

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 173	13-05123-00-BR	WABASH	25	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 95846	

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.	TYPICAL CROSS SECTIONS
4.	PLAN AND PROFILE
5-9.	CULVERT PLANS
10-11.	BORINGS
12-25.	STATION CROSS SECTIONS

HIGHWAY STANDARDS:

000001-07	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
515001-03	NAME PLATE FOR BRIDGES
701901-08	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

**PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM – BRIDGE**

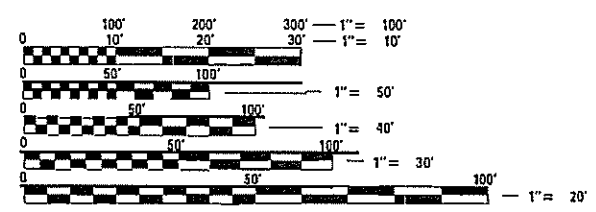
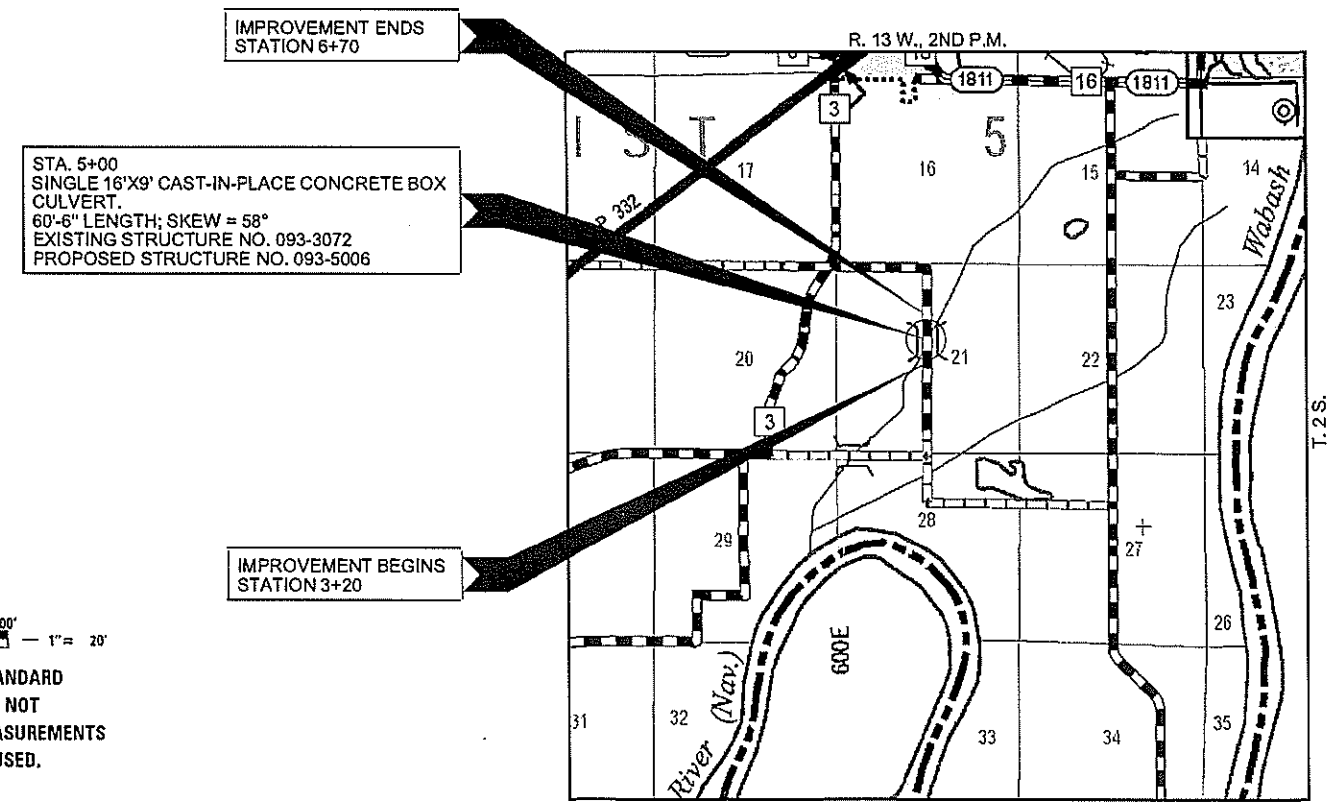
PROJECT MT6W(127)
SECTION 13-05123-00-BR
ROAD DISTRICT NO. 5
WABASH COUNTY
T.R. 173
PROPOSED STRUCTURE NO. 093-5006
C-97-039-19



UTILITIES

AMEREN
1403 S. MAIN
BENTON, IL 62812

FRONTIER COMMUNICATIONS
208 W. UNION
MARION, IL 62959



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

FUNCTIONAL CLASSIFICATION: LOCAL ROAD
DESIGN SPEED: 30 MPH
DESIGN TRAFFIC: 150 ADT

LOCATION MAP

APPROXIMATE SCALE: 0 1/2 MILE
GROSS LENGTH OF SECTION = 350 FEET = 0.066 MILES



WARNING

CALL 811
BEFORE YOU DIG
DIG NO: X2400367

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED 01-30-19
[Signature]
COUNTY ENGINEER

APPROVED 01-30-19
[Signature]
TOWNSHIP COMMISSIONER

PASSED 2/25/19
[Signature]
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bld Based on Limited Review 2/25/19
[Signature]
REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 01/28/2019

JEFFREY M. SOUTH
LICENSED PROFESSIONAL ENGINEER
NO. 057-5005
STATE OF ILLINOIS

HAMPTON, LENZINI AND RENWICK, INC.
CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS

HLR

3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
217.548.3400 www.hlrengineering.com

184.000559
ILLINOIS PROFESSIONAL DESIGN FIRMS / PE / SE CORPORATION

EXPIRES: 11/30/2019 PROJECT NUMBER: 15,1126,130 DATE: 01/28/19

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL
			CONSTRUCTION TYPE CODE 0010
20200100	EARTH EXCAVATION	CU YD	180
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	415
35101400	AGGREGATE BASE COURSE, TYPE B	TON	165
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	43,030
* 50900205	STEEL RAILING, TYPE S1	FOOT	59
51500100	NAME PLATES	EACH	1
54003000	CONCRETE BOX CULVERTS	CU YD	160.9
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	70
67100100	MOBILIZATION	L SUM	1
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
^ X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	122
X2070302	POROUS GRANULAR EMBANKMENT, SPECIAL	TONS	800
X2090210	POROUS GRANULAR BACKFILL, SPECIAL	CU YD	47
^ X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.1

^ SEE SPECIAL PROVISIONS

* SPECIALTY ITEMS

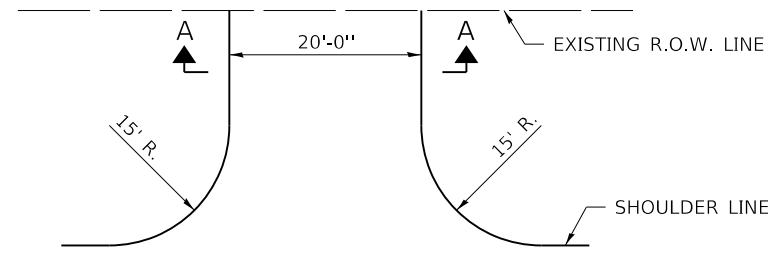
GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- ALL CLEARING AND GRUBBING, FENCE REMOVAL, STUMP REMOVAL, AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. THE REMOVAL AND DISPOSAL OF EXISTING BITUMINOUS & AGGREGATE PAVEMENT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE LOCATION OF EXISTING GAS MAINS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATIONS AND THE BEST INFORMATION AVAILABLE, BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:
 AGGREGATE SURFACE COURSE 2.05 TON/CU YD
 STONE DUMPED RIPRAP 1.75 TON/CU YD
 POROUS GRANULAR EMBANKMENT 1.50 TON/CU YD
- THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER.
 ESTIMATED QUANTITY: SEEDING, CLASS 2 (SPECIAL) = 0.1 ACRES
- COMMITMENTS:
 1) ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH NATIONWIDE PERMIT NO. 14 INCLUDED IN SPECIAL PROVISIONS.
- ALL WASTE MATERIAL FROM EXCAVATIONS SHALL BE DISPOSED OF BY THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

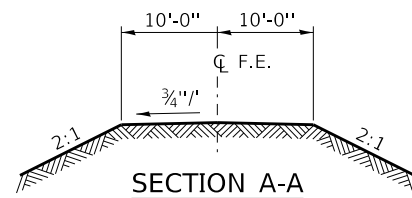
EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION	INCIDENTAL EXCAVATION	SHRINKAGE FACTOR	PERCENT USED	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT REQUIRED	EARTHWORK BALANCE
	20200100 CU.YD.	CU.YD.			CU.YD.		
TR 173							
STA 3+20 to 3+30	3		25.00%	100.00%	2	1	1
STA 4+00 to 4+90	25		25.00%	100.00%	19	14	5
STA 4+90 to STA 5+17	16	447	25.00%	70.00%	243	1	242
STA 5+17 to STA 6+70	133		25.00%	100.00%	100	19	81
TOTAL	177	447			364	35	329
USE	180						329

