

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	GENERAL NOTES, DETAILS, TYPICAL SECTIONS
3.	SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES
4.	TRAFFIC CONTROL PLAN
5.	EROSION CONTROL PLAN
6.	PLAN AND PROFILE
7.-16.	STRUCTURE PLANS AND SOIL BORING LOGS
17.-20.	EXISTING STRUCTURE PLANS
21.-30.	CROSS SECTIONS

REQUIRED HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
515001-03	NAME PLATE FOR BRIDGES
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT OF WAY MARKERS
701901-03	TRAFFIC CONTROL DEVICES
780001-04	TYPICAL PAVEMENT MARKINGS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 26-3	STEEL PLATE BEAM GUARDRAIL 29 IN. HEIGHT
BLR 27-1	TRAFFIC BARRIER TERMINAL, TYPE 5A

UTILITY COMPANIES

AMEREN ILLINOIS
LASALLE, ILLINOIS

AGL RESOURCES
NAPERVILLE, ILLINOIS

MEDIACOM
ELBURN, ILLINOIS

AT&T
OAK BROOK, ILLINOIS

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

CONTRACT NO. 87581

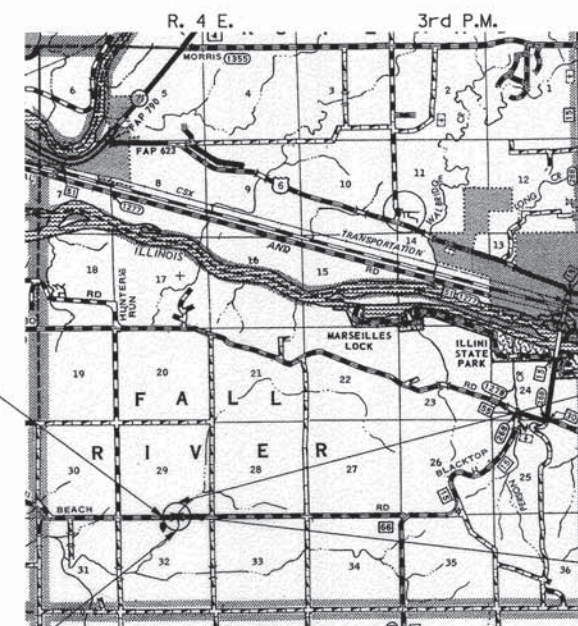
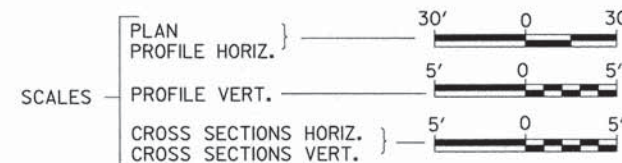
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM - BRIDGE
LASALLE COUNTY
SECTION 15-00730-00-BR
COUNTY HIGHWAY 66 OVER
COVEL CREEK TRIBUTARY
PROJECT NO. BROS-0099(052)
JOB NUMBER C-93-054-14

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	1
FED. ROAD DIST. NO. 7	ILLINOIS	CONTRACT NO. 87581		

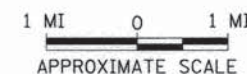


LOCATION OF SECTION INDICATED THUS: - ■ -

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



LOCATION MAP



SECTION 15-00730-00-BR
BEGINS
STATION 15+75.00

EXISTING STRUCTURE 050-3208
SINGLE SPAN PRECAST CHANNEL BEAM BRIDGE
ON TIMBER PILE CLOSED ABUTMENTS WITH
REINFORCED CONCRETE CAPS
36'-0" BK. TO BK., AND 26'-3" O. TO O.,
NO SKEW (TO BE REMOVED)

SECTION 15-00730-00-BR
ENDS
STATION 24+00.00

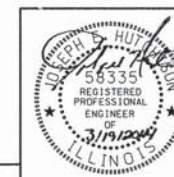
PROPOSED STRUCTURE SN 050-3612
SINGLE SPAN 21" PPC DK BM STRUCTURE ON
CONCRETE SPILL THRU PILE BENT ABUTMENTS
57'-0" BK TO BK, AND 30'-0" O TO O DECK,
NO SKEW.

NET LENGTH OF PROJECT = 825.00 FEET = 0.156 MILES
DESIGN CLASSIFICATION: MINOR-COLLECTOR (NON-URBAN)
DESIGN ADT = 790 (2034)
DESIGN SPEED = 50 MPH

Hutchison Engineering, Inc.
JACKSONVILLE-SHOREWOOD-PEORIA

2014

JOB#3458



J. Exp 11/30/2015
SIGNATURE

ENGINEER'S SEAL

PLANS DESIGNED IN ACCORDANCE WITH BUREAU
OF LOCAL ROADS AND STREETS MANUAL GUIDELINES
FOR TWO LANE RURAL COLLECTORS - RECONSTRUCTION

APPROVED March 21, 2014

Lawrence A. Kinzie
LASALLE COUNTY ENGINEER

PASSED 3/31 2014

David R. E.
DISTRICT THREE ENGINEER OF
LOCAL ROADS & STREETS

Released For
Bid Based on
Limited Review 3/31 2014

Paul A. Lott
DEPUTY DIRECTOR OF HIGHWAYS,
REGION TWO ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL DESIGN INFORMATION
COUNTY HIGHWAY 66

ROAD CLASSIFICATION: CLASS III 80,000 LB./20 YEAR DESIGN
 STRUCTURAL DESIGN TRAFFIC:
 PV = 660 SU = 53 MU = 38
 PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
 P = 88% S = 7% M = 5%
 MINIMUM SUBGRADE SUPPORT RATING: FAIR
 FLEXIBLE PAVEMENT DESIGN: MINIMUM TF = 0.21
 ASPHALT PAVEMENT THICKNESS: 5 1/4"
 AGGREGATE BASE COURSE, TYPE A: 8"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

	HMA BINDER	HMA SURFACE	INCIDENTAL HMA
PG GRADE**	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4% @ N50	4% @ N50	4% @ N50
MIXTURE COMPOSITION*	IL-19.0 FG	IL-9.5	IL-9.5
FRICITION AGGREGATE		MIXTURE C	
DENSITY TEST METHOD	CORES	CORES	SATISFACTION OF ENGINEER

- * OTHER MIXES CAN BE USED WITH WRITTEN PERMISSION FROM THE ENGINEER.
- ** WHEN RAP/RAS ABR EXCEEDS 20 PERCENT, THE HIGH AND LOW VIRGIN ASPHALT BINDER GRADES SHALL EACH BE REDUCED BY ONE GRADE (i.e. 25% ABR WOULD REQUIRE A VIRGIN ASPHALT BINDER GRADE OF PG 64-22 TO BE REDUCED TO PG 58-28).

GENERAL NOTES

THE REMOVAL OF EXISTING ASPHALT SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE PROJECT SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

ALL EXISTING DRAINAGE STRUCTURES NOT BEING REMOVED BY THE CONTRACTOR THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION

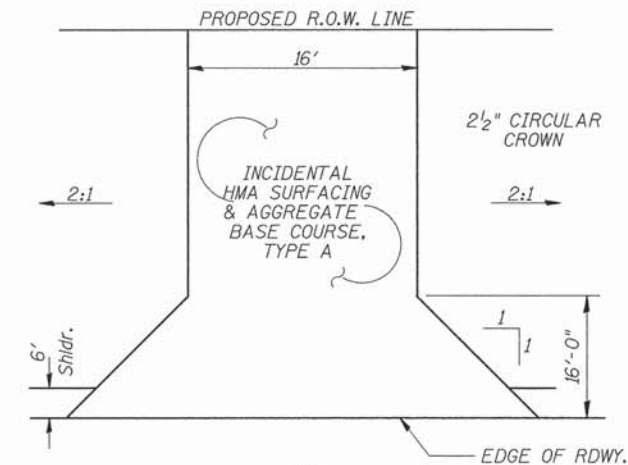
THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

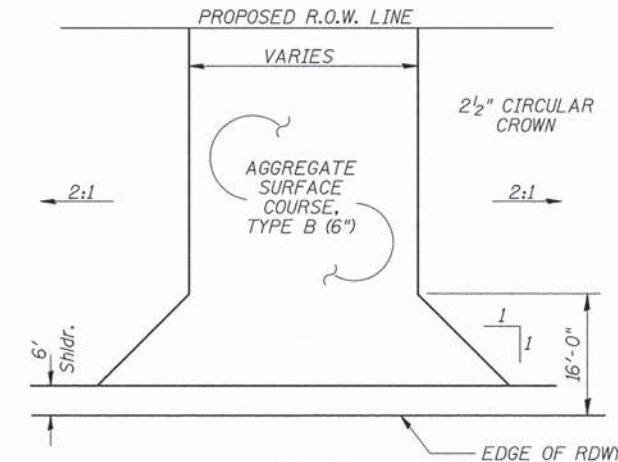
THE FINAL SURFACE OF ALL DISTURBED/EMBANKMENT AREAS SHALL BE SEED. THE TOP 4 INCHES OF THE SEEDER AREAS SHALL BE COHESIVE VEGETATION SUSTAINING SOIL SUBJECT TO THE APPROVAL OF THE ENGINEER. THE COST OF SHAPING THE SLOPES AND PROVIDING VEGETATION SUSTAINING SOIL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. TOPSOIL MAY BE STRIPPED AND STOCKPILED FROM THE SITE OR HAULED IN FROM AN ALTERNATE LOCATION AS APPROVED BY THE ENGINEER.

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.



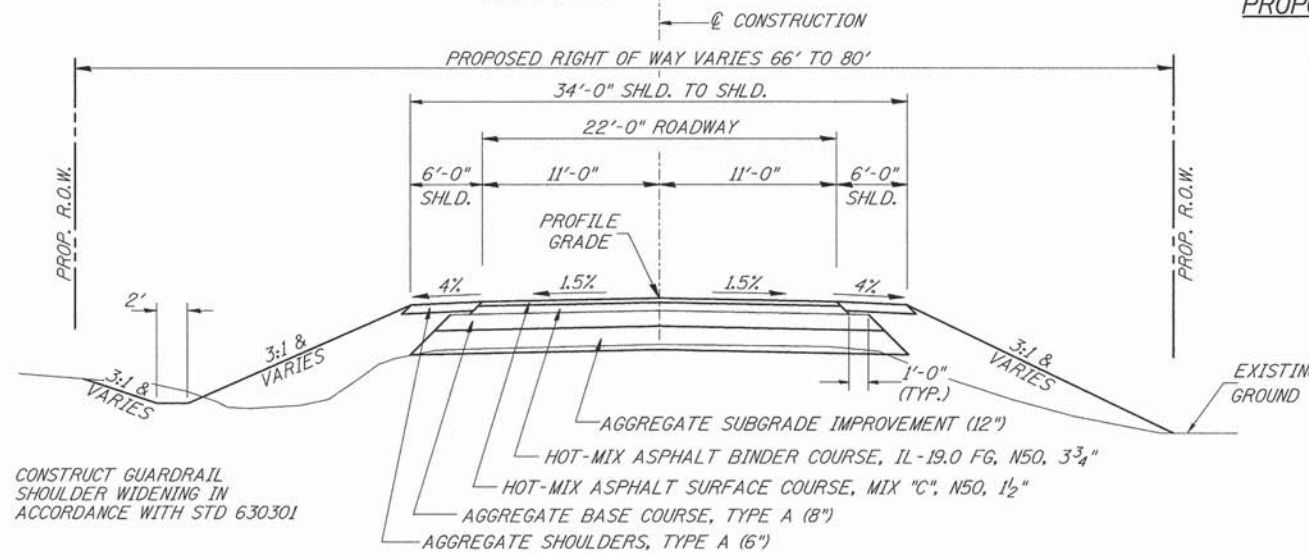
PROPOSED PRIVATE ENTRANCE

STA 16+22 LT



PROPOSED FIELD ENTRANCES

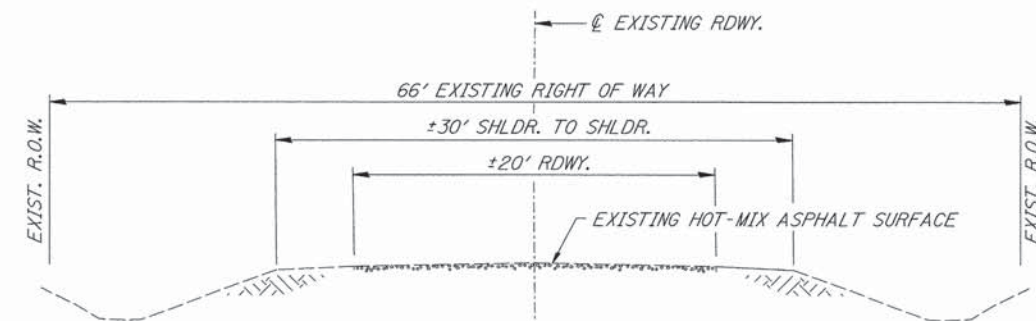
STA 19+44 LT (16' WIDE)
 STA 20+60 RT (16' WIDE)
 STA 21+25 LT (28' WIDE)



PROPOSED TYPICAL SECTION

STA. 15+75.00 TO STA. 19+71.50
 STA. 20+28.50 TO STA. 24+00.00
 EXCEPT TRANSITIONS

BRIDGE OMISSION
 STA. 19+71.50 TO STA. 20+28.50



EXISTING TYPICAL SECTION

FILE NAME =	USER NAME = cthomas	DESIGNED -	REVISED -
W:\Bridge\3458-LeSalle\3458\001.dgn		DRAWN -	REVISED -
	PLOT SCALE = 1/8" = 1' / 1"	CHECKED -	REVISED -
	PLOT DATE = 3/18/2014	DATE -	REVISED -

LASALLE COUNTY
COUNTY HIGHWAY 66
OVER COVEL CREEK TRIBUTARY

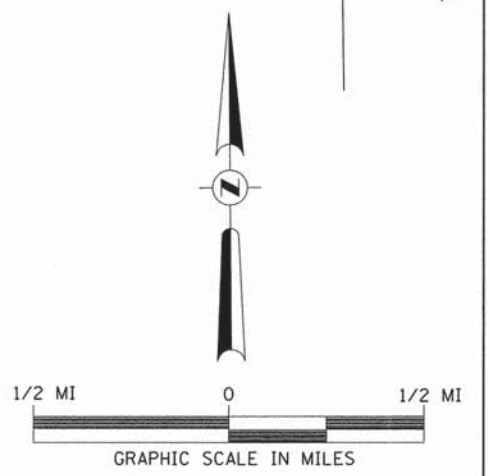
GENERAL NOTES, DETAILS, TYPICAL SECTIONS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 15+75.00 TO STA. 24+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	2
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 87581	
FED. AID PROJECT BROS-0099(052)				

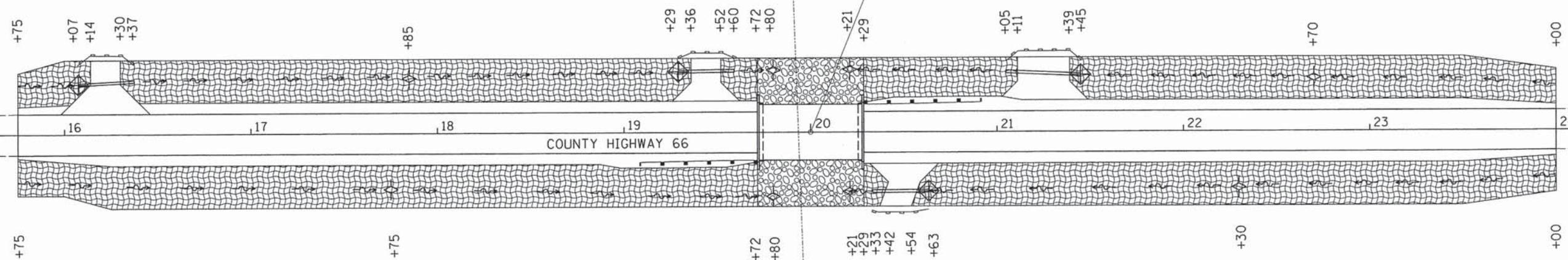


- 1 ROAD CLOSED 2 1/2 MILES AHEAD LOCAL TRAFFIC ONLY R11-3
 - 2 ROAD CLOSED 1 1/4 MILE AHEAD LOCAL TRAFFIC ONLY R11-3
 - 3 ROAD CLOSED 3/4 MILE AHEAD LOCAL TRAFFIC ONLY R11-3
 - 4 ROAD CLOSED AHEAD W20-3
 - 5 ROAD CLOSED 500 FT W20-3
 - 6 TYPE III BARRICADES
- SEE STANDARDS BLR 21 & BLR 22 AND SPECIAL PROVISIONS









FILE NAME = V:\Bridges\3458-LeSalle\3458h001.dgn	USER NAME = othomas	DESIGNED -	REVISED -	LASALLE COUNTY COUNTY HIGHWAY 66 OVER COVEL CREEK TRIBUTARY	TRAFFIC CONTROL PLAN		RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. 15+75.00 TO STA. 24+00.00	CH 66	15-00730-00-BR	LASALLE	30	4
		PLOT SCALE = 1:8000' / 1"	CHECKED -					CONTRACT NO. 87581				
		PLOT DATE = 3/13/2014	DATE -					FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BR05-00990521				

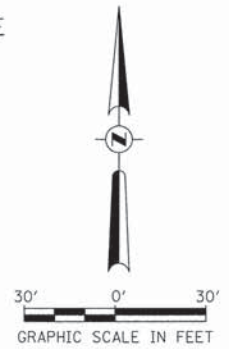
T 33 N, R 4 E, 3rd PM
SECTION 29



LEGEND

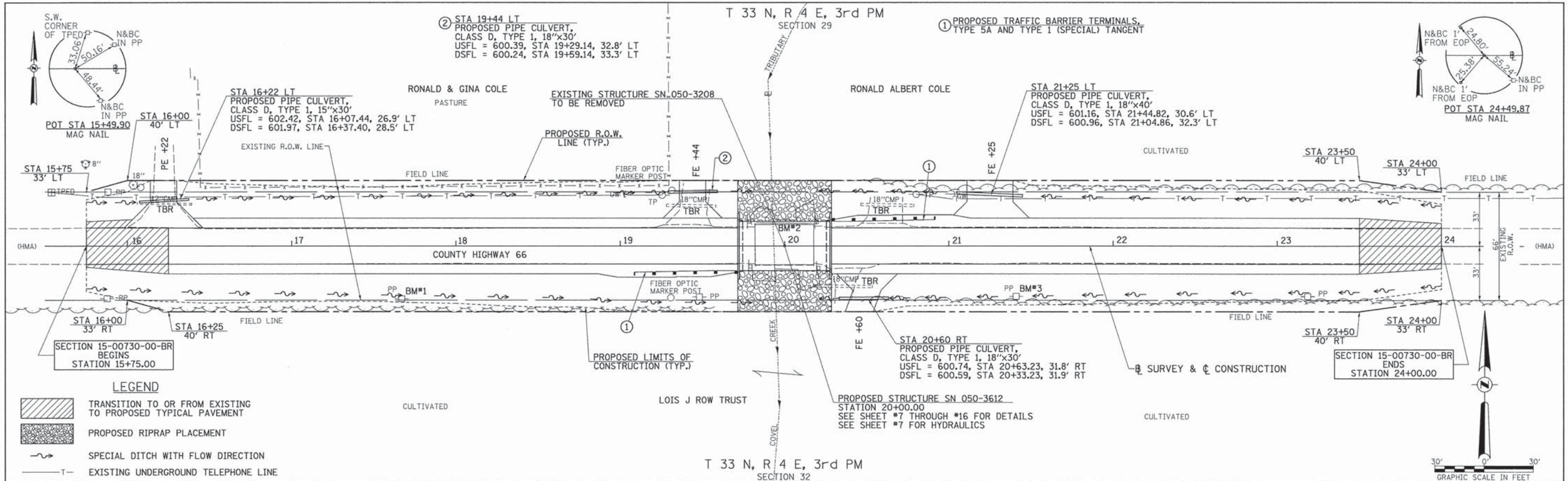
-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK
-  INLET & PIPE PROTECTION
-  EROSION CONTROL BLANKET
-  SPECIAL DITCH - FLOW LINE AND DIRECTION
-  PROPOSED RIPRAP PLACEMENT

NOTE: TEMPORARY EROSION CONTROL SEEDING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 280.04 OF THE STANDARD SPECIFICATIONS.



