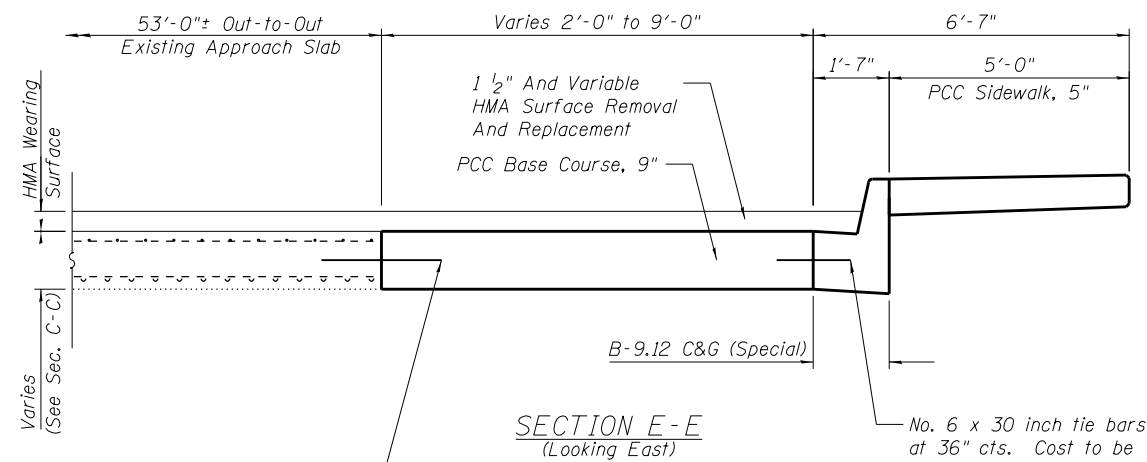
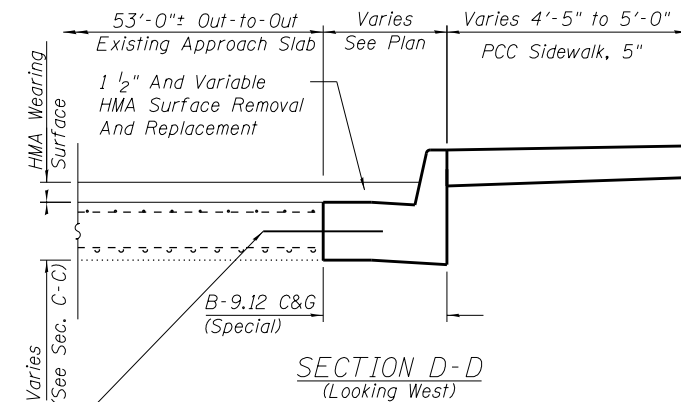


PLAN
(East Approach Shown)

Note:
See Sheet 13 of 28 for Sections A-A & C-C.

No. 6 x 30 inch tie bars at 36" cts.
Drill and epoxy grout solid 15" into
existing approach pavement. Cost
to be included in B-9.12 C&G (Special).



No. 6 x 30 inch tie bars at 36" cts.
Drill and epoxy grout solid 15" into
existing approach pavement. Cost
to be included in PCC Base Course, 9".

No. 6 x 30 inch tie bars
at 36" cts. Cost to be
included in B-9.12 C&G
(Special).

Note: PCC Sidewalk, 5", B-9.12 C&G (Special), Tie Bars,
PCC Base Course, 9", and 1 1/2" and Variable HMA
Surface Removal and Replacement shown for information
only. See Roadway Plans for Quantities.



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME = cf1gus
PLOT SCALE = 0:2.0000 '1' / in.
PLOT DATE = 2/13/2019

DESIGNED - BS
DRAWN - BS
CHECKED - CB
DATE - 11/16/18

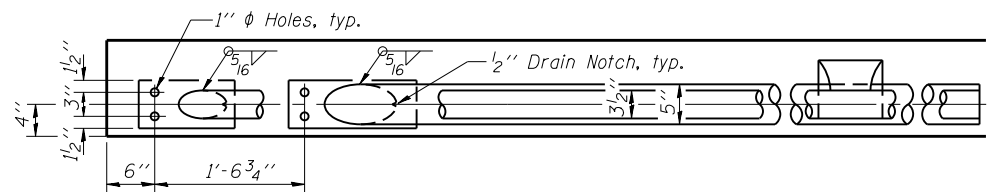
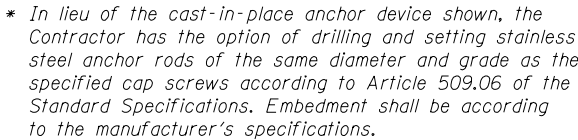
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST BRIDGE APPROACH SLAB DETAILS

SCALE: N.T.S. SHEET 14 OF 28 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	54
PROJECT:		JOB: C-91-313-15		
ILLINOIS				



Note: The end rail post shall be set back as required for the terminal rail section.

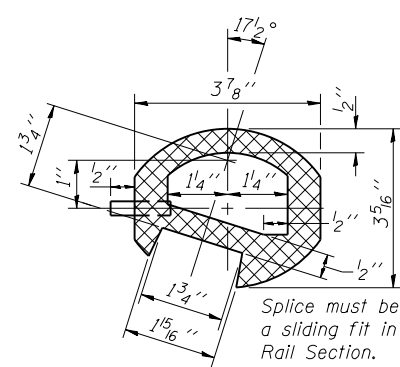
For Top Rail

TOP RAIL

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

For Top Rain

SEC. THRU SPLICE

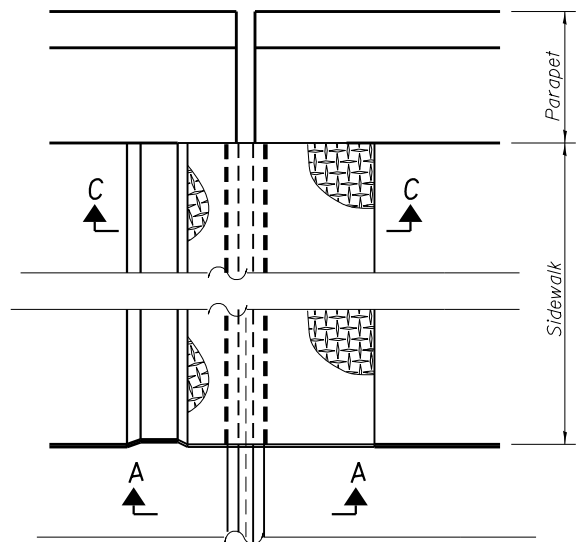


For bottom rail
DRIVE FIT TYPE

For top rail

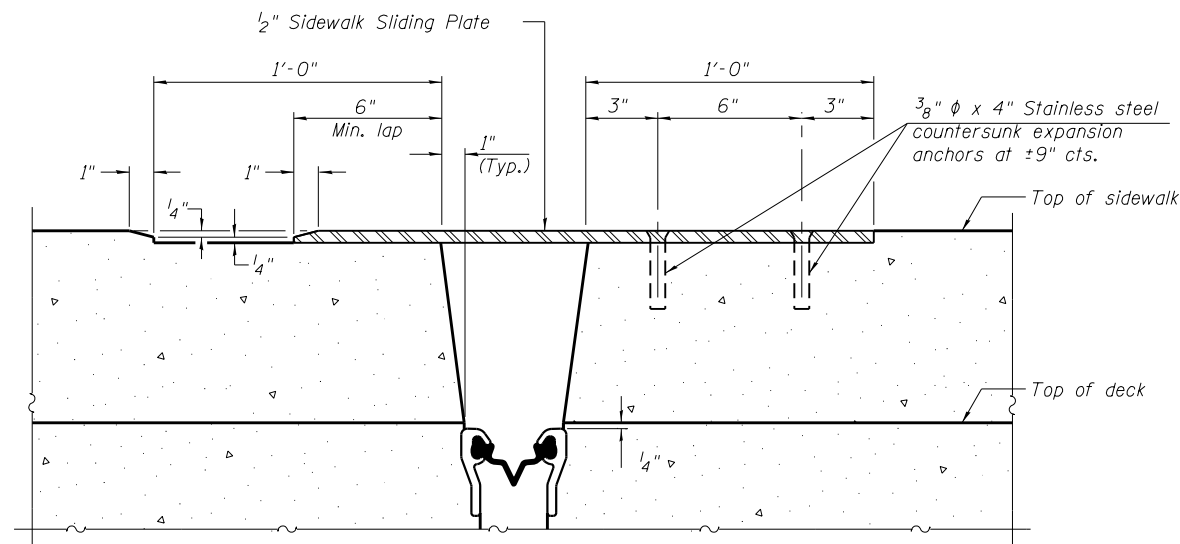
Item	Unit	Quantity
Aluminum Railing, Type L	Foot	263

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 1-1/8" and 2-1/16" 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 11 of 30 for rail post spacing.

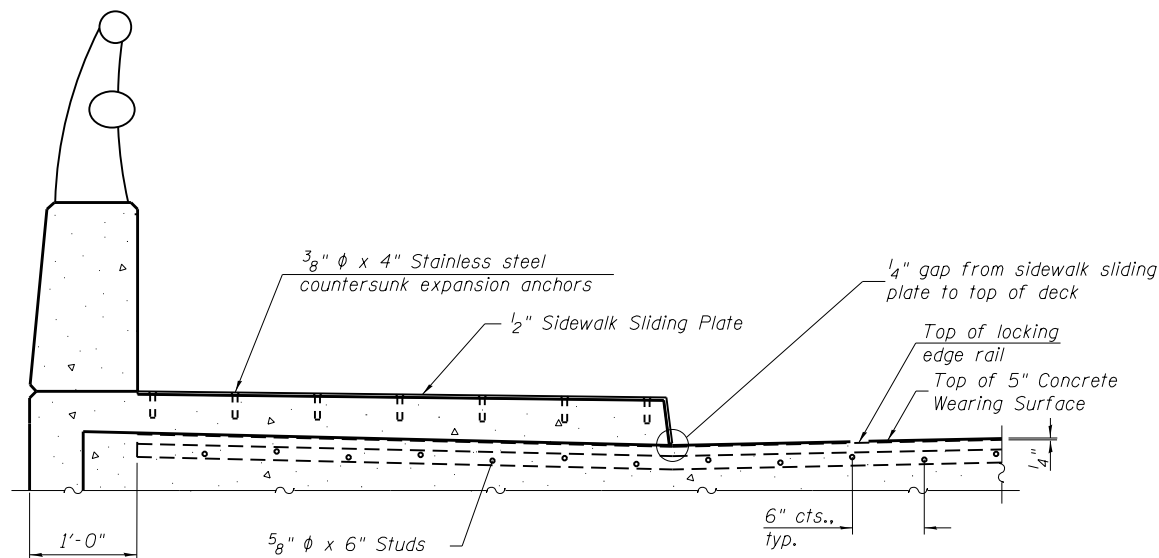


(NO SKEW)

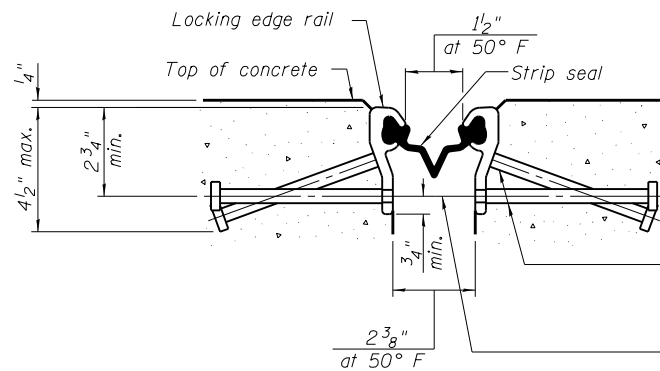
PLAN AT RAISED SIDEWALK



SECTION C-C



ELEVATION AT RAISED SIDEWALK



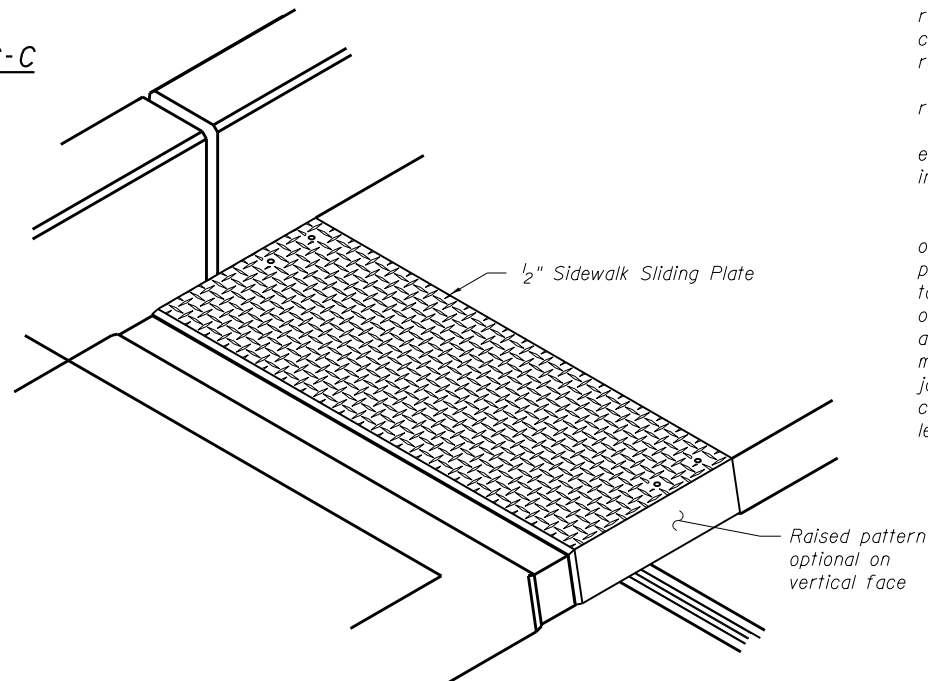
SHOWING ROLLED RAIL JOINT

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

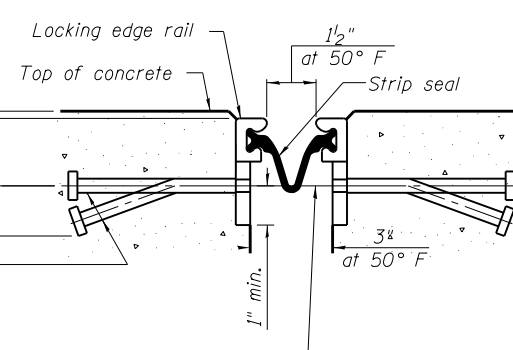
3/8" ϕ threaded rods in 7/16" ϕ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

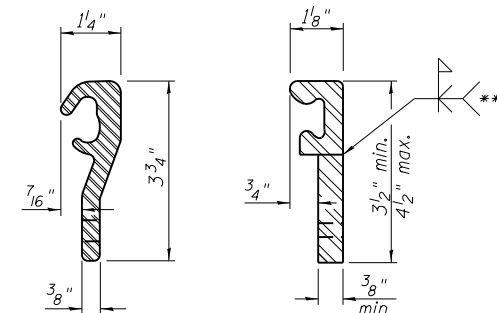
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



TRIMETRIC VIEW

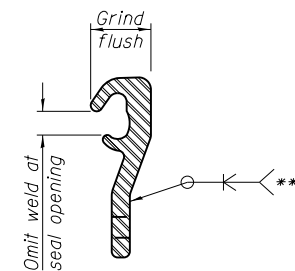


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	134

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME = cf1gus
DESIGNED - BS
DRAWN - BS
CHECKED - CB
DATE - 11/16/18
PLOT SCALE = 0:2.0000 '1' = 1"
PLOT DATE = 2/13/2019

DESIGNED - BS
DRAWN - BS
CHECKED - CB
DATE - 11/16/18

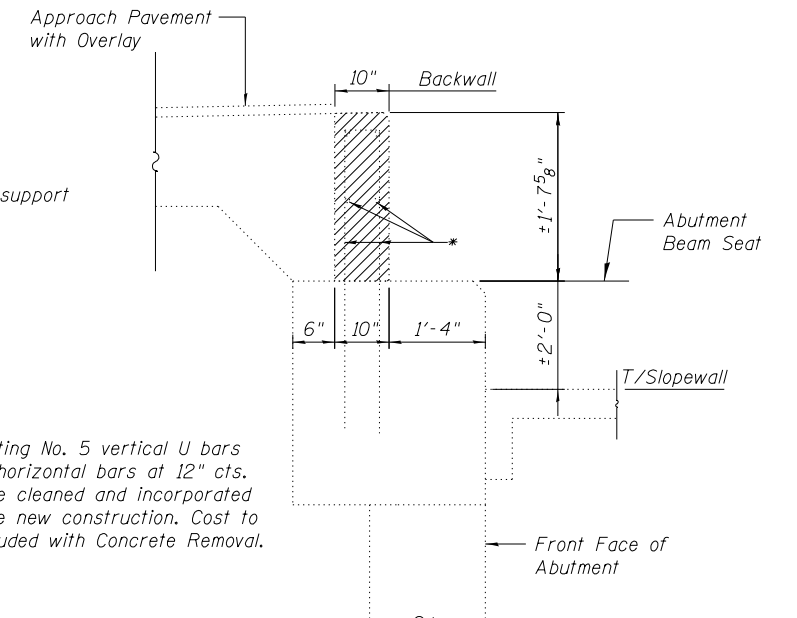
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

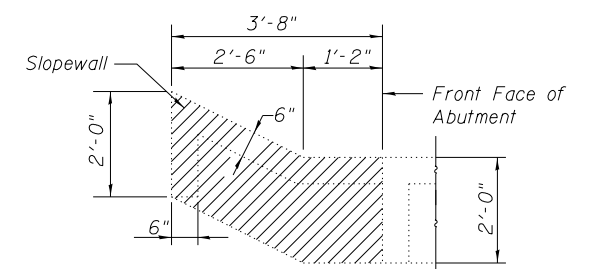
PREFORMED JOINT STRIP SEAL - SIDEWALK
STRUCTURE NO. 022-6950

SCALE: N.T.S. SHEET 16 OF 28 SHEETS STA. TO STA.

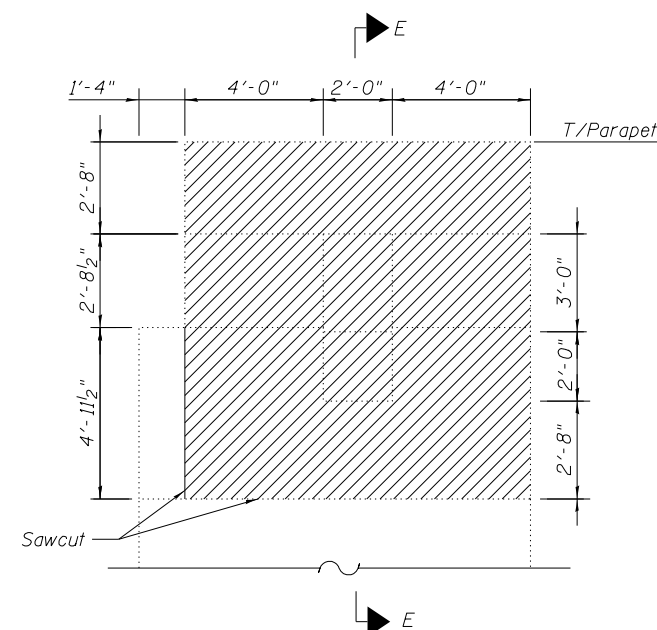
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	56
PROJECT:		JOB: C-91-313-15		
ILLINOIS				



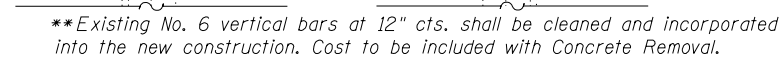
SECTION A - A



SECTION F-F
(Showing Partial Slopewall-only)





SECTION C-C
(Showing Wingwall and
Lightpole support-only)




SECTION E-E

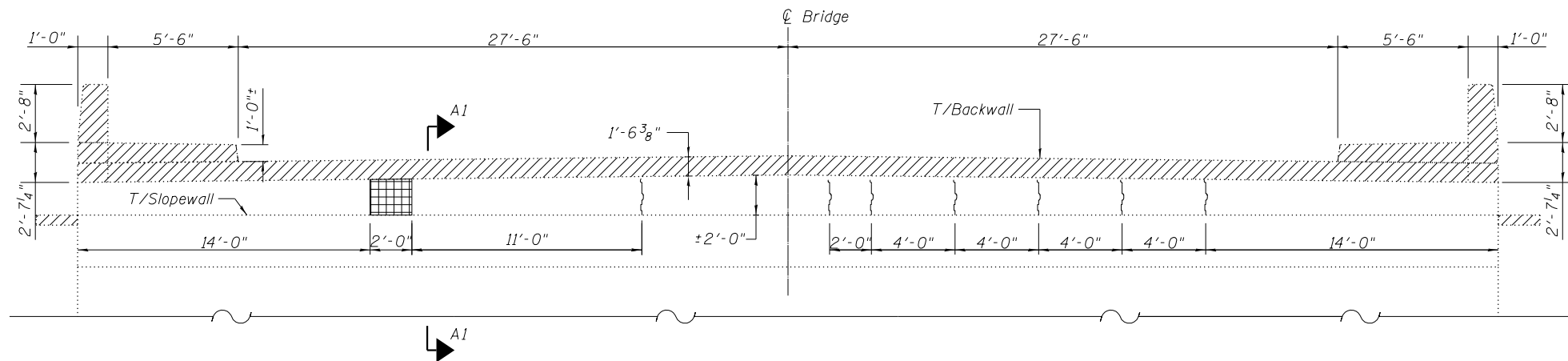
(Showing Wingwall and
Lightpole support-only)

 Concrete Removal

 Structural Repair of Concrete
(Depth Equal to or Less
Than 5 Inches)

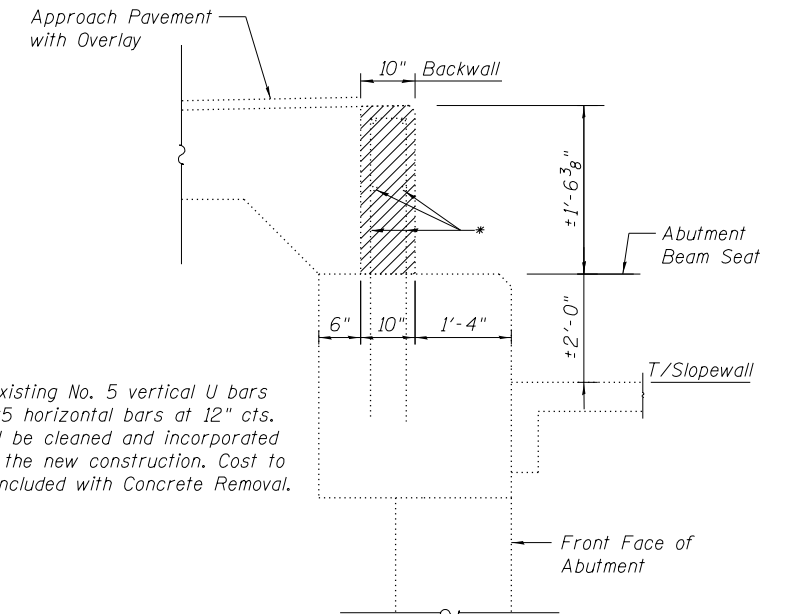
 Epoxy Crack Injection

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	2.0
Epoxy Crack Injection	Ft.	22
Concrete Removal	Cu. Yd.	12.2

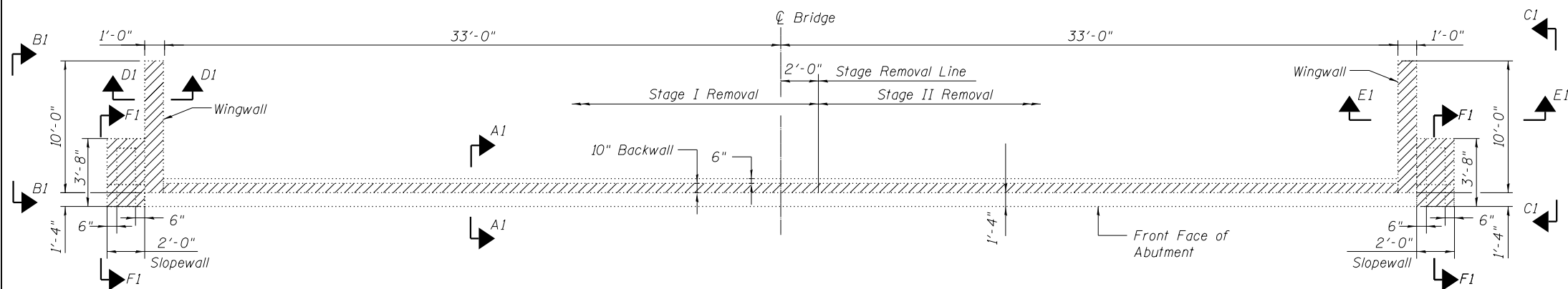


EAST ABUTMENT ELEVATION
Looking East

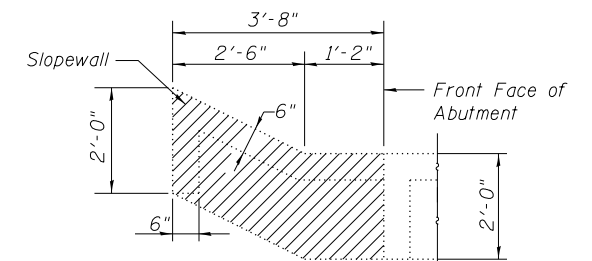
* Existing No. 5 vertical U bars & #5 horizontal bars at 12" cts. shall be cleaned and incorporated into the new construction. Cost to be included with Concrete Removal.



