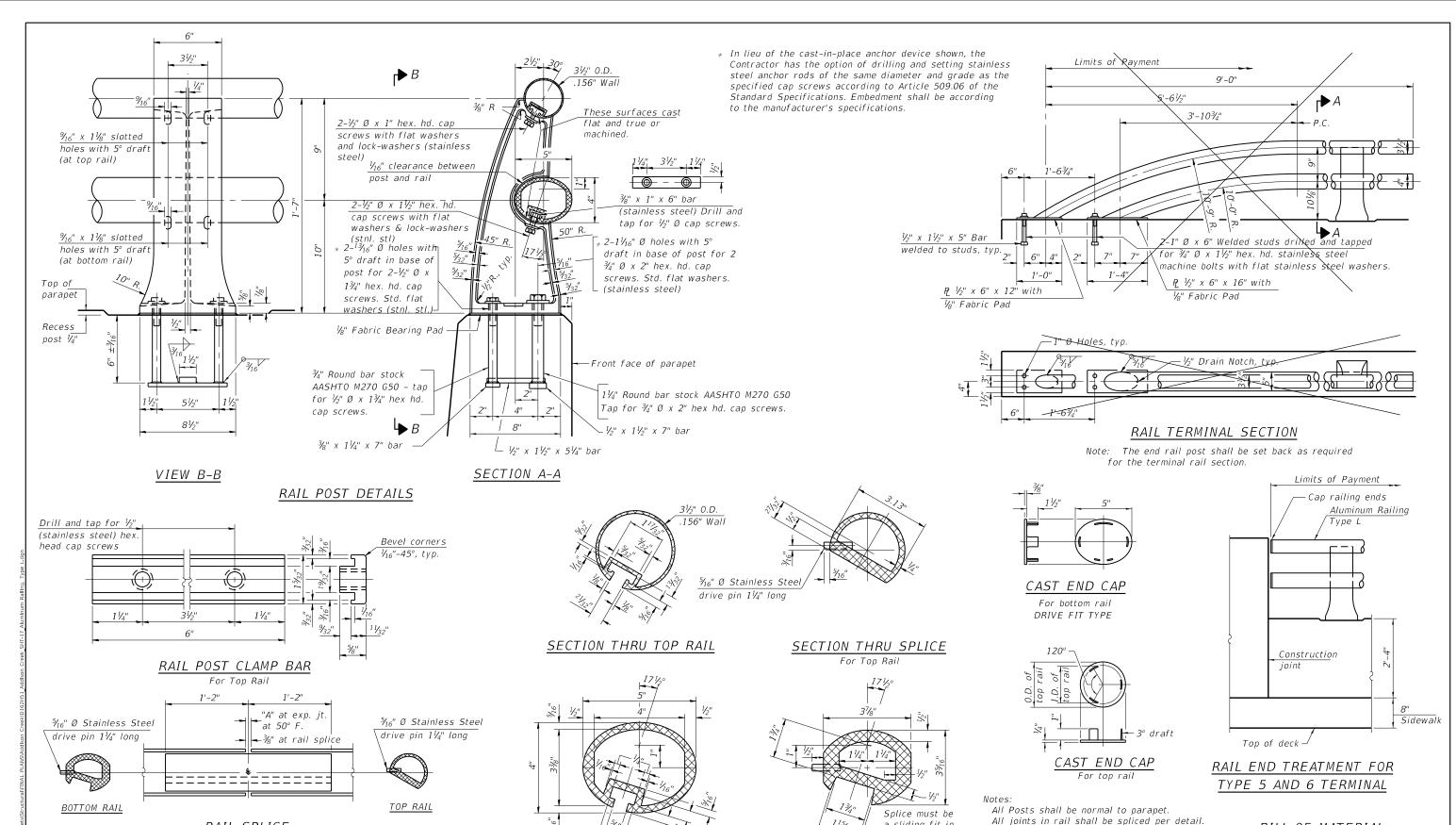






11/5/2020 9:19:54 AM





BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	258

R-20 2-17-2017 (7'-0" to 10'-0" Post spacing)

RAIL SPLICE

	· ·	_	
,	USER NAME = Winson	DESIGNED - HB	REVISED -
		CHECKED - JJI	REVISED -
BLA, Inc.	PLOT SCALE =	DRAWN - HB	REVISED -
, DL/ 1, 11101	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

< 4"

 $> 6\frac{1}{2}$ " ≤ 9 "

> 9" ≤ 13"

 $> 4'' \le 6\frac{1}{2}'' 3\frac{3}{4}''$

T = Total movement at expansion joint

as shown on the design plans.

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SEC. THRU ELLIPTICAL

RAIL SECTION

ALUMINUM RAILING, TYPE L STRUCTURE NO. 016-0633 SHEET NO. 17 OF 27 SHEETS

post spacing.

ground and low spots shimmed.

All exposed rail ends shall be capped per

Shims for 25% of the Posts. Rail elements

shall be parallel to Grade-high spots will be

See sheets 11, 12, and 16 of 27 for rail

Provide $1-\frac{1}{8}$ " and $2-\frac{1}{16}$ " Aluminum

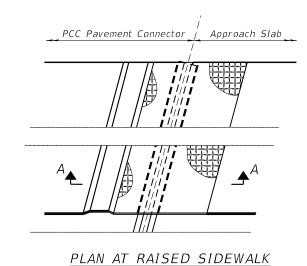
a sliding fit in

Rail Section.

SEC. THRU SPLICE

F.A.U RTE				COUNTY	TOTAL SHEETS	SHEET NO.	
1453	1453 2018-126-BR			соок	194	163	
					CONTRACT	NO. 62	2H51
		TELINOIS	EED	ΔI	D DROJECT		

SECTION AT RAISED SIDEWALK

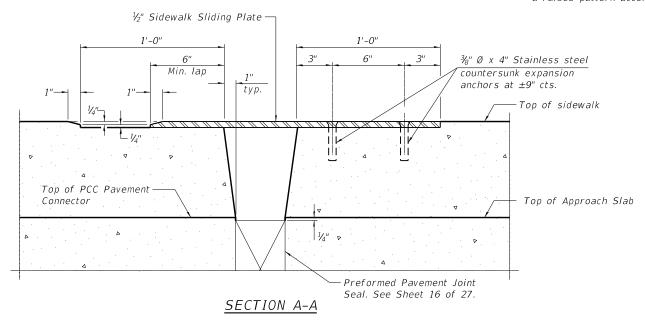


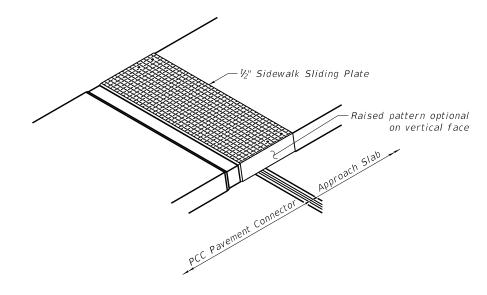
Note

Cost of Sidewalk Sliding Plate and Expansion Anchors is included in the cost of Concrete Superstructure.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The top surface of the sidewalk sliding plates shall have a raised pattern according to ASTM 786.





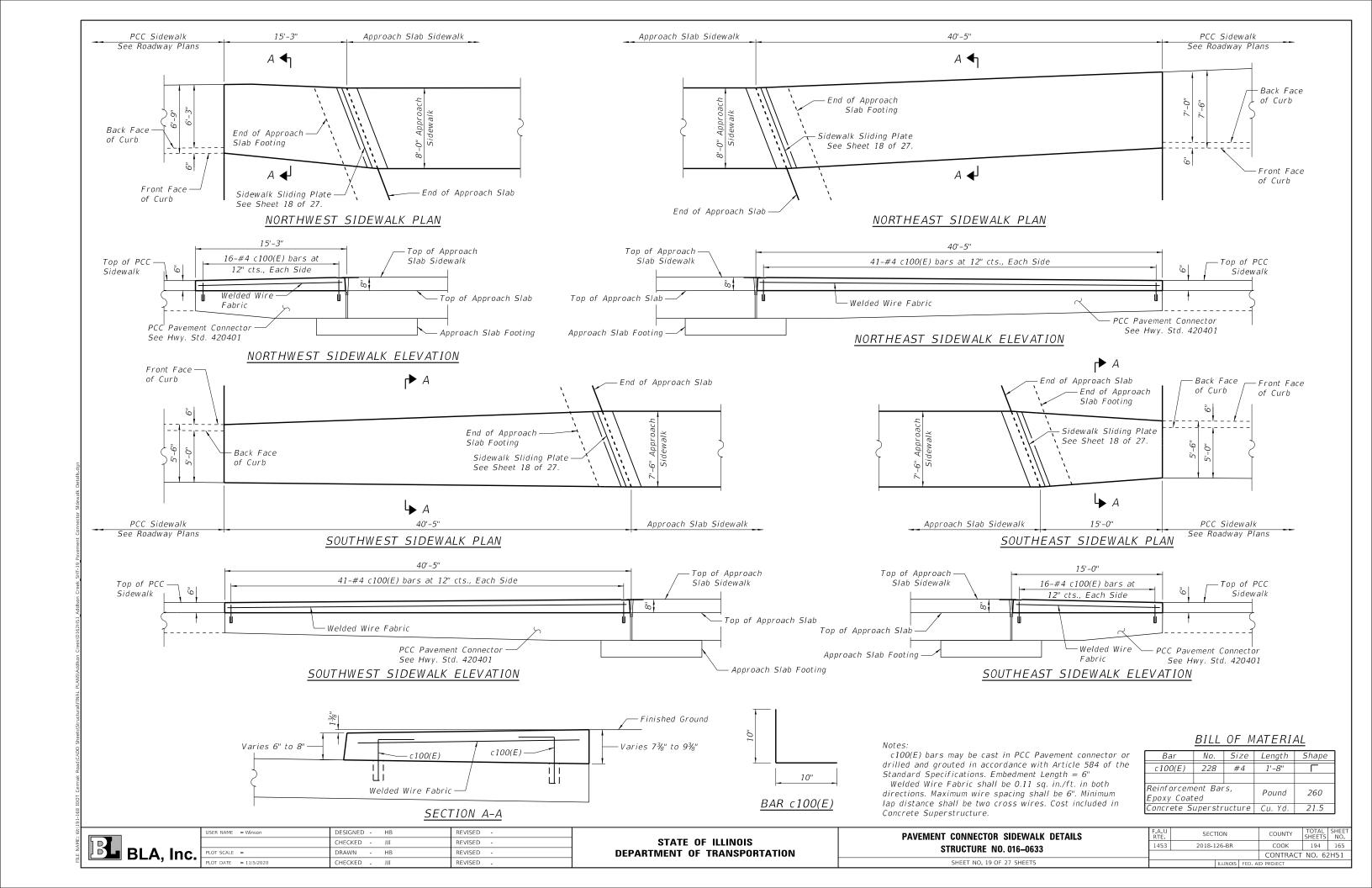
TRIMETRIC VIEW

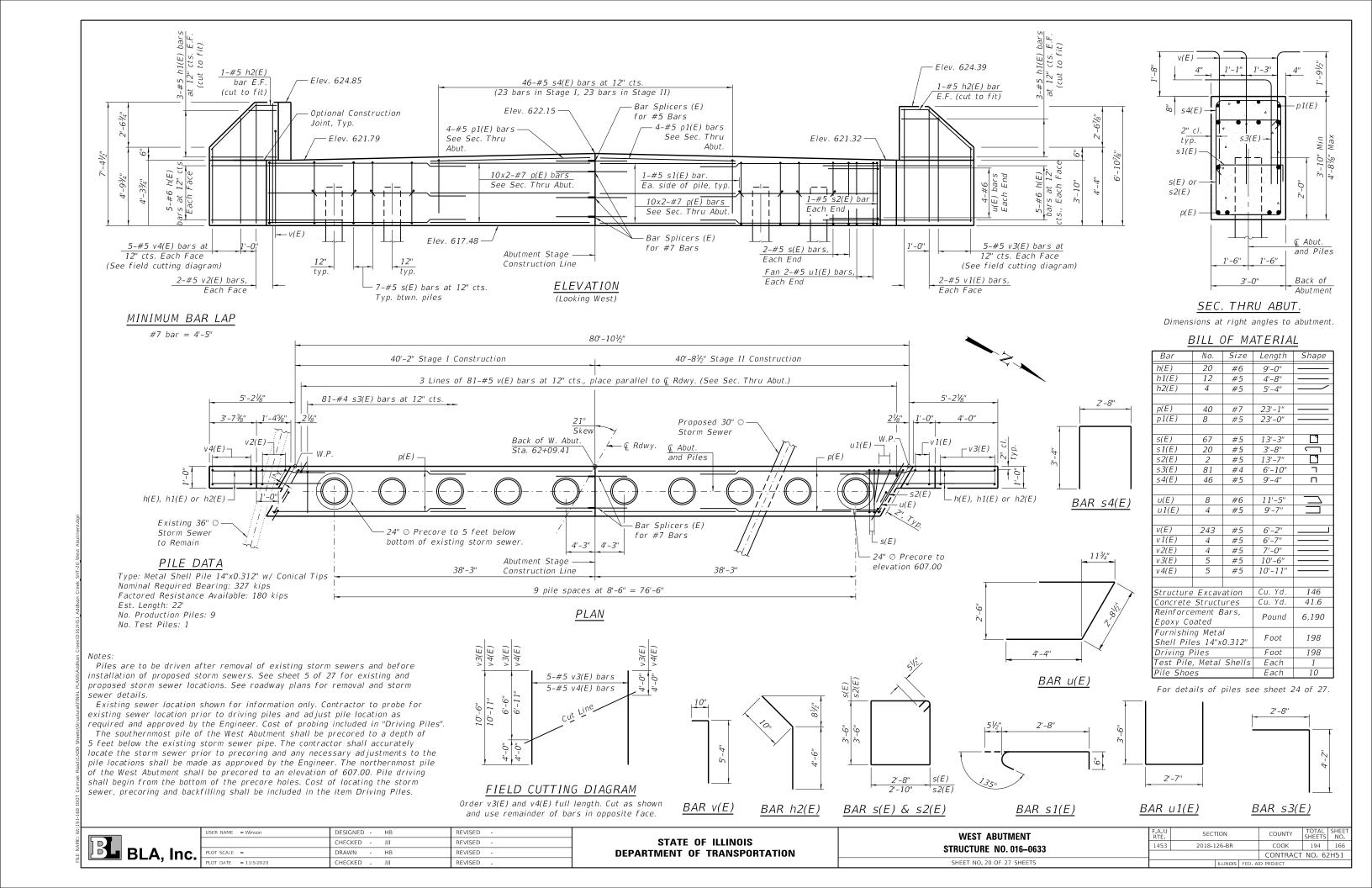
	_
BLA,	Inc.