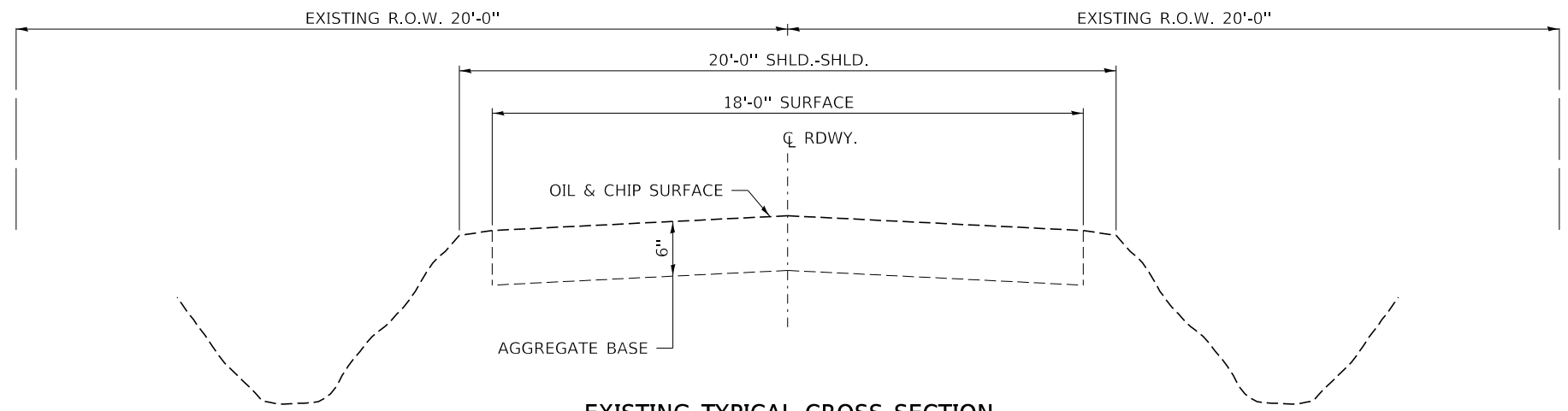
WASTE EXCAVATION 329 CU YDS



FIELD ENTRANCE DETAIL

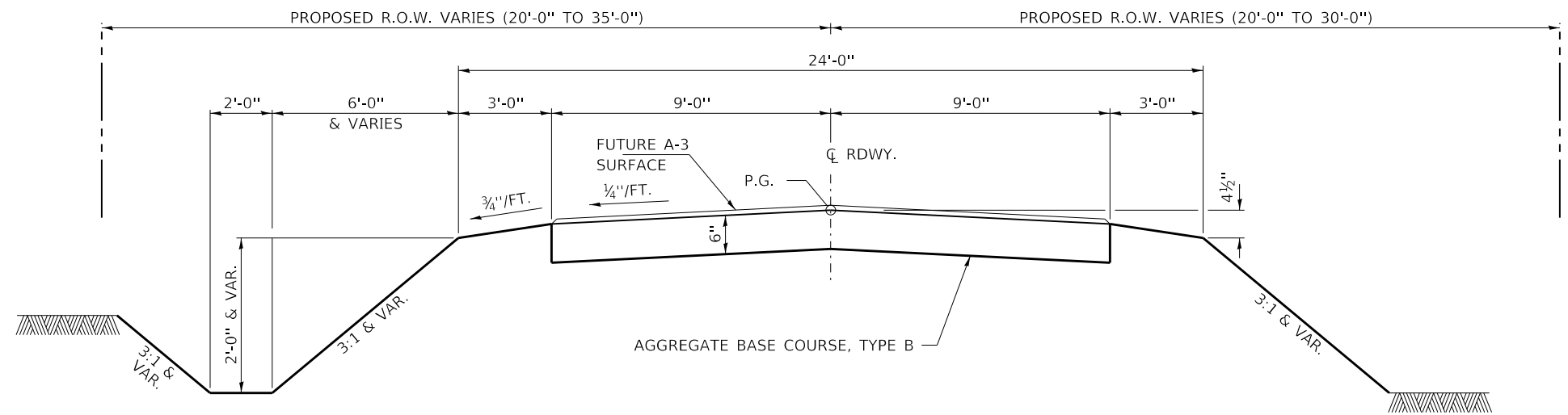


SECTION A-A



EXISTING TYPICAL CROSS SECTION

STA. 3+20 TO 6+70



PROPOSED TYPICAL CROSS SECTION

STA. 3+20 TO 3+30 &
STA. 4+00 TO 6+00

SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

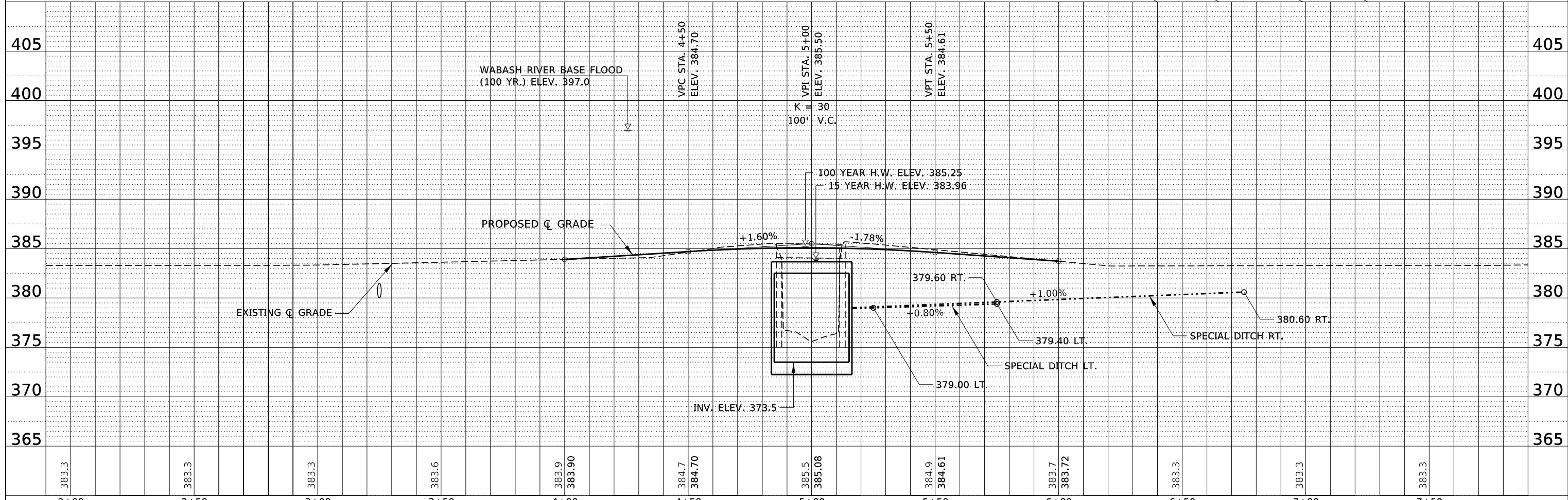
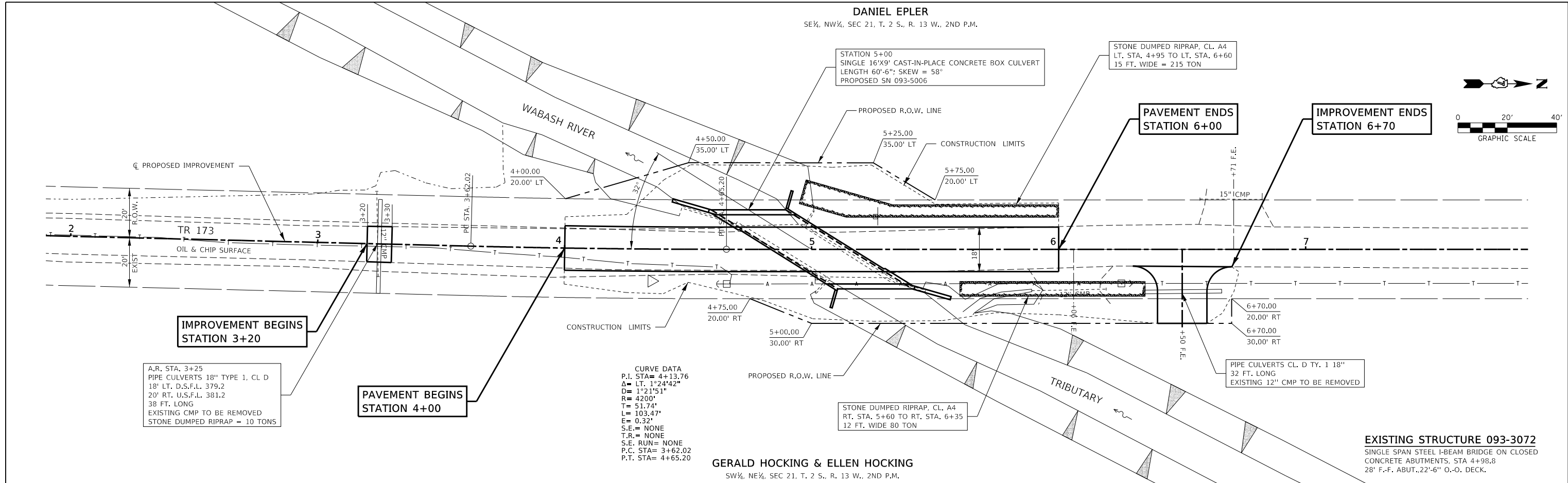
SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

TRANSITION FROM THE PROPOSED SHOULDER TO THE EXISTING SHOULDER FROM STA. 4+00 TO 4+25. NO TRANSITION NEEDED AT NORTH APPROACH.

FILE NAME = 151126-shit-typsections.dgn	USER NAME = rhostick	DESIGNED - S.W.M.	REVISED -	STATE OF ILLINOIS WABASH COUNTY HIGHWAY DEPARTMENT	TYPICAL CROSS SECTIONS			T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		DRAWN - R.D.H.	REVISED -		SCALE:	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	173	13-05123-00-BR	WABASH	25	3
	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -					ROAD DISTRICT NO 5		CONTRACT NO. 95846		
	PLOT DATE = 2/22/2019	DATE - 01/28/19	REVISED -					ILLINOIS FED. AID PROJECT MT6W(127)				

DATE	
BY	
REVIEWED	
PLANNED	
ALIGNED	
CHECKED	
NO. _____	
NO. _____	
NO. _____	

DATE	
BY	
REVIEWED	
PLANNED	
GRADES	
CHECKED	
STRUCTURE	
NOTATING	
CHKD	
NO. _____	
NO. _____	
NO. _____	

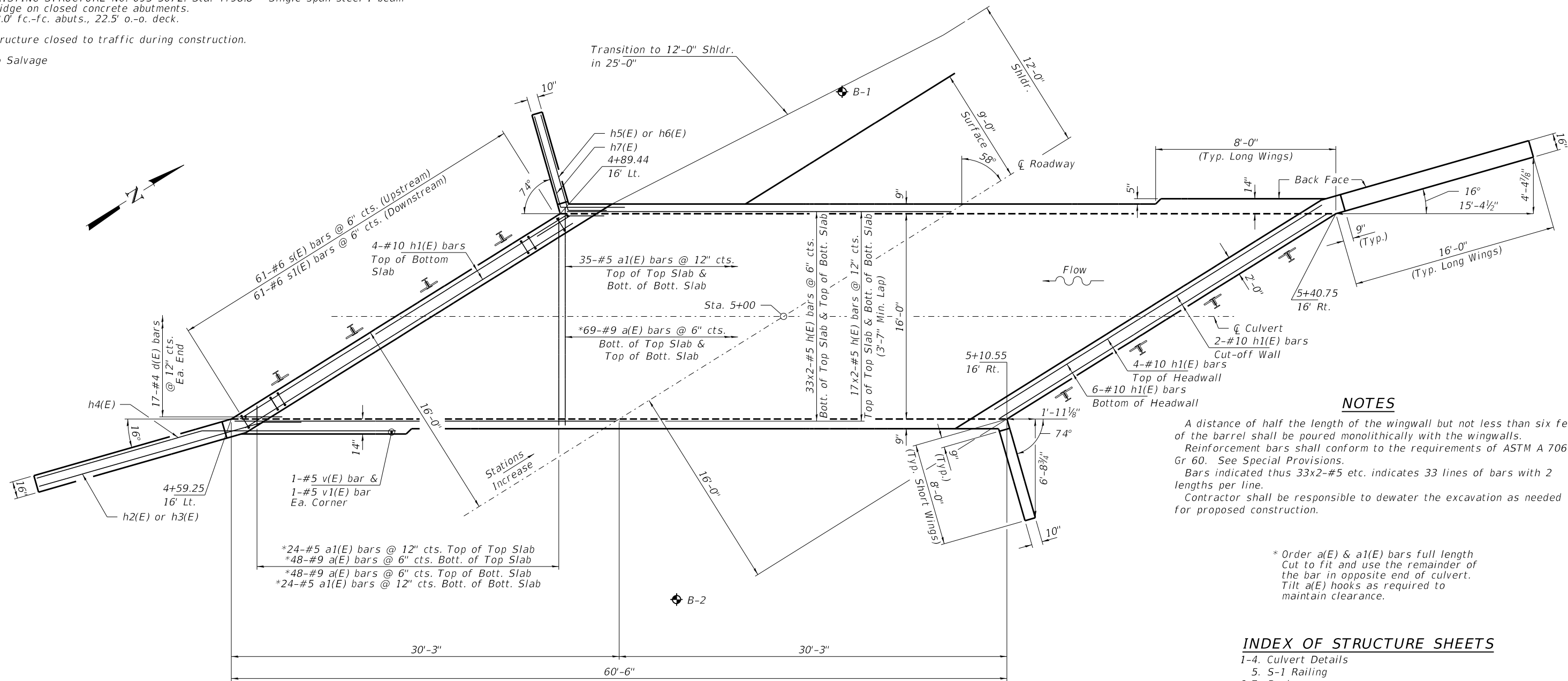


FILE NAME = 151126-shl-plnprf.dgn	USER NAME = rmosick	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS WABASH COUNTY HIGHWAY DEPARTMENT	PLAN & PROFILE SCALE: 20H:5V SHEET NO. 1 OF 1 SHEETS STA. 2+00.00 TO STA. 7+50.00	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = \$SCALE\$	DRAWN - R.D.H.	REVISED -			173	13-05123-00-BR	WABASH	25	4
PLOT DATE = 1/28/2019	DATE = 01/28/19	CHECKED - S.W.M.	REVISED -			ROAD DISTRICT #5	CONTRACT NO. 95846		ILLINOIS FED. AID PROJECT BROS-MT6W(12)	
		REVISIONS								

EXISTING STRUCTURE NO. 093-3072: Sta. 4+98.8 - Single span steel I-beam bridge on closed concrete abutments. 28.0' fc.-fc. abuts., 22.5' o.-o. deck.

Structure closed to traffic during construction.

No Salvage



NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
 Bars indicated thus 33x2-#5 etc. indicates 33 lines of bars with 2 lengths per line.
 Contractor shall be responsible to dewater the excavation as needed for proposed construction.

* Order a(E) & a1(E) bars full length. Cut to fit and use the remainder of the bar in opposite end of culvert. Tilt a(E) hooks as required to maintain clearance.

INDEX OF STRUCTURE SHEETS

- 1-4. Culvert Details
- 5. S-1 Railing
- 6-7. Borings

SHOWING REINFORCEMENT

SHOWING OUTLINES

PLAN

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.262g
 Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.623g
 Soil Site Class = D

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition with all interims.

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

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

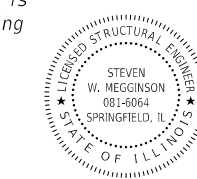
WATERWAY INFORMATION

Drainage Area = 5.8 Sq. Mi.		Existing Low Grade Elev. 383.3 @ Sta. 6+50 Proposed Low Grade Elev. 383.3 @ Sta. 6+50								
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.	Exist.	Prop.	Exist.	Prop.
Design / Overtop	15	1065	96 128	383.96	0.02 0.02	383.98	383.98	383.98	383.98	383.98
Base	100	1800	96 128	385.25	0.01 0.00	385.26	385.25	385.25	385.25	385.25

* Low water approach to remain

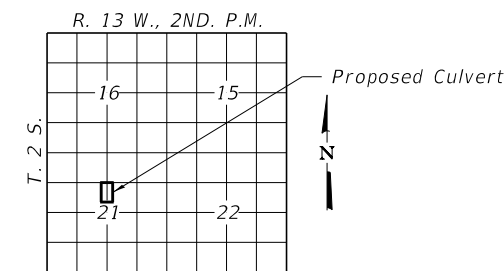
I certify that to the best of my knowledge, information and belief, this culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Specifications."

Steven W. Megginson 01/28/2019
 ILLINOIS STRUCTURAL ENGINEER NO. 081-6064



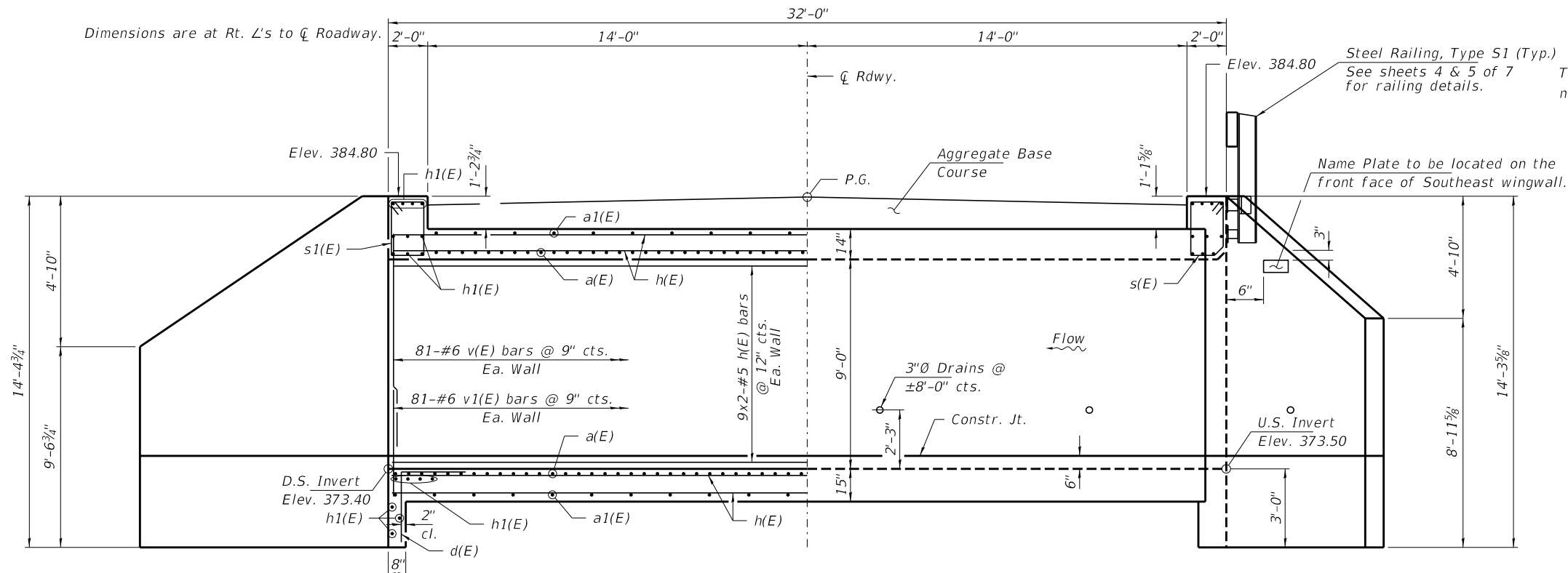
MIN. BAR LAP

#5 = 3'-7"
 #7 = 5'-0"



LOCATION SKETCH

FILE NAME = 151126-shi-culvert.dgn	USER NAME = rthosck	DESIGNED - D.W.T.	REVISIONS -	STATE OF ILLINOIS WABASH COUNTY HIGHWAY DEPARTMENT	CULVERT DETAILS STRUCTURE NO. 093-5006 SHEET NO. 1 OF 7 SHEETS	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.009959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISIONS -			173	13-05123-00-BR	WABASH	25	5
PLOT DATE = 2/22/2019	DRAWN - D.A.B.	CHECKED - S.W.M.	REVISIONS -			ROAD DISTRICT NO. 5	CONTRACT NO. 95846			
						ILLINOIS FED. AID PROJECT M16W(127)				

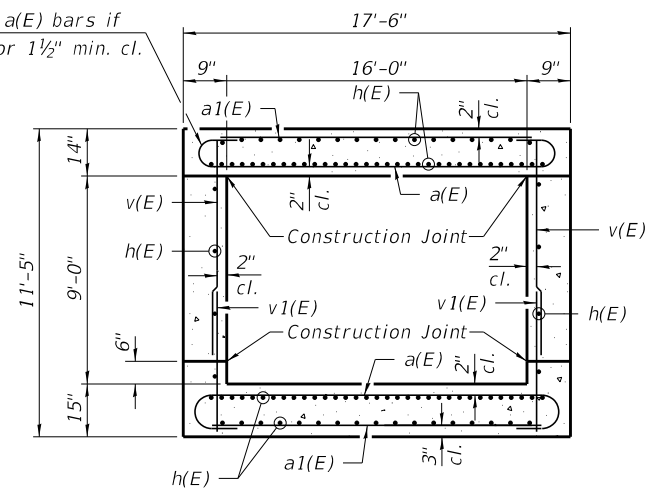


HALF LONG SECTION
Showing Reinforcement

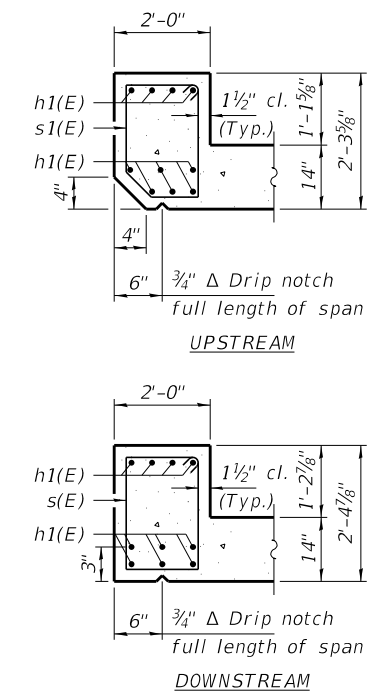
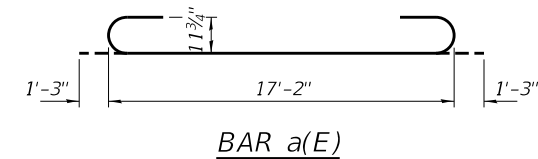
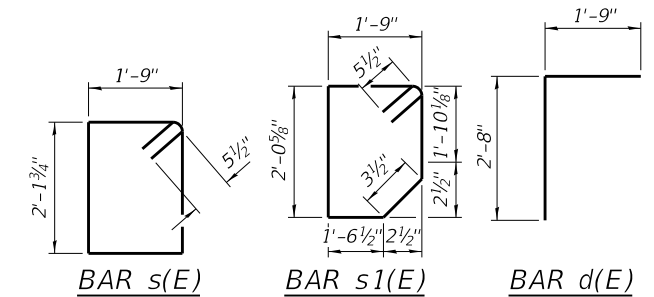
HALF ELEVATION
Showing Outlines

Dimensions are at Rt. L's to \bar{C} Roadway.