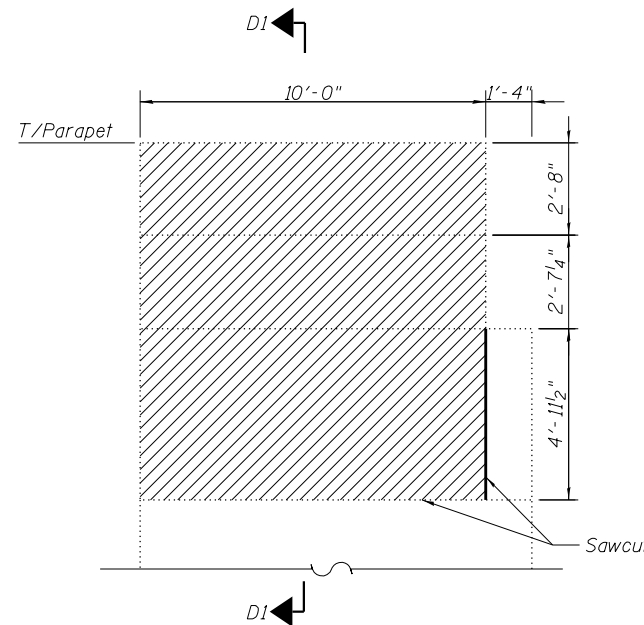
SECTION A1-A1



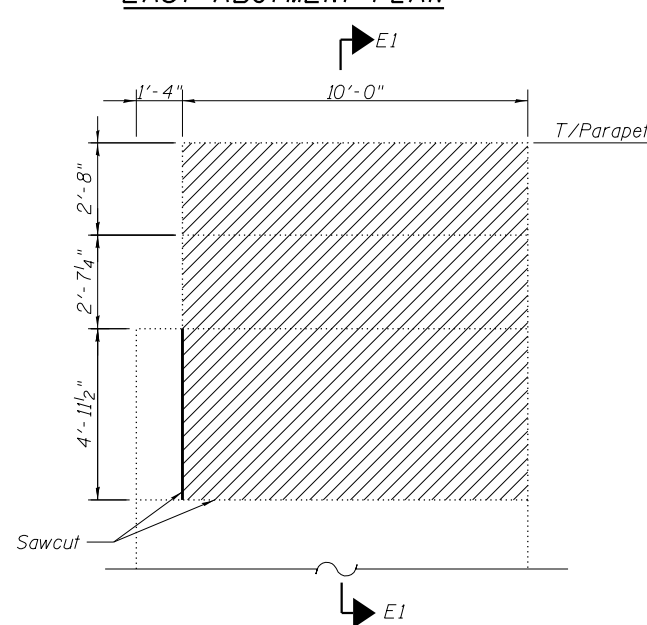
EAST ABUTMENT PLAN



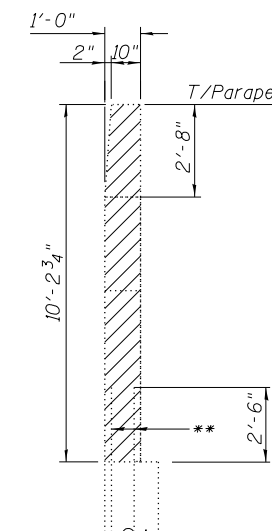
SECTION F1-F1
(Showing Partial Slopewall-only)



SECTION B1-B1
(Showing Wingwall-only)

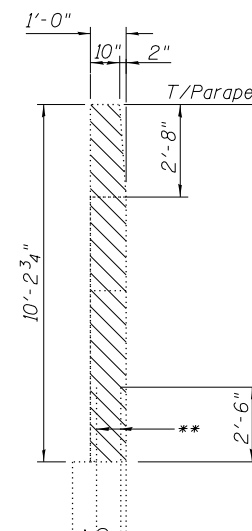


SECTION C1-C1
(Showing Wingwall-only)



** Existing No. 6 vertical bars at 12" cts. shall be cleaned and incorporated into the new construction. Cost to be included with Concrete Removal.

SECTION D1-D1



SECTION E1-E1

LEGEND

- Concrete Removal
- Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)
- Epoxy Crack Injection

**EAST ABUTMENT
BILL OF MATERIAL**

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	4.0
Epoxy Crack Injection	Ft.	14
Concrete Removal	Cu. Yd.	11.4



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME = cf1gus
PLOT SCALE = 0:2.0000 '1' / in.
PLOT DATE = 2/13/2019

DESIGNED - BS
DRAWN - BS
CHECKED - CB
DATE - 11/16/18

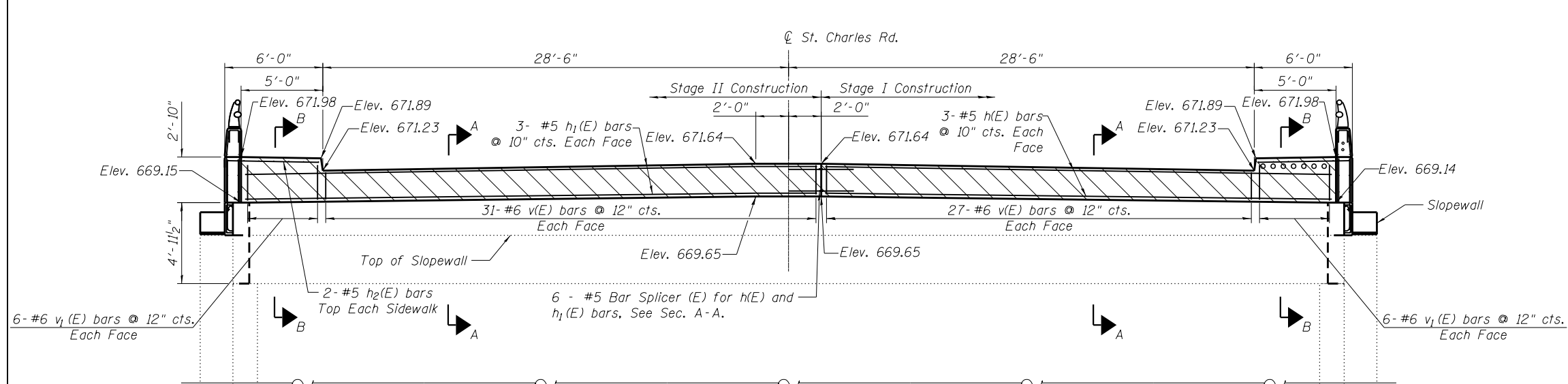
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

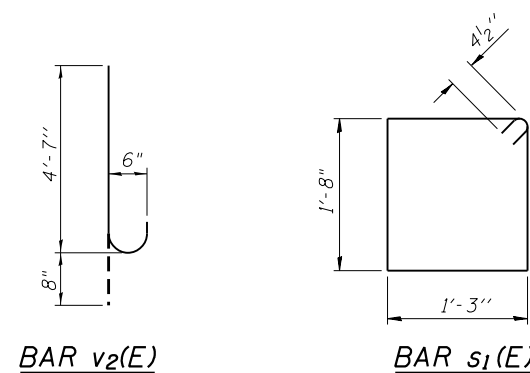
**EAST ABUTMENT REPAIRS AND CONCRETE REMOVAL
STRUCTURE NO. 022-6950**

SCALE: N.T.S. SHEET 18 OF 28 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	58
PROJECT:			JOB: C-91-313-15	
ILLINOIS				

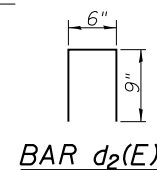


WEST ABUTMENT ELEVATION
Looking West

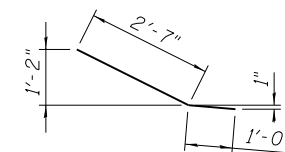


BAR v2(E)

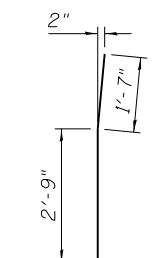
BAR s1(E)



BAR d2(E)



BAR h4(E)



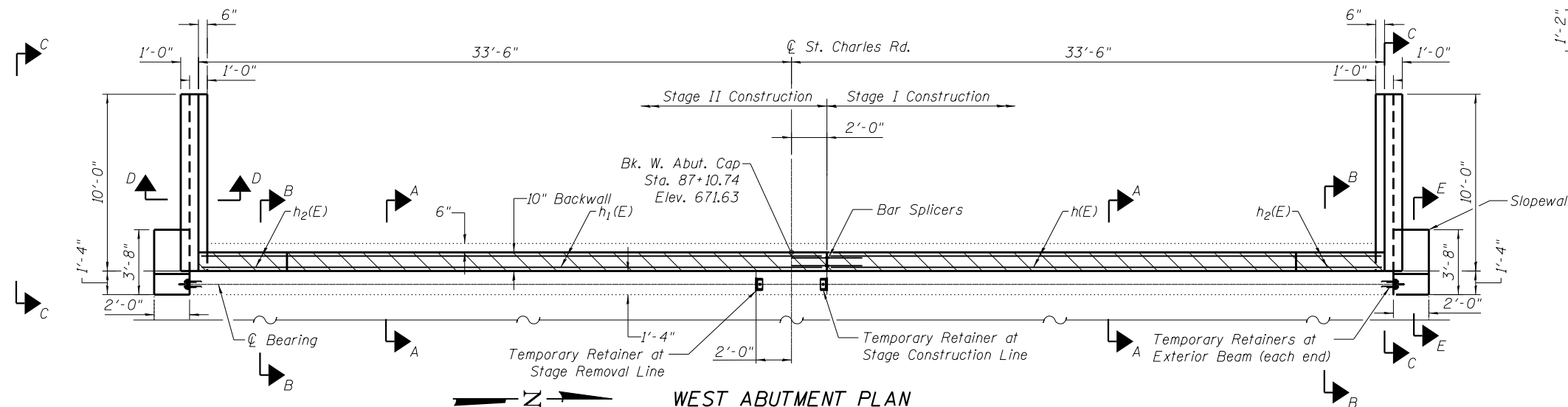
BAR v4(E)

BILL OF MATERIAL
(West Abutment Only)

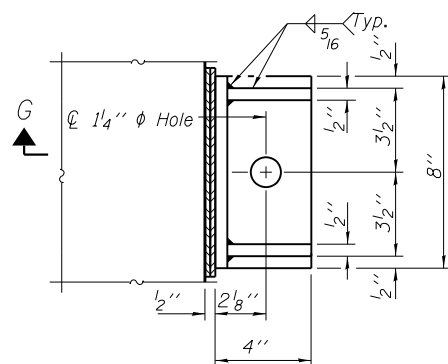
Bar	No.	Size	Length	Shape
d2(E)	4	#4	2'-0"	□
h(E)	6	#5	31'-2"	—
h1(E)	6	#5	35'-2"	—
h2(E)	4	#5	4'-8"	—
h3(E)	74	#6	9'-8"	—
h4(E)	12	#5	3'-7"	—
h5(E)	16	#5	1'-8"	—
s(E)	20	#4	6'-7"	□
v(E)	116	#6	1'-9"	—
v1(E)	24	#6	2'-5"	—
v2(E)	80	#6	5'-3"	—
v3(E)	20	#6	4'-3"	—
v4(E)	20	#6	4'-4"	—
Structure Excavation		Cu. Yd.	19	
Concrete Structures		Cu. Yd.	12.0	
Concrete Sealer		Sq. Ft.	90	
Reinforcement Bars, Epoxy Coated		Pound	3,030	
Protective Coat		Sq. Yd.	5.7	
* Concrete Superstructure		Cu. Yd.	1.2	

* Concrete Superstructure is for the Parapet portion of the wingwalls.

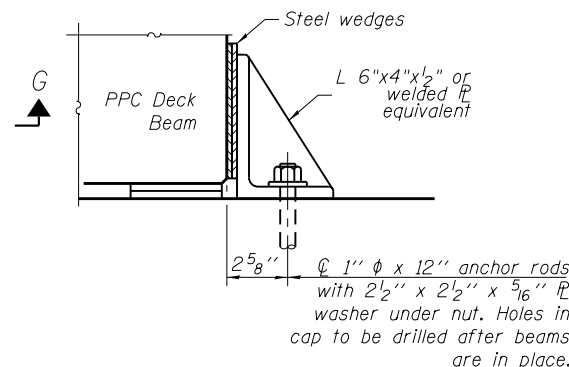
To be poured after beams and concrete wearing surface are in place



WEST ABUTMENT PLAN



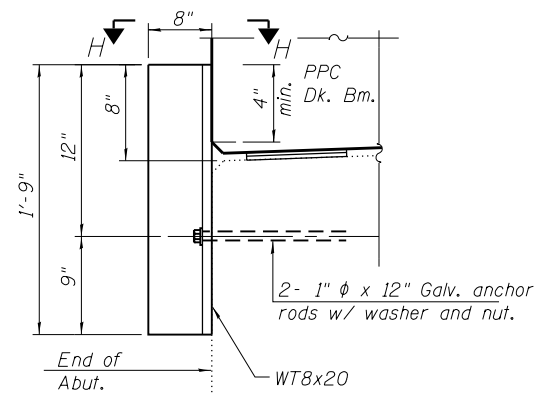
PLAN



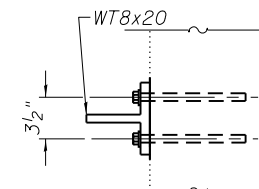
SECTION G-G

**TEMPORARY RETAINER DETAIL
AT STAGE CONSTRUCTION LINE
AND STAGE REMOVAL LINE**

Notes:
Cost of temporary retainer, accessories, installation and removal are included with Precast Prestressed Concrete Deck Beams.
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
All side retainers, anchor bolts, nuts and plate washers shall be galvanized according to AASHTO M 232.
After the notch or concrete overlay are poured and cured, the side retainers and steel wedges shall be removed.
Burn temporary anchor bolts flush with concrete, grind smooth and seal with epoxy.



ELEVATION



VIEW H-H

**TEMPORARY RETAINER DETAIL
(At Exterior Beams)**

Notes:
See Sheet 20 of 28 for Sections



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

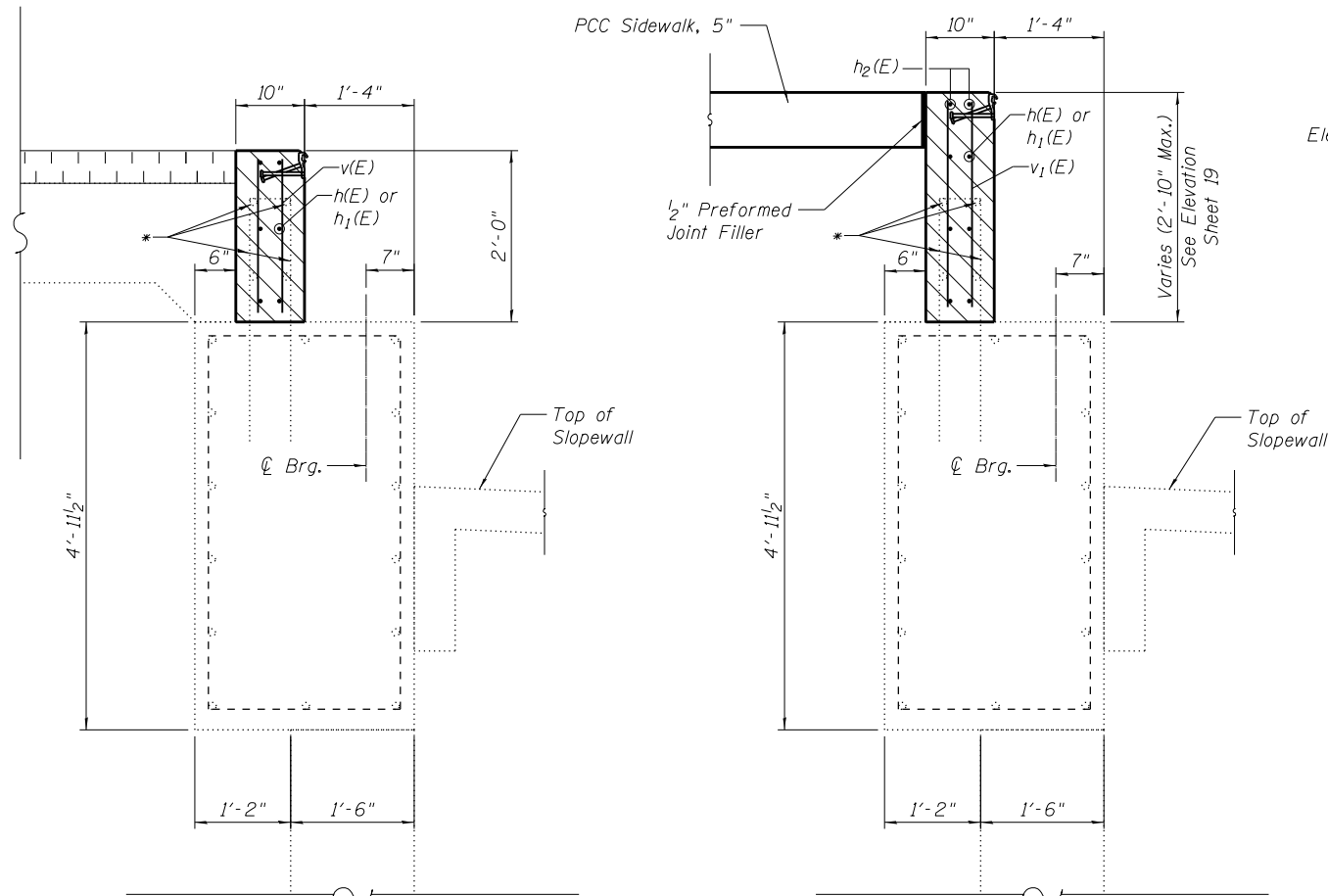
USER NAME = cfisus	DESIGNED - BS	REVISED -
PLOT SCALE = 8:0.0000 '1' = 1"	DRAWN - BS	REVISED -
PLOT DATE = 2/13/2019	CHECKED - CB	REVISED -
	DATE - 11/16/18	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT PLAN AND ELEVATION
STRUCTURE NO. 022-6950**

SCALE: N.T.S. SHEET 19 OF 28 SHEETS STA. TO STA.

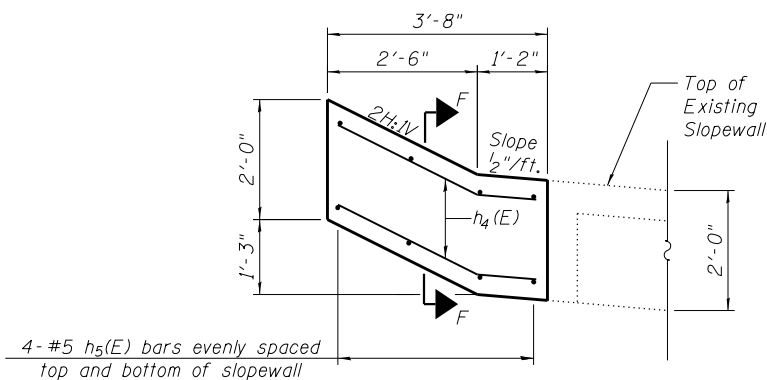
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	59
PROJECT:		JOB: C-91-313-15		
ILLINOIS				



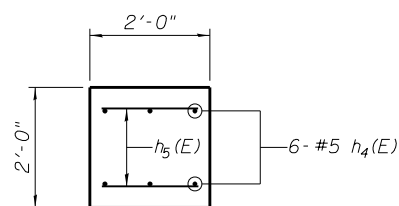
SECTION A-A

SECTION B-B

* Existing No. 5 vertical U bars & #5 horizontal bars at 12" cts. shall be cleaned and incorporated into the new construction. Cost to be included with Concrete Removal.

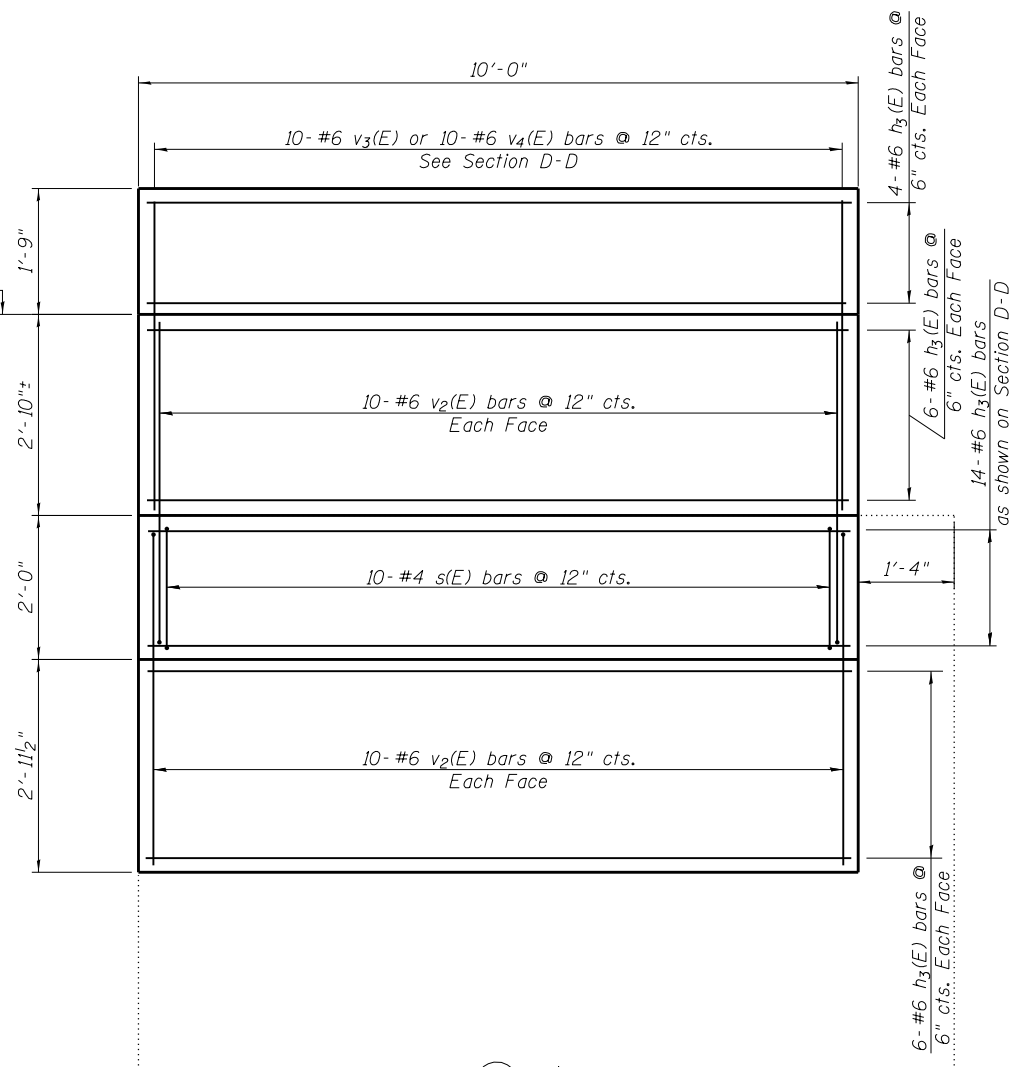


SECTION E-E
(Showing Partial Slopewall-Only)

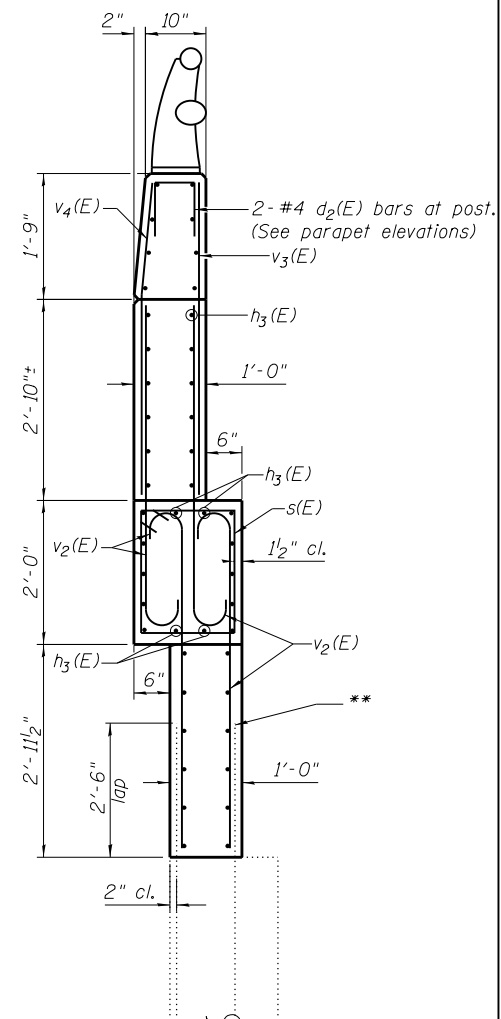


SECTION F-F

Elev. 671.98



SECTION C-C



SECTION D-D

** Existing No. 6 vertical bars at 12" cts. shall be cleaned and incorporated into the new construction. Cost to be included with Concrete Removal.



