

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	1
ILLINOIS		CONTRACT NO. 87466		

**INDEX OF SHEETS**

- 1 = COVER SHEET
- 2 = SUMMARY OF QUANTITIES
- 3 = HORIZONTAL, VERTICAL CONTROL, AND GENERAL NOTES
- 4-7 = SCHEDULE OF QUANTITIES
- 8-10 = TYPICAL SECTIONS
- 11-15 = PLAN & PROFILES
- 16-17 = STORM WATER POLLUTION PREVENTION PLAN
- 18-35 = STRUCTURAL BRIDGE DETAILS
- 36-48 = CROSS SECTIONS - C.H. 13
- 49-50 = CROSS SECTIONS - PRIVATE ENTRANCE
- 51 = INLETS, SPECIAL & PAVEMENT STRIPING DETAILS

04-27-12 LETTING ITEM 178

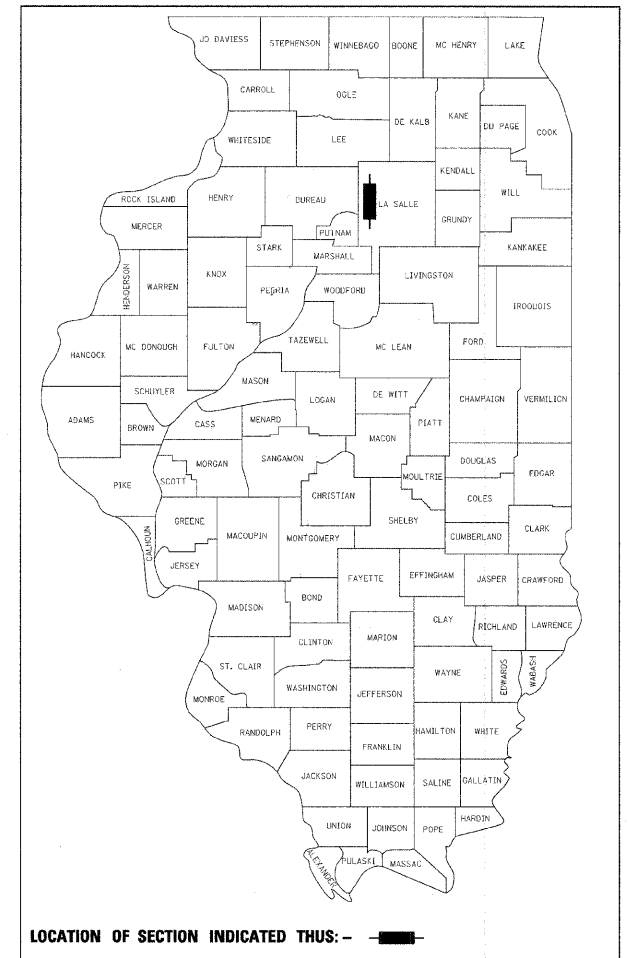
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

# PLANS FOR PROPOSED FEDERAL AID PROJECT HIGHWAY BRIDGE PROGRAM

FAS ROUTE 260 (COUNTY HIGHWAY 13)  
SECTION 10-00651-00-BR  
PROJECT BRS-0260(105)  
BRIDGE REPLACEMENT  
LASALLE COUNTY

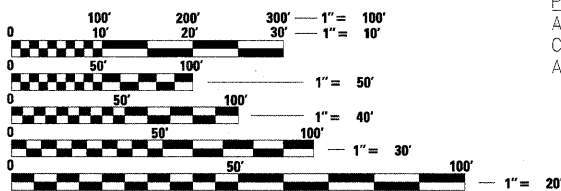
C-93-102-10



LOCATION OF SECTION INDICATED THUS: - ■ -

**STANDARDS**

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 280001-06 TEMPORARY EROSION CONTROL SYSTEMS
- 406201-01 MAILBOX TURNOUT
- 420401-08 BRIDGE APPROACH PAVEMENT CONNECTOR
- 515001-03 NAME PLATE FOR BRIDGES
- 542301-03 PRECAST REINFORCED CONCRETE FLARED END SECTION
- 542311-03 GRATING FOR CONCRETE FLARED END SECTION (FOR 24" (600 mm) THRU 54" (1350 mm) PIPE)
- 601101-01 CONCRETE HEADWALL FOR PIPE DRAIN
- 630001-10 STEEL PLATE BEAM GUARDRAIL
- 630301-05 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631031-09 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 666001-01 RIGHT OF WAY MARKERS
- 667101-02 PERMANENT SURVEY MARKERS
- 701201-04 LANE CLOSURE, 2L 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
- 701301-04 LANE CLOSURE, 2L 2W, SHORT TIME OPERATIONS
- 701901-02 TRAFFIC CONTROL DEVICES
- 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPE A & B METAL POSTS (FOR SIGNS & MARKERS)
- B.L.R. 17-4 TRAFFIC CONTROL DEVICES - DAY LABOR CONSTRUCTION
- B.L.R. 22-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)



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.

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

PROJECT ENGINEER - MAC  
PROJECT MANAGER - BKC

CONTRACT NO. 87466

PROPOSED STRUCTURE: S.N. 050-3604  
A SINGLE SPAN (1@ 106'-6") PRECAST, PRESTRESSED CONCRETE BULB T BEAM BRIDGE ON OPEN INTEGRAL ABUTMENTS AT STA. 20+00, SKEWED 30° RIGHT AHEAD.

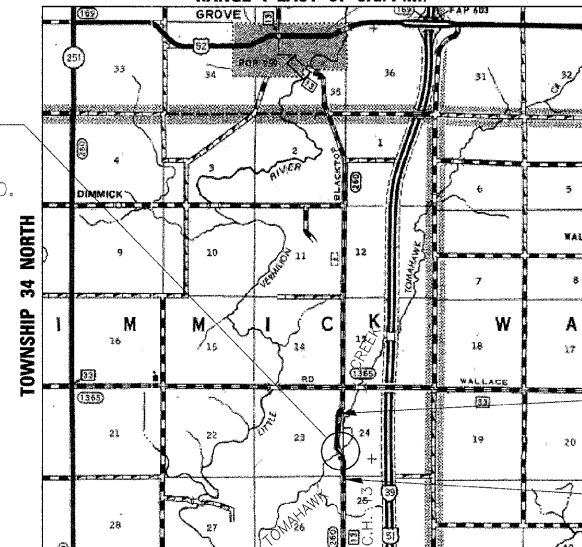
UTILITIES:  
NICOR GAS  
Attn: Connie Lane  
1844 Ferry Road  
Naperville, IL 60563  
(630) 388-3830  
AMEREN IP  
Attn: Kathy Cromwell  
1450 Red Adams Road  
Kewanee, IL 61443  
(309) 852-2963

FUNCTIONAL CLASSIFICATION  
MAJOR COLLECTOR (NON-URBAN)  
DESIGN SPEED 55 MPH  
2012 ADT = 650  
3R GUIDELINES

GROSS LENGTH = 2000 FT. = 0.379 MILE  
NET LENGTH = 2000 FT. = 0.379 MILE

**LOCATION MAP**

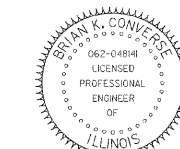
RANGE 1 EAST OF 3rd. P.M.



LOCATION MAP  
NOT TO SCALE

CONSTRUCTION ENDS  
STATION 29+50

CONSTRUCTION BEGINS  
STATION 9+50



Brian K. Converse  
DATE: 12/22/2011  
EXPIRES 11/30/13

LASALLE COUNTY HIGHWAY DEPARTMENT	
APPROVED	12-6 2011
<i>Lawrence J. King</i> LASALLE COUNTY ENGINEER	
PASSED	12-30-2011
<i>J. J. J.</i> DISTRICT 3 PROJECT IMPLEMENTATION ENGINEER	
RELEASING FOR BID BASED ON LIMITED REVIEW	12-30-2011
<i>W. J. H.</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER	

**WILLETT HOFMANN  
& ASSOCIATES INC**  
ENGINEERING ARCHITECTURE LAND SURVEYING  
809 EAST 2ND STREET, DIXON, IL 61021-0367  
T: 815-284-3381 DESIGN FIRM: #184-000918

# SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE 0011

ITEM NO.	CODE NO.	ITEM	UNIT	QUANTITY
1	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	10
2	20100500	TREE REMOVAL, ACRES	ACRE	0.12
3	20201200*	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	340
4	20300100	CHANNEL EXCAVATION	CU YD	1,991
5	20400800*	FURNISHED EXCAVATION	CU YD	4,565
6	20800150	TRENCH BACKFILL	CU YD	62
7	25100630	EROSION CONTROL BLANKET	SQ YD	13,692
8	25100900	TURF REINFORCEMENT MAT	SQ YD	3,164
9	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	349
10	28000305	TEMPORARY DITCH CHECKS	FOOT	523
11	28000400	PERIMETER EROSION BARRIER	FOOT	1,269
12	28000500	INLET AND PIPE PROTECTION	EACH	2
13	31100100*	SUBBASE GRANULAR MATERIAL, TYPE A	TON	3,457
14	35101400	AGGREGATE BASE COURSE, TYPE B	TON	702
15	40600100*	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	2,577
16	40600300*	AGGREGATE (PRIME COAT)	TON	7
17	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	136
18	40603080*	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1,062
19	40603310*	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	410
20	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	22
21	42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	70
22	48101200	AGGREGATE SHOULDERS, TYPE B	TON	412
23	48203100	HOT-MIX ASPHALT SHOULDERS	TON	154
24	50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1
25	50100400*	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1
26	50200100	STRUCTURE EXCAVATION	CU YD	178
27	50300100	FLOOR DRAINS	EACH	12
28	50300225	CONCRETE STRUCTURES	CU YD	68.7
29	50300255	CONCRETE SUPERSTRUCTURE	CU YD	273.3
30	50300260	BRIDGE DECK GROOVING	SQ YD	534
31	50300280	CONCRETE ENCASEMENT	CU YD	4.2
32	50300300	PROTECTIVE COAT	SQ YD	665
33	50400735	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE BULB T-BEAMS 63"	FOOT	539.0
34	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	58,770

ITEM NO.	CODE NO.	ITEM	UNIT	QUANTITY
35	50800515	BAR SPLICERS	EACH	62
36	51201610	FURNISHING STEEL PILES HP12X63	FOOT	170
37	51202305	DRIVING PILES	FOOT	170
38	51203610	TEST PILE STEEL HP12X63	EACH	2
39	51500100	NAME PLATES	EACH	1
40	542A1093*	PIPE CULVERTS, CLASS A, TYPE 2 48"	FOOT	76
41	542D0229*	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	44
42	54213693	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 48"	EACH	1
43	54247190	GRATING FOR CONCRETE FLARED END SECTION 48"	EACH	1
44	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	126
△ 45	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	400
△ 46	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
△ 47	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
48	63200310	GUARDRAIL REMOVAL	FOOT	1,031
49	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	25
50	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1
51	67100100	MOBILIZATION	L SUM	1
△ 52	78200410	GUARDRAIL MARKERS, TYPE A	EACH	16
△ 53	78200420	GUARDRAIL MARKERS, TYPE B	EACH	8
△ 54	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
55	X0323013*	TUBULAR STEEL GATE	EACH	1
56	X2011000*	TEMPORARY FENCE (SPECIAL)	FOOT	940
57	X2020410*	EARTH EXCAVATION (SPECIAL)	CU YD	3,412
58	X2070304*	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	186
59	X2501000*	SEEDING, CLASS 2 (SPECIAL)	ACRE	3.49
60	X2810208*	STONE RIPRAP, CLASS A4 (SPECIAL)	TON	31
61	X2810210*	STONE RIPRAP, CLASS A5 (SPECIAL)	TON	1,652
62	X6024240*	INLETS, SPECIAL	EACH	1
63	X7010216*	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
64	Z0013798	CONSTRUCTION LAYOUT	L SUM	1
65	Z0022800*	FENCE REMOVAL	FOOT	2,282
66	Z0046304*	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	202

\* INDICATES SPECIAL PROVISION

△ INDICATES SPECIALTY ITEMS

FILE = S:\Struct\1156008\1156008.dgn



DESIGNED - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -
DRAWN - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**SUMMARY OF QUANTITIES**  
**STRUCTURE NO. 050-3604**

SHEET NO. 1 OF 1 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	02
WHA# 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-02601050				

## GENERAL NOTES

The Contractor shall seed all disturbed areas within the project limits. Seeding, Class 2 (Special) shall be used throughout.

The final top four inches of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation.

All Borrow/Waste/Use sites must be approved by the Illinois Department of Transportation prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The 12" Subbase Granular Material, Type A shall be constructed of 4" of aggregate gradation CA-6 on 8" of CA-2 aggregate. The water necessary to achieve compaction in the 12" Subbase may be added after it is placed on the grade. The use of a mechanical spreader or spreader box is waived.

On full depth pavement, shoulder widths of 6 ft. or less may be placed, at the Contractor's option, simultaneously with the adjacent traffic lane for both the binder and surface courses, provided the cross slope of both the pavement and shoulder can be satisfactorily obtained. The shoulder will be paid for at the contract unit price per Ton for HOT-MIX ASPHALT SHOULDERS, of the thickness specified on the plans.

The proposed pipes for entrances and side roads shall be placed in line with the existing or proposed ditch line.

It is anticipated that mailboxes will require relocation. The Contractor shall be required to mount any relocated mailboxes on a 4"x4" wood post 40 inches above the shoulder surface at locations specified in the plans. This work shall be incidental to the contract.

The Contractor shall supply the Engineer with the manufacturer's installation requirements for the Traffic Barrier Terminal, Type 1 (Special) Tangent.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123.

The Contractor shall be responsible for the protection of all field tiles, underground and surface utilities as outlined in Article 107.31 of the Standard Specifications, even though they may not be shown on the plans. Any field tile that is damaged during construction shall be repaired in accordance with Section 611 of the Standard Specifications for Road and Bridge Construction. This work shall be considered as included in the unit bid price of the contract, and no additional compensation will be allowed. Any utility property damaged during construction shall be repaired or replaced to the satisfaction of the Owner at the Contractor's expense.

Proposed entrance pipe culvert shall be corrugated steel.

Saw cuts shall be included in the cost of the item to be removed.

Additional Aggregate Base Course, Type B quantities are provided in the plans for use as temporary access to properties and shall be used as directed by the Engineer.

Existing signs within the project limits shall be removed, stored, and reset (except those noted for removal) or relocated as directed by the Engineer. Any signs which become damaged during these operations shall be replaced at the Contractor's expense. This work shall be included in the cost of Earth Excavation (Special).

It shall be the responsibility of the Contractor to coordinate with the property owner and the Engineer to ensure satisfactory replacement fencing has been erected in locations where existing fence is to be removed prior to removal operations starting. No fencing is to be removed without authorization from the Engineer.

COUNTY HIGHWAY 13 - HORIZONTAL CONTROL POINTS					
POINT #	STATION	O/S	NORTH	EAST	DESCRIPTION
108	12+45	RT 12'	1724610.48	782684.71	PK NAIL
107	18+84	LT 13'	1725220.09	782490.08	5/8" IRON PIN
150	18+88	RT 17'	1725232.79	782517.37	NAIL
111	19+69	RT 114'	1725340.68	782583.45	TRAVERSE STATION
110	22+48	RT 105'	1725602.82	782487.63	NAIL
M110	22+59	LT 89'	1725552.31	782299.99	TRAVERSE STATION
112	25+29	LT 13'	1725840.59	782308.29	TRAVERSE STATION
106	26+22	LT 15'	1725933.62	782297.94	5/8" IRON PIN

COUNTY HIGHWAY 13 - VERTICAL BENCH MARKS				
STATION	O/S	ROAD	ELEV.	DESCRIPTION
14+08	LT 46'	CH 13	636.94	RR SPIKE IN 3RD PP SOUTH OF BRIDGE
19+83	RT 15'	CH 13	615.38	CHIS. "□" ON THE SE WINGWALL OF EXIST. BRIDGE
26+22	LT 34'	CH 13	636.51	TOP OF R.O.W. MARKER

## COMMITMENTS

The Contractor is encouraged to conduct their construction activities during a period of low flow. The Contractor is required to remove all excess fill material to an upland, non-wetland site, to seed all disturbed areas with native grasses, and to implement appropriate measures to insure that sediments are not introduced into waters of the United States during construction of this project.

LaSalle County is within the known breeding range of the federally endangered Indiana Bat (*Myotis sodalis*). The U.S. Army Corps of Engineers has made a determination of not likely to adversely affect the endangered Indiana Bat, provided that clearing of potential roost trees occurs outside the maternity season for the Indiana Bat, designated as April 1st to September 30th in Illinois.



DESIGNED -	J.M.K.	REVISED -	
CHECKED -	G.F.S.	REVISED -	
DRAWN -	J.M.K.	REVISED -	
CHECKED -	G.F.S.	REVISED -	

**LASALLE COUNTY  
C.H. 13 OVER TOMAHAWK CREEK  
STATION 20+00**

**HORIZONTAL CONTROL, VERTICAL CONTROL, AND GENERAL NOTES  
STRUCTURE NO. 050-3604**

SHEET NO. 1 OF 1 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	03
WHA# 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				

C.H. 13 EARTHWORK TOTALS				
LOCATION	EARTH EXCAVATION (SPECIAL) X2020410*	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 25%	EMBANKMENT	FURNISHED EXCAVATION 20400800
	CU YD	CU YD	CU YD	CU YD
TOTAL	3,412	2,559	7,871	4,565

TREE REMOVAL (6 TO 15 UNITS DIAMETER)		
STATION	UNIT	REMARKS
CH 13		
18+74 RT 46'	10	
PROJECT TOTAL	10	

TREE REMOVAL, ACRES		
STATION	ACRE	REMARKS
CH 13		
LT 20+16 TO 22+26	0.12	
PROJECT TOTAL	0.12	

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL		
STATION	CU YD	REMARKS
CH 13		
CONTINGENCY ITEM	340	AS DIRECTED BY THE ENGINEER
PROJECT TOTAL	340	

TRENCH BACKFILL		
STATION	CU YD	REMARKS
CH 13		
10+43	62	48" P CUL
PROJECT TOTAL	62	

EROSION CONTROL BLANKET		
STATION	SQ YD	REMARKS
CH 13		
LT 9+50 TO 19+45	3,685	
RT 9+50 TO 20+20	2,959	
LT 20+20 TO 29+50	2,512	
RT 20+55 TO 29+50	2,899	
PEL 23+25	1,637	
PROJECT TOTAL	13,692	

TURF REINFORCEMENT MAT		
STATION	SQ YD	REMARKS
CH 13		
LT 9+50 TO 10+37	84	8' WIDE
RT 9+50 TO 12+63	291	8' WIDE
LT 10+64 TO 13+13	229	8' WIDE
RT 13+22 TO 16+50	308	8' WIDE
LT 13+52 TO 19+00	507	8' WIDE
LT 20+22 TO 23+02	875	
LT 23+44 TO 29+50	583	8' WIDE
RT 24+00 TO 27+16	287	8' WIDE
PROJECT TOTAL	3,164	

TEMPORARY EROSION CONTROL SEEDING		
STATION	POUND	REMARKS
CH 13		
LT 9+50 TO 19+45	93	100 LB / ACRE
RT 9+50 TO 20+20	74	100 LB / ACRE
LT 20+20 TO 29+50	82	100 LB / ACRE
RT 20+55 TO 29+50	66	100 LB / ACRE
PEL 23+25	34	100 LB / ACRE
PROJECT TOTAL	349	

TEMPORARY DITCH CHECKS		
STATION	FOOT	REMARKS
CH 13		
LT 10+00	17	
LT 11+00	13	
LT 11+50	20	
LT 12+50	13	
LT 15+00	14	
LT 15+50	12	
LT 16+00	14	
LT 16+50	17	
LT 17+00	23	
LT 17+50	28	
LT 18+00	13	
LT 18+50	13	
LT 24+00	16	
LT 24+50	24	
LT 25+00	23	
LT 25+50	14	
LT 26+00	14	
LT 29+00	13	
RT 11+00	17	
RT 12+00	11	
RT 13+50	9	
RT 14+00	20	
RT 14+50	18	
RT 15+00	19	
RT 15+50	21	
RT 16+00	20	
RT 16+50	13	
RT 24+00	19	
RT 24+50	19	
RT 25+00	14	
RT 25+50	14	
RT 26+00	8	
PROJECT TOTAL	523	

PERIMETER EROSION BARRIER		
STATION	FOOT	REMARKS
CH 13		
RT 16+50 TO 20+25	381	ALONG PROP ROW
LT 17+50 TO 19+34	187	ALONG PROP ROW
LT 20+15 TO 21+67	362	
RT 20+61 TO 24+00	339	ALONG PROP ROW
PROJECT TOTAL	1,269	

INLET AND PIPE PROTECTION		
STATION	EACH	REMARKS
CH 13		
10+37 RT 35'	1	AT DITCH INLET, SPECIAL
23+44 LT 40'	1	AT 24" P CUL
PROJECT TOTAL	2	

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DESIGNED - J.M.K.  
 CHECKED - G.F.S.  
 DRAWN - J.M.K.  
 CHECKED - G.F.S.

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**SCHEDULE OF QUANTITIES**  
**STRUCTURE NO. 050-3604**  
 SHEET NO. 1 OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	04
WHA* 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				

SUBBASE GRANULAR MATERIAL, TYPE A		
STATION	TON	REMARKS
CH 13		
9+80 TO 19+11.55	1,826	12" - MAINLINE
20+88.44 TO 29+20	1,631	12" - MAINLINE
PROJECT TOTAL	3,457	
31100100*		

AGGREGATE BASE COURSE, TYPE B		
STATION	TON	REMARKS
CH 13		
PER 12+93	74	8"
PER 12+93 MAILBOX TURNOUT	7	8"
FEL 13+33	33	8"
PER 23+25	428	8"
CONTINGENCY	160	TEMPORARY ACCESS
PROJECT TOTAL	702	
35101400*		

BITUMINOUS MATERIALS (PRIME COAT)		
STATION	GALLON	REMARKS
CH 13		
9+80.00 TO 19+11.55	1,069	.4 GAL/SY (OVER AGG)
20+88.44 TO 29+20	955	.4 GAL/SY (OVER AGG)
PER 12+93	65	.4 GAL/SY (OVER AGG)
PER 12+93 MAILBOX TURNOUT	6	.4 GAL/SY (OVER AGG)
9+50 TO 19+15.02	254	.1 GAL/SY (OVER BIT)
20+84.98 TO 29+50	228	.1 GAL/SY (OVER BIT)
PROJECT TOTAL	2,577	
40600100*		

AGGREGATE (PRIME COAT)		
STATION	TON	REMARKS
CH 13		
9+50.00 TO 19+15.02	4	3 LBS / SY
20+84.98 TO 29+50.00	3	3 LBS / SY
PROJECT TOTAL	7	
40600300*		

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT		
STATION	SQ YD	REMARKS
CH 13		
9+50 TO 9+80	68	
29+20 TO 29+50	68	
PROJECT TOTAL	136	
40600982*		

HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50		
STATION	TON	REMARKS
CH 13		
9+80.00 TO 19+02.02	561	4" - MAINLINE
20+97.98 TO 29+20.00	501	4" - MAINLINE
CALCULATIONS BASED ON 115* / SY / INCH		
PROJECT TOTAL	1,062	
40603080*		

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50		
STATION	TON	REMARKS
CH 13		
9+50.00 TO 19+02.02	216	1 1/2" - MAINLINE
20+97.98 TO 29+50.00	194	1 1/2" - MAINLINE
CALCULATIONS BASED ON 115* / SY / INCH		
PROJECT TOTAL	410	
40603310*		

INCIDENTAL HOT-MIX ASPHALT SURFACING		
STATION	TON	REMARKS
CH 13		
PER 12+93	20	2"
PER 12+93 MAILBOX TURNOUT	2	2"
CALCULATIONS BASED ON 115* / SY / INCH		
PROJECT TOTAL	22	
40800050		

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)		
STATION	SQ YD	REMARKS
CH 13		
19+02.02 TO 19+15.02	35	13'
20+84.98 TO 20+97.98	35	13'
PROJECT TOTAL	70	
42001430		

AGGREGATE SHOULDERS, TYPE B		
STATION	TON	REMARKS
CH 13		
LT 9+50.00 TO 10+55.68	12	6"
RT 9+50.00 TO 12+30.91	31	6"
PER 12+93	9	6"
RT 13+25.69 TO 19+54.59	106	6"
LT 15+64.69 TO 19+35.44	62	6"
LT 20+45.41 TO 23+01.93	61	6"
RT 20+64.55 TO 22+90.19	46	6"
LT 23+52.07 TO 29+50.00	68	6"
RT 27+99.20 TO 29+50.00	17	6"
PROJECT TOTAL	412	
48101200		

HOT-MIX ASPHALT SHOULDERS		
STATION	TON	REMARKS
CH 13		
LT 10+55.68 TO 15+64.69	77	8"
RT 22+90.19 TO 27+99.20	77	8"
CALCULATIONS BASED ON 115* / SY / INCH		
PROJECT TOTAL	154	
48203100		

PIPE CULVERTS, CLASS A, TYPE 2 48"		
STATION	FOOT	REMARKS
CH 13		
10+43.08	76	
PROJECT TOTAL	76	
542A1093*		

PIPE CULVERTS, CLASS D, TYPE 1 24"		
STATION	FOOT	REMARKS
CH 13		
PEL 23+25	44	
PROJECT TOTAL	44	
542D0229*		

PRECAST REINFORCED CONCRETE FLARED END SECTIONS 48"		
STATION	EACH	REMARKS
CH 13		
LT 10+50	1	
PROJECT TOTAL	1	
54213693		

FILE = S:\AS-Project\156008\ch13.asx\156008\500\_General\_Note.dgn



DESIGNED - J.M.K.  
CHECKED - G.F.S.  
DRAWN - J.M.K.  
CHECKED - G.F.S.