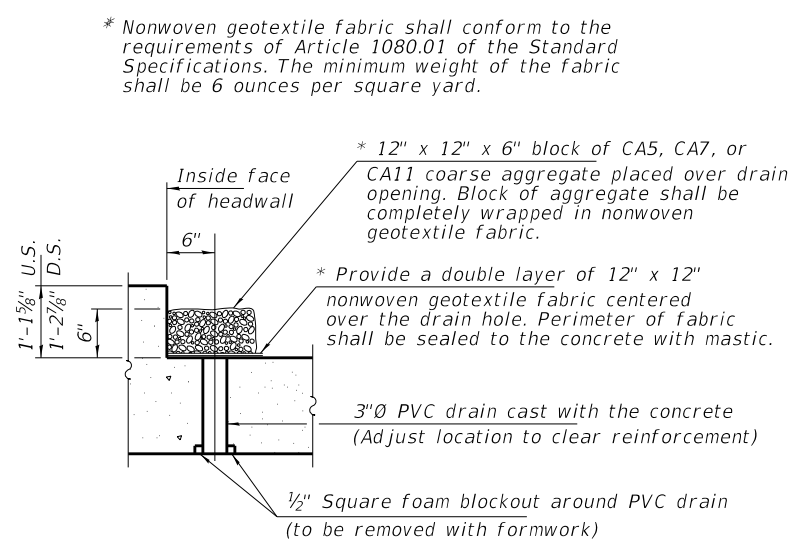
Steel Railing, Type S1 (Typ.)
See sheets 4 & 5 of 7
for railing details.
Tilt hook of a(E) bars if
necessary for 1 1/2" min. cl.



SECTION THRU BARREL

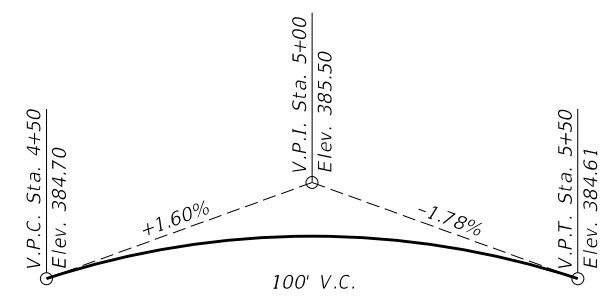


SECTION THRU HEADWALL



DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for Concrete Box Culverts.)



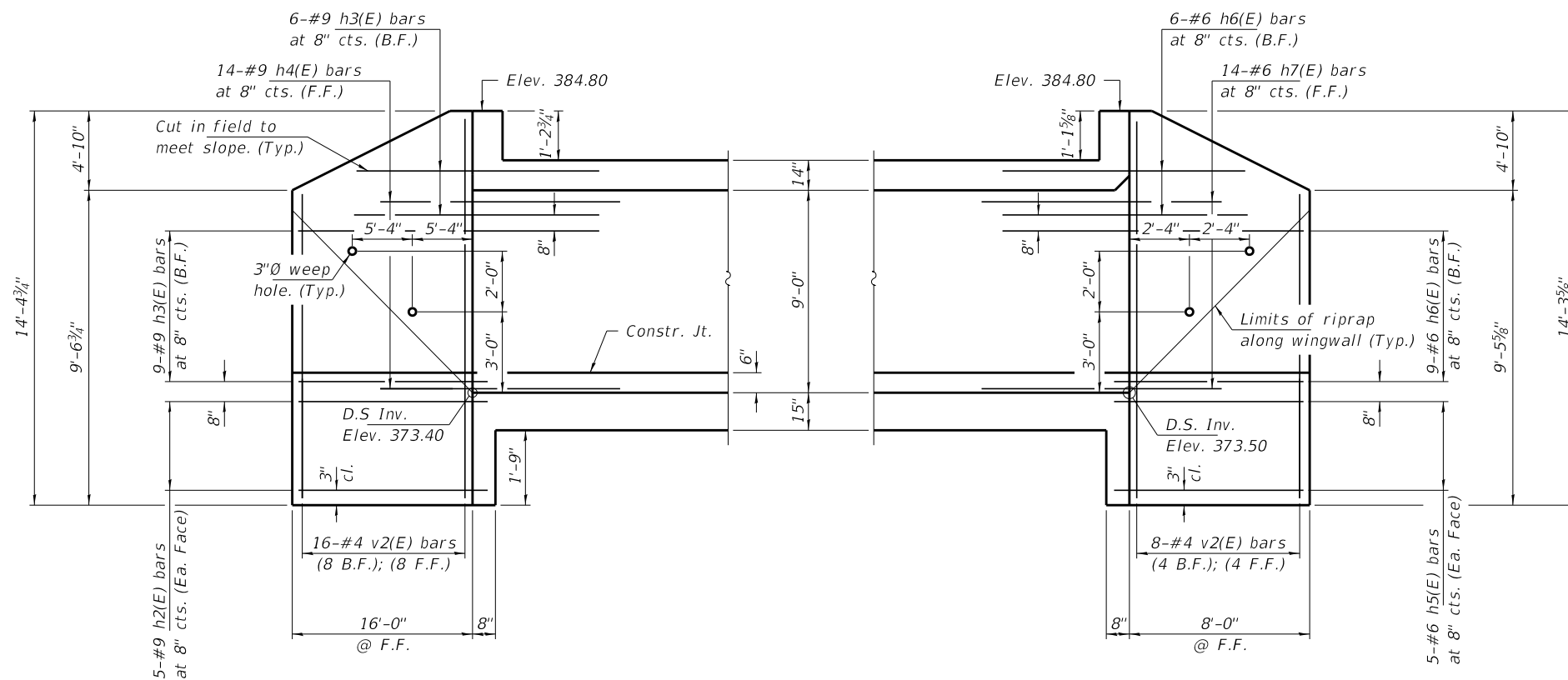
PROFILE GRADE
T.R. 173

BUILT 201_ BY
WABASH COUNTY
SEC. 13-05123-00-BR
ROAD DISTRICT NO. 5
STR. NO. 093-5006
LOADING HL-93

NAME PLATE
See Std. 515001

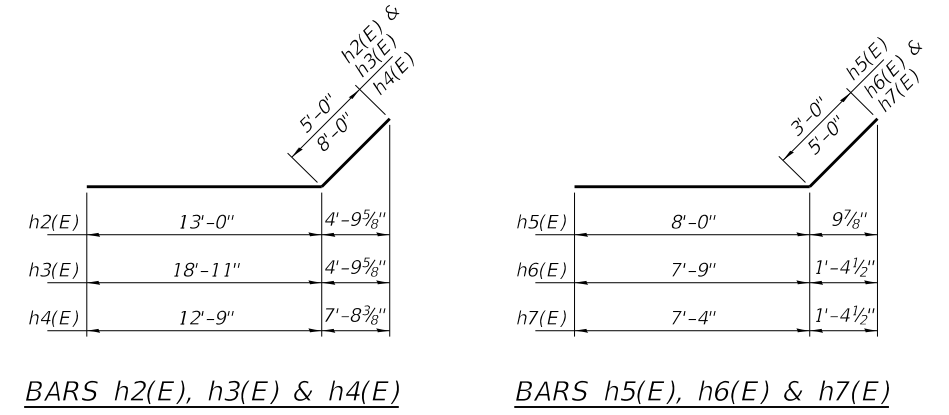
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	234	#9	19'-8"	U
a1(E)	118	#5	17'-2"	—
d(E)	34	#4	4'-5"	L
h(E)	236	#5	32'-0"	—
h1(E)	32	#10	32'-0"	—
h2(E)	20	#9	18'-0"	—
h3(E)	30	#9	23'-11"	—
h4(E)	28	#9	20'-9"	—
h5(E)	20	#6	11'-0"	—
h6(E)	30	#6	12'-9"	—
h7(E)	28	#6	12'-4"	—
s(E)	61	#6	8'-3"	□
s1(E)	61	#6	8'-9"	□
v(E)	166	#6	9'-6"	—
v1(E)	166	#6	5'-7"	—
v2(E)	48	#4	14'-0"	—
Concrete Box Culverts			Cu. Yd.	160.9
Reinf. Bars, Epoxy Coated			Pound	43,030
Membrane Waterproofing System for Buried Structures			Sq. Yd.	122
Porous Granular Backfill			Cu. Yd.	47
Porous Granular Embankment			Ton	800
Stone Dumped Riprap, Class A4			Ton	110



NORTHEAST AND SOUTHWEST WINGWALL ELEVATION - (LONG WING)

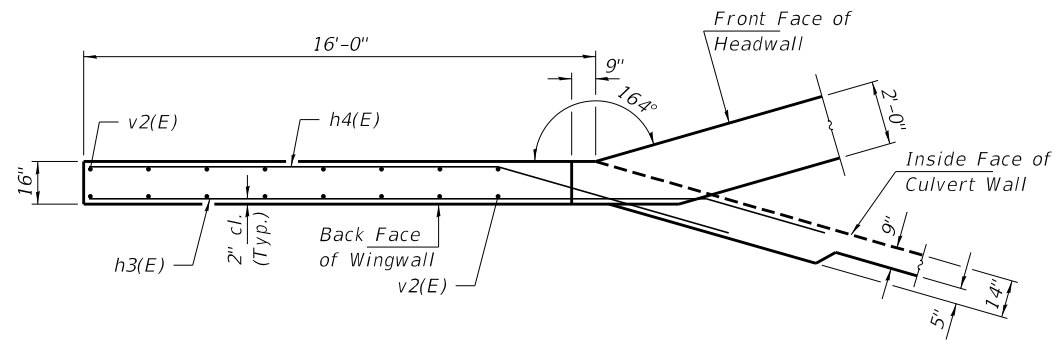
NORTHWEST AND SOUTHEAST WINGWALL ELEVATION - (SHORT WING)



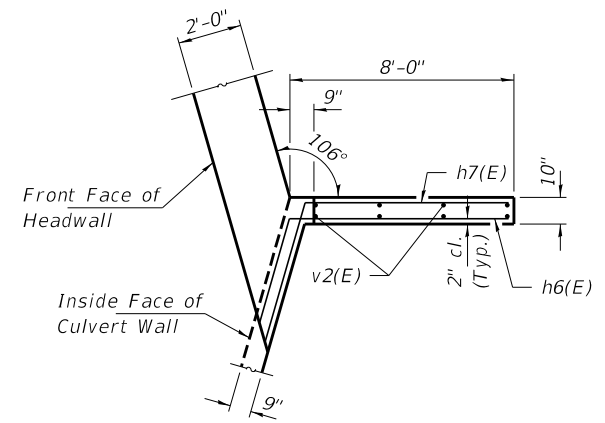
BARS h2(E), h3(E) & h4(E)

BARS h5(E), h6(E) & h7(E)

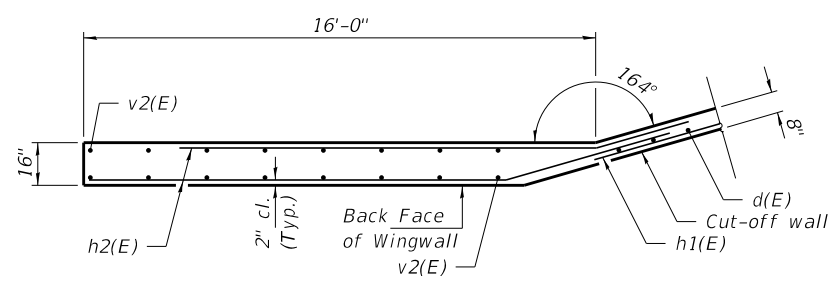
Notes:
 For Bill of Material and reinforcement bars summary see sheet 2 of 7.
 B.F. denotes Back Face and F.F. denotes Front Face.



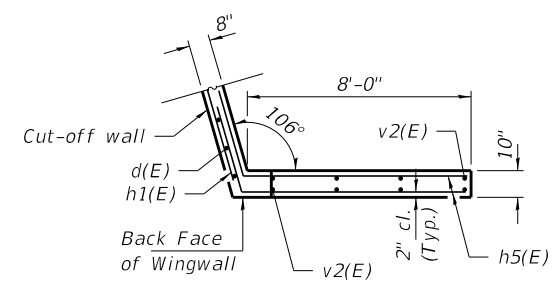
NORTHEAST AND SOUTHWEST WINGWALL UPPER PLAN - (LONG WING)



NORTHWEST AND SOUTHEAST WINGWALL UPPER PLAN - (SHORT WING)