To be poured after beams and concrete wearing surface are in place

Note:

Existing reinforcement bars that are to be incorporated into the new construction and have lost 25% or more of their original diameter shall be supplemented by new epoxy coated bars of the same diameter. New bars shall be drilled and epoxy grouted in place adjacent to the original bars, as directed by the Engineer. Drilling and epoxy grouting of reinforcement shall be in accordance with Article 584 of the Standard Specifications. Cost to be included with Reinforcement Bars, Epoxy Coated.



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME = cf1gus
PLOT SCALE = 8:0.0000 '1' / in.
PLOT DATE = 2/13/2019

DESIGNED - BS
DRAWN - BS
CHECKED - CB
DATE - 11/16/18

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT SECTIONS
STRUCTURE NO. 022-6950

SCALE: N.T.S.

SHEET 20 OF 28 SHEETS

STA.

TO STA.

F.A.U.
RTE.

1397

SECTION

15-00094-00-BR

COUNTY

DUPAGE

TOTAL
SHEETS

106

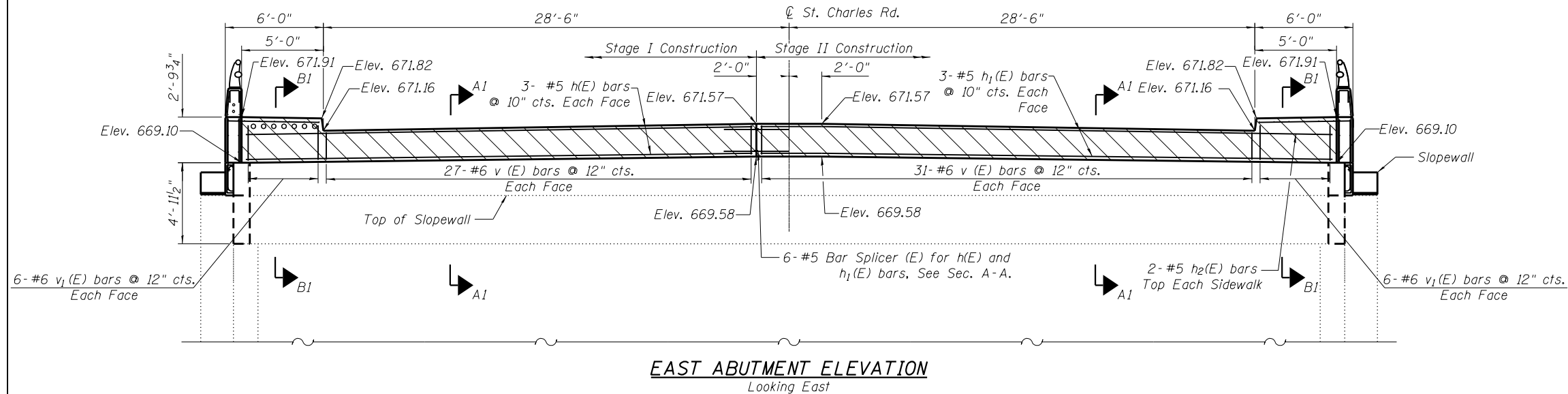
SHEET
NO.

60

PROJECT:

ILLINOIS

JOB: C-91-313-15

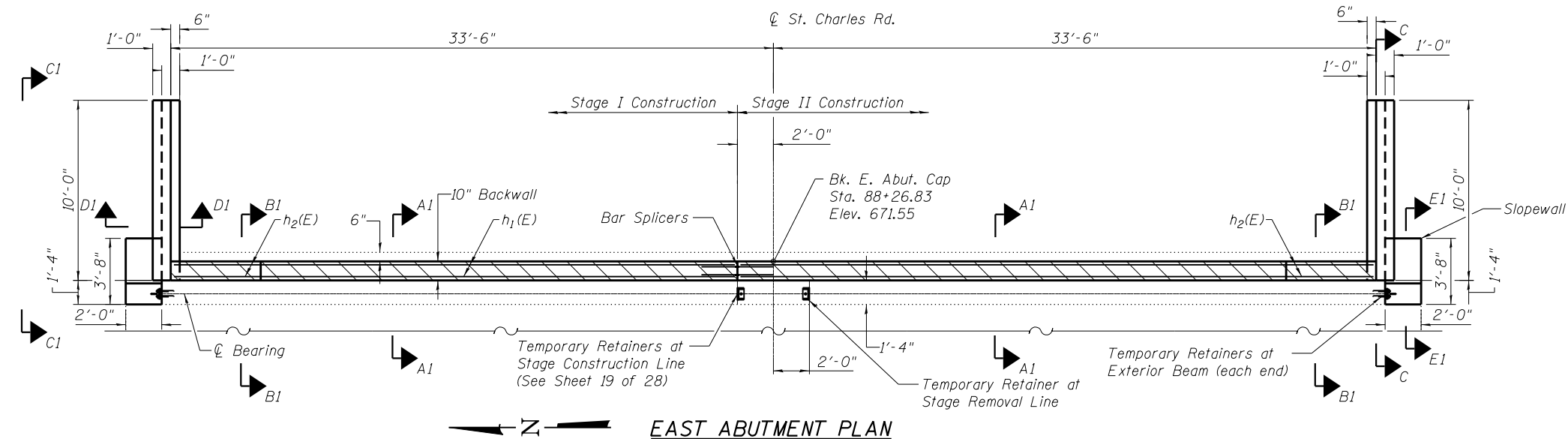


BILL OF MATERIAL

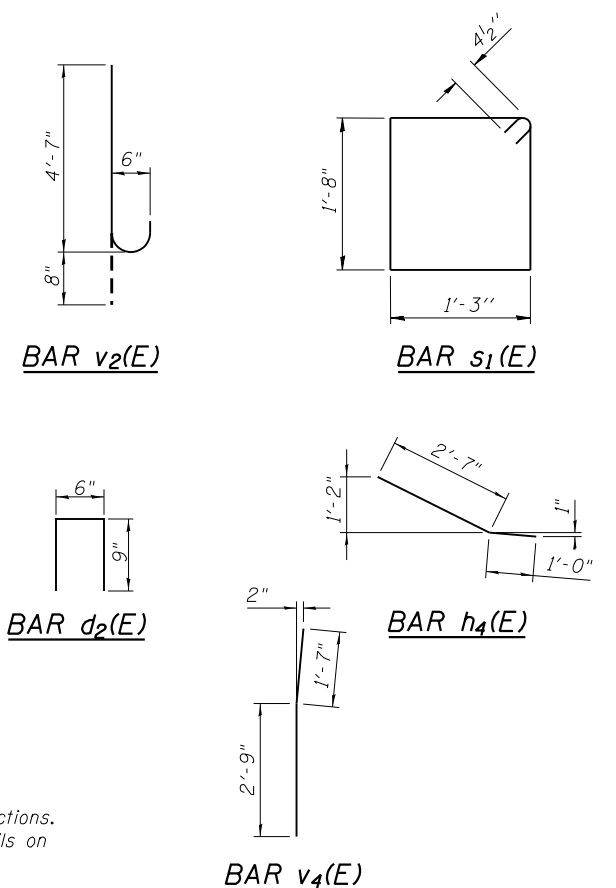
(East Abutment Only)

Bar	No.	Size	Length	Shape
d ₂ (E)	4	#4	2'-0"	□
h(E)	6	#5	31'-2"	—
h ₁ (E)	6	#5	35'-2"	—
h ₂ (E)	4	#5	4'-8"	—
h ₃ (E)	74	#6	9'-8"	—
h ₄ (E)	12	#5	3'-7"	—
h ₅ (E)	16	#5	1'-8"	—
s(E)	20	#4	6'-7"	□
v(E)	116	#6	1'-9"	—
v ₁ (E)	24	#6	2'-5"	—
v ₂ (E)	80	#6	5'-3"	—
v ₃ (E)	20	#6	4'-3"	—
v ₄ (E)	20	#6	4'-4"	—
Structure Excavation	Cu. Yd.	15		
Concrete Structures	Cu. Yd.	12.0		
Concrete Sealer	Sq. Ft.	90		
Reinforcement Bars, Epoxy Coated	Pound	3,030		
Protective Coat	Sq. Yd.	5.7		
* Concrete Superstructure	Cu. Yd.	1.2		

* Concrete Superstructure is for the Parapet portion of the wingwalls.



To be poured after beams and concrete wearing surface are in place



Notes:
See Sheet 22 of 28 for Sections.
See Sheet 19 of 28 for Details on Temporary Retainers.



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME : cf1gus
PLOT SCALE : 8:0.0000 '1' = 1"
PLOT DATE : 2/13/2019

DESIGNED - BS
DRAWN - BS
CHECKED - CB
DATE - 11/16/18

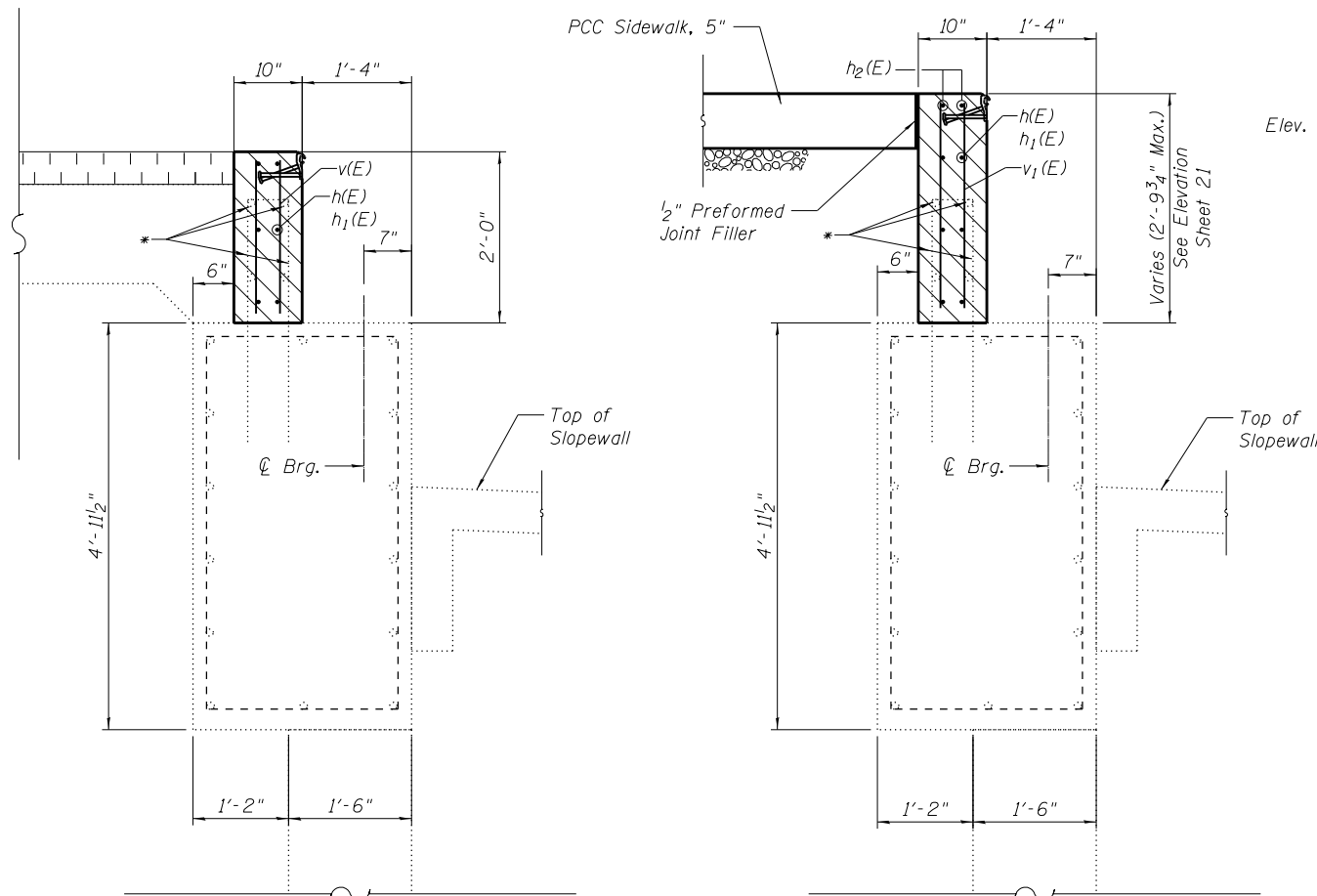
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT PLAN AND ELEVATION
STRUCTURE NO. 022-6950

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

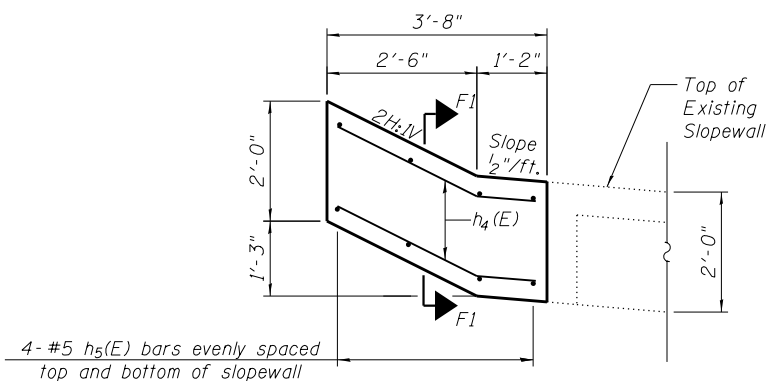
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	61
PROJECT:		JOB: C-91-313-15		
ILLINOIS				



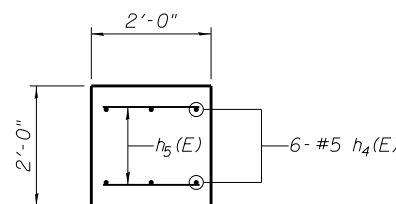
SECTION A1-A1

SECTION B1-B1

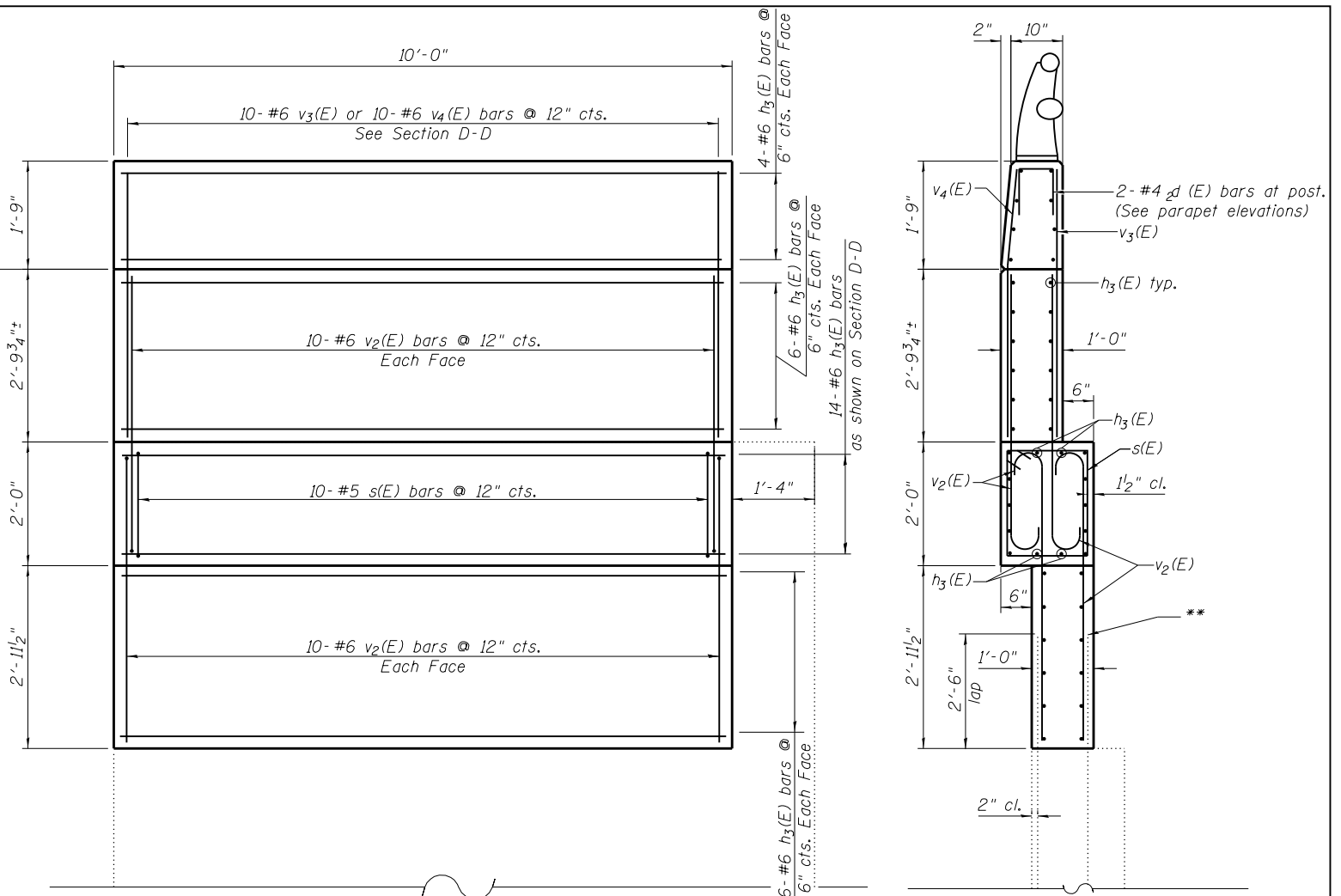
* Existing No. 5 vertical U bars & #5 horizontal bars at 12" cts. shall be cleaned and incorporated into the new construction. Cost to be included with Concrete Removal.



SECTION E1-E1
(Showing Partial Slopewall-Only)



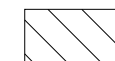
SECTION F1-F1



SECTION C1-C1

SECTION D1-D1

** Existing No. 6 vertical bars at 12" cts. shall be cleaned and incorporated into the new construction. Cost to be included with Concrete Removal.



To be poured after beams and concrete wearing surface are in place

Note:

Existing reinforcement bars that are to be incorporated into the new construction and have lost 25% or more of their original diameter shall be supplemented by new epoxy coated bars of the same diameter. New bars shall be drilled and epoxy grouted in place adjacent to the original bars, as directed by the Engineer. Drilling and epoxy grouting of reinforcement shall be in accordance with Article 584 of the Standard Specifications. Cost to be included with Reinforcement Bars, Epoxy Coated.



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME = cfigus	DESIGNED - BS	REVISED -
	DRAWN - BS	REVISED -
PLOT SCALE = 8:0.0000 '1' / in.	CHECKED - CB	REVISED -
PLOT DATE = 2/13/2019	DATE - 11/16/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT SECTIONS
STRUCTURE NO. 022-6950

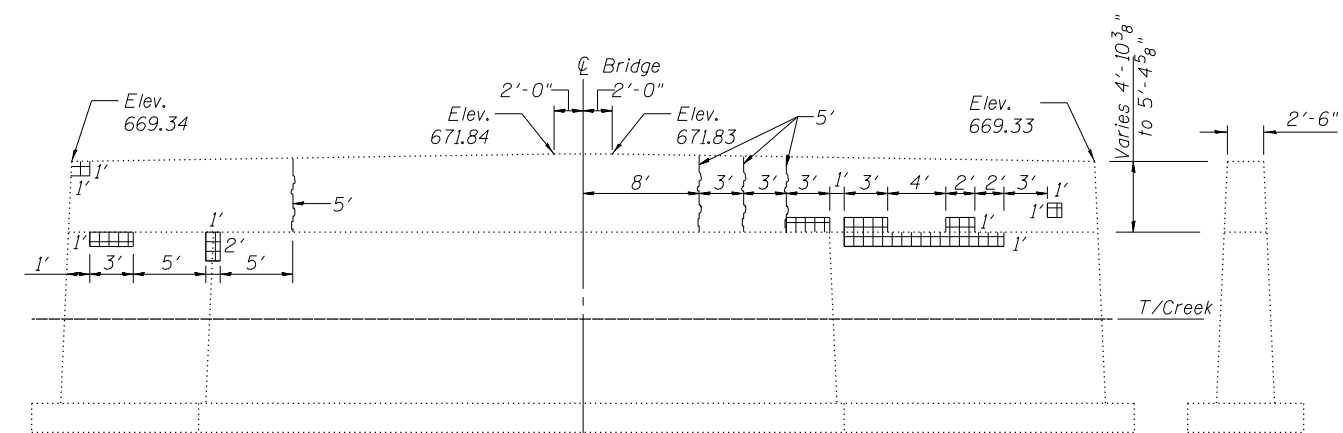
SCALE: N.T.S. SHEET 22 OF 28 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	62
PROJECT:		JOB: C-91-313-15		
	ILLINOIS			

[illegible]