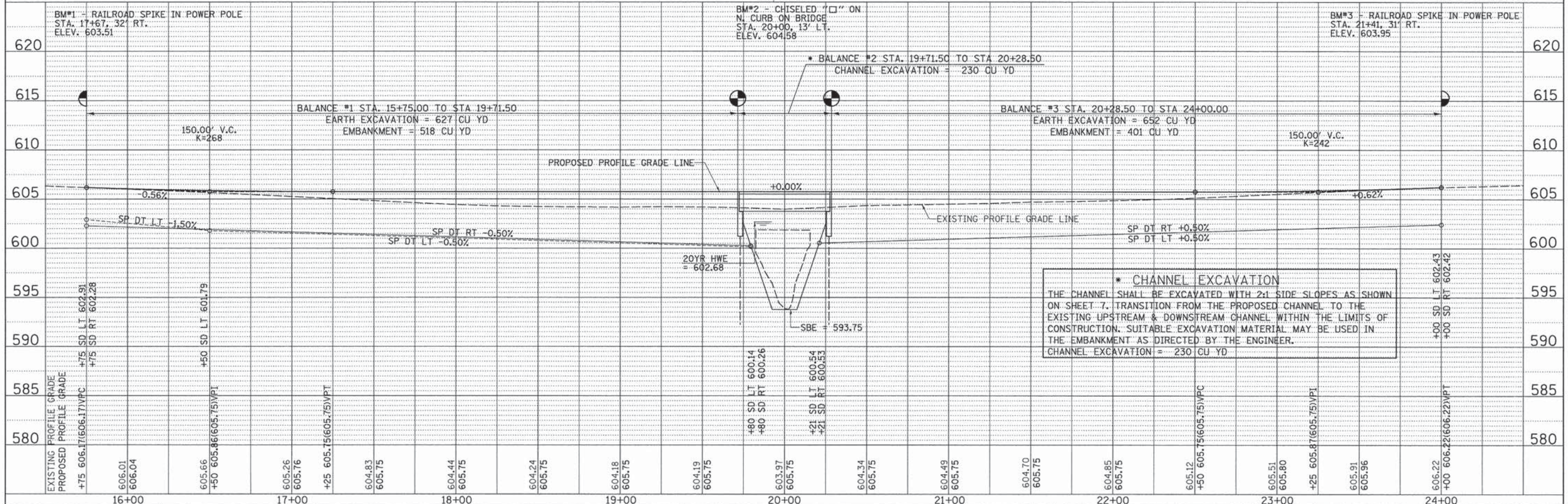
T 33 N, R 4 E, 3rd PM
SECTION 32

FILE NAME = V:\Bridge\3458-LoSalle\3458S001.dgn	USER NAME = cthomas	DESIGNED -	REVISED -	LASALLE COUNTY COUNTY HIGHWAY 66 OVER COVEL CREEK TRIBUTARY	EROSION CONTROL PLAN			RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -		SCALE: 1" = 30'	SHEET NO. 1 OF 1 SHEETS	STA. 15+75.00 TO STA. 24+00.00	CH 66	15-00730-00-BR	LASALLE	30	5
		PLOT SCALE = 38.80000' / in.	REVISED -					CONTRACT NO. 87581				
		PLOT DATE = 3/13/2014	REVISED -					FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BR05-00990521				



LEGEND

- TRANSITION TO OR FROM EXISTING TO PROPOSED TYPICAL PAVEMENT
- PROPOSED RIPRAP PLACEMENT
- SPECIAL DITCH WITH FLOW DIRECTION
- EXISTING UNDERGROUND TELEPHONE LINE



DATE: _____
 BY: _____
 CHECKED: _____
 DESIGNED: _____

DATE: _____
 BY: _____
 CHECKED: _____
 DESIGNED: _____

FILE NAME = V:\Bridges\3458-LaSalle\3458p001.dgn	USER NAME = JHutchison	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

PLAN AND PROFILE
 SCALE: 1"=30'
 SHEET NO. 1 OF 1 SHEETS
 STA. 15+75.00 TO STA. 24+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	6
CONTRACT NO. 87581				
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BR05-00990521		

B.M.: RR Spike in Power Pole Sta. 17+67, 32' Rt. Elev. 603.51
 RR Spike in Power Pole Sta. 21+41, 31' Rt. Elev. 603.95

Existing Structure:
 Single span precast channel beam bridge on timber pile closed abutments with reinforced concrete caps. The structure is 36'-0" back to back of abutments, 26'-3" out to out deck, and is not skewed. Str. No. 050-3208

Salvage: None
 Road to be closed to traffic during construction.

GENERAL NOTES

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of the piles.
 For Soil Boring Logs, See Sheets 8 thru 10 of 10.
 A Corrosion Inhibitor shall be used in the concrete for Precast Prestressed Concrete Deck Beams according to Article 1020.05(b)(10) of the Standard Specifications.
 Reinforcement Bars shall conform to the requirements of ASTM A706 Grade 60. Reinforcement Bars designated (E) shall be epoxy coated.
 Layout of the slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
 Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
 The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

**COVEL CREEK TRIBUTARY
 BUILT 201_ BY
 LASALLE COUNTY
 SEC. 15-00730-00-BR
 C.H. 66 STATION 20+00.00
 F.A. PROJ. BROS-0099(052)
 STR. NO. 050-3612 LOADING HL-93**

NAME PLATE

Locate Name Plate at S.W. Wingwall
 Corner of Bridge (See Std. 515001)

TOTAL BILL OF MATERIAL

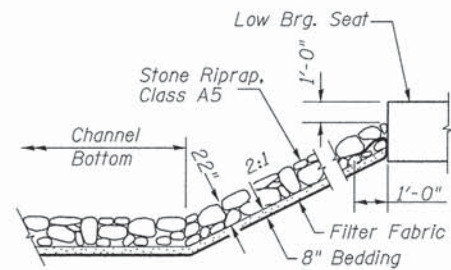
ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	CU YD	—	230	230
Stone Riprap, Class A5	SQ YD	—	530	530
Filter Fabric	SQ YD	—	530	530
① Removal of Existing Structures	EACH	—	—	1
Structure Excavation	CU YD	—	70	70
Concrete Structures	CU YD	—	24.0	24.0
① Precast Prestressed Concrete Deck Beams (21" Depth)	SQ FT	1,655	—	1,655
① Reinforcement Bars	POUND	—	2,760	2,760
Steel Railing, Type S1	FOOT	114	—	114
Furnishing Metal Shell Piles 12"x0.250"	FOOT	—	200	200
Driving Piles	FOOT	—	200	200
Test Pile Metal Shells	EACH	—	2	2
Pile Shoes	EACH	—	10	10
Concrete Encasement	CU YD	—	2.6	2.6
Name Plates	EACH	—	1	1
① Controlled Low-Strength Material	CU YD	—	15.2	15.2

① See Special Provisions

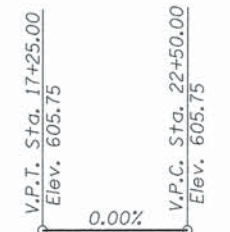
I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specification for Highway Bridges. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

[Signature] 3/19/2014
 Illinois Structural No. 6440
 Expires 11/30/2014
 L. E. P. 11/30/2014

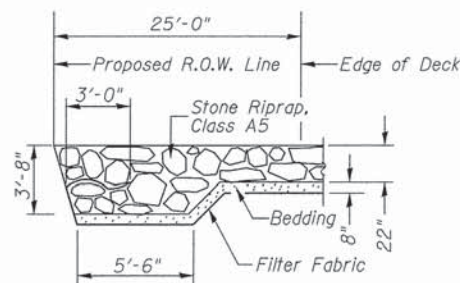
GENERAL PLAN & ELEVATION



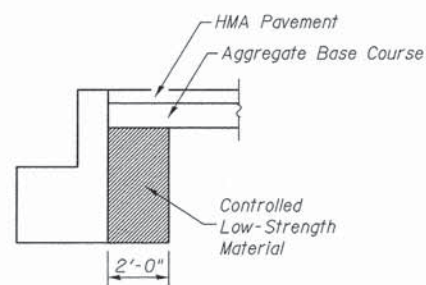
STONE RIPRAP DETAIL



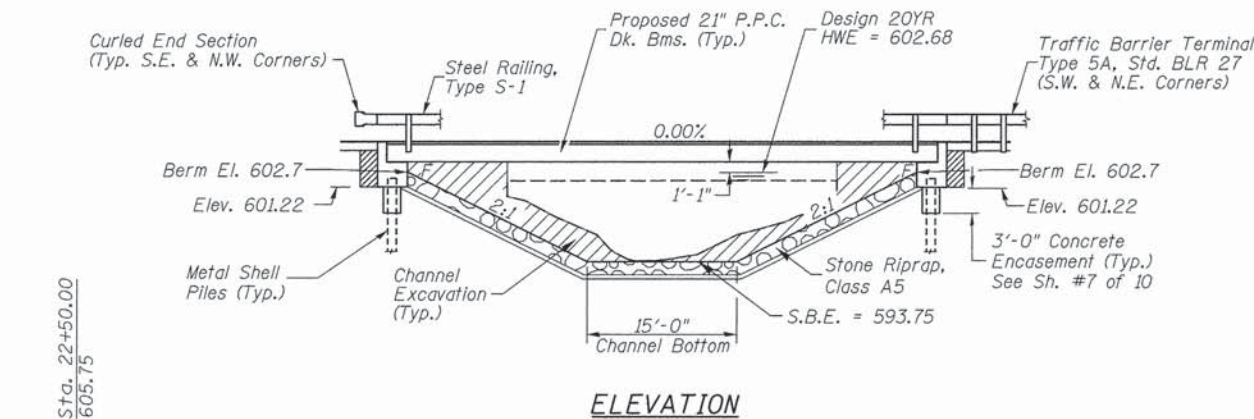
PROFILE GRADE



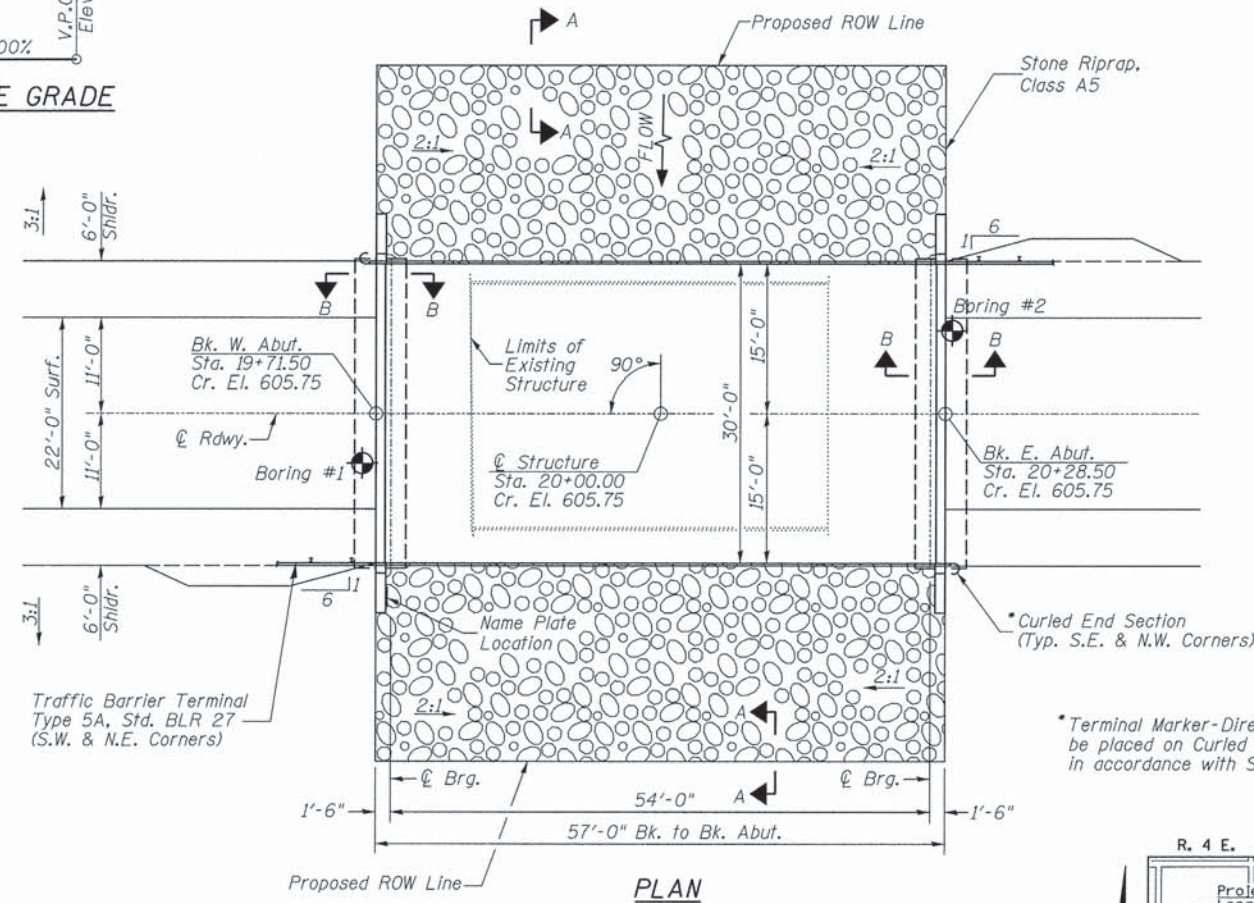
SECTION A-A



SECTION B-B



ELEVATION



PLAN

DESIGN SCOUR TABLE

Location	W. Abut.	E. Abut.
Design Scour Elevation	601.22	601.22

WATERWAY INFORMATION

Drainage Area = 3.95 Sq. Mi.		Low Grade Elev. = 605.75 @ Sta. 20+00.00							
Flood	Freq. Yr.	Q C.F.S.	Opening Exist.	Prop.	Nat. H.W.E. Exist.	Prop.	Head - Ft. Exist.	Prop.	Headwater El.
Design	20	1,159	171	294	602.68	0.83	0.28	603.51	602.96
Base	100	1,730	171	316	603.11	1.54	0.74	604.65	603.85

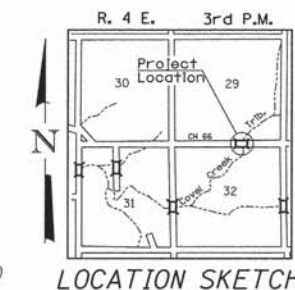
DESIGN SPECIFICATIONS
 2012 AASHTO LRFD Bridge Design Specifications
 6th Edition with 2013 Interims

DESIGN STRESSES

(FIELD UNITS) $f'_c = 3,500$ p.s.i., $f_y = 60,000$ p.s.i. (Rein.)
 (PRECAST PRESTRESSED UNITS) $f'_c = 6,000$ p.s.i., $f'_{ci} = 5,000$ p.s.i., $f'_s = 270,000$ p.s.i. ($\frac{1}{2}$ " Strands), $f'_{si} = 201,960$ p.s.i. ($\frac{1}{2}$ " Strands)

LOADING HL-93

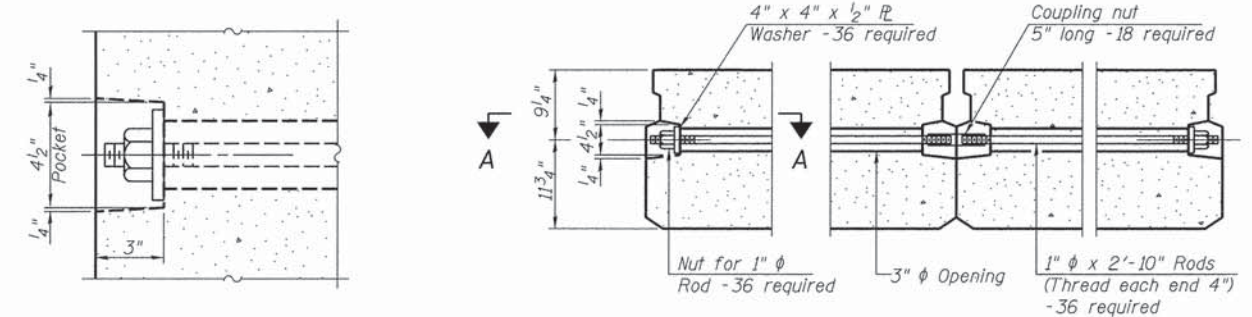
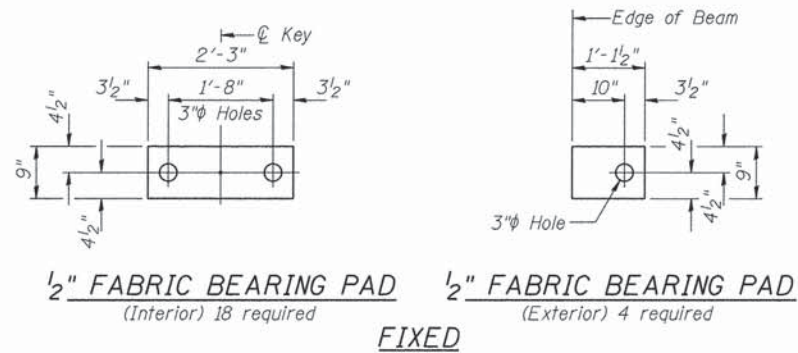
Allow 50#/sq. ft. for future wearing surface.



LOCATION SKETCH

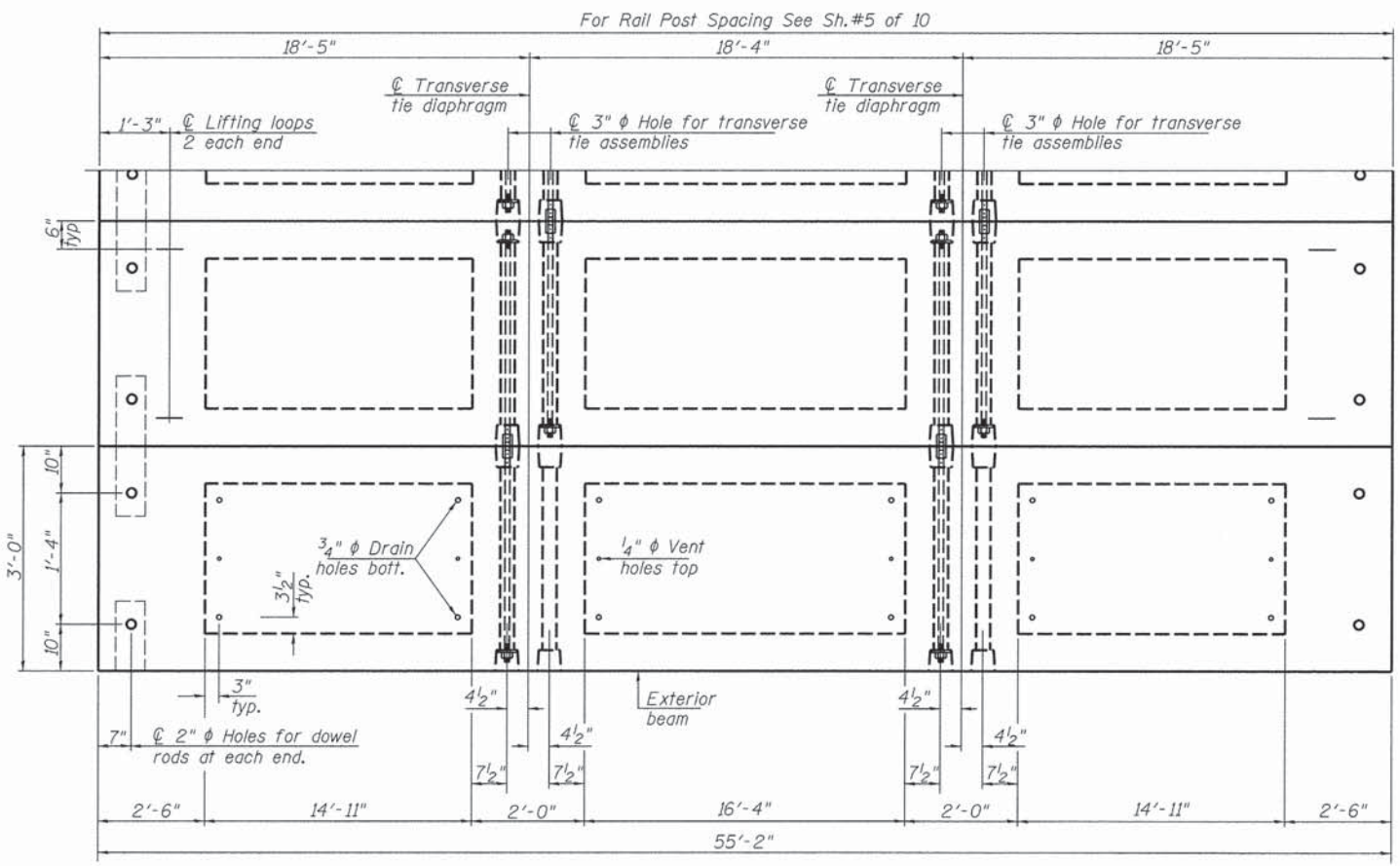
DESIGNED	S.T.M.
CHECKED	C.T.M./J.E.H.
DRAWN	S.T.M.
CHECKED	C.T.M./J.E.H.