REVISED -  
REVISED -  
REVISED -  
REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**SCHEDULE OF QUANTITIES**  
**STRUCTURE NO. 050-3604**

SHEET NO. 2 OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	05
WHA# 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260109				

GRATING FOR CONCRETE FLARED END SECTION 48"		
STATION	EACH	REMARKS
CH 13		
LT 10+50	1	
PROJECT TOTAL	1	

STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS		
STATION	FOOT	REMARKS
CH 13		
LT 18+42.97 TO 18+92.97	50	
RT 17+61.44 TO 19+11.44	150	
LT 20+88.56 TO 22+38.56	150	
RT 21+07.03 TO 21+57.03	50	
PROJECT TOTAL	400	

TRAFFIC BARRIER TERMINAL, TYPE 6		
STATION	EACH	REMARKS
CH 13		
LT 18+92.97 TO 19+36.12	1	
RT 19+11.44 TO 19+54.59	1	
LT 20+45.41 TO 20+88.56	1	
RT 20+63.88 TO 21+07.03	1	
PROJECT TOTAL	4	

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT		
STATION	EACH	REMARKS
CH 13		
LT 17+92.97 TO 18+42.97	1	
RT 17+11.44 TO 17+61.44	1	
LT 22+38.56 TO 22+88.56	1	
RT 21+57.03 TO 22+07.03	1	
PROJECT TOTAL	4	

GUARDRAIL REMOVAL		
STATION	FOOT	REMARKS
CH 13		
RT 15+28.26 TO 19+80.30	453	
LT 18+90.07 TO 19+65.16	75	
LT 20+20.08 TO 21+43.39	124	
RT 20+34.48 TO 24+14.52	379	
PROJECT TOTAL	1,031	

FURNISHING & ERECTING RIGHT-OF-WAY MARKERS		
STATION	EACH	REMARKS
CH 13		
9+50.00 LT 35.00'	1	
10+00.00 LT 55.00'	1	
12+21.96 LT 48.03'	1	
17+01.62 LT 50.00'	1	
17+50.00 LT 50.00'	1	
19+00.00 LT 80.00'	1	
20+13.14 LT 219.34'	1	
20+21.21 LT 80.00'	1	
24+47.25 LT 68.93'	1	
26+00.00 LT 45.00'	1	
27+94.70 LT 45.00'	1	
29+00.00 LT 45.00'	1	
29+50.00 LT 35.00'	1	
10+00.00 RT 35.00'	1	
10+50.00 RT 45.00'	1	
15+00.00 RT 45.00'	1	
15+50.00 RT 50.00'	1	
19+00.00 RT 50.00'	1	
19+50.00 RT 75.00'	1	
21+00.00 RT 75.00'	1	
21+50.00 RT 60.00'	1	
22+94.69 RT 60.00'	1	
23+50.00 RT 50.00'	1	
26+00.00 RT 50.00'	1	
26+50.00 RT 35.00'	1	
		ALL MARKERS METHOD A UNLESS NOTED
PROJECT TOTAL	25	

PERMANENT SURVEY MARKERS, TYPE I		
STATION	EACH	REMARKS
CH 13		
	1	WINGWALL - AS DIRECTED BY ENGINEER
PROJECT TOTAL	1	

PAINT PAVEMENT MARKING - LINE 4"		
STATION	FOOT	REMARKS
CH 13		
9+50 TO 29+50	4000	DOUBLE YELLOW CENTERLINE
LT 9+50 TO 29+50	2,000	WHITE EDGELINE
RT 9+50 TO 29+50	2,000	WHITE EDGELINE
		WORK TO BE DONE BY LCHD.
PROJECT TOTAL	8,000	

GUARDRAIL MARKERS, TYPE A		
STATION	EACH	REMARKS
CH 13		
LT 17+92.97 TO 19+36.12	4	BIDIRECTIONAL SILVER / SILVER
LT 20+45.41 TO 22+88.56	4	BIDIRECTIONAL SILVER / SILVER
RT 17+11.44 TO 19+54.59	4	BIDIRECTIONAL SILVER / SILVER
RT 20+63.88 TO 22+07.03	4	BIDIRECTIONAL SILVER / SILVER
PROJECT TOTAL	16	

GUARDRAIL MARKERS, TYPE B		
STATION	EACH	REMARKS
CH 13		
LT 19+36.12 TO 20+45.41	4	BIDIRECTIONAL SILVER / SILVER
RT 19+54.59 TO 20+63.88	4	
PROJECT TOTAL	8	

TERMINAL MARKER - DIRECT APPLIED		
STATION	EACH	REMARKS
CH 13		
LT 17+92.97	1	
RT 17+11.44	1	
LT 22+88.56	1	
RT 22+07.03	1	
PROJECT TOTAL	4	

TUBULAR STEEL GATE		
STATION	EACH	REMARKS
CH 13		
PEL 23+25	1	
PROJECT TOTAL	1	

TEMPORARY FENCE (SPECIAL)		
STATION	FOOT	REMARKS
CH 13		
LT 19+62 TO 21+53	235	
RT 16+79 TO 20+39	365	
RT 20+59 TO 24+00	340	
PROJECT TOTAL	940	

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DESIGNED - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -
DRAWN - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**SCHEDULE OF QUANTITIES**  
**STRUCTURE NO. 050-3604**  
 SHEET NO. 3 OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	06
	WHA* 1156D08		CONTRACT NO. 87466	
ILLINOIS FED. AID PROJECT BRS-0260105				

SEEDING, CLASS 2 (SPECIAL)		
STATION	ACRE	REMARKS
CH 13		
LT 9+50 TO 19+45	0.93	
RT 9+50 TO 20+20	0.74	
LT 20+20 TO 29+50	0.82	
RT 20+55 TO 29+50	0.66	
PEL 23+25	0.34	
PROJECT TOTAL	3.49	

X2501000\*

STONE RIPRAP, CLASS A4 (SPECIAL)		
STATION	TON	REMARKS
CH 13		
LT 10+43	31	
PROJECT TOTAL	31	

X2810208\*

INLETS, SPECIAL		
STATION	EACH	REMARKS
CH 13		
10+37.00 RT 35.22'	1	
PROJECT TOTAL	1	

X6024240\*

FENCE REMOVAL		
STATION	FOOT	REMARKS
CH 13		
LT 10+24 TO 11+78	194	
LT 13+98 TO 19+43	542	
LT 24+60 TO 26+62	222	
RT 10+08 TO 10+76	68	
RT 13+09 TO 19+76	675	
RT 20+59 TO 26+47	581	
PROJECT TOTAL	2,282	

Z0022800\*

FILE = S:\Structure\1156D06\13\analla\Plans\SOQ (General) Notes.dgn



DESIGNED - J.M.K.  
 CHECKED - G.F.S.  
 DRAWN - J.M.K.  
 CHECKED - G.F.S.

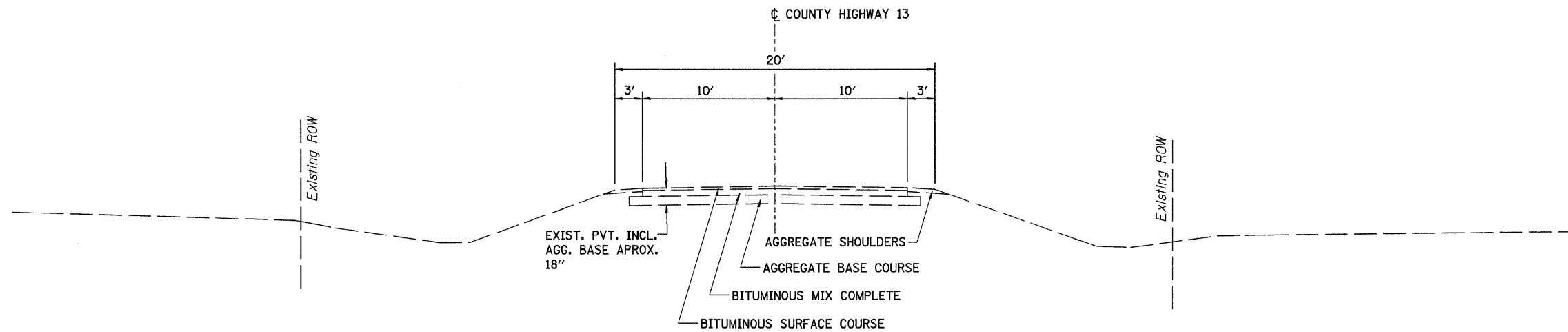
REVISED -  
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 REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

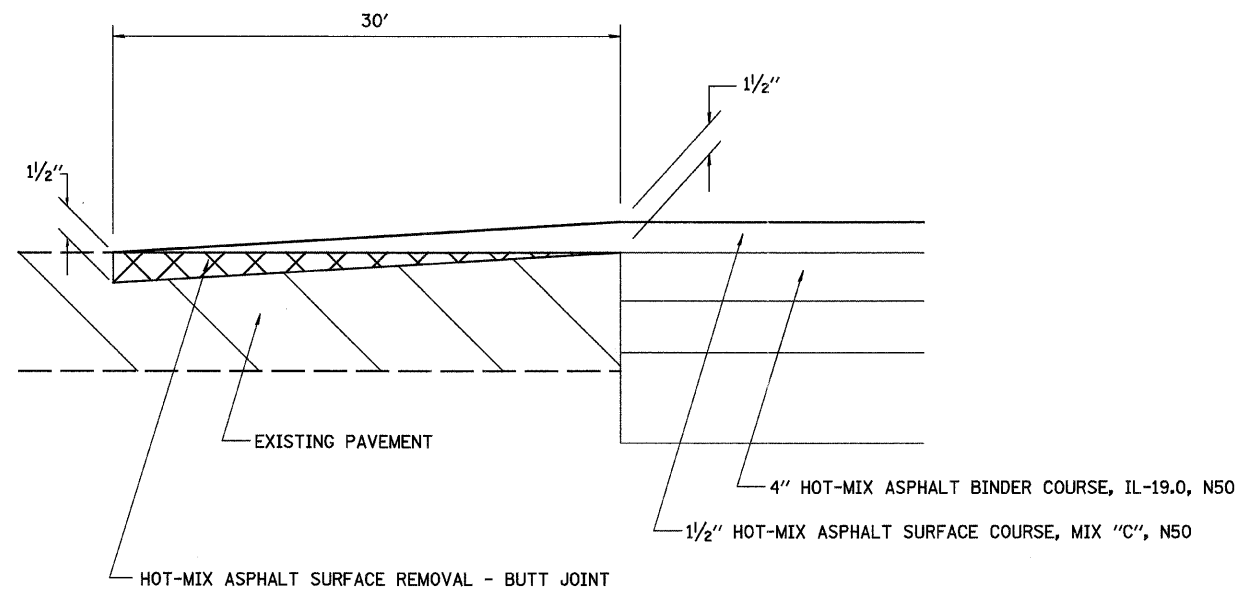
**SCHEDULE OF QUANTITIES**  
**STRUCTURE NO. 050-3604**

SHEET NO. 4 OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	07
WHA* 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				



EXISTING ROADWAY TYPICAL SECTION



TYPICAL TAPER - BUTT JOINT

STA 9+50 TO STA 9+80  
STA 29+20 TO STA 29+50

**COUNTY HIGHWAY 13  
PAVEMENT STRUCTURAL DESIGN**  
80,000 LB. DESIGN

STRUCTURAL DESIGN TRAFFIC (S.D.T.) = YEAR 2020

P.V.	697	}	792 ADT
S.U.	55		
M.U.	40		

1/2" HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50  
4" HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50  
12" SUBBASE GRANULAR MATERIAL, TYPE A

CLASS II ROADWAY  
SUBGRADE SUPPORT RATING (SSR) POOR (ASSUMED)  
TRAFFIC FACTOR: 0.22

PAVEMENT DESIGN PROCEDURES USED:  
CHAPTER 37 - BUREAU OF LOCAL ROADS MANUAL

PAVEMENT MIXTURE REQUIREMENTS			
MIXTURE USE:	SHOULDER	BINDER	SURFACE
PG:	PG 58-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	2.0 @ N50	4.0 @ N50	4.0 @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL-19.0	IL-19.0	IL-9.5
FRICTION AGGREGATE	N/A	N/A	MIX "C"
MIXTURE WEIGHT:	115 LBS/SY/IN	115 LBS/SY/IN	115 LBS/SY/IN
DENSITY TEST METHOD:	CORES*	CORES	CORES

\*Material shall be compacted to 93.0-97.4 percent of the maximum theoretical density, except that when placed as first lift on an unimproved subgrade the minimum percent compaction shall be 92.0 percent. The maximum theoretical density shall be determined from the moving average as specified in the QC/QA Specification.

FILE = S:\Projects\116606\sh13\as\13\Plans\Typical Sections.dgn



DESIGNED -	J.M.K.	REVISED -	
CHECKED -	G.F.S.	REVISED -	
DRAWN -	J.M.K.	REVISED -	
CHECKED -	G.F.S.	REVISED -	

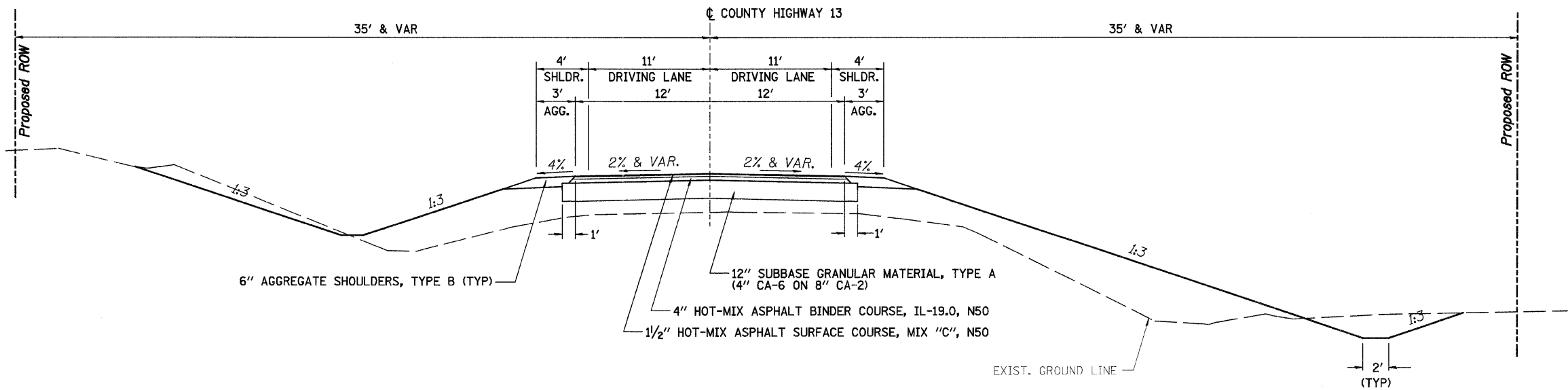
**LASALLE COUNTY  
C.H. 13 OVER TOMAHAWK CREEK  
STATION 20+00**

**TYPICAL SECTIONS  
STRUCTURE NO. 050-3604**

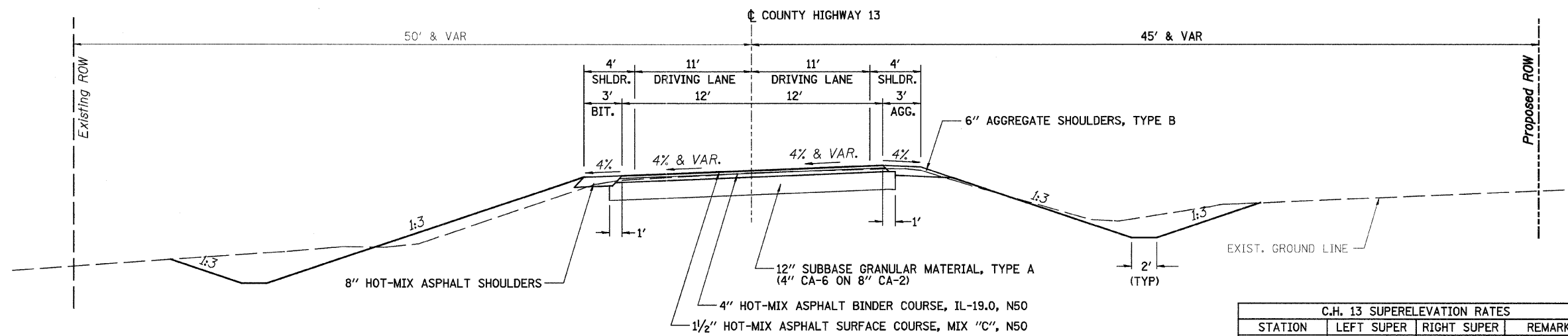
SHEET NO. 1 OF 3 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	08
WHA* 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				





STA 9+50.00 TO STA 9+51.68  
 STA 29+03.20 TO STA 29+50.00

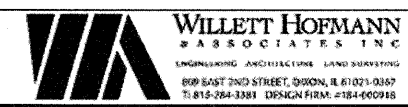


STA 9+51.68 TO STA 16+68.69

C.H. 13 SUPERELEVATION RATES			
STATION	LEFT SUPER	RIGHT SUPER	REMARKS
9+51.68	-2.00%	-2.00%	NORMAL CROWN
10+03.68	-2.00%	0.00%	
10+55.68	-2.00%	2.00%	FULL SUPER
11+06.68	-4.00%	4.00%	MAX SUPER
15+13.69	-4.00%	4.00%	MAX SUPER
15+64.69	-2.00%	2.00%	FULL SUPER
16+16.69	-2.00%	0.00%	
16+68.69	-2.00%	-2.00%	NORMAL CROWN

PC STA = 10+60.18  
 PT STA = 15+60.19  
 T.R. = 52'  
 S.E. RUN = 103'  
 T.L. = 155'

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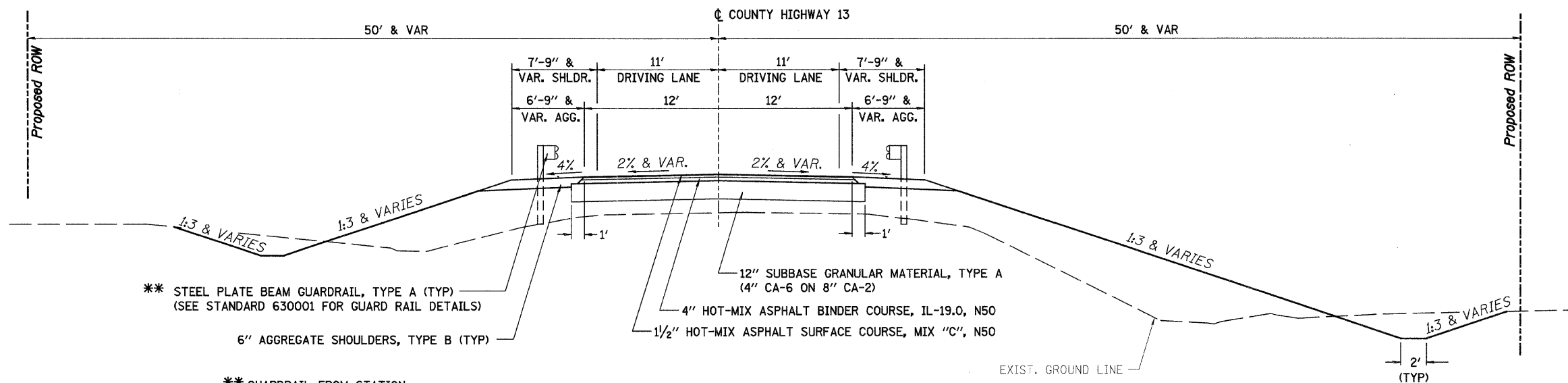


DESIGNED	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-
DRAWN	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**TYPICAL SECTIONS**  
**STRUCTURE NO. 050-3604**  
 SHEET NO. 2 OF 3 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	09
WHA# 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				

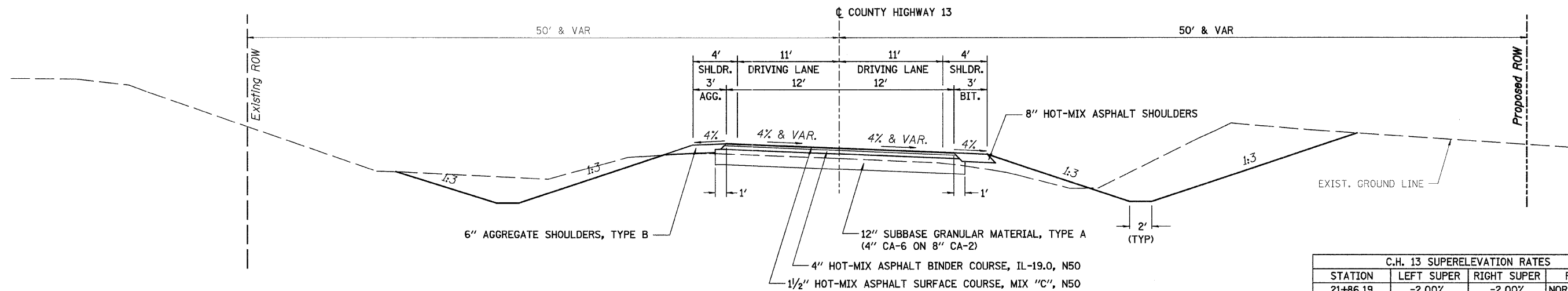


\*\* STEEL PLATE BEAM GUARDRAIL, TYPE A (TYP)  
(SEE STANDARD 630001 FOR GUARD RAIL DETAILS)

6" AGGREGATE SHOULDERS, TYPE B (TYP)

\*\* GUARDRAIL FROM STATION:  
LT 17+92.97 TO 19+36.12  
LT 20+45.41 TO 22+88.56  
RT 17+11.44 TO 19+54.59  
RT 20+63.88 TO 22+07.03

STA 16+68.69 TO 19+02.02  
BRIDGE OMMISION STA 19+02.02 TO 20+97.98  
STA 20+97.98 TO 21+86.19



6" AGGREGATE SHOULDERS, TYPE B

STA 21+86.19 TO STA 29+03.20

C.H. 13 SUPERELEVATION RATES			
STATION	LEFT SUPER	RIGHT SUPER	REMARKS
21+86.19	-2.00%	-2.00%	NORMAL CROWN
22+38.19	0.00%	-2.00%	
22+90.19	2.00%	-2.00%	FULL SUPER
23+41.19	4.00%	-4.00%	MAX SUPER
27+48.20	4.00%	-4.00%	MAX SUPER
27+99.20	2.00%	-2.00%	FULL SUPER
28+51.20	0.00%	-2.00%	
29+03.20	-2.00%	-2.00%	NORMAL CROWN

PC STA = 22+94.69  
PT STA = 27+94.70  
T.R. = 52'  
S.E. RUN = 103'  
T.L. = 155'

FILE = S:\Projects\1156026\13\_Lasalle\Plans\Typical Sections.dgn



DESIGNED	J.M.K.	REVISED	-
CHECKED	G.F.S.	REVISED	-
DRAWN	J.M.K.	REVISED	-
CHECKED	G.F.S.	REVISED	-

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**TYPICAL SECTIONS**  
**STRUCTURE NO. 050-3604**

SHEET NO. 3 OF 3 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	10
WHA# 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260109				

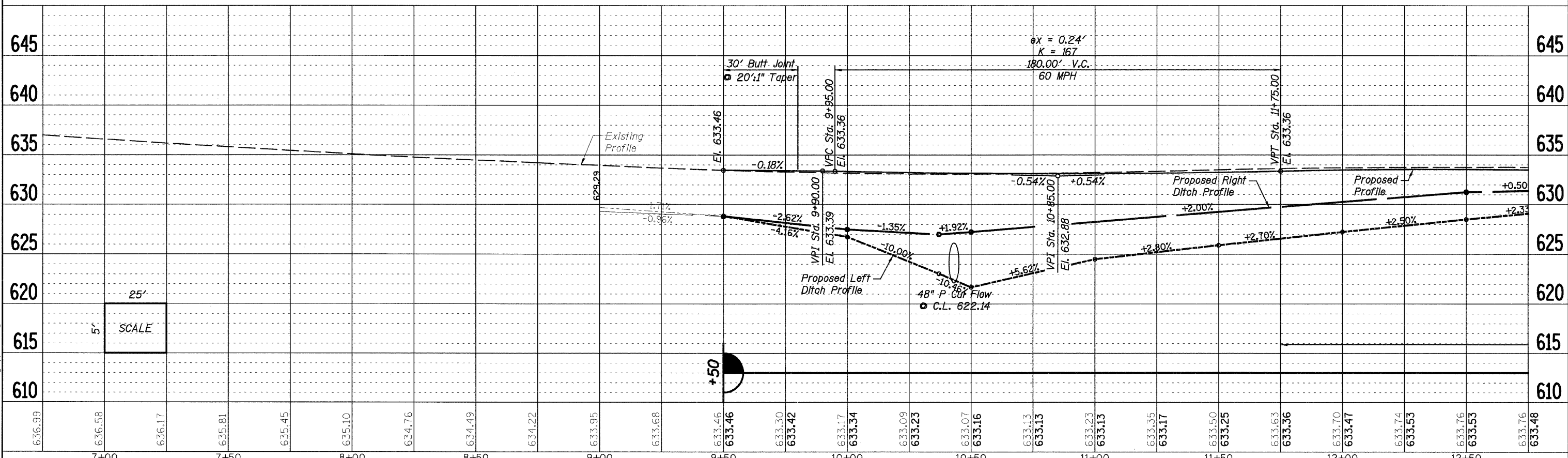
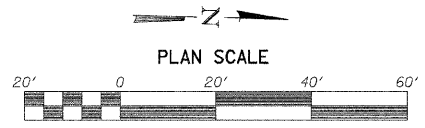
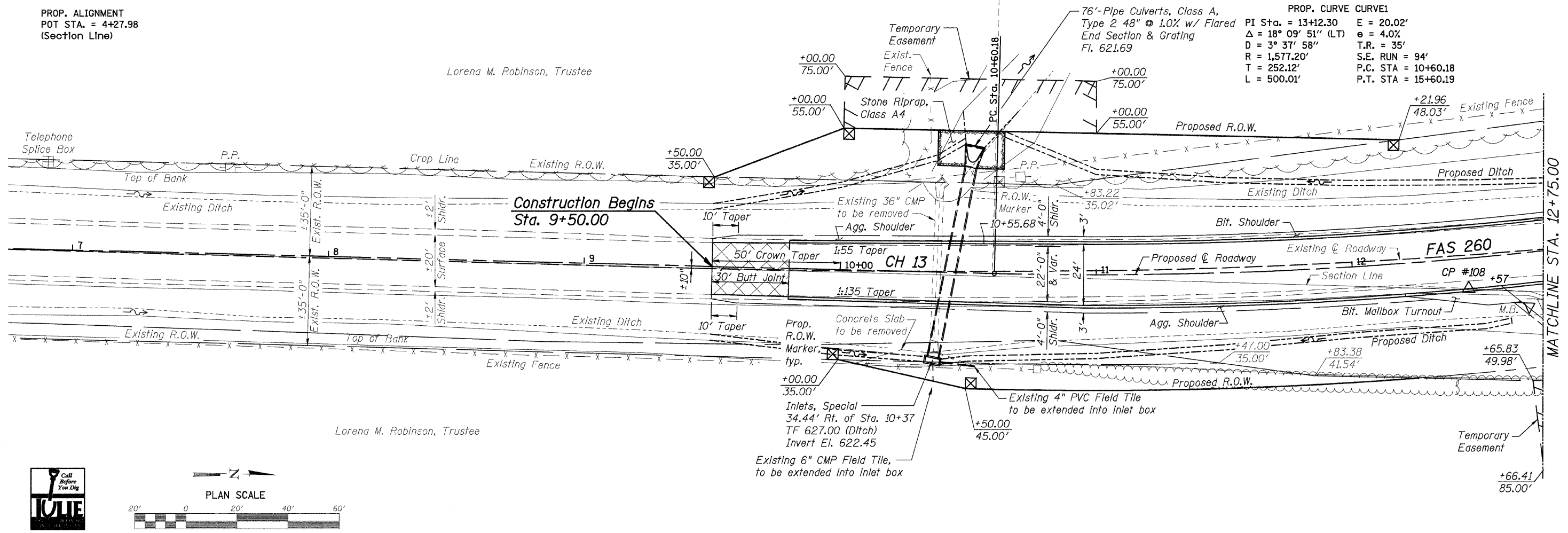
PROP. ALIGNMENT  
 POT STA. = 4+27.98  
 (Section Line)