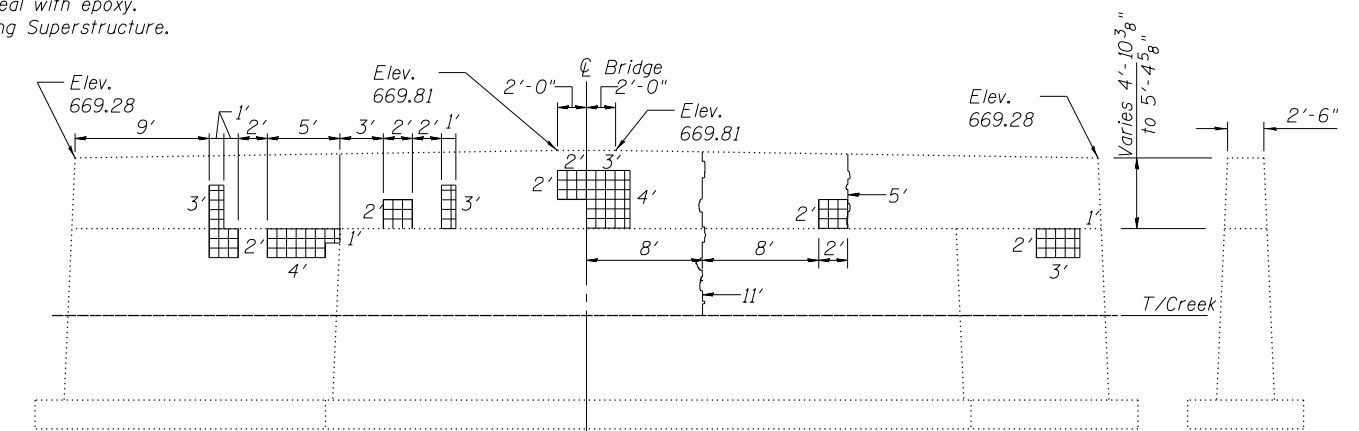
WEST PIER-WEST FACE

SOUTH END



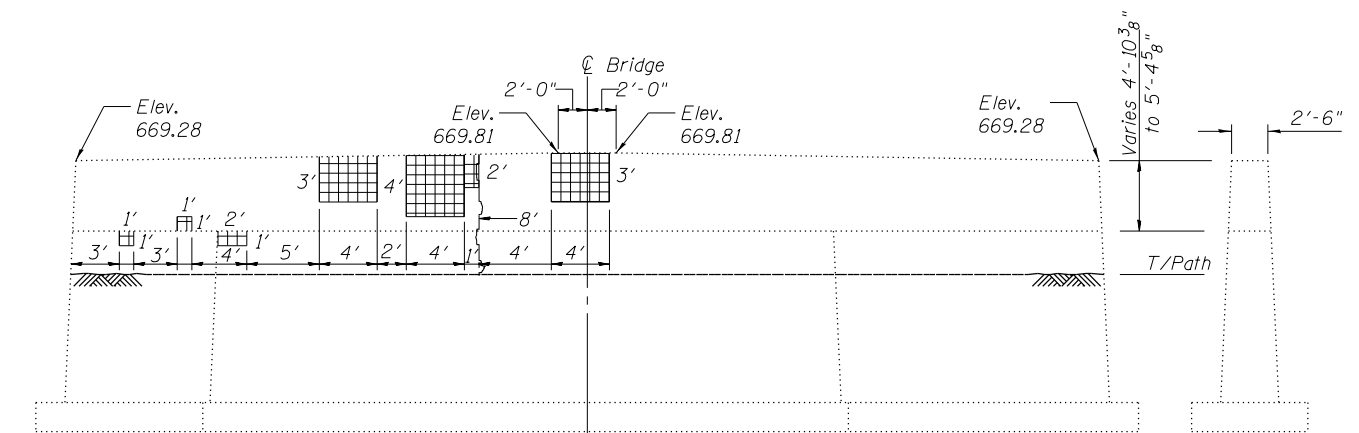
WEST PIER-EAST FACE

NORTH END



EAST PIER-WEST FACE

SOUTH END



EAST PIER-EAST FACE

NORTH END

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	294.0
Epoxy Crack Injection	Ft.	49
Concrete Sealer	Sq. Ft.	352



USER NAME	= cfigures
PLOT SCALE	= 0:2.00
PLOT DATE	= 2/13/2

DESIGNED	-	BS
DRAWN	-	BS
CHECKED	-	CB
DATE	-	11/16/18

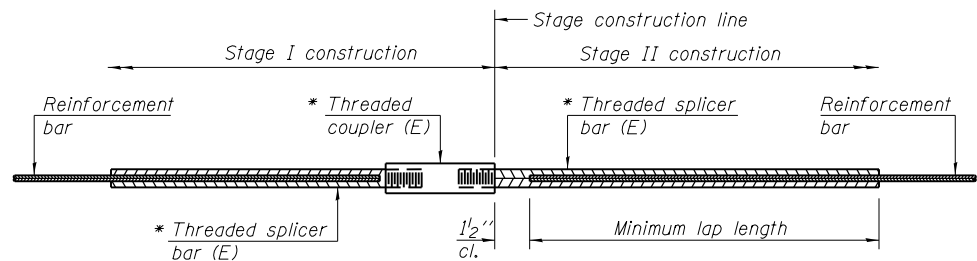
REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REPAIRS
STRUCTURE NO. 022-6950

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	63
PROJECT:		JOB: C-91-313-15		
	ILLINOIS			

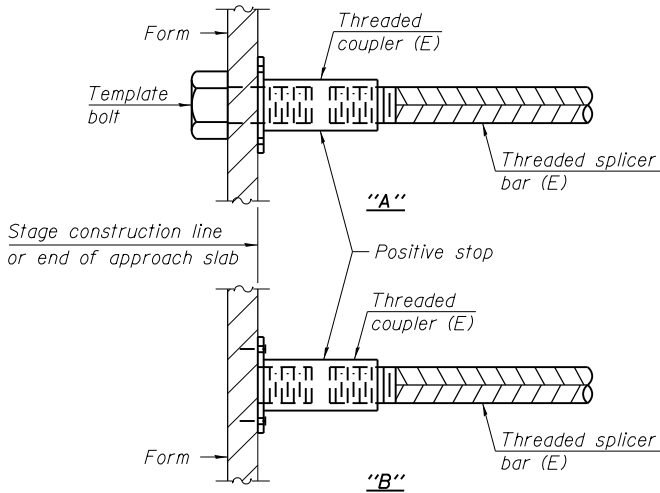


STANDARD BAR SPLICER ASSEMBLY

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

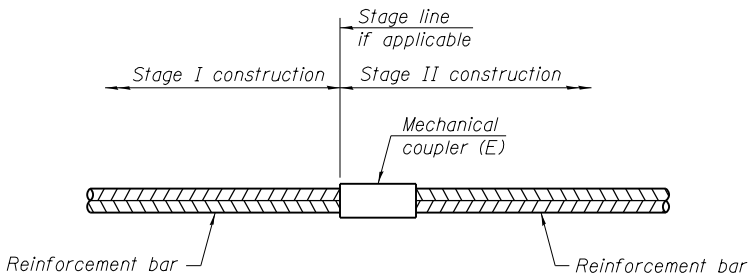
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Concrete Wearing Surface a(E) to a ₁ (E)	#4	114	2'-7"
West Abut. Backwall h(E) to h ₁ (E)	#5	6	3'-3"
East Abut. Backwall h(E) to h ₁ (E)	#5	6	3'-3"



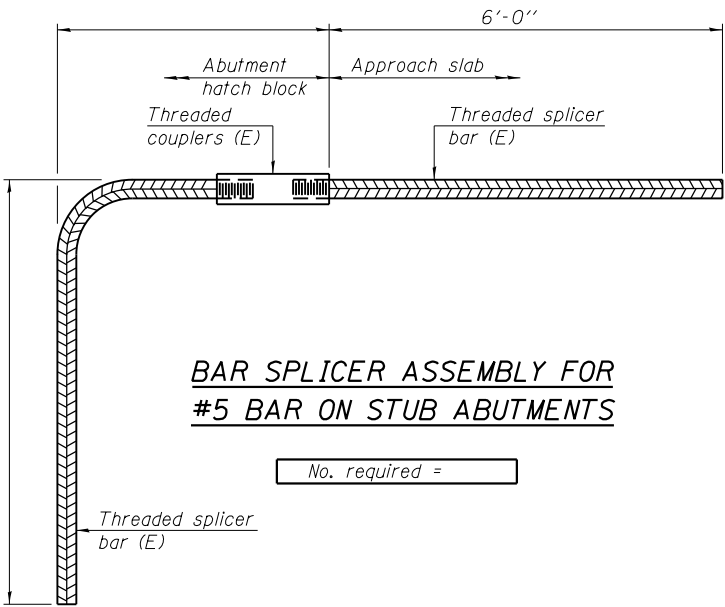
INSTALLATION AND SETTING METHODS

"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



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. 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

8-31-12



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME : cf1gus
PLOT SCALE : 0:2.0000 '1' / in.
PLOT DATE : 2/13/2019

DESIGNED - BS
DRAWN - BS
CHECKED - CB
DATE - 11/16/18

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO.

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	64
PROJECT:		JOB: C-91-313-15		
ILLINOIS				

Page 1 of 2

Date 11/29/15

PROJECT BRM-4003 (508) **DESCRIPTION** St. Charles Road Bridge over Salt Creek **LOGGED BY** K. Krug

ROUTE FAU 1397 (St. Charles Road) **SECTION** 15-00094-00-BR **LOCATION** SE 1/4 SEC. 3 TWP. 39N RNG. 11E PM. 3rd

COUNTY DuPage **DRILLING METHOD** Solid Stem Auger / Mud Rotary below 12.5 feet **HAMMER TYPE** Automatic

STRUCT. NO. 0226950

Station _____

BORING NO. B-1

Station _____

Offset _____

North 1,902,818.84
East 1,991,758.85

Easting 1,084,759.95
 Ground Surface Elevation 671.0

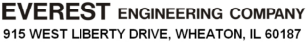
Ground Surface Elev. 671.0

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev. _____	ft	D	B	U	M
Stream Bed Elev. _____	ft	E	L	C	O
		P	O	S	I
Groundwater Elev.: _____		T	W		S
First Encounter _____ Dry _____	ft	H	S	Qu	T
Upon Completion _____ Mud Rotary _____	ft				
After _____ Hrs. _____	ft	(ft)	(/6")	(tsf)	(%)

[illegible]

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge and S-Shear on Rimac/Shelby Tube (ST), P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

Page 2 of 2

Date 11/29/15

PROJECT BRM-4003 (508) **DESCRIPTION** St. Charles Road Bridge over Salt Creek **LOGGED BY** K. Krug

ROUTE FAU 1397 (St. Charles Road) **SECTION** 5-00094-00-BR **LOCATION** SE 1/4 SEC. 3 TWP. 39N RNG. 11E PM. 3rd

COUNTY DuPage **DRILLING METHOD** Solid Stem Auger / Mud Rotary below 12.5 feet **HAMMER TYPE** Automatic

STRUCT. NO. 0226950

Station _____

BORING NO. B-1

Station _____

Offset _____


North 1,902,818.84
East 1,881,758.85

Easting 1,084,759.95
 Ground Surface Elevation 671.0

Ground Surface Elev. 671.0

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev. _____	ft	D	B	U	M
Stream Bed Elev. _____	ft	E	L	C	O
Groundwater Elev.: _____		P	O	S	I
First Encounter _____ Dry _____	ft	T	W		S
Upon Completion _____ Mud Rotary _____	ft	H	S	Qu	T
After _____ Hrs. _____	ft	(ft)	(/6")	(tsf)	(%)

	Loose to Medium Dense, Gray SILTY LOAM some - gravel(continued)	6 3 4 4 5 6	14 11	610.0 MDD - Maximum Dry Density OMC - Optimum Moisture Content
	625.5 Very Dense, Gray SAND some - gravel	18 30 20	9	
	623.0 Extremely Dense, Gray SILTY LOAM some - gravel	15 50/5"	9	
	620.0 DOLOMITE: Light to dark gray, slightly to moderately weathered, massive, fine grained, moderately to highly fractured, thin to thick bedded trace - vugs, stylolites, chert	1309		
	Recovery = 99% RQD = 62.5% (Fair)			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge and S-Shear on Rimac/Shelby Tube (ST), P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME	= cf1gus
PLOT SCALE	= 0:2.0000 's' / in.
PLOT DATE	= 2/13/2019

DESIGNED	-	BS
DRAWN	-	BS
CHECKED	-	CB
DATE	-	11/16/18

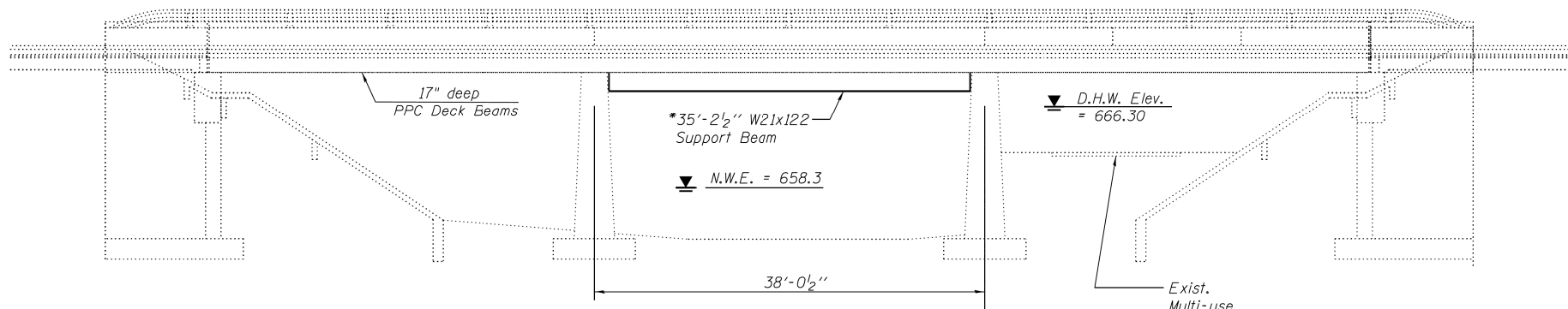
REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

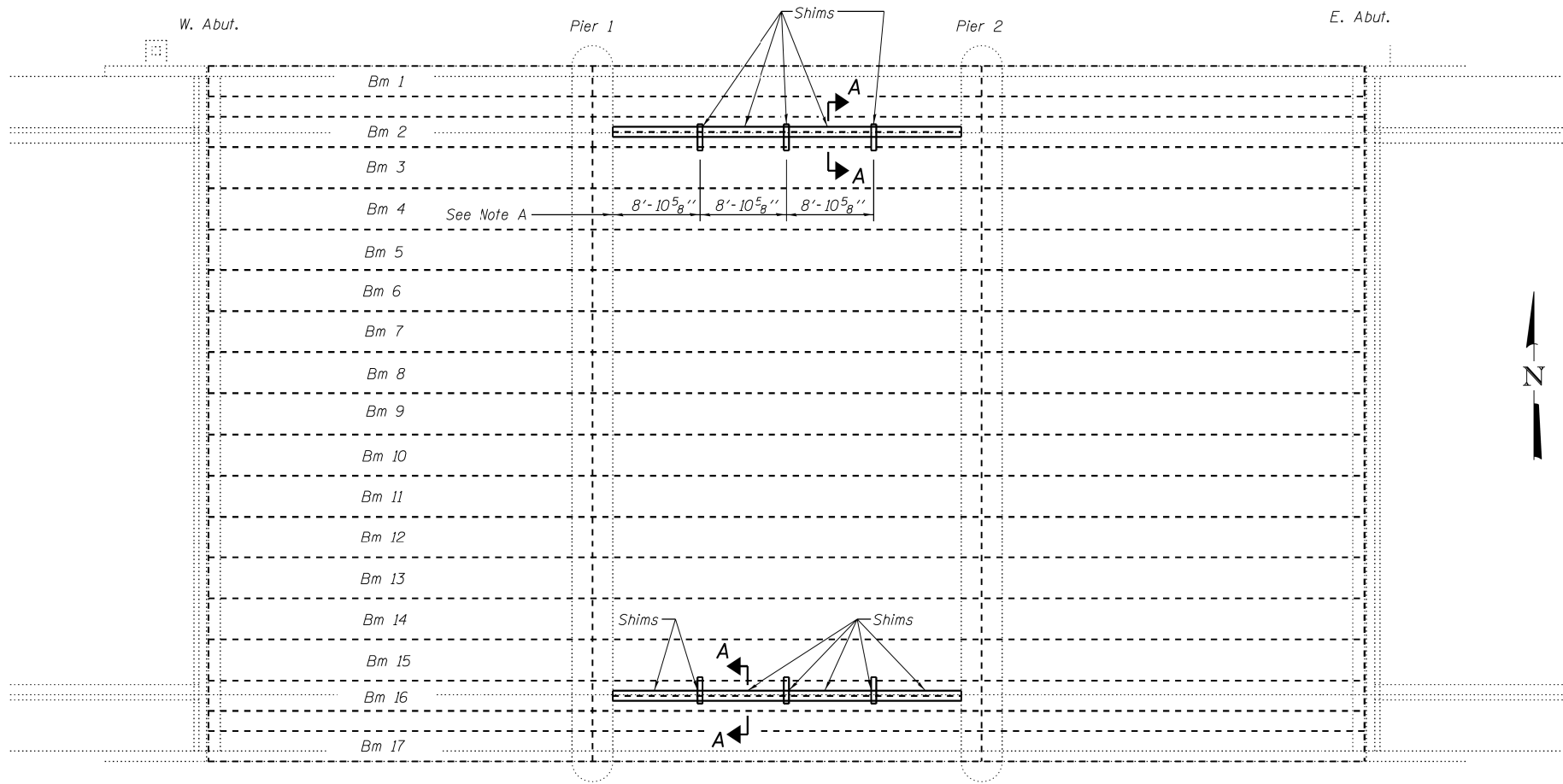
SOIL BORING LOG B-1
STRUCTURE NO. 022-6950

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	65
PROJECT:		JOB: C-91-313-15		
ILLINOIS				



*Contractor is to verify beam length prior to ordering material.

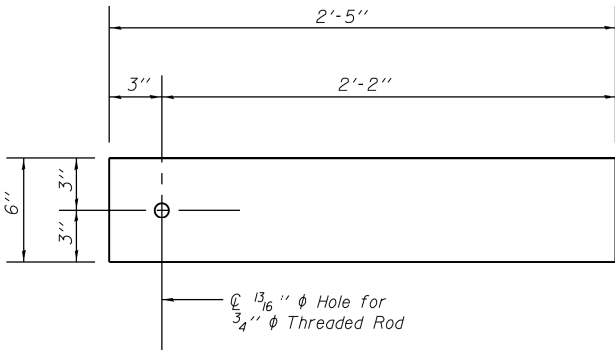


PLAN

RECORD DRAWINGS

GENERAL NOTES

All structural steel shall be AASHTO M 270 Grade 36.
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractors responsibility to account for the condition of the beams when developing construction procedures.
If the Contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams.
The cost of epoxy grouting threaded rods on the piers and deck beams shall be included with Furnishing and Erecting Structural Steel.
See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods; Minimum Embedment 9".



TRANSVERSE TIE P. A

P. 1/2"x6"x2'-5"
(6 Required)

Note A:
P. Transverse tie P's A (3 per span). Place additional shims at midpoints between tie P's. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	11,810



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME = cfisus

DESIGNED - CJB
CHECKED - PJM
DRAWN - CJB
CHECKED - 9/23/16

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM REPAIR PLANS - I
STRUCTURE NO. 022-6950

SHEET NO. 1 OF 3 SHEETS

F.A.U.
RTE.

1397

SECTION

15-00094-00-BR

COUNTY

DUPAGE

TOTAL
SHEETS

SHEET
NO.

PROJECT: BRM-40003(508); JOB: P-91-313-15

ILLINOIS FED. AID PROJECT



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME = cfisus
PLOT SCALE = 0:2.0000 '1' / in.
PLOT DATE = 2/13/2019

DESIGNED - BS
DRAWN - BS
CHECKED - CB
DATE - 11/16/18

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE REPAIR PLAN
- FOR INFORMATION ONLY

SCALE: N.T.S.

SHEET

1

OF

3

SHEETS

STA.

TO

STA.

F.A.U.
RTE.

1397

SECTION

15-00094-00-BR

COUNTY

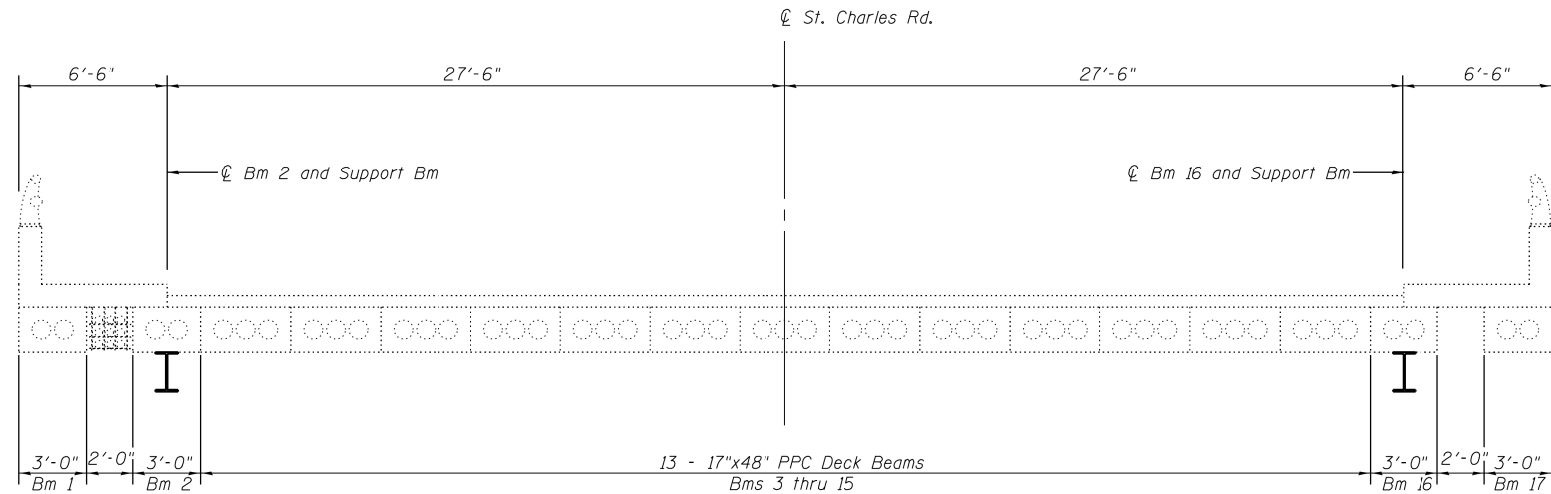
DUPAGE

TOTAL
SHEETS

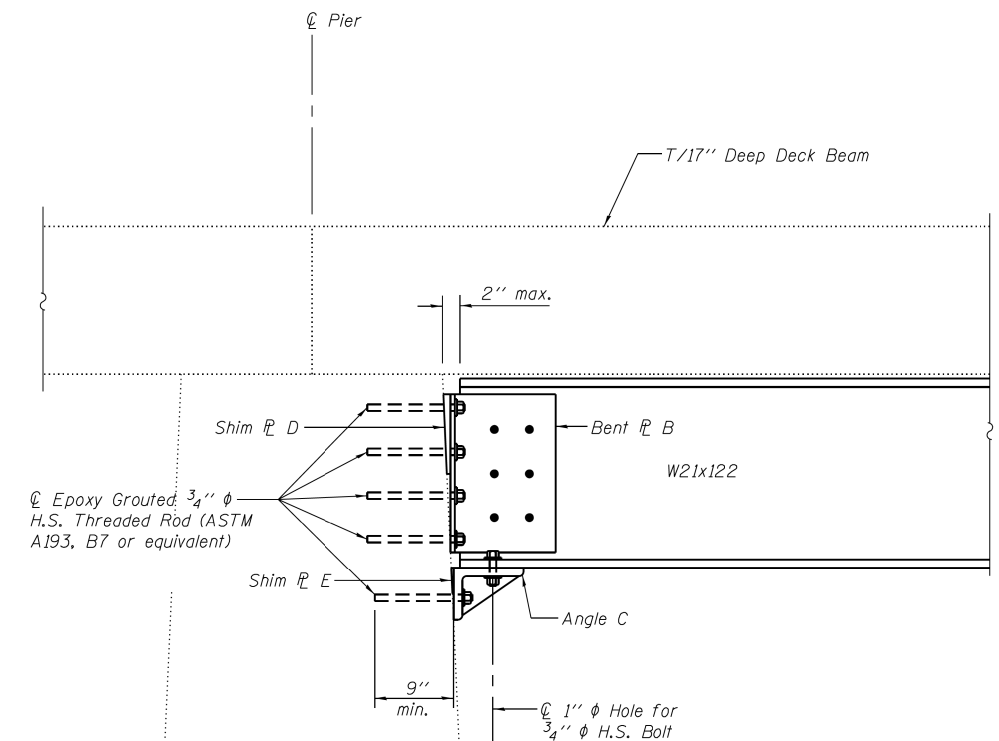
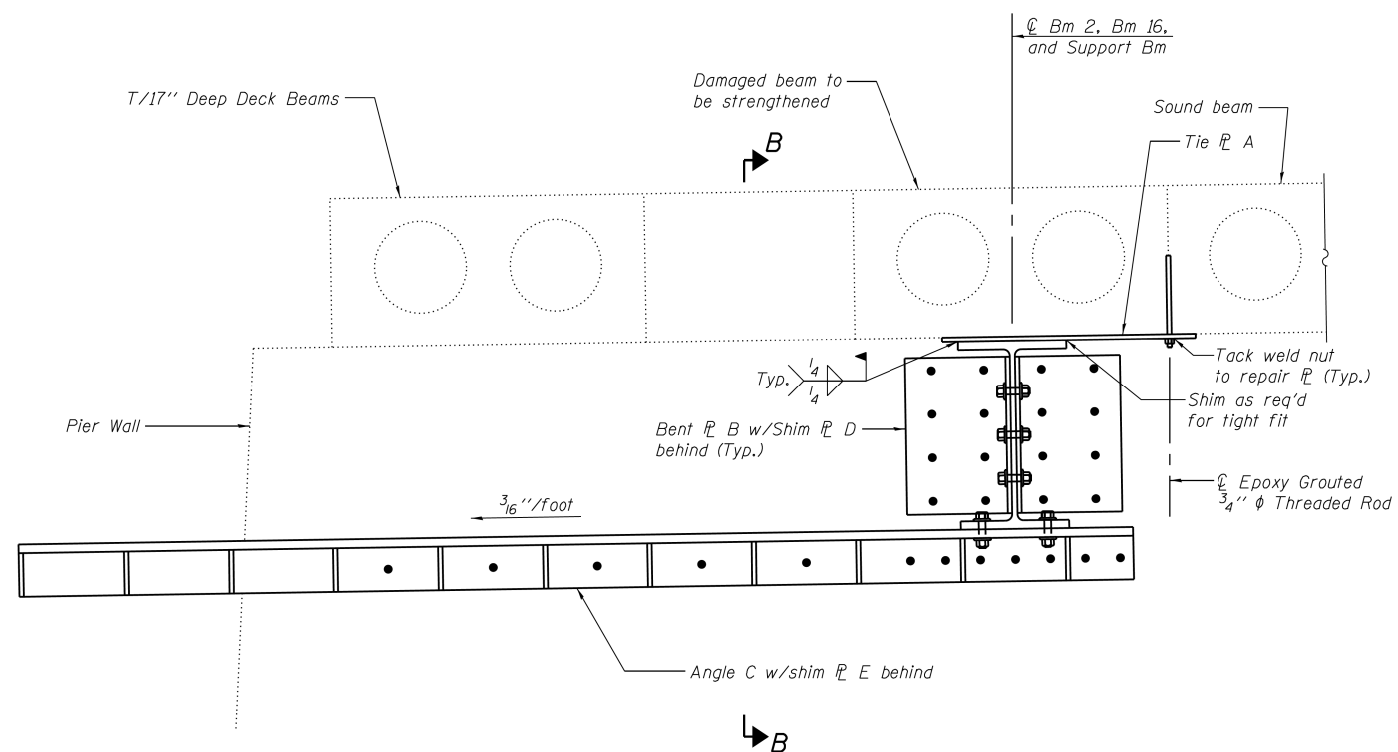
SHEET
NO.