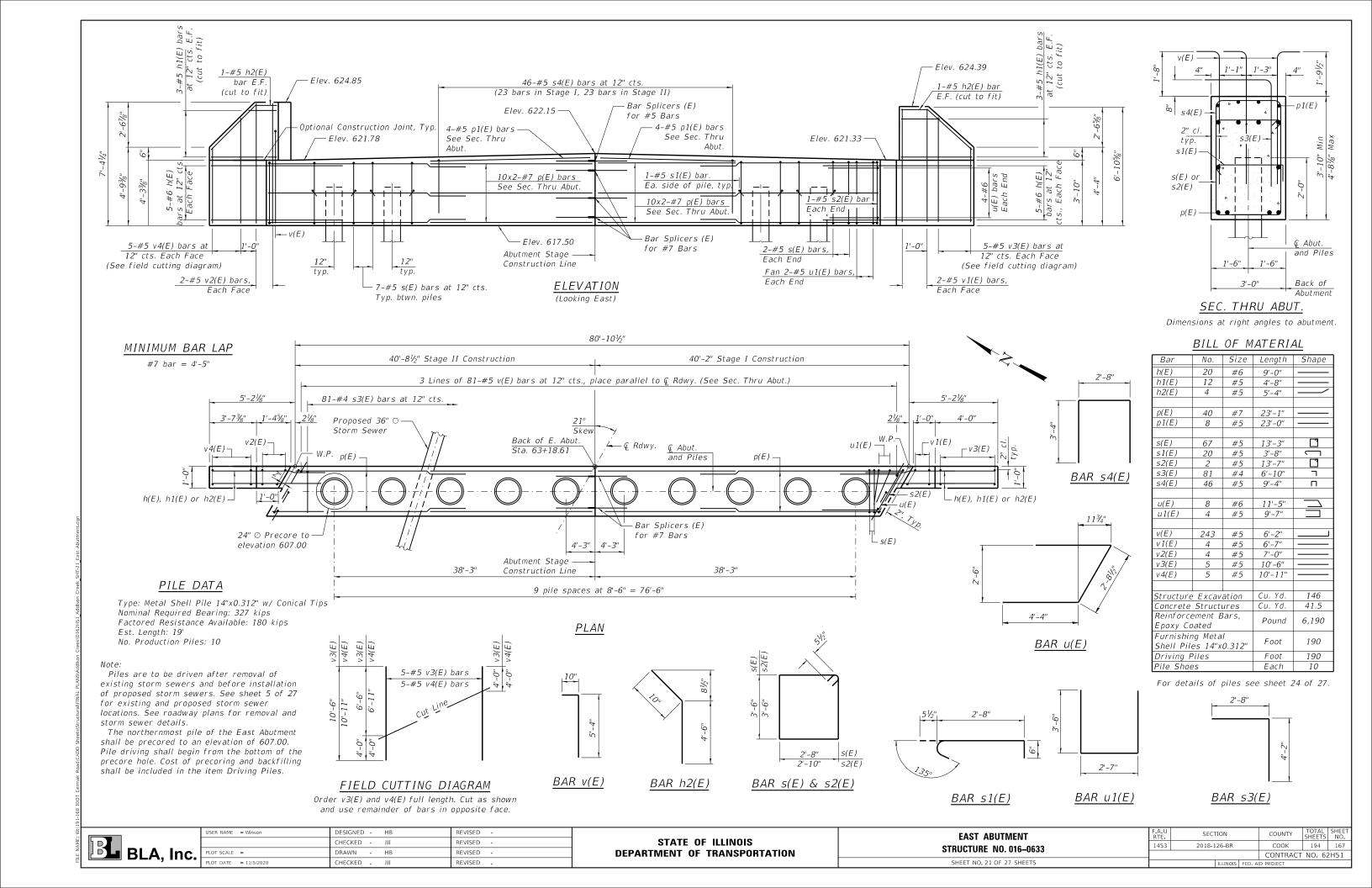
USER NAME = Winson	DESIGNED - HB	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

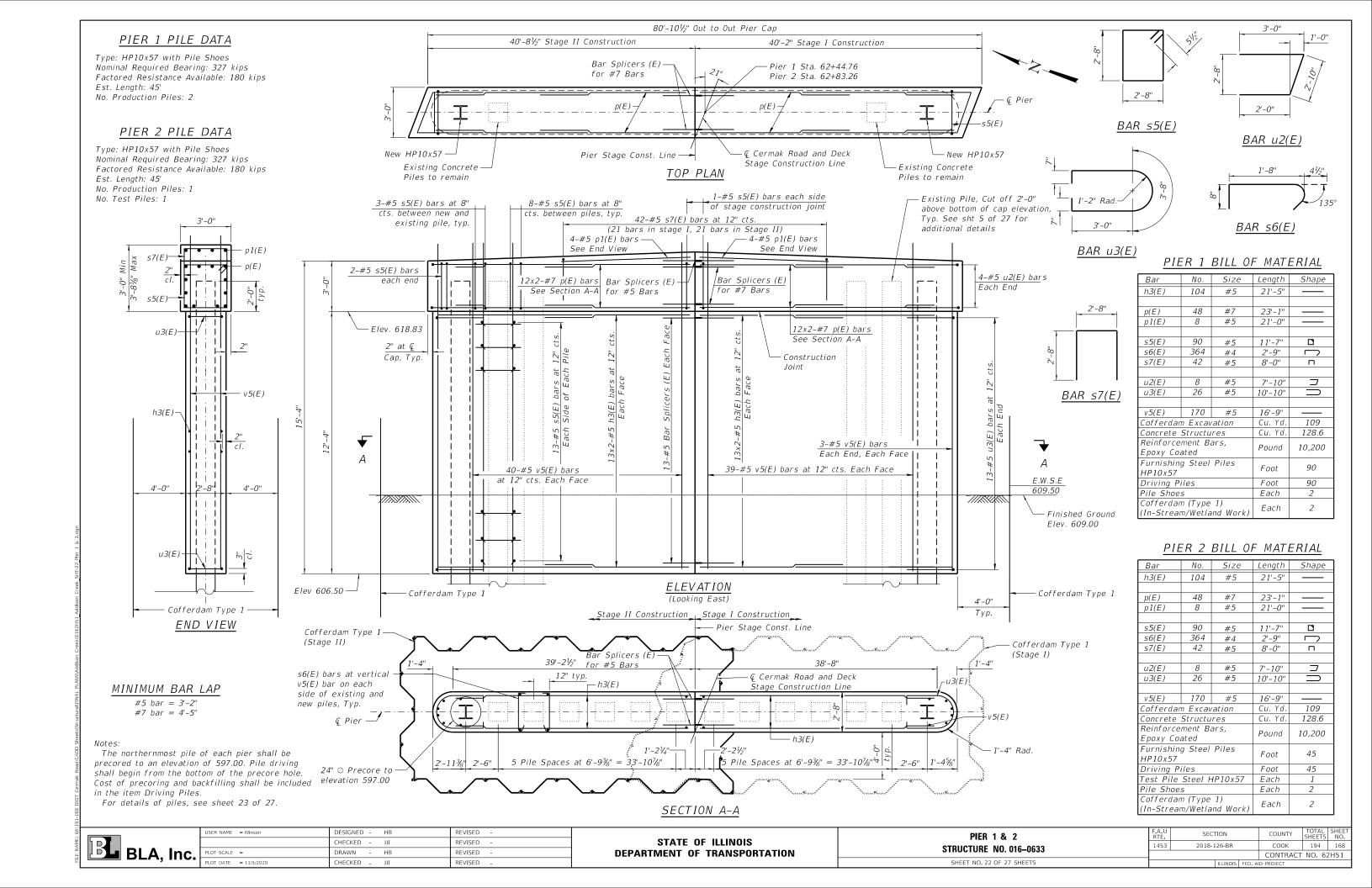
SIDEWALK SLIDING PLATE DETAILS					
STRUCTURE NO. 016-0633					
CHEET NO. 10 OF 37 CHEETC					

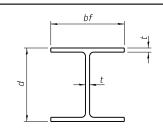
F.A.U RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.
1453	2018-126-BR		соок	194	164
			CONTRACT	NO. 62	2H51
	ILLINOIS	EED ΔI	ID PROJECT		





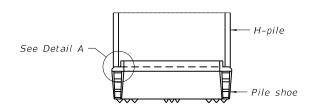




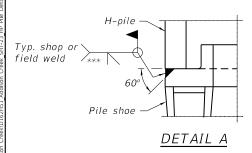


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	141/4"	14 ⁷ /8"	¹³ / ₁₆ "	30"
x102	14"	14¾"	11/ ₁₆ "	30"
x89	137/8"	143/4"	5/8"	30"
x73	135%"	14%"	1/2"	30"
HP 12x84	12½"	121/4"	11/ ₁₆ "	24"
x74	12½"	121/4"	5/8"	24"
x63	12"	12½"	1/2"	24"
x53	1 1 3/4"	12"	7/ ₁₆ "	24"
HP 10x57	10"	101/4"	%16"	24"
x42	9¾"	101/8"	7/ ₁₆ "	24"
HP 8x36	8"	81/8"	⁷ / ₁₆ "	18"



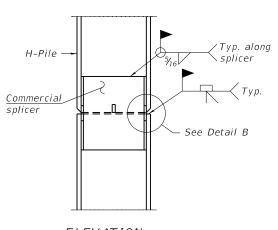
ELEVATION

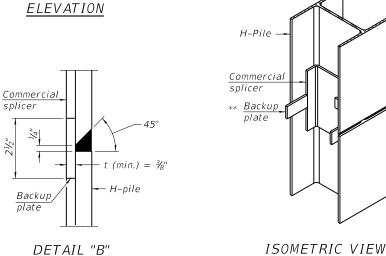


SHOE ATTACHMENT

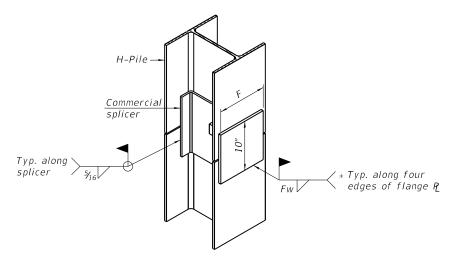
Note:

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





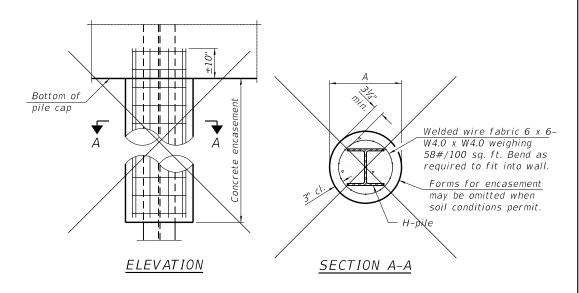
WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW

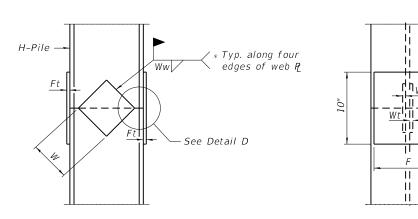
WELDED COMMERCIAL SPLICE ALTERNATE

- $_*$ Interrupt welds $\frac{1}{4}$ " 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.).