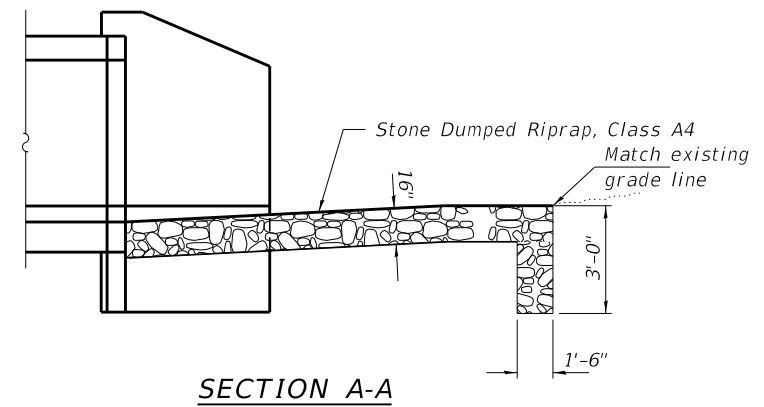
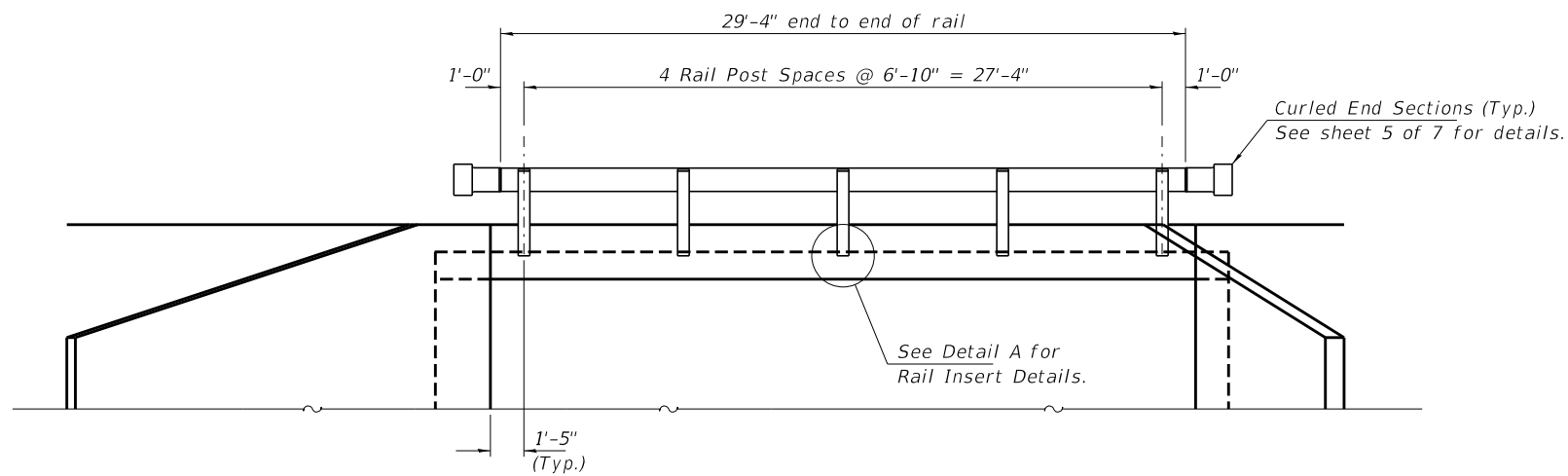
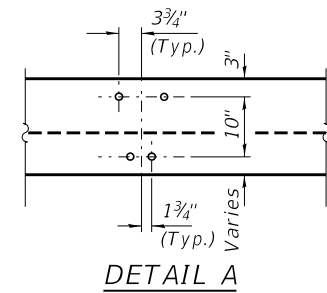
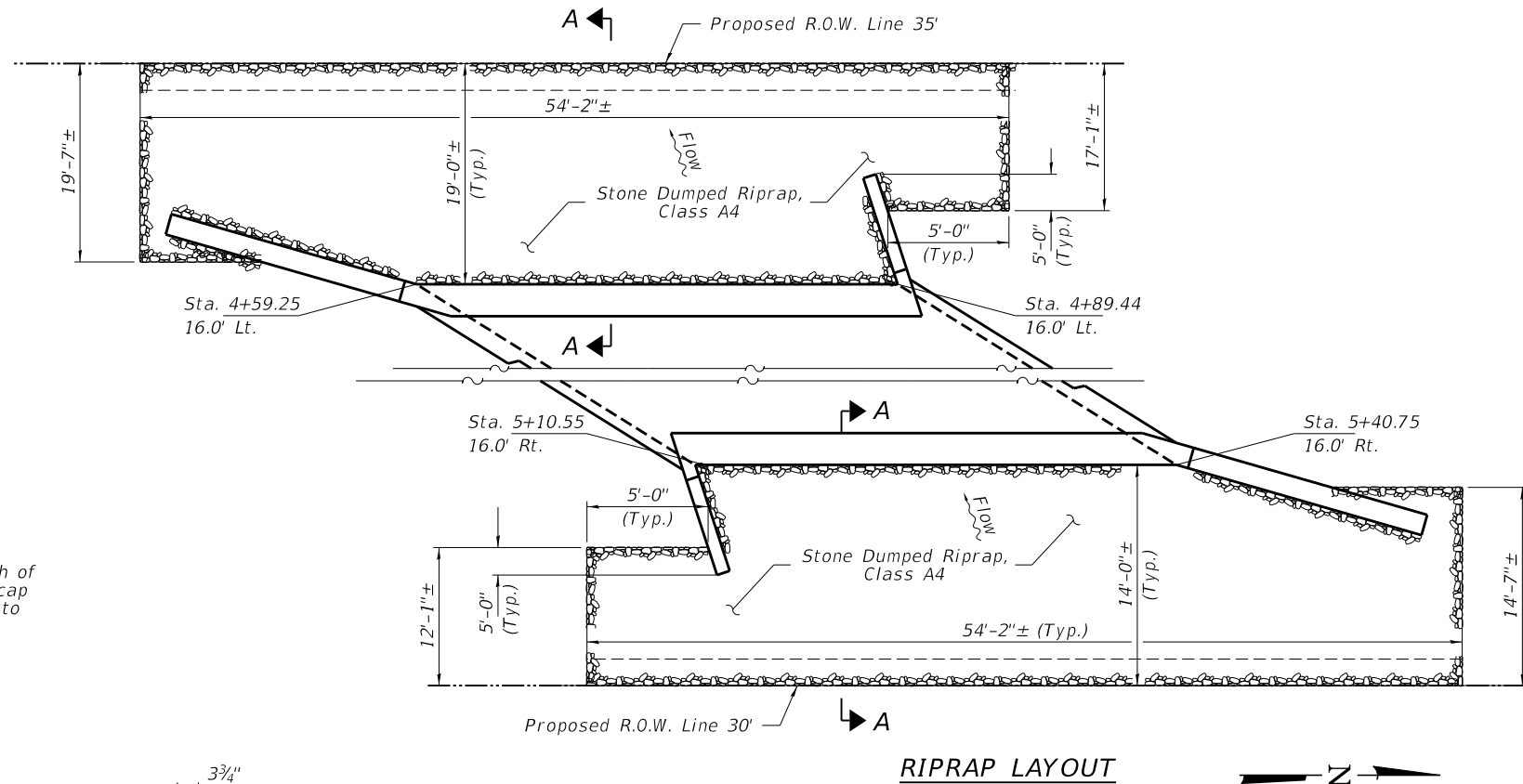
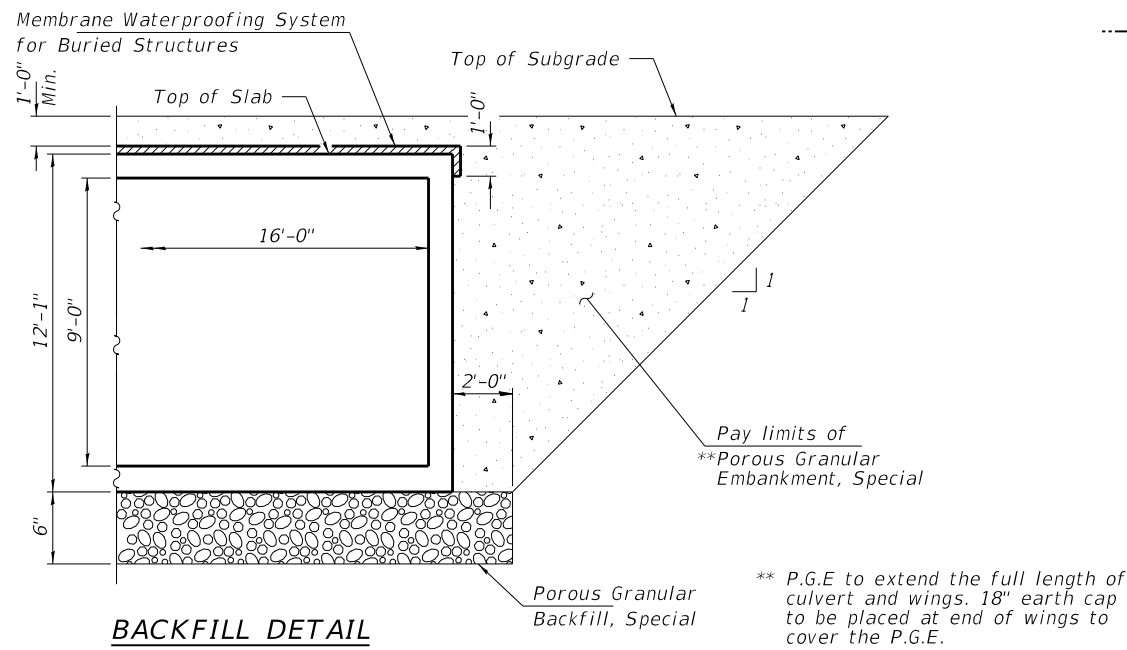


NORTHEAST AND SOUTHWEST WINGWALL LOWER PLAN - (LONG WING)



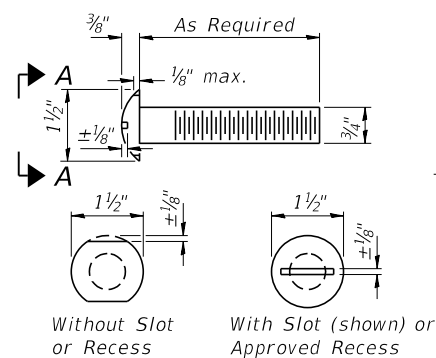
NORTHWEST AND SOUTHEAST WINGWALL LOWER PLAN - (SHORT WING)

FILE NAME = 151126-shi-culvert.dgn	USER NAME = rtholck	DESIGNED - D.W.T.	REVISED -	STATE OF ILLINOIS WABASH COUNTY HIGHWAY DEPARTMENT	CULVERT DETAILS STRUCTURE NO. 093-5006	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.W.M.	REVISED -			173	13-05123-00-BR	WABASH	25	7
	PLOT SCALE = \$SCALE\$	DRAWN - D.A.B.	REVISED -			ROAD DISTRICT NO. 5		CONTRACT NO. 95846		
	PLOT DATE = 1/28/2019	CHECKED - S.W.M.	REVISED -			SHEET NO. 3 OF 7 SHEETS		ILLINOIS		FED. AID PROJECT BROS-MT6W(127)

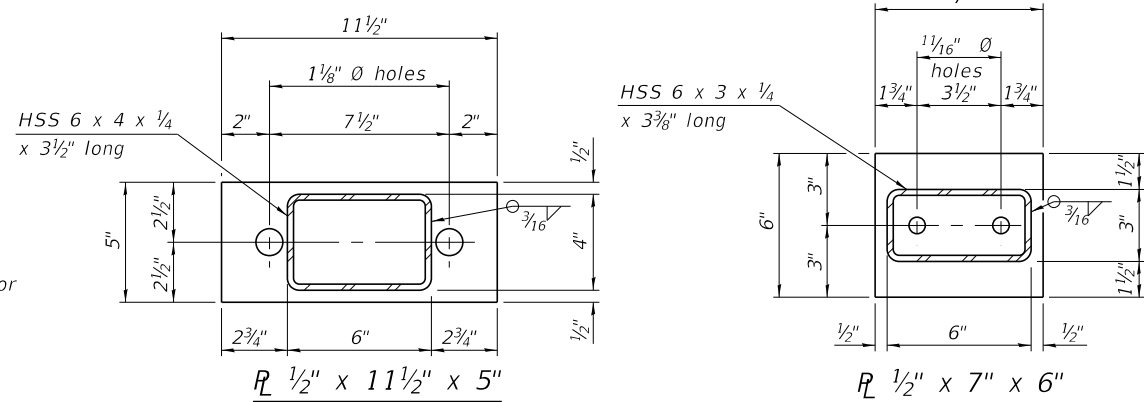


ELEVATION
Showing Rail Post Spaces
See sheet 5 of 7 for Railing Details.

FILE NAME = 151126-shi-culvert.dgn	USER NAME = rthosick	DESIGNED - D.W.T.	REVISED -	STATE OF ILLINOIS WABASH COUNTY HIGHWAY DEPARTMENT	CULVERT DETAILS STRUCTURE NO. 093-5006	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -			173	13-05123-00-BR	WABASH	25	8
PLOT DATE = 1/28/2019	DRAWN - D.A.B.	CHECKED - S.W.M.	REVISED -			ROAD DISTRICT NO. 5		CONTRACT NO. 95846		
						ILLINOIS		FED. AID PROJECT BROS-MT6W(127)		

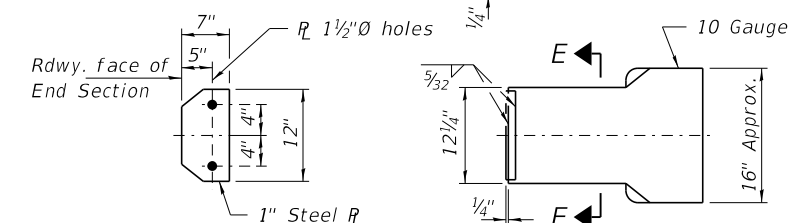


VIEW A-A
ROUND HEAD BOLT

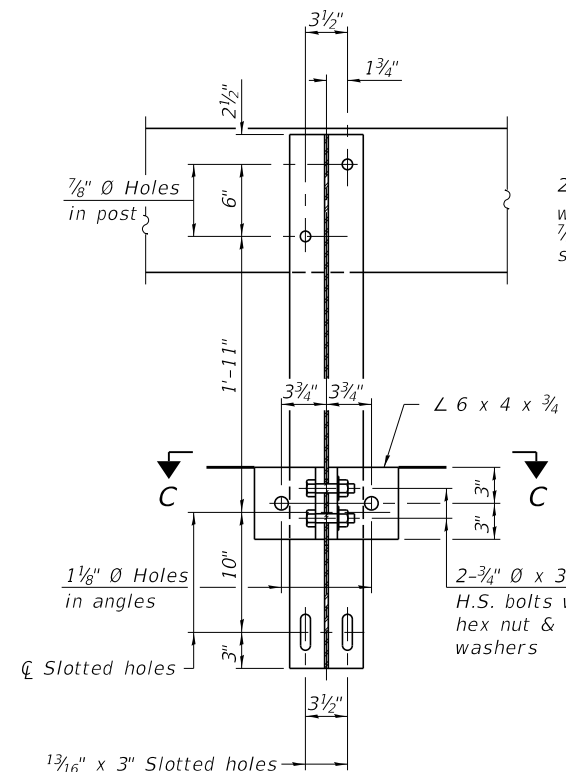


SECTION B-B
SECTION AT RAILING POST

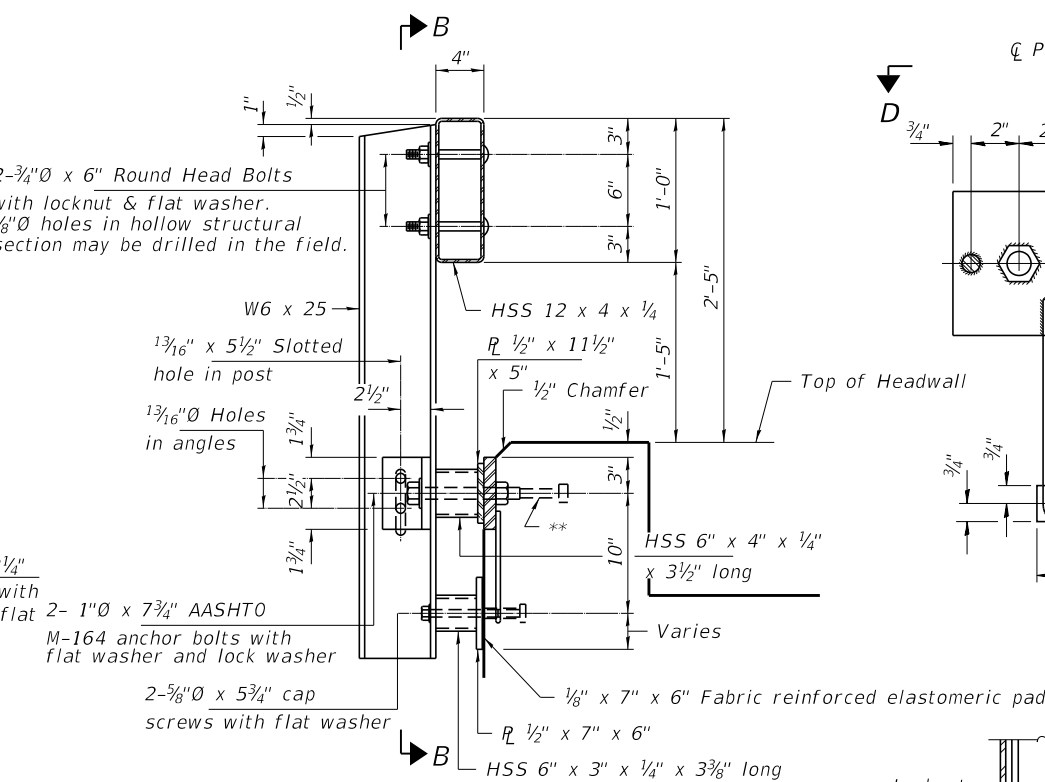
Note: Cost of curled end sections shall be included with the Steel Railing. (4 Required)