SHEET NO. 1	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10 SHEETS	CH 66	15-00730-00-BR	LASALLE	30	7
S.N. 050-3612			CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0099(052)		

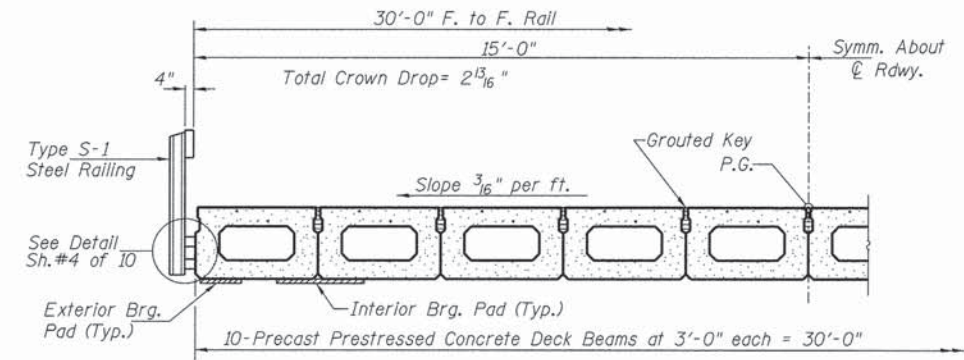


SECTION A-A

TYPICAL TRANSVERSE TIE ASSEMBLY



PLAN VIEW



HALF CROSS SECTION

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
① Precast Prestressed Concrete Deck Beams (21\"/>	SQ FT	1,655
① See Special Provisions		

Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2\"/>

Reinforcement bars shall conform to ASTM A 706, Grade 60.

Two 1/8\"/>

A minimum 2 1/2\"/>

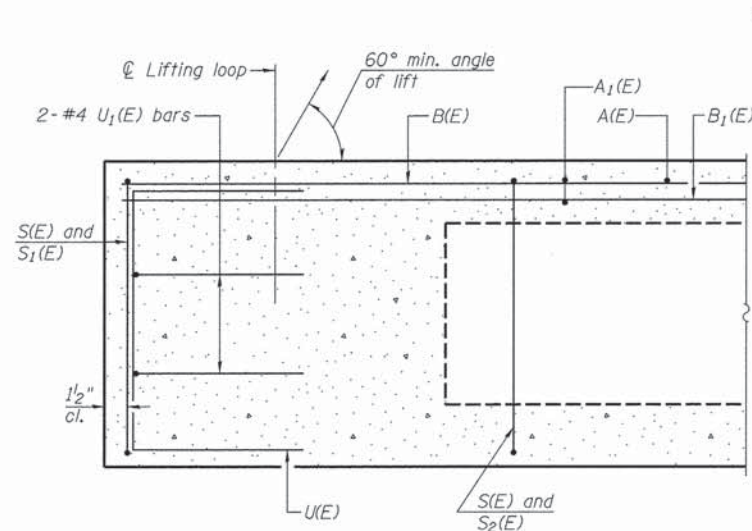
Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

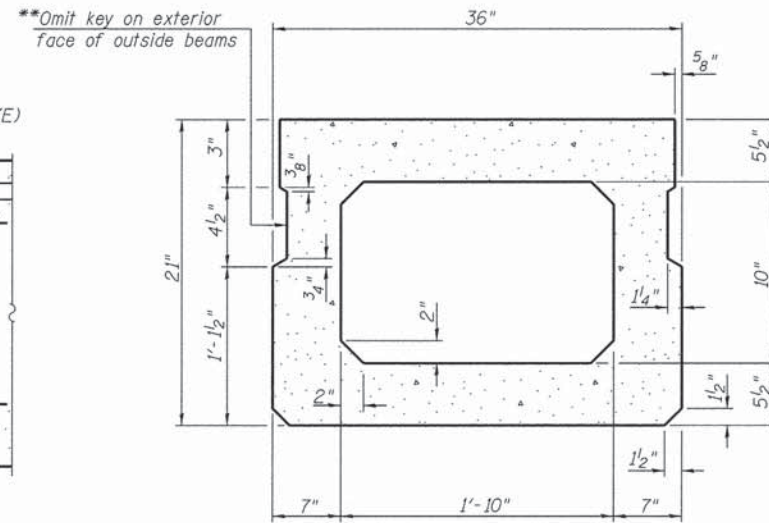
Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

SUPERSTRUCTURE

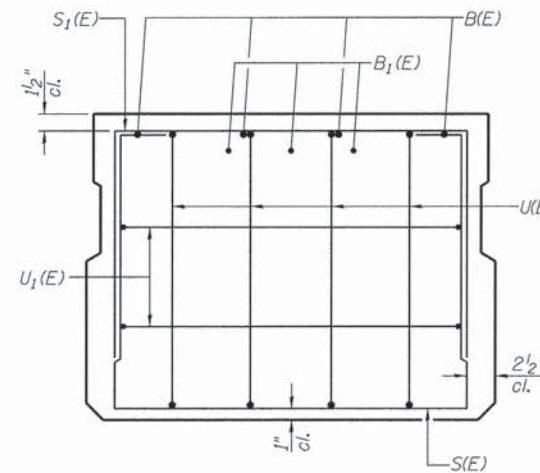
SHEET NO. 2	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	8
10 SHEETS	S.N. 050-3612		CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BR05-0099(052)		



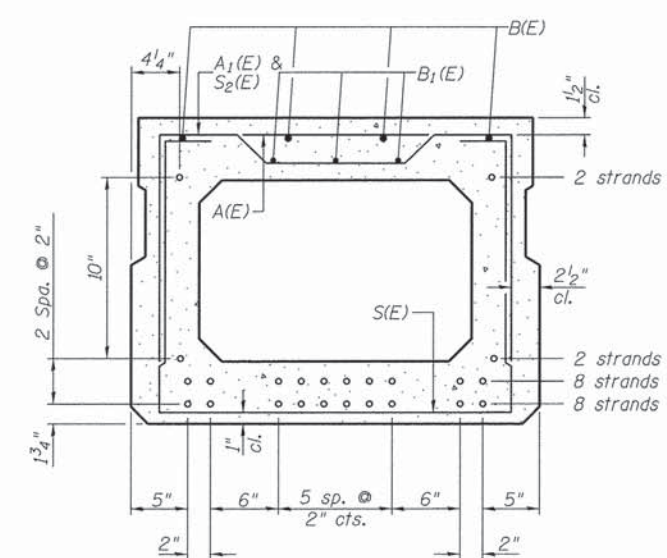
SECTION C-C



SECTION A-A
(Showing Dimensions)



VIEW B-B



SECTION A-A

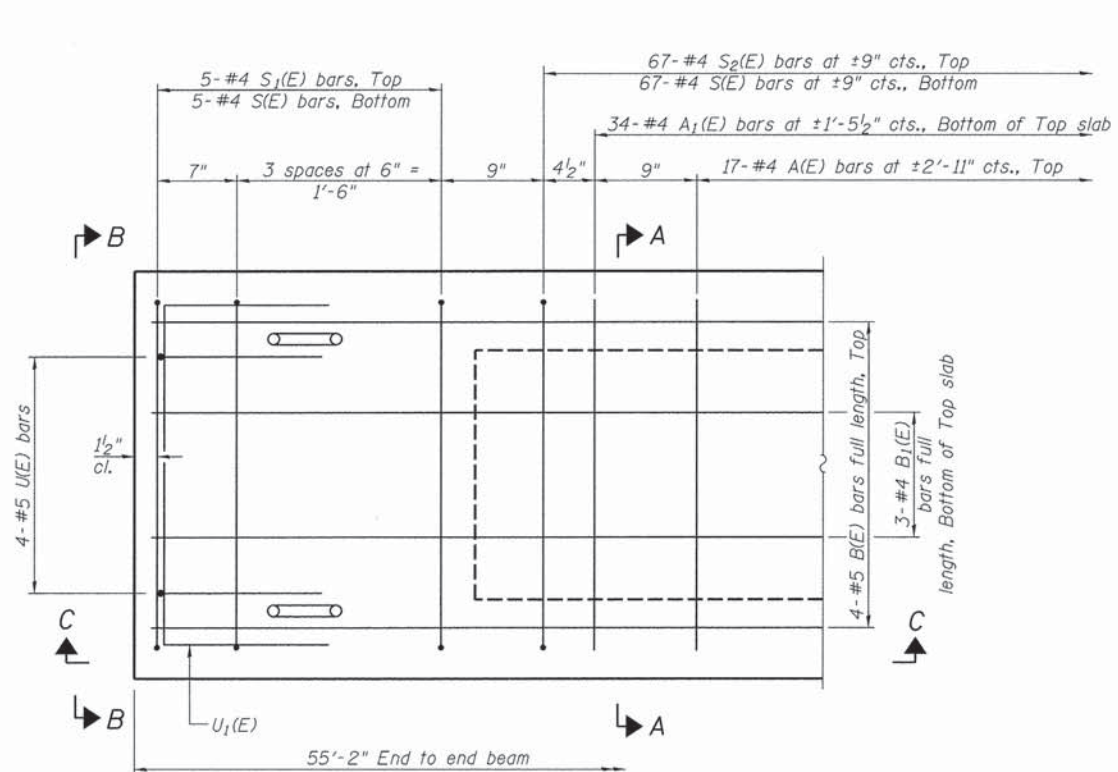
20-1/2" Strands Each Strand Stressed to 30,900 Lbs.

8-Strands 1 3/4" up, 8-Strands 3 3/4" up,

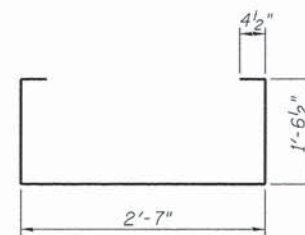
2-Strands 5 3/4" up, 2-Strands 1'-3 3/4" up

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

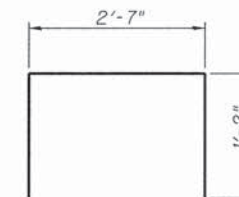
**Rail post anchor devices (Sheet 4 of 10) to be cast into exterior face of outside beams.



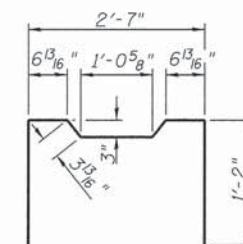
PLAN VIEW



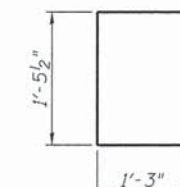
BAR S(E)



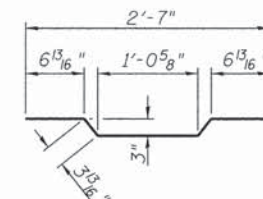
BAR S1(E)



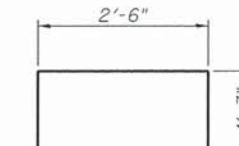
BAR S2(E)



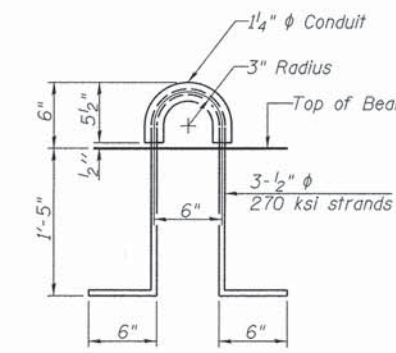
BAR U(E)



BAR A1(E)



BAR U1(E)



LIFTING LOOP DETAIL

BAR LIST-ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	17	#4	2'-7"	—
A1(E)	34	#4	2'-10"	—
B(E)	4	#5	*54'-11"	—
B1(E)	3	#4	*54'-11"	—
S(E)	77	#4	6'-5"	U
S1(E)	10	#4	4'-11"	U
S2(E)	67	#4	5'-2"	U
U(E)	8	#5	4'-0"	U
U1(E)	4	#4	5'-0"	U

* Total Length. Lap as necessary

Note: See sheet 2 of 10 for additional details and Bill of Material.

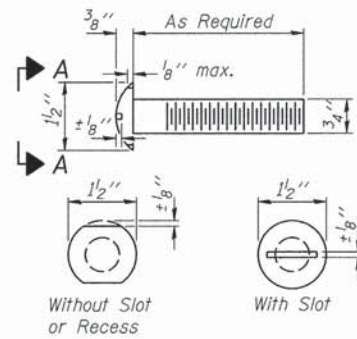
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP
#4 bar = 2'-0"
#5 bar = 2'-6"

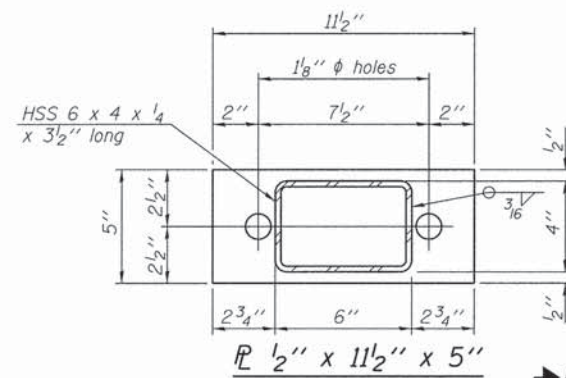
SUPERSTRUCTURE DETAILS

SHEET NO. 3 10 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	9
S.N. 050-3612			CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0099(052)		

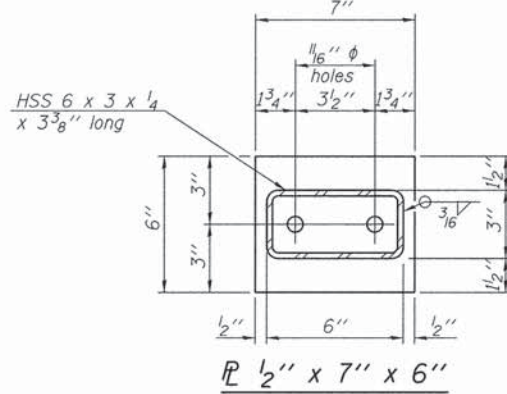
FOR RAIL POST SPACING SEE SH.#5 OF 10



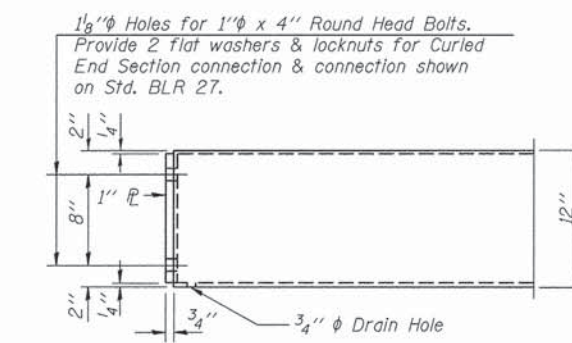
VIEW A-A
ROUND HEAD BOLT



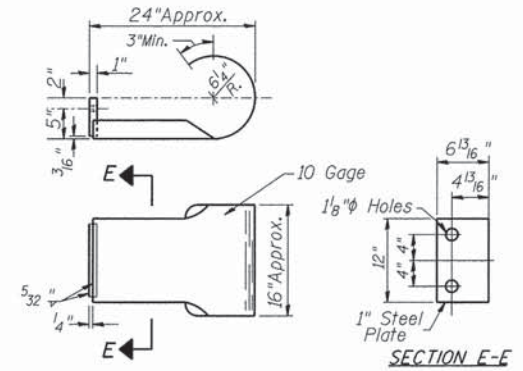
PL 1/2" x 11 1/2" x 5"



PL 1/2" x 7" x 6"

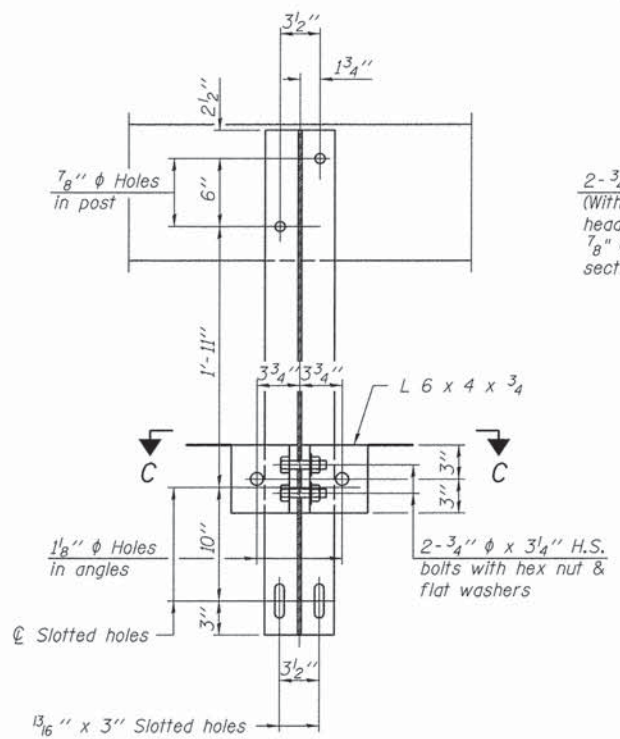


END OF RAIL DETAILS

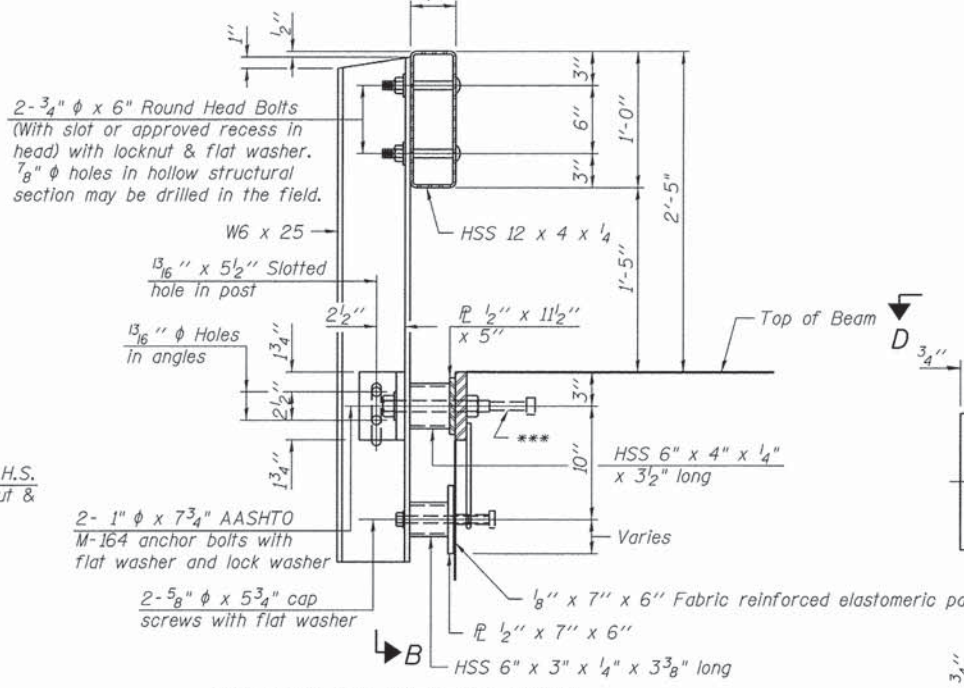


CURLED END SECTION

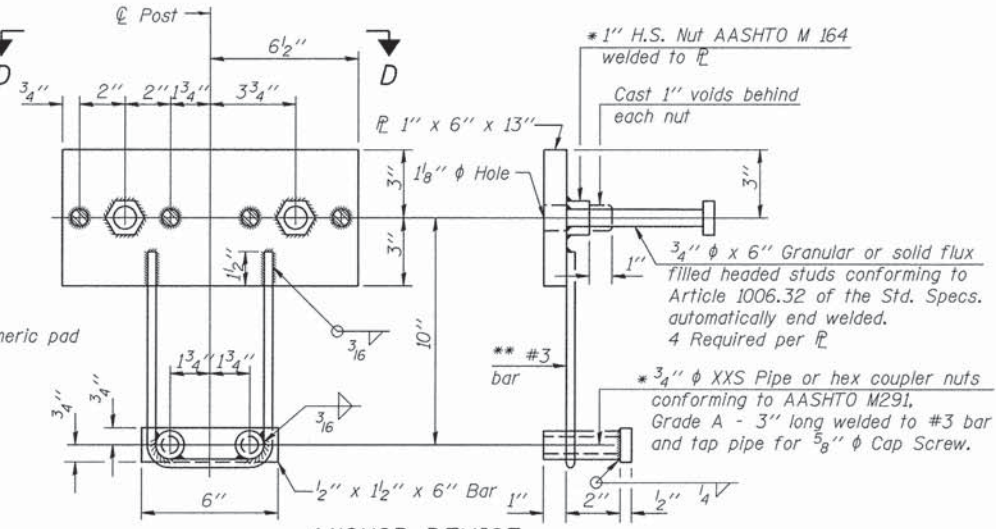
(2 Req'd) Cost Included with Steel Railing, Type S-1. Terminal Markers - Direct Applied shall be placed on end of each Curled End Section (S.E. & N.W. Corners)



SECTION B-B

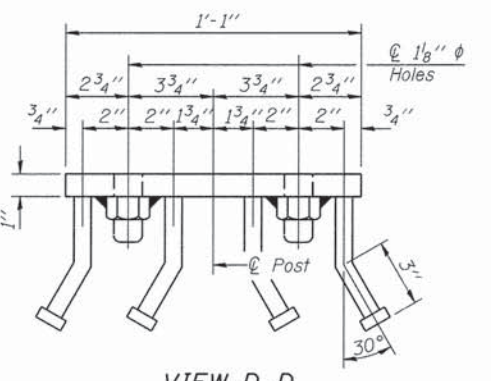


SECTION AT RAILING POST

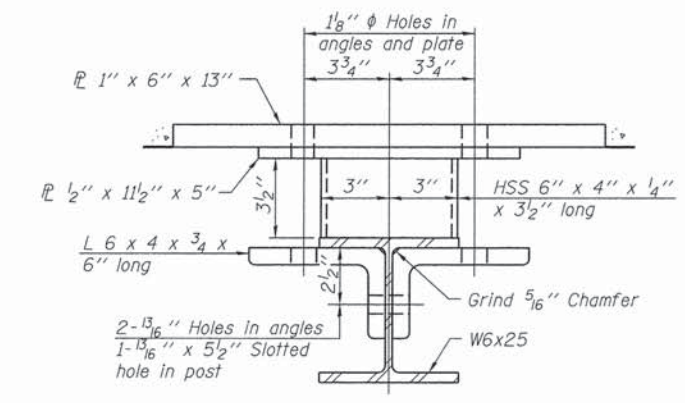


ANCHOR DEVICE

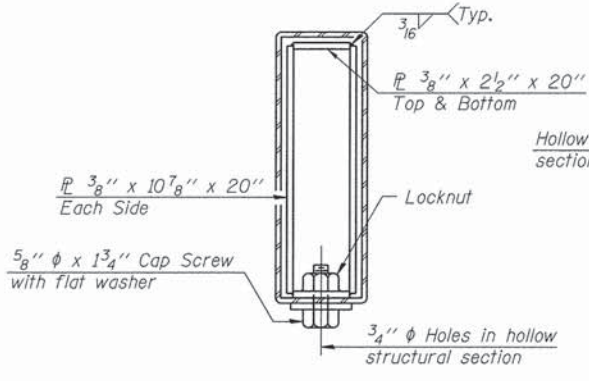
* Threaded areas shall be plugged or blocked off during casting of beam.