PROJECT: BRM-40003(508); JOB: C-91-313-15

ILLINOIS



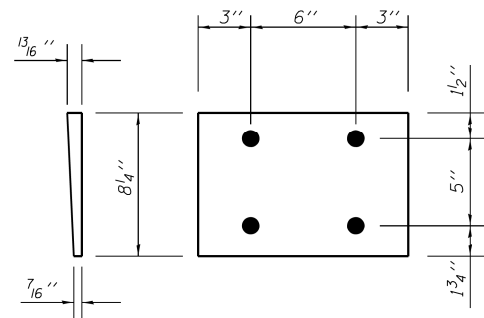
CROSS SECTION OF DECK
(Looking East)



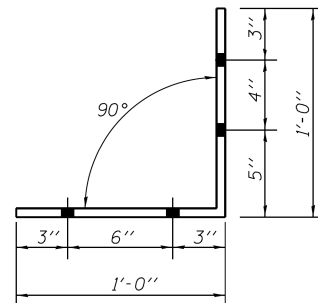
RECORD DRAWINGS

 <div>V3 Companies 7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</div>	USER NAME =	DESIGNED - CJB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEAM REPAIR PLANS - II STRUCTURE NO.022-6950	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED - PJM	REVISED -			1397	15-00094-00-BR	DUPAGE			
	PLOT SCALE =	DRAWN - CJB	REVISED -			PROJECT: BRM-4000315081; JOB: P-91-313-15					
	PLOT DATE =	CHECKED - 9/23/16	REVISED -			ILLINOIS FED. AID PROJECT					
						SHEET NO. 2 OF 3 SHEETS					

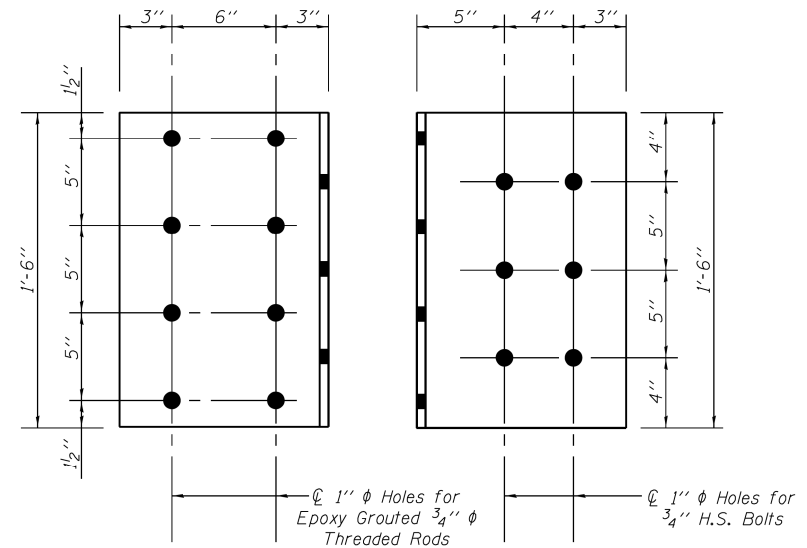
 <div>V3 Companies 7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</div>	USER NAME = cfigus	DESIGNED - BS	REVISED -	<div>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</div>	<div>RECORD ST.CHARLES ROAD BRIDGE REPAIR PLAN - FOR INFORMATION ONLY</div>				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - BS	REVISED -						1397	15-00094-00-BR	DUPAGE	106	70
	PLOT SCALE = 0:2.0000 '1' = 1".	CHECKED - CB	REVISED -		PROJECT: JOB: C-91-31-15								
	PLOT DATE = 2/13/2019	DATE - 11/16/18	REVISED -		ILLINOIS								
				SCALE: N.T.S.	SHEET 2 OF 3 SHEETS	STA.	TO STA.						



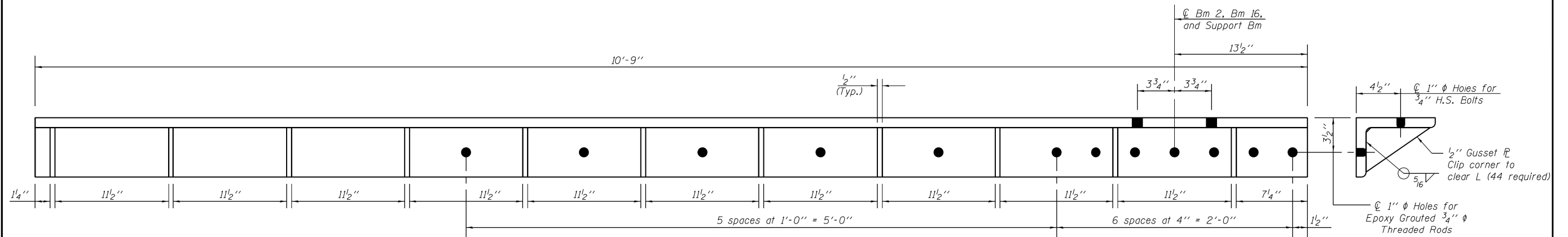
SHIM PL D
Beveled 7/16 inch to 13/16 inch x 8 1/4 inch x 1'-0 inch
(8 Required)



BENT PL B
1/2 inch x 1'-6 inch x 2'-0 inch
(8 Required)

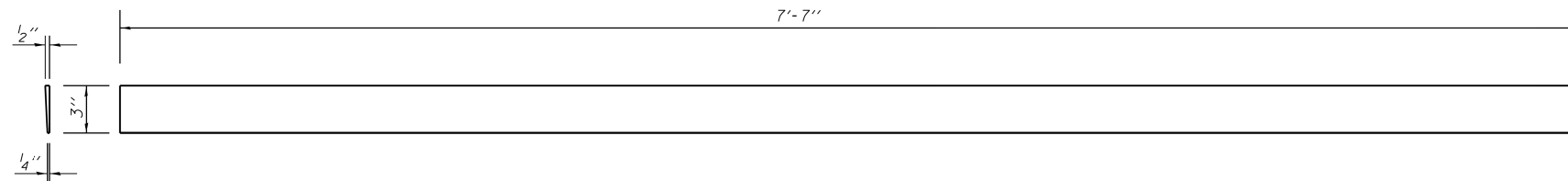


BENT PL B ELEVATIONS



SECTION THRU ANGLE C

ANGLE C
L 8 x 6 x 1/2 inch x 10'-9 inch
(4 Required)



SHIM PL E
Beveled 1/4 inch to 1/2 inch x 3 inch x 7'-7 inch
(4 Required)

RECORD DRAWINGS

 <div>V3 Companies 7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</div>	USER NAME =	DESIGNED - CJB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEAM REPAIR PLANS - III STRUCTURE NO. 022-6950	F.A.U. RTE. 1397	SECTION 15-00094-00-BR	COUNTY DUPAGE	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - CJB	REVISED -			PROJECT: BRM-40003(508); JOB: P-91-313-15				
	PLOT DATE =	CHECKED - 9/23/16	REVISED -			ILLINOIS FED. AID PROJECT				
						SHEET NO. 3 OF 3 SHEETS				

 <div>V3 Companies 7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</div>	USER NAME = cfigus	DESIGNED - BS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RECORD ST. CHARLES ROAD BRIDGE REPAIR PLAN - FOR INFORMATION ONLY	F.A.U. RTE. 1397	SECTION 15-00094-00-BR	COUNTY DUPAGE	TOTAL SHEETS 106	SHEET NO. 71
	PLOT SCALE = 0:2.0000 '1' / in.	CHECKED - CB	REVISED -			PROJECT: ILLINOIS				
	PLOT DATE = 2/13/2019	DATE - 11/16/18	REVISED -			JOB: C-91-313-15				
						SCALE: N.T.S. SHEET 3 OF 3 SHEETS STA. TO STA.				

WTL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1975-1980-1997	W.R.S. BY	DUPAGE	105	50
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-5003(27)	

ITEM	UNIT	QUANTITY
NAME PLATE	EACH	1
CHANNEL EXCAVATION	CU. YDS.	1500
POROUS GRANULAR EMBANKMENT, SPECIAL	CU. YDS.	375
STRUCTURE EXCAVATION	CU. YDS.	570
COFFERDAM EXCAVATION	CU. YDS.	450
COFFERDAMS *	EACH	2

DESIGN DATA

DESIGN SPECIFICATIONS FOR HIGHWAY BRIDGES, A.A.S.H.T.O. 1975 AND INTERIMS 1974, 1975, 1976 & 1977

DESIGN LOAD: HS20

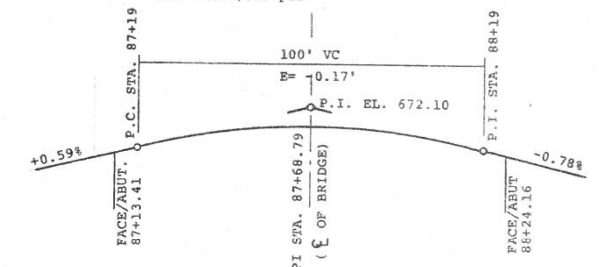
DESIGN STRESSES:

CAST IN PLACE CONCRETE
 $f_c = 1400$ psi
 $v = 56.2$ psi
 $n = 8.5$

PRESTRESSED CONCRETE BEAMS
 $f'_c = 5000$ psi
 $f'_{ci} =$ SEE INDIVIDUAL BEAM DETAILS

REINFORCING STEEL, DEFORMED
 $f_s = 20,000$ psi

PRESTRESSING STEEL - $1/2"$ ϕ STRANDS
 $f'_s = 270,000$ psi EXTRA HIGH STRENGTH
 (INITIAL FORCE PER STRAND IS TO BE 28,900 LBS.)
 $f_{si} = 189,000$ psi



PROFILE GRADE & ϕ OF CONSTRUCTION
 (TOP OF CLASS I SURFACE)

STATION 87+68.79
 BUILT 1978 BY
 STATE OF ILLINOIS
 S.A. RT. SA-7 SEC. 0-1.15D
 F.A. PROJ. M-5003(27)
 LOADING HS 20
 STR. NO. 022-6950

NAME PLATE
 (SEE STD. 2113)

NOTE:
 STRUCTURE NUMBER (STR. NO.)
 TO BE SUPPLIED BY DISTRICT
 LOCATE NAME PLATE AT THE
 NORTHEAST WINGWALL (#1)

*THE CONTRACTOR SHALL BE PAID FOR CONSTRUCTION OF ONE COFFERDAM AT EACH PIER. THE COFFERDAM MAY BE CONTINUOUS FROM ONE END OF THE PIER TO THE OTHER OR IT MAY BE CONSTRUCTED ONLY AROUND THE NEW CONSTRUCTION AT THE ENDS.

ILLINOIS DIVISION OF HIGHWAYS

GENERAL BRIDGE PLAN

ST. CHARLES ROAD BRIDGE - SALT CREEK

SCALE: 1" = 20'

DRAWN BY: D.C.N.

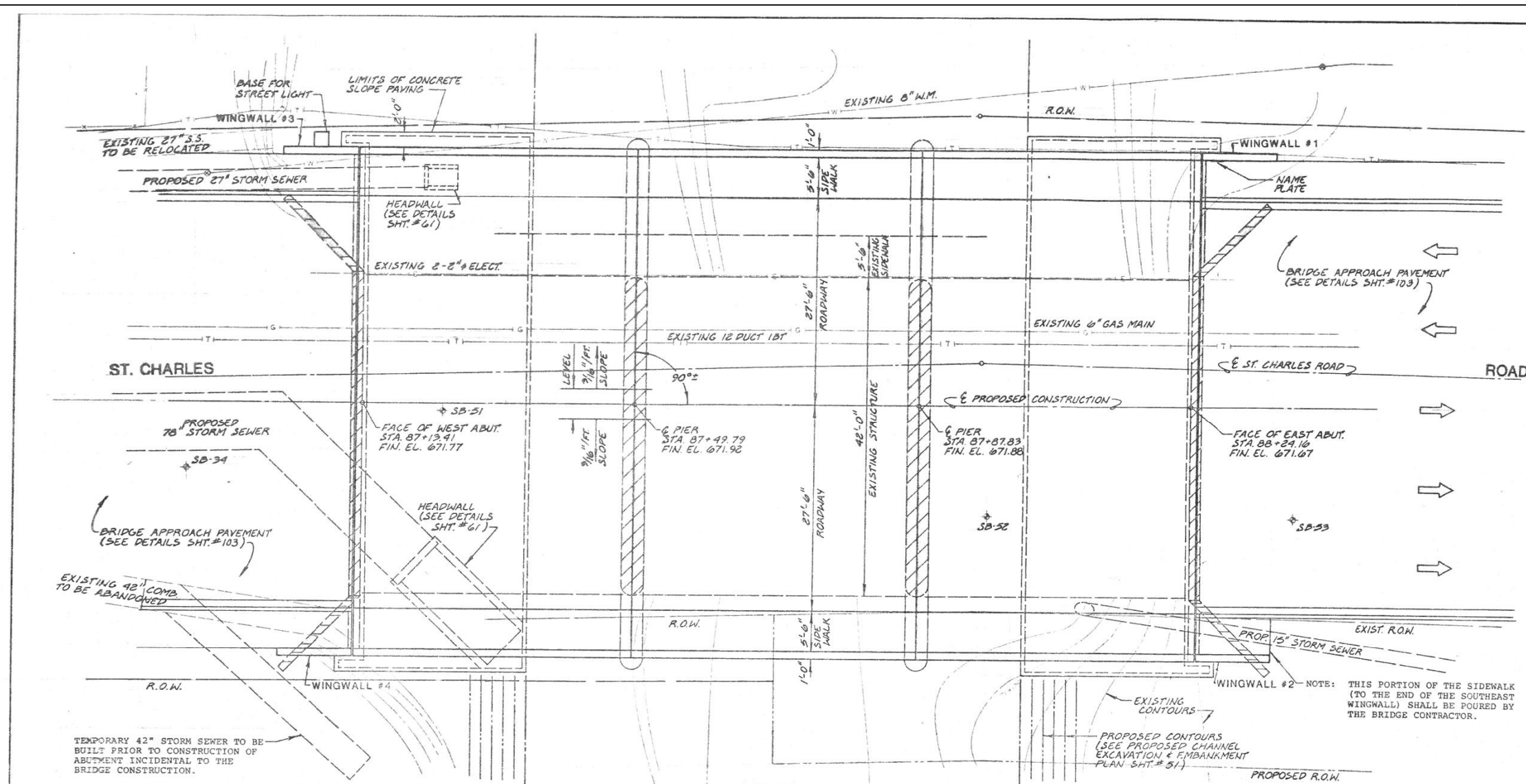
DATE: 12-13-77

CHECKED BY: E.M.

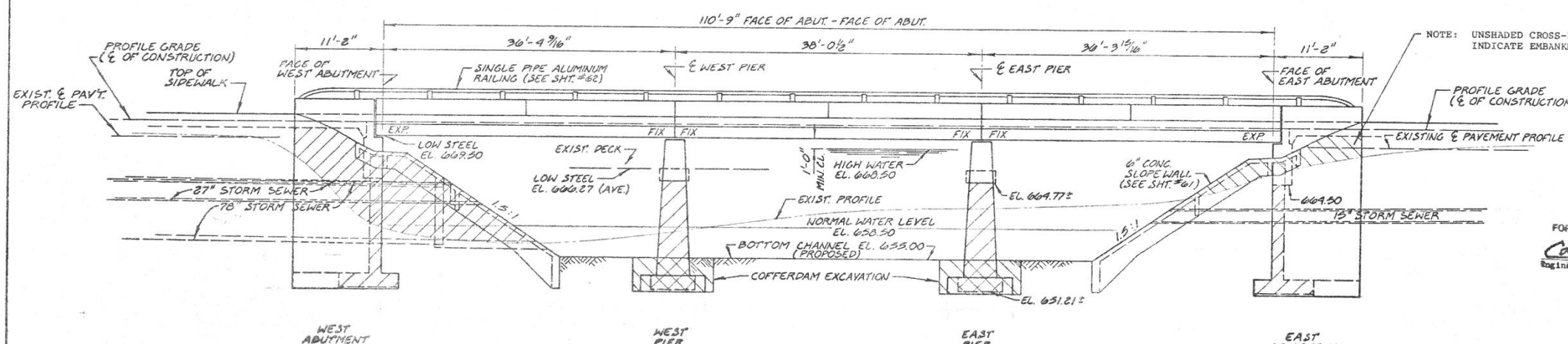
APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
Carl E. Thompson
 Engineer of Bridge & Traffic Structures



REVISIONS	
NAME	DATE
D.C.N.	2/14/78
G.H.	3-22-79



PLAN

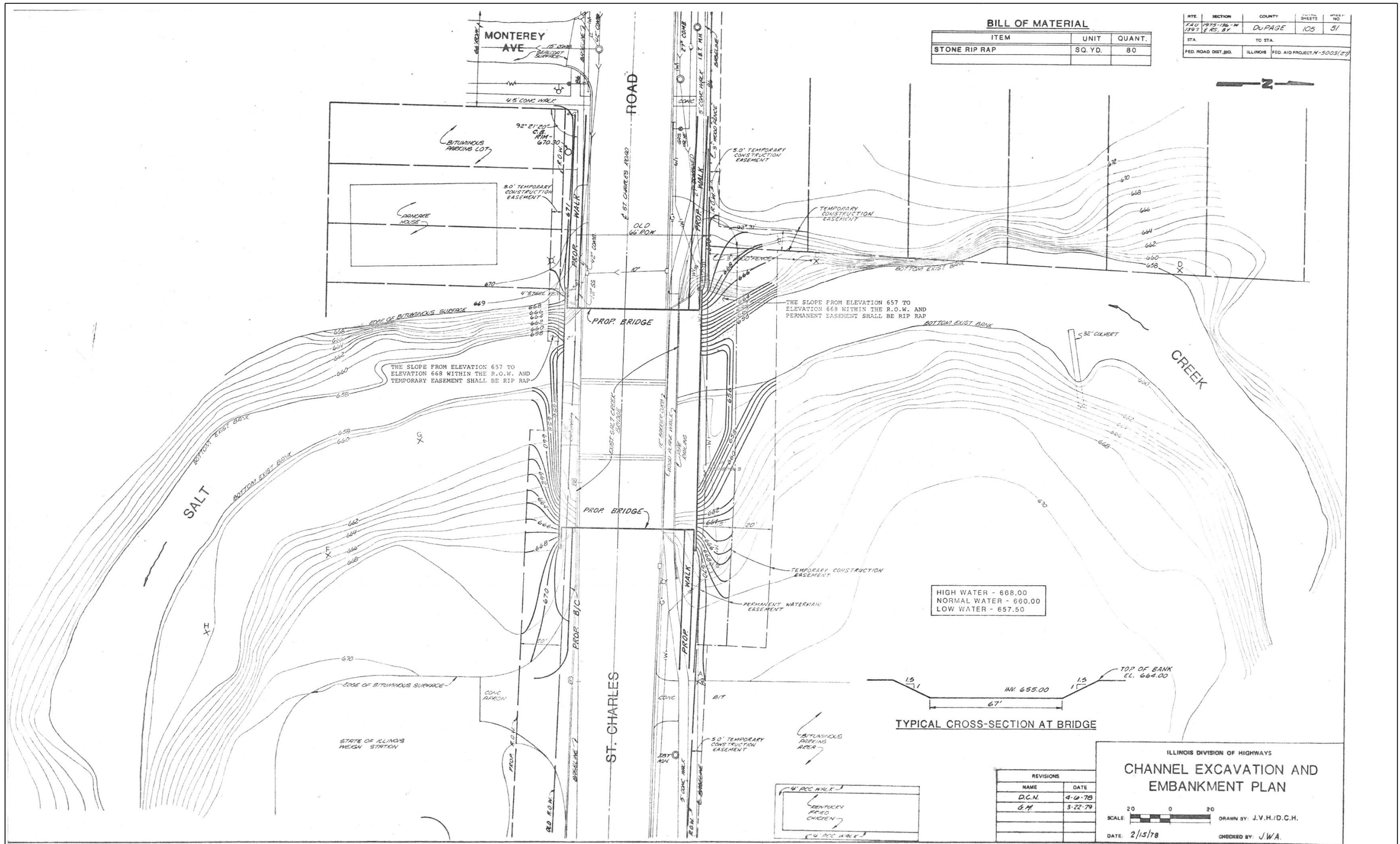


ELEVATION

CROSS-HATCHED AND SHADED AREAS
 INDICATE EXISTING SUB-STRUCTURE.

USER NAME: cfagus	DESIGNED - BS	REVISED -
PLOT SCALE: 0.20000 '1' = 1"	DRAWN - BS	REVISED -
PLOT DATE: 2/13/2019	CHECKED - CB	REVISED -
	DATE - 11/16/18	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	72
PROJECT:		JOB: C-91-313-15		
ILLINOIS				



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME: cfagus
PLOT SCALE: 0:2.0000 '1' / in.
PLOT DATE: 2/13/2019

DESIGNED - BS
DRAWN - BS
CHECKED - CB
DATE - 11/16/18

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN
- FOR INFORMATION ONLY

SCALE: N.T.S. SHEET 2 OF 15 SHEETS STA. TO STA.