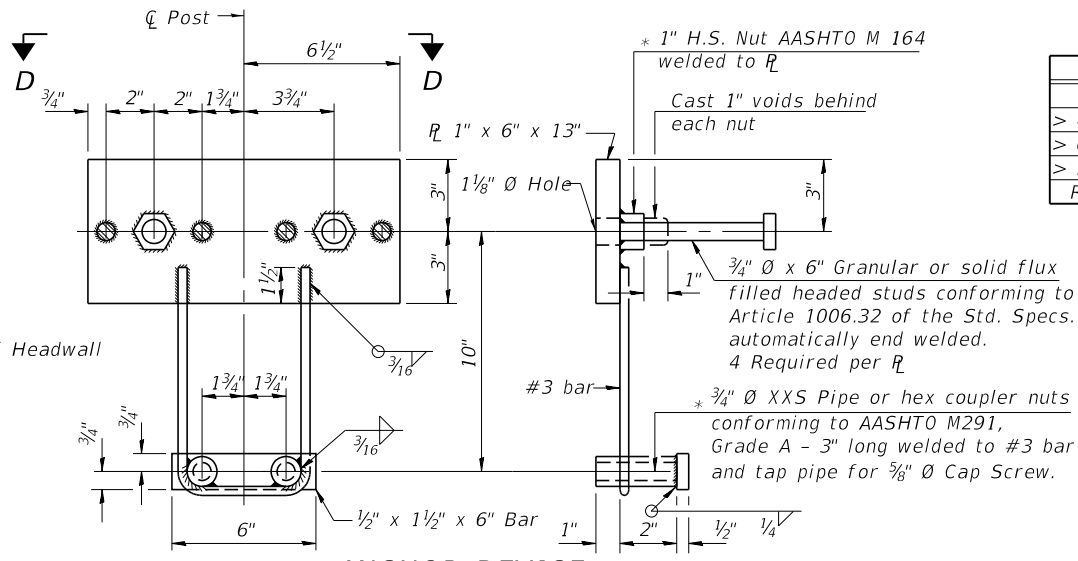
SECTION E-E
CURLED END SECTION DETAILS



SECTION C-C



SECTION AT RAILING POST



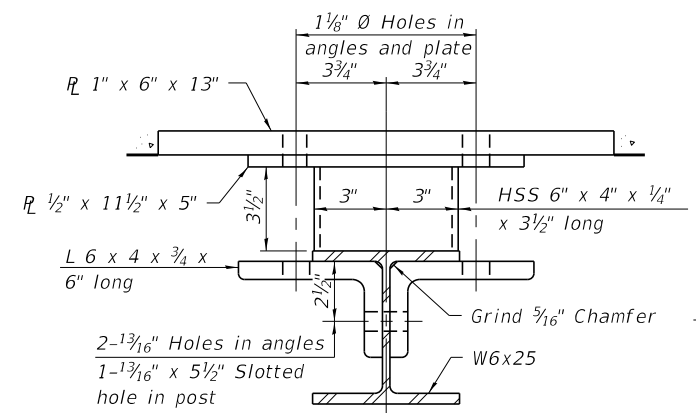
ANCHOR DEVICE

SPLICE DIMENSIONS

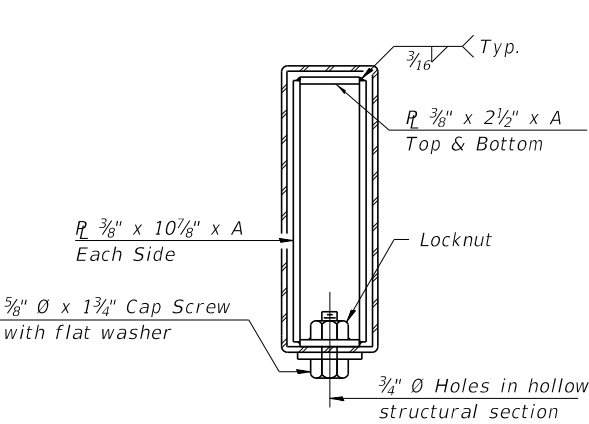
T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

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

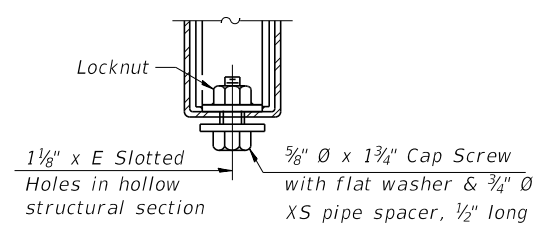
Notes:
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



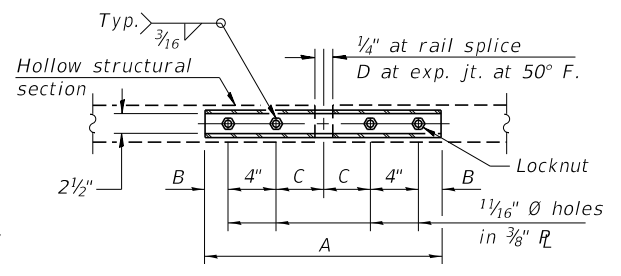
SECTION C-C



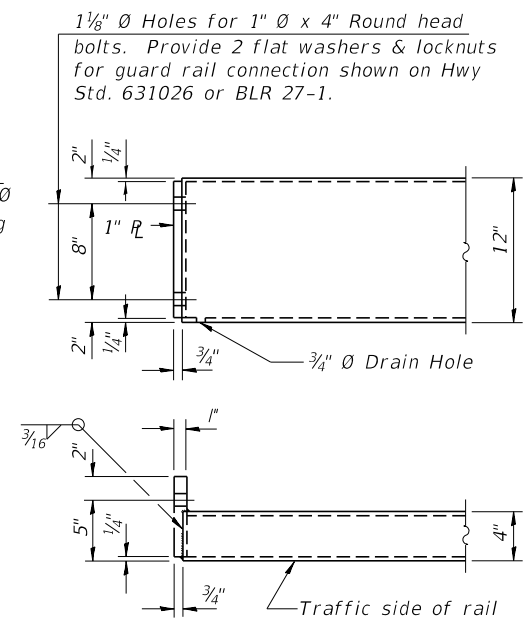
SECTIONS AT RAIL SPLICE



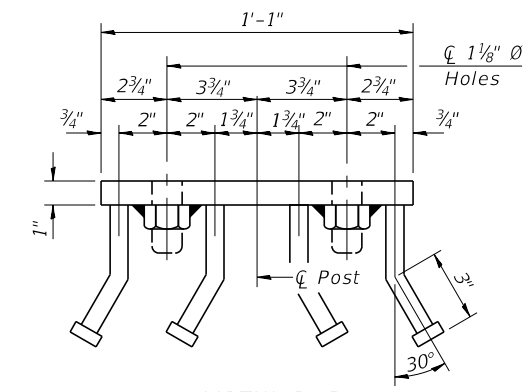
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE R TYPICAL



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	59

R-23A 8-11-2017 (10'-9" Maximum Post Spacing)

FILE NAME = 151126-shi-culvert.dgn	USER NAME = rthosck	DESIGNED - D.W.T.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.	PLOT SCALE = \$SCALES	CHECKED - S.W.M.	REVISED -
3035 STEVENSON DRIVE, SUITE 201	PLOT DATE = 1/28/2019	DRAWN - D.A.B.	REVISED -
SPRINGFIELD, ILLINOIS 62703		CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM			
LS / PE / SE CORP. 184.009959			

STATE OF ILLINOIS
WABASH COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE S-1
STRUCTURE NO. 093-5006

SHEET NO. 5 OF 7 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	9
ROAD DISTRICT NO. 5		CONTRACT NO. 95846		
ILLINOIS		FED. AID PROJECT BROS-MT6W(127)		

Bridge Foundation Boring Log

Project: H-13279 Bridge Co. Rd 650 E Date: 3/17/2014
Section: 13-05123-00-BR Station _____ Bored by: B. Schwartz
Structure: _____ Checked By: T. Holcomb
County: Wabash

Boring No: 1
Station: _____
Offset: _____
Surface Water Elev. _____
Ground Water Elev. During Drilling 372.7
Upon Completion 382.7

Description	Elevation			Qu tsf			w %		
	N	Qu	w %	N	Qu	w %	N	Qu	w %
Ground Surface	383.7	0							
4" of Topsoil									
Brown Silty CLAY (A-6) with pebbles		8	2.2B	21			-25	14	17
		6	2.2B	20				10	19
		6	1.2B	24				20	16
		5	1.3B	20				23	11
Gray SAND (A-2-4) with gravel		5	--	18				18	18
		3	--	21				29	15
		12	--	18					
		16	--	14					
		18	--	12					

N = Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with a 140 lbs. hammer falling 30"
Qu-Unconfined Compressive Strength in tons/sq.ft.
w-Water Content-percentage of oven dry weight-%
B = Bulge Failure S = Shear Failure E = Estimated Value P = Penetrometer

Bridge Foundation Boring Log

Project: H-13279 Bridge Co. Rd 650 E Date: 3/17/2014
Section: 13-05123-00-BR Station _____ Bored by: B. Schwartz
Structure: _____ Checked By: T. Holcomb
County: Wabash

Boring No: 1
Station: _____
Offset: _____
Surface Water Elev. _____
Ground Water Elev. During Drilling 372.7
Upon Completion 382.7

Description	Elevation			Qu tsf			w %		
	N	Qu	w %	N	Qu	w %	N	Qu	w %
End of Boring @ -80.0'	303.7	-80	40	--	19				

N = Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with a 140 lbs. hammer falling 30"
Qu-Unconfined Compressive Strength in tons/sq.ft.
w-Water Content-percentage of oven dry weight-%
B = Bulge Failure S = Shear Failure E = Estimated Value P = Penetrometer

BORING 1

HOLCOMB FOUNDATION ENGINEERING INC.
P.O. Box 88 618-529-5262
Carbondale, Il. 62903 618-457-8991 fax

Bridge Foundation Boring Log

Project: H-13279 Bridge Co. Rd 650 E Date: 3/17/2014
Section: 13-05123-00-BR Station _____ Bored by: B. Schwartz
Structure: _____ Checked By: T. Holcomb
County: Wabash

Boring No: 2
Station: _____
Offset: _____
Surface Water Elev. _____
Ground Water Elev. During Drilling 373.9
Upon Completion 383.9

Elevation	N	Qu	tsf	w	%	Elevation	N	Qu	tsf	w	%
384.9	0										
4" of Topsoil											
Brown Silty CLAY (A-6) with pebbles											
	5	1.7B	19			-25	4	--	9		
	6	1.7B	21				17	--	11		
	9	2.3B	23			-30	23	--	17		
	8	1.4B	20								
373.9	2	--	22			-35	29	--	19		
Gray SAND (A-2-4) with gravel											
	1	--	14								
	15	--	13								
	15	--	13			-40	37	--	18		
	16	--	11								
	5	--	11								

N = Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with a 140 lbs. hammer falling 30"
Qu- Unconfined Compressive Strength in tons/sq.ft.
w- Water Content- percentage of oven dry weight-%
B = Bulge Failure
S = Shear Failure
E = Estimated Value
P = Penetrometer

HOLCOMB FOUNDATION ENGINEERING INC.
P.O. Box 88 618-529-5262
Carbondale, Il. 62903 618-457-8991 fax

Bridge Foundation Boring Log

Project: H-13279 Bridge Co. Rd 650 E Date: 3/17/2014
Section: 13-05123-00-BR Station _____ Bored by: B. Schwartz
Structure: _____ Checked By: T. Holcomb
County: Wabash

Boring No: 2
Station: _____
Offset: _____
Surface Water Elev. _____
Ground Water Elev. During Drilling 373.9
Upon Completion 383.9

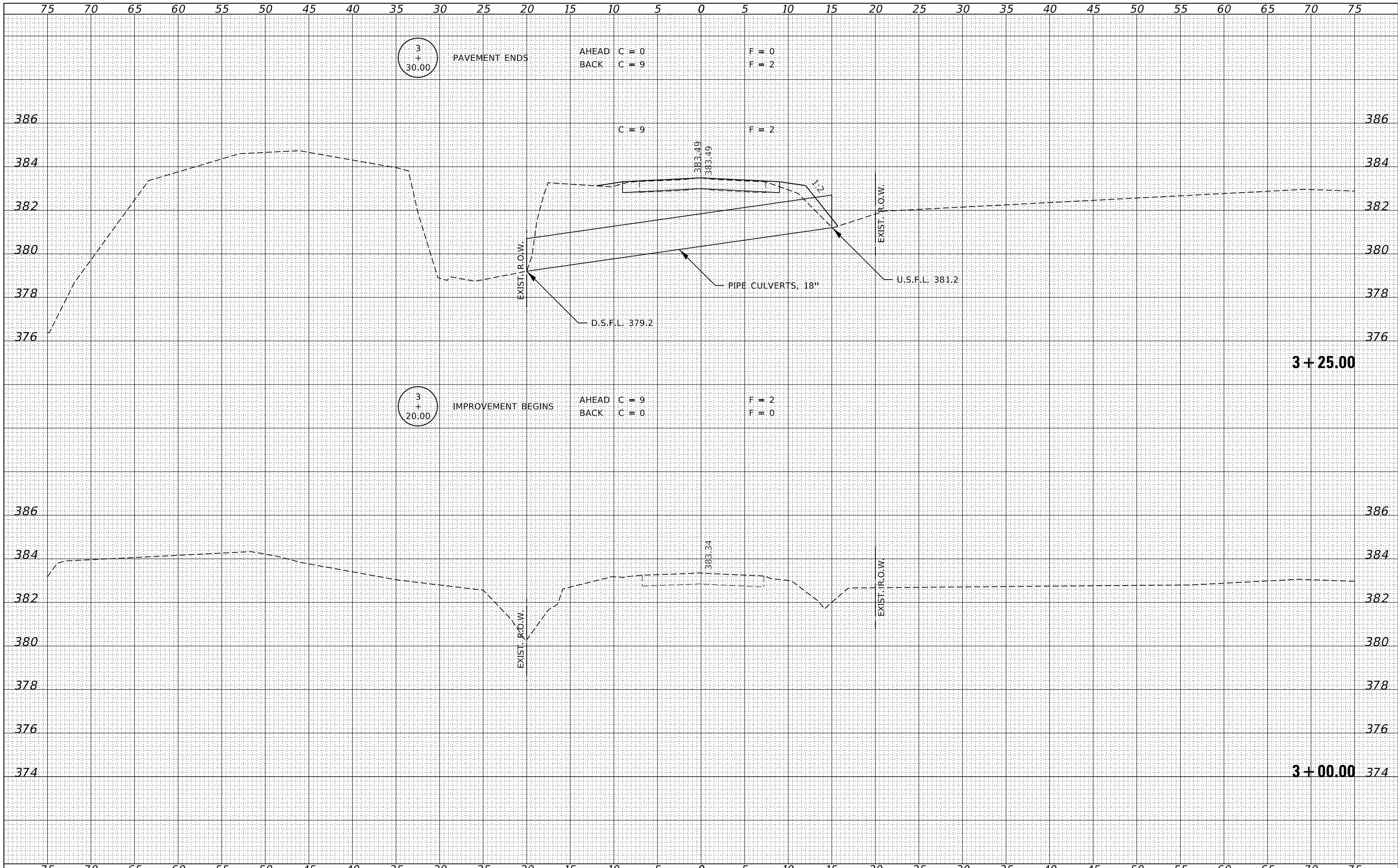
Elevation	N	Qu	tsf	w	%	Elevation	N	Qu	tsf	w	%
sand (continued)											
	45	40	--	19							
						314.9	29	--	--		
End of Boring @ -70.0'											
						-50	34	--	13		
						-75					
						-55	30	--	19		
						-60	28	--	12		
						-85					
						-65	11	--	--		

N = Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with a 140 lbs. hammer falling 30"
Qu- Unconfined Compressive Strength in tons/sq.ft.
w- Water Content- percentage of oven dry weight-%
B = Bulge Failure
S = Shear Failure
E = Estimated Value
P = Penetrometer

BORING 2

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

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



FILE NAME = 151126-shl-xxsh.dgn
 USER NAME = rmosck
 DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 PLOT SCALE = \$SCALES
 PLOT DATE = 1/28/2019

DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19

REVISÉ -
 REVISÉ -
 REVISÉ -
 REVISÉ -

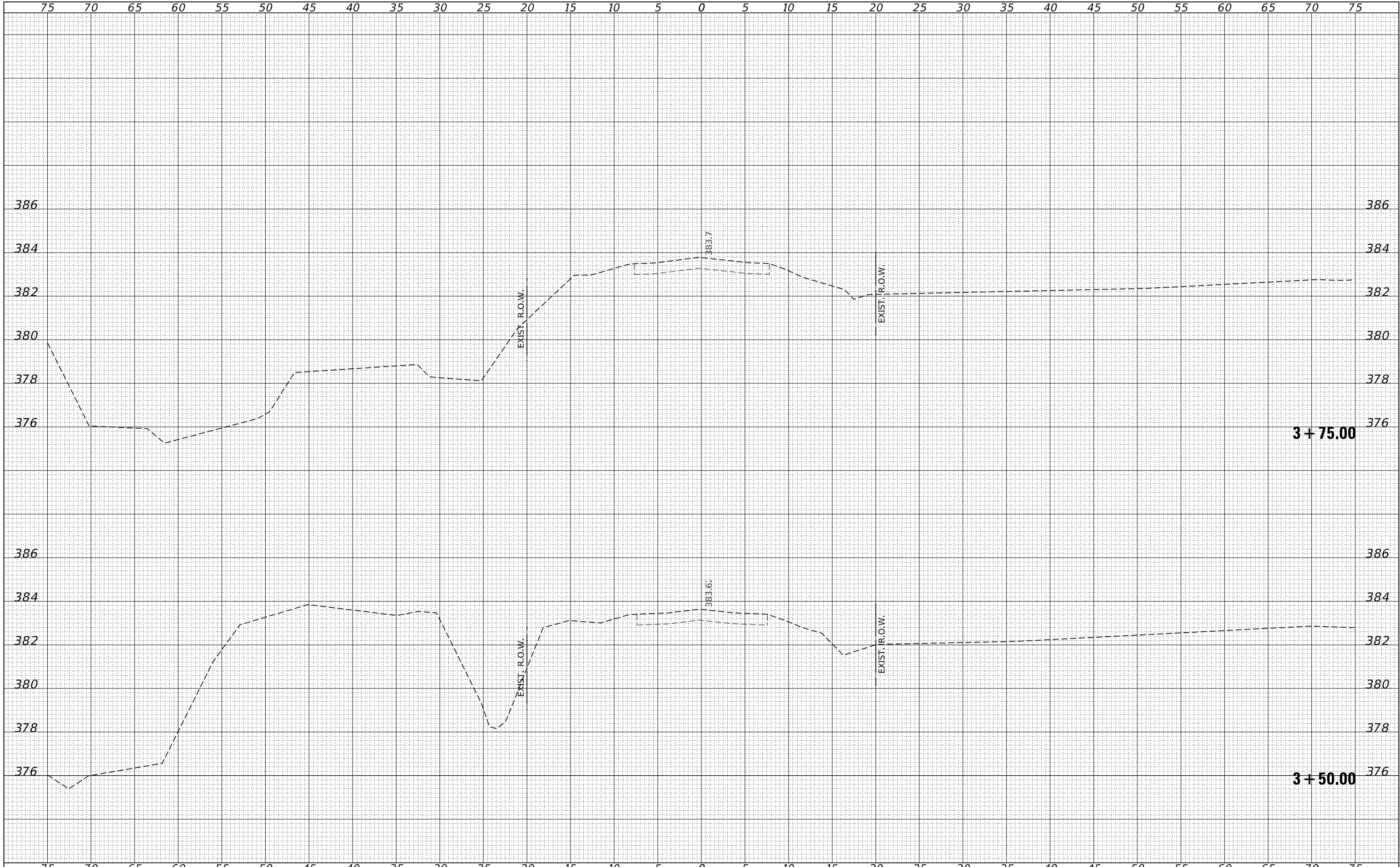
STATE OF ILLINOIS
 WABASH COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS
 SCALE: 5H:2V
 SHEET NO. 1 OF 14 SHEETS
 STA. 3+00.00 TO STA. 3+25.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	12
ROAD DISTRICT # 5		CONTRACT NO. 95846		
ILLINOIS FED. AID PROJECT BROS-MT6W(127)				

BY	DATE

BY	DATE



FILE NAME = 151126-shl-xxxsh.dgn
 DESIGNED - J.V.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 HAMPTON, LENZINI AND RENWICK, INC.
 3885 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 ILLINOIS PROFESSIONAL DESIGN FIRM
 L/S / P/E / S.E. CORP. 184.000959

USER NAME = rmosick
 PLOT SCALE = \$SCALES
 PLOT DATE = 1/28/2019

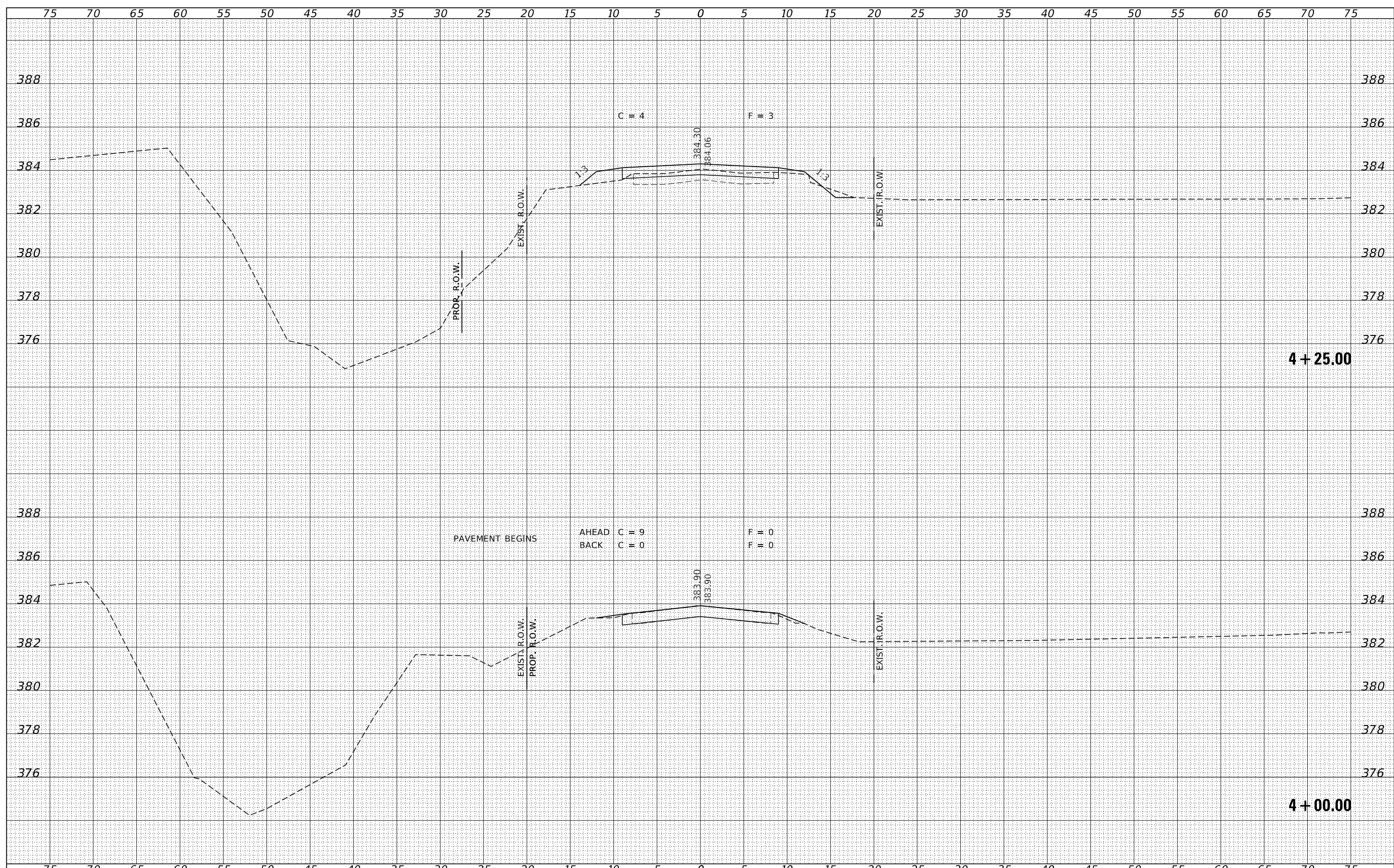
REVISIED -
 REVISIED -
 REVISIED -
 REVISIED -

**STATE OF ILLINOIS
 WABASH COUNTY HIGHWAY DEPARTMENT**

STATION CROSS SECTIONS

SCALE: 5H:2V SHEET NO. 2 OF 14 SHEETS STA. 3+50.00 TO STA. 3+75.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	13
ROAD DISTRICT # 5			CONTRACT NO. 95846	
ILLINOIS FED. AID PROJECT BROS-MT6W(127)				



BY _____ DATE _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

BY _____ DATE _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

FILE NAME = 151126-shl-xxsh.dgn
 USER NAME = rmosck
 DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 PLOT SCALE = \$SCALE\$
 PLOT DATE = 1/28/2019

DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 PLOT SCALE = \$SCALE\$
 PLOT DATE = 1/28/2019

REVISIONS
 REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 WABASH COUNTY HIGHWAY DEPARTMENT**

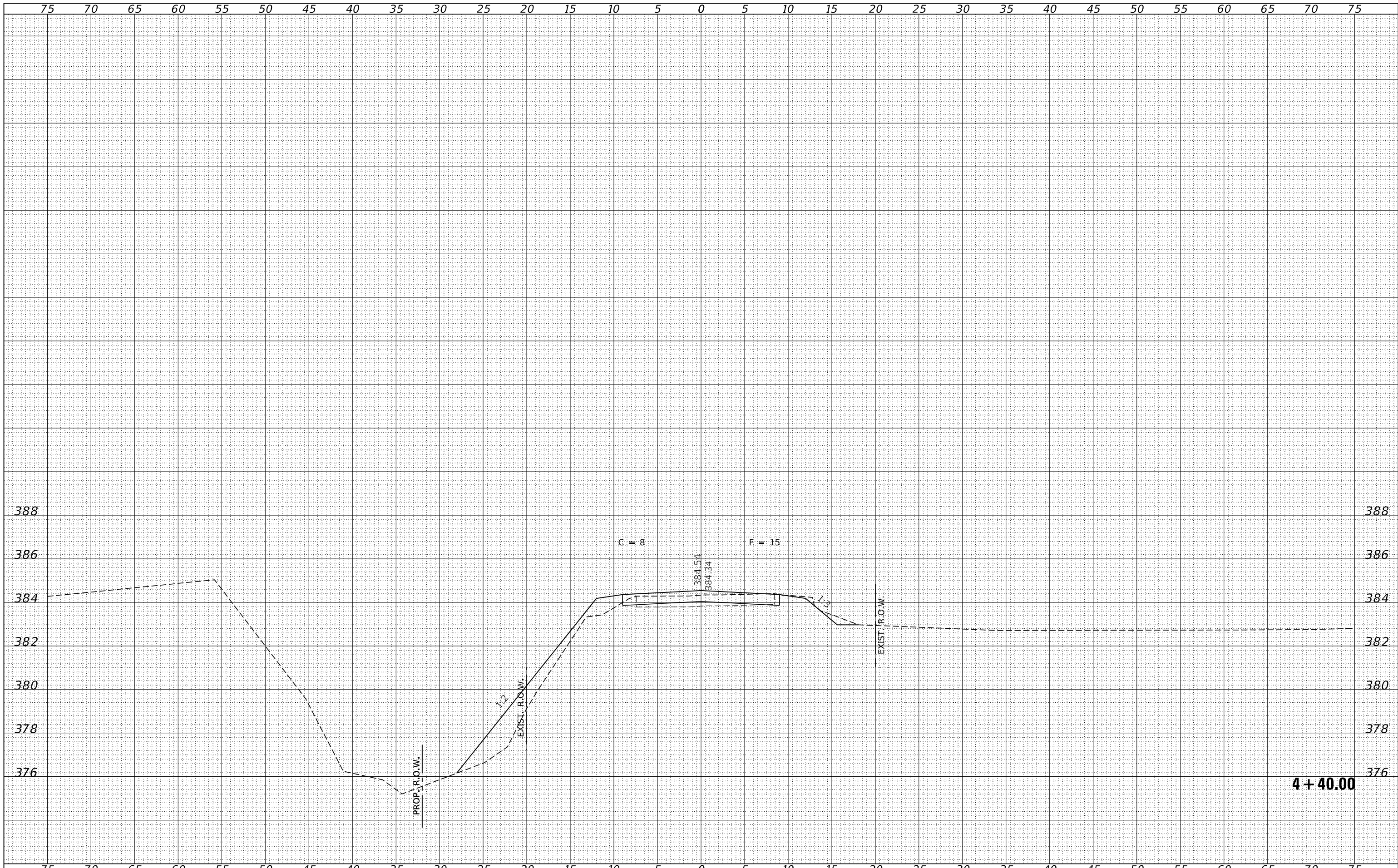
STATION CROSS SECTIONS

SCALE: 5H:2V SHEET NO. 3 OF 14 SHEETS STA. 4+00.00 TO STA. 4+25.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	14
ROAD DISTRICT # 5			CONTRACT NO. 95846	
ILLINOIS FED. AID PROJECT BROS-MT6W(127)				

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

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



FILE NAME = 151126-sh1-xxxx.dgn
 3885 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 ILLINOIS PROFESSIONAL DESIGN FIRM
 L.S. / P.E. / S.E. CORP. 184.000958

USER NAME = rmosck
 DESIGNED - J.V.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 PLOT SCALE = \$SCALE\$
 PLOT DATE = 1/28/2019

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 WABASH COUNTY HIGHWAY DEPARTMENT**

STATION CROSS SECTIONS

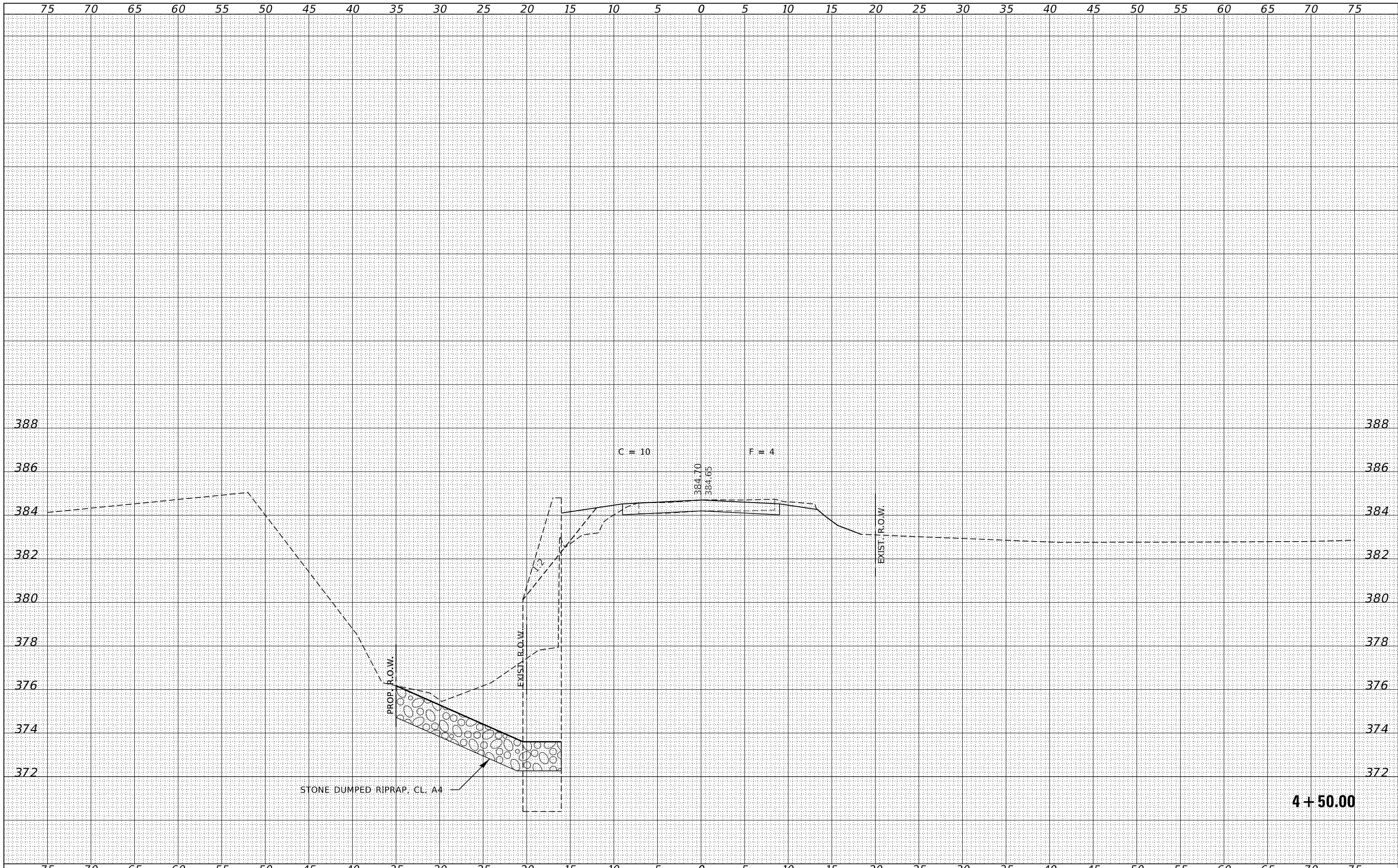
SCALE: 5H:2V SHEET NO. 4 OF 14 SHEETS STA. 4+40.00 TO STA. 4+40.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	15
ROAD DISTRICT # 5			CONTRACT NO. 95846	