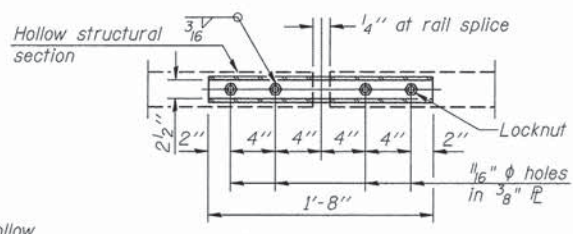
VIEW D-D



SECTION C-C



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE PL
TYPICAL

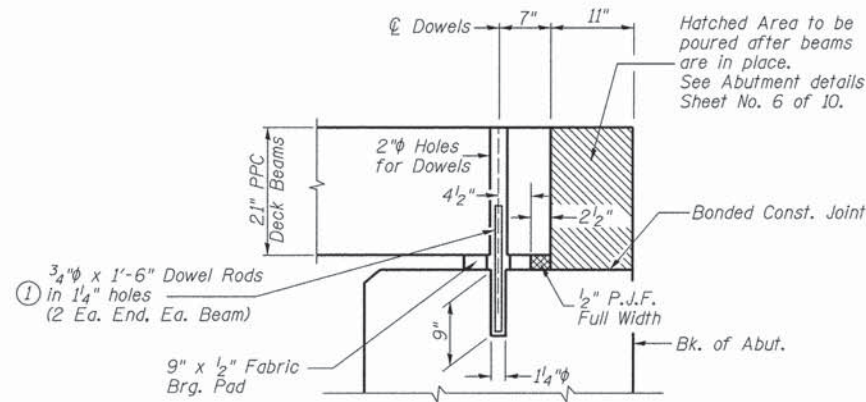
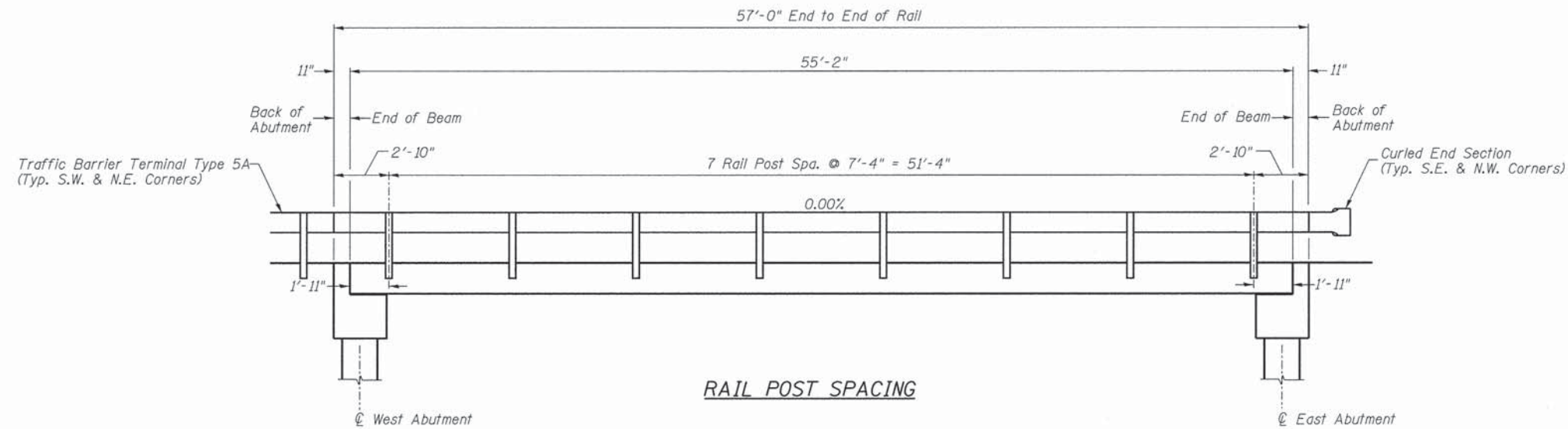
** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2 inch.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Steel Railing, Type S-1	FOOT	114

STEEL RAILING TYPE S-1

SHEET NO.	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4	CH 66	15-00730-00-BR	LASALLE	30	10
10 SHEETS	S.N. 050-3612		CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0099(052)		

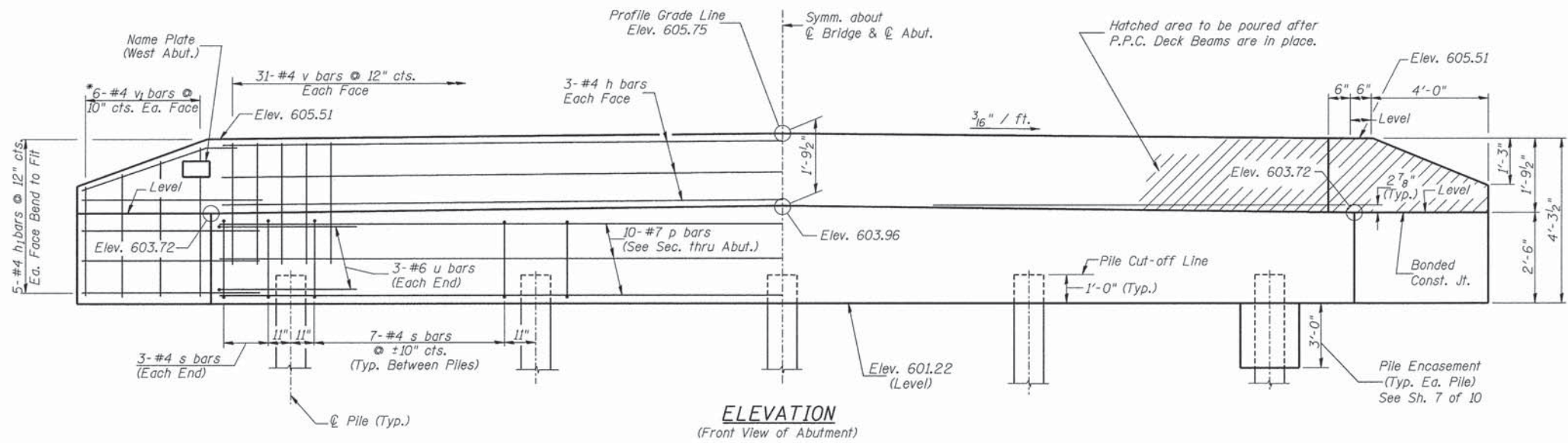
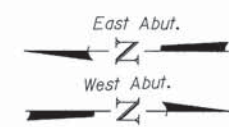
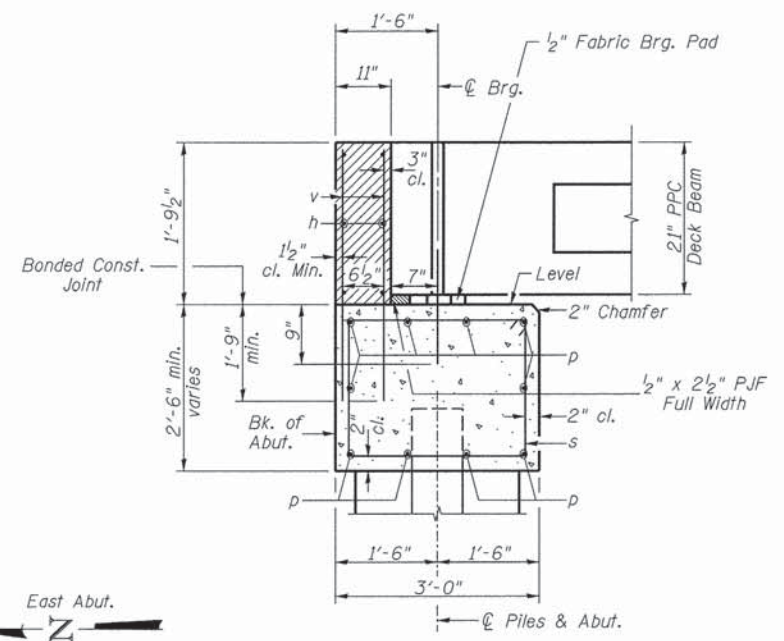
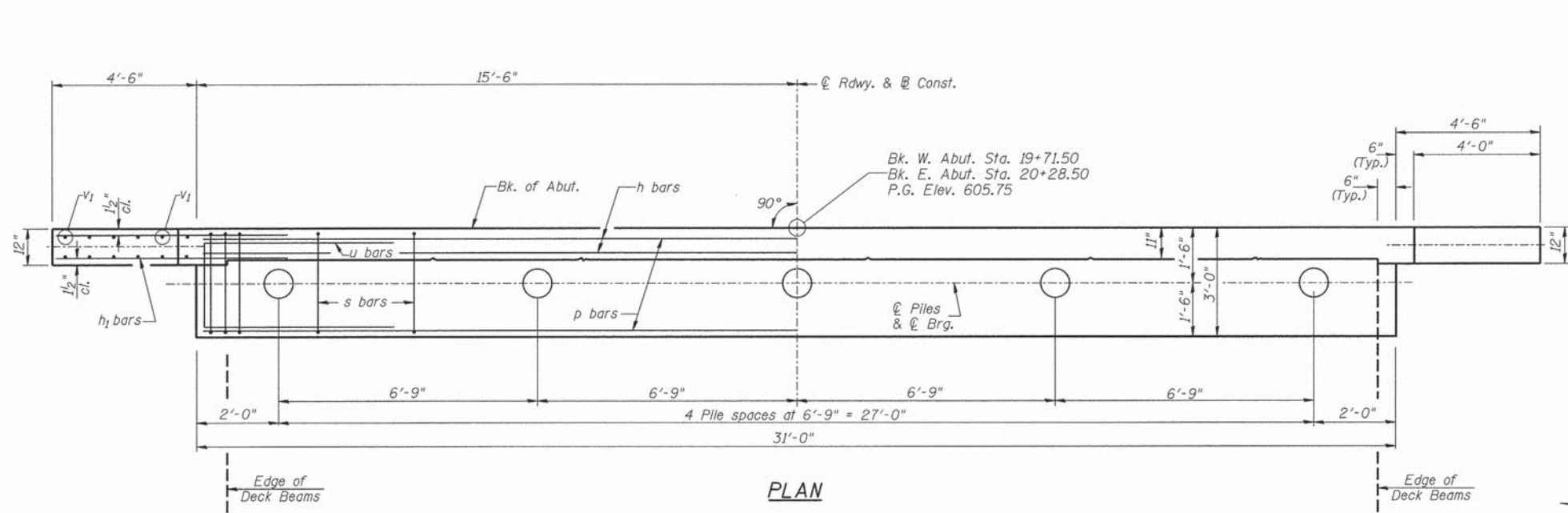


① Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hr.) prior to grouting the shear keys.

SECTION THRU ABUTMENTS

RAIL POST SPACING AND SUPERSTRUCTURE DETAILS

SHEET NO. 5	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	11
10 SHEETS	S.N. 050-3612		CONTRACT NO. 87581		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BR05-0099(052)		



**TWO ABUTMENTS
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	#4	30'-9"	—
h1	40	#4	6'-6"	—
p	20	#7	30'-9"	—
s	68	#4	10'-5"	□
u	12	#6	11'-7"	□
v	124	#4	3'-6"	—
v1	24	#4	6'-9"	—
Concrete Structures		CU YD	24.0	
Reinforcement Bars		POUND	2,760	
Structure Excavation		CU YD	70	
Name Plates		EACH	1	
Furnishing Metal Shell Piles 12"x0.250"		FOOT	200	
Driving Piles		FOOT	200	
Test Pile Metal Shells		EACH	2	
Pile Shoes		EACH	10	
Concrete Encasement		CU YD	2.6	

① See Special Provisions

DESIGN STRESSES

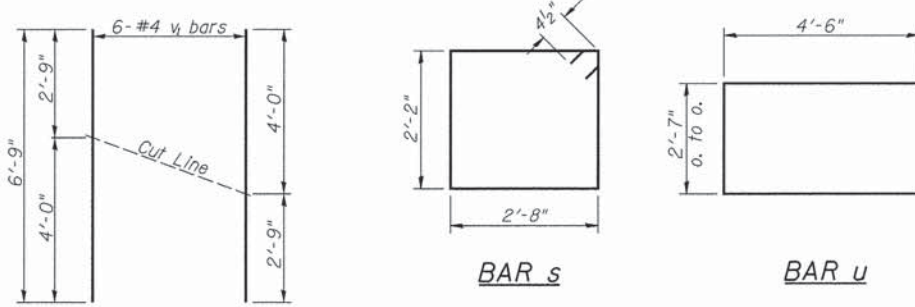
$f'_c = 3,500$ p.s.i.
 $f_y = 60,000$ p.s.i.

PILE DATA

Type & Size: Metal Shell 12"x0.250" walls w/ Pile Shoes
Nominal Required Bearing: 230 kips
Factored Resistance Available: 125 kips
Est. Length: 28' West Abutment
22' East Abutment
No. Req'd.: 10 (Includes 1 Test Pile at Each Abut.)

NOTES

- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to ASTM A706 Grade 60.

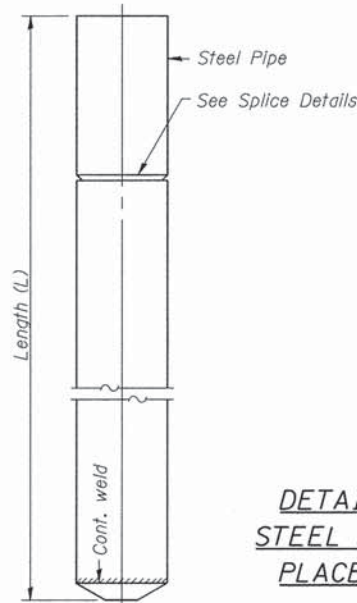


BAR CUTTING DIAGRAM
*Order v1 bars full length. Cut as shown and use remainder of bars in opposite face.

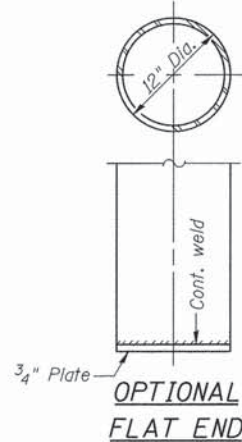
ABUTMENTS

SHEET NO. 6	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10 SHEETS	CH 66	15-00730-00-BR	LASALLE	30	12
		S.N. 050-3612		CONTRACT NO. 87581	
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	BR05-0099(052)	

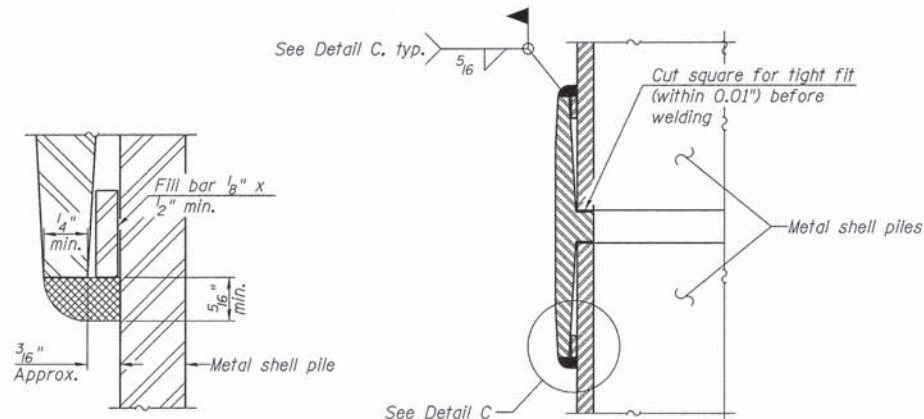
Notes: Driving and bearing ends of pipe shall be cut square. The thickness of the shell shall be 0.25 inches with a tolerance of 5%. The shell shall be according to Article 1006.05(a) of the Standard Specifications, and shall be ASTM A252 Grade 3.



DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



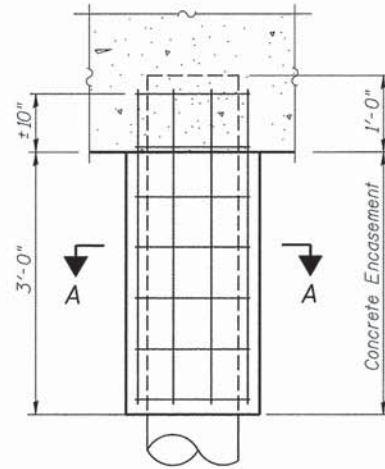
OPTIONAL FLAT END



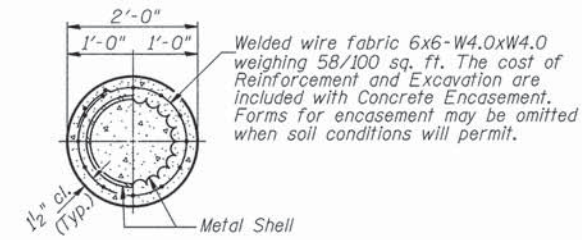
DETAIL C

WELDED COMMERCIAL SPLICE

Notes:
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

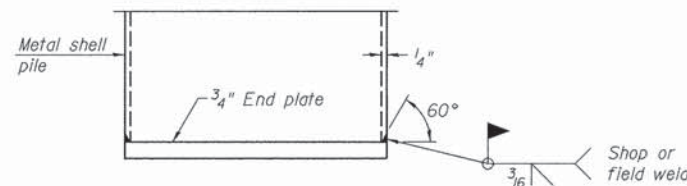


ELEVATION

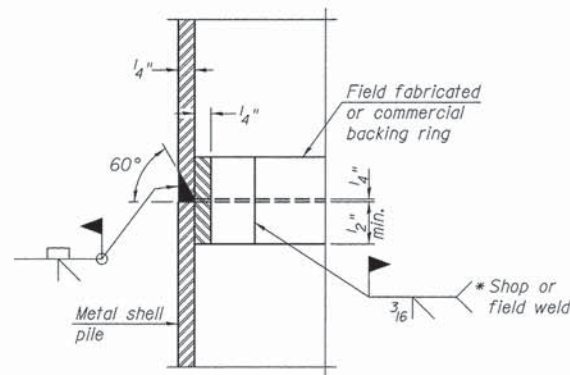


SECTION A-A

DETAIL OF METAL SHELL PILE ENCASEMENT AT ABUTMENTS

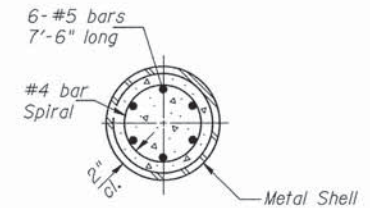
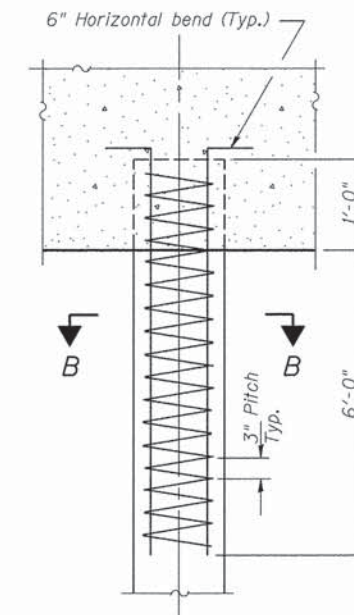


END PLATE ATTACHMENT



COMPLETE PENETRATION WELD SPLICE

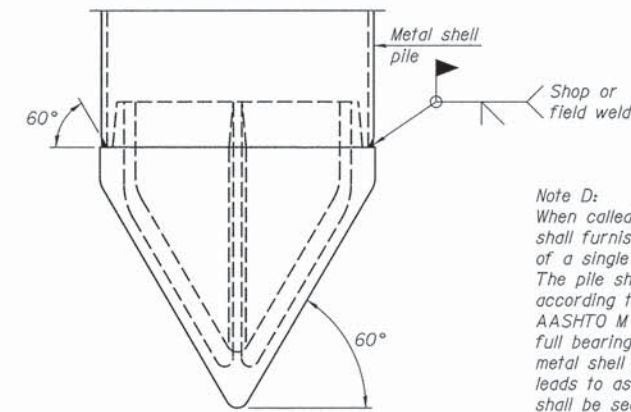
* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



SECTION B-B

The cost of Reinforcement is included with Furnishing Metal Shell Piles 12"x0.250"

DETAIL OF REINFORCEMENT FOR METAL SHELLS AT ABUTMENTS



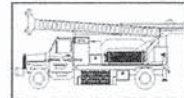
METAL SHELL PILE SHOE ATTACHMENT

(See Note D)

Note D:
When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.