Lorena M. Robinson, Trustee

PROP. CURVE CURVE1  
 PI Sta. = 13+12.30 E = 20.02'  
 $\Delta = 18^\circ 09' 51''$  (LT)  $e = 4.0\%$   
 $D = 3^\circ 37' 58''$  T.R. = 35'  
 $R = 1,577.20'$  S.E. RUN = 94'  
 $T = 252.12'$  P.C. STA = 10+60.18  
 $L = 500.01'$  P.T. STA = 15+60.19

DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	

DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	



7+00	7+50	8+00	8+50	9+00	9+50	10+00	10+50	11+00	11+50	12+00	12+50																											
636.99	636.58	636.17	635.81	635.45	635.10	634.76	634.49	634.22	633.95	633.68	633.46	633.46	633.30	633.42	633.17	633.34	633.09	633.23	633.07	633.16	633.13	633.13	633.23	633.13	633.35	633.17	633.50	633.25	633.63	633.36	633.70	633.47	633.74	633.53	633.76	633.53	633.76	633.48

**WILLETT HOFMANN ASSOCIATES INC.**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 805 EAST 2ND STREET, DUNDEE, IL 61021-0387  
 T. 815-264-7387 DESIGN FIRM: 718-4-00918

DESIGNED - B.S.K.	REVISED -
CHECKED - M.A.C.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - B.S.K.	REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**PLAN & PROFILE**  
**STRUCTURE NO. 050-3604**  
 SHEET NO. 1 OF 5 SHEETS STA. 6+75.00 TO STA. 12+75.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	11
WHA* 1156D08	CONTRACT NO. 87466		ILLINOIS FED. AID PROJECT BRS-0260105	

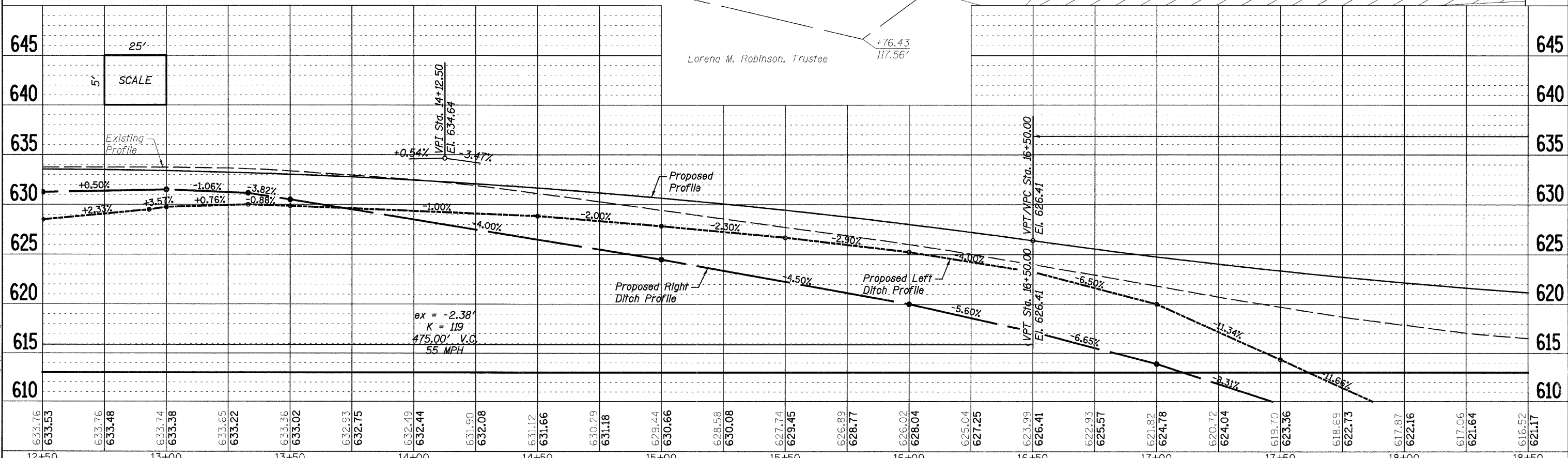
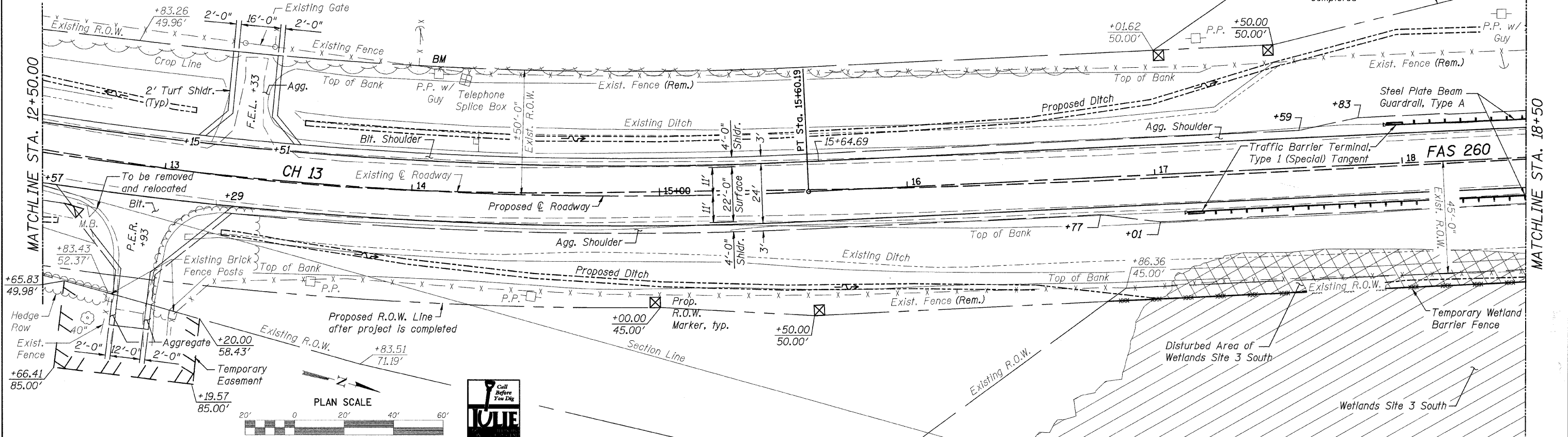
PROP. CURVE CURVE1  
 PI Sta. = 13+12.30 E = 20.02'  
 $\Delta = 18^\circ 09' 51''$  (LT)  $e = 4.0\%$   
 D = 3° 37' 58" T.R. = 35'  
 R = 1,577.20' S.E. RUN = 94'  
 T = 252.12' P.C. STA = 10+60.18  
 L = 500.01' P.T. STA = 15+60.19

BENCHMARK: RR Spike in 3rd PP South of Bridge  
 $\pm 46'$  Lt. of Sta.  $\pm 14+08$   
 El. 636.94

Lorena M. Robinson, Trustee

DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	

DATE	
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REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	



**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**PLAN & PROFILE**  
**STRUCTURE NO. 050-3604**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	12
WHA* 1156D08	CONTRACT NO. 87466			

SHEET NO. 2 OF 5 SHEETS STA. 12+50.00 TO STA. 18+50.00

ILLINOIS FED. AID PROJECT BRS-0260105

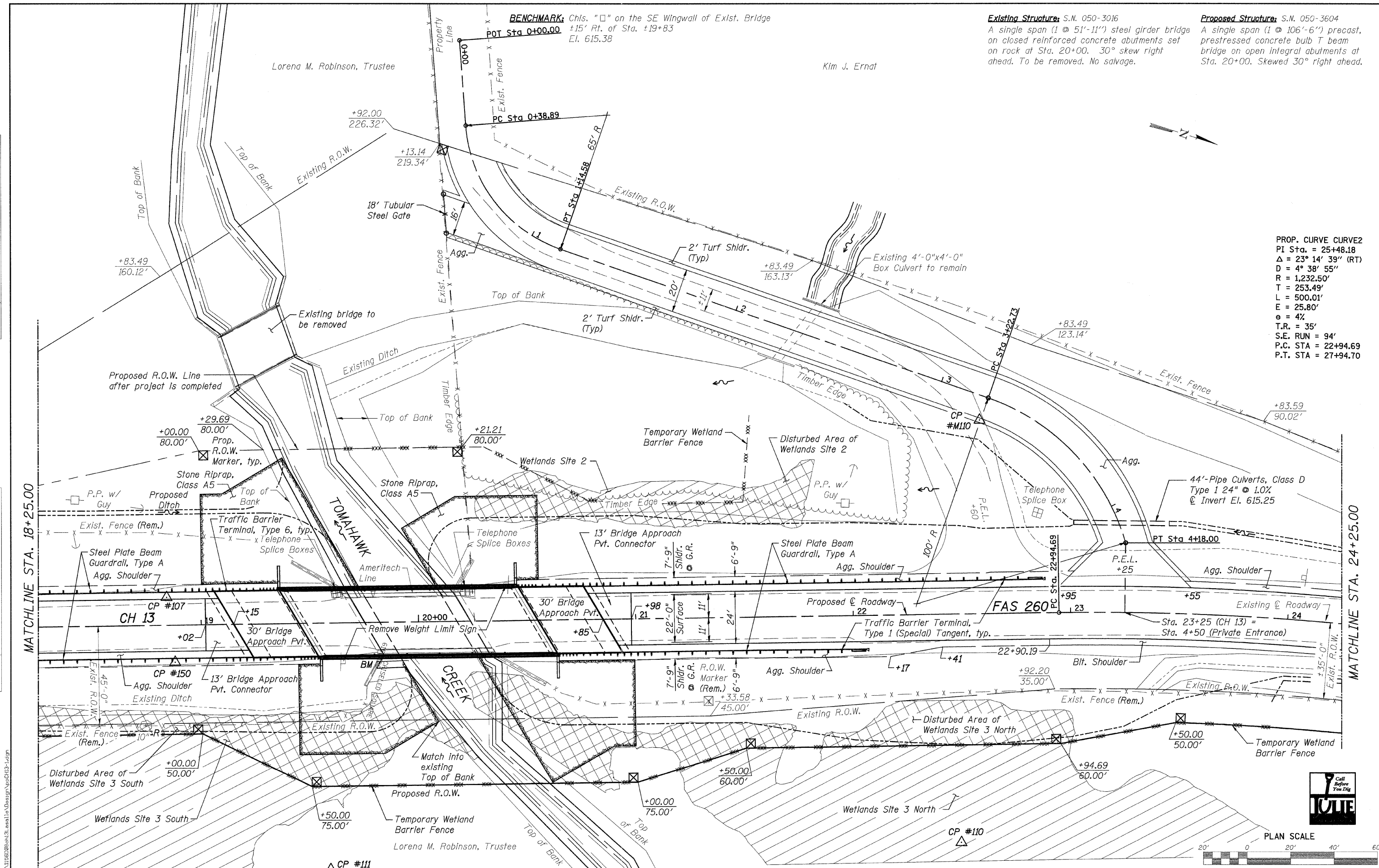
**WILLET HOFMANN ASSOCIATES INC.**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 809 EAST 2ND STREET, CHICAGO, IL 60611-0367  
 T: 815-284-3181 DESIGN FIRM #184-000918

DESIGNED - B.S.K.	REVISED -
CHECKED - M.A.C.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - B.S.K.	REVISED -

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PLAN	SURVEYED
	PLOTTED
	NOTED
	CHECKED
	REVISIONS
	NO. DATE

DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	NOTED
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	REVISIONS
	NO. DATE

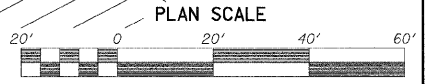


**BENCHMARK:** Chls. "□" on the SE Wingwall of Exist. Bridge  
 ±15' Rt. of Sta. ±19+83  
 El. 615.38

**Existing Structure:** S.N. 050-3016  
 A single span (1 @ 51'-11") steel girder bridge on closed reinforced concrete abutments set on rock at Sta. 20+00. 30° skew right ahead. To be removed. No salvage.

**Proposed Structure:** S.N. 050-3604  
 A single span (1 @ 106'-6") precast, prestressed concrete bulb T beam bridge on open integral abutments at Sta. 20+00. Skewed 30° right ahead.

**PROP. CURVE CURVE2**  
 PI Sta. = 25+48.18  
 $\Delta = 23^\circ 14' 39''$  (RT)  
 D = 4° 38' 55"  
 R = 1,232.50'  
 T = 253.49'  
 L = 500.01'  
 E = 25.80'  
 e = 4%  
 T.R. = 35'  
 S.E. RUN = 94'  
 P.C. STA = 22+94.69  
 P.T. STA = 27+94.70



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DESIGNED	- B.S.K.	REVISED	-
CHECKED	- M.A.C.	REVISED	-
DRAWN	- R.D.A.	REVISED	-
CHECKED	- B.S.K.	REVISED	-

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**PLAN & PROFILE**  
**STRUCTURE NO. 050-3604**

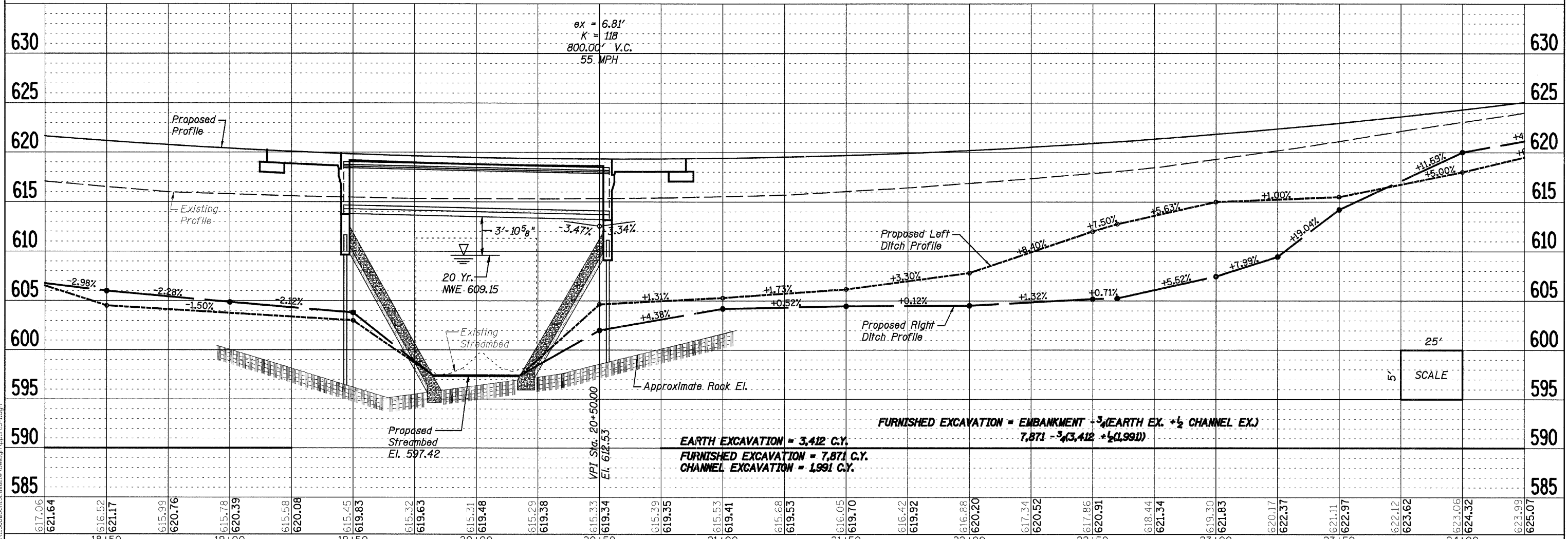
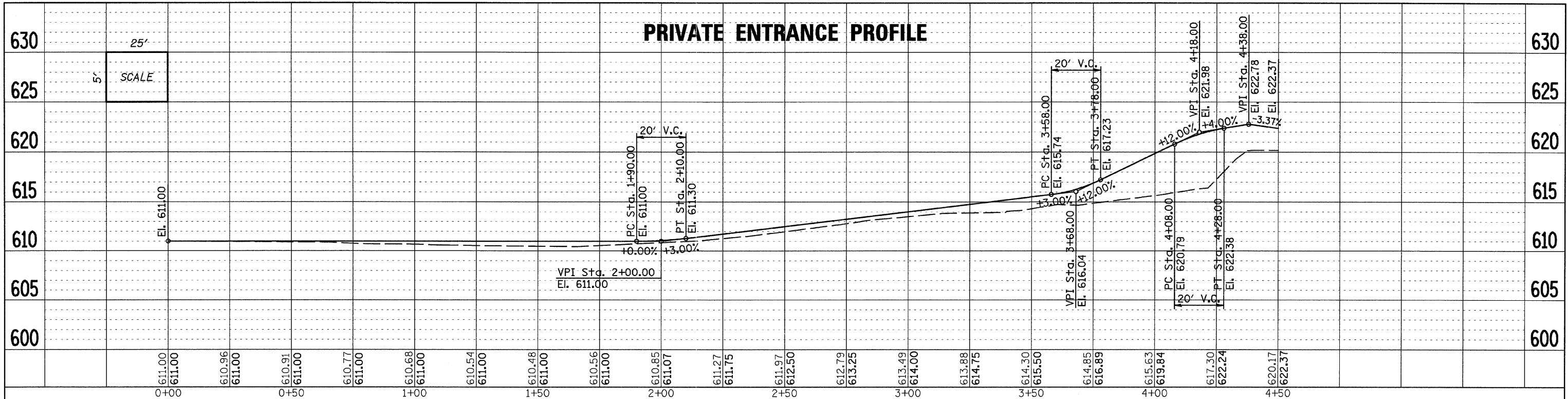
SHEET NO. 3 OF 5 SHEETS STA. 18+25.00 TO STA. 24+25.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	13
WHA# 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				

PLAN	DATE
BY	
REVIEWED	
PLOTTED	
ALIGNED	
CHECKED	
NO. 000	
NO. 000	
NO. 000	
NO. 000	

PROFILE	DATE
BY	
REVIEWED	
PLOTTED	
GRADES	
CHECKED	
NO. 000	
NO. 000	
NO. 000	
NO. 000	

# PRIVATE ENTRANCE PROFILE



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DESIGNED	- B.S.K.	REVISED	-
CHECKED	- M.A.C.	REVISED	-
DRAWN	- R.D.A.	REVISED	-
CHECKED	- B.S.K.	REVISED	-

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

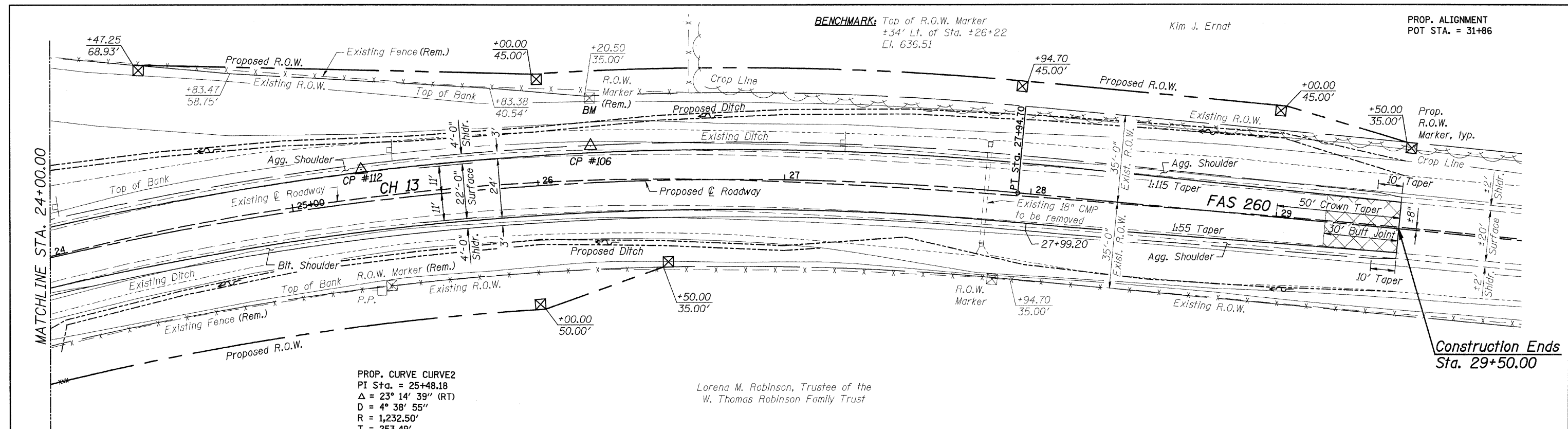
**PLAN & PROFILE**  
**STRUCTURE NO. 050-3604**

SHEET NO. 4 OF 5 SHEETS STA. 18+25.00 TO STA. 24+25.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	14
WHA# 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				

DATE	
BY	
PLAN	
NO.	
DATE	
BY	
PROFILE	
NO.	

DATE	
BY	
PROFILE	
NO.	
DATE	
BY	
PLAN	
NO.	



PROP. CURVE CURVE2  
 PI Sta. = 25+48.18  
 $\Delta = 23^\circ 14' 39''$  (RT)  
 D = 4° 38' 55"  
 R = 1,232.50'  
 T = 253.49'  
 L = 500.01'  
 E = 25.80'  
 $e = 4\%$   
 T.R. = 35'  
 S.E. RUN = 94'  
 P.C. STA = 22+94.69  
 P.T. STA = 27+94.70

Lorena M. Robinson, Trustee of the  
 W. Thomas Robinson Family Trust

BENCHMARK: Top of R.O.W. Marker  
 $\pm 34'$  Lt. of Sta.  $\pm 26+22$   
 El. 636.51

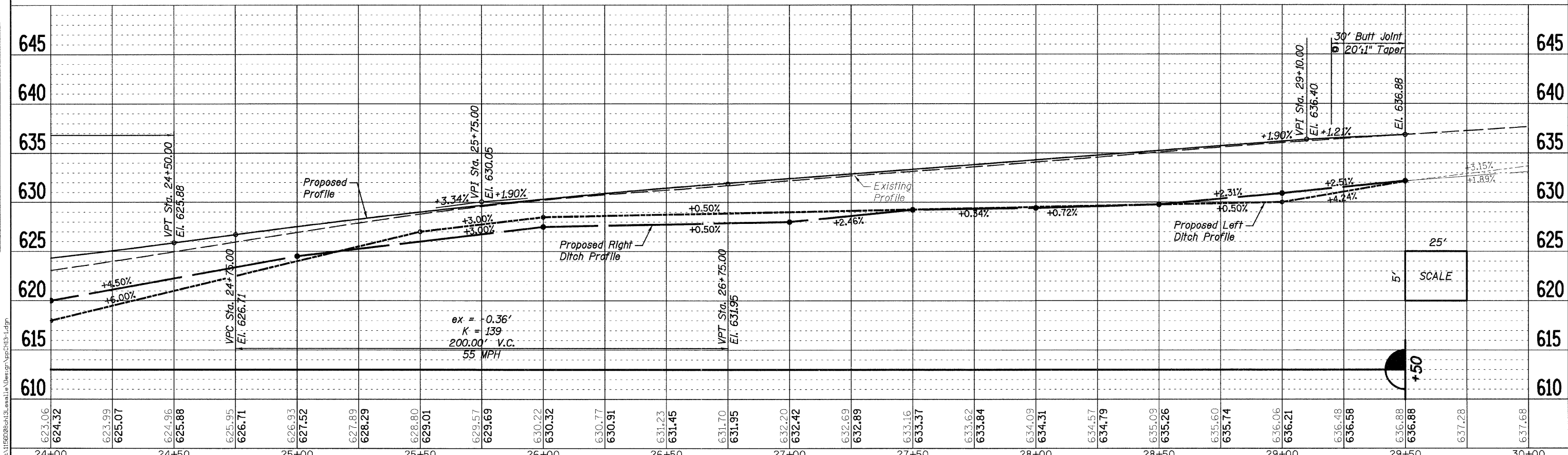
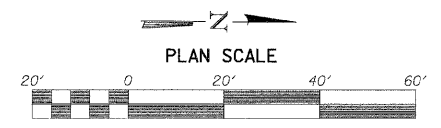
Kim J. Ernat

PROP. ALIGNMENT  
 POT STA. = 31+86

**UTILITIES:**

Ameren IP  
 Attn: Kathy Cromwell  
 1450 Red Adams Road  
 Kewanee, IL 61443  
 (309) 852-2963

Nicor Gas  
 Attn: Connie Lane  
 1844 Ferry Road  
 Naperville, IL 60563  
 (630) 388-3830



24+00	24+50	25+00	25+50	26+00	26+50	27+00	27+50	28+00	28+50	29+00	29+50	30+00																																		
623.06	624.32	623.99	625.07	624.96	625.88	625.95	626.71	626.93	627.52	627.89	628.29	628.80	629.01	629.57	629.69	630.22	630.32	630.77	630.91	631.23	631.45	631.70	631.95	632.20	632.42	632.69	632.89	633.16	633.37	633.62	633.84	634.09	634.31	634.57	634.79	635.09	635.26	635.60	635.74	636.06	636.21	636.48	636.58	636.88	637.28	637.68



DESIGNED - B.S.K.  
 CHECKED - M.A.C.  
 DRAWN - R.D.A.  
 CHECKED - B.S.K.