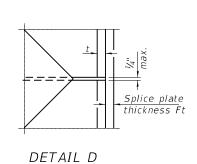


INDIVIDUAL PILE CONCRETE ENCASEMENT

(when specified)



<u>ELEVATION</u>



END VIEW

Designation	F	Ft	Fw	w	Wt	Ww
HP 14×117	121/2"	1"	7/8"	7¾"	5/8"	1/2"
x102	12½"	7/8"	3/4"	73/4"	5/8"	1/2"
x89	12½"	3/4"	11/ ₁₆ "	73/4"	5/8"	1/2"
x73	12½"	5/8"	% ₁₆ "	73/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6½"	5/8"	1/2"
x74	10"	7/8"	11/ ₁₆ "	6½"	5/8"	1/2"
x63	10"	5/8"	1/2"	6½"	1/2"	3/8"
x53	10"	5/8"	1/2"	6½"	1/2"	3/8"
HP 10x57	8"	3/4"	% ₁₆ "	5½"	1/2"	3/8"
x42	8"	5/8"	% ₁₆ "	5½"	1/2"	3/8"
HP 8x36	7"	5/8"	⁷ / ₁₆ "	41/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

F-HP

1-1-2020

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 016–0633
SHEET NO. 23 OF 27 SHEETS

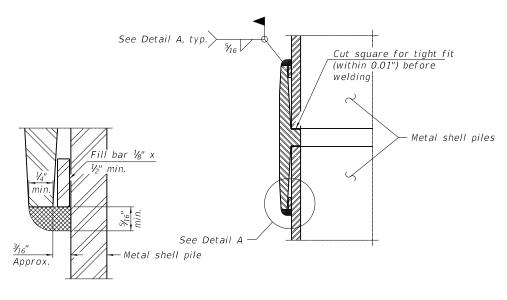
| FA. U | SECTION | COUNTY | TOTAL SHEET | NO. | 1453 | 2018-126-BR | COOK | 194 | 169 | CONTRACT | NO. 62H51 |

/∗Typ. along four ∖ edges of flange P

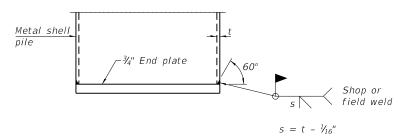


METAL SHELL PILE TABLE

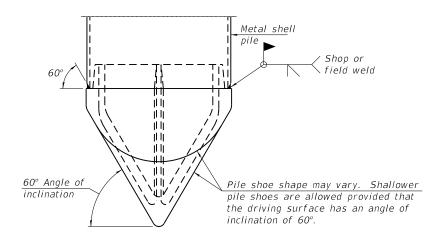
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd.³/ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



DETAIL A



END PLATE ATTACHMENT



PILE SHOE ATTACHMENT

(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80–50 or AASHTO M 103 Grade 65–35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).

1-1-2020

WELDED COMMERCIAL SPLICE

Notes:

The $\frac{1}{8}$ " x $\frac{1}{2}$ " min. fill bar may be constructed of

2 bars with a 1/8" max. gap between them.

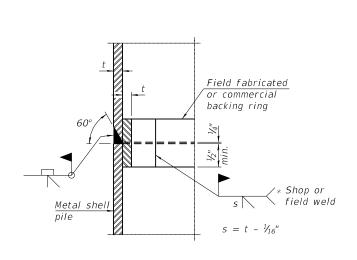
Pile segments shall be driven to solid contact with splicer before welding.

INDIVIDUAL PILE CONCRETE ENCASEMENT (When specified)

ELEVATION

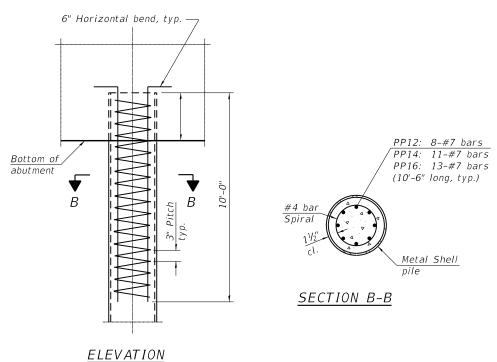
Bottom of

pile cap



COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



REINFORCEMENT AT ABUTMENTS

(Omit when concrete encasement is specified)

The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.



F-MS

USER NAME = Winson	DESIGNED - HB	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

METAL SHELL PILE DETAILS	F.A.U RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 016-0633	1453	2018-126-BR		соок	194	170
STRUCTURE NO. 010-0033				CONTRACT	NO. 62	2H51
SHEET NO 24 OF 27 SHEETS		ILLINOIS	EED A	D PROJECT		-

2'-6"

SECTION A-A

Welded wire fabric 6 x 6-

W4.0 x W4.0 weighing

Forms for concrete encasement may be omitted when soil conditions permit.

58#/100 sq. ft.

Metal shell pile

STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + $1\frac{1}{2}$ " + thread length

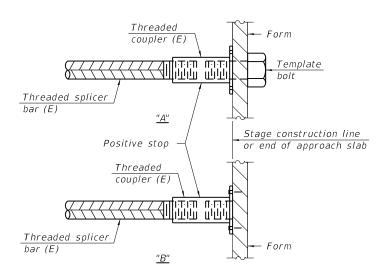
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar	No. assemblies	Minimum
Location	size	required	lap length
Top of Slab	#8	143	4'-9"
Bottom of Slab	#8	143	<i>5'-3</i> "
Top of Slab	#5	4	3'-0"
Bottom of Slab	#5	12	2'-8"
West Abutment	#7	10	4'-5"
West Abutment	#5	4	3'-2"
East Abutment	#7	10	4'-5"
East Abutment	#5	4	3'-2"
Pier 1	#7	12	4'-5"
Pier 1	#5	30	3'-2"
Pier 2	#7	12	4'-5"
Pier 2	#5	30	3'-2"
West Approach Slab	#8	62	4'-9"
West Approach Slab	#5	46	3'-4"
West Approach Slab Footing	#5	40	3'-2"
East Approach Slab	#8	62	4'-9"
East Approach Slab	#5	46	3'-4"
East Approach Slab Footing	#5	40	3'-2"

Notes:

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

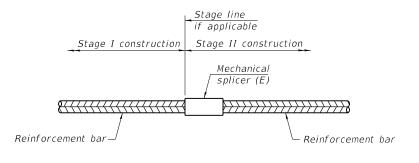
All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.



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

BSD-1

1-1-2020

	USER N
BI A. Inc.	PLOT SO
	PLOT D

		DECICNED UD	DELECED
	USER NAME = Winson	DESIGNED - HB	REVISED -
		CHECKED - JJI	REVISED -
.	PLOT SCALE =	DRAWN - HB	REVISED -
	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -

BAR	SPLICER	ASSEMBLY	AND	MECHANICAL	SPLICER	DETAILS				
	STRUCTURE NO. 016-0633									
SHEET NO. 25 OF 27 SHEETS										

F.A.U RTE.	SECT	ION		COUNTY	TOTAL SHEETS	SHEE NO.
1453	2018-1	26-BR		соок	194	171
				CONTRACT	NO. 62	2H51
		ILLINOIS	FED. A	ID PROJECT		

Wang Engineering

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148

Telephone: 630 953-9928 Fax: 630 953-9938

Project Location

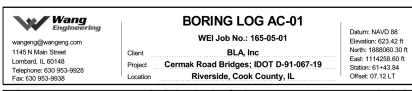
WEI Job No.: 165-05-01 BLA, Inc

Cermak Road Bridges; IDOT D-91-067-19 Riverside, Cook County, IL

BORING LOG AC-01

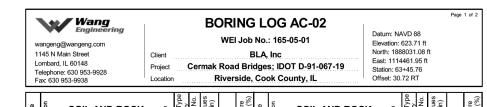
Datum: NAVD 88 Elevation: 623.42 ft North: 1888060.30 ft East: 1114258.60 ft Station: 61+43.84 Offset: 07.12 LT

Profile		Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	DESCRIPTION		Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture
622 A (622 A (622 B (620)	2,08-inch thick CONCRETEPAVEMENT- Dense, gray SANDY GRAVEL; dry	-	X	1	9 16 15	NΡ	5			occasional rig chatter	· -	X	9	24 30 46	NP	11
618	FILLRDR 2- Hard, dark gray and black SILTY CLAY LOAM, trace gravel 22FILLRDR 2-	-/ _ - - 5_	X	2	4 4 5	> 4.50 P	15				25	X	10	22 16 13	NP	9
	Soft to medium stiff, dark gray and black CLAY to SILTY CLAYRDR 1-	- -	X	3	3 3 4	0.79 B	45		595.4		-	X	11	9 10 11	NP	16
		10	X	4	2 2 3	0.66 B	30		593.9 De GI	ery stiff, gray SILTY CLAY —RDR 2— ense to very dense, gray RAVELLY SILTY LOAM to DBBLES and BOULDERS, le gravel; damp	30	X	12	7 12 32	3.28 B	22
 	RDR 4- hard drilling, 14 to 15 feet- possible cobbles and boulders-		X	5	1 2 2	0.49 B	32			RDR 2 hard drilling, 31.5 to 32.5 feet AUGER REFUSAL		×	113	50/2"	NP	
608	cobble fragments- 19 Very stiff, brown and gray to gray CLAY to SILTY CLAY, little graveRDR 1 to 2wet spoon-	15_ \sqrt{2}	×	7	2 50 <u>4</u> 3" 8 10	0.50 P	30			Run 1: 32.5 to 38.5 feet- Recovery = 43% cobbles and boulders			1	CORE		
605	5.4 Medium dense to very dense, gray SILT to SILTY LOAM, trace gravel; dry to damp RDR 2 to 3-	-	\setminus	8	23 25 26	B	11	0.0		edium dense, gray, coarse RAVELLY SAND; wet	40	\bigvee_{i}	14	4 5 16	NP	15
	GENERA	LN	от	ĖS				_		WATER LE	VE	L D	ΑТ	Α		_
Drilling Driller	Begin Drilling 02-07-2020 Complete Drilling 02-07-2020 Drilling Contractor Wang Testing Services Drill Rig CME 55 [85%] Driller R&J Logger F. Bozga Checked by C. Marin Drilling Method 3.25" IDA HSA, autohammer, backfilled upon									While Drilling At Completion of Drilling Time After Drilling Depth to Water	A		15.	50 ft 00 ft		
_	completion	er ich		+1 9. l	Jacki	meu	apo			The stratification lines represent the between soil types: the actual transi	appr	oxima	ate b	oundar	у	



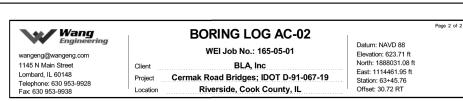
Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture
	Very dense, gray GRAVELLY SILTY LOAM, little gravel; damp —RDR 3 to 4- —hard drilling, 41 to 43.5 feet- —possible cobbles and boulders- —RDR 4 to 5- —hard drilling, 44 to 48 feet- —possible cobbles and boulders-		15	-50/ 3"-	NP	12								
565.4	Strong, light greyish white, very poor rock mass quality, damp DOLOSTONE; slightly to moderately weathered rock, slightly to moderately weathered rock, slightly to moderately weathered joints, closely spaced horizontal joints, with <0.05 to 0.2-inch opening, hard joint wall, slightly rough joint wall surface, hard infill strength, and <0.2-inch infill thickness. - Run 2: 48 to 58 feetRecovery = 100%RQD = 8%-	-	2	CORE										
	Boring terminated at 58.00 ft	60												
Begin Do	Contractor Wang Testing S	L NO Comple ervice:	te Dri	lling Drill Riç	C		55 [8	5%]		_ LEVEI ☑ ▼ NA	1	TA 5.50 ft 0.00 ft		
Drilling I									Depth to Water The stratification lines represer between soil types; the actual tr	NA t the appr	oximat	e boundar gradual.	у	

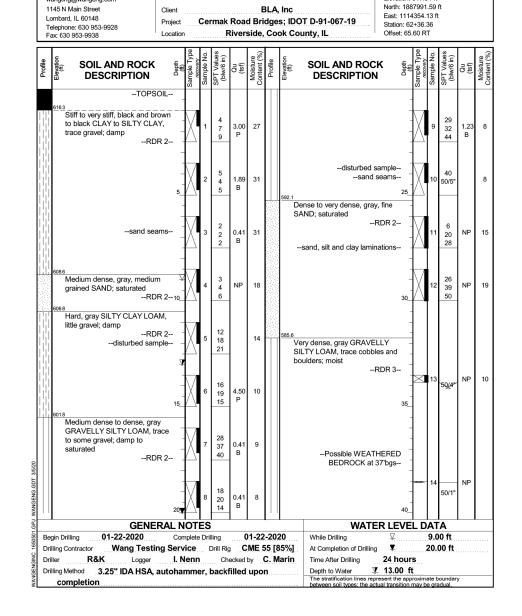


Profile	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Ty	Sample N	SPT Value (blw/6 in)	Ou (tsf)	Moisture Content (9	Profile	Soil and beautiful beautif	Moisture Content (%			
A 4	9-inch thick ASPHALT 623.0PAVEMENT- 622.3 ⁸ -inch thick CONCRETE 622.5PAVEMENT-	-	V		5		45		-\/				
	4-inch thick gray SANDY GRAVELSUB-BASEFILL-	-/-	Δ		3 5	3.00 P	15		-\rightarrow 9 23 6.1 B	5 11			
	RDR 2- Very stiff to hard, gray CLAY LOAM, trace to little gravel, crushed stone, wood chips;		\bigvee	2	13 4 3	NP	18		Very dense, gray, medium grained SAND, and gravel; wet -RDR 2-25	7 10			
	dampFILL- RDR 2-		X	3	2 5 5	6.15 B	22		Very dense, gray GRAVELLY SILTY CLAY, some gravelRDR 2interbedded medium grained sanddisturbed sample	12			
	615.0 Medium stiff to stiff, gray and black to gray CLAY to SILTY CLAY, trace gravel; damp RDR 2-	10_	X	4	4 4 5	1.48 B	27		12 19 41 44 P	50 10			
	sand seams-	_	X	5	1 2 2	0.82 B	26		RDR 3silt laminations Very dense GRAVELLY SAND; wet to saturatedRDR 3				
	Medium dense to dense, gray, medium grained SAND, trace gravel; wet to saturated RDR 2-		\bigvee	6	2 3 3	NP	20		2-inch thick silty clay seam	14			
3/5/20	007.2 Very stiff to hard, gray SILTY LOAM to SILTY CLAY LOAM, trace to some gravel, damp RDR 2-	-	X	7	4 7 12	8.20 B	14						
WANGENG.GDT	2-inch thick silt seams-	20▼	\bigvee	8	14 29 29	2.30 B	11	, O.	silt laminations possible cobbles and boulders	15			
<u>G</u>	GENERA	LN	ОТ	ĖS				-	WATER LEVEL DATA				
Beg Drill	gin Drilling 01-22-2020		plete		-)1-22						
	Drilling Contractor Wang Testing Service Drill Rig CME 55 [85%]												
۶I	Driller R&K Logger I. Nenn Checked by C. Marin												
g Drill	ling Method 3.25" IDA HSA, auto	ohar	nme	er. I	backt	filled	upo	n	Depth to Water V NA	Depth to Water The stratification lines represent the approximate boundary			
	completion							••••	The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual.				