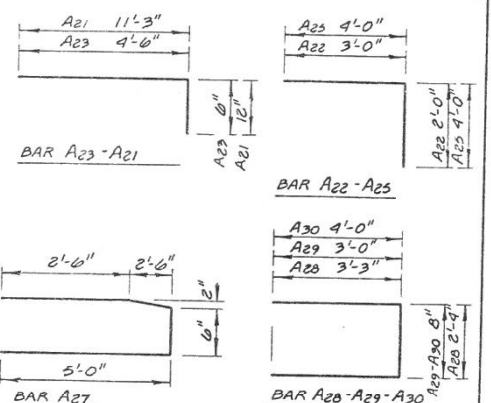
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	73

PROJECT: ILLINOIS JOB: C-91-313-15

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PAU 1397	1975-1396-1	DUPAGE	105	52
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT M-5003(27)		

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
A9(E)	12	#6	9'-8"	
A6	12	#6	7'-4"	
A7	16	#6	8'-3"	
A9	12	#6	9'-8"	
A11	68	#6	11'-0"	
A13	16	#6	13'-0"	
A15	118	#6	14'-0"	
A16	12	#6	14'-0"	
A17	12	#6	15'-0"	
A18	14	#6	16'-3"	
A19	8	#5	30'-0"	
A20	24	#8	35'-0"	
A21	36	#6	12'-3"	
A22	53	#5	5'-0"	
A23	112	#6	5'-0"	
A25	66	#6	8'-0"	
A26	44	#6	7'-8"	
A27(E)	24	#6	10'-6"	
A28	134	#6	8'-10"	
A29	55	#5	6'-8"	
A30(E)	6	#5	8'-8"	
A3	30	#6	5'-0"	
F4(E)	8	#5	7'-2"	SEE SHT. #56
3/4"X12" SELF DRILLING EXPAN. BOLTS				
CLASS X CONCRETE			CU. YDS.	92
REINFORCEMENT BARS			POUNDS	13,515
REINFORC. BARS (EPOXY COATED)			POUNDS	644



REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED SEE SPECIAL PROVISIONS

NOTES:

- 1 - CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING BRIDGE. IF ANY SIGNIFICANT VARIATIONS ARE FOUND THE ENGINEER SHOULD BE NOTIFIED.
- 2 - ALL BARS SHALL HAVE 2" OF COVER EXCEPT IN THE FOOTINGS WHERE 3" OF COVER SHALL BE MAINTAINED.

ILLINOIS DIVISION OF HIGHWAYS

EAST ABUTMENT PLANS

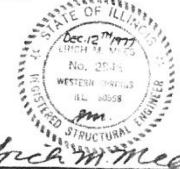
ST. CHARLES ROAD BRIDGE - SALT CREEK

DRAWN BY: D.C.N.

CHECKED BY: E.M.

DATE: 12-13-77

REVISIONS	
NAME	DATE
D.C.N.	2-19-78
D.C.N.	4-6-78
G.M.	3-22-79



RECORD ST. CHARLES ROAD BRIDGE PLAN
- FOR INFORMATION ONLY

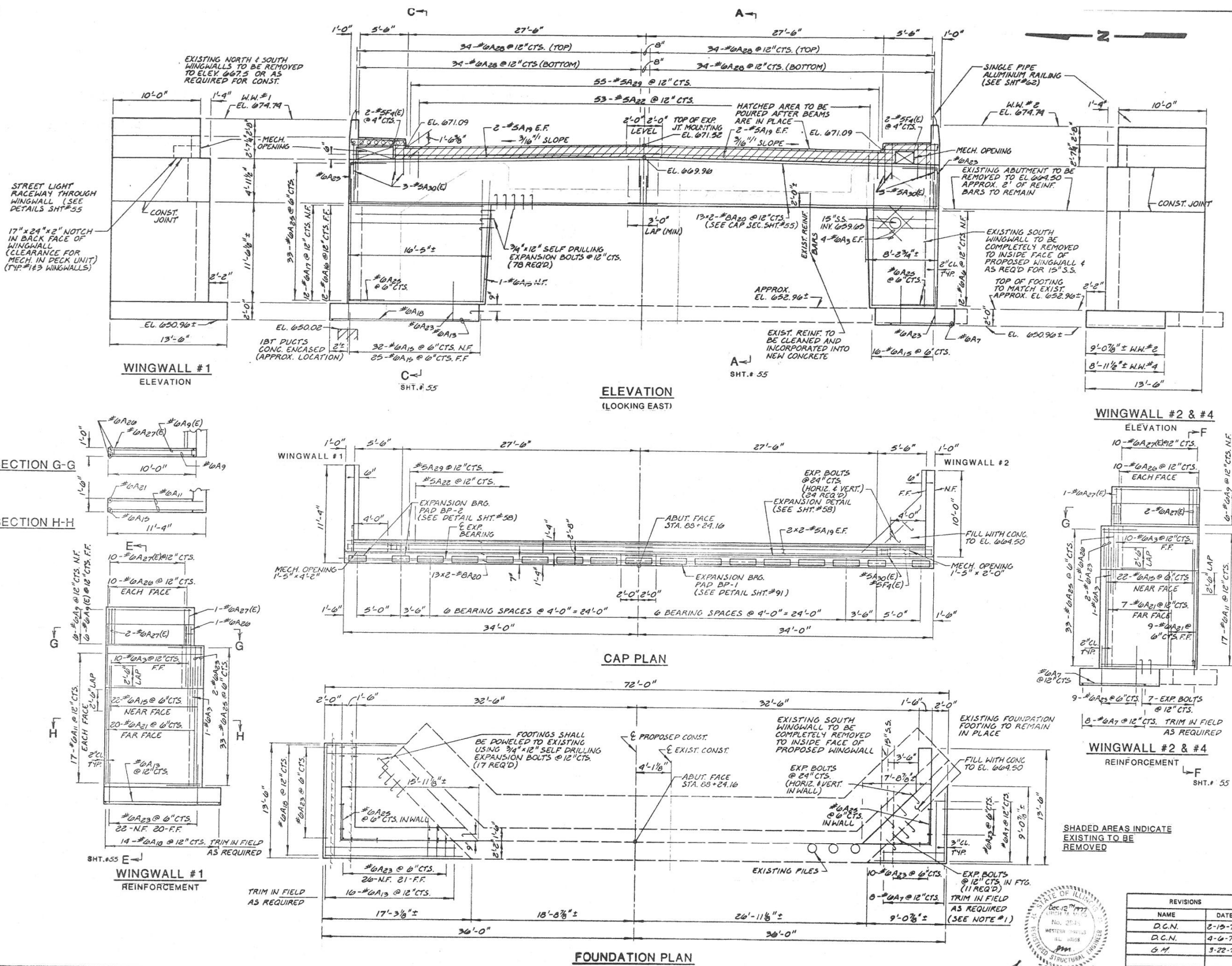
SCALE: N.T.S. SHEET 3 OF 15 SHEETS STA. TO STA.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGNED - BS	REVISED -
DRAWN - BS	REVISED -
CHECKED - CB	REVISED -
DATE - 11/16/18	REVISED -

USER NAME: cfagus
PLOT SCALE: 0.20000' / in.
PLOT DATE: 2/13/2019

V3 Companies
7325 Jones Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com



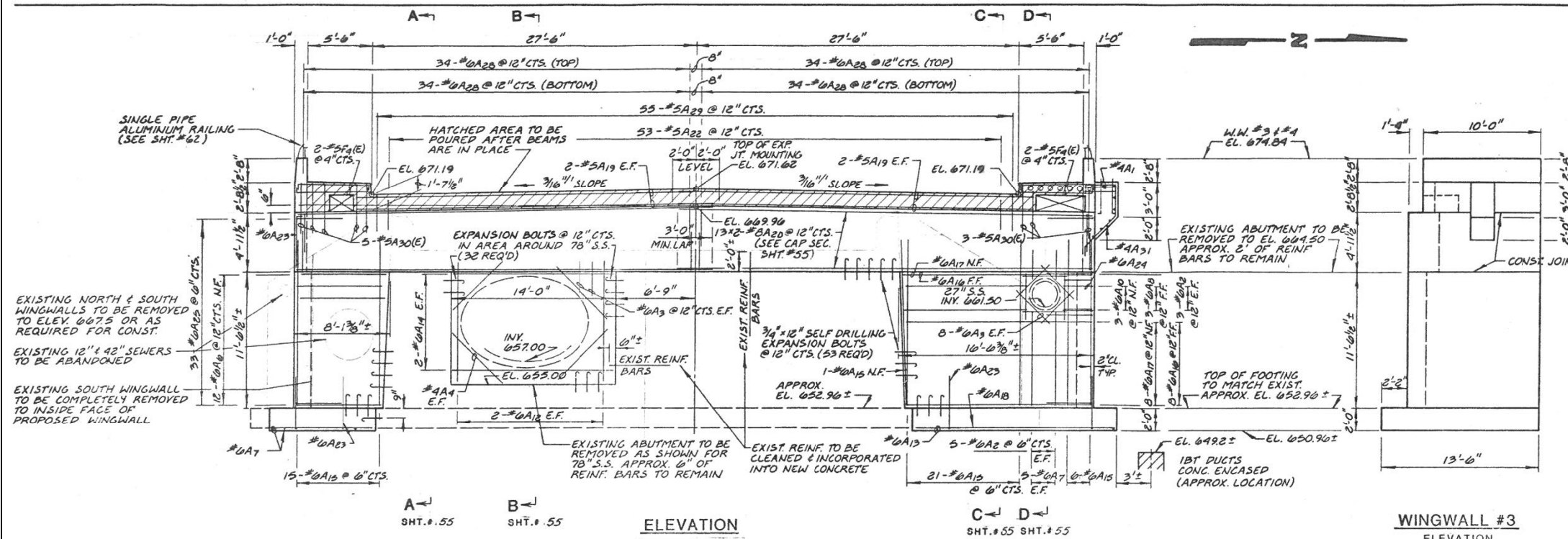
06104-50

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PAU 1997	1975-1997	DUPAGE	105	53
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-5003(27)	

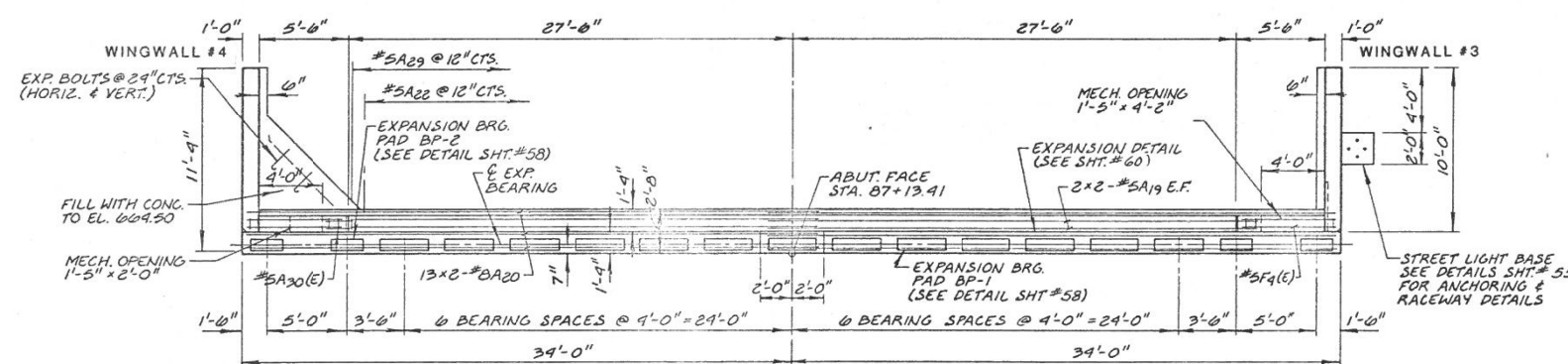
REINFORCEMENT BARS DESIGNATED (E)
SHALL BE EPOXY COATED
SEE SPECIAL PROVISIONS

BILL OF MATERIAL

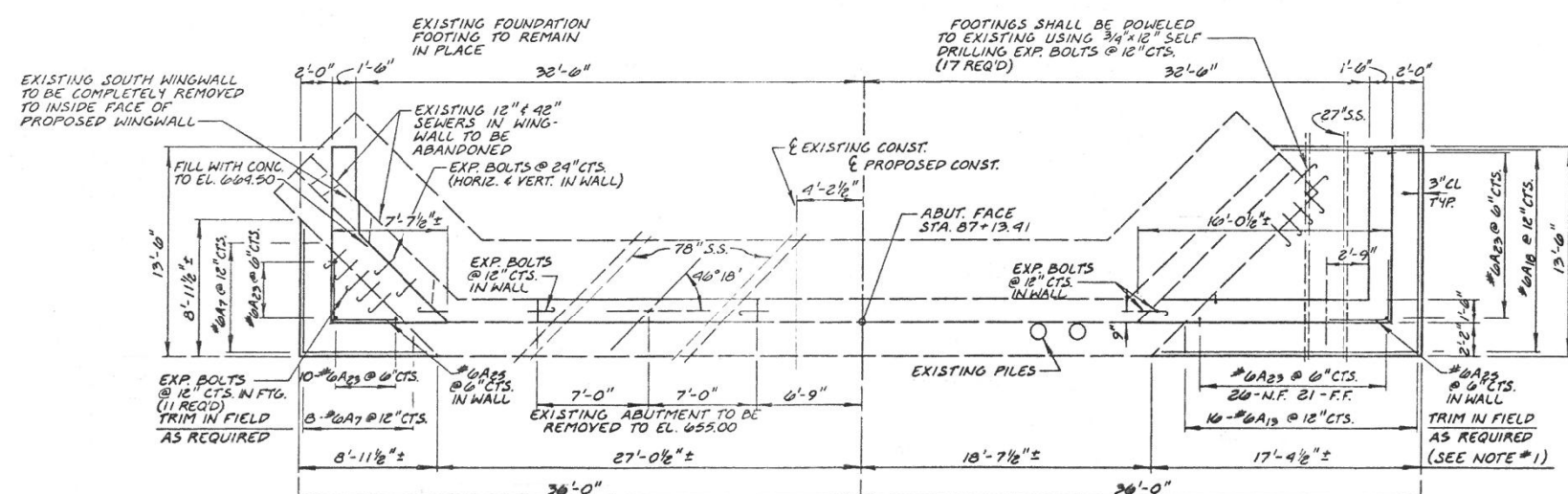
BAR	NO.	SIZE	LENGTH	SHAPE
A1	8	#4	1'-8"	
A2	16	#6	2'-6"	
A3	40	#6	5'-0"	
A4	8	#4	6'-0"	
A5(E)	12	#6	9'-8"	
A6	12	#6	7'-4"	
A7	26	#6	8'-3"	
A8	3	#6	9'-0"	
A9	12	#6	9'-0"	
A10	3	#6	10'-0"	
A11	48	#6	11'-0"	
A12	4	#6	12'-0"	
A13	16	#6	13'-0"	
A14	4	#6	13'-8"	
A15	114	#6	14'-0"	
A16	9	#6	14'-6"	
A17	9	#6	15'-6"	
A18	14	#6	16'-3"	
A19	8	#5	30'-6"	
A20	26	#8	35'-6"	
A21	40	#6	12'-3"	
A22	53	#5	5'-0"	
A23	112	#6	5'-0"	
A24	6	#6	6'-6"	
A25	60	#6	8'-0"	
A26	44	#6	7'-8"	
A27(E)	26	#6	10'-6"	
A28	136	#6	8'-10"	
A29	55	#5	6'-8"	
A30(E)	6	#5	8'-8"	
A31	6	#4	10'-10"	
A32	2	#4	9'-4"	
F4(E)	8	#5	7'-2"	SEE SHT. #56
3/4"X12" SELF DRILLING EXPAN. BOLTS			137	
CLASS X CONCRETE		CU. YDS.	92	
REINFORCEMENT BARS		POUNDS	14,294	
REIN. BARS (EPOXY COATED)		POUNDS	698	



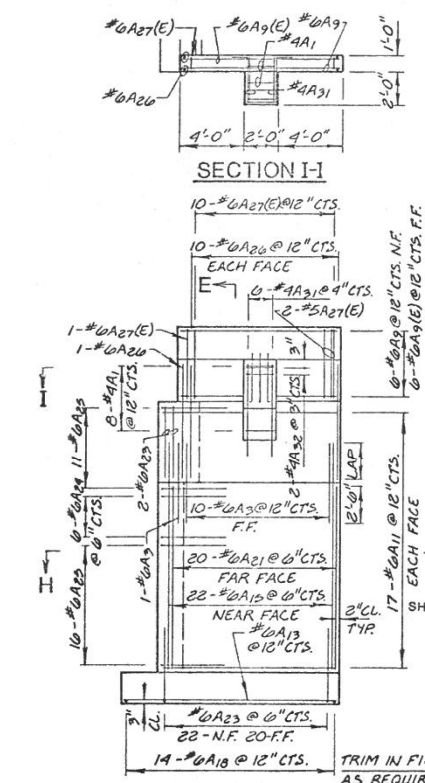
WINGWALL #3
ELEVATION



CAP PLAN



FOUNDATION PLAN



WINGWALL #3
REINFORCEMENT

NOTES

- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING BRIDGE. IF ANY SIGNIFICANT VARIATIONS ARE FOUND THE ENGINEER SHOULD BE NOTIFIED.
- ALL BARS SHALL HAVE 2" OF COVER EXCEPT IN THE FOOTINGS WHERE 3" OF COVER SHALL BE MAINTAINED

ILLINOIS DIVISION OF HIGHWAYS

WEST ABUTMENT PLANS

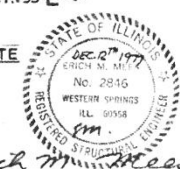
ST. CHARLES ROAD BRIDGE - SALT CREEK

DATE: 12-13-77

DRAWN BY: D.C.N.

CHECKED BY: E.M.

SHADED AREAS INDICATE
EXISTING TO BE
REMOVED.

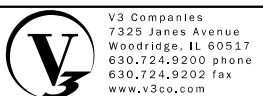


REVISIONS	
NAME	DATE
D.C.N.	2-17-78
G.M.	3-22-79

RECORD ST. CHARLES ROAD BRIDGE PLAN
- FOR INFORMATION ONLY

SCALE: N.T.S. SHEET 4 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	75
PROJECT:		JOB: C-91-313-15		
	ILLINOIS			



USER NAME: cfagus	DESIGNED: BS	REVISED:
PLOT SCALE: 0.20000' / 1"	DRAWN: BS	REVISED:
PLOT DATE: 2/13/2019	CHECKED: CB	REVISED:
	DATE: 11/16/18	REVISED:

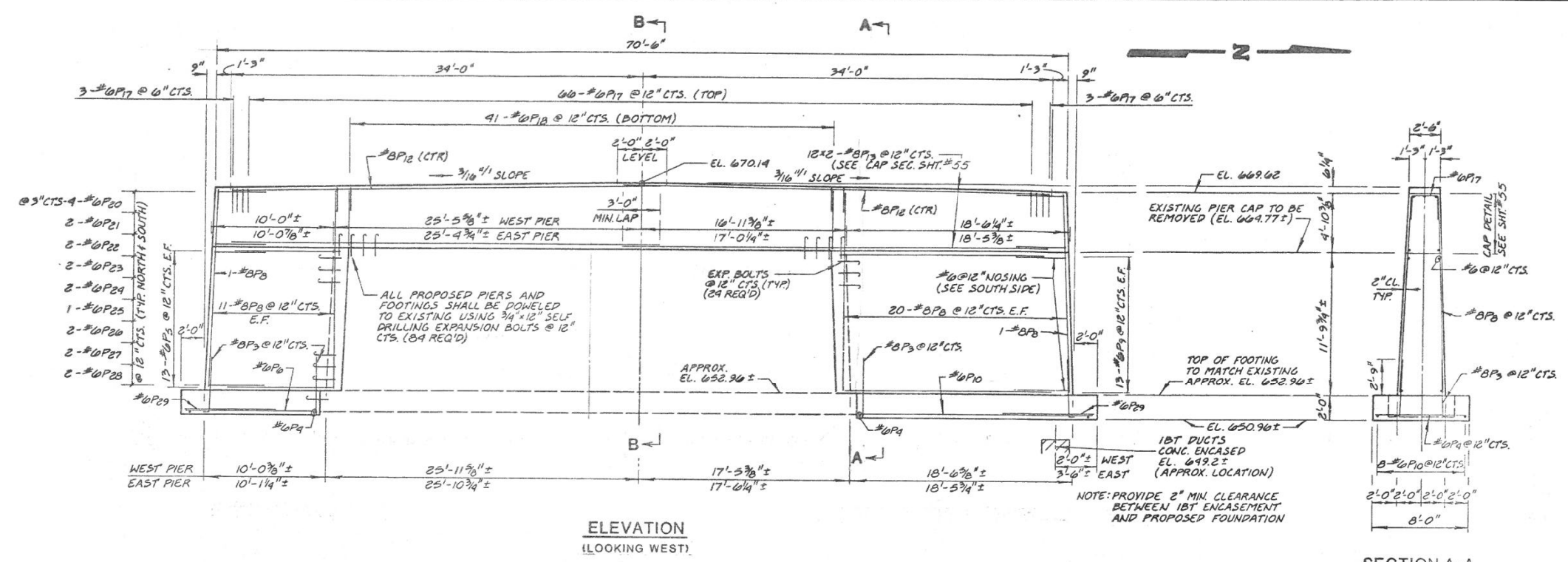
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

no 104-51

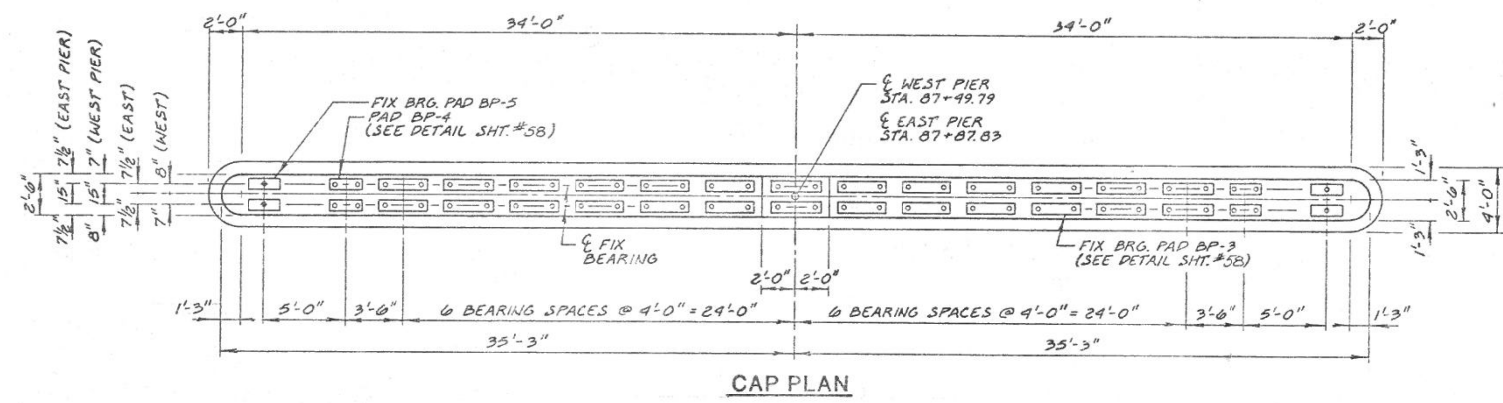
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
157	15-00094-00-BR	DUPAGE	105	54
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-2003(27)	

EAST AND WEST PIERS BILL OF MATERIAL

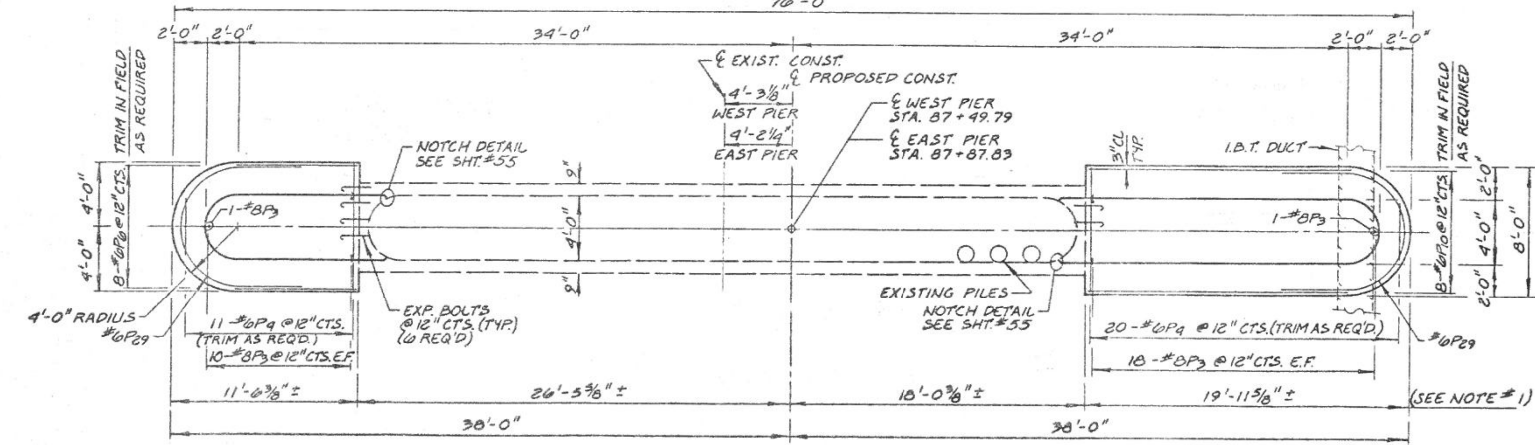
BAR	NO.	SIZE	LENGTH	SHAPE
P3	110	#8	5'-0"	
P4	62	#10	7'-6"	
P5	52	#10	8'-6"	
P6	16	#10	11'-0"	
P8	124	#8	16'-9"	
P9	52	#10	17'-0"	
P10	16	#10	19'-6"	
P12	4	#8	20'-6"	
P13	48	#8	35'-6"	
P17	144	#10	7'-2"	
P18	82	#10	11'-8"	
P20	16	#10	9'-4"	
P21	8	#10	9'-8"	
P22	8	#10	10'-0"	
P23	8	#10	10'-2"	
P24	8	#10	10'-4"	
P25	4	#10	10'-5"	
P26	8	#10	11'-0"	
P27	8	#10	11'-3"	
P28	8	#10	11'-6"	
P29	4	#10	19'-9"	
3/4"X12" SELF DRILLING EXPAN. BOLTS			288	
CLASS X CONCRETE			CU. YDS.	196
REINFORCEMENT BARS			POUNDS	19,603



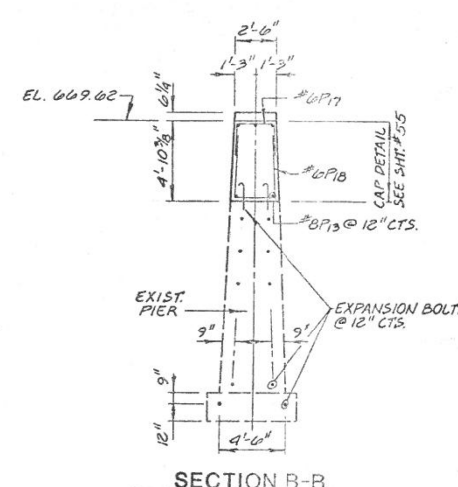
SECTION A-A



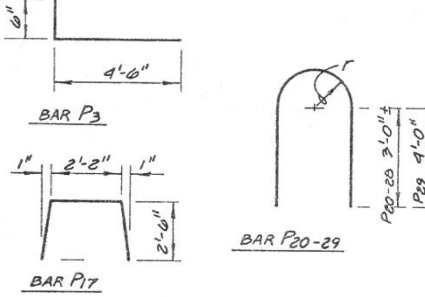
CAP PLAN



FOUNDATION PLAN



SECTION B-B



NOTES:

- 1 - CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING BRIDGE. IF ANY SIGNIFICANT VARIATIONS ARE FOUND THE ENGINEER SHOULD BE NOTIFIED.
- 2 - ALL BARS SHALL HAVE 2" OF COVER EXCEPT IN THE FOOTINGS WHERE 3" OF COVER SHALL BE MAINTAINED.