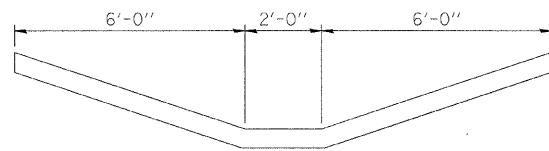
REVISED -  
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 REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

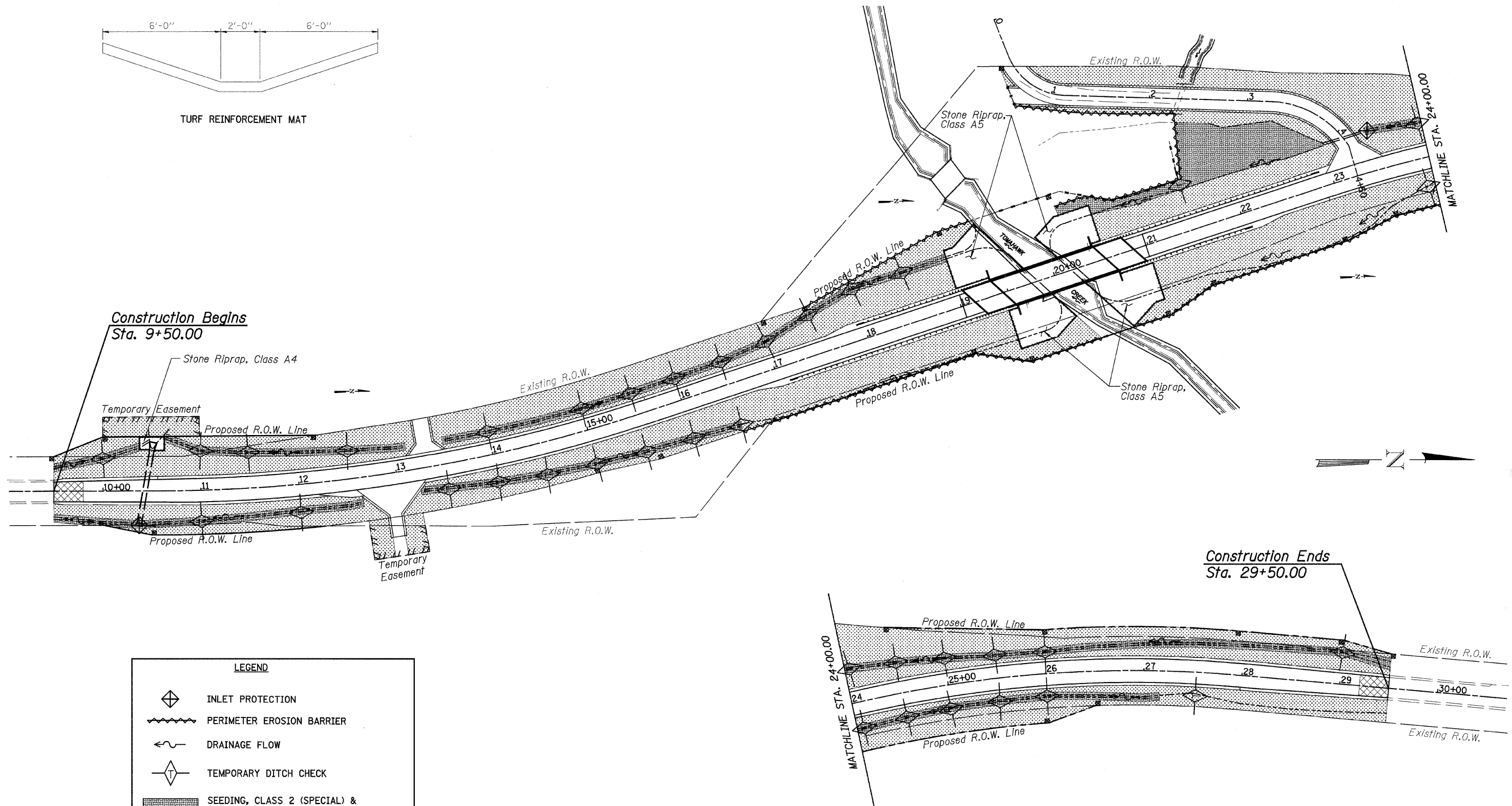
**PLAN & PROFILE**  
**STRUCTURE NO. 050-3604**

SHEET NO. 5 OF 5 SHEETS  
 STA. 24+00.00 TO STA. 30+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	15
WHA# 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-026010D				



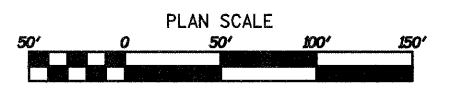
TURF REINFORCEMENT MAT



Construction Begins  
Sta. 9+50.00

Construction Ends  
Sta. 29+50.00

LEGEND	
	INLET PROTECTION
	PERIMETER EROSION BARRIER
	DRAINAGE FLOW
	TEMPORARY DITCH CHECK
	SEEDING, CLASS 2 (SPECIAL) & TURF REINFORCEMENT MAT
	SEEDING, CLASS 2 (SPECIAL) & EROSION CONTROL BLANKET



FILE: S:\Sprojects\1156106\13\_2011\13\_2011\_Plan\Erosion\_Control.dgn



DESIGNED - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -
DRAWN - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**STORM WATER POLLUTION PREVENTION PLAN**  
**STRUCTURE NO. 050-3604**  
SHEET NO. 1 OF 2 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	16
WHA# 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260109				



# STORM WATER POLLUTION PREVENTION PLAN EROSION CONTROL PLAN

THE FOLLOWING PLAN WAS ESTABLISHED AND INCLUDED IN THESE PLANS TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE SILTATION WITHIN THE CONSTRUCTION ZONE AND TO ELIMINATE SEDIMENTS FROM ENTERING AND LEAVING THE CONSTRUCTION ZONE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN ITEMS, AS SHOWN IN THIS PLAN AND REFERENCED BY THE LEGEND, SHALL BE PLACED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION RESULTING FROM THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL PLACE PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A REASONABLE AMOUNT OF TIME; THEREFORE, REDUCING THE AMOUNT OF AREA BEING OPEN TO THE POSSIBILITY OF EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE RESIDENT ENGINEER WILL DETERMINE IF TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED, THE PROPER METHOD OF INSTALLATION, AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS SHALL BE ADDED WHICH ARE NOT INCLUDED IN THE PLANS. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 OF THE PLANS.

**SITE DESCRIPTION**

DESCRIPTION OF CONSTRUCTION ACTIVITY: RECONSTRUCTION OF COUNTY HIGHWAY 13 OVER TOMAHAWK CREEK.

THIS PROJECT CONSISTS OF EARTH EXCAVATION, PAVEMENT AND STRUCTURE REMOVAL & REPLACEMENT, NEW HORIZONTAL AND VERTICAL ALIGNMENTS, DITCHES, CULVERTS, AND GUARDRAIL.

**DESCRIPTION OF INTENDED SEQUENCE OF ACTIVITIES:**

THE SEQUENCE OF EVENTS ARE AS FOLLOW: PAVEMENT REMOVAL, EARTH EXCAVATION, STORM SEWER INSTALLATION, INSTALLATION OF INLET & PIPE PROTECTION, BRIDGE & CULVERT CONSTRUCTION, AGGREGATE BASE, BITUMINOUS SURFACE AND RELATED APPURTENANCES, PLACEMENT OF PERMANENT EROSION CONTROL INCLUDING SEEDING

TOTAL CONSTRUCTION SITE (CONSTRUCTION LIMIT TO CONSTRUCTION LIMIT) 7.0 ACRES  
DISTURBED SOIL BY EXCAVATION 5.0 ACRES

**SUPPORTING REPORTS AND PLANS**

THE FOLLOWING ASSISTED IN DEVELOPING THE EROSION CONTROL PLAN AS REFERENCED DOCUMENTS:

SOIL PROFILE SHEETS, PROJECT PLAN DOCUMENTS

DRAINAGE TRIBUTARIES RECEIVING WATER FROM CONSTRUCTION SITE:  
TOMAHAWK CREEK

EROSION CONTROLS AND SEDIMENT CONTROL PROCEDURES  
STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION:  
SILT FENCE INSTALLATION

**STABILIZATION PRACTICES DURING CONSTRUCTION:**

- (a) WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
- (b) EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN DAYS.
- (c) AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:
  - I. PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.
  - II. TEMPORARILY SEED ERODABLE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODABLE SURFACE AREA WITHIN THE CONTRACT LIMITS.
- (d) EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR SEVEN DAYS.
- (e) CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR OTHER POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
- (f) THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT DAILY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE WEEKLY AND AFTER RAINS OF 1/2 INCH OR GREATER OR EQUIVALENT SNOWFALL AND DURING THE WINTER SHUTDOWN PERIOD. THE PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER ON A BI-WEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.
- (g) SEDIMENT COLLECTED DURING CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR EARTH EXCAVATION (SPECIAL).
- (h) THE TEMPORARY EROSION CONTROL SYSTEM SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

**MAINTENANCE AFTER FINAL GRADING**

TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED WITH THE PROPER STAND. SEED SHALL BE WATERED ACCORDING TO THE SPECIFICATIONS AND ADDITIONAL WATERINGS SHALL BE USED AS DIRECTED BY THE ENGINEER.

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DESIGNED - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -
DRAWN - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -

**LASALLE COUNTY  
C.H. 13 OVER TOMAHAWK CREEK  
STATION 20 + 00**

**STORM WATER POLLUTION PREVENTION PLAN  
STRUCTURE NO. 050-3604**

SHEET NO. 2 OF 2 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	17
WHA* 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				

**EXISTING STRUCTURE NO. 1:** S.N. 050-3016

Originally built in 1956 as F.A.S. Route 260, Section 41-G. The existing structure is a single span (1@51'-11") steel girder structure on closed reinforced concrete abutments. 53'-9" Bk. to Bk. of abutments and 27'-8" out to out of deck. Structure to be removed and replaced. Road shall be closed to traffic during construction.

No salvage.

**EXISTING STRUCTURE NO. 2:**

There also is a second existing reinforced concrete closed abutment slab structure located west of the bridge that shall be removed.

No salvage.

**BENCH MARK:** Chiseled "□" on the southeast wingwall of exist. bridge, Elev. 615.38

**INDEX OF SHEETS**

- 1 General Plan & Elevation
- 2 Riprap & Pile Layout
- 3-4 Top of Slab Elevations
- 5-6 Top of Approach Slab Elevations
- 7 Framing Plan
- 8 Superstructure
- 9 Superstructure Details
- 10 Diaphragm Details
- 11 Bridge Approach Slab Details
- 12 63" PPC Bulb T Beam
- 13 63" PPC Bulb T Beam Details
- 14 South Abutment Details
- 15 North Abutment Details
.
- 16 HP Pile Details
- 17 Bar Splicer Assembly Details
- 18 Boring Logs

**BILL OF MATERIAL - BRIDGE**

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.	---	1,991	1,991
Removal of Existing Structures No. 1	Each	---	---	1
Removal of Existing Structures No. 2	Each	---	---	1
Structure Excavation	Cu. Yd.	---	178	178
Floor Drains	Each	12	---	12
Concrete Structures	Cu. Yd.	22	46.7	68.7
Concrete Superstructure	Cu. Yd.	273.3	---	273.3
Bridge Deck Grooving	Sq. Yd.	534	---	534
Concrete Encasement	Cu. Yd.	---	4.2	4.2
Protective Coat	Sq. Yd.	665	---	665
Furnishing and Erecting Precast Prestressed Concrete Bulb T-Beams 63"	Foot	539.0	---	539.0
Reinforcement Bars, Epoxy Coated	Pound	52,940	5,830	58,770
Bar Splicers	Each	62	---	62
Furnishing Steel Piles HP12x6.3	Foot	---	170	170
Driving Piles	Foot	---	170	170
Test Pile Steel HP12x6.3	Each	---	2	2
Name Plates	Each	1	---	1
Geocomposite Wall Drain	Sq. Yd.	---	126	126
Porous Granular Embankment, Special	Cu. Yd.	---	186	186
Stone Riprap, Class A5 (Special)	Ton	---	1,652	1,652
Pipe Underdrains for Structures 4"	Foot	---	202	202

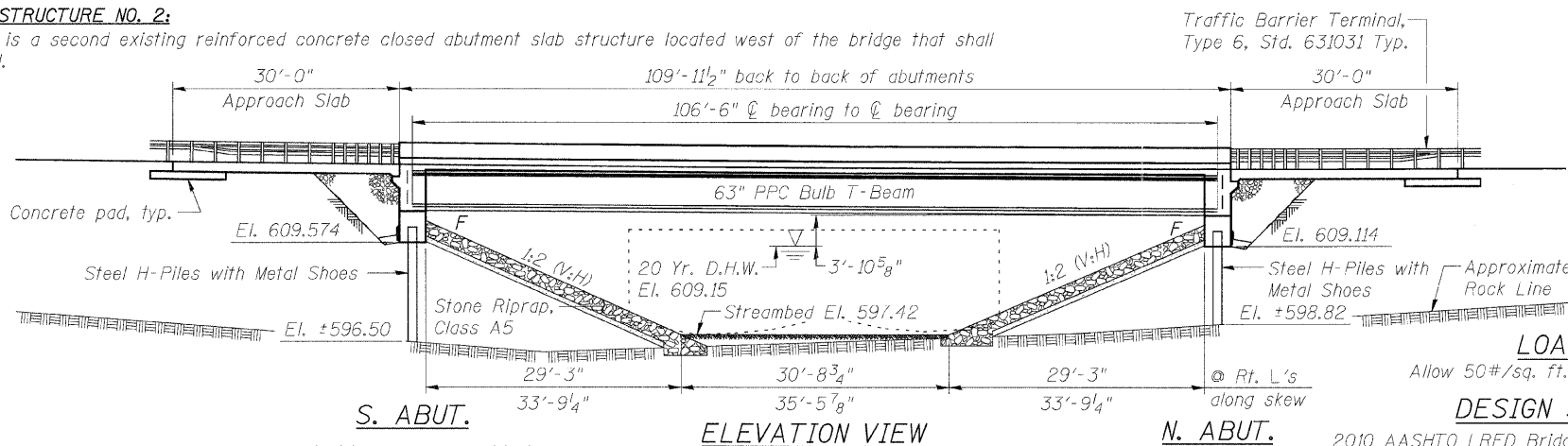
\* See Special Provisions.  
\*\* Includes Deck, Approach Pavement, and Top & Inside Face of Parapet Only.

**GENERAL NOTES:**

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

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



**LOADING HL-93**

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

**DESIGN SPECIFICATIONS**

2010 AASHTO LRFD Bridge Design Specifications, 5th. Edition & 2011 Interims

**DESIGN STRESSES**

**FIELD UNITS**

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

**PRECAST PRESTRESSED UNITS**

f'c = 7,000 psi  
f'ci = 6,000 psi  
fpu = 270,000 psi (1/2" φ Low Lax Strands)  
fpbt = 201,960 psi (1/2" φ Low Lax Strands)

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.045g  
Design Spectral Acceleration at 0.2 sec. (SDs) = 0.11g  
Soil Site Class = B

**WATERWAY INFORMATION**

Drainage Area = 36.4 sq. mi. Low Grade Elev. 619.34 @ Sta. 20+57.64

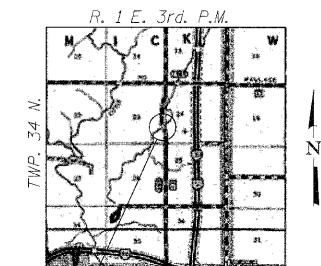
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	3,050	477	636	609.15	0.86	0.12	610.01	609.03
Base	100	4,460	527	728	610.31	2.59	0.06	612.90	610.37

**DESIGN SCOUR ELEVATION TABLE**

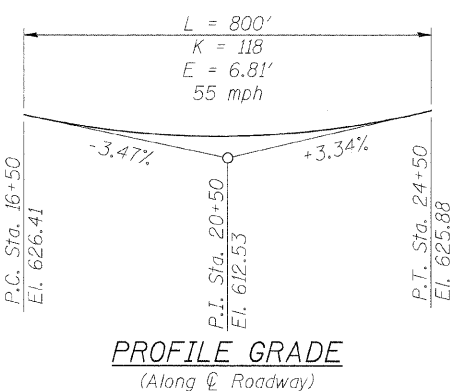
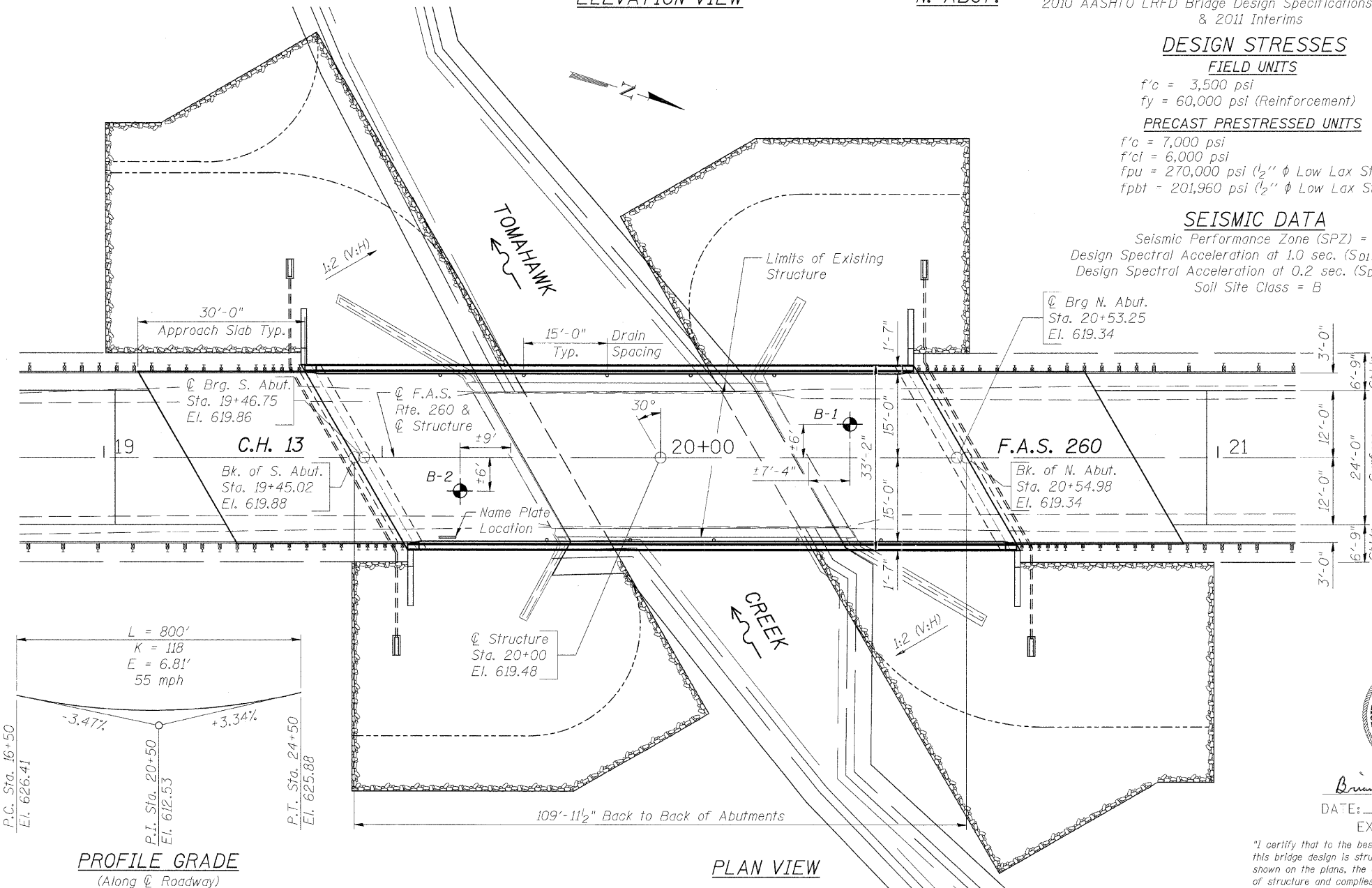
Design Scour Elevation (ft.)	S. Abut.	N. Abut.
	609.64	609.13

TOMAHAWK CREEK  
BUILT 2012 BY  
LASALLE COUNTY  
SECTION 10-00651-00-BR  
F.A.S. RTE. 260 STATION 20+00  
STR. NO. 050-3604 LOADING HL-93

**NAME PLATE LETTERING**  
Refer To Std. 515001



Bridge Location  
LOCATION SKETCH



**PROFILE GRADE**  
(Along Centerline Roadway)

**PLAN VIEW**



Brian K. Conner  
DATE: 12/23/2011  
EXPIRES 11/30/12

"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 Bridge Design Specifications.'"

**GENERAL PLAN & ELEVATION**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**F.A.S. 260 - SEC. 10-00651-00-BR**  
**LASALLE COUNTY**  
**STATION 20+00**  
**STRUCTURE NO. 050-3604**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	18
WHA* 1156D08		CONTRACT NO. 87466		

FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT BRS-0260105

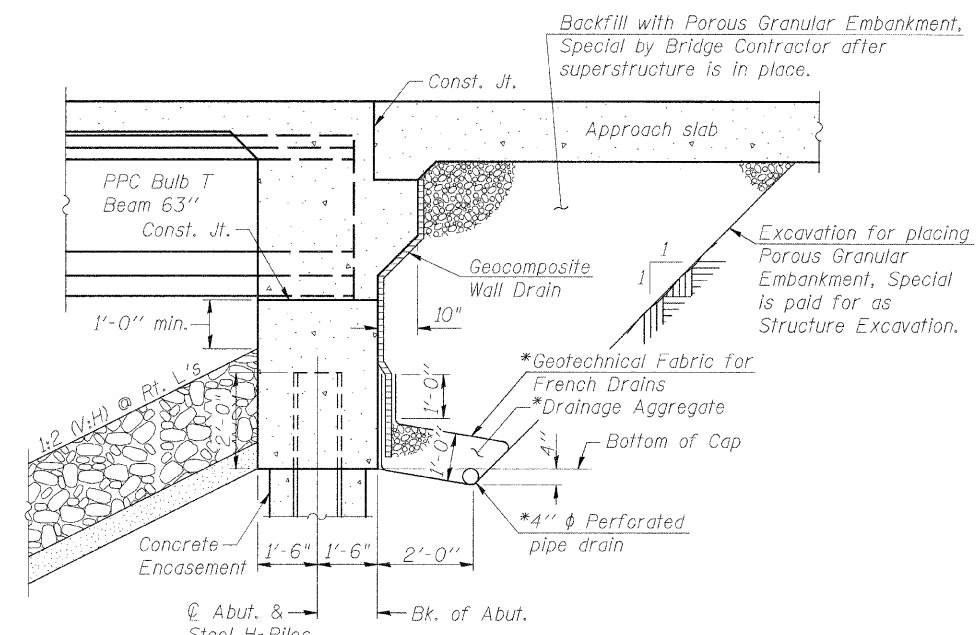
**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**GENERAL PLAN & ELEVATION**  
**STRUCTURE NO. 050-3604**  
STRUCTURAL SHEET NO. 1 OF 18 SHEETS

DESIGNED - B.K.C.	REVISED -
CHECKED - M.A.C.	REVISED -
DRAWN - F.D.L.	REVISED -
CHECKED - B.K.C.	REVISED -



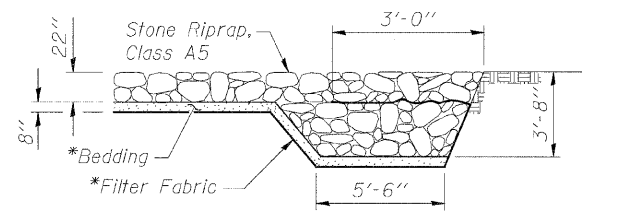
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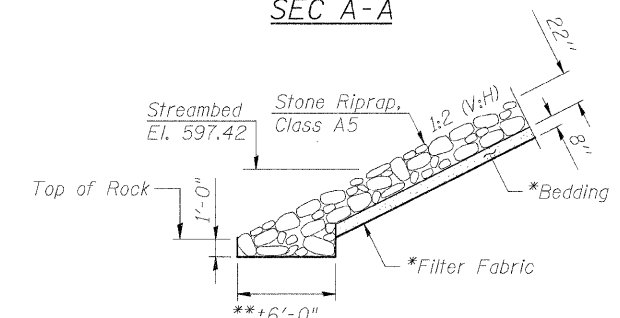
**SECTION THRU INTEGRAL ABUTMENT**  
(Horiz. dim. @ Rt. L's)

\*Included in the cost of Pipe Underdrains for Structures.