USER NAME = WINSON	DESIGNED - HB	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - HB	REVISED -
PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -



Segin Drilling 01-22-2020 White Drilling 01-22-2020 White Drilling 15.00 ft Drilling Contractor Wang Testing Service Drill Rg CME 55 [85%] A Completion of Drilling NA Drillin	SOIL AND ROCK DESCRIPTION	(ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND RO		Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture
damp -RDR 3 Strong, light greyish white, very poor rock mass quality, damp cherty DOLOSTONE; slightly to moderately weathered rock, moderately to highly weathered joints, horizontal, oblique and vertical joints, with 0.05 to 0.2-inch joint opening, soft to hard joint wall sulface, soft infill strength, and <0.2-inch infill thickness. -Run 1: 48.0 to 58.0 feet-Recovery = 100%-Recovery = 100%	582.2 Very dense, gray LOAM to SILT' CLAY LOAM, trace cobbles and boulders; dampRDR 3-		15	-5 0/5"	ΝP	10								
moderately to highly weathered 50_ joints, horizontal, oblique and vertical joints, with 0.05 to 0.2-inch joint opening, soft to hard joint wall, slightly rough to rough joint twall surface, soft infill strength, and <0.2-inch infill thickness. Run 1: 48.0 to 58.0 feet	dampRDR 3- 575.7 Strong, light greyish white, very poor rock mass quality, damp cherty DOLOSTONE; slightly to		16	50/1"	NP									
-RQD = 19% 55 55 Boring terminated at 58.00 ft GENERAL NOTES Begin Drilling 01-22-2020 Complete Drilling 01-22-2020 While Drilling ♀ 15.00 ft Drilling Contractor Wang Testing Service Drill Rig CME 55 [85%] At Completion of Drilling ▼ 20.00 ft	moderately to highly weathered joints, horizontal, oblique and vertical joints, with 0.05 to 0.2-inch joint opening, soft to hard joint wall, slightly rough to rough joint wall surface, soft infill strength, and <0.2-inch infill thickness.	-	17		NP									
Boring terminated at 58.00 ft GENERAL NOTES Begin Drilling 01-22-2020 Complete Drilling 01-22-2020 While Drilling ↓ 15.00 ft Drilling Contractor Wang Testing Service Drill Rig CME 55 185% At Completion of Drilling ▼ 20.00 ft														
	Boring terminated at 58 00 ft								. was					
	GENERA Regin Drilling 01-22-2020					11-22	-201	20						_
		Service I. Nenr	I	Drill Rig	ecked	ME 5	55 [8 C. M	35%]	At Completion of Drill Time After Drilling	ing ▼ NA				



BORING LOG AC-03

WEI Job No.: 165-05-01

BLA, Inc

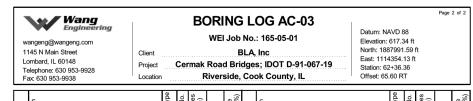
Datum: NAVD 88

Elevation: 617.34 ft

Wang Engineering

Client

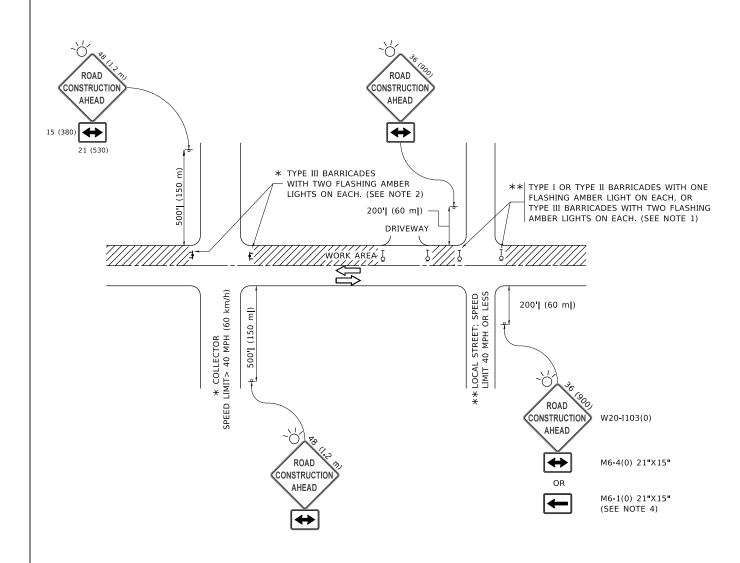
wangeng@wangeng.com 1145 N Main Street



Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Typ	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	g si m D jo	tedium strong, light greyish ray, very poor rock mass quality lightly rough joint wall, noderately to highly weathered IOLOSTONE, closely spaced ints, horizontal, vertical, and blique joints with 0.05-inch to reater than 0.2-inch joint pening, none infill, hard joint rall. Run #1: 41 to 49 feet. RECOVERY = 97%- RQD = 0%-	45		15		NP										
	s m D c v g o w	ray, very poor rock mass quality lightly rough to rough joint wall, noderately to highly weathered IOLOMITIC LIMESTONE, very losely spaced joints, horizontal, ertical, and oblique joints with reater than 0.2-inch joint pening, none infill, hard joint rall. -Run #2: 49 to 55 feet-RECOVERY = 96% -RQD = 5%-oring terminated at 30.00 ft															
PJ WANGENG.GDT 3/5/20		CENEDA	60_	OT							WATER						
96 Be	-i- D "	GENERA		_	ES e Dri)1-22	200	20	WATER						
Dri	gin Dril illing Co iller illing M	ontractor Wang Testing S R&K Logger	Depth to Water 1	↓ 4 hour 3.00 fr	s t	20.0	00 ft 00 ft										
WAN	con	npletion	The stratification lines represe between soil types: the actual t	nt the app ransition	roxim may b	ate b e gra	oundar adual.	′									



	USER NAME = Winson	DESIGNED - HB	REVISED -
		CHECKED - JJI	REVISED -
	PLOT SCALE =	DRAWN - HB	REVISED -
٠.	PLOT DATE = 11/5/2020	CHECKED - JJI	REVISED -



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.
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
 b) 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
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
 4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
 BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- 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
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

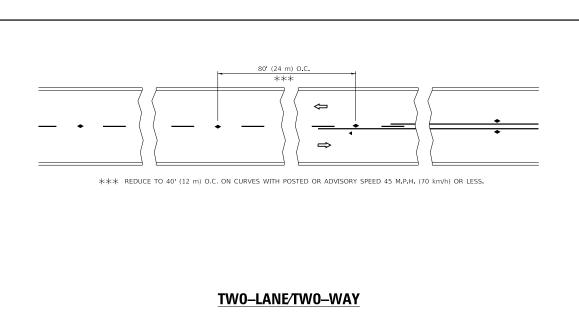
All dimensions are in inches (millimeters) unless otherwise shown.

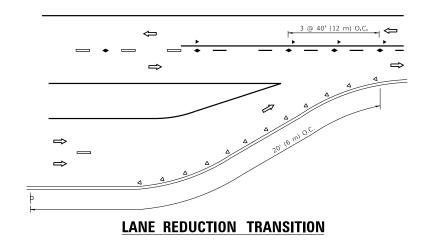
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

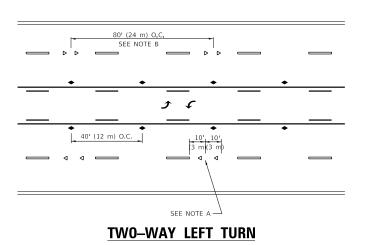
| SHEET 1 OF 1 SHEETS STA. TO STA.

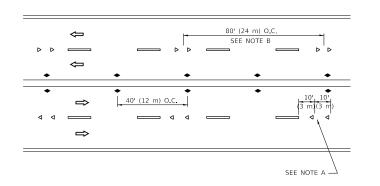
-10 -1-- 2/4/2010 10/27/07

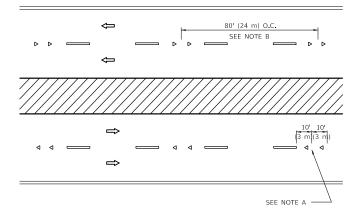




SEE FIGURE 3B-14 MUTCD

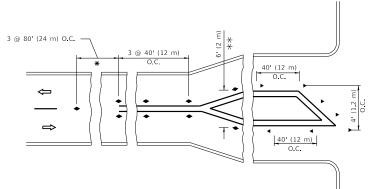


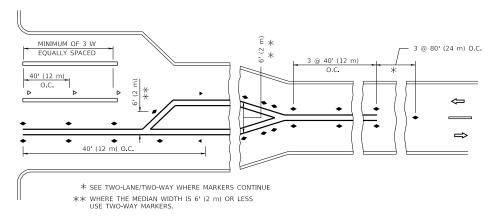




MULTI-LANE/UNDIVIDED







TURN LANES

GENERAL NOTES

- 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.
- MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.
- 4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

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.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

SYMBOLS

ONE-WAY AMBER MARKER

TWO-WAY AMBER MARKER

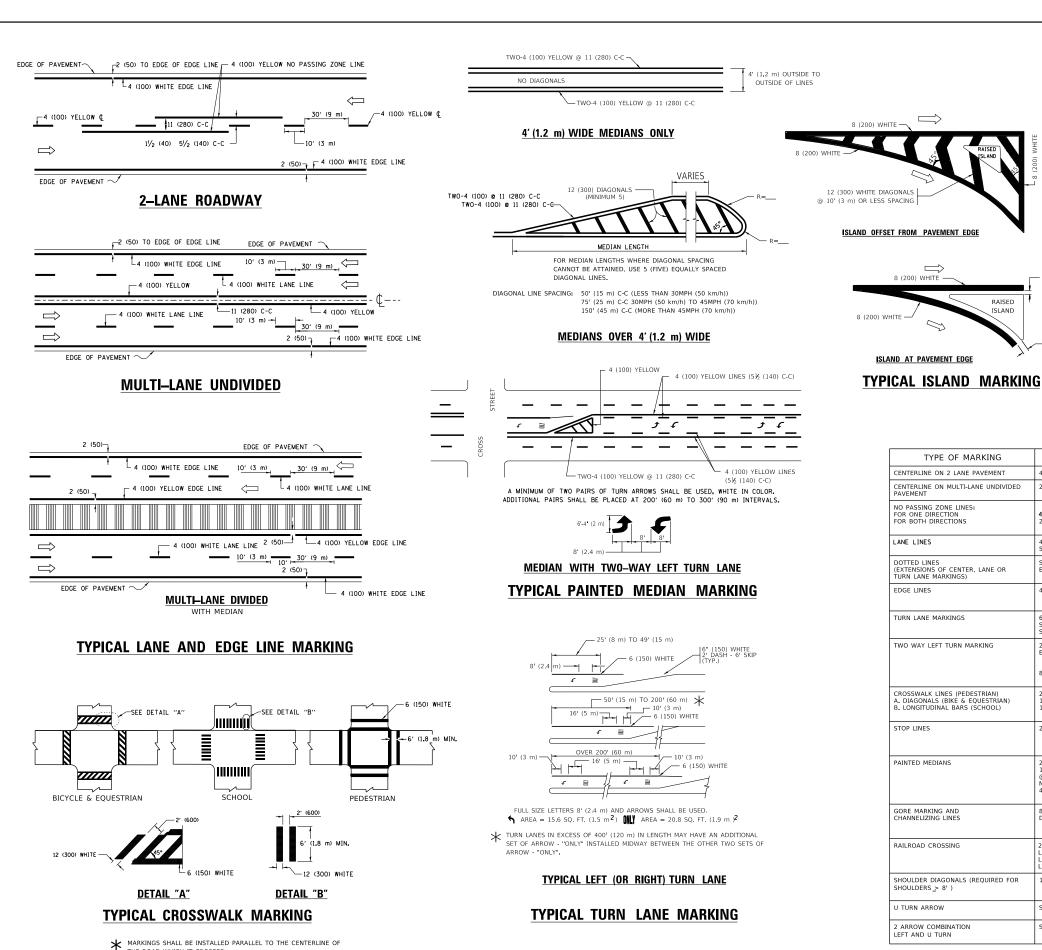
ONE-WAY CRYSTAL MARKER (W/O)

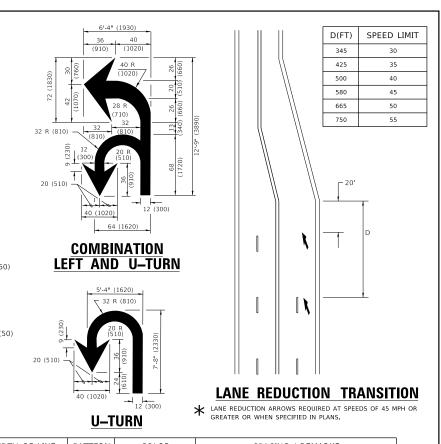
— YELLOW STRIPE

WHITE STRIPE

jects(Diststd22x34(CADData(CADSne

ult w:\\ILO84EBIDINTEG.:Illinois.gov:PWIDOT\Documents\IDOT. Office





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	5½ (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	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (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 2' (600) APART 5' (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 PEACH "X"=54.0 SQ. FT. (5.0 m P
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.