METAL SHELL PILE DETAILS

SHEET NO. 7 10 SHEETS	ROUTE NO. CH 66	SECTION 15-00730-00-BR	COUNTY LASALLE	TOTAL SHEETS 30	SHEET NO. 13
	S.N. 050-3612		CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BR05-0099(052)		



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG

Sheet 1 of 3

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

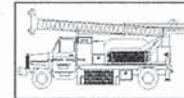
Client: Hutchison Engineering, Inc.
Project Name: Section 15-00730-00-BR
Project Site: CH-66 Over Covell Creek Tributary
LaSalle County, IL.

Boring No. B-1
Surface Elev. 99.80
Auger Depth 61' Rotary Depth NA
Start Date 12/07/13 Finish Date 12/07/13

Location: 29' West of center of existing bridge
and 6' south of centerline of roadway

(DEPTH) *ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
99.80										Randy Safranski Diedrich D-50 Turbo	
98.80	Stiff Black And Brown Clay (Fill)		1								
97.80			2								
96.80			3	1	SS	1.5	8	B	21		
95.80	Stiff Black Clay		4								
94.80			5								
93.80			6	2	SS	1.3	7	B	23		
92.80	Stiff Brown Clay		7								
91.80			8								
90.80			9	3	SS	1.3	7	B	22		
89.80	Very Stiff Gray Silty Loam Till		10								
88.80			11								
87.80			12	4	SS	1.0	5	B	26		
86.80	Hard Stiff Gray Silty Loam Till		13								
85.80			14								
84.80			15	5	SS	1.8	9	B	22		
83.80	Hard Stiff Gray Silty Loam Till		16								
82.80			17								
81.80			18	6	SS	3.4	20	S	14		
80.80	Hard Stiff Gray Silty Loam Till		19								
79.80			20	7	SS	3.9	31	S	12		
				8	SS	4.4	36	S	8		

Groundwater Data: Static water level after auger removal - Elevation 88.5.
Comments: * Assumed existing bridge deck as elevation 100.0.



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG

Sheet 2 of 3

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc.
Project Name: Section 15-00730-00-BR
Project Site: CH-66 Over Covell Creek Tributary
LaSalle County, IL.

Boring No. B-1
Surface Elev. 99.80
Auger Depth 61' Rotary Depth NA
Start Date 12/07/13 Finish Date 12/07/13

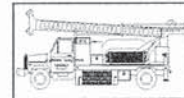
Location: 29' West of center of existing bridge
and 6' south of centerline of roadway

(DEPTH) *ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)			Dry Density (PCF)
78.80											Randy Safranski Diedrich D-50 Turbo	
77.80	Hard Gray Silty Loam Till		22									
76.80			23	9	SS	4.2	31	S	9			
75.80			24									
74.80	Medium Gray Fine Sand		25									
73.80			26	10	SS	4.7	38	S	8			
72.80			27									
71.80	Dense Gray Fine Sand And Gravel		28									
70.80			29	11	SS	4.5	32	S	8			
69.80			30									
68.80	Dense Gray Fine Sand And Gravel		31									
67.80			32	12	SS	---	22	---	---			
66.80			33									
65.80	Dense Gray Fine Sand And Gravel		34									
64.80			35									
63.80			36	13	SS	---	27	---	---			
62.80	Dense Gray Fine Sand And Gravel		37									
61.80			38									
60.80			39									
59.80	Dense Gray Fine Sand And Gravel		40									
58.80			41	14	SS	---	35	---	---			

Groundwater Data: Static water level after auger removal - Elevation 88.5.
Comments: * Assumed existing bridge deck as elevation 100.0.

SOIL BORING LOGS

SHEET NO. 8 10 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	14
	S.N. 050-3612			CONTRACT NO. 87581	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT BROS-0099(052)		



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG

Sheet 3 of 3

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

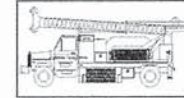
Client: Hutchison Engineering, Inc.
Project Name: Section 15-00730-00-BR
Project Site: CH-66 Over Covell Creek Tributary
LaSalle County, IL.

Boring No. B-1
Surface Elev. 99.80
Auger Depth 61' Rotary Depth NA
Start Date 12/07/13 Finish Date 12/07/13

Location: 29' West of center of existing bridge
and 6' south of centerline of roadway

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	
57.80										Randy Safranski Diedrich D-50 Turbo	
56.80	Dense Gray Fine Sand And Gravel		43								
55.80			44								
54.80			45	15	SS	3.7	33	S	10		
53.80			46								
52.80			47								
51.80	Very Stiff To Hard Brownish Gray Clay Till		48								
50.80			49								
49.80			50								
48.80			51	16	SS	3.8	37	S	10		
47.80			52								
46.80			53								
45.80			54								
44.80			55								
43.80	Medium To Dense Gray Silt		56	17	SS	---	29	---	14		
42.80			57								
41.80			58								
40.80			59								
39.80			60								
38.80			61	18	SS	---	35	---	12		
37.80			62								

Groundwater Data: Static water level after auger removal - Elevation 88.5.
Comments: * Assumed existing bridge deck as elevation 100.0.



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG

Sheet 1 of 3

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc.
Project Name: Section 15-00730-00-BR
Project Site: CH-66 Over Covell Creek Tributary
LaSalle County, IL.

Boring No. B-2
Surface Elev. 99.80
Auger Depth 61' Rotary Depth NA
Start Date 12/07/13 Finish Date 12/07/13

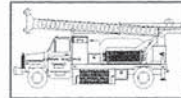
Location: 29' East of center of existing bridge
and 10' north of centerline of roadway

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	
99.80										Randy Safranski Diedrich D-50 Turbo	
98.80			1								
97.80			2								
96.80	Stiff Black And Brown Clay (Fill)		3	1	SS	1.3	6	B	22		
95.80			4								
94.80			5	2	SS	1.6	8	B	25		
93.80			6								
92.80	Stiff Black Clay		7								
91.80			8	3	SS	1.4	7	B	26		
90.80			9								
89.80			10	4	SS	3.0	18	B	18		
88.80			11								
87.80			12								
86.80			13	5	SS	3.2	19	B	19		
85.80	Very Stiff Gray Silty Loam Till		14								
84.80			15								
83.80			16	6	SS	3.1	18	B	14		
82.80			17								
81.80			18	7	SS	3.3	21	S	14		
80.80			19								
79.80			20	8	SS	3.8	30	S	13		

Groundwater Data: Static water level after auger removal - Elevation 88.5.
Comments: * Assumed existing bridge deck as elevation 100.0.

SOIL BORING LOGS

SHEET NO. 9	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	15
10 SHEETS	S.N. 050-3612		CONTRACT NO. 87581		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BR05-0099(052)		



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG

Sheet 2 of 3

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

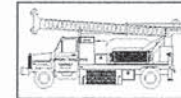
Client: Hutchison Engineering, Inc.
Project Name: Section 15-00730-00-BR
Project Site: CH-66 Over Covell Creek Tributary
LaSalle County, IL.

Boring No. B-2
Surface Elev. 99.80
Auger Depth 61' Rotary Depth NA
Start Date 12/07/13 Finish Date 12/07/13

Location: 29' East of center of existing bridge
and 10' north of centerline of roadway

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)			Dry Density (PCF)
78.80												
77.80			22									
76.80	Very Stiff To Hard Gray Silty Loam		23	9	SS	3.5	28	S	10			
75.80			24									
74.80			25	10	SS	4.1	33	S	9			
73.80			26									
72.80			27									
71.80			28	11	SS	4.4	36	S	8			
70.80			29									
69.80	Medium To Dense Gray Fine Sand		30									
68.80			31	12	SS	---	26	---	---			
67.80			32									
66.80			33									
65.80			34									
64.80			35									
63.80			36	13	SS	---	33	---	---			
62.80			37									
61.80	Very Stiff Brownish Gray Clay Till		38									
60.80			39									
59.80			40									
58.80			41	14	SS	3.7	34	S	---			

Groundwater Data: Static water level after auger removal - Elevation 88.5.
Comments: * Assumed existing bridge deck as elevation 100.0.



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG

Sheet 3 of 3

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Hutchison Engineering, Inc.
Project Name: Section 15-00730-00-BR
Project Site: CH-66 Over Covell Creek Tributary
LaSalle County, IL.

Boring No. B-2
Surface Elev. 99.80
Auger Depth 61' Rotary Depth NA
Start Date 12/07/13 Finish Date 12/07/13

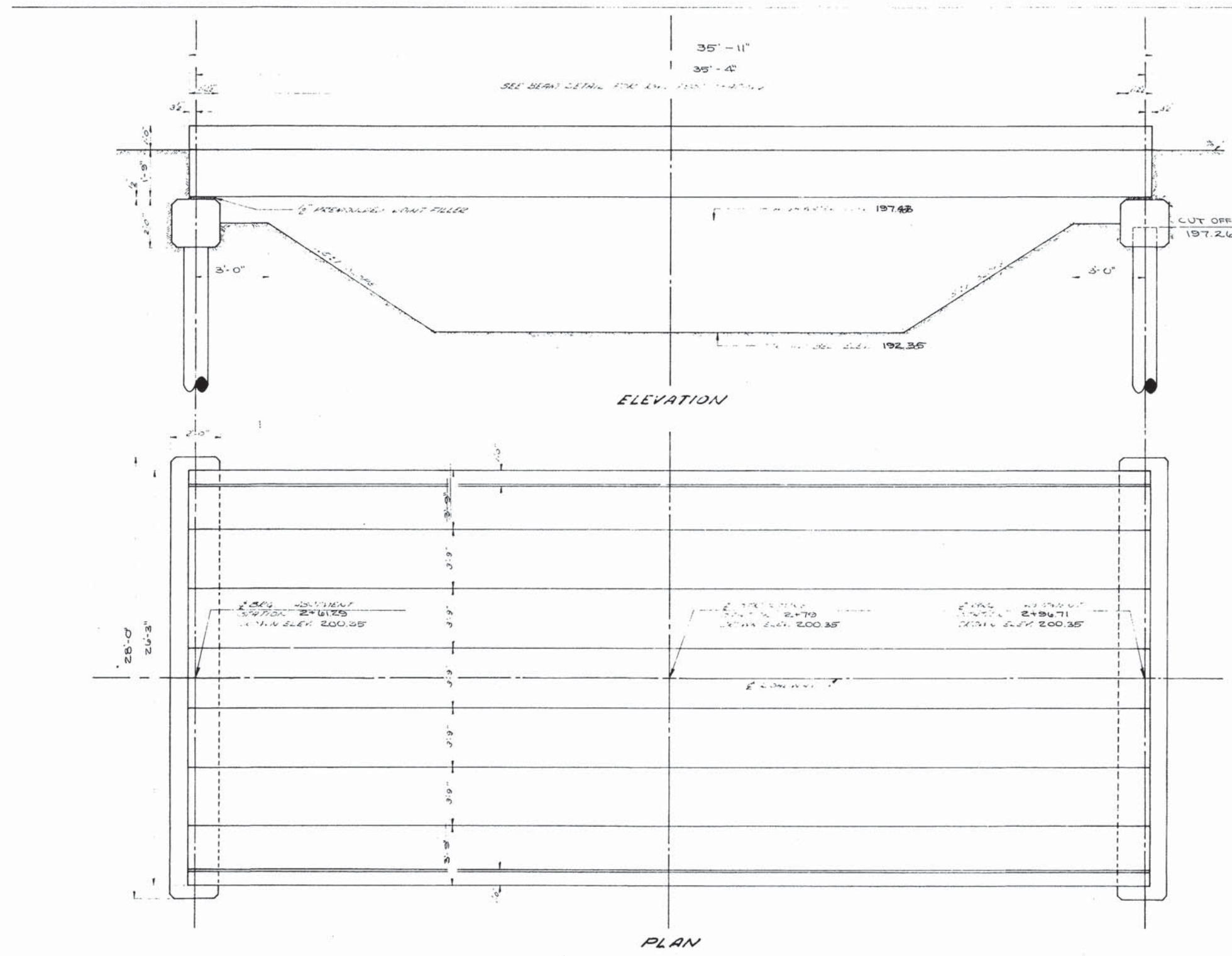
Location: 29' East of center of existing bridge
and 10' north of centerline of roadway

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)			Dry Density (PCF)
57.80												
56.80	Very Stiff Brownish Gray Clay Till		43									
55.80			44									
54.80			45									
53.80	Dense Gray Silt		46	15	SS	---	37	---	12			
52.80			47									
51.80			48									
50.80			49									
49.80			50									
48.80	Medium Gray Silt		51	16	SS	---	31	---	14			
47.80			52									
46.80			53									
45.80			54									
44.80			55									
43.80			56	17	SS	---	27	---	16			
42.80			57									
41.80			58									
40.80			59									
39.80			60									
38.80			61	18	SS	---	27	---	15			
37.80			62									

Groundwater Data: Static water level after auger removal - Elevation 88.5.
Comments: * Assumed existing bridge deck as elevation 100.0.

SOIL BORING LOGS

SHEET NO. 10	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	16
10 SHEETS	S.N. 050-3612		CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT BR05-0099(052)		



COUNTY HIGHWAY
SECTION 9-64 B
LA SALLE COUNTY

GENERAL NOTES

- SEE SPECIAL PROVISIONS FOR ITEMS "PRECAST CONCRETE CURBS" AND "PRECAST CONCRETE" CURBS.
- ALL PILES AND TIMBER SHALL BE DRYKIDED AND PROTECTED AGAINST DECAY BY THE USE OF PRESERVATIVE TREATMENT.
- ALL DIMENSIONS FOR ISOLTS AND BRISSES SHALL BE AS SHOWN UNLESS OTHERWISE NOTED.
- SEE SPECIAL PROVISIONS FOR ITEM "METAL ALKALINE RESISTANT CONCRETE".
- CONSTRUCTION SHALL BE AS DIRECTED BY THE ENGINEER, BEARING IN MIND THE REQUIREMENTS OF THE SPECIFICATIONS.
- FOR PILING, REFER TO THE SPECIFICATIONS.
- ALL PILES AND TIMBER SHALL BE DRYKIDED.
- ALL STEEL AND WELDS IN THE EXISTING STRUCTURE SHALL REMAIN THE PROPERTY OF THE COUNTY AND SHALL BE MAINTAINED AT THE BRIDGE AS DIRECTED BY THE ENGINEER.

WATERWAY INFORMATION

CHANNEL WIDTH	2500	AC
CHANNEL DEPTH	110	SQ. FT.
CHANNEL VELOCITY	110	SQ. FT.
CHANNEL VELOCITY	95	SQ. FT.
CHANNEL	LEVEL CULTIVATED	

PILE DATA

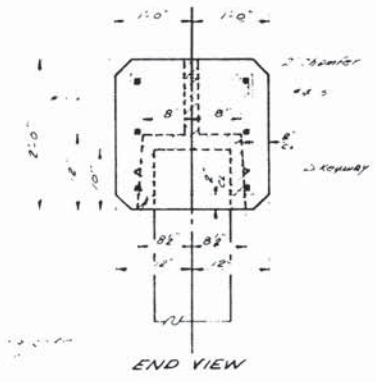
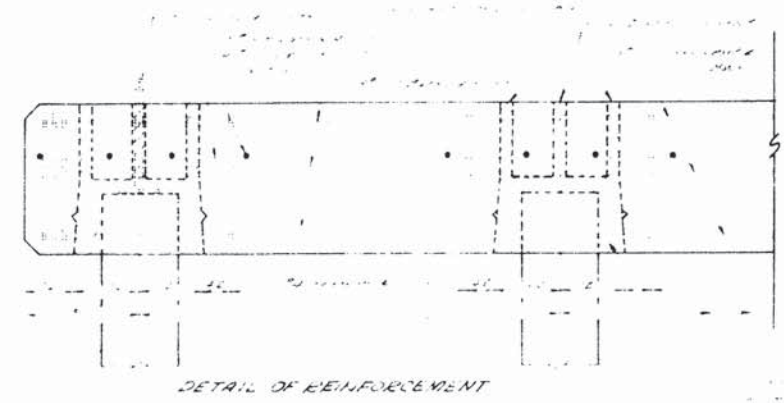
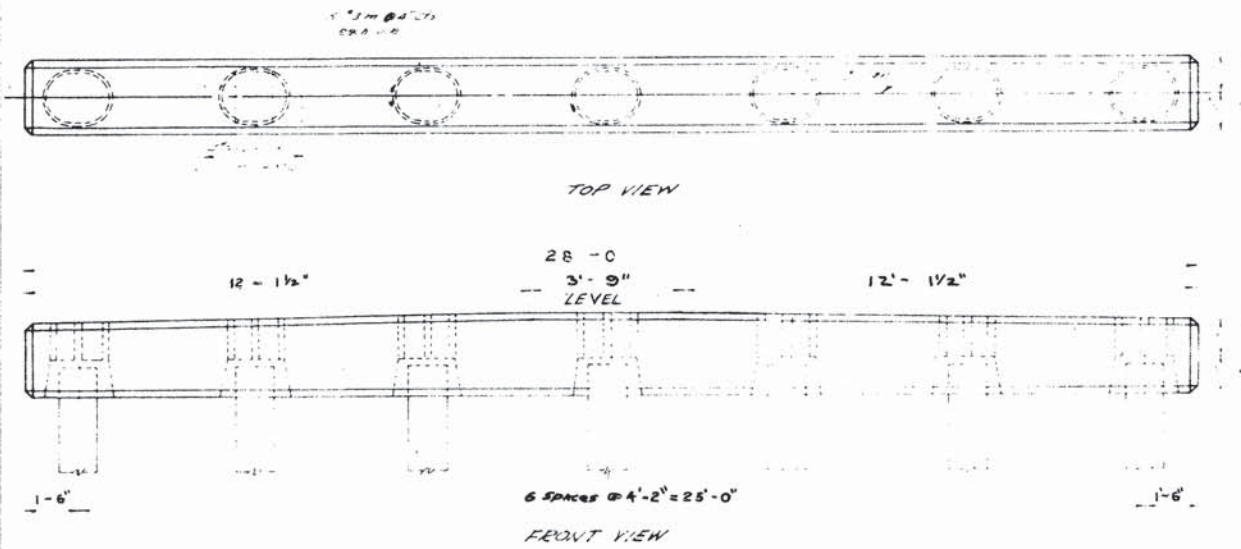
TYPE: 24" x 24" DRYKIDED TIMBER
LENGTH: 25'-0"
SPACING: 13' x 1' PILE PILES
MAX. WEIGHT: 18 TON PILE

NAME PLATE

SECTION 9-64B
BUILT 1964 BY
LA SALLE COUNTY
FALL RIVER TWP
STATION 2+79
LOADING 415-512
SEE S.D. 2113

EXISTING STRUCTURE PLANS

SHEET NO. 1 4 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	17
S.N. 050-3612			CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BR05-0099(052)		