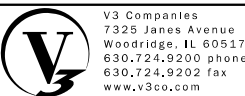
REVISIONS	
NAME	DATE
D.C.N.	2-16-78
D.C.N.	4-6-78
G.A.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS

EAST & WEST PIER PLANS

ST. CHARLES ROAD BRIDGE - SALT CREEK

DRAWN BY: D.C.N.



USER NAME: cfagus	DESIGNED - BS	REVISED -
PLOT SCALE: 0.20000 '1' = 1"	DRAWN - BS	REVISED -
PLOT DATE: 2/13/2019	CHECKED - CB	REVISED -
	DATE - 11/16/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN
- FOR INFORMATION ONLY

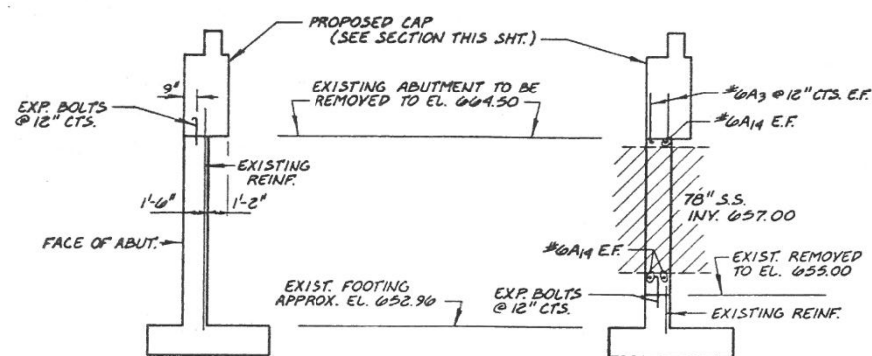
SCALE: N.T.S. SHEET 5 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	76
PROJECT:		JOB: C-91-313-15		
ILLINOIS				

BILL OF MATERIAL

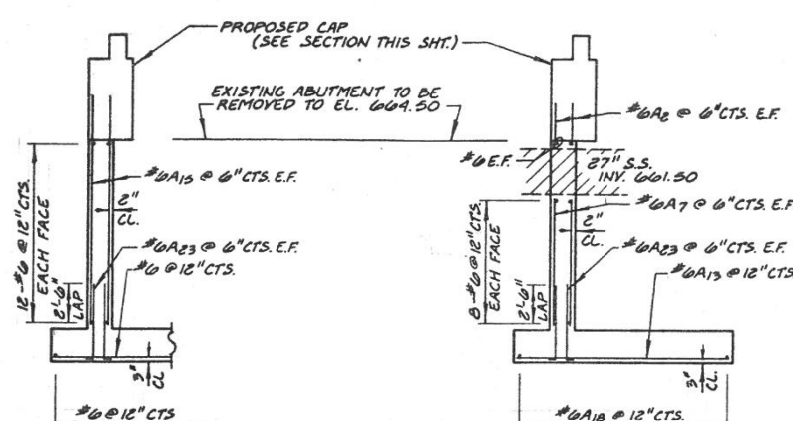
ITEM	UNIT	QUAN.
REPAIR CONCRETE STRUCTURES	SQ. FT.	100

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	1975-130	DUPAGE	105	55
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT M-5003(27)		



SECTION A-A
(EXISTING ABUTMENT)

SECTION B-B
(AT 78\"/>

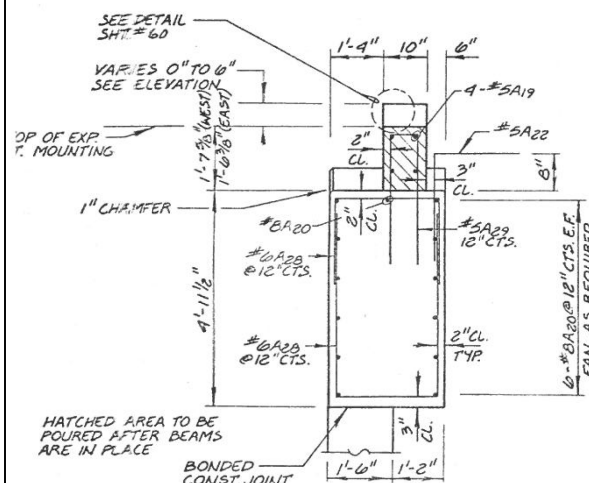


SECTION C-C
(PROPOSED ABUTMENT)

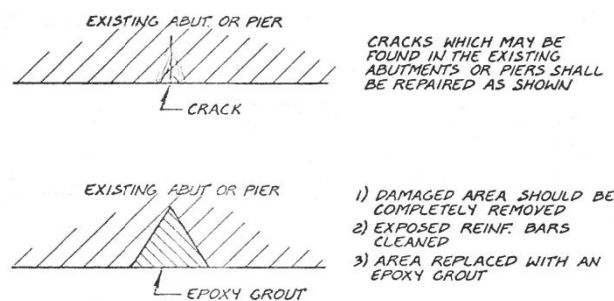
SECTION D-D
(AT 27\"/>

SECTION E-E
(WINGWALL #1 & #3)

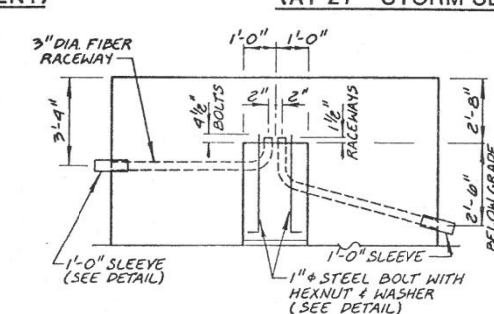
SECTION F-F
(WINGWALL #2 & #4)



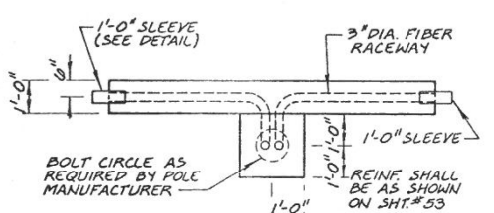
SECTION - ABUTMENT CAP



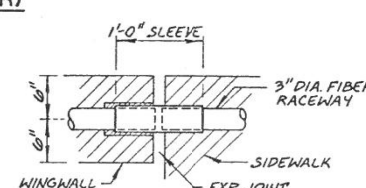
REPAIRING EXISTING ABUTMENTS OR PIERS



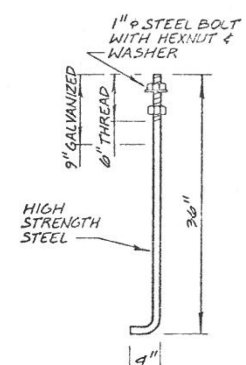
ELEVATION



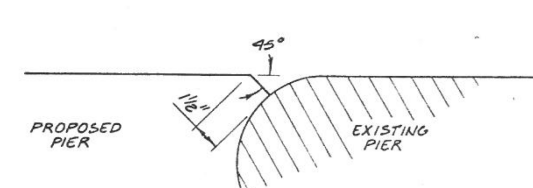
PLAN
STREET LIGHT RACEWAY
AT WINGWALL #3



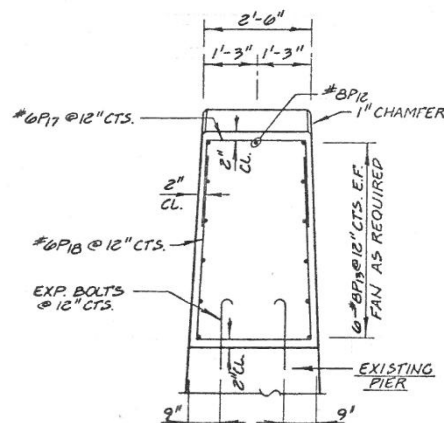
SLEEVE DETAIL



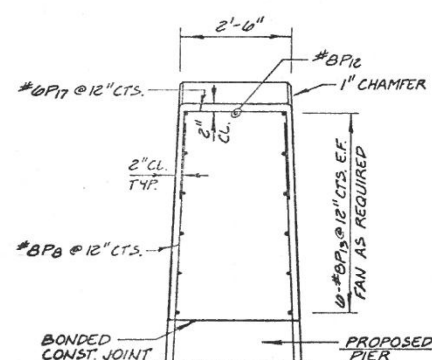
BOLT DETAIL



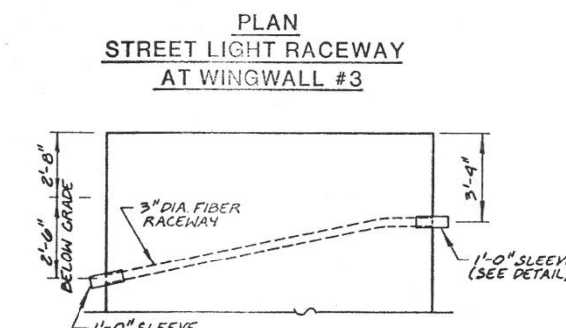
NOTCH DETAIL



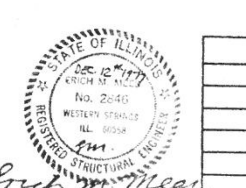
SECTION - PIER CAP



SECTION - PIER CAP



ELEVATION
STREET LIGHT RACEWAY
AT WINGWALL #1



BOLT DETAIL



REVISIONS	
NAME	DATE
D.C.N.	2-17-78
D.C.N.	4-6-78
G.M.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS			
MISC. ABUTMENT & PIER DETAILS			
ST. CHARLES ROAD BRIDGE - SALT CREEK			
DRAWN BY: D.C.N.		DATE: 12-13-77	
CHECKED BY: E.M.			



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME : cfagus	DESIGNED - BS	REVISED -
	DRAWN - BS	REVISED -
PLOT SCALE : 0.20000 '1' / in.	CHECKED - CB	REVISED -
PLOT DATE : 2/13/2019	DATE - 11/16/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN
- FOR INFORMATION ONLY

SCALE: N.T.S. SHEET 6 OF 15 SHEETS STA. TO STA.

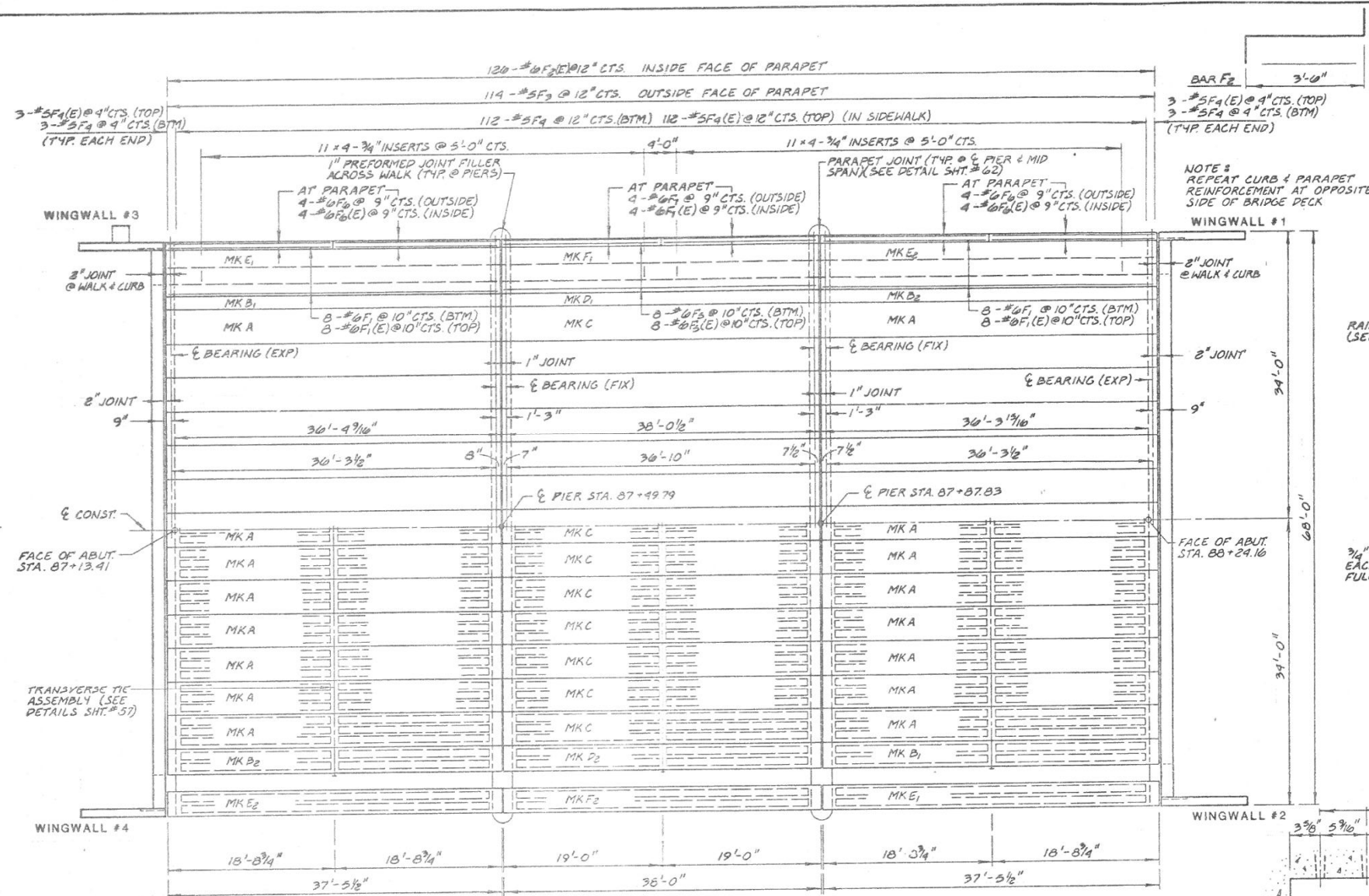
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	77
PROJECT:		JOB: C-91-313-15		
ILLINOIS				

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1397	1975-1976 WARS, BY	DUPAGE	105	56
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-3003(27)	

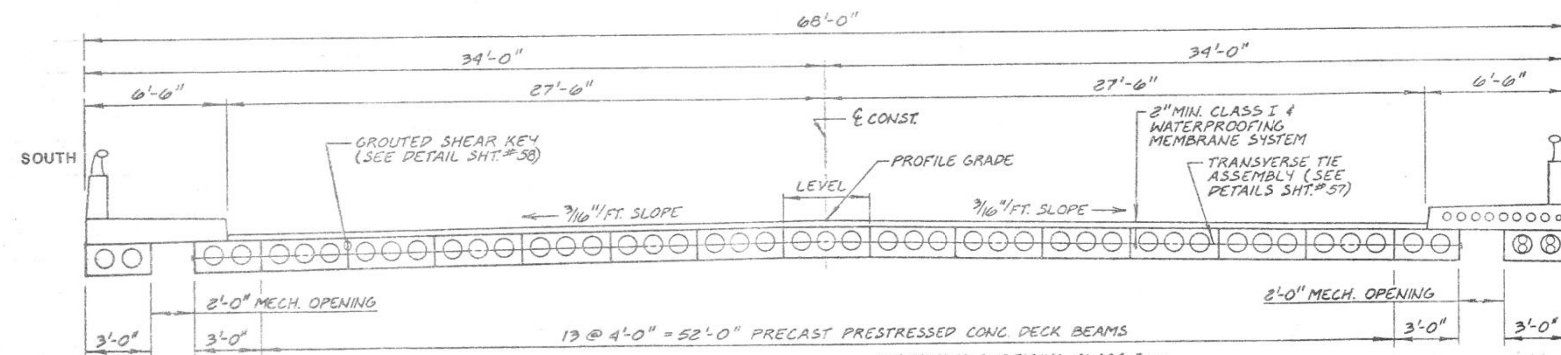
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
F1	32	#6	37'-0"	
F2(E)	252	#6	4'-0"	
F3	238	#5	4'-0"	
F4	236	#5	7'-2"	
F1(E)	32	#6	37'-0"	
F4(E)	236	#5	7'-2"	
F5	16	#6	37'-8"	
F5(E)	16	#6	37'-8"	
F6	32	#6	18'-4"	
F6(E)	32	#6	18'-4"	
F7	16	#6	18'-8"	
F7(E)	16	#6	18'-8"	

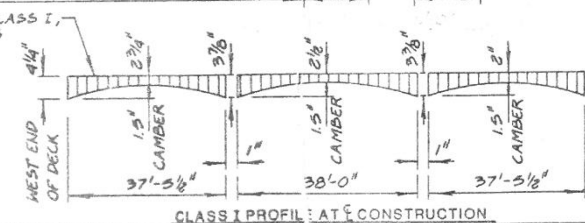
PRESTR. CONC. DECK BEAMS	SQ. FT.	7227
CLASS X CONCRETE	CU. YDS.	80
REINFORCEMENT BARS	POUNDS	6848
REIN. BARS (EPOXY COATED)	POUNDS	7482
P.C.M. FAIRING COURSE	LIN. FT.	1580
PROTECTIVE COAT	SQ. YD.	280
CONDUIT IN STRUCTURE, 3" DIA., GALV.	LIN. FT.	133
CONDUIT IN STRUCTURE, 4" DIA., PVC.	LIN. FT.	1000



DECK FRAMING PLAN



CROSS SECTION



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN
- FOR INFORMATION ONLY

SCALE: N.T.S. SHEET 7 OF 15 SHEETS STA. TO STA.

ILLINOIS DIVISION OF HIGHWAYS	
<u>DECK FRAMING PLAN & DETAILS</u>	
ST. CHARLES ROAD BRIDGE - SALT CREEK	
DRAWN BY: D.C.N.	
DATE: 12-13-77	CHECKED BY: E.M.

V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME: cfagus	DESIGNED - BS	REVISED -
PLOT SCALE: 0.20000 '1' = 1"	DRAWN - BS	REVISED -
PLOT DATE: 2/13/2019	CHECKED - CB	REVISED -
	DATE - 11/16/18	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	78
PROJECT:		JOB: C-91-313-15		
ILLINOIS				

00104

RTL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1397	1975-1397-1397	DUPAGE	105	57
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT M-5003(27)		

GENERAL NOTES

PRESTRESSING STEEL SHALL BE NON-GALVANIZED HIGH STRENGTH, STRESS RELIEVED 7-WIRE STRAND GRADE 270. THE NOMINAL DIAMETER SHALL BE 1/2" AND THE NOMINAL CROSS-SECTIONAL AREA SHALL BE 0.153 SQ. IN.

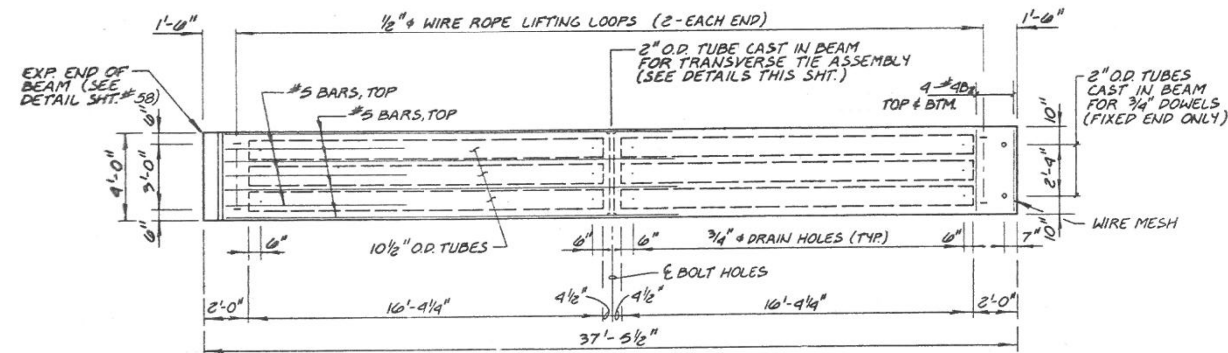
THE 1" DIAMETER RODS IN THE TRANSVERSE TIE ASSEMBLY SHALL BE TIGHTENED TO A SNUG FIT AND THE THREADS SET. POCKETS THAT RECEIVE TRANSVERSE TIE ROD ON OUTSIDE BEAM SHALL BE FILLED WITH GROUT AFTER TRANSVERSE TIE ASSEMBLY IS IN PLACE.

AFTER FABRICATION THE TRANSVERSE TIE ASSEMBLIES (TIE RODS, NUTS AND WASHERS) SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH A.A.S.H.T.O. DESIGNATION M-232.

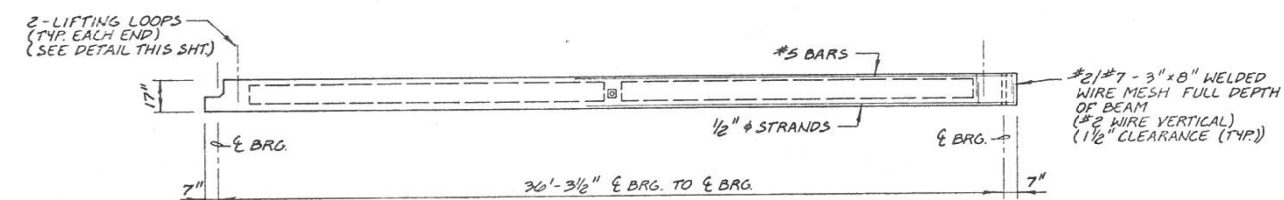
LONGITUDINAL SHEAR KEYS SHALL BE PACKED WITH A VERY DRY MIX OF 2:1 SAND AND P.C. MORTAR.