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



**SEC A-A**



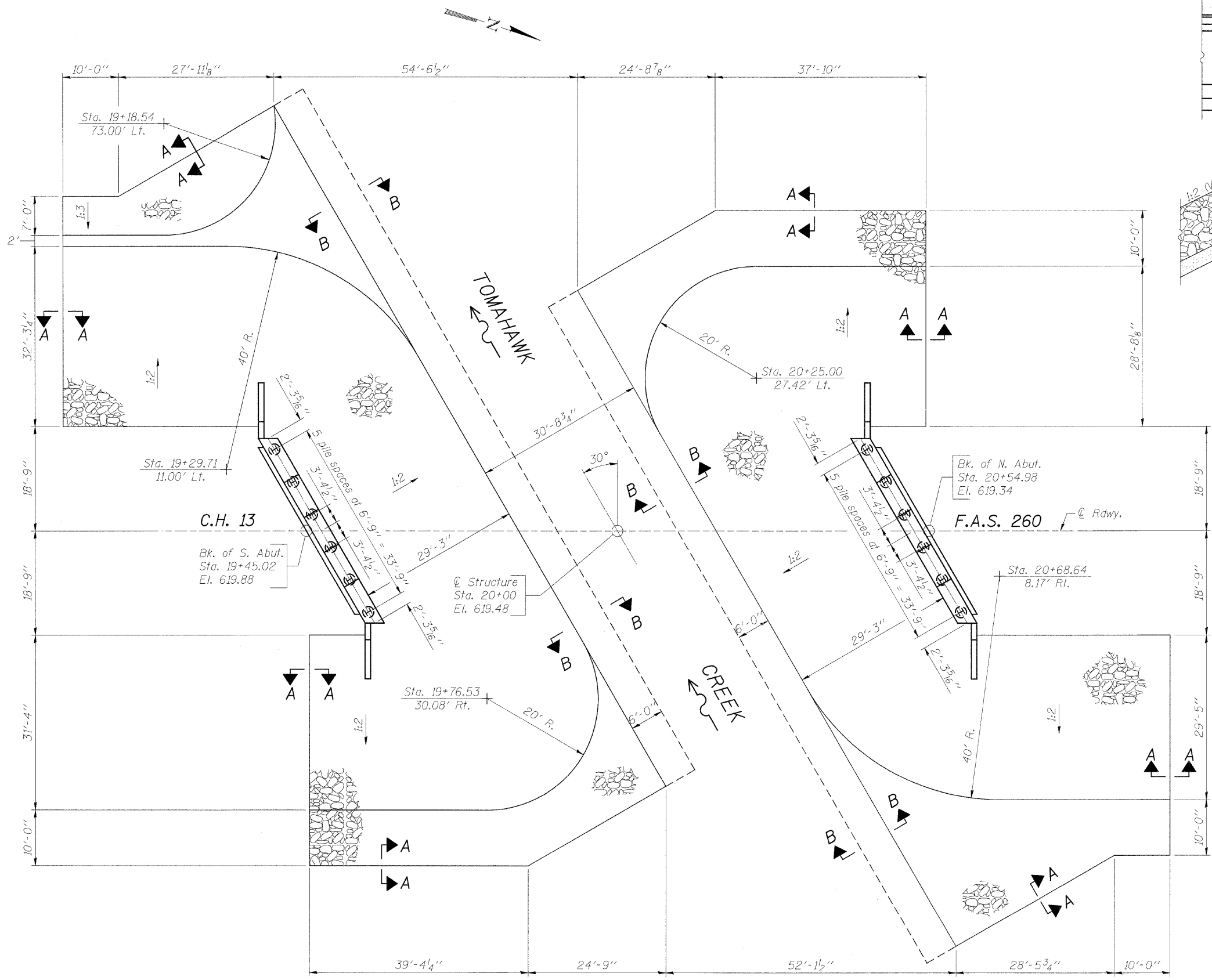
**SECTION B-B**

**STONE RIPRAP ANCHOR DETAILS**  
\*\*Will vary in field due to top of rock elevation.

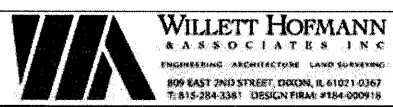
**BILL OF MATERIAL**

Item	Unit	Quantity
Stone Riprap, Class A5 (Special)	Ton	1,652

\*Included in the cost of Stone Riprap, Class A5 (Special).



**PLAN VIEW**



DESIGNED - B.K.C.	REVISED -
CHECKED - M.A.C.	REVISED -
DRAWN - F.D.L.	REVISED -
CHECKED - B.K.C.	REVISED -

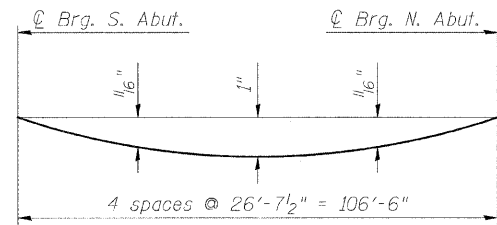
**LASALLE COUNTY  
C.H. 13 OVER TOMAHAWK CREEK  
STATION 20+00**

**RIPRAP & PILE LAYOUT  
STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 2 OF 18 SHEETS

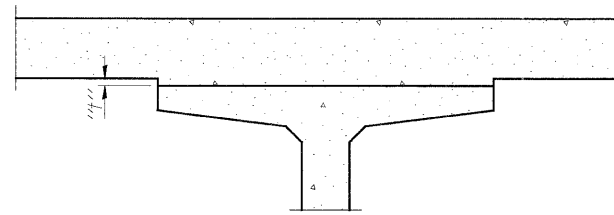
F.A.S. RTE. 260	SECTION 10-00651-00-BR	COUNTY LASALLE	TOTAL SHEETS 51	SHEET NO. 19
WHA* 1156D08		CONTRACT NO. 87466		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT BRS-02601051				

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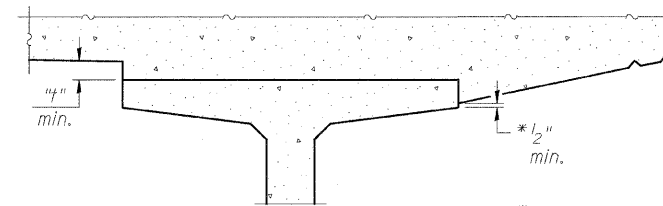


**DEAD LOAD DEFLECTION DIAGRAM**  
(Includes weight of concrete, excluding beams).

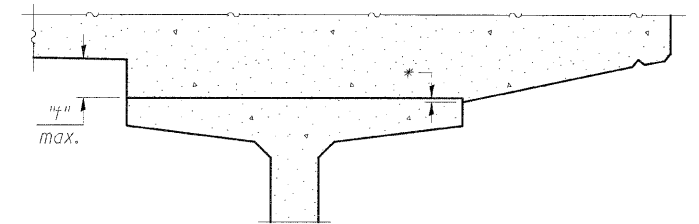
**NOTE:**  
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Structural Sheet 4 of 18.



**INTERIOR BEAMS**



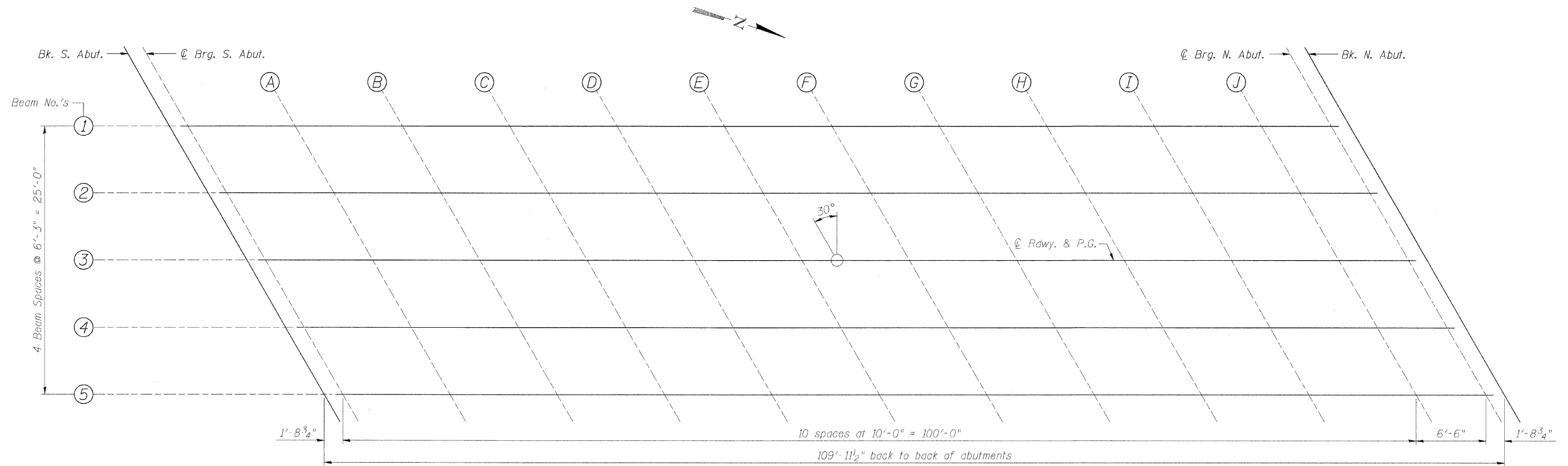
**AT MINIMUM FILLET**



**AT MAXIMUM FILLET**

**FILLET HEIGHTS**

To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown on Structural Sheet 4 of 18, minus slab thickness, equals the fillet heights "t" above top flanges of beams.



**PLAN**

FILE = j:\1156106\ch13\csl\le\Design\Struct\1156106\Top of Slab Elevations.dgn



DESIGNED - B.K.C.	REVISED -
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DRAWN - F.D.L.	REVISED -
CHECKED - B.K.C.	REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**TOP OF SLAB ELEVATIONS**  
**STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 3 OF 18 SHEETS

F.A.S. RTN.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	20
WHA* 1156D08		CONTRACT NO. 87466		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT BRS-0260105				

BEAM 1

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+37.80	12.50	619.75	619.75
S. C. Brg.	19+39.53	12.50	619.73	619.73
A	19+49.53	12.50	619.64	619.66
B	19+59.53	12.50	619.55	619.60
C	19+69.53	12.50	619.47	619.53
D	19+79.53	12.50	619.40	619.48
E	19+89.53	12.50	619.34	619.42
F	19+99.53	12.50	619.28	619.37
G	20+09.53	12.50	619.24	619.31
H	20+19.53	12.50	619.20	619.26
I	20+29.53	12.50	619.17	619.21
J	20+39.53	12.50	619.15	619.17
N. C. Brg.	20+46.03	12.50	619.15	619.15
Back N. Abut.	20+47.76	12.50	619.14	619.14

BEAM 2

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+41.41	6.25	619.81	619.81
S. C. Brg.	19+43.14	6.25	619.80	619.80
A	19+53.14	6.25	619.70	619.73
B	19+63.14	6.25	619.62	619.67
C	19+73.14	6.25	619.54	619.61
D	19+83.14	6.25	619.48	619.55
E	19+93.14	6.25	619.42	619.50
F	20+03.14	6.25	619.37	619.45
G	20+13.14	6.25	619.32	619.40
H	20+23.14	6.25	619.29	619.35
I	20+33.14	6.25	619.27	619.30
J	20+43.14	6.25	619.25	619.26
N. C. Brg.	20+49.64	6.25	619.24	619.24
Back N. Abut.	20+51.37	6.25	619.24	619.24

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+45.02	0.00	619.88	619.88
S. C. Brg.	19+46.75	0.00	619.86	619.86
A	19+56.75	0.00	619.77	619.80
B	19+66.75	0.00	619.69	619.74
C	19+76.75	0.00	619.62	619.68
D	19+86.75	0.00	619.55	619.63
E	19+96.75	0.00	619.50	619.58
F	20+06.75	0.00	619.45	619.53
G	20+16.75	0.00	619.41	619.48
H	20+26.75	0.00	619.38	619.44
I	20+36.75	0.00	619.36	619.40
J	20+46.75	0.00	619.34	619.36
N. C. Brg.	20+53.25	0.00	619.34	619.34
Back N. Abut.	20+54.98	0.00	619.34	619.34

BEAM 4

Location	Station	Offset Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+48.63	6.25	619.75	619.75
S. C. Brg.	19+50.36	6.25	619.73	619.73
A	19+60.36	6.25	619.64	619.67
B	19+70.36	6.25	619.56	619.61
C	19+80.36	6.25	619.49	619.56
D	19+90.36	6.25	619.43	619.51
E	20+00.36	6.25	619.38	619.46
F	20+10.36	6.25	619.34	619.42
G	20+20.36	6.25	619.30	619.37
H	20+30.36	6.25	619.27	619.33
I	20+40.36	6.25	619.25	619.29
J	20+50.36	6.25	619.24	619.26
N. C. Brg.	20+56.86	6.25	619.24	619.24
Back N. Abut.	20+58.59	6.25	619.24	619.24

BEAM 5

Location	Station	Offset Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+52.24	12.50	619.61	619.61
S. C. Brg.	19+53.97	12.50	619.60	619.60
A	19+63.97	12.50	619.51	619.54
B	19+73.97	12.50	619.44	619.48
C	19+83.97	12.50	619.37	619.44
D	19+93.97	12.50	619.31	619.39
E	20+03.97	12.50	619.26	619.35
F	20+13.97	12.50	619.22	619.30
G	20+23.97	12.50	619.19	619.26
H	20+33.97	12.50	619.16	619.22
I	20+43.97	12.50	619.15	619.19
J	20+53.97	12.50	619.14	619.16
N. C. Brg.	20+60.47	12.50	619.14	619.14
Back N. Abut.	20+62.20	12.50	619.14	619.14

FILE = J:\11562005\131\anal\1a\Desig\Struct\11562008\Top of Slab Elevations.dgn



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DRAWN - F.D.L.  
CHECKED - B.K.C.

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REVISED -  
REVISED -  
REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**TOP OF SLAB ELEVATIONS**  
**STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 4 OF 18 SHEETS

F.A.S. RTN.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	21
WHA# 11562008		CONTRACT NO. 87466		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT BRS-02601051		

LEFT EDGE OF APPROACH PAVEMENT

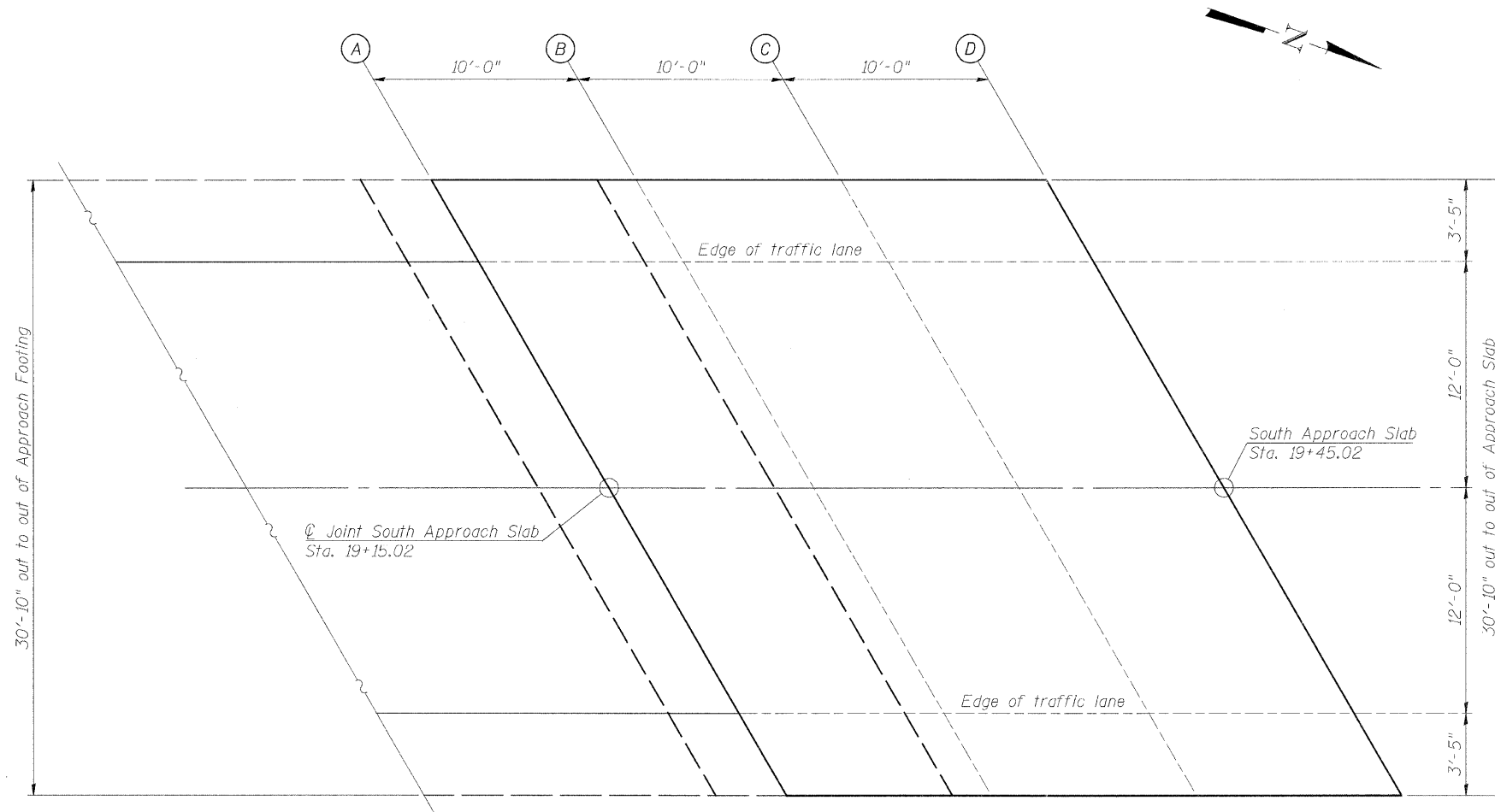
Location	Station	Offset Lt.	Theoretical Grade Elevations
A	19+06.12	15.4167	620.05
B	19+16.12	15.4167	619.93
C	19+26.12	15.4167	619.81
D	19+36.12	15.4167	619.71

LEFT EDGE OF TRAFFIC LANE

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	19+08.09	12.00	620.10
B	19+18.09	12.00	619.98
C	19+28.09	12.00	619.86
D	19+38.09	12.00	619.76

CENTERLINE

Location	Station	Offset	Theoretical Grade Elevations
A	19+15.02	0.00	620.20
B	19+25.02	0.00	620.09
C	19+35.02	0.00	619.98
D	19+45.02	0.00	619.88



RIGHT EDGE OF TRAFFIC LANE

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	19+21.95	12.00	619.93
B	19+31.95	12.00	619.82
C	19+41.95	12.00	619.72
D	19+51.95	12.00	619.62

RIGHT EDGE OF APPROACH PAVEMENT

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	19+23.92	15.4167	619.84
B	19+33.92	15.4167	619.73
C	19+43.92	15.4167	619.63
D	19+53.92	15.4167	619.54

PLAN

FILE = J:\1156\026ch13\_road\Design\Structure\1156\026\Top of South Approach Elevations.dgn



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 DRAWN - F.D.L.  
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 REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 19+00**

**TOP OF SOUTH BRIDGE APPROACH SLAB ELEVATIONS**  
**STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 5 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	22
WHA# 1156D08		CONTRACT NO. 87466		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT BRS-0260(105)				

LEFT EDGE OF APPROACH PAVEMENT

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	20+46.08	15.4167	619.08
B	20+56.08	15.4167	619.08
C	20+66.08	15.4167	619.08
D	20+76.08	15.4167	619.09

LEFT EDGE OF TRAFFIC LANE

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	20+48.05	12.00	619.15
B	20+58.05	12.00	619.15
C	20+68.05	12.00	619.15
D	20+78.05	12.00	619.17

CENTERLINE

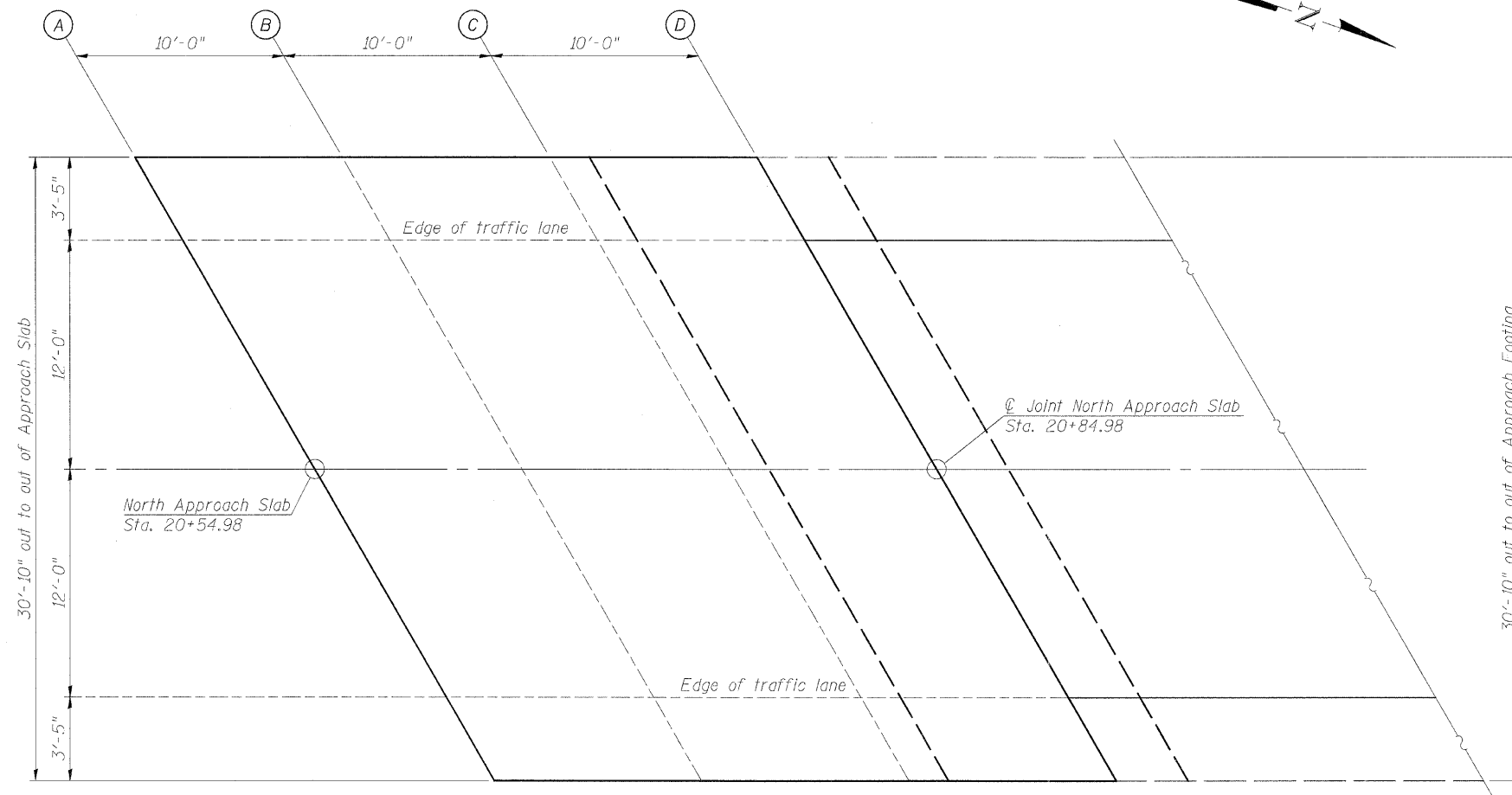
Location	Station	Offset	Theoretical Grade Elevations
A	20+54.98	0.00	619.34
B	20+64.98	0.00	619.34
C	20+74.98	0.00	619.35
D	20+84.98	0.00	619.37

RIGHT EDGE OF TRAFFIC LANE

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	20+61.91	12.00	619.15
B	20+71.91	12.00	619.16
C	20+81.91	12.00	619.17
D	20+91.91	12.00	619.20

RIGHT EDGE OF APPROACH PAVEMENT

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	20+63.88	15.4167	619.08
B	20+73.88	15.4167	619.09
C	20+83.88	15.4167	619.11
D	20+93.88	15.4167	619.13



PLAN

FILE = J:\1156008\Bsh\3\_lasalle\Design\Struct\11560081\Top of North Approach Slab Elevations.dgn



DESIGNED - B.K.C.  
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 CHECKED - B.K.C.

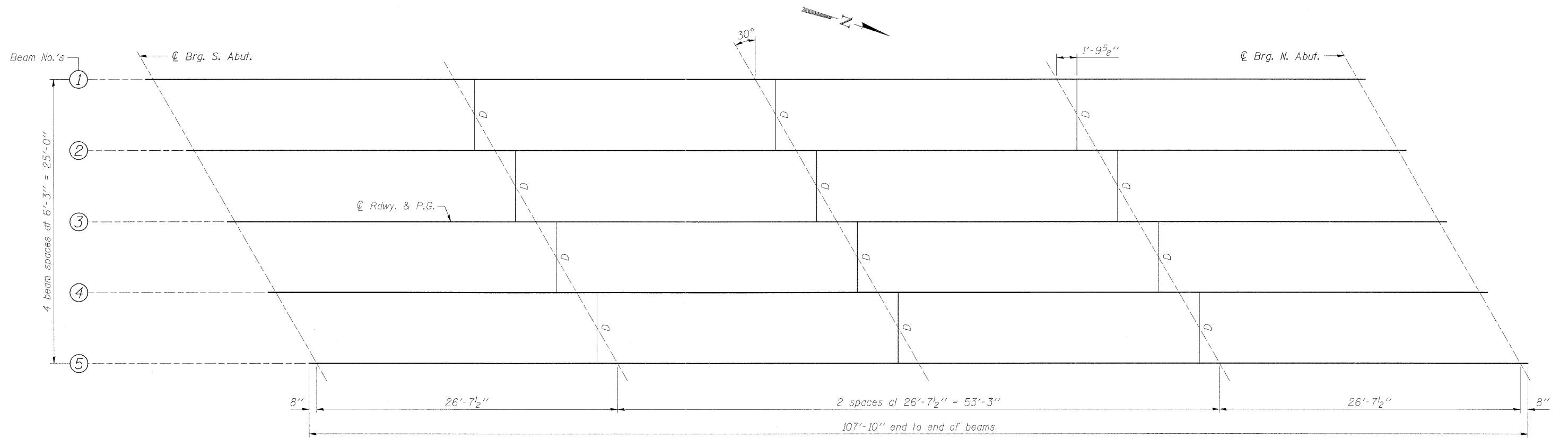
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**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**TOP OF NORTH BRIDGE APPROACH SLAB ELEVATIONS**  
**STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 6 OF 18 SHEETS

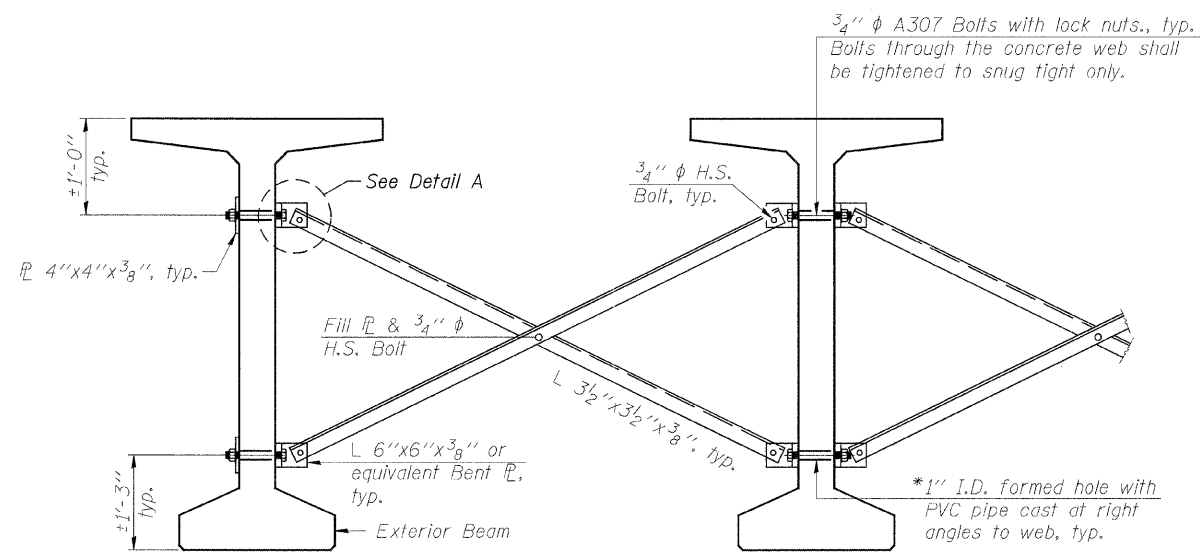
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	10-00651-00-BR	LASALLE	51	23
WHA# 1156D08		CONTRACT NO. 87466		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT BRS-02601051				



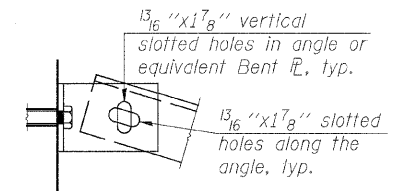
PLAN

INTERIOR BEAM MOMENT TABLE		
Sp. 1		
I	(in <sup>4</sup> )	392,638
I'	(in <sup>4</sup> )	749,655
S <sub>b</sub>	(in <sup>3</sup> )	12,224
S <sub>b</sub> '	(in <sup>3</sup> )	16,166
S <sub>1</sub>	(in <sup>3</sup> )	12,715
S <sub>1</sub> '	(in <sup>3</sup> )	45,078
DC1	(k/')	1.499
M <sub>DC1</sub>	(k)	2,125.3
DC2	(k/')	0.180
M <sub>DC2</sub>	(k)	255.2
DW	(k/')	0.313
M <sub>DW</sub>	(k)	443.8
M <sub>Σ</sub> + IM	(k)	1,797.1

INTERIOR BEAM REACTION TABLE		
Abut.		
R <sub>DC1</sub>	(k)	79.8
R <sub>DC2</sub>	(k)	9.6
R <sub>DW</sub>	(k)	16.7
R <sub>Σ</sub> + IM	(k)	93.7
R <sub>Total</sub>	(k)	199.8



PERMANENT BRACING DETAILS FOR BULB-T BEAMS



DETAIL A

NOTES:

- All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
- Two hardened washers are required for each set of oversized holes.
- All holes shall be 15/16" φ unless otherwise noted.
- 5/16" x 3" x 3" plate washers are required over all slotted holes.
- All bolts shall be galvanized according to AASHTO M232.
- Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
- Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Bulb T-Beams.
- \* Fabricator shall locate to miss strands within permissible tolerances.