BILL OF MATERIAL

Bar	Size	Qty	Length	Shape
1	#3	35	31'-0"	---
2	#3	28	11'-0"	---
3	#7	6	---	---
4	#4	6	7'-0"	---
5	#7	6	9'-11"	---
CLASS 1 Concrete (CUM)				---
Reinforcement Bars Lbs				---
Total Weight of Cap Lbs				---

GENERAL NOTES

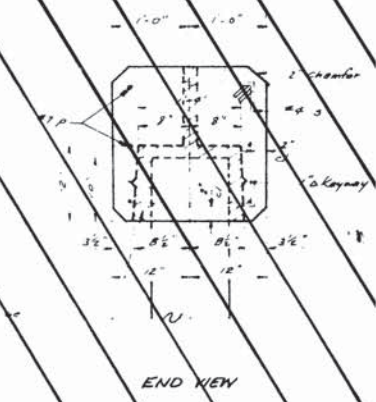
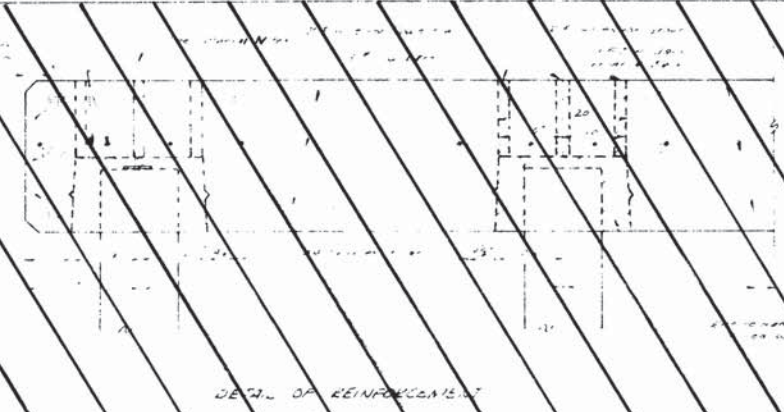
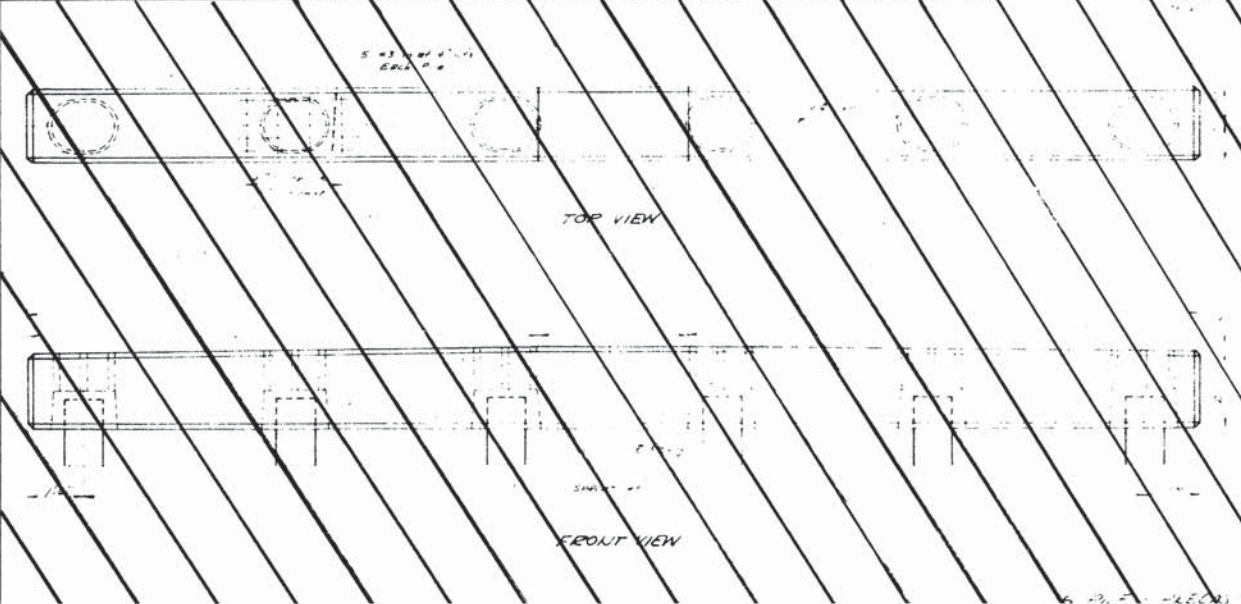
1. Precast Concrete Cap and Piles shall be 12, 18, 20, 24, 28, 30" & 40" Precast Sizes and 12" Timber or 14" Precast Concrete Piles.

2. Piles shall be bored to the design depth and shall be cast in place. Piles shall be spaced 4'-2" on center. Piles shall be cast in place and shall be cast in place.

3. Cast in place concrete shall be Class 1 Concrete. Reinforcement shall be as shown on the drawings.

4. The cap shall be cast in place and shall be cast in place.

7 PILE CAP



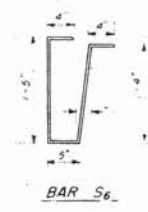
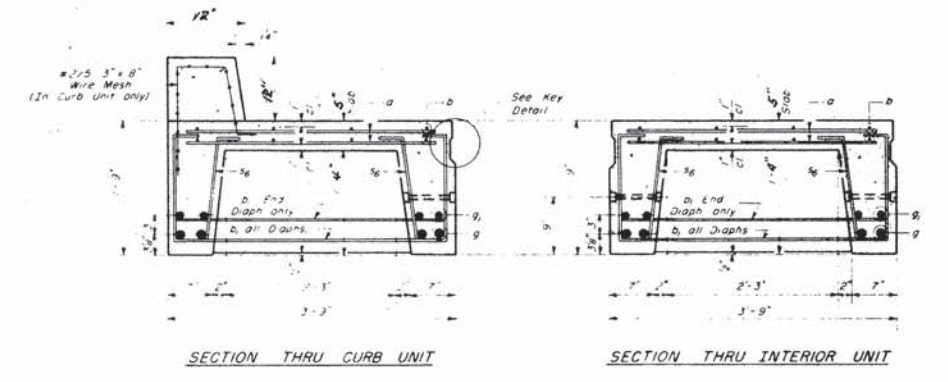
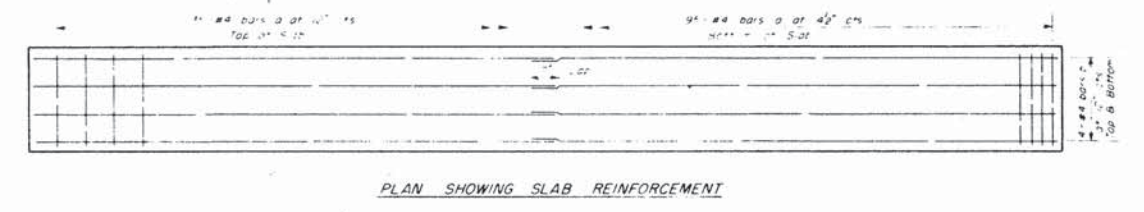
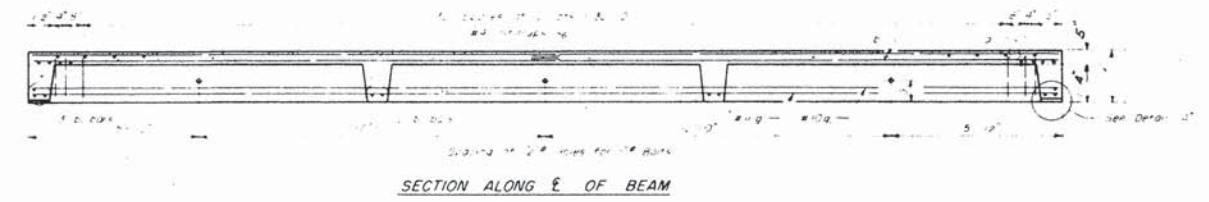
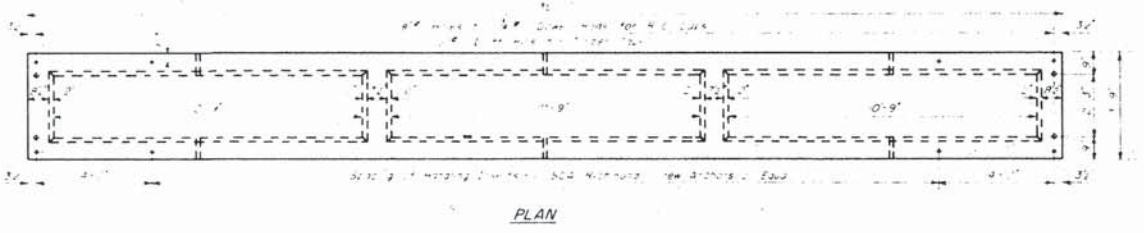
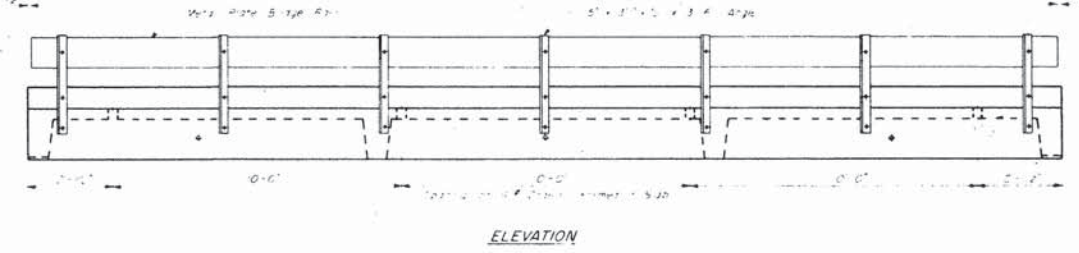
BILL OF MATERIAL

Bar	Size	Qty	Length	Shape
1	#3	30	31'-0"	---
2	#3	28	11'-0"	---
3	#7	6	---	---
4	#4	6	7'-0"	---
5	#7	6	9'-11"	---
CLASS 1 Concrete (CUM)				---
Reinforcement Bars Lbs				---
Total Weight of Cap Lbs				---

DESIGN STRESSES:
1.5K
4.5K
21.000
1.8

EXISTING STRUCTURE PLANS

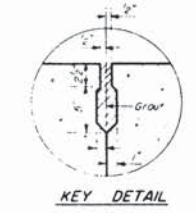
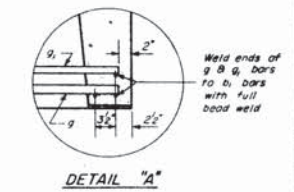
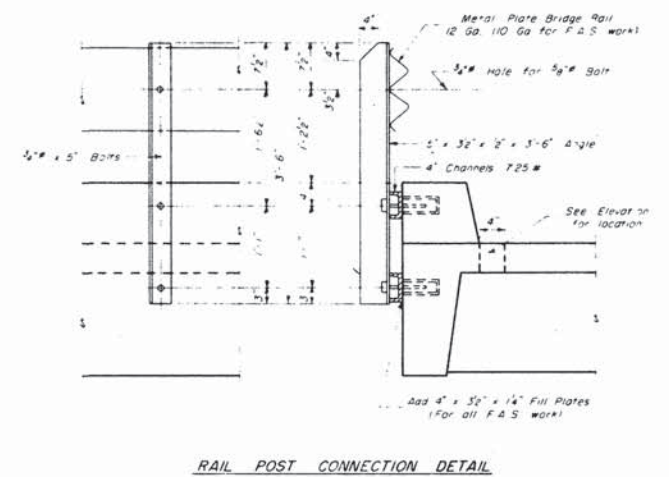
SHEET NO. 2 4 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	18
S.N. 050-3612			CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BR05-0099(052)		



BILL OF MATERIAL

NO.	SIZE	NO.	LENGTH	WEIGHT
a	#4	130	3'-3"	283
b	#4	16	18'-4"	197
c	#4	10	3'-6"	23
d	#11	4	35'-7"	756
e	#10	4	35'-7"	612
f	#4	74	3'-10"	190
Class X Concrete				Cu Yd 4.9
Reinforcement Bars				Lbs 2061
Total Weight of Beam				Lbs 18,580

Reinforcing and Concrete for Curbs not included above Bill of Material



PRECAST CONCRETE SLAB BRIDGE
 USING 36 FT. BEAMS

DESIGN STRESSES
 F_c = 4000 psi
 F_s = 60,000 psi
 F_t = 10,000 psi

PAGE 16-1

EXISTING STRUCTURE PLANS

SHEET NO. 3 4 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	19
	S.N. 050-3612		CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0099(052)		

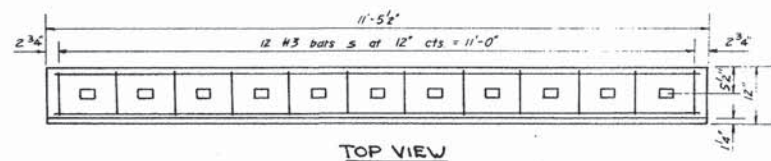
PRECAST CURBS FOR 36' BEAM UNITS

**END SECTION
BILL OF MATERIAL**

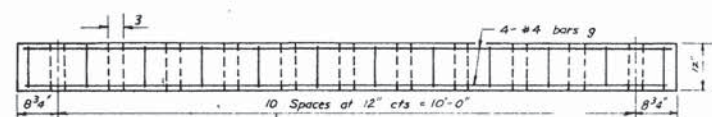
BAR	NO.	SIZE	LENGTH	SHAPE
9	4	#4	11'-3"	—
8	12	#3	3'-7"	□
5 (ALT)		1/4" WIRE		
CLASS X CONCRETE		CU YDS	.35	
REINFORCEMENT BARS		LBS	46	
WEIGHT OF UNIT		LBS	1560	

**CENTER SECTION
BILL OF MATERIAL**

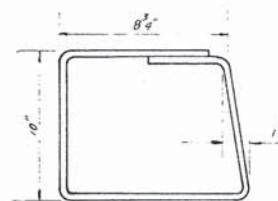
BAR	NO.	SIZE	LENGTH	SHAPE
9	4	#4	12'-0"	—
8	14	#3	3'-7"	□
5 (ALT)		1/4" WIRE		
CLASS X CONCRETE		CU YDS	.43	
REINFORCEMENT BARS		LBS	53	
WEIGHT OF UNIT		LBS	1760	



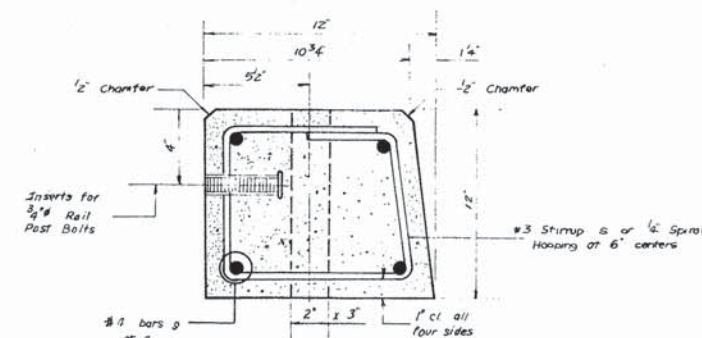
TOP VIEW



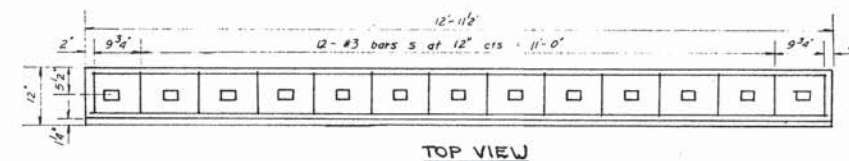
FRONT VIEW



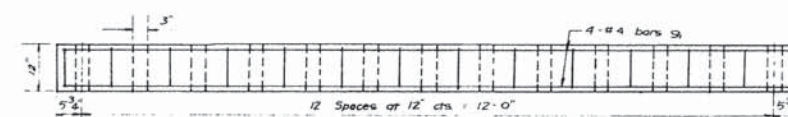
BAR 8



CROSS SECTION



TOP VIEW



FRONT VIEW

GENERAL NOTES

CURB TO CONSIST OF THREE SECTIONS TWO END AND ONE CENTER FOR EACH CURB LINE IN EACH SPAN
 1" x 1/4" DOWELS TO BE CAST IN SLAB SECTIONS AT 12" INTERVALS 5/16" FROM OUTSIDE EDGE
 CURB SECTIONS TO BE PLACED IN POSITION AND GROUT FILLED IN EACH HOLE
 A LAYER OF LIQUID BITUMINOUS TO BE PAINTED ON SLAB WHERE CURB COMES IN CONTACT
 2" RICHMOND SCREW EYE ANCHORS TO BE PLACED 21L FROM END EACH UNIT.

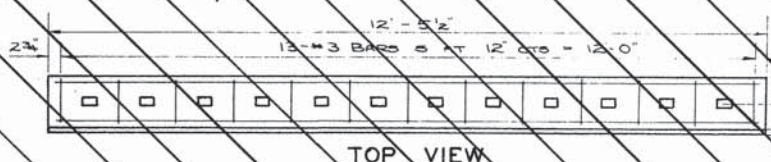
PRECAST CURBS FOR 40' BEAM UNIT

**END SECTION
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
9	4	#4	12'-3"	—
8	13	#3	3'-7"	□
5 (ALT)		1/4" WIRE		
CLASS X CONCRETE		CU YD.	.42	
REINFORCEMENT BARS		LBS	60	
WEIGHT OF UNIT		LBS	1700	

**CENTER SECTION
BILL OF MATERIAL**

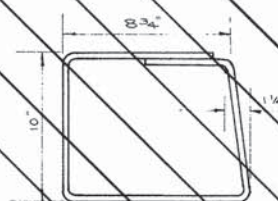
BAR	NO.	SIZE	LENGTH	SHAPE
9	4	#4	14'-0"	—
8	16	#3	3'-7"	□
5 (ALT)		1/4" WIRE		
CLASS X CONCRETE		CU YD.	.50	
REINFORCEMENT BARS		LBS	61	
WEIGHT OF UNIT		LBS	2030	