ILLINOIS FED. AID PROJECT BROS-MT6W(127)

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

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



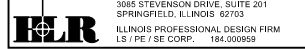
FILE NAME = 151126-shl-xxxx.dgn
 USER NAME = rmosck
 DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 PLOT SCALE = \$SCALE\$
 PLOT DATE = 1/28/2019

DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 REVISIONS:
 REVISIONS:
 REVISIONS:

**STATE OF ILLINOIS
 WABASH COUNTY HIGHWAY DEPARTMENT**

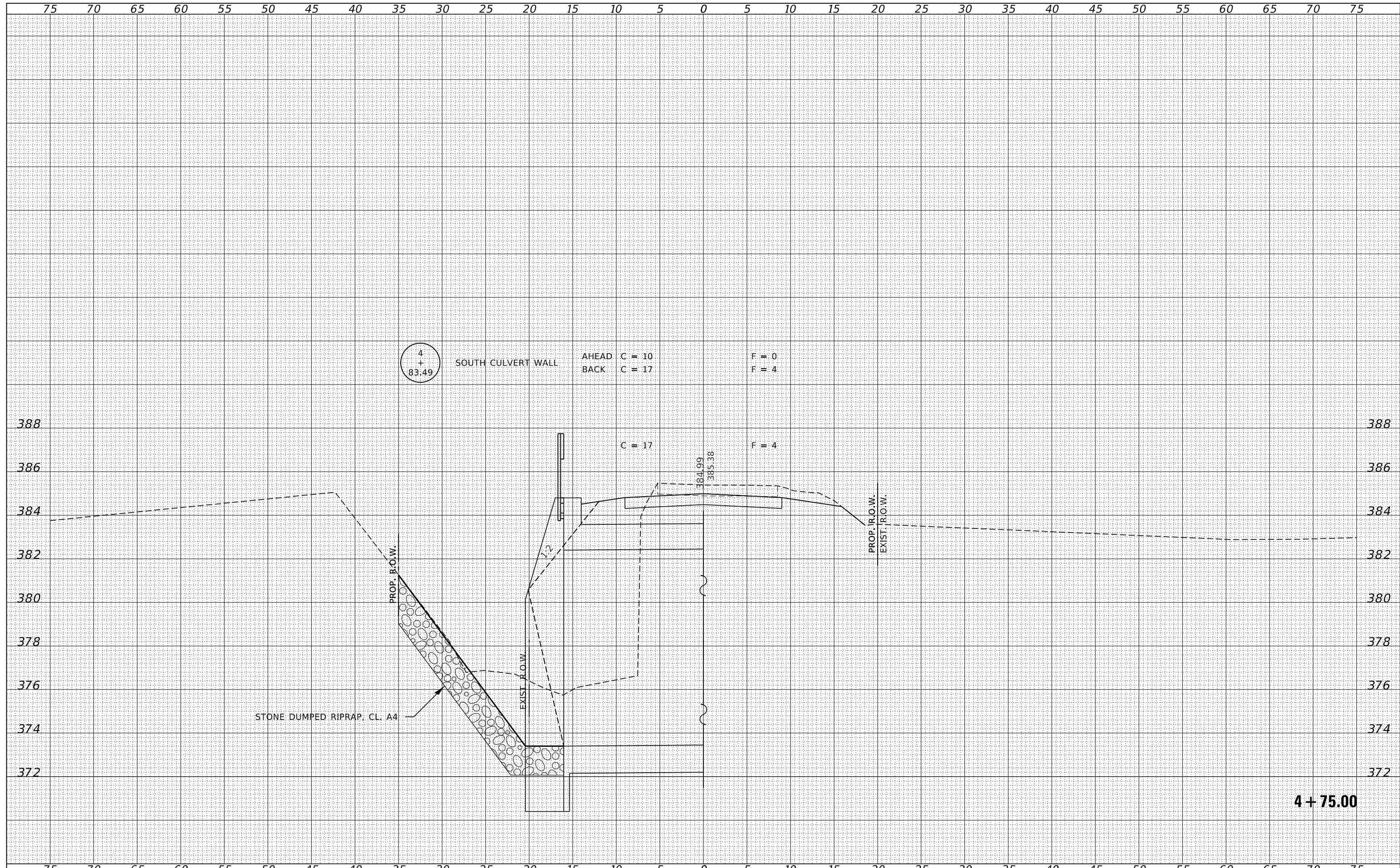
STATION CROSS SECTIONS
 SCALE: 5H:2V
 SHEET NO. 5 OF 14 SHEETS
 STA. 4+50.00 TO STA. 4+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	16
ROAD DISTRICT # 5			CONTRACT NO. 95846	
ILLINOIS FED. AID PROJECT BROS-MT6W(127)				



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

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

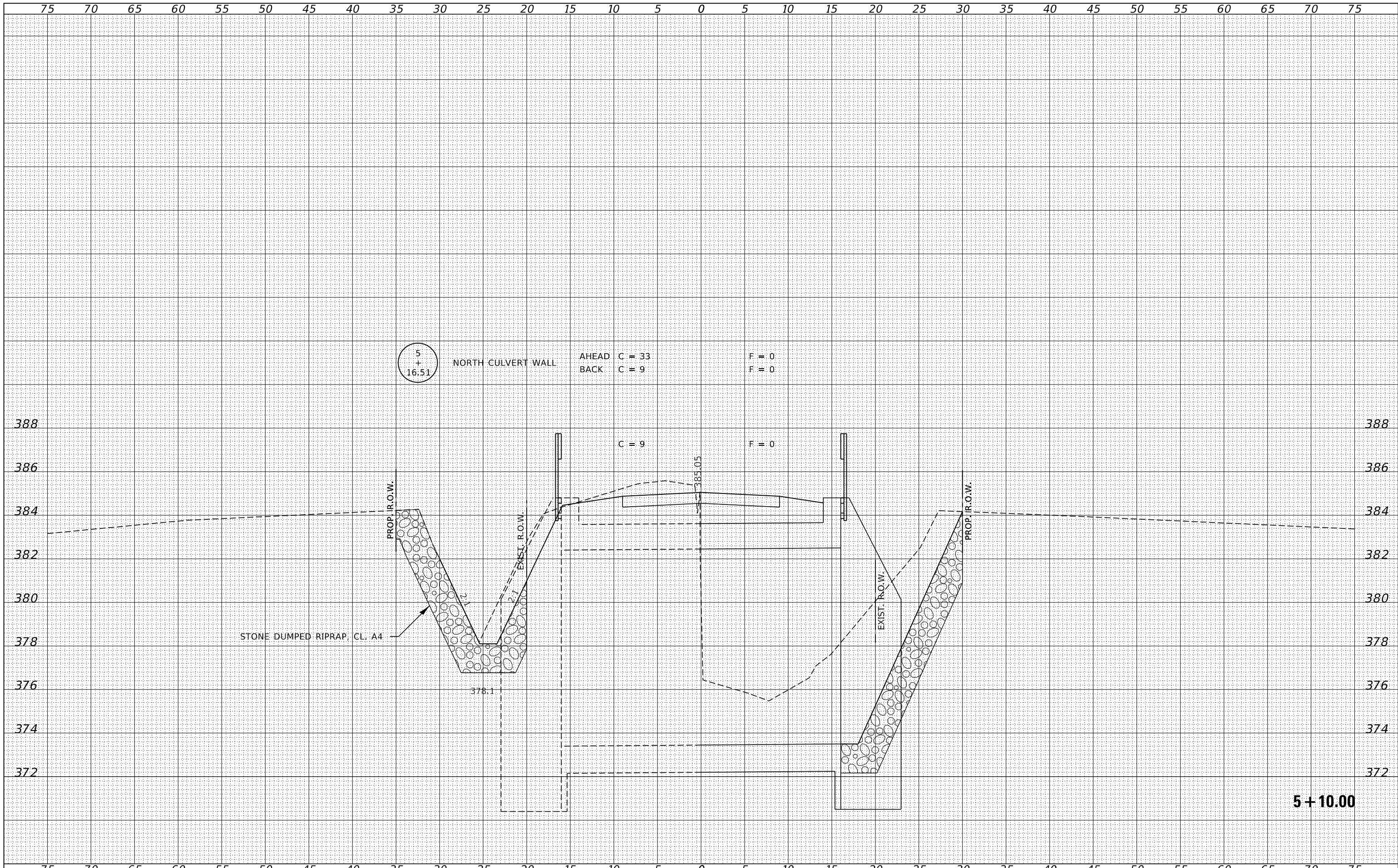


4 + 75.00

FILE NAME = 151126-shl-xxxx.dgn	USER NAME = mosck	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS WABASH COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS			T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.009958	PLOT SCALE = \$Scales	DRAWN - R.D.H.	REVISED -					173	13-05123-00-BR	WABASH	25	17
PLOT DATE = 1/28/2019	CHECKED - S.W.M.	REVISIED -	SCALE: 5H:2V		SHEET NO. 6	OF 14 SHEETS	STA. 4+75.00	TO STA. 4+75.00	ILLINOIS FED. AID PROJECT BROS-MT6W(127)			
	DATE - 01/28/19	REVISIED -										

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

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



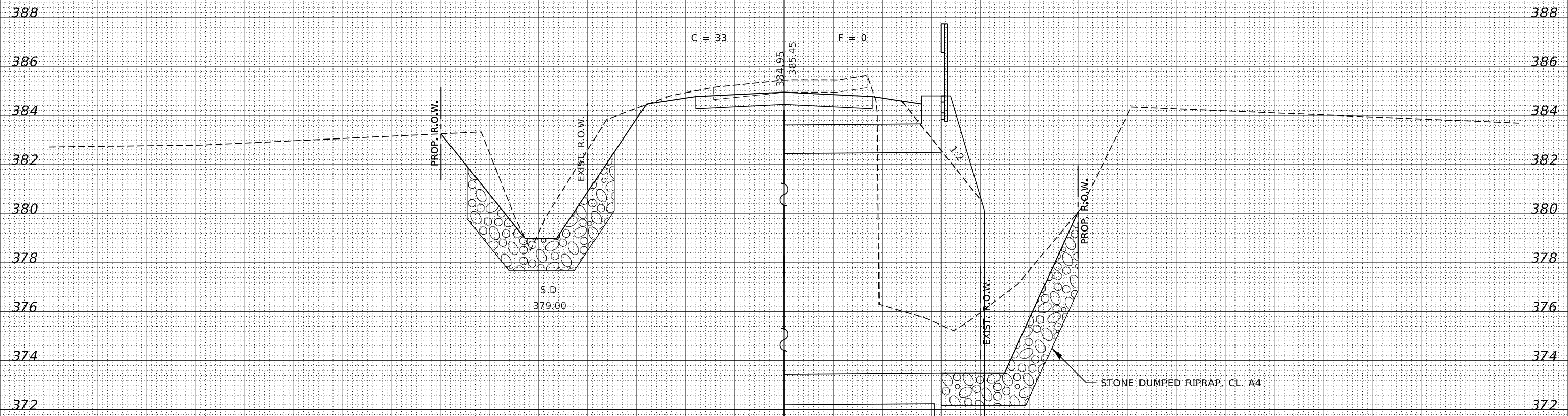
5 + 10.00

FILE NAME = 151126-shl-xxsh.dgn	USER NAME = rmosck	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS WABASH COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS			T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L3 / PE / SE CORP. 184.009958		DRAWN - R.D.H.	REVISED -		173	13-05123-00-BR	WABASH	25	19			
		CHECKED - S.W.M.	REVISED -		ROAD DISTRICT # 5			CONTRACT NO. 95846				
		DATE - 01/28/19	REVISED -		SCALE: 5H:2V	SHEET NO. 8 OF 14 SHEETS	STA. 5+10.00	TO STA. 5+10.00	ILLINOIS FED. AID PROJECT BROS-MT6W(127)			

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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

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



5 + 25.00

FILE NAME = 151126-shl-xxxx.dgn
HAMPTON, LENZINI AND RENWICK, INC.
 3885 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 184-000958

USER NAME = rmosck
 DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 PLOT SCALE = \$SCALE\$
 PLOT DATE = 1/28/2019

REVISIED -
 REVISIED -
 REVISIED -
 REVISIED -

STATE OF ILLINOIS
WABASH COUNTY HIGHWAY DEPARTMENT

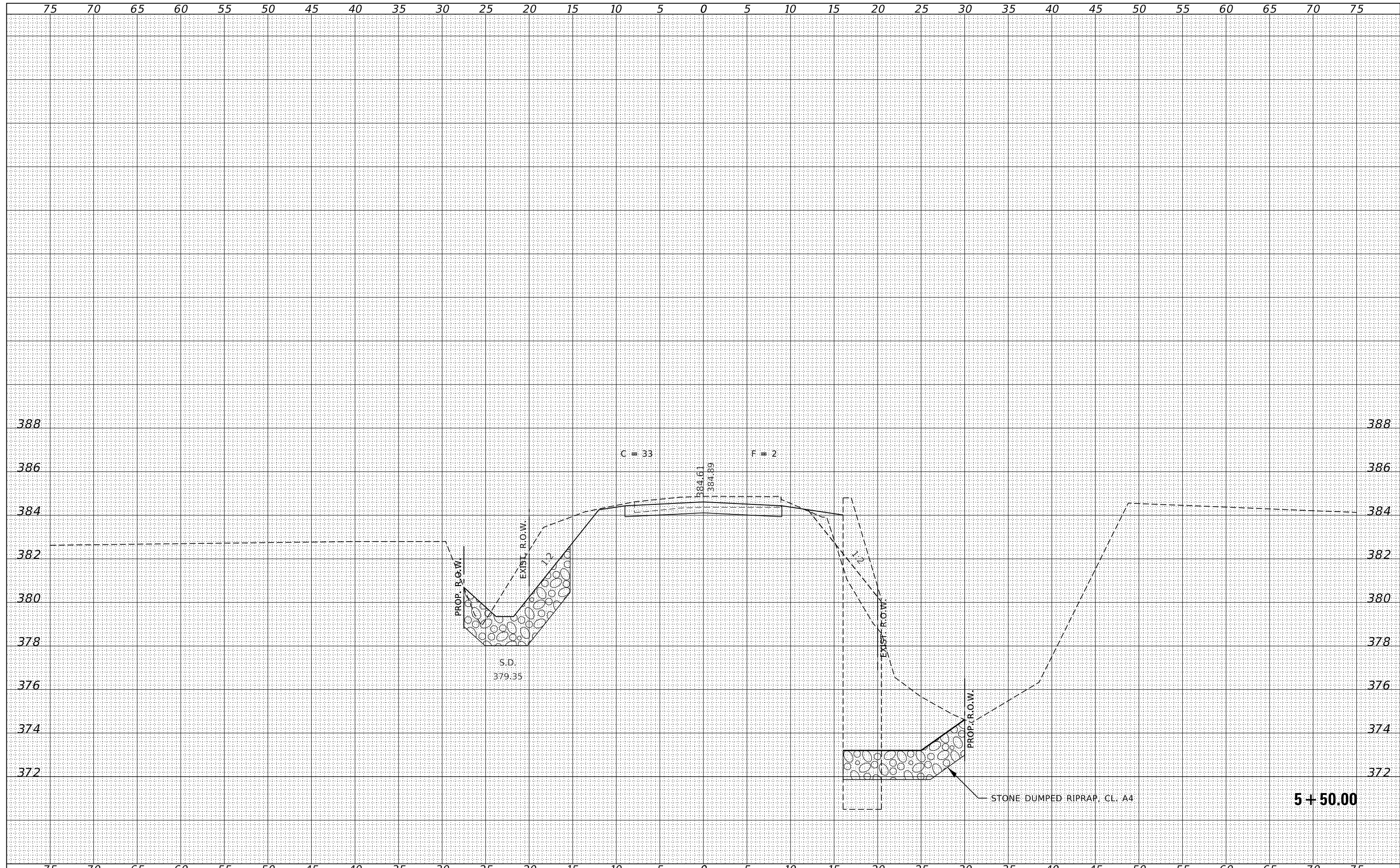
STATION CROSS SECTIONS

SCALE: 5H:2V SHEET NO. 9 OF 14 SHEETS STA. 5+25.00 TO STA. 5+25.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	20
ROAD DISTRICT # 5			CONTRACT NO. 95846	
ILLINOIS FED. AID PROJECT BROS-MT6W(127)				