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DESIGNED -	B.K.C.	REVISED -	
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DRAWN -	F.D.L.	REVISED -	
CHECKED -	B.K.C.	REVISED -	

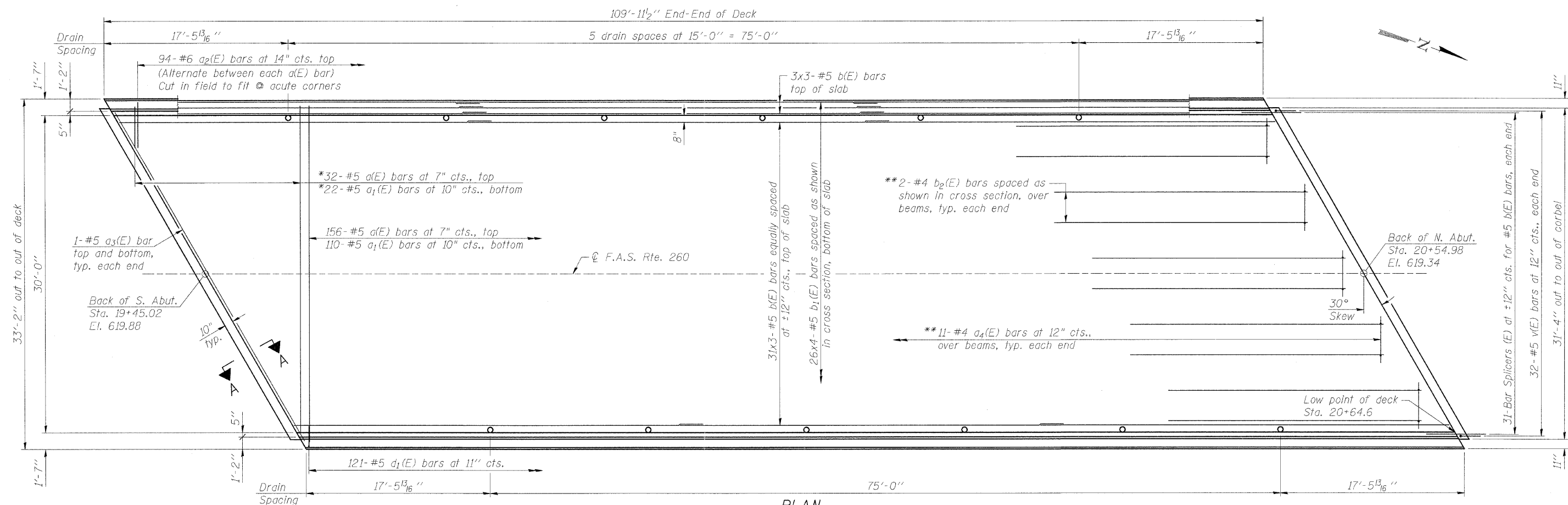
**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**FRAMING PLAN**  
**STRUCTURE NO. 050-3604**

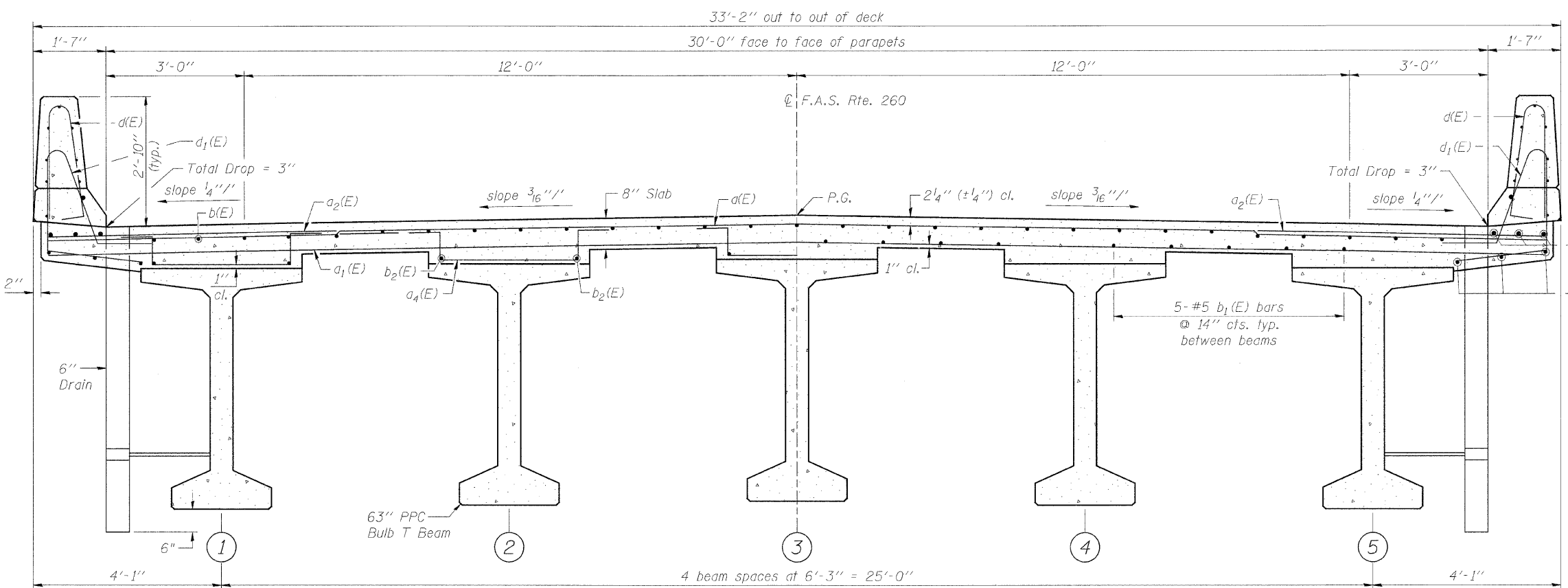
STRUCTURAL SHEET NO. 7 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	24
WHA# 1156D08		CONTRACT NO. 87466		
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJ. ECT BRS-0260(105)				





PLAN



CROSS SECTION  
(Looking North)

MIN. LAP	
SIZE	LAP
#4	2'-7"
#5	3'-3"
#6	3'-10"

**NOTES:**  
 See Structural Sheet 9 of 18 for Superstructure Details and Bill of Material.  
 For Section A-A and Diaphragm Details, see Structural Sheet 10 of 18.  
 See Structural Sheet 9 of 18 for parapet reinforcement.  
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.  
 \* Order a(E) and a1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.  
 \*\* Required where fillet exceeds 2 1/2", exact number of a4(E) bars & length of b2(E) bars to be determined during construction.

FILE = J:\1156008\13\asalle\Design\Struct\1156008\Superstructure.dwg

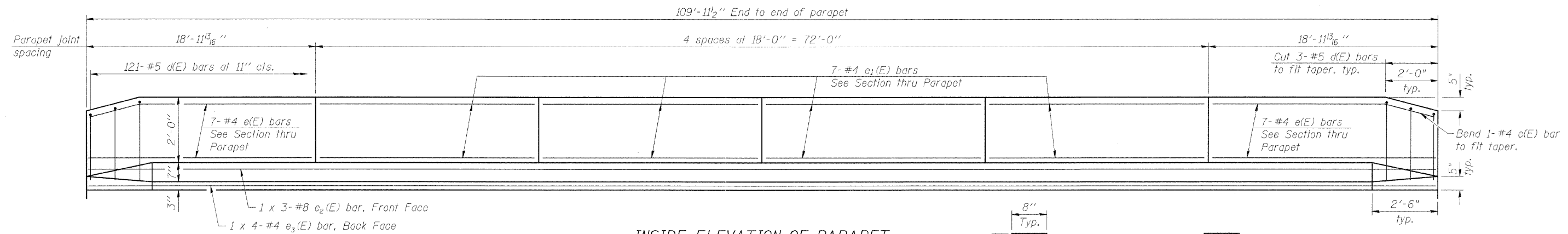


DESIGNED -	B.K.C.	REVISED -	
CHECKED -	M.A.C.	REVISED -	
DRAWN -	F.D.L.	REVISED -	
CHECKED -	B.K.C.	REVISED -	

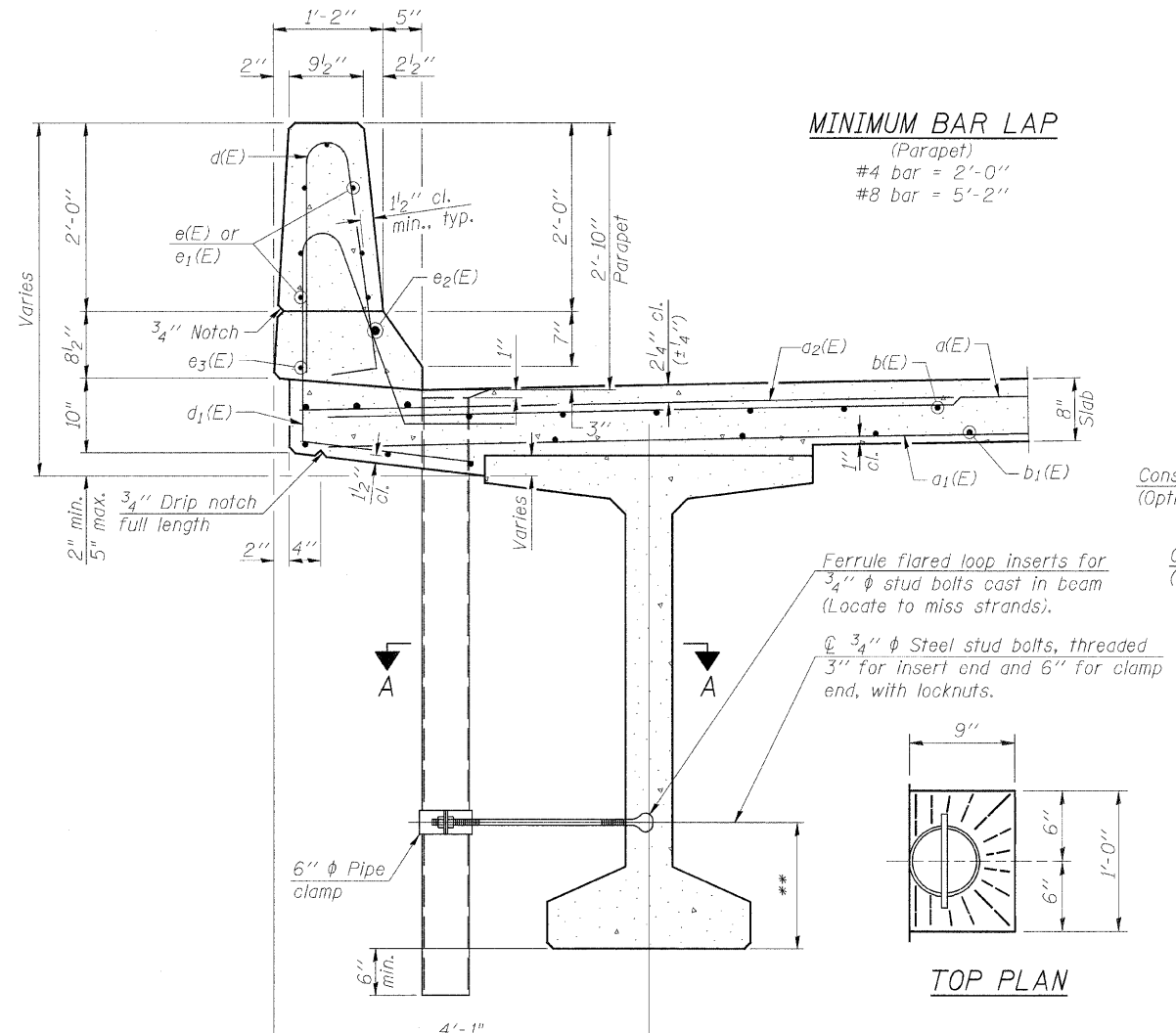
**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**SUPERSTRUCTURE**  
**STRUCTURE NO. 050-3604**  
 STRUCTURAL SHEET NO. 8 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	25
WHA* 1156008		CONTRACT NO. 87466		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT BRS-0260105				

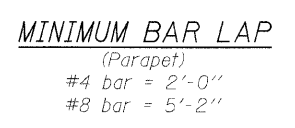


INSIDE ELEVATION OF PARAPET



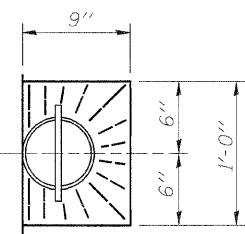
SECTION THRU PARAPET

\*\*For insert locations see Structural Sheet 8 of 18.

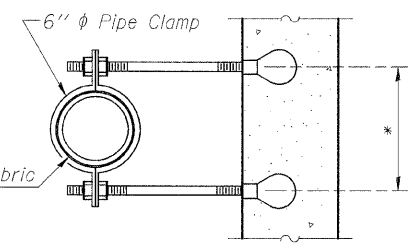


MINIMUM BAR LAP

(Parapet)  
#4 bar = 2'-0"  
#8 bar = 5'-2"

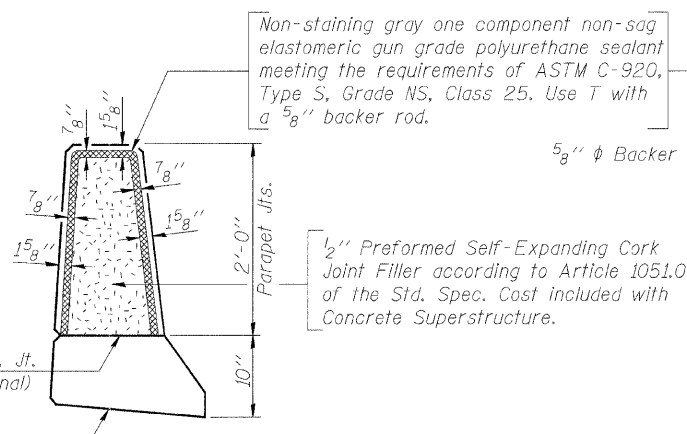


TOP PLAN

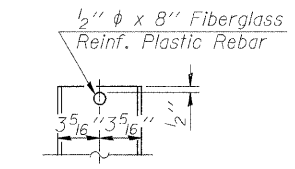


SECTION A-A

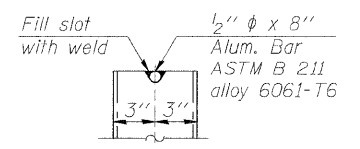
\*Dimension as required by Pipe Clamp



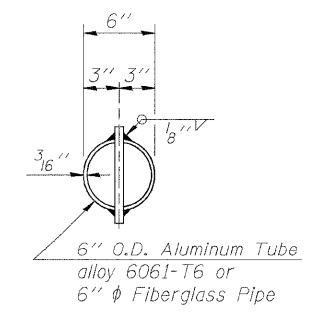
PARAPET JOINT DETAILS



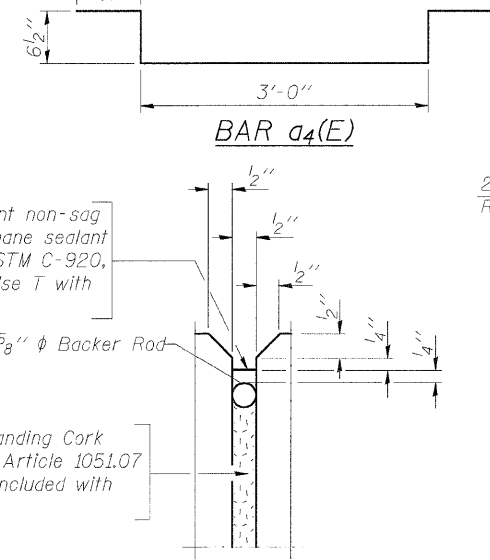
FIBERGLASS PIPE



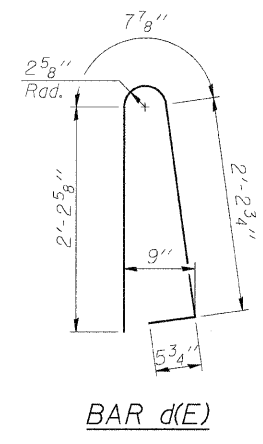
ALUMINUM TUBE



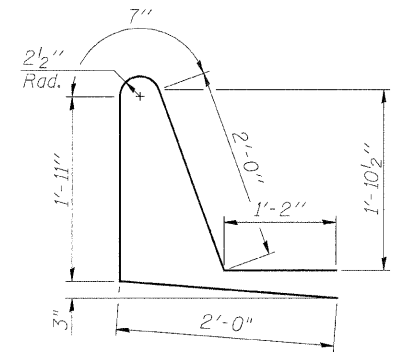
TOP PLAN (Showing Aluminum Tube)



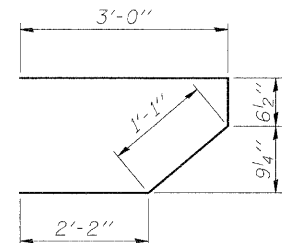
BAR a1(E)



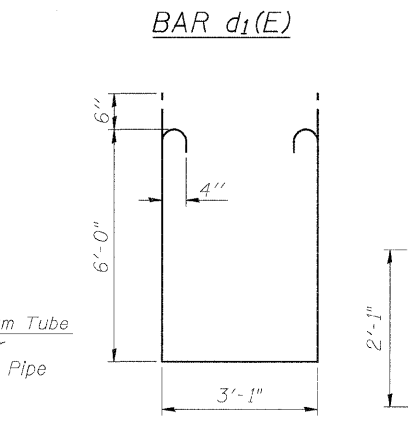
BAR d(E)



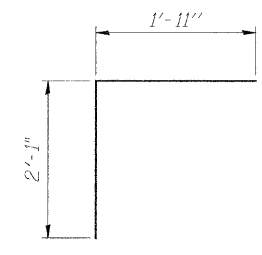
BAR d1(E)



BAR s(E)



BAR s1(E)



BAR v(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	188	#5	32'-6"	—
a1(E)	132	#5	32'-6"	—
a2(E)	188	#6	6'-6"	—
a3(E)	4	#5	37'-7"	—
a4(E)	110	#4	5'-5"	—
b(E)	111	#5	38'-9"	—
b1(E)	104	#5	29'-11"	—
b2(E)	20	#4	10'-0"	—
d(E)	242	#5	5'-7"	—
d1(E)	242	#5	7'-8"	—
e(F)	28	#4	18'-8"	—
e1(F)	56	#4	17'-8"	—
e2(E)	6	#8	40'-0"	—
e3(E)	8	#4	28'-11"	—
m(E)	10	#6	38'-0"	—
m1(E)	18	#6	11'-0"	—
m2(E)	8	#6	4'-4"	—
m3(E)	4	#6	3'-1"	—
m4(E)	4	#6	35'-10"	—
m5(E)	12	#6	10'-1"	—
s(E)	60	#5	6'-10"	—
s1(E)	36	#4	16'-1"	—
v(E)	64	#5	4'-0"	—
Floor Drains	Each		12	
Reinforcement Bars, Epoxy Coated	Lbs.		28,670	
Concrete Superstructure	Cu. Yds.		183.6	
Bridge Deck Grooving	Sq. Yd.		342	
Protective Coat	Sq. Yd.		459	

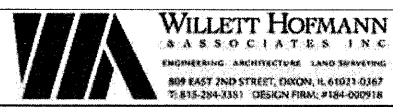
NOTES:

Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

The exterior surfaces of the floor drains shall be coated or pigmented by the manufacturer with a color that matches the concrete.

The clamping device and inserts shall be galvanized according to AASHTO M 232. Cost of clamping device and inserts included with Floor Drains.

Bars indicated thus 1 x 3-#8 etc. Indicates 1 line of bars with 3 lengths per line.



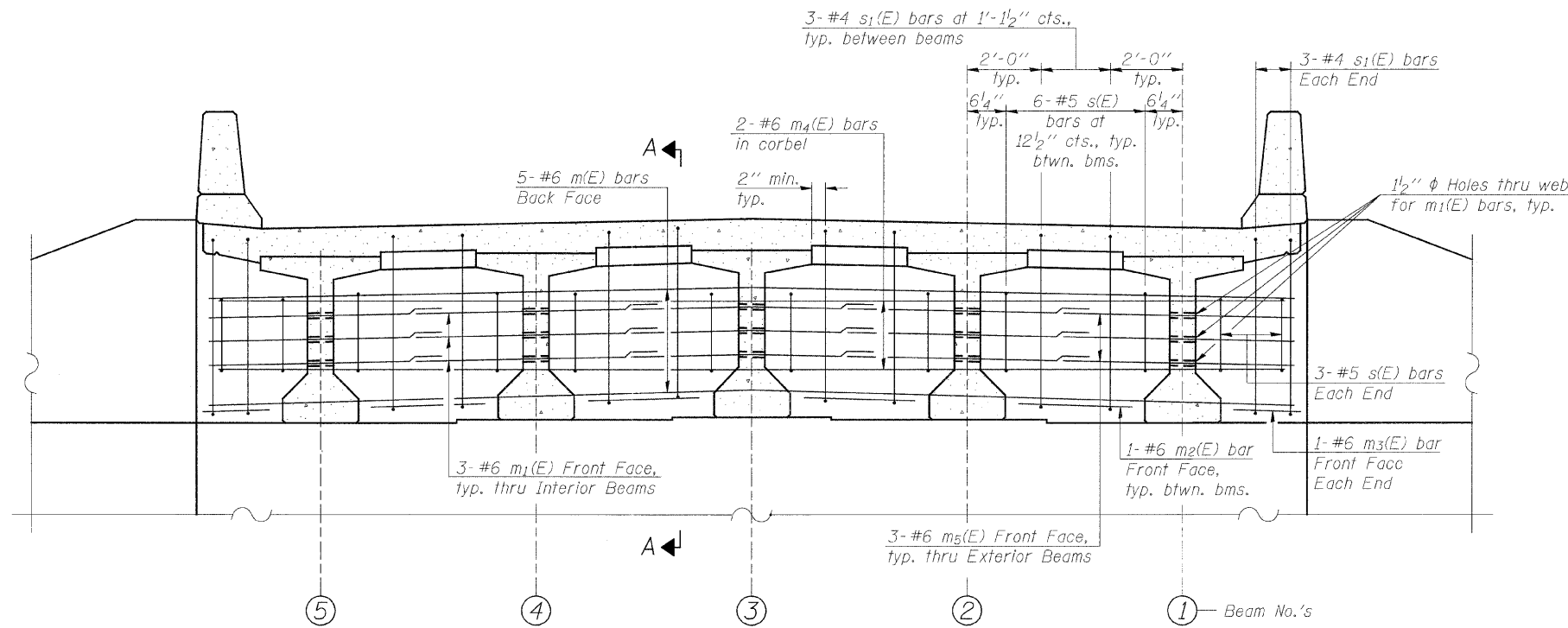
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DRAWN -	F.D.L.	REVISED -	
CHECKED -	B.K.C.	REVISED -	

LASALLE COUNTY  
C.H. 13 OVER TOMAHAWK CREEK  
STATION 20 + 00

SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 050-3604

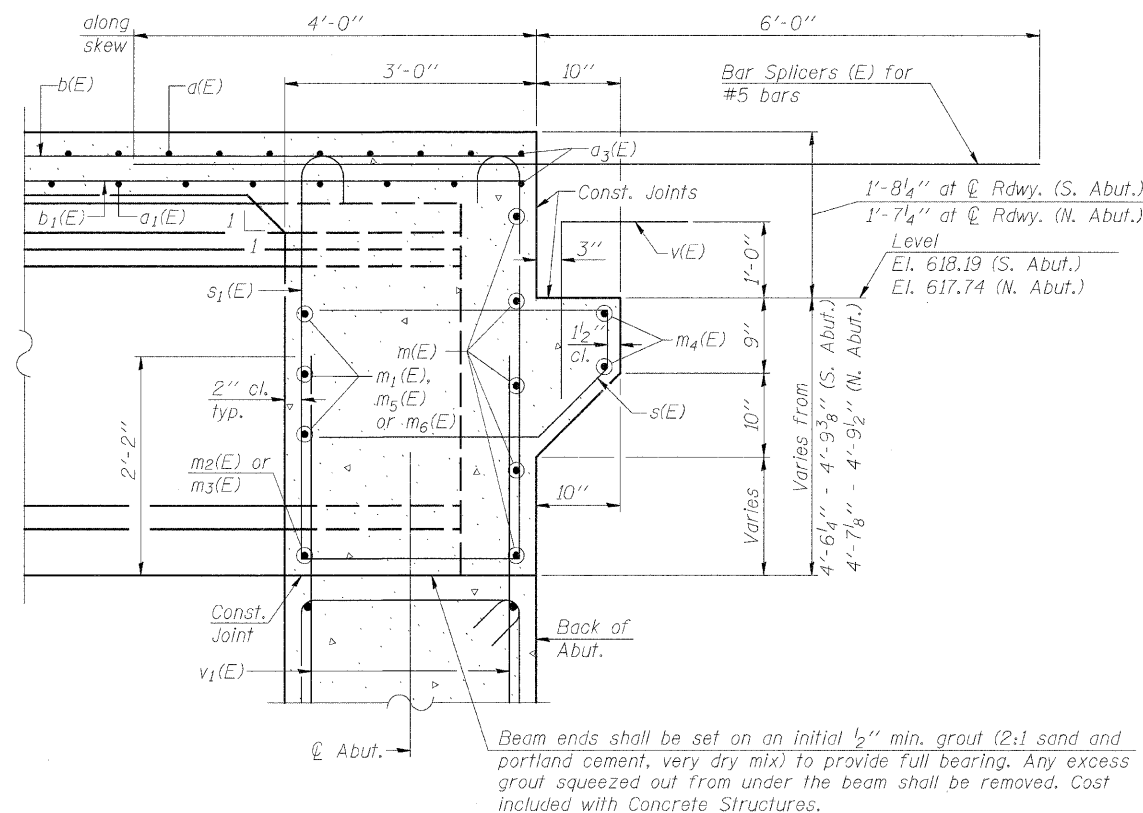
STRUCTURAL SHEET NO. 9 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	26
	WHA* 1156D08		CONTRACT NO. 87466	
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT BRS-02601051				



**DIAPHRAGM ELEVATION AT ABUTMENT**  
(Looking South)

**MIN. BAR LAP**  
#6 bar = 3'-4"



**SECTION A-A**

Dimensions at right angles to abutment, except as shown.