SCALE: NONE

8 (200) WHITE -

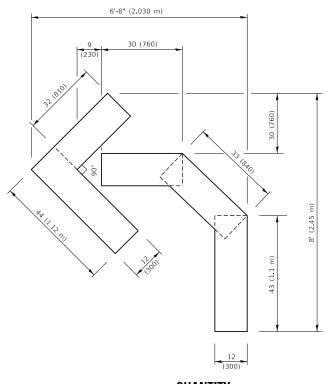
RAISED

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

JSER NAME = footemj EVERS DESIGNED -C. JUCIUS 09-09-09 DRAWN REVISED C. JUCIUS 07-01-13 HECKED REVISED -DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

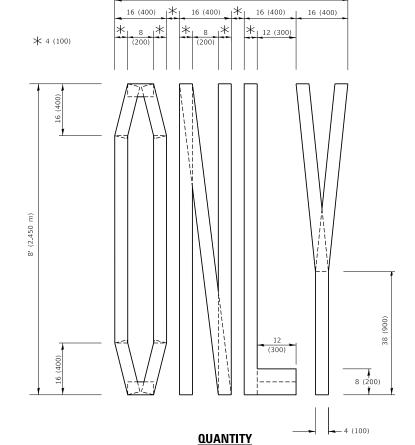
SECTION DISTRICT ONE 1453 2018-126-BR COOK 194 | 176 TYPICAL PAVEMENT MARKINGS TC-13 CONTRACT NO. 62H51 OF 2 SHEETS STA. SHEET 1



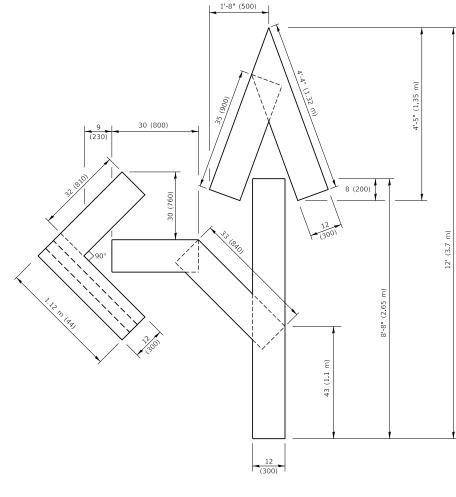
QUANTITY

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

6' (2 m)



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

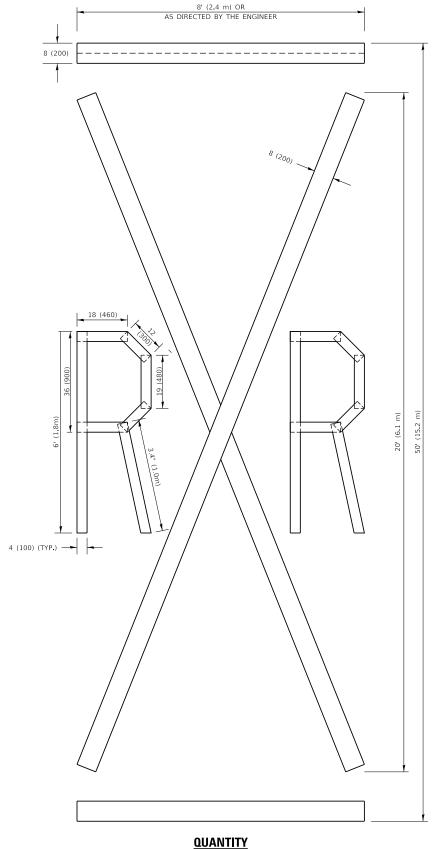


QUANTITY

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.



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

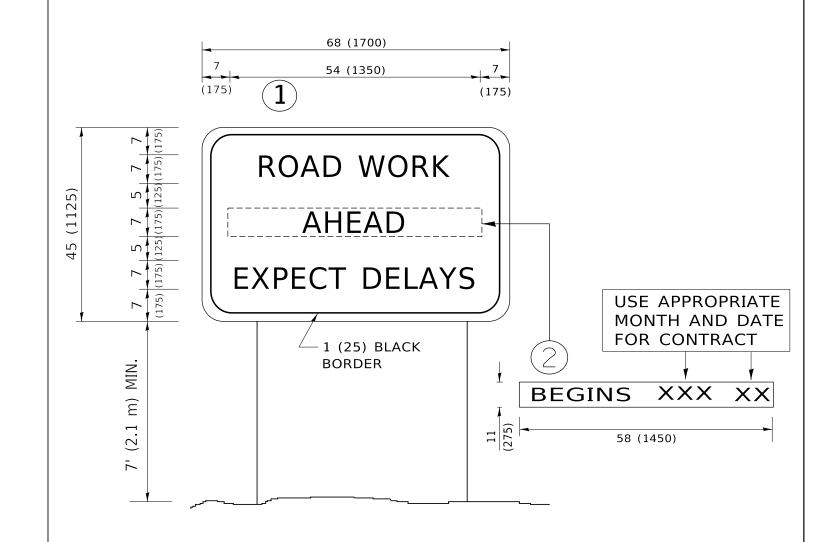
> All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = footemj	DESIGNED -	REVISED	- T. RAMMACHER 03-02-98
	DRAWN -	REVISED	- E. GOMEZ 08-28-00
PLOT SCALE = 50.0068 ' / in.	CHECKED -	REVISED	- E. GOMEZ 08-28-00
PLOT DATE = 3/4/2019	DATE - 09-18-94	REVISED	- A. SCHUETZE 09-15-16

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SHORT TE	RM	PAV	EMENT	MARKIN	IG LETTER	S AND SYMBOLS	
SCALE: NONE	SHEET	1	OF :	l SHEET	S STA.	TO STA.	

F.A.U RTE	SECT	ΠΟΝ		COUNTY	TOTAL SHEETS	SHEET NO.
1453	2018-	126-BR		COOK	194	177
	TC-16			CONTRACT	NO. 6	2H51
		ILLINOIS	FED. A	ID 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.

SHEET

6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)

SCALE: NONE

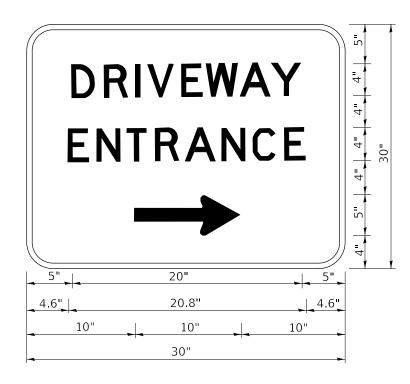
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

USER NAME = footemj	DESIGNED -	REVISED	- R. MIRS 09-15-97	ı
	DRAWN -	REVISED	- R. MIRS 12-11-97	i
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED	-T. RAMMACHER 02-02-99	DEP
PLOT DATE = 3/4/2019	DATE -	REVISED	- C. JUCIUS 01-31-07	1

STATI	E OI	F ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

	ARTE	RIAL ROAD		F.A.U RTE	SECTION
	INFORM	ATION SIGN		1453	2018-126-BR
	IIVI OIII	MATION SIGN			TC-22
1	OF 1	SHEETS STA.	TO STA.		ILLINOIS FED



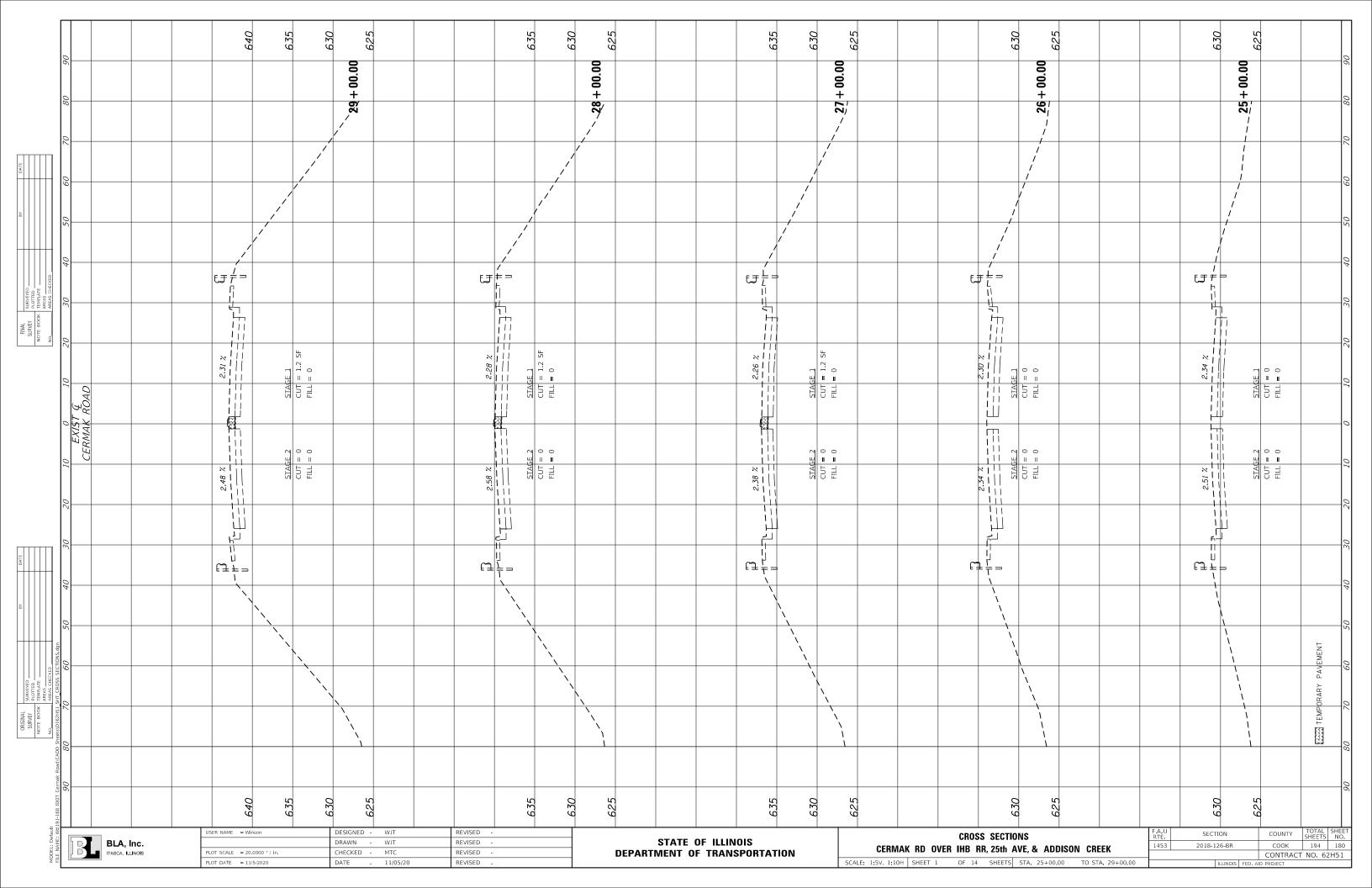
3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

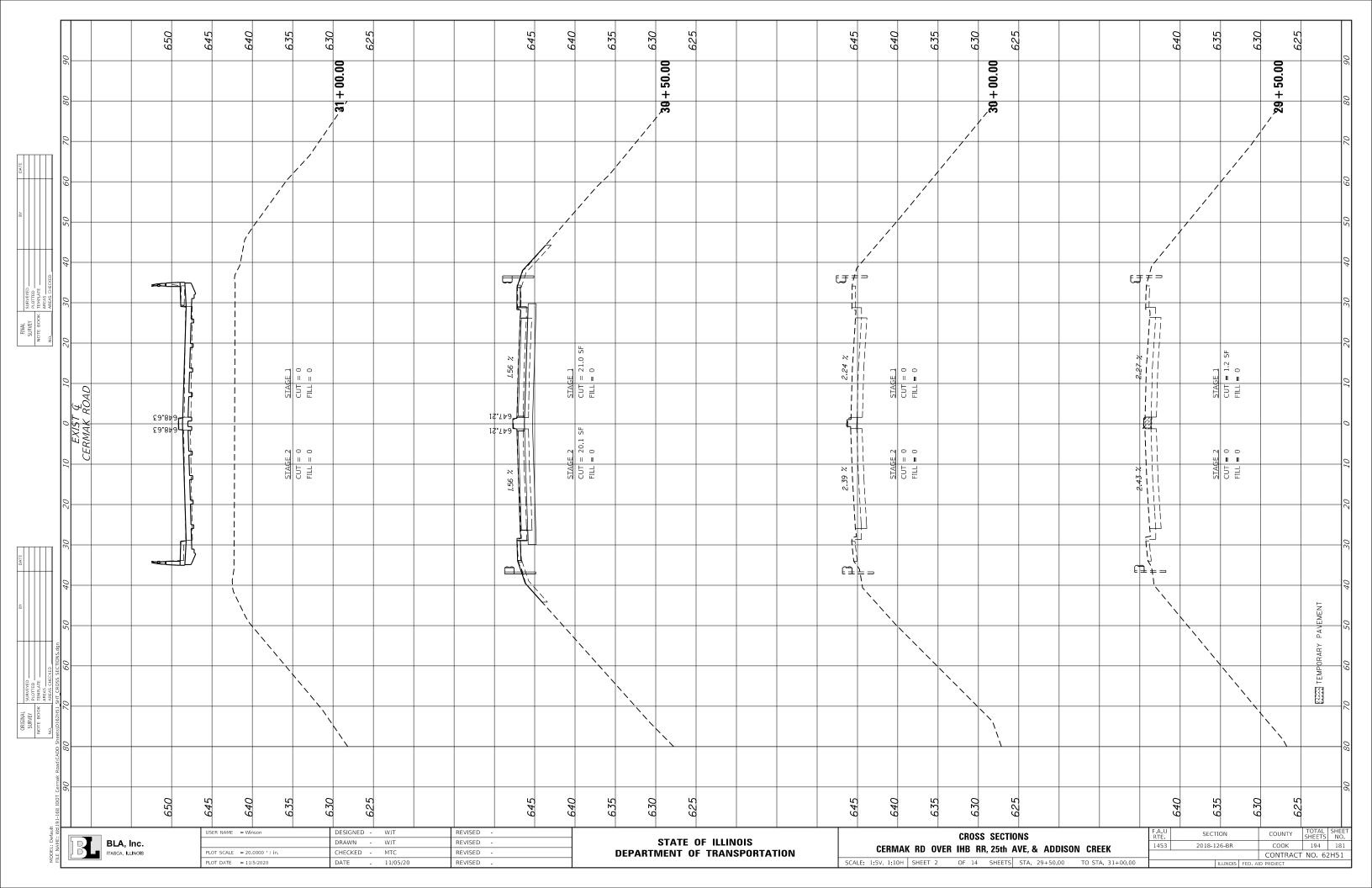
NOTES:

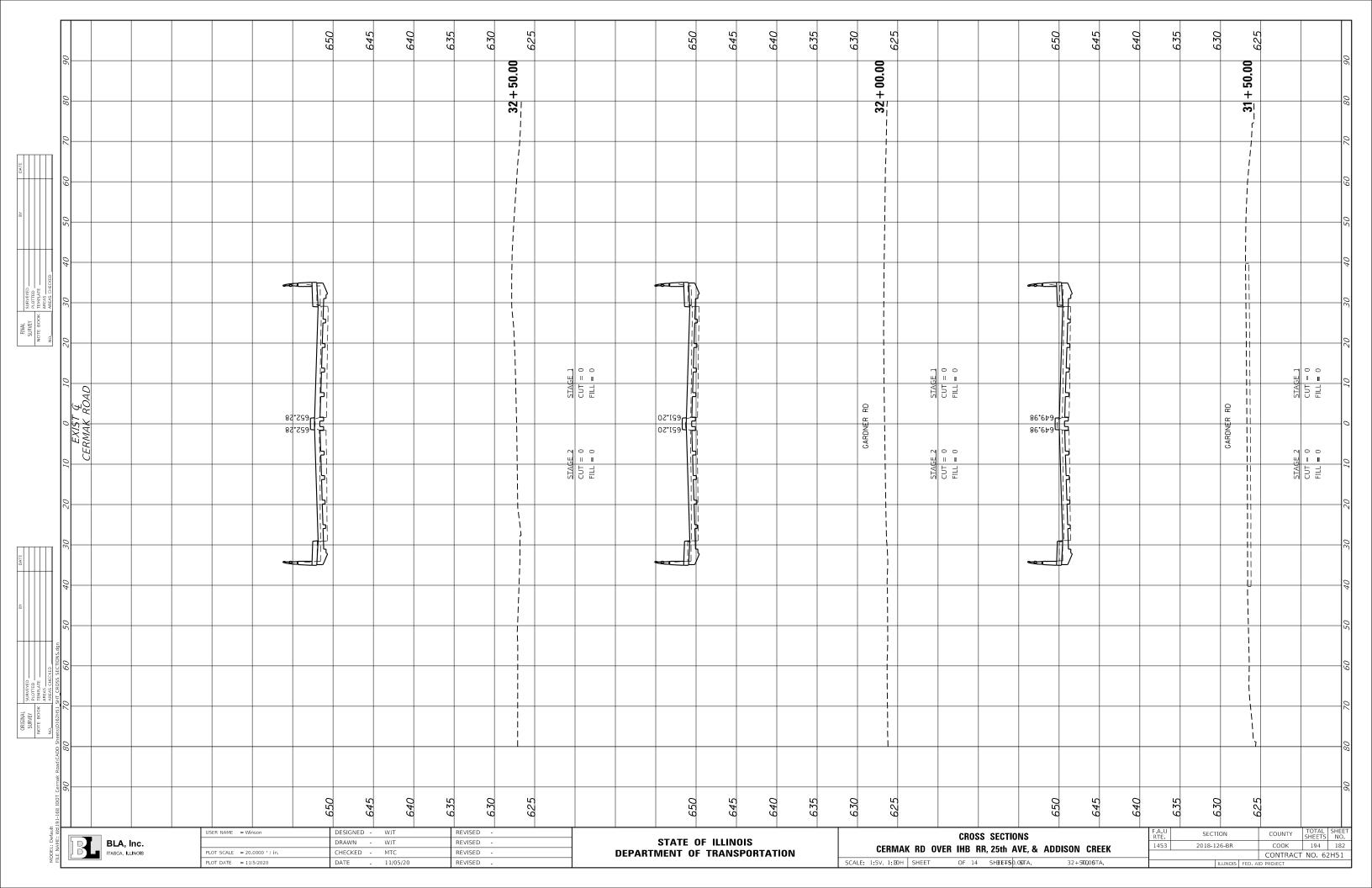
- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

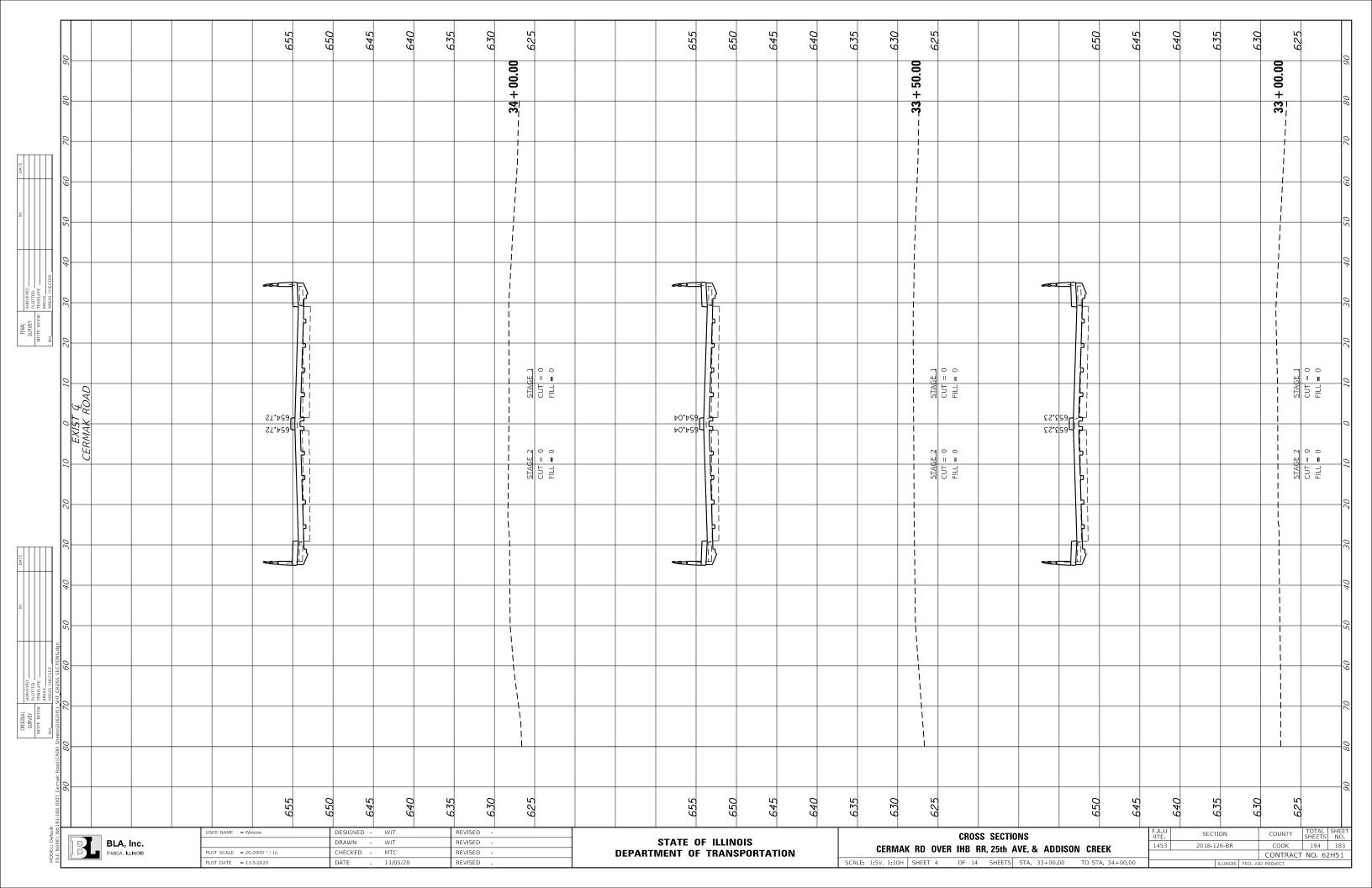
| USER NAME = footemj | DESIGNED - REVISED - C. JUCIUS 02-15-07 |
| DRAWN - REVISED - |
| PLOT SCALE = 50,0000 ' / in. | CHECKED - REVISED - |
| PLOT DATE = 3/4/2019 | DATE - REVISED - |

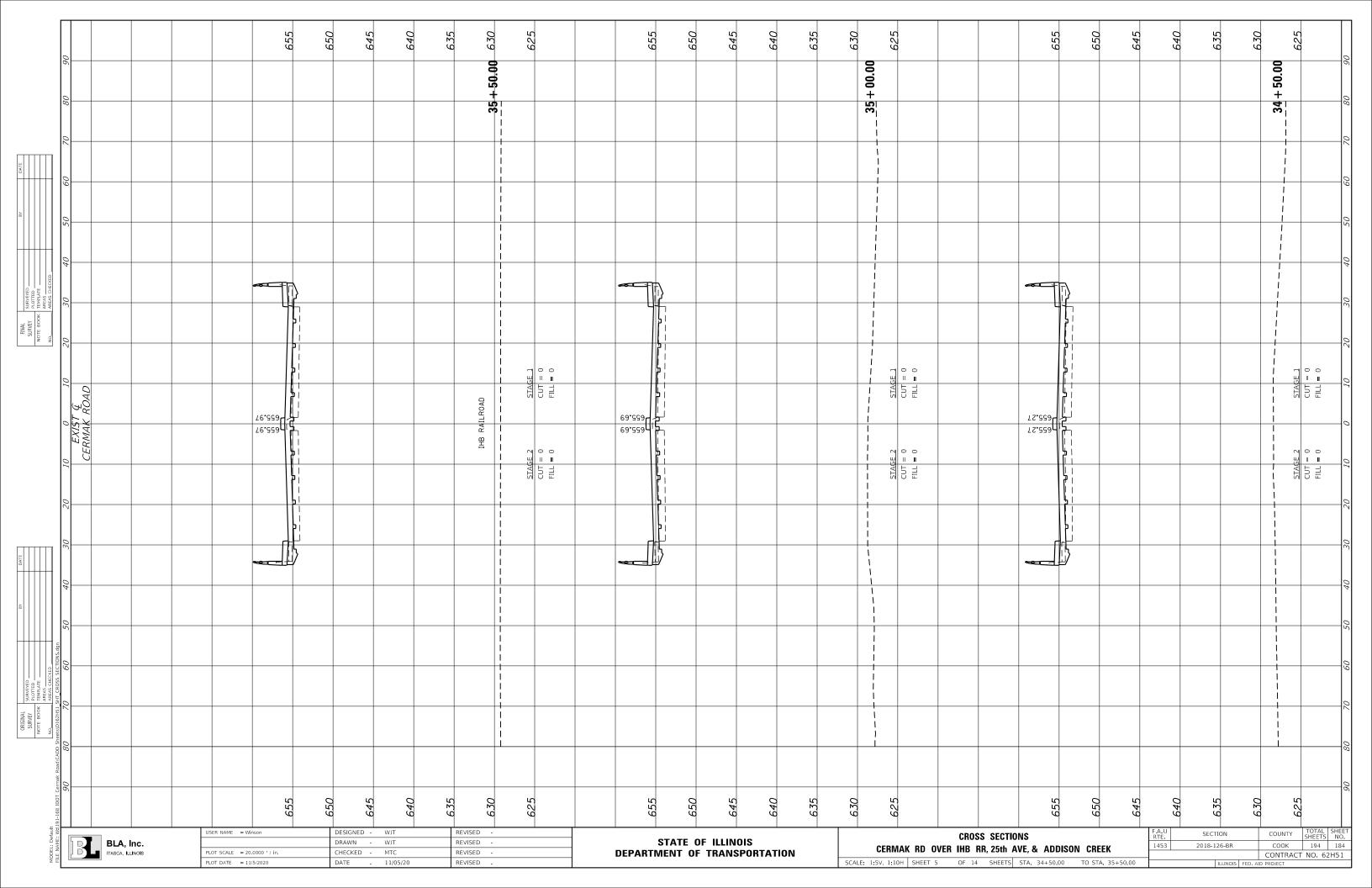
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