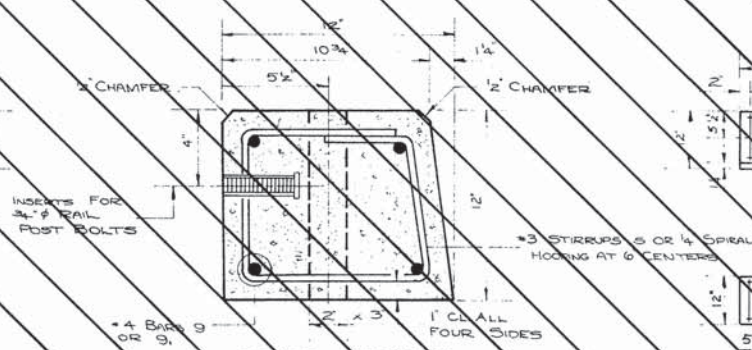
TOP VIEW



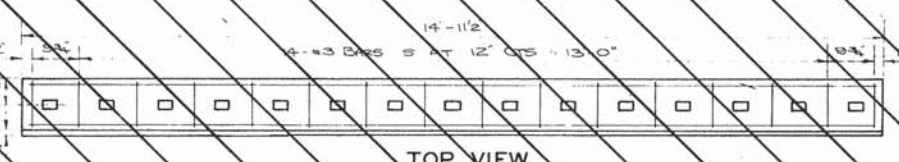
FRONT VIEW



BAR 8



CROSS SECTION



TOP VIEW



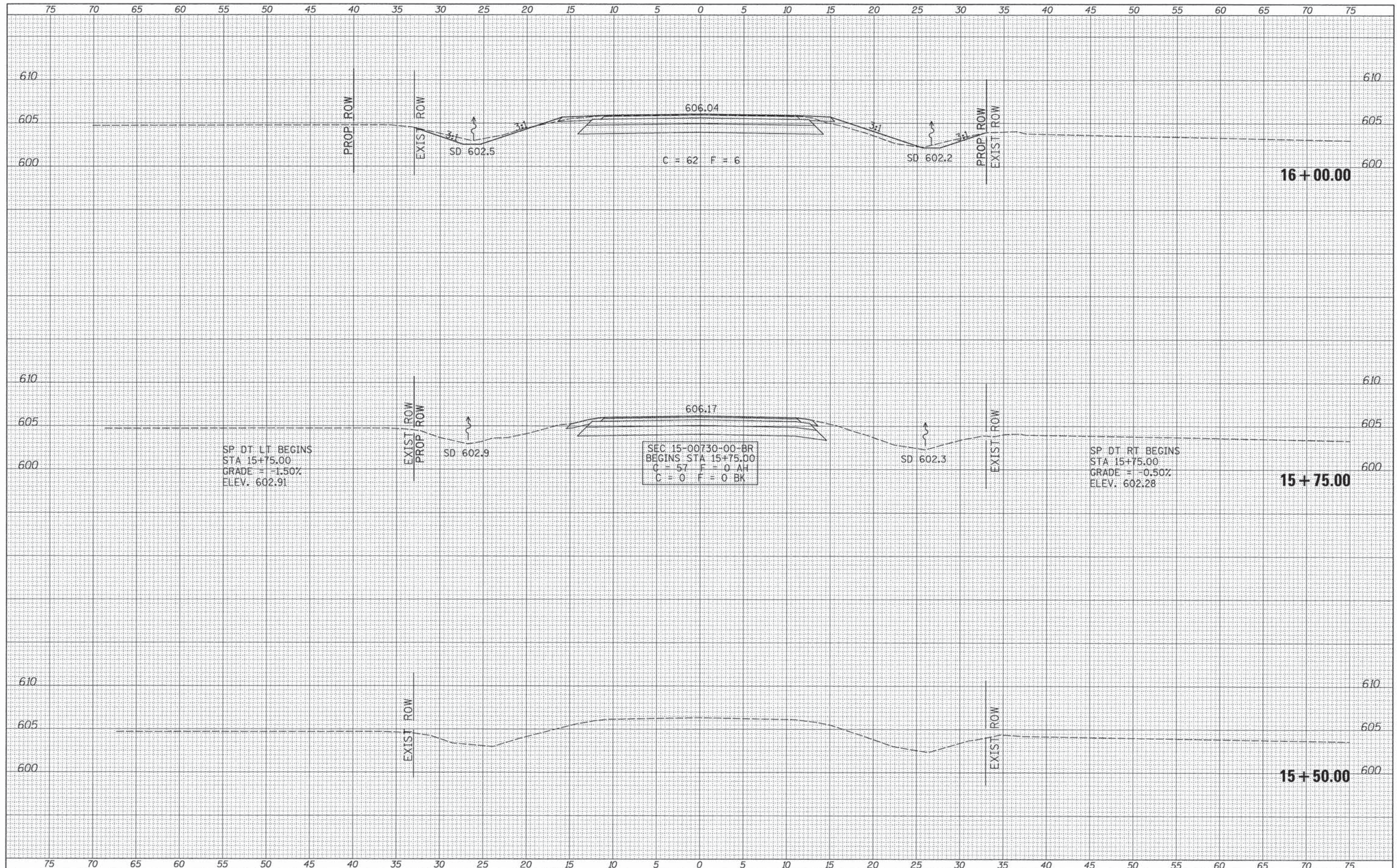
FRONT VIEW

EXISTING STRUCTURE PLANS

SHEET NO. 4 4 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 66	15-00730-00-BR	LASALLE	30	20
	S.N. 050-3612		CONTRACT NO. 87581		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BR05-0099(052)			

DATE	
BY	
SURVEYED	
NOTE BOOK	
NO.	
AREAS CHECKED	

DATE	
BY	
SURVEYED	
NOTE BOOK	
NO.	
AREAS CHECKED	



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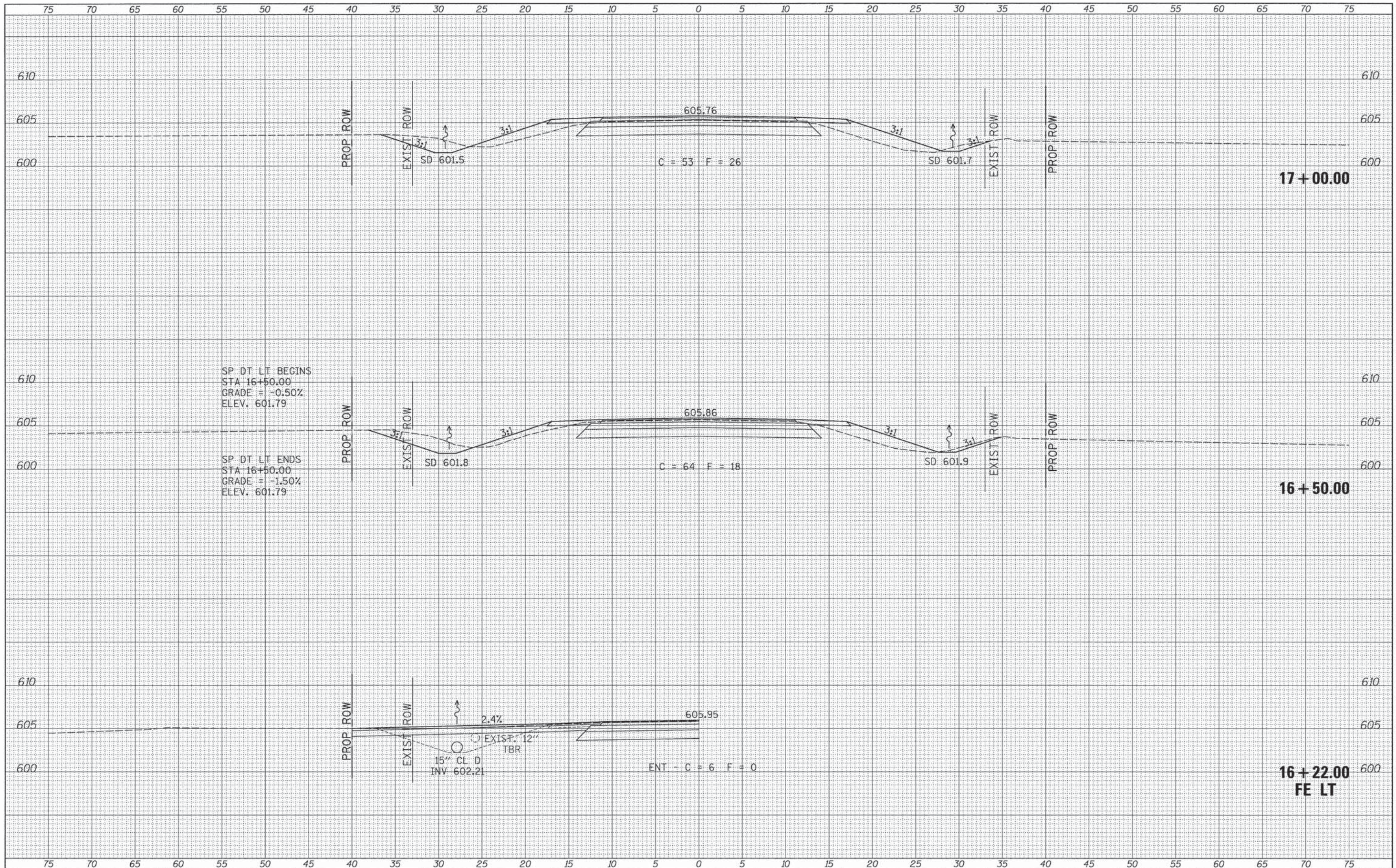
**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

CROSS SECTIONS
 SCALE: 1"=5'
 SHEET 1 OF 10 SHEETS STA. 15+50.00 TO STA. 16+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	21
CONTRACT NO. 87581			FED. AID PROJECT BROS-00990521	

DATE	
BY	
SURVEYED	
NOTED	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
NOTED	
AREAS CHECKED	
NO.	



SP DT LT BEGINS
 STA 16+50.00
 GRADE = -0.50%
 ELEV. 601.79

SP DT LT ENDS
 STA 16+50.00
 GRADE = -1.50%
 ELEV. 601.79

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	DATE -	REVISED -

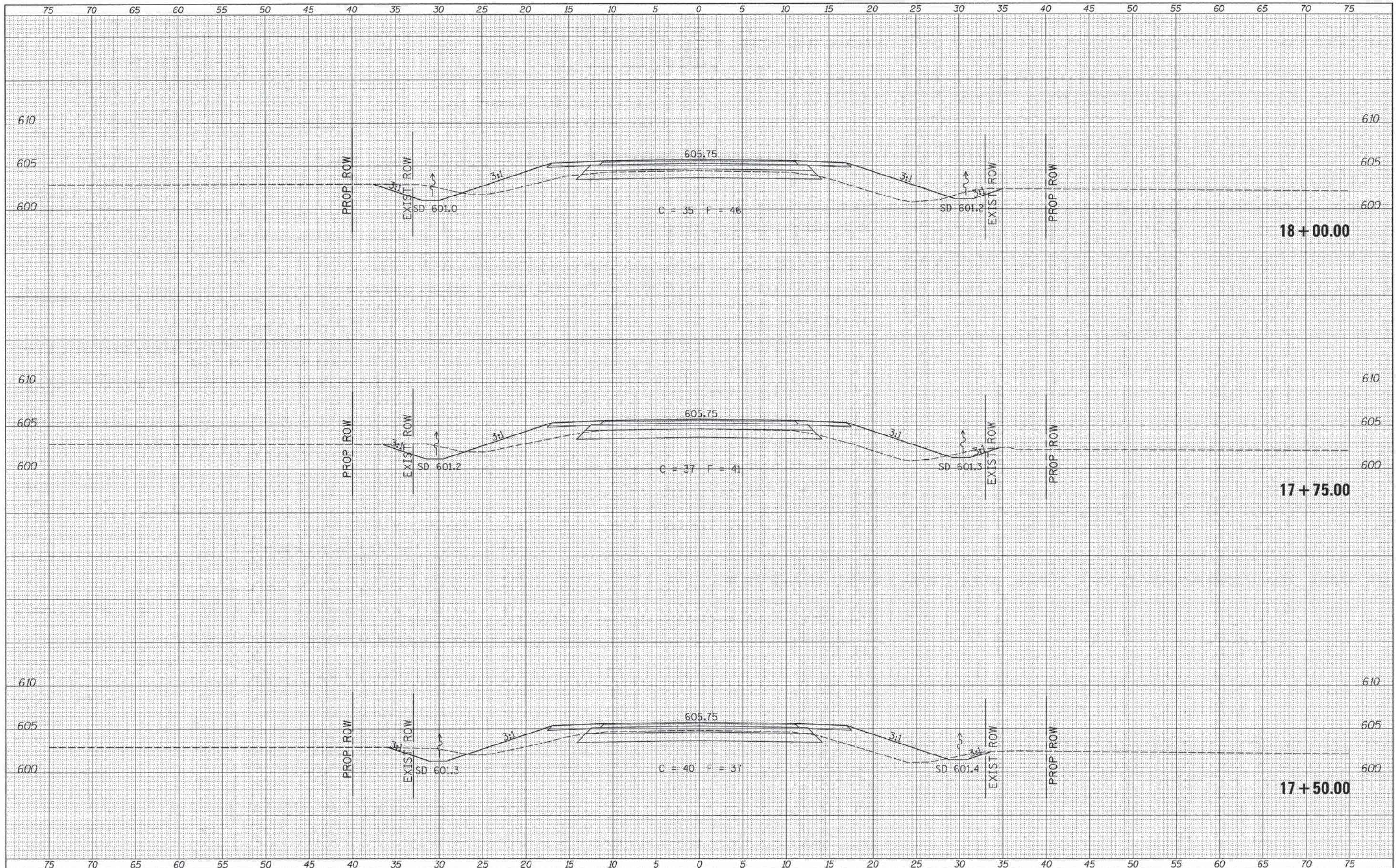
**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

CROSS SECTIONS
 SCALE: 1"=5'
 SHEET 2 OF 10 SHEETS
 STA. 16+22.00 TO STA. 17+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	22
CONTRACT NO. 87581			FED. ROAD DIST. NO. 7 [ILLINOIS] FED. AID PROJECT BR05-0099052	

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

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



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	DATE -	REVISED -

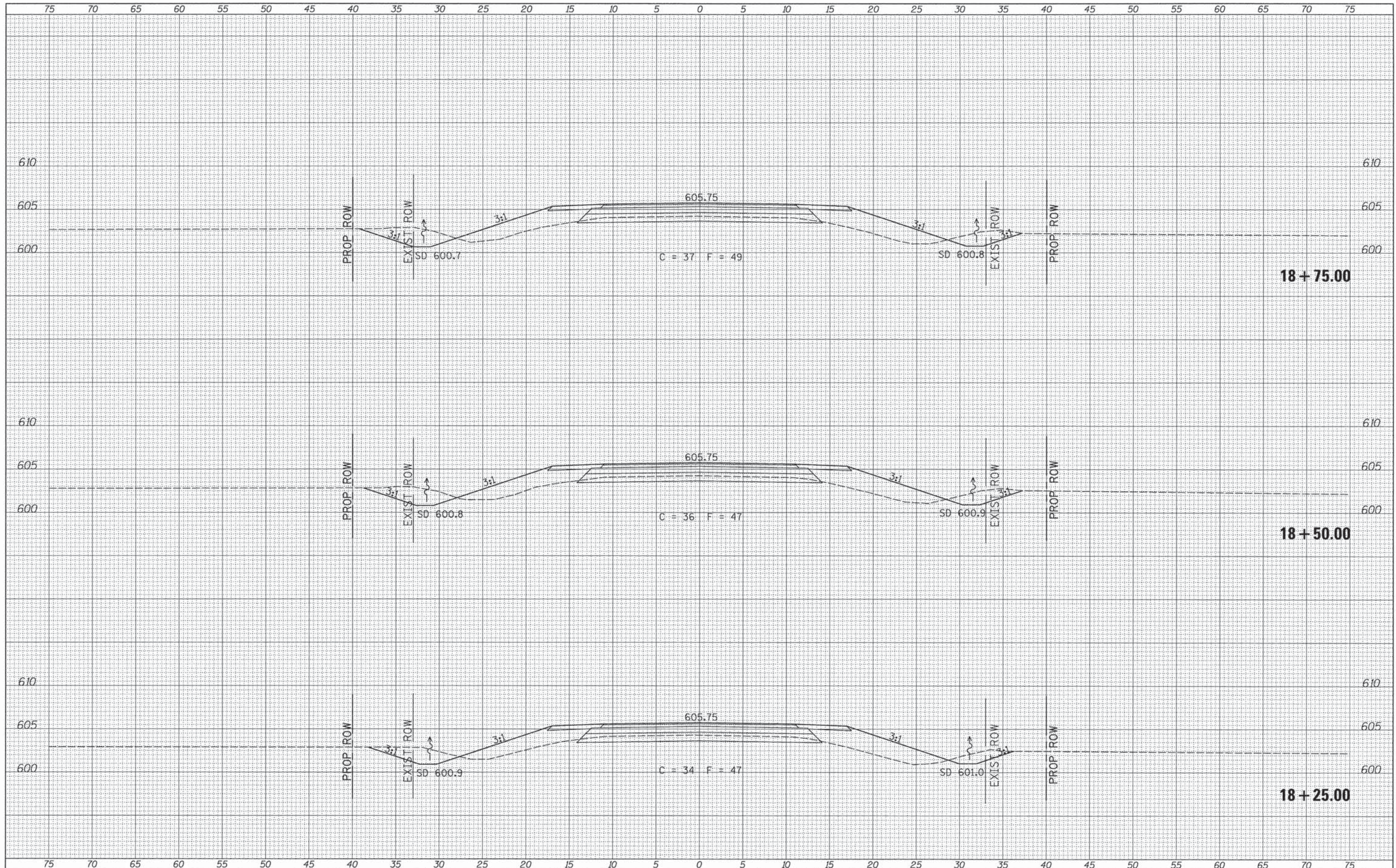
**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

CROSS SECTIONS
 SCALE: 1"=5'
 SHEET 3 OF 10 SHEETS
 STA. 17+50.00 TO STA. 18+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	23
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BR05-0099052		
		CONTRACT NO. 87581		

DATE	
BY	
SURVEYED	
NOTE BOOK	
NO.	
AREAS CHECKED	

DATE	
BY	
SURVEYED	
NOTE BOOK	
NO.	
AREAS CHECKED	



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PLOT DATE = 3/13/2014	CHECKED -	REVISED -
	DATE -	REVISED -

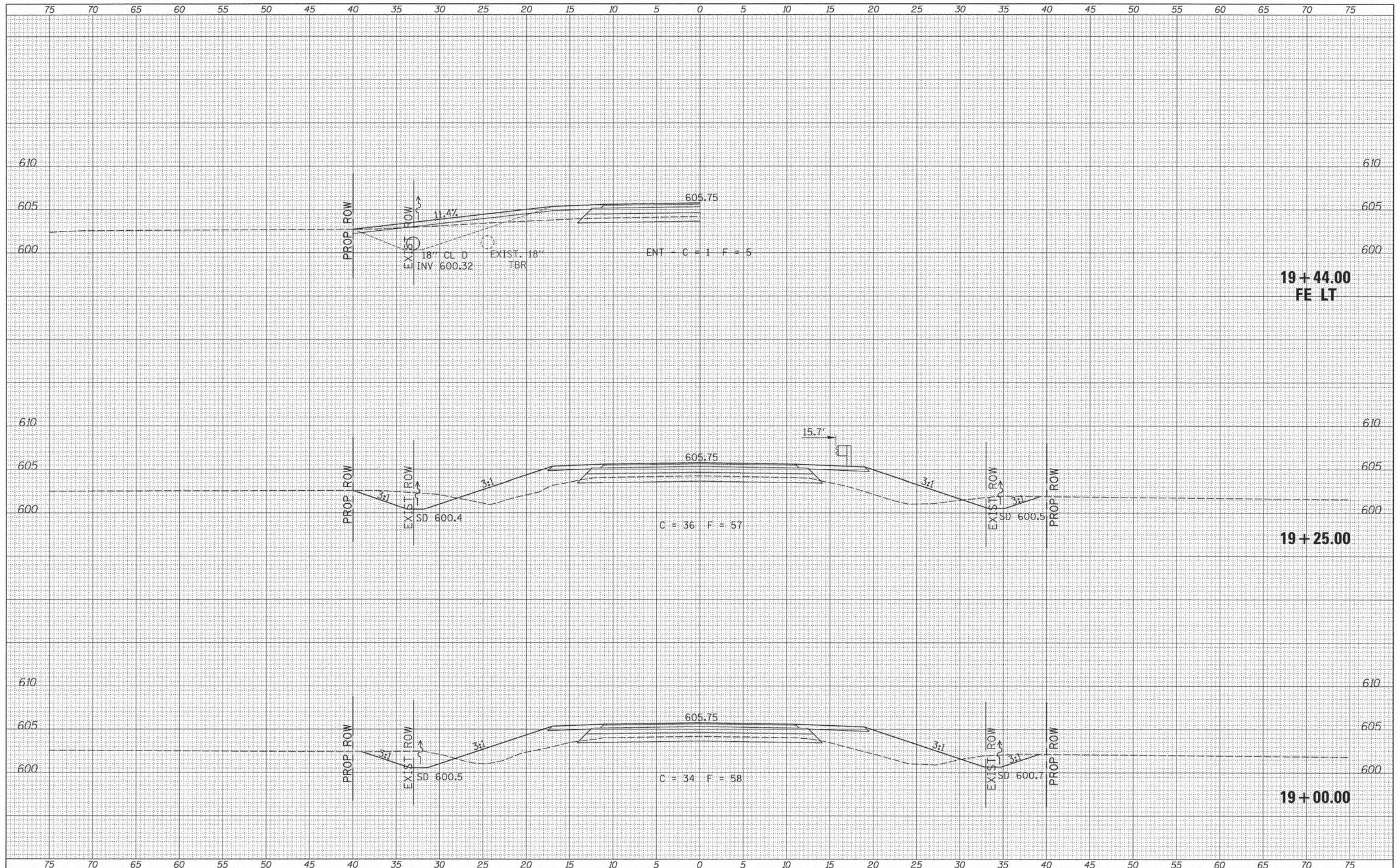
**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

CROSS SECTIONS
 SCALE: 1"=5' SHEET 4 OF 10 SHEETS STA. 18+25.00 TO STA. 18+75.00

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	24
FED. ROAD DIST. NO. 7 [ILLINOIS]			CONTRACT NO. 87581	
FED. AID PROJECT BR05-009910521				

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

DATE	
BY	
REVISIONS	
PLOTTED	
TEMPLATE	
AREAS	
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ORIGINAL SURVEY	
NOTE BOOK	
NO.	