**NOTES:**

Reinforcement bars in diaphragm are billed with superstructure on Structural Sheet 9 of 18.

Concrete in diaphragm is included with Concrete Superstructure on Structural Sheet 9 of 18.

For details of bars s(E) and s1(E) see Structural Sheet 9 of 18.

The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

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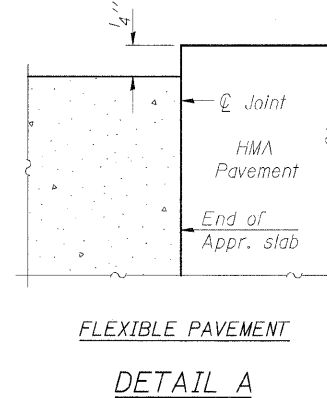
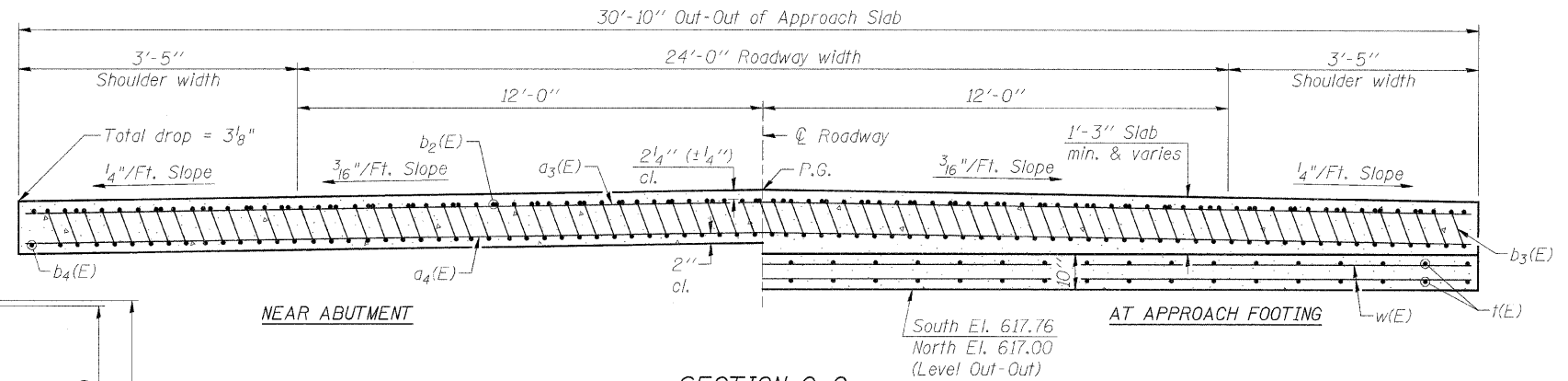
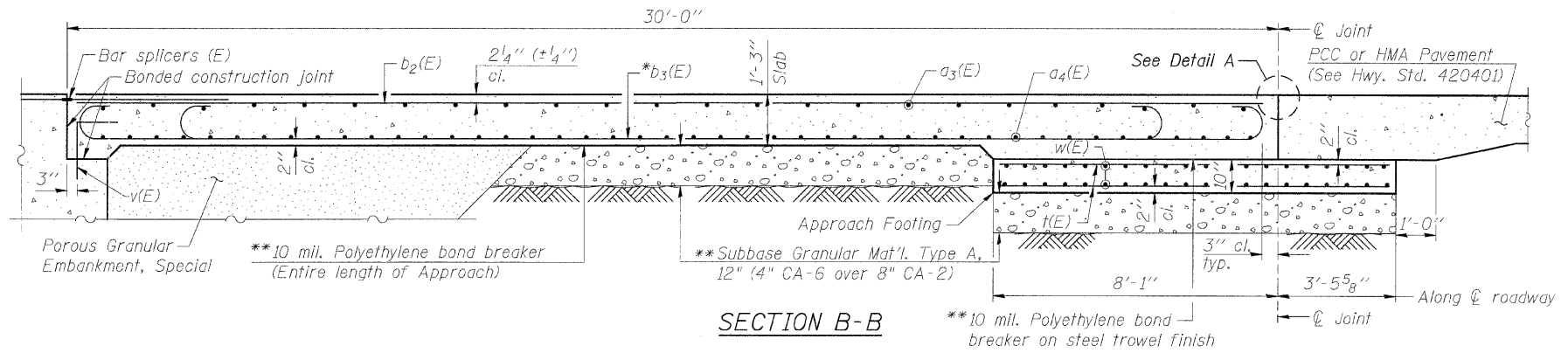
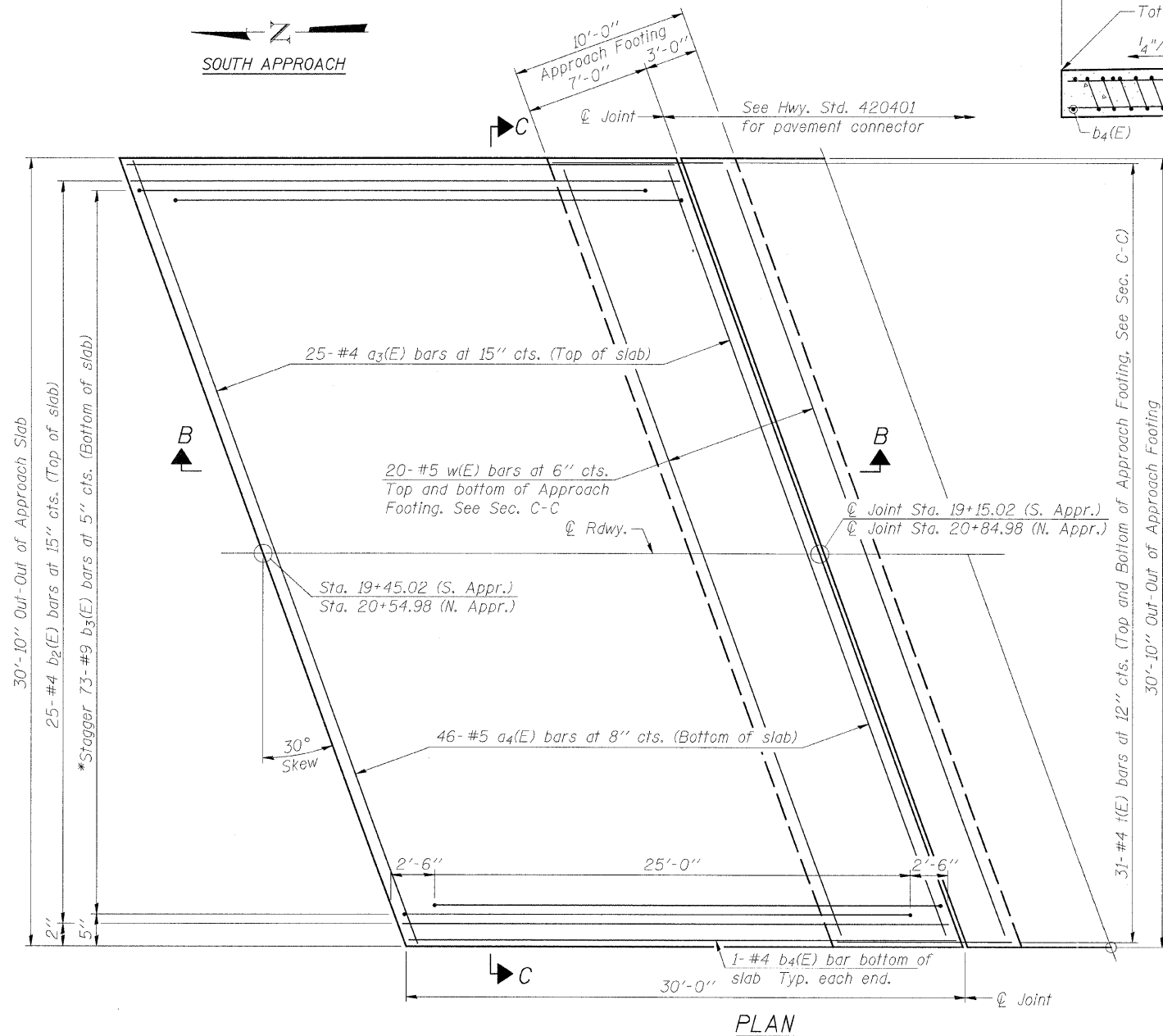
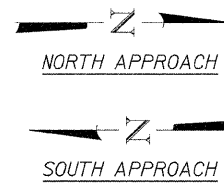
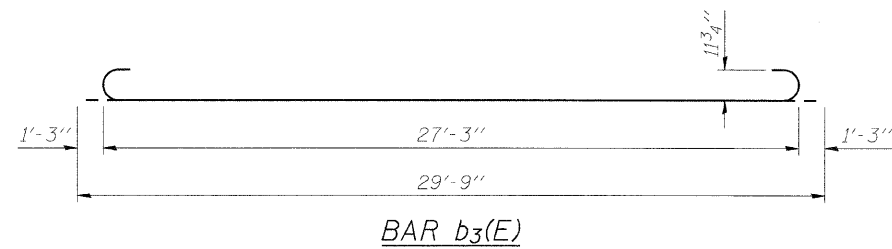
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DRAWN -	F.D.L.	REVISED -	
CHECKED -	B.K.C.	REVISED -	

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**DIAPHRAGM DETAILS**  
**STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 10 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	27
WHA* 1156008		CONTRACT NO. 87466		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT BRS-0260(105)				



**TWO APPROACHES**  
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$a_3(E)$	50	#4	35'-3"	—
$a_4(E)$	92	#5	35'-3"	—
$b_2(E)$	50	#4	29'-8"	—
$b_3(E)$	146	#9	29'-9"	—
$b_4(E)$	4	#4	29'-8"	—
$f(E)$	124	#4	11'-2"	—
$w(E)$	80	#5	35'-3"	—
Concrete Structures		Cu. Yd.	22	
Concrete Superstructure		Cu. Yd.	89.7	
Bridge Deck Grooving		Sq. Yd.	192	
Protective Coat		Sq. Yd.	206	
Reinforcement Bars, Epoxy Coated		Pound	24,270	

**NOTES:**

- $a_3(E)$  and  $a_4(E)$  bar spacings measured along  $\varnothing$  Rdwy.
- Approach slab shall be paid for as Concrete Superstructure.
- Approach footing concrete shall be paid for as Concrete Structures.
- Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
- For  $v(E)$  bar details, see Structural Sheet 9 of 18.
- The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.
- For Bar Splicer Assembly Details, see Structural Sheet 17 of 18.
- Cost of excavation for approach footing included with Concrete Structures.
- For Porous Granular Embankment, Special and drainage treatment details, see Structural Sheet 2 of 18.
- \*Tilt #9  $b_3(E)$  bars as required to maintain clearance.
- \*\*Cost included with Concrete Superstructure.



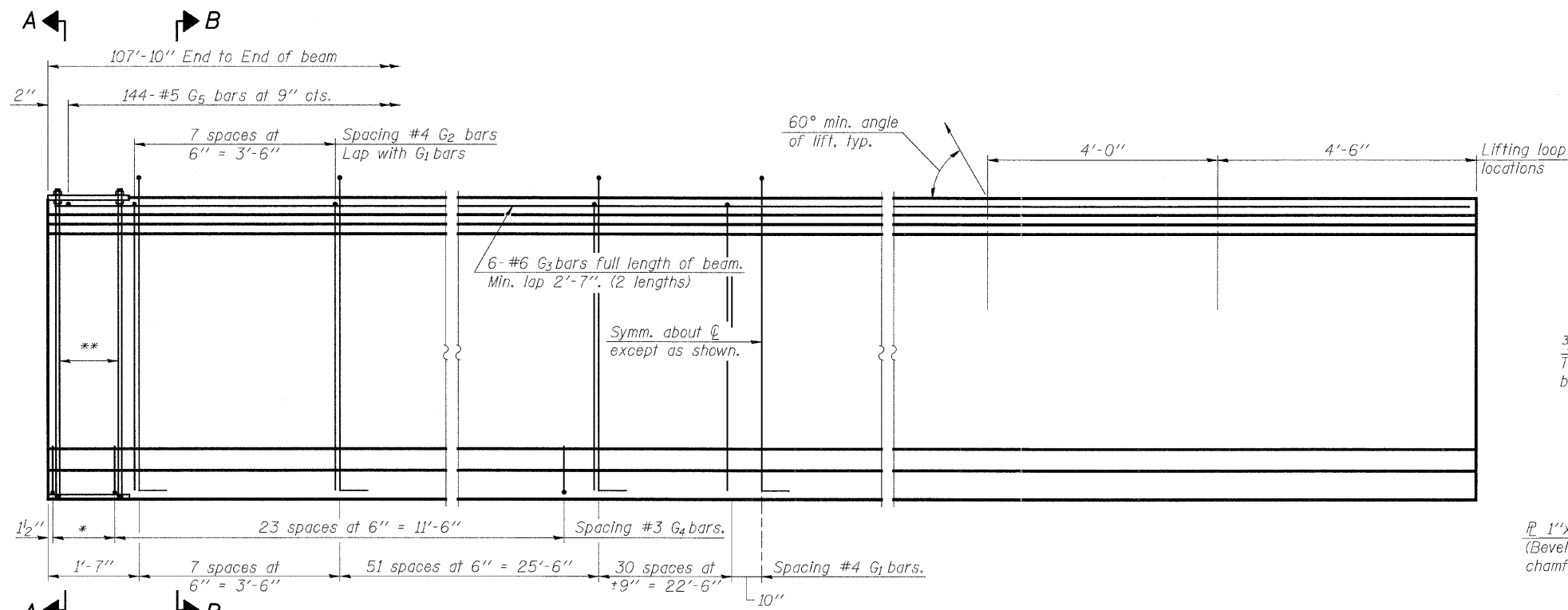
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DRAWN -	F.D.L.	REVISED -	
CHECKED -	B.K.C.	REVISED -	

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**BRIDGE APPROACH SLAB DETAILS**  
**STRUCTURE NO. 050-3604**

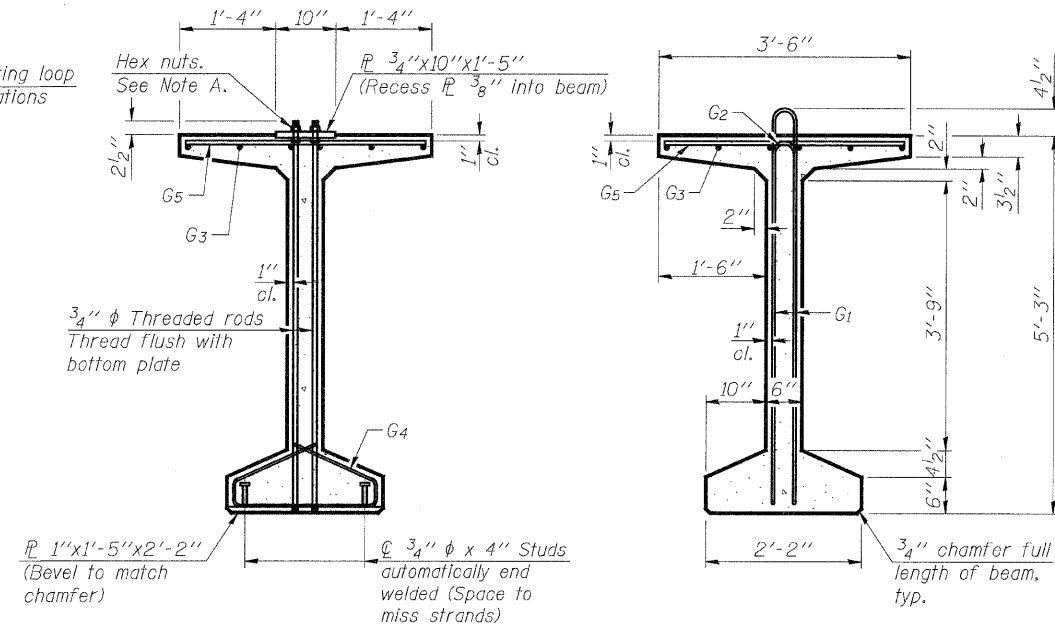
STRUCTURAL SHEET NO. 11 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	28
	WHA* 1156008		CONTRACT NO. 87466	
FED. ROAD DIST.		LINCOLN FED. AID PROJECT	BRS-0260105	



**ELEVATION OF BEAM**  
(Showing reinforcement & dimensions)

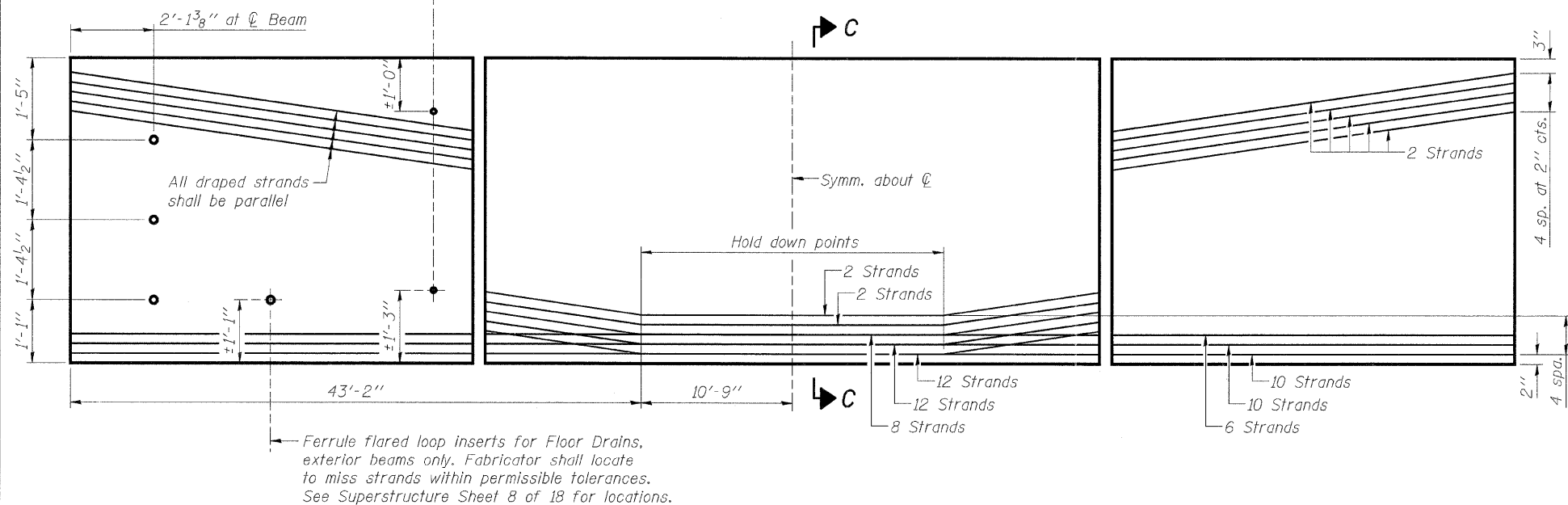
\* 4 spaces at 3 1/4" = 1'-1"  
 \*\* 5-3/4" φ threaded dowel rods at 3 1/4" cts., each face.



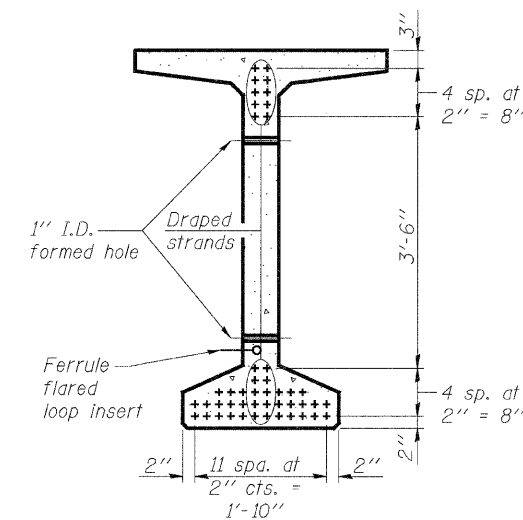
**SECTION A-A**

**SECTION B-B**

φ 1" I.D. formed hole with PVC pipe cast at right angles to web for permanent bracing, typ. Fabricator shall locate to miss strands within permissible tolerances. See Framing Plan Sheet 7 of 18 for locations.



**ELEVATION OF BEAM**  
(Showing prestressing steel)



**SECTION C-C**

**\*\*\*BAR LIST  
ONE BEAM ONLY**

Bar	No.	Size	Length	Shape
G1	179	#4	11'-11"	⊏
G2	16	#4	10'-2"	⊏
G3	12	#6	55'-1"	⊏
G4	56	#3	4'-11"	⊏
G5	144	#5	3'-4"	⊏

\*\*\*For information only.

**NOTES:**

See Structural Sheet 13 of 18 for additional details and Bill of Material.

Required release strength, f'ci, shall be 6,000 psi.

See Structural Sheet 7 of 18 for permanent bracing details.

See Structural Sheet 9 of 18 for floor drain details.

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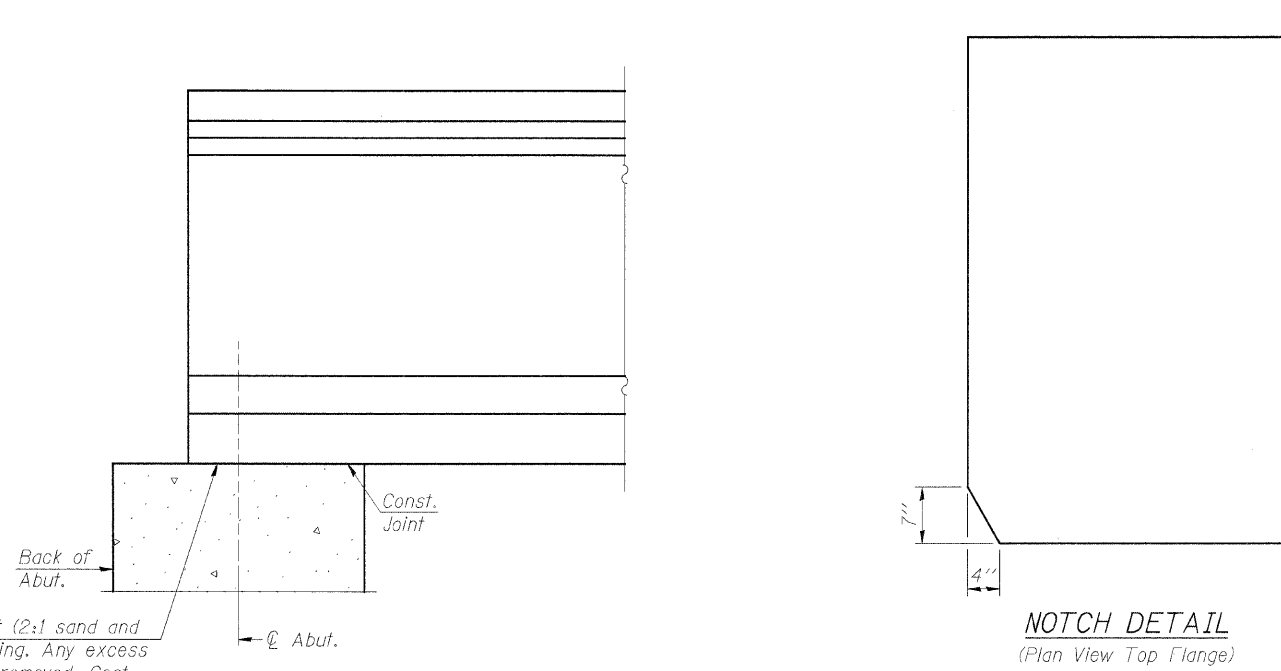
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**LASALLE COUNTY  
C.H. 13 OVER TOMAHAWK CREEK  
STATION 20 + 00**

**63" PPC BULB T-BEAM  
STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 12 OF 18 SHEETS

F.A.S. RTE. 260	SECTION 10-00651-00-BR	COUNTY LASALLE	TOTAL SHEETS 51	SHEET NO. 29
WHA# 1156009		CONTRACT NO. 87466		
FED. ROAD DIST. NO. -		NOIS FED. AID PROJECT BRS-0260105		



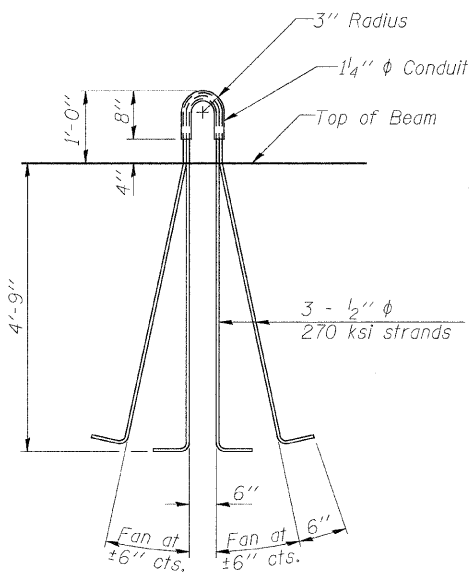
Beam ends shall be set on an initial 1/2" min. grout (2:1 sand and portland cement, very dry mix) to provide full bearing. Any excess grout squeezed out from under the beam shall be removed. Cost included with Concrete Structures.