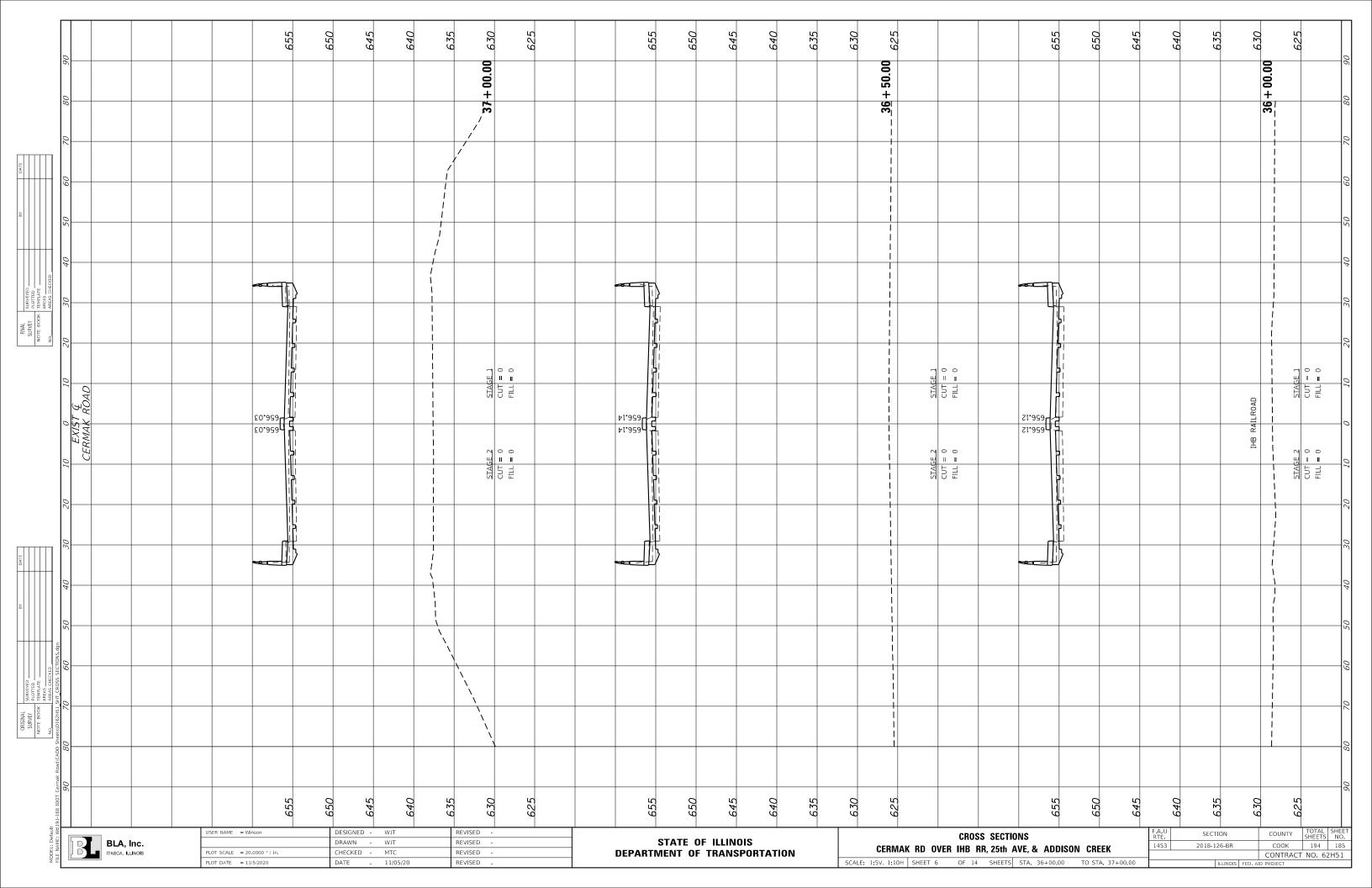


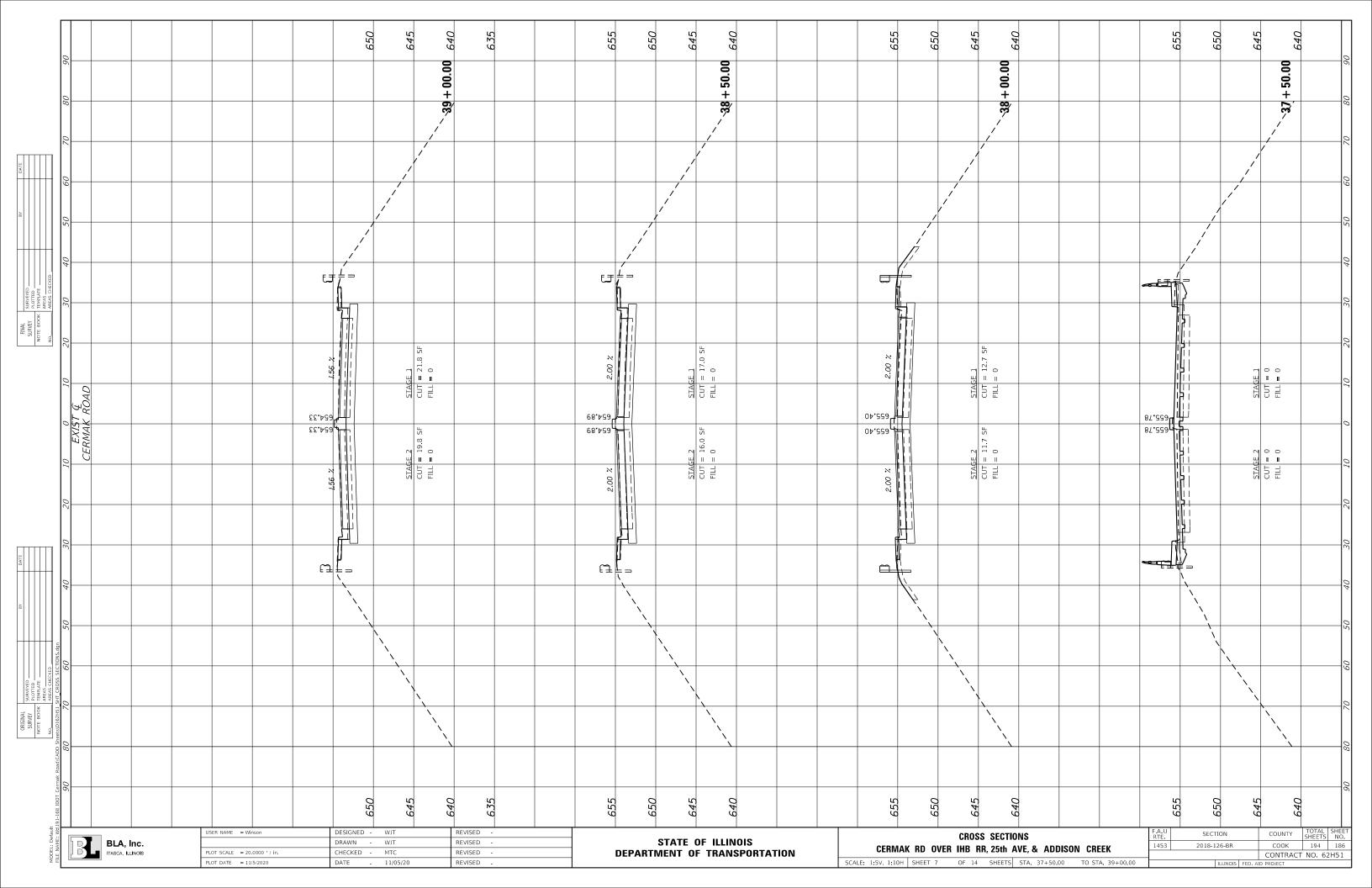


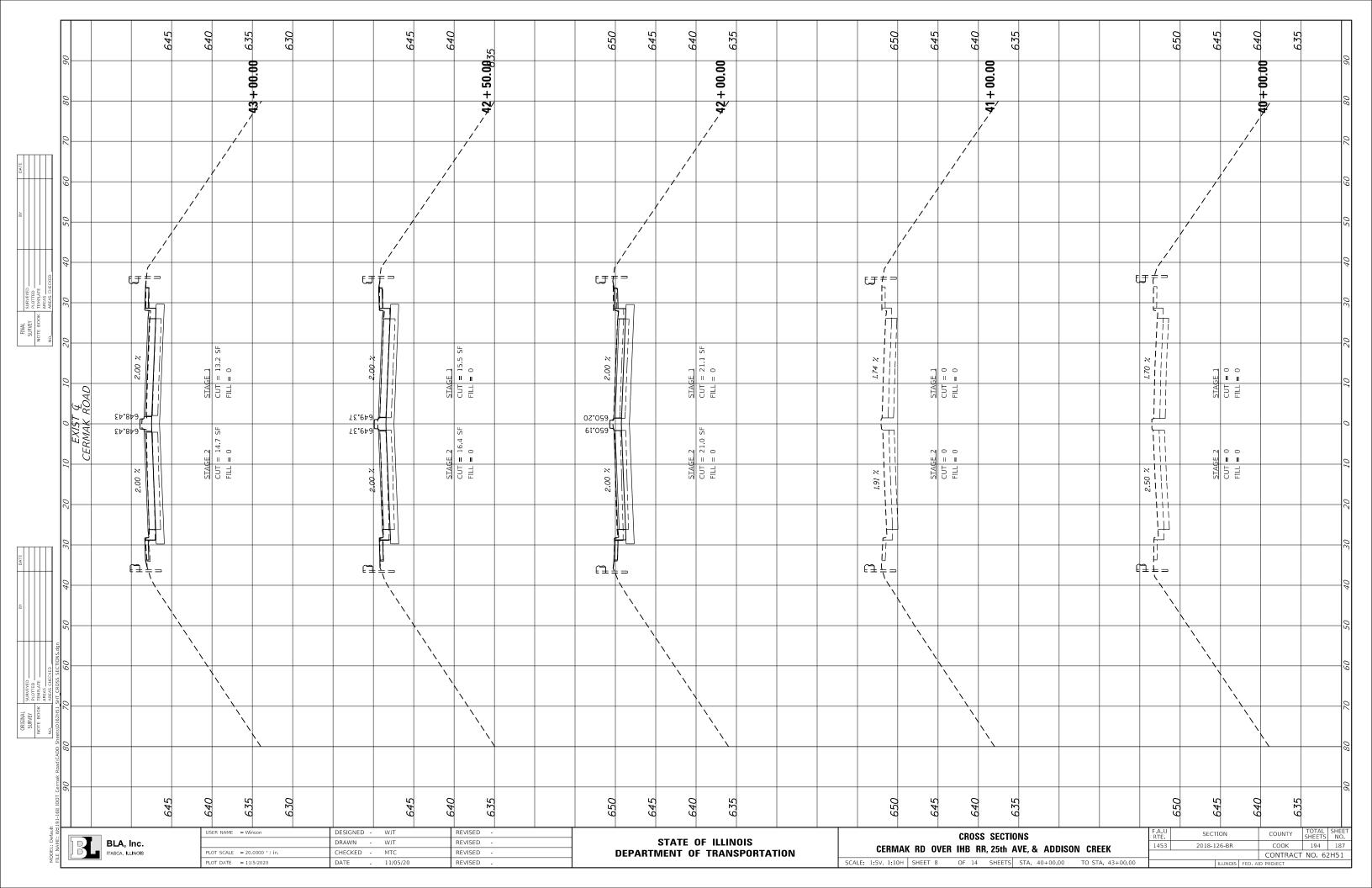


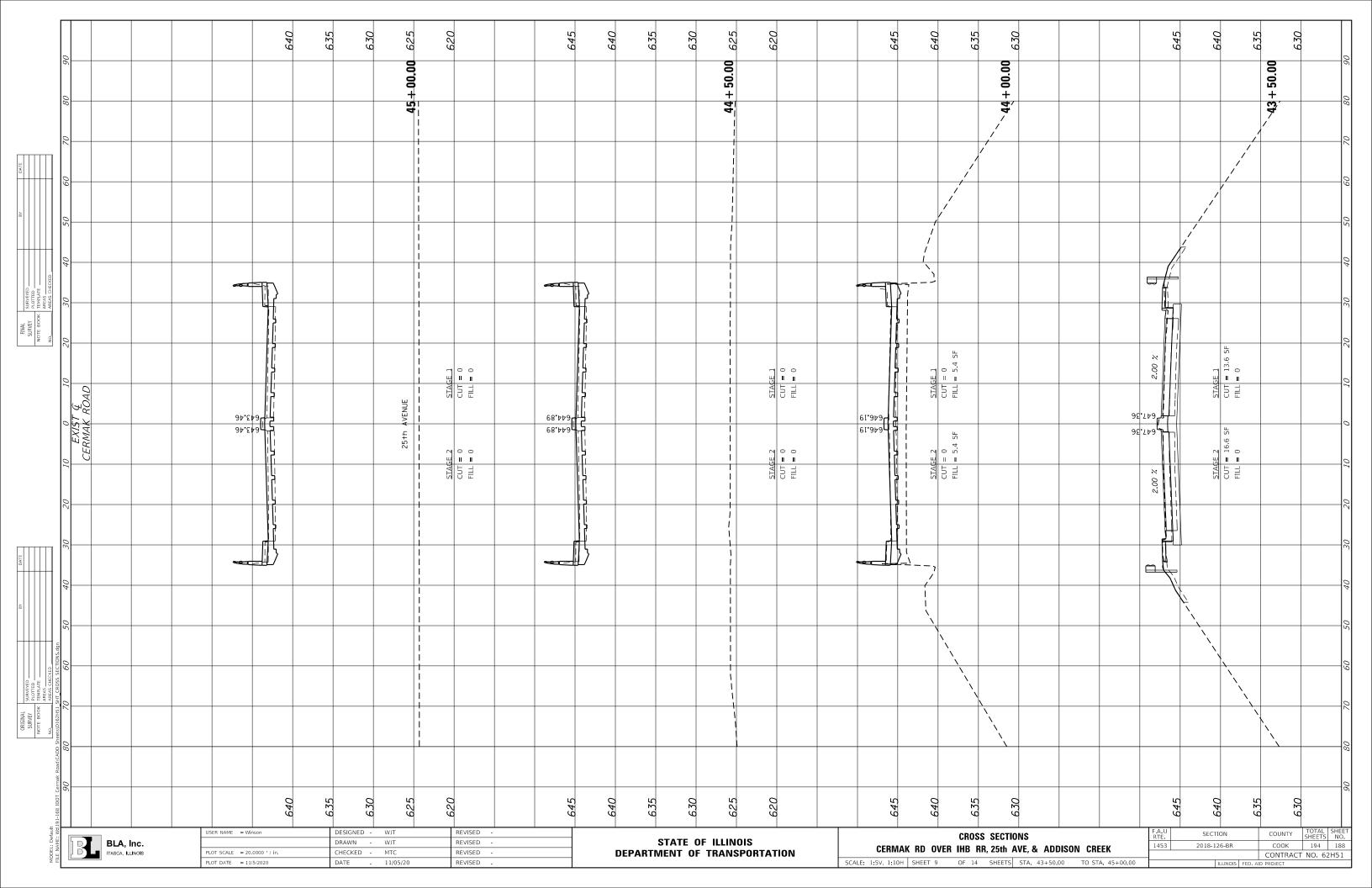


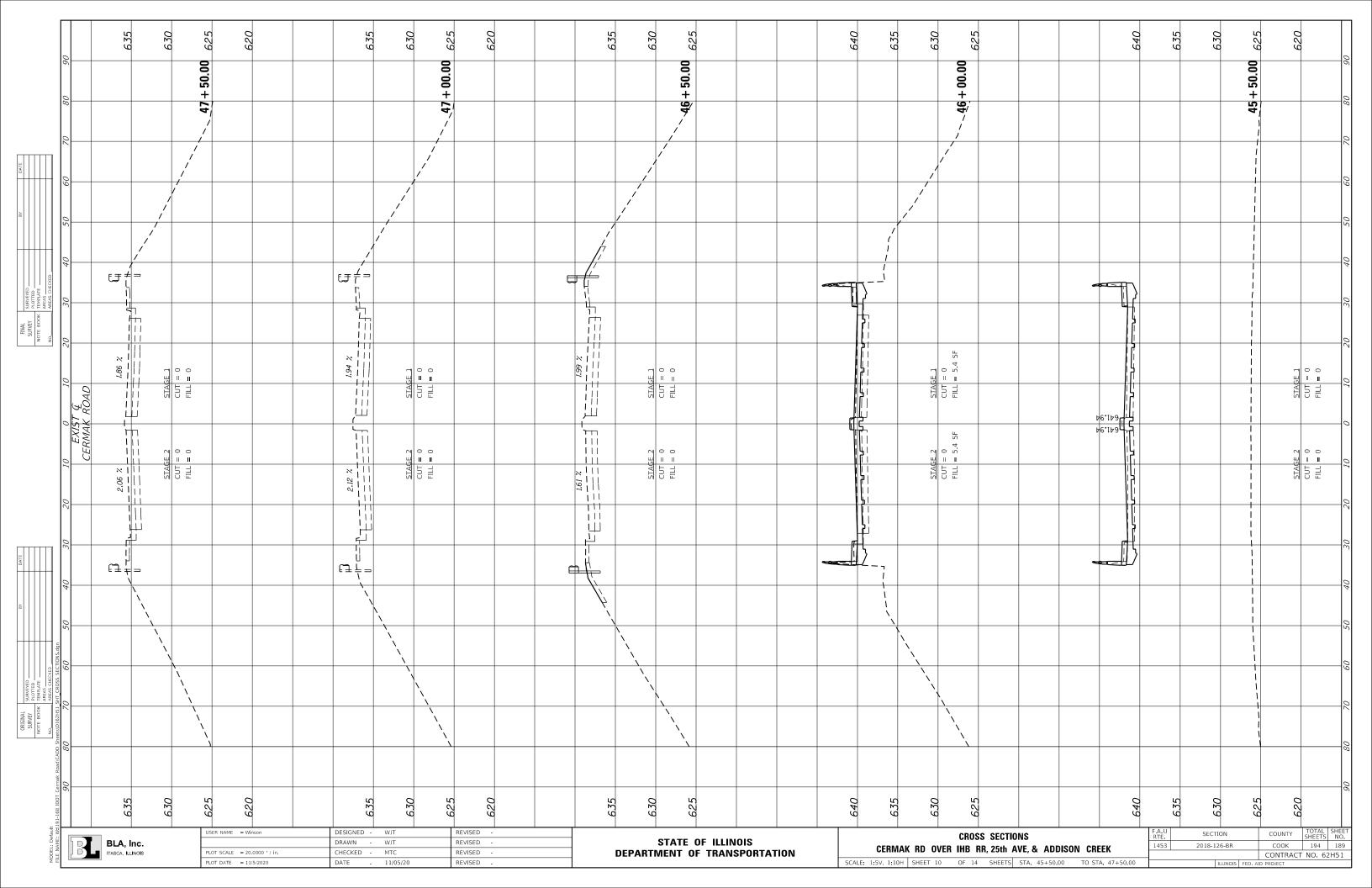


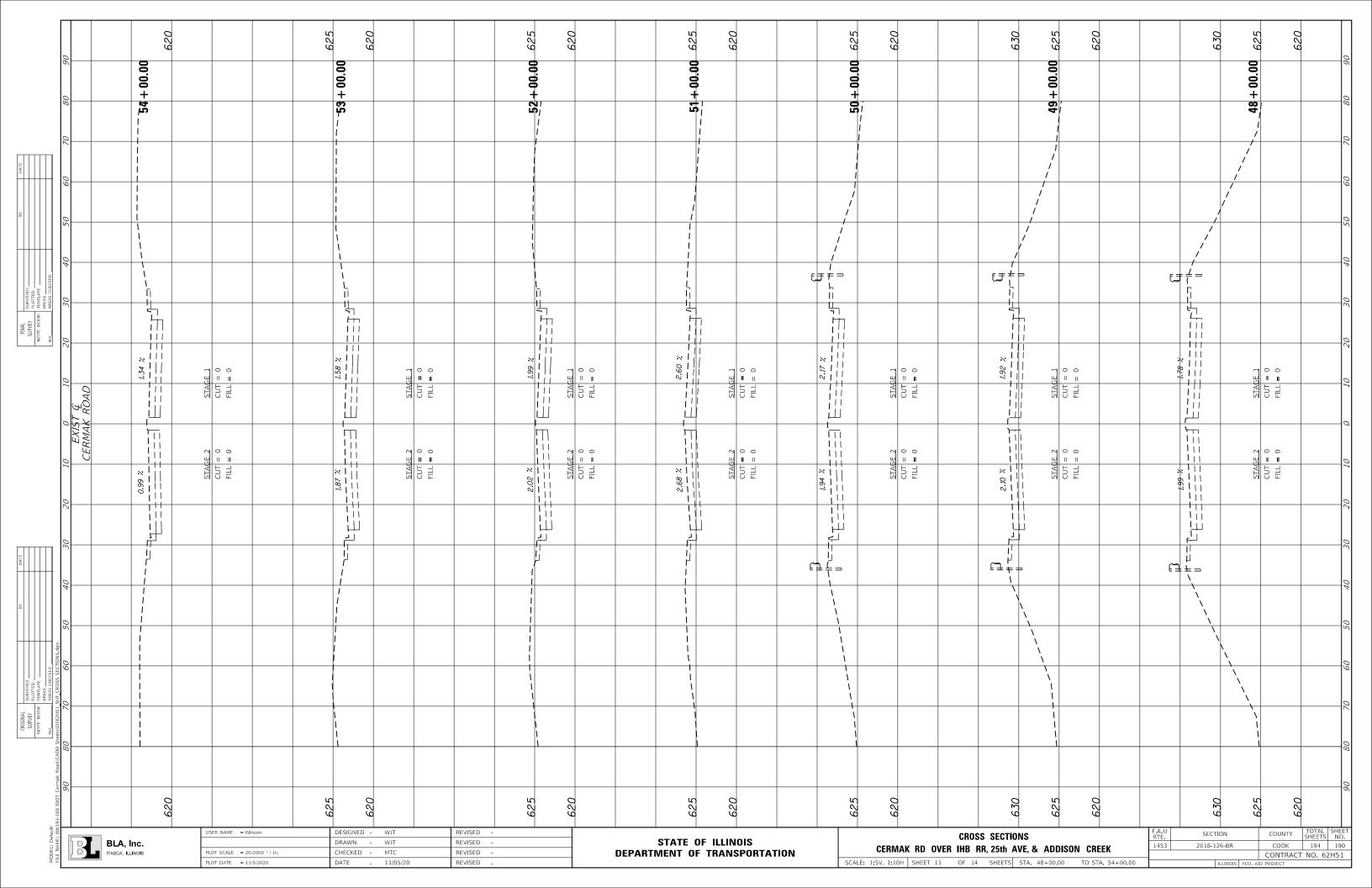




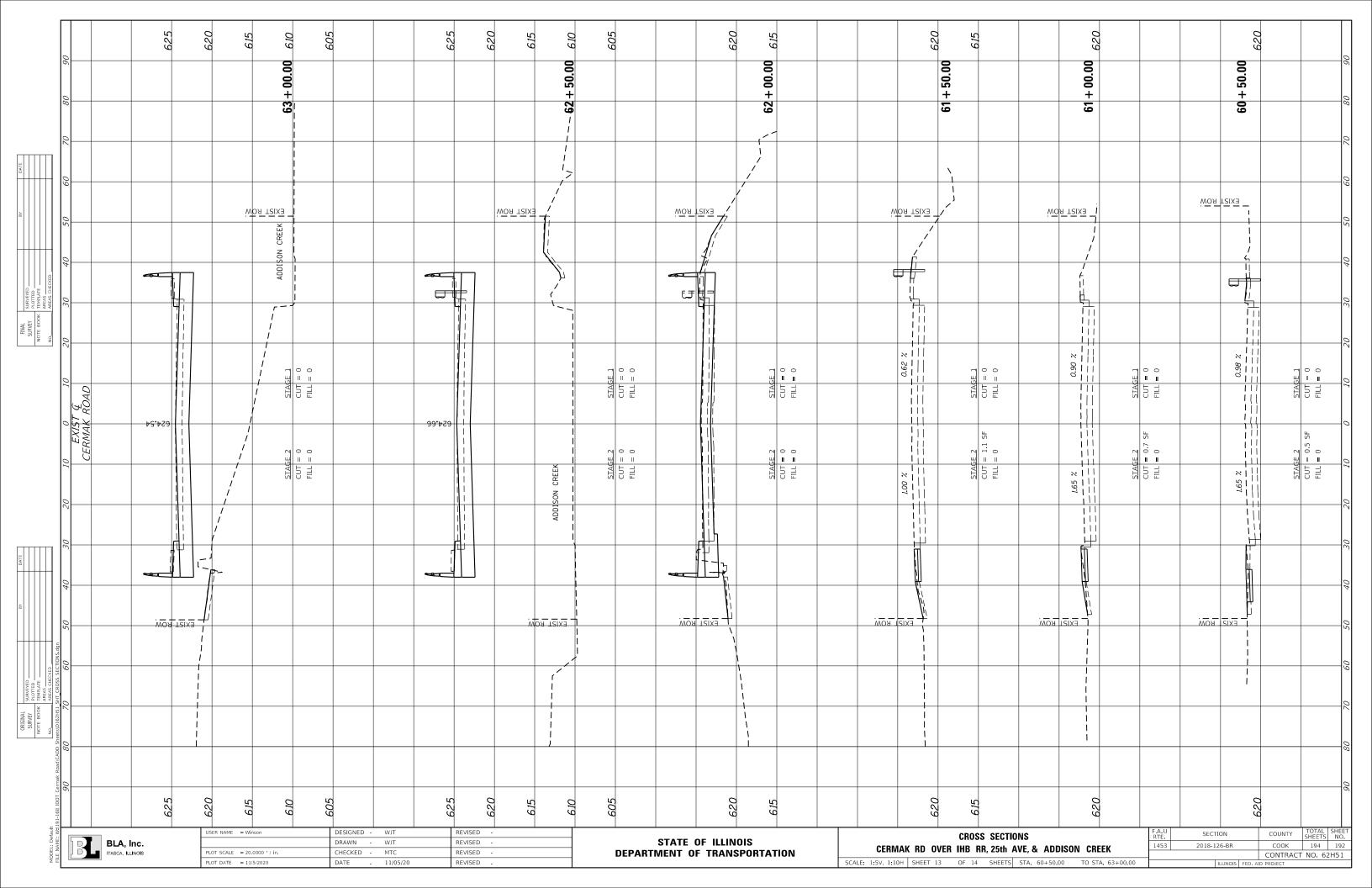








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EL: Default		BLA, Inc.	USER NAME = Winson PLOT SCALE = 20.0000 ' / in.	DESIGNED - WJT DRAWN - WJT CHECKED - MTC	REVISED - REVISED - REVISED -	NEPART	STATE OF ILLINOIS	INI		S SECTIONS IR, 25th AVE, & ADDISON CRI	F.A.U RTE.	SECTION 2018-126-BR	COUNTY SHEETS N COOK 194 1' CONTRACT NO. 62H5