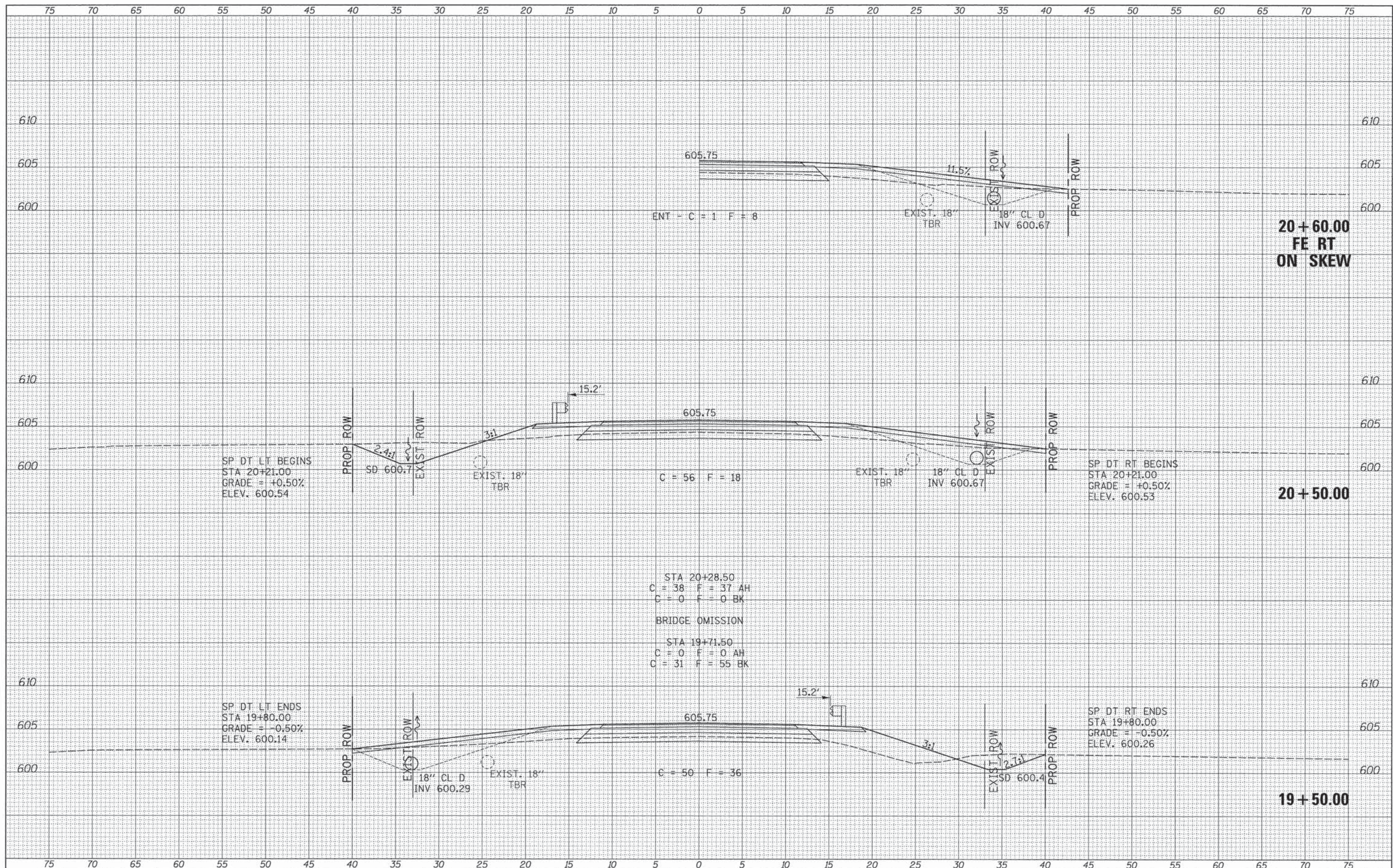
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DESIGNED -	REVISED -
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CHECKED -	REVISED -
DATE -	REVISED -

**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

CROSS SECTIONS
 SCALE: 1"=5'
 SHEET 5 OF 10 SHEETS
 STA. 19+00.00 TO STA. 19+44.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	25
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BR05-009910521	



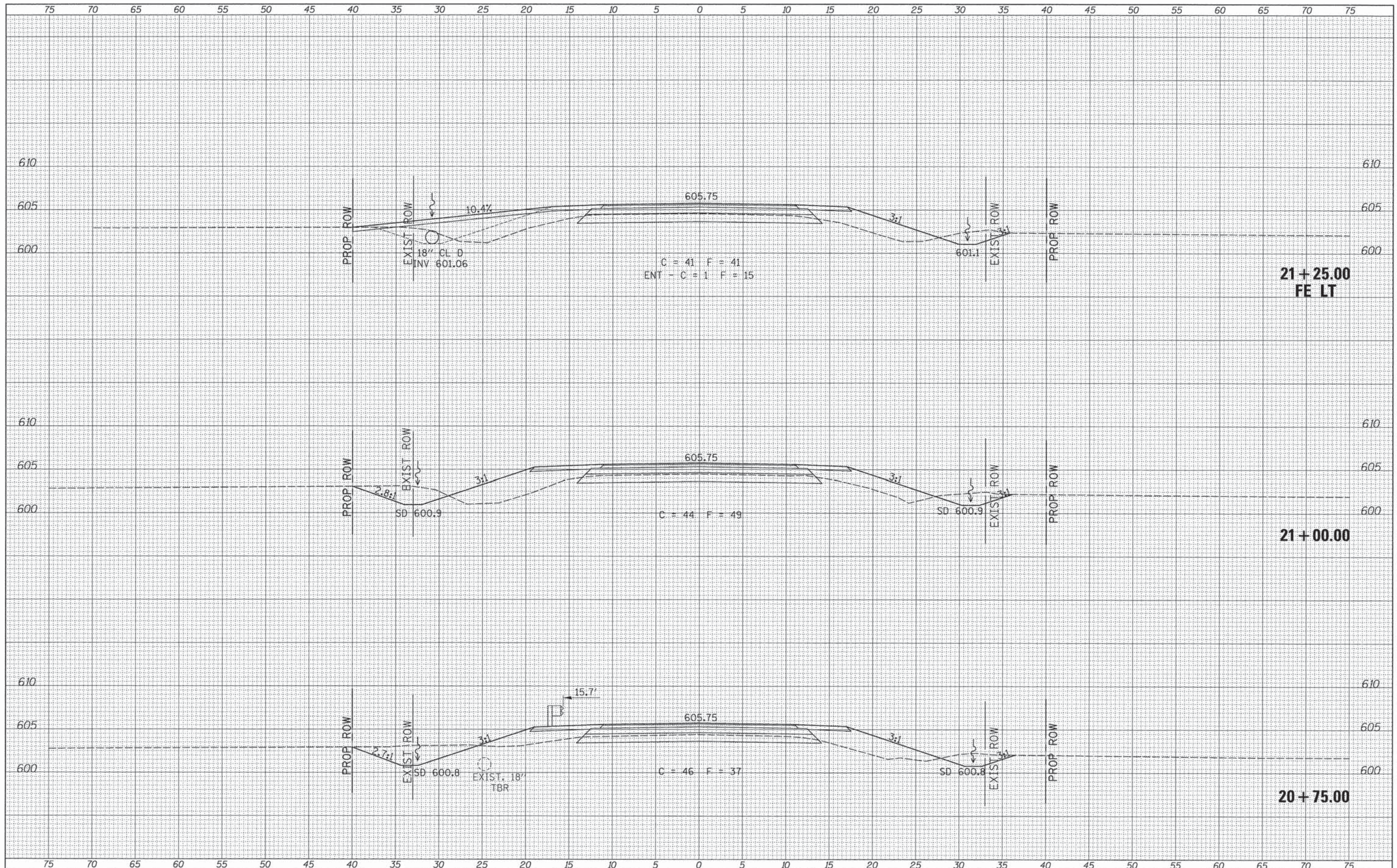
DATE	
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FINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS CHECKED

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

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Default	PLOT SCALE = 5.0000' / in.	DRAWN -	REVISED -			CH 66	15-00730-00-BR	LASALLE	30	26	
	PLOT DATE = 3/13/2014	CHECKED -	REVISED -			SCALE: 1"=5'		SHEET 6 OF 10 SHEETS		STA. 19+50.00 TO STA. 20+60.00	
		DATE -	REVISED -			FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BR05-00991052			

DATE	
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PLOT DATE = 3/13/2014	DATE -	REVISED -

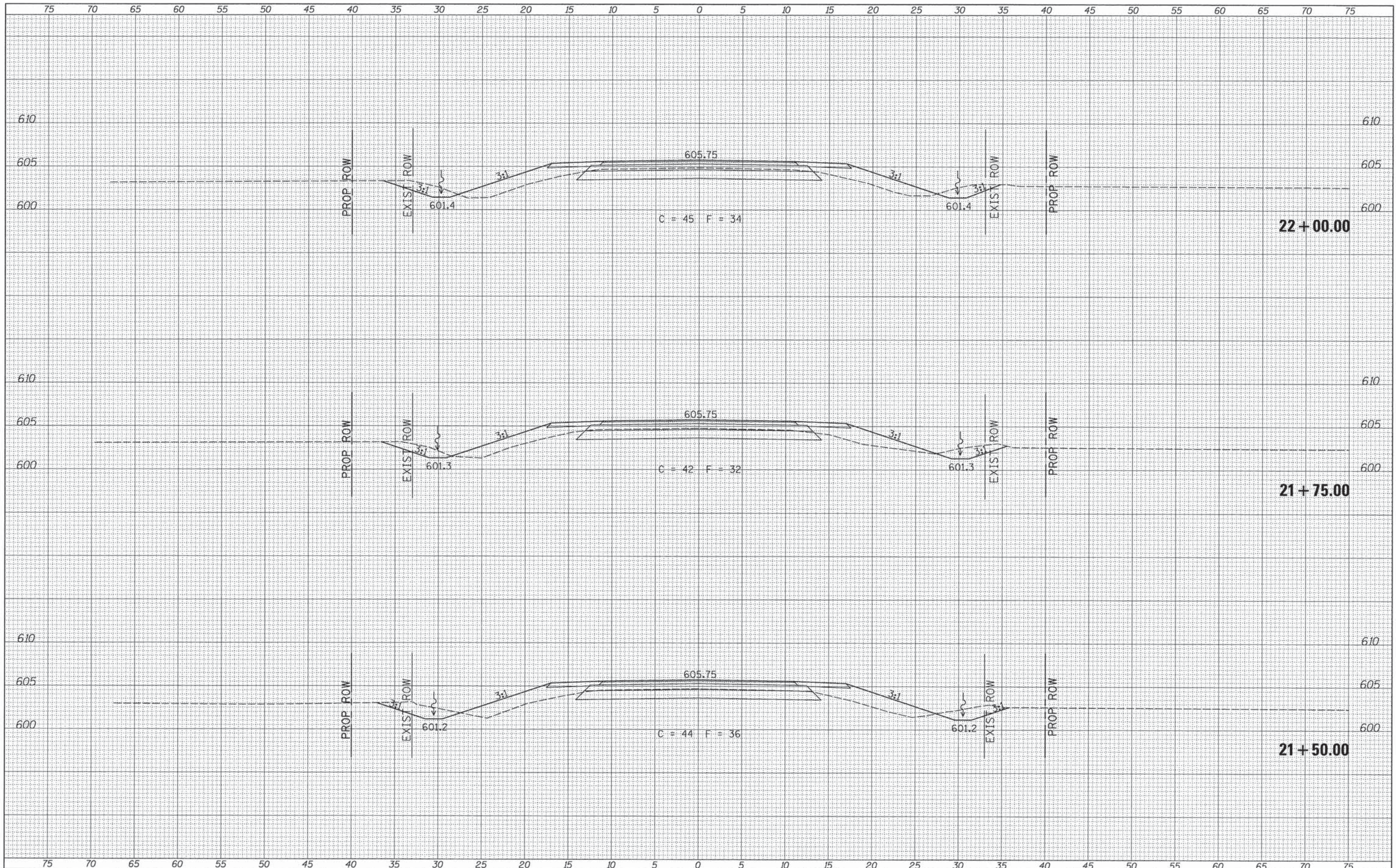
**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

CROSS SECTIONS
 SCALE: 1"=5'
 SHEET 7 OF 10 SHEETS
 STA. 20+75.00 TO STA. 21+25.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	27
CONTRACT NO. 87581			FED. ROAD DIST. NO. 7 ILLINOIS	
			FED. AID PROJECT BROS-0099(052)	

DATE	
BY	
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TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
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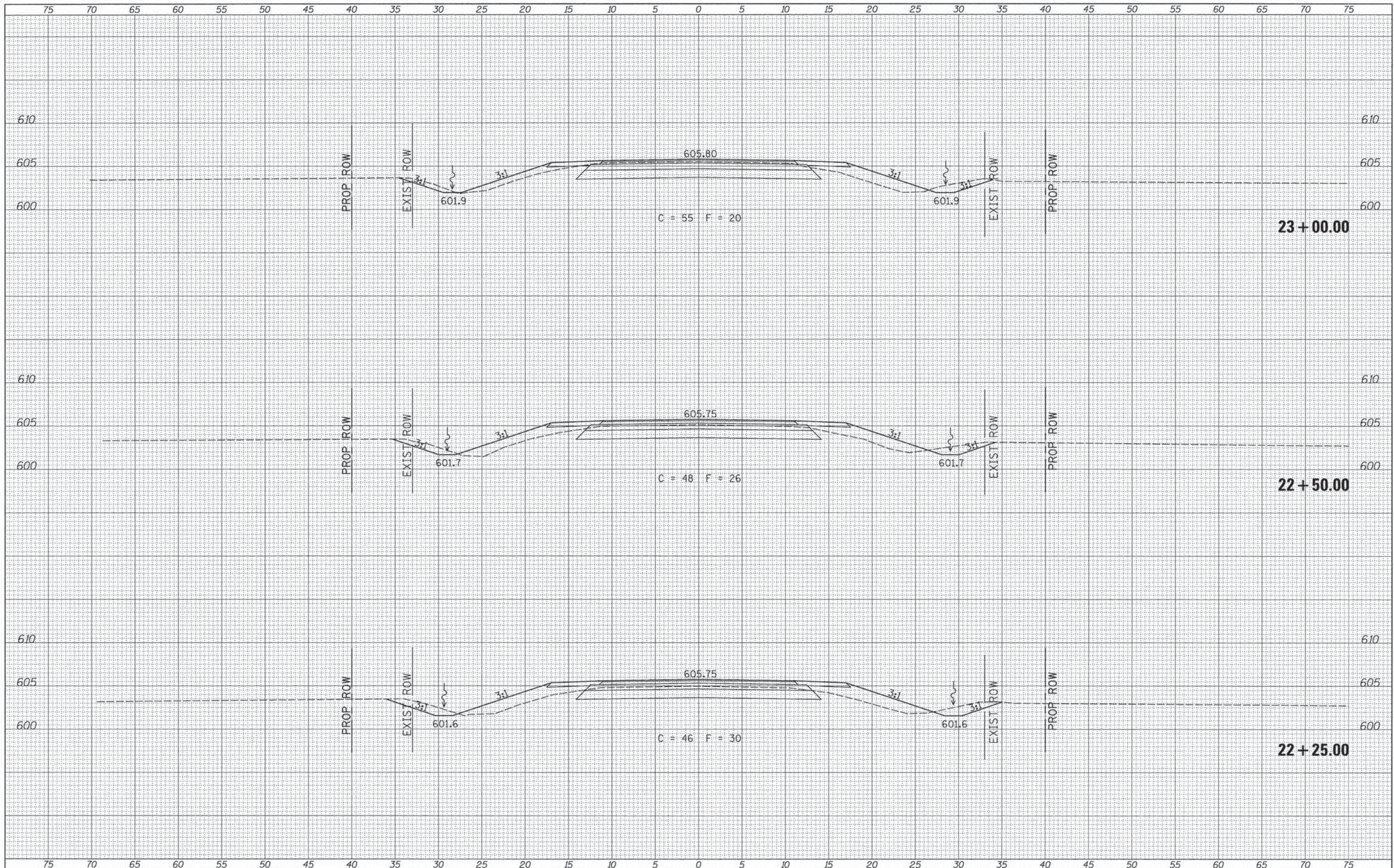
**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

CROSS SECTIONS
 SCALE: 1"=5'
 SHEET 8 OF 10 SHEETS
 STA. 21+50.00 TO STA. 22+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	28
CONTRACT NO. 87581			FED. ROAD DIST. NO. 7 ILLINOIS	
FED. AID PROJECT BROS-0099052				

DATE	
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DATE	
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DATE	-	REVISED	-

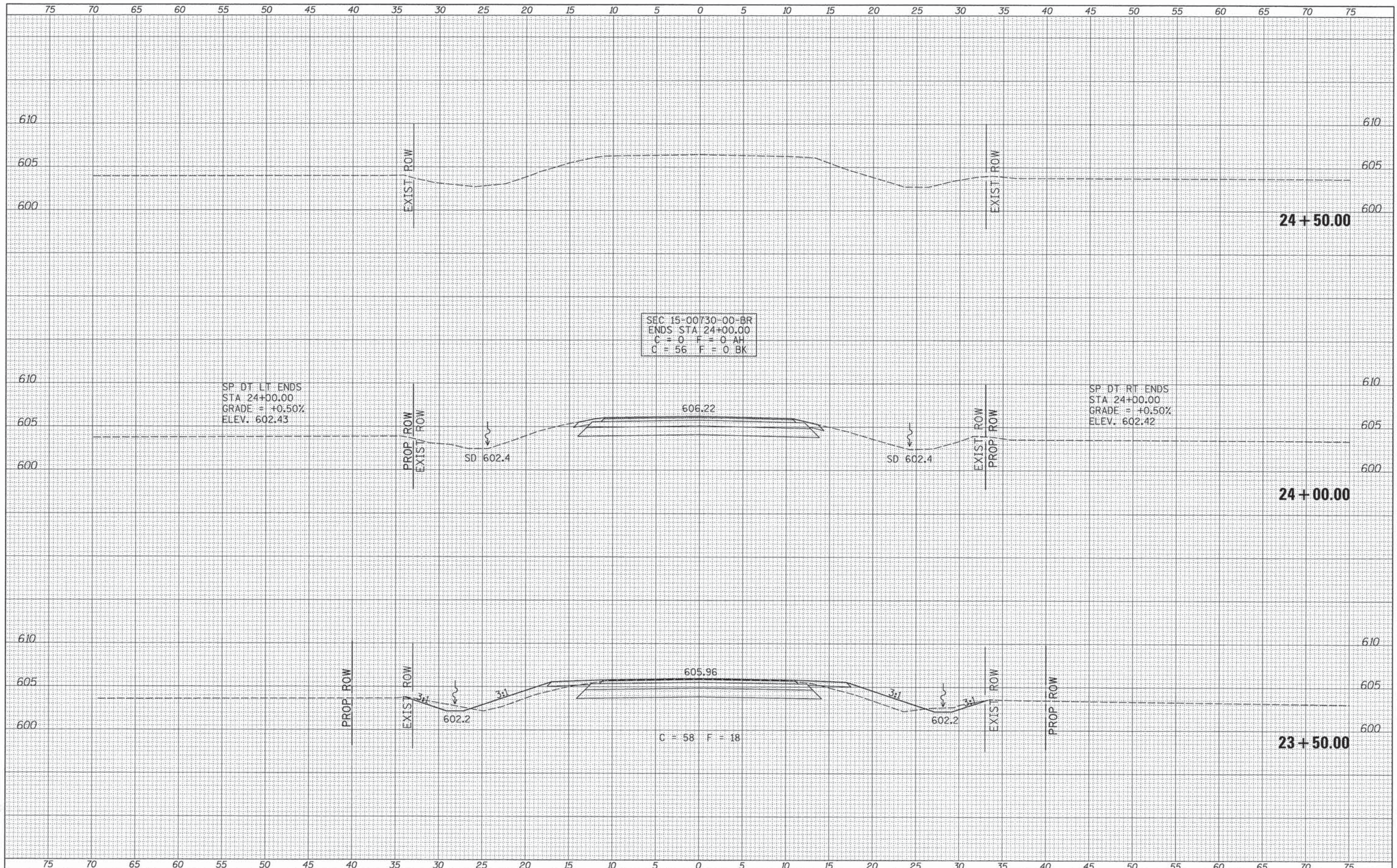
**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

CROSS SECTIONS
 SCALE: 1"=5'
 SHEET 9 OF 10 SHEETS
 STA. 22+25.00 TO STA. 23+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	29
CONTRACT NO. 87581			FED. ROAD DIST. NO. 7 ILLINOIS	
FED. AID PROJECT BR05-00990521				

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

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



SEC 15-00730-00-BR
 ENDS STA 24+00.00
 C = 0 F = 0 AH
 C = 56 F = 0 BK

SP DT LT ENDS
 STA 24+00.00
 GRADE = +0.50%
 ELEV. 602.43

SP DT RT ENDS
 STA 24+00.00
 GRADE = +0.50%
 ELEV. 602.42

C = 58 F = 18

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		DATE -	REVISED -

**LASALLE COUNTY
 COUNTY HIGHWAY 66
 OVER COVEL CREEK TRIBUTARY**

CROSS SECTIONS

SCALE: 1"=5' SHEET 10 OF 10 SHEETS STA. 23+50.00 TO STA. 24+50.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 66	15-00730-00-BR	LASALLE	30	30
CONTRACT NO. 87581				
FED. ROAD DIST. NO. 7 [ILLINOIS]			FED. AID PROJECT BROS-00990521	