ELEVATION OF BEAM AT ABUTMENT

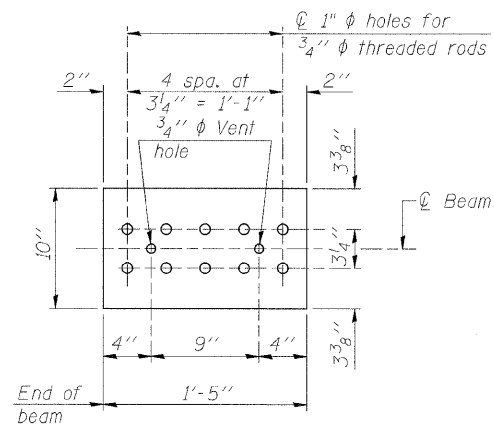
NOTCH DETAIL  
(Plan View Top Flange)

**NOTES:**

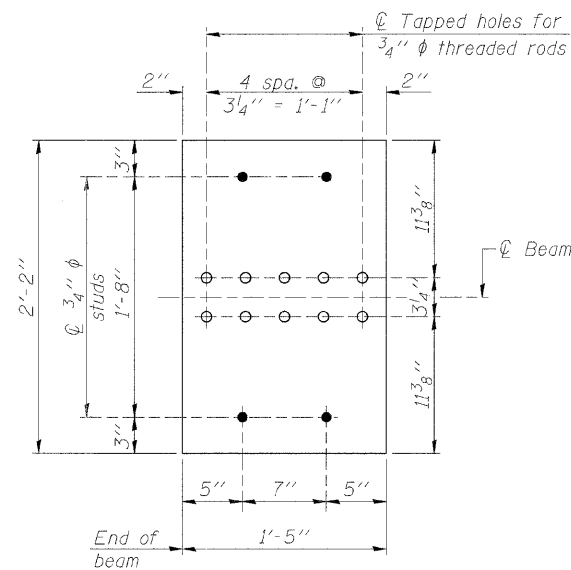
Inserts for 3/4"  $\phi$  threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams.  
 Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.  
 Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).  
 A minimum 2 1/2"  $\phi$  lifting pin shall be used to engage the lifting loops during handling.  
 The top and bottom plates shall be AASHTO M270 Grade 50.  
 The bottom plates and studs shall be galvanized according to AASHTO M111. Top plates and threaded rods need not be galvanized.  
 Threaded rods shall be ASTM F 1554 Grade 55.



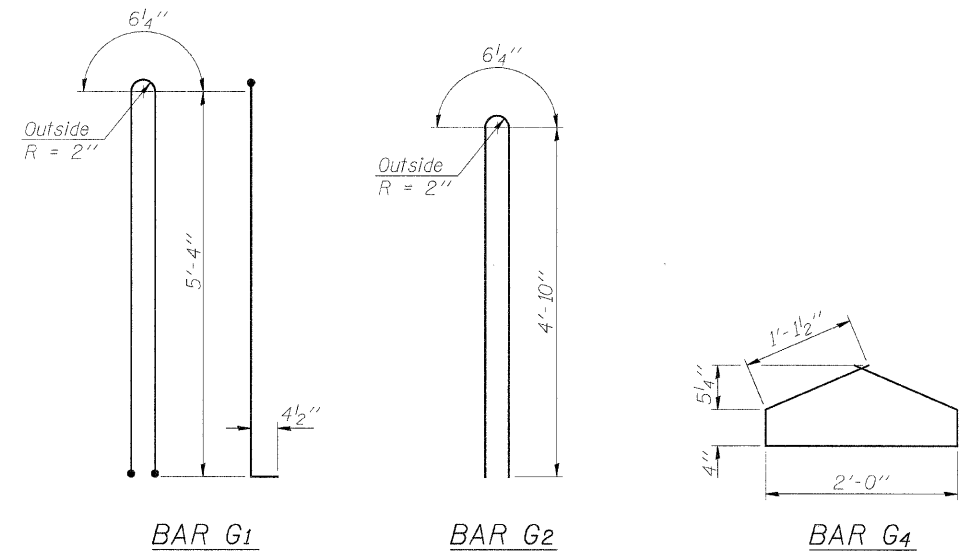
LIFTING LOOP DETAIL



TOP PLATE



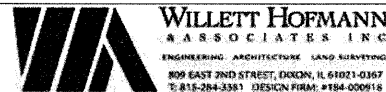
BOTTOM PLATE



BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Bulb T-Beams, 63"	Foot	539

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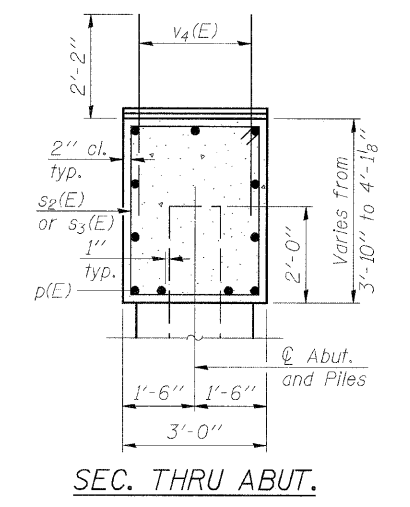
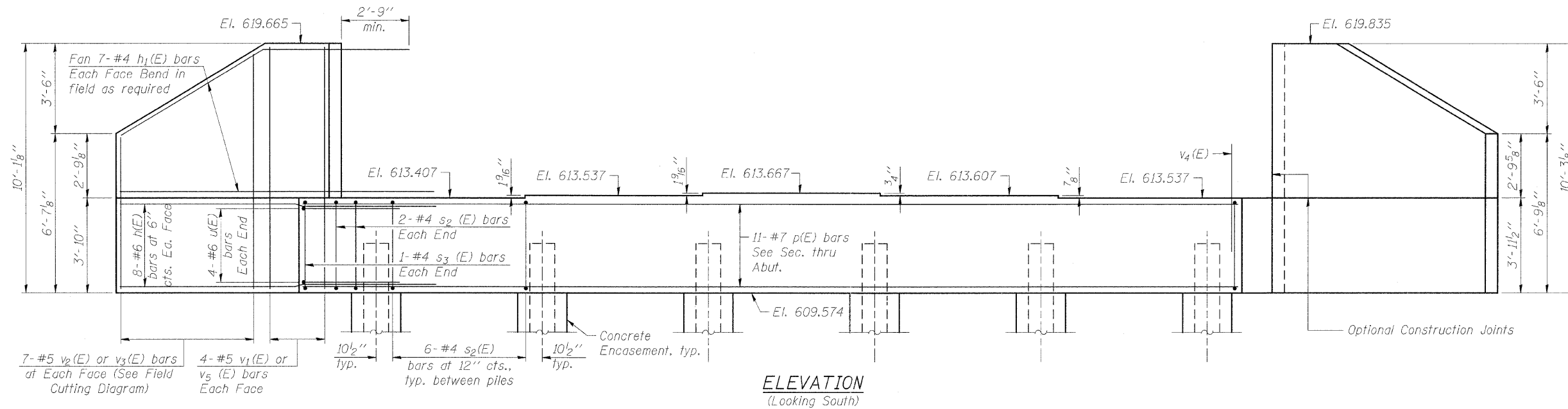
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**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**63" PPC BULB T-BEAM DETAILS**  
**STRUCTURE NO. 050-3604**

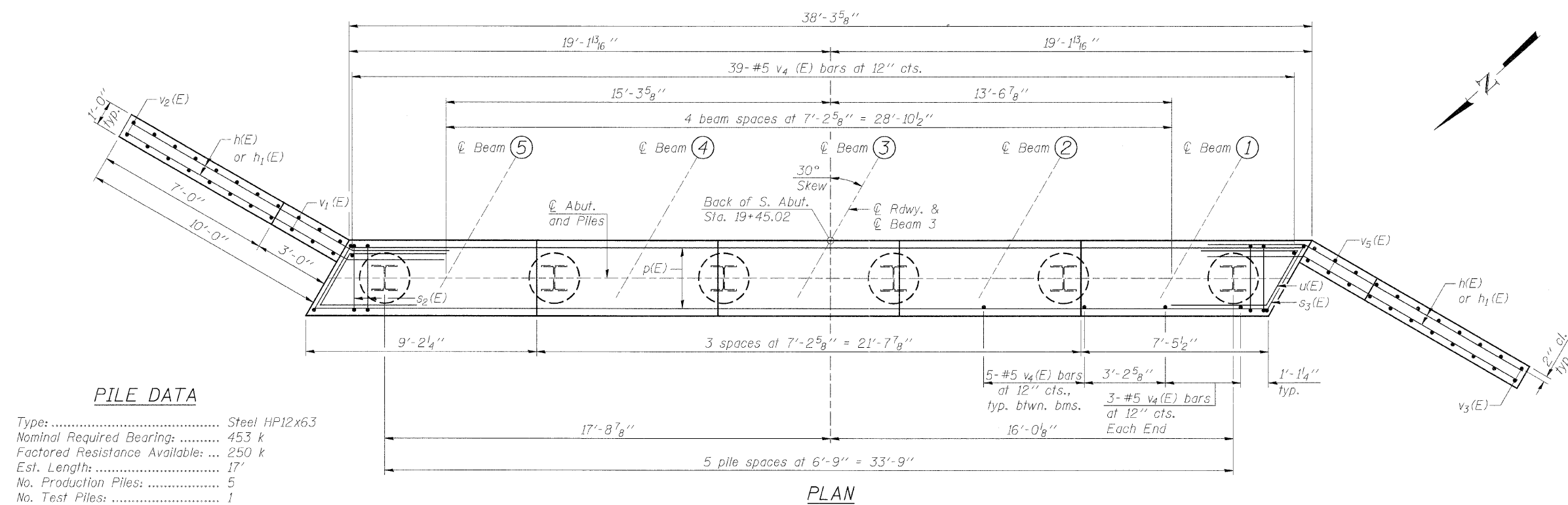
STRUCTURAL SHEET NO. 13 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	30
WHA* 1156D08		CONTRACT NO. 87466		
FED. ROAD DIST. NO.		FED. AID PROJECT BRS-0260(105)		



**ELEVATION**  
(Looking South)

**SEC. THRU ABUT.**

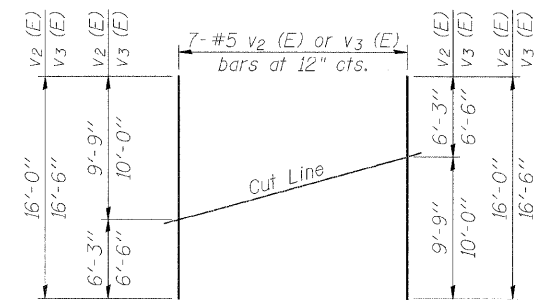


**PLAN**

**PILE DATA**  
 Type: ..... Steel HP12x63  
 Nominal Required Bearing: ..... 453 k  
 Factored Resistance Available: ... 250 k  
 Est. Length: ..... 17'  
 No. Production Piles: ..... 5  
 No. Test Piles: ..... 1

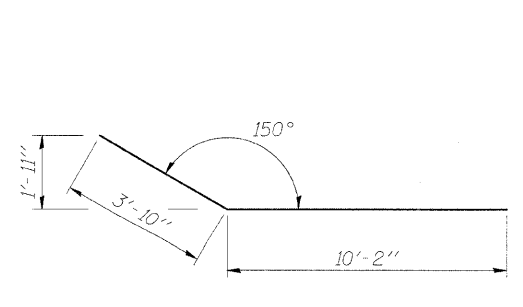
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	32	#6	14'-0"	—
h1(E)	28	#4	13'-3"	—
p(E)	11	#7	38'-0"	—
s2(E)	34	#4	13'-1"	□
s3(E)	2	#4	13'-11"	□
u(E)	8	#6	10'-6"	—
v1(E)	8	#5	9'-10"	—
v2(E)	7	#5	16'-0"	—
v3(E)	7	#5	16'-6"	—
v4(E)	65	#5	4'-4"	—
v5(E)	8	#5	10'-0"	—
Porous Granular Embankment, Special			Cu. Yd.	93
Structure Excavation			Cu. Yd.	86
Concrete Structures			Cu. Yd.	23.5
Concrete Encasement			Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated			Pound	2,910
Furnishing Steel Piles HP12x63			Foot	85
Driving Piles			Foot	85
Test Pile Steel HP12x63			Each	1
Geocomposite Wall Drain			Sq. Yd.	63
Concrete Headwall for Pipe Drains			Each	2
Pipe Underdrains for Structures 4"			Foot	101

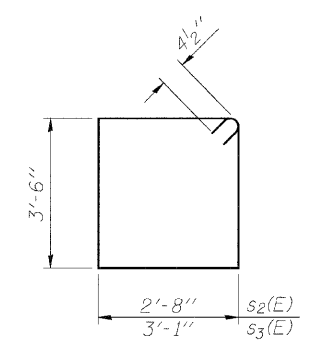


**FIELD CUTTING DIAGRAM**

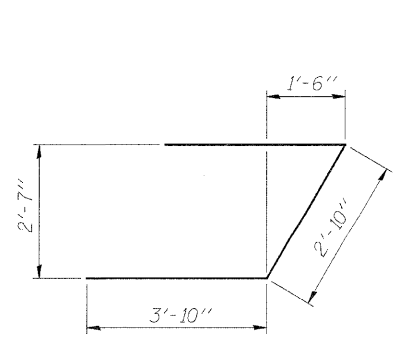
Order v2(E) & v3(E) full length. Cut as shown and use remainder of bars in opposite face.



**BAR h(E)**



**BARS s2(E) & s3(E)**

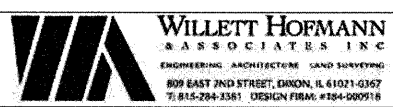


**BAR u(E)**

**NOTES:**

For details of Bar Splicers, see Structural Sheet 17 of 18.  
 For details of Piles and Concrete Encasement, see Structural Sheet 16 of 18.  
 \*See Riprap & Pile Layout, see Structural Sheet 2 of 18 for details.  
 Pour steps monolithically with cap.  
 All exposed edges shall have standard 3/4" chamfers, except as noted.

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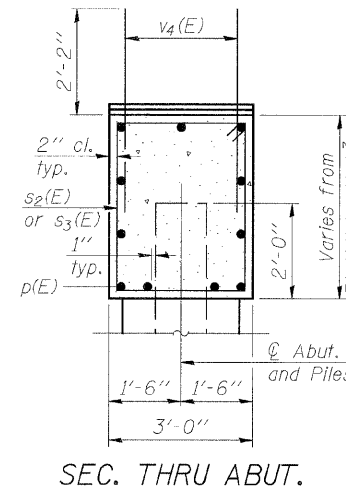
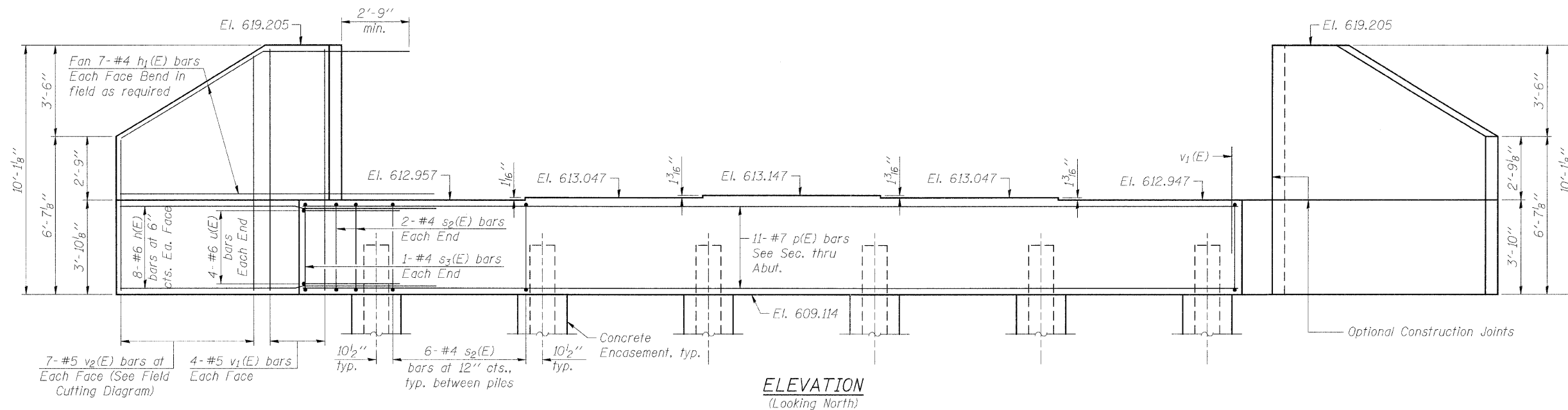


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**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

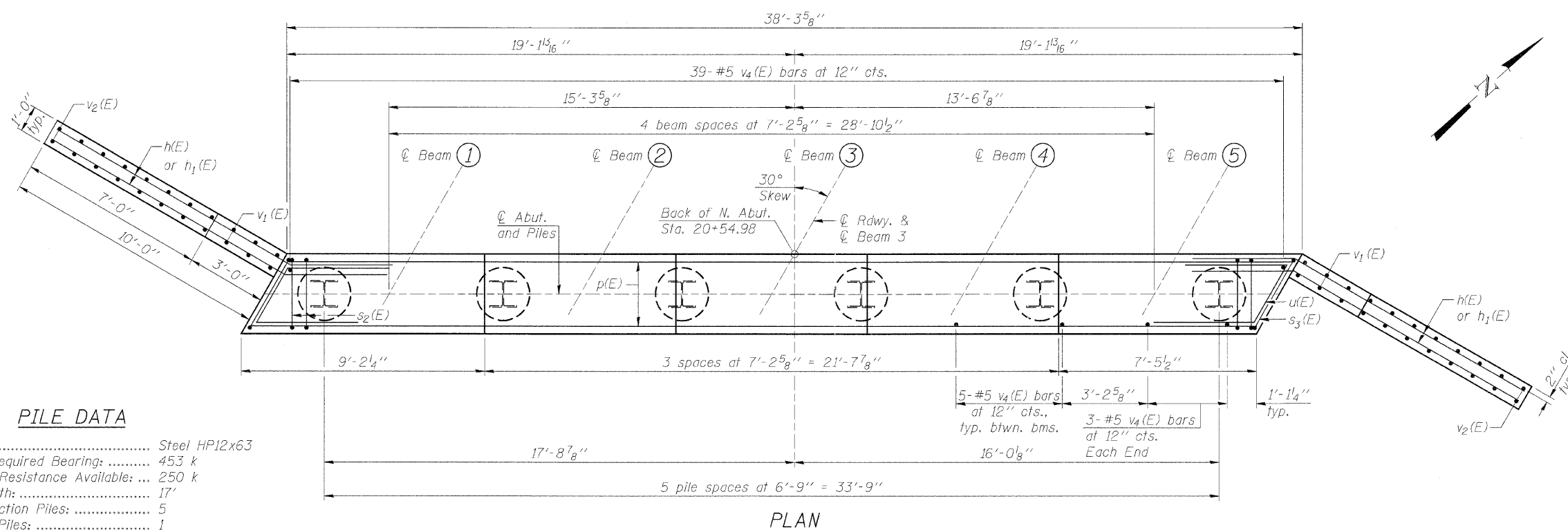
**SOUTH ABUTMENT DETAILS**  
**STRUCTURE NO. 050-3604**  
 STRUCTURAL SHEET NO. 14 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	31
WHA* 1156008		CONTRACT NO. 87466		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT BRS-0260105		



**ELEVATION**  
(Looking North)

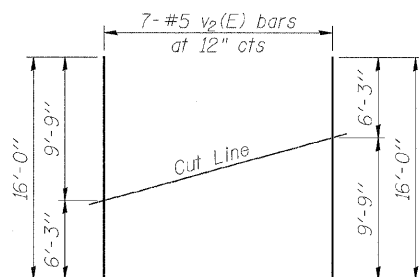
**SEC. THRU ABUT.**



**PLAN**

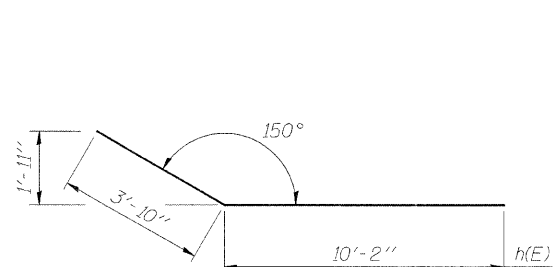
**PILE DATA**

Type: ..... Steel HP12x63  
 Nominal Required Bearing: ..... 453 k  
 Factored Resistance Available: ... 250 k  
 Est. Length: ..... 17'  
 No. Production Piles: ..... 5  
 No. Test Piles: ..... 1

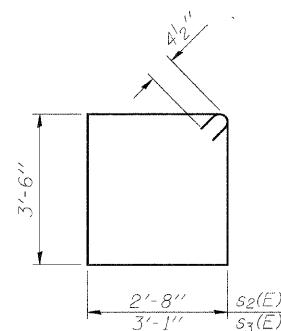


**FIELD CUTTING DIAGRAM**

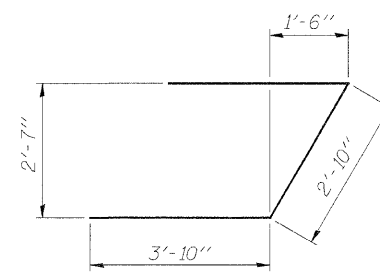
Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



**BAR h(E)**



**BARS s2(E) & s3(E)**



**BAR u(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	32	#6	14'-0"	—
h1(E)	28	#4	13'-3"	—
p(E)	11	#7	38'-0"	—
s2(E)	34	#4	13'-1"	□
s3(E)	2	#4	13'-11"	□
u(E)	8	#6	10'-6"	—
v1(E)	16	#5	9'-10"	—
v2(E)	14	#5	16'-0"	—
v4(E)	65	#5	4'-4"	—
Porous Granular Embankment, Special			Cu. Yd.	93
Structure Excavation			Cu. Yd.	92
Concrete Structures			Cu. Yd.	23.2
Concrete Encasement			Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated			Pound	2,920
Furnishing Steel Piles HP12x63			Foot	85
Driving Piles			Foot	85
Test Pile Steel HP12x63			Each	1
Geocomposite Wall Drain			Sq. Yd.	63
Concrete Headwall for Pipe Drains			Each	2
Pipe Underdrains for Structures 4"			Foot	101

**NOTES:**

For details of Bar Splicers, see Structural Sheet 17 of 18.  
 For details of Piles and Concrete Encasement, see Structural Sheet 16 of 18.  
 \* See Riprap & Pile Layout, see Structural Sheet 2 of 18 for details.  
 Pour steps monolithically with cap.  
 All exposed edges shall have standard 3/4" chamfers, except as noted.

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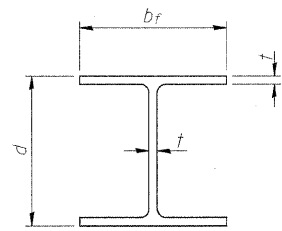
**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**NORTH ABUTMENT DETAILS**  
**STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 15 OF 18 SHEETS

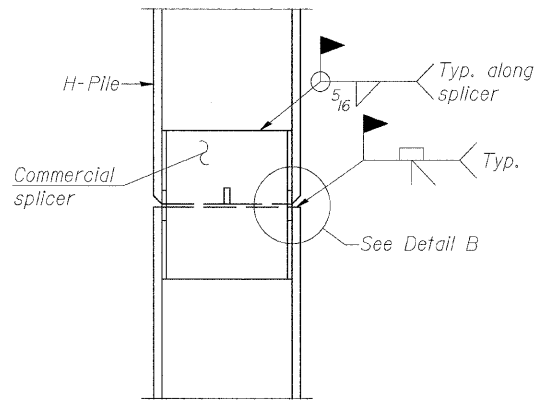
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	32
WHA# 1156008		CONTRACT NO. 87466		
FED. ROAD DIST. NO. - ILLINIS FED. AID PROJECT BRS-02601051				



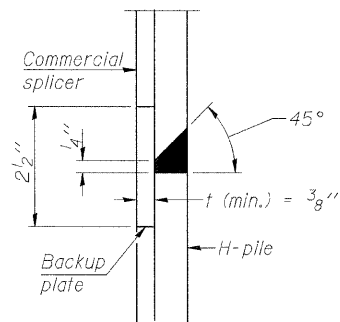


STEEL PILE TABLE

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

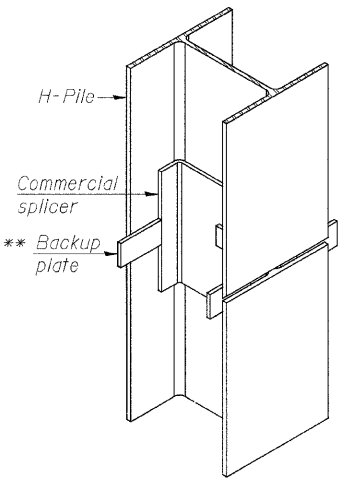


ELEVATION