AFTER BEAMS HAVE BEEN ERECTED, HOLES FOR THE DOWEL ANCHORS SHALL BE DRILLED INTO THE SUB-STRUCTURE AND THE ANCHOR DOWELS SHALL BE GROUTED IN PLACE.

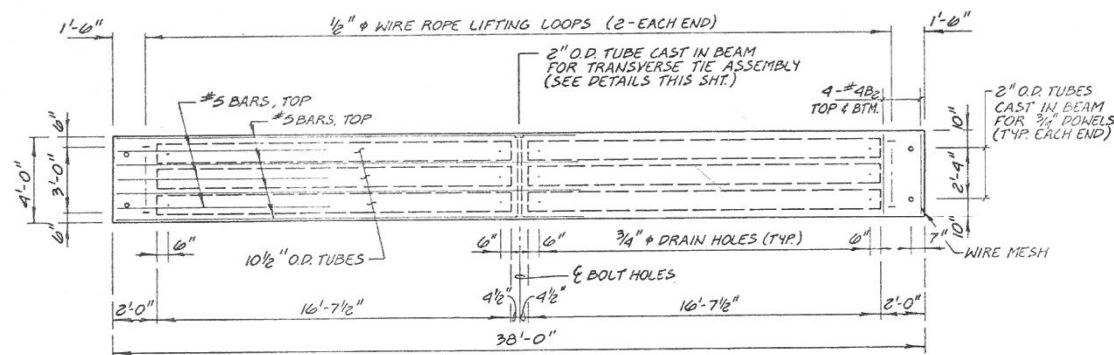
COST OF REINFORCEMENT AND ACCESSORIES CAST INTO THE BEAMS, OF BEARING PADS, AND OF GROUTING LONGITUDINAL SHEAR KEYS IS INCLUDED IN UNIT BID PRICE FOR "PRECAST PRESTRESSED CONCRETE BRIDGE DECK".



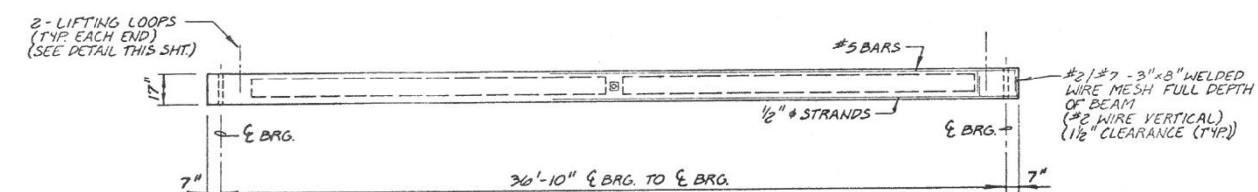
PLAN - MK A DECK UNITS



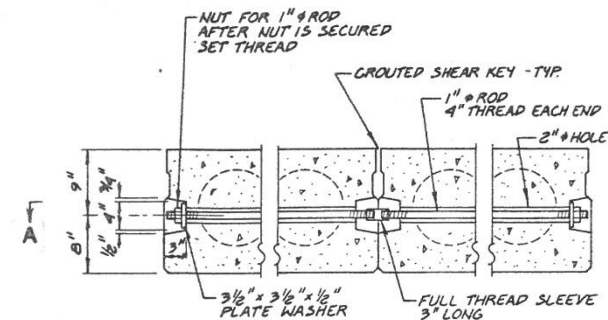
ELEVATION - MK A



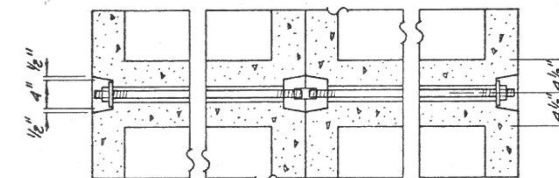
PLAN - MK C DECK UNITS



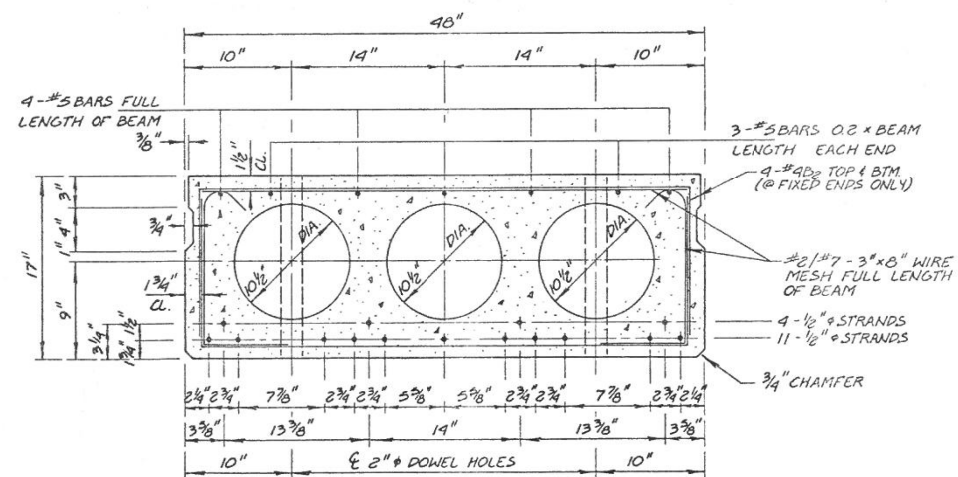
ELEVATION - MK C



TYPICAL TRANSVERSE TIE ASSEMBLY

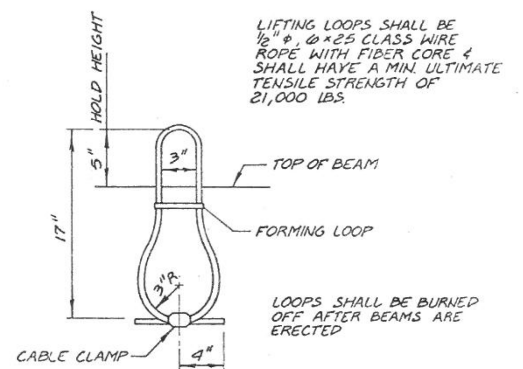


SECTION A-A



SECTION - MK A & MK C DECK UNITS

f'ci = 4900 PSI



LIFTING LOOP DETAIL



REVISIONS	
NAME	DATE
D.C.N.	2/14/78
G.M.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS				
DECK UNITS (MK A & C) & DETAILS				
ST. CHARLES ROAD BRIDGE - SALT CREEK				
DRAWN BY: D.C.N.			CHECKED BY: E.M.	
DATE: 12-13-77				



V3 Companies

7325 Janes Avenue

Woodridge, IL 60517

630.724.9200 phone

630.724.9202 fax

www.v3co.com

USER NAME = cfagus

DESIGNED - BS

DRAWN - BS

CHECKED - CB

DATE - 11/16/18

PLOT SCALE = 0:2.0000 '1' / in.

PLOT DATE = 2/13/2019

DESIGNED - BS

DRAWN - BS

CHECKED - CB

DATE - 11/16/18

PLOT SCALE = 0:2.0000 '1' / in.

PLOT DATE = 2/13/2019

DESIGNED - BS

DRAWN - BS

CHECKED - CB

DATE - 11/16/18

PLOT SCALE = 0:2.0000 '1' / in.

PLOT DATE = 2/13/2019

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN
- FOR INFORMATION ONLY

SCALE: N.T.S.

SHEET 8 OF 15 SHEETS

STA.

TO STA.

F.A.U.

SECTION

COUNTY

TOTAL SHEETS

SHEET NO.

1397

15-00094-00-BR

DUPAGE

106

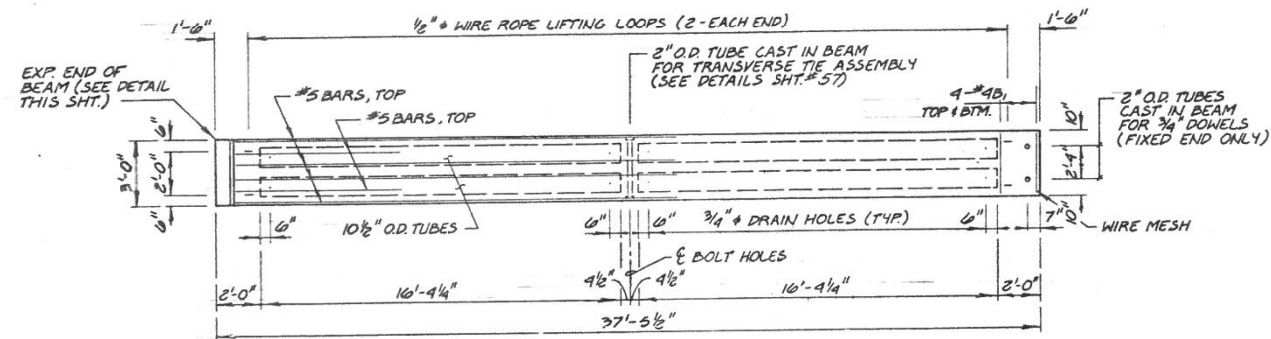
79

PROJECT:

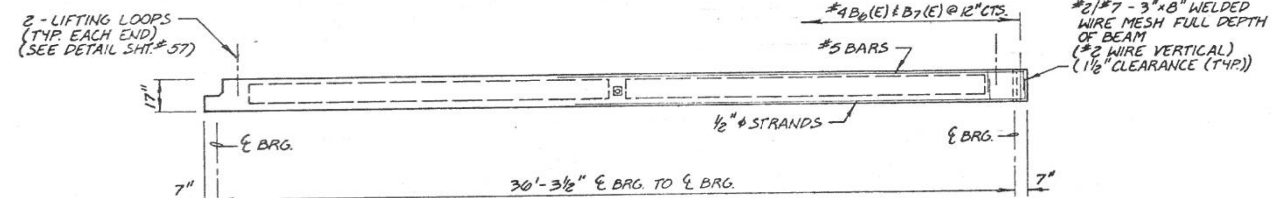
JOB: C-91-313-15

ILLINOIS

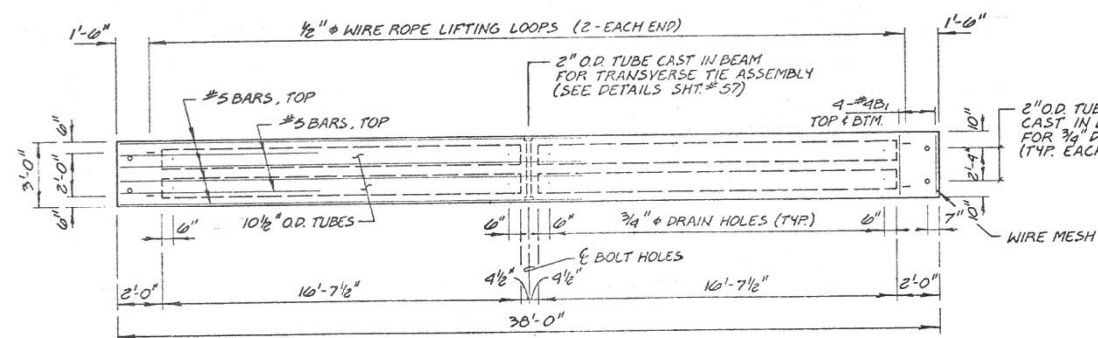
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FDL 1975-1360 1397 WARS. BY		DUPAGE	105	58
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT M-5003 (27)		



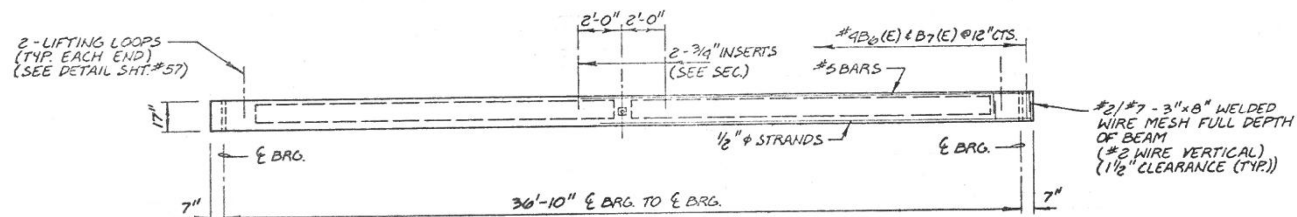
PLAN - MK B DECK UNITS



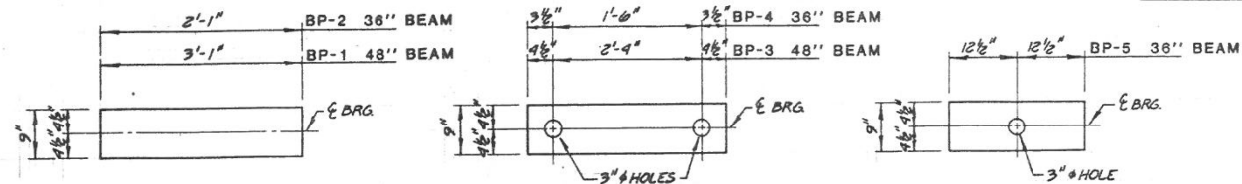
ELEVATION - MK B



PLAN - MK D DECK UNITS

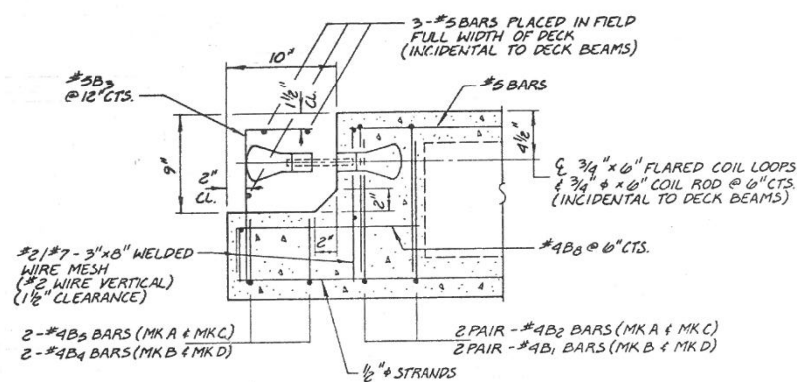


ELEVATION - MK D

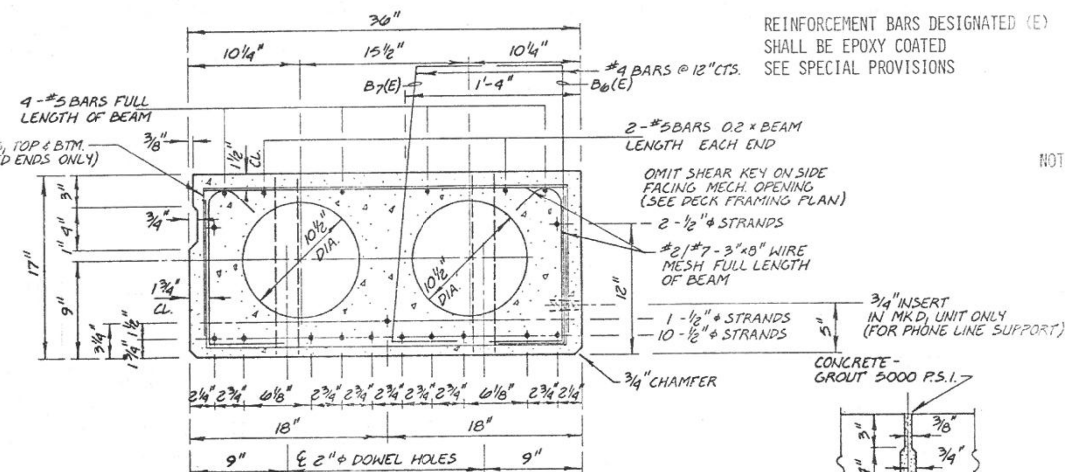
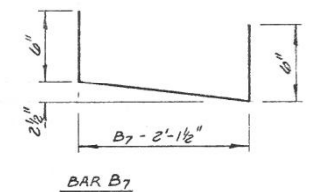
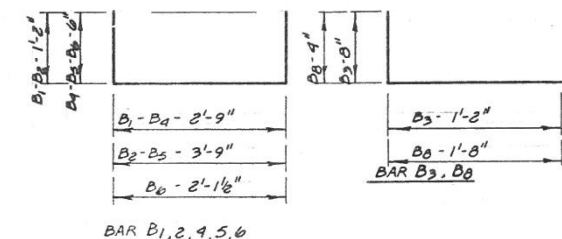


1/4" GRAPHITED ASBESTOS BEARING PADS (EXPANSION BEARING)

1/2" FABRIC BEARING PADS (FIXED BEARING)



EXPANSION END OF BEAM

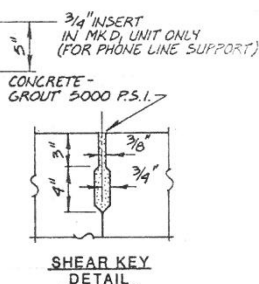


SECTION - MK B & MK D DECK UNITS

f'ci = 4000 PSI

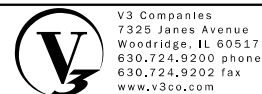
REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED SEE SPECIAL PROVISIONS

NOTE: REINFORCEMENT BARS IN THE DECK UNITS SHALL NOT BE MEASURED FOR SEPARATE PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THE DECK BEAMS.



REVISIONS	
NAME	DATE
D.C.N.	2/14/78
D.C.N.	4-6-78
G.M.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS	
DECK UNITS (MK B & D) & DETAILS	
ST. CHARLES ROAD BRIDGE - SALT CREEK	
DRAWN BY: D.C.N.	CHECKED BY: E.M.
DATE: 12-13-77	



USER NAME: cfagus	DESIGNED: BS	REVISED: -
PLOT SCALE: 0.20000 '1' = 1"	DRAWN: BS	REVISED: -
PLOT DATE: 2/13/2019	CHECKED: CB	REVISED: -
	DATE: 11/16/18	REVISED: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN
- FOR INFORMATION ONLY

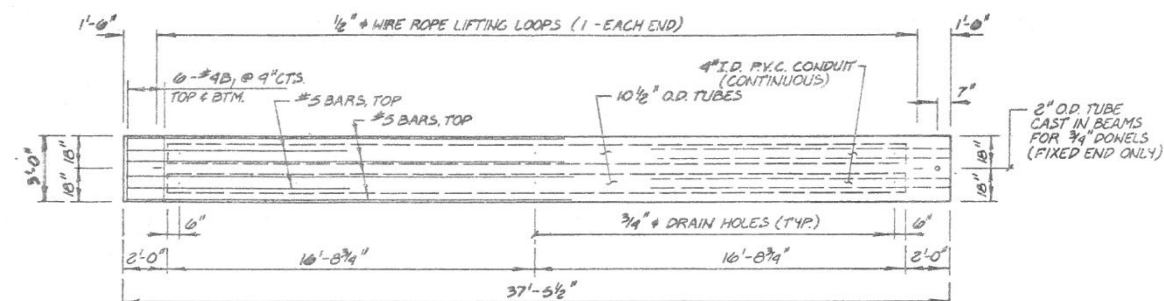
SCALE: N.T.S. SHEET 9 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	80
PROJECT:		JOB: C-91-313-15		
		ILLINOIS		

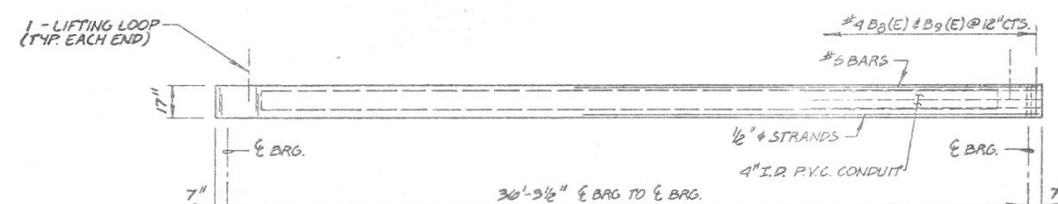
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1975-1980-1997	W.R.S. BY	DUPAGE	105	59
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT M-5003(27)		

BILL OF MATERIAL

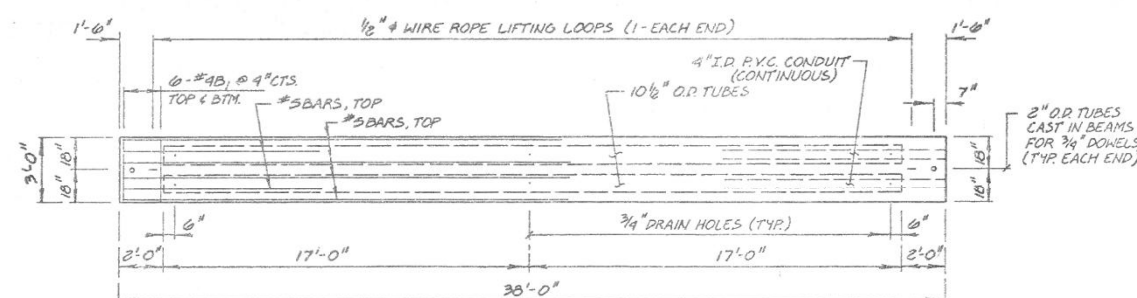
CONDUIT IN STRUCTURE	LIN. FT.	500
4" DIA. P.V.C.		



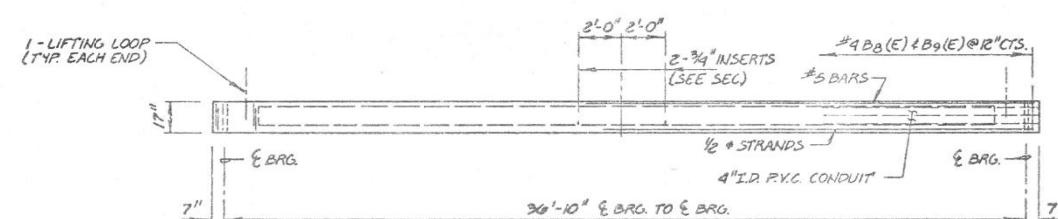
PLAN - MK E DECK UNITS



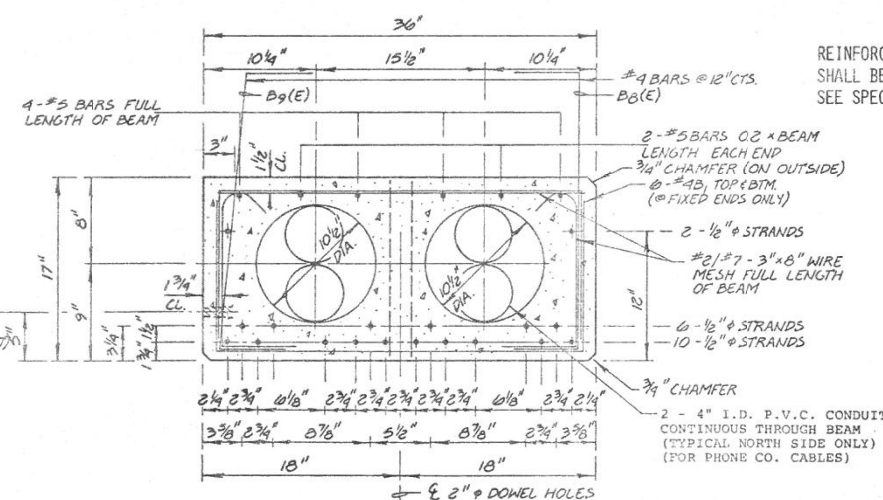
ELEVATION - MK E



PLAN - MK F DECK UNITS



ELEVATION - MK F



SECTION - MK E & MK F DECK UNITS

f'ci = 4600 PSI

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED SEE SPECIAL PROVISIONS



REVISIONS	
NAME	DATE
D.C.N.	2/14/78
D.C.N.	4-6-78
G.M.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS				
DECK UNITS (MK E & F) & DETAILS				
ST. CHARLES ROAD BRIDGE - SALT CREEK				
DRAWN BY: D.C.N.				
CHECKED BY: E.M.				
DATE: 12-13-77				



V3 Companies
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

USER NAME = cfagus	DESIGNED - BS	REVISED -
PLOT SCALE = 0:2.0000 '1' / in.	DRAWN - BS	REVISED -
PLOT DATE = 2/13/2019	CHECKED - CB	REVISED -
	DATE - 11/16/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN
- FOR INFORMATION ONLY

SCALE: N.T.S. SHEET 10 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	81
PROJECT:		JOB: C-91-313-15		
ILLINOIS				