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

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



FILE NAME = 151126-shl-xxxx.dgn
 USER NAME = rmosck
 DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 PLOT SCALE = \$SCALE\$
 PLOT DATE = 1/28/2019

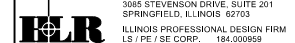
REVISIED -
 REVISIED -
 REVISIED -
 REVISIED -

STATE OF ILLINOIS
 WABASH COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V SHEET NO. 10 OF 14 SHEETS STA. 5+50.00 TO STA. 5+50.00

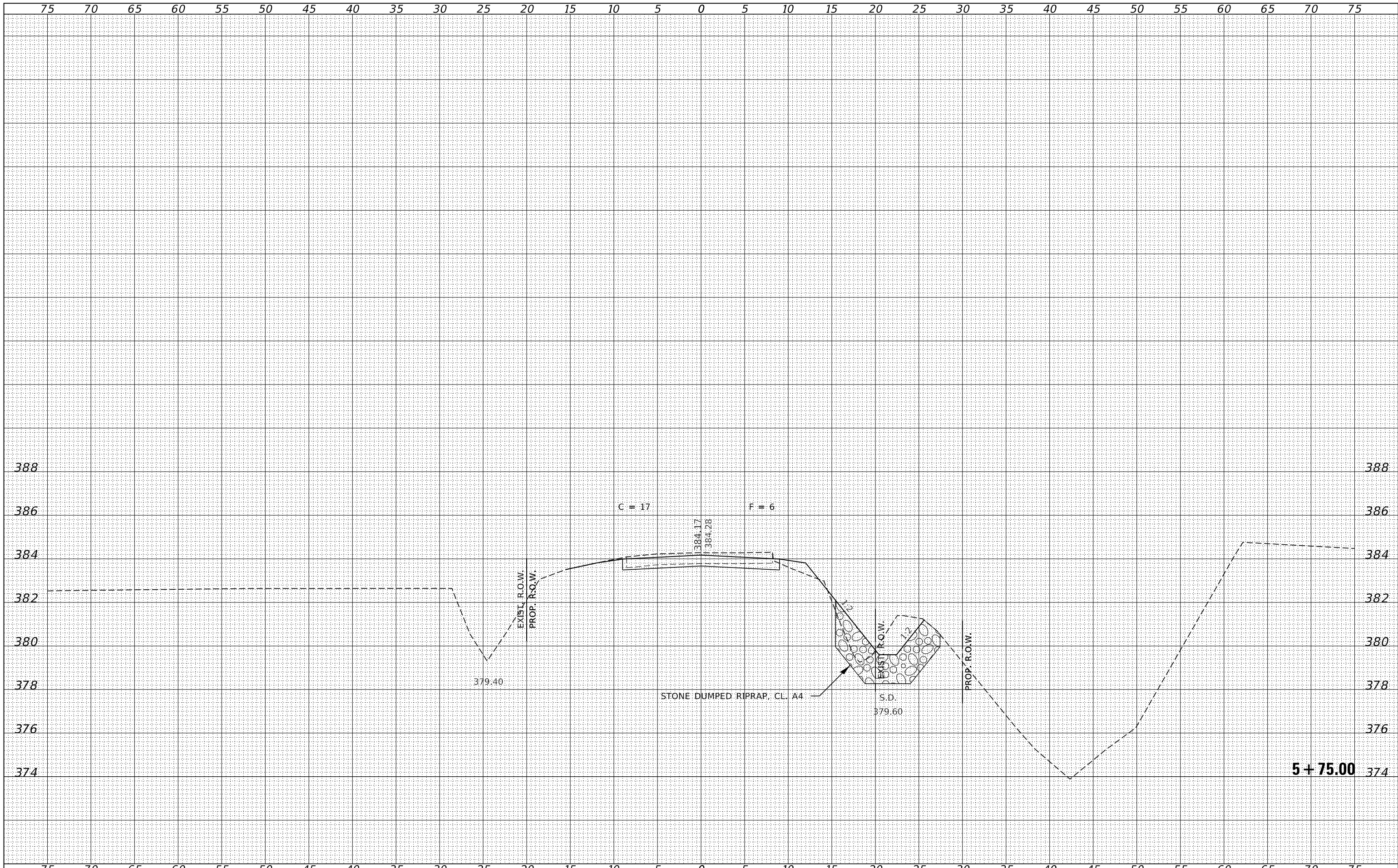
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	21
ROAD DISTRICT # 5		CONTRACT NO. 95846		
ILLINOIS FED. AID PROJECT BROS-MT6W(127)				



5 + 50.00

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

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



FILE NAME = 151126-shl-xxxx.dgn
 DESIGNED - J.V.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19

USER NAME = rmosck
 PLOT SCALE = \$SCALES
 PLOT DATE = 1/28/2019

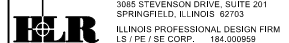
REVISIED -
 REVISIED -
 REVISIED -
 REVISIED -

STATE OF ILLINOIS
 WABASH COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

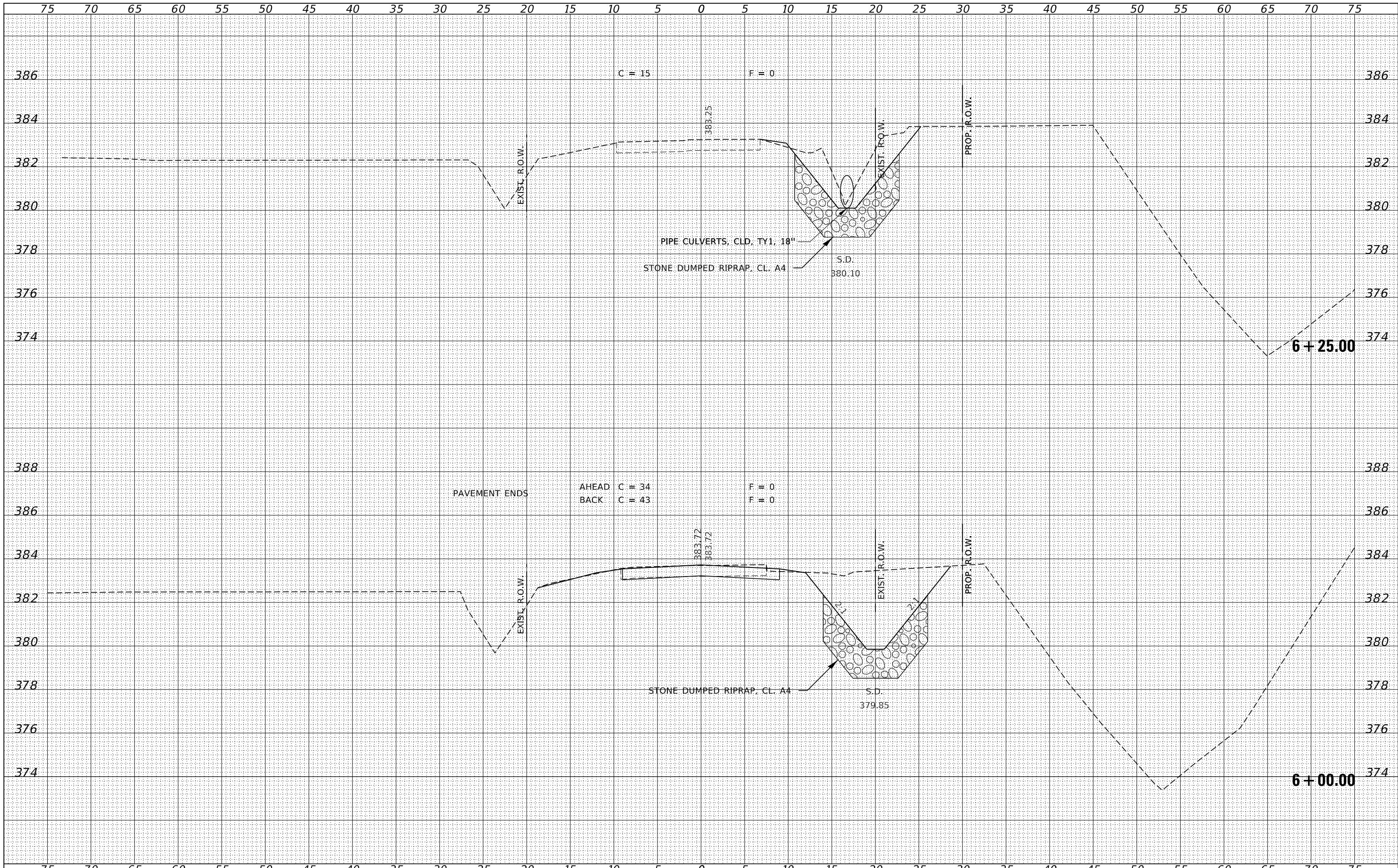
SCALE: 5H:2V SHEET NO. 11 OF 14 SHEETS STA. 5+75.00 TO STA. 5+75.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	22
ROAD DISTRICT # 5		CONTRACT NO. 95846		



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

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



FILE NAME = 151126-shl-xxsh.dgn
 USER NAME = rmosck
 DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19
 PLOT SCALE = \$SCALE\$
 PLOT DATE = 1/28/2019

DESIGNED - J.W.F.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 DATE - 01/28/19

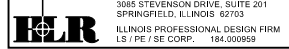
REVISD -
 REVISD -
 REVISD -
 REVISD -

STATE OF ILLINOIS
 WABASH COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

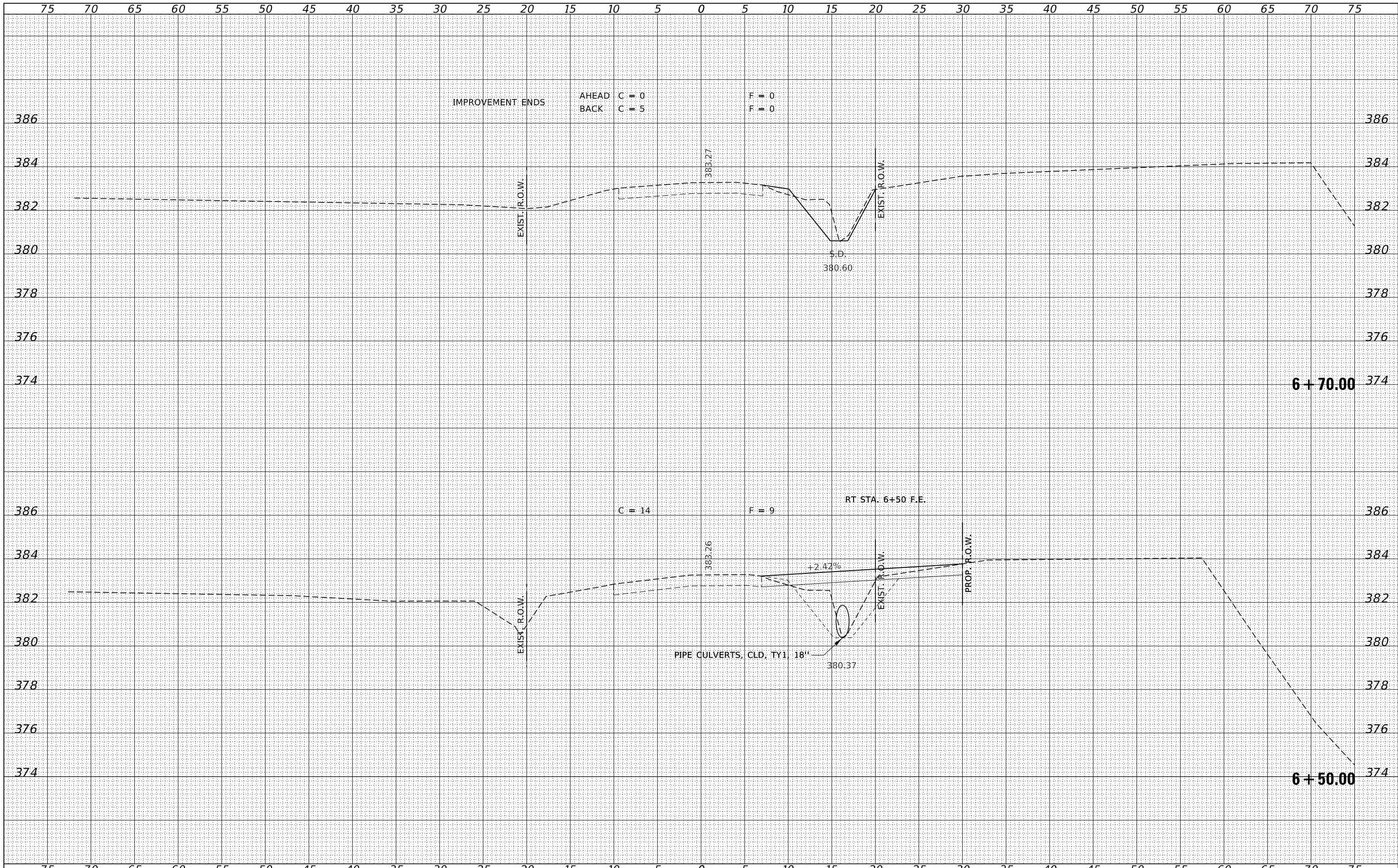
SCALE: 5H:2V SHEET NO. 12 OF 14 SHEETS STA. 6+00.00 TO STA. 6+25.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173	13-05123-00-BR	WABASH	25	23
ROAD DISTRICT # 5			CONTRACT NO. 95846	
ILLINOIS FED. AID PROJECT BROS-MT6W(127)				



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

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



FILE NAME = 151126-shl-xxsh.dgn	USER NAME = rmosck	DESIGNED - J.W.F.	REVISIONS	STATE OF ILLINOIS WABASH COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS		T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.009958	PLOT SCALE = \$SCALES	DRAWN - R.D.H.	REVISIONS		SCALE: 5H:2V	SHEET NO. 13 OF 14 SHEETS	173	13-05123-00-BR	WABASH	25	24
	PLOT DATE = 1/28/2019	CHECKED - S.W.M.	REVISIONS			STA. 6+50.00 TO STA. 6+75.00	ROAD DISTRICT # 5		CONTRACT NO. 95846		
		DATE - 01/28/19	REVISIONS				ILLINOIS FED. AID PROJECT BROS-MT6W(127)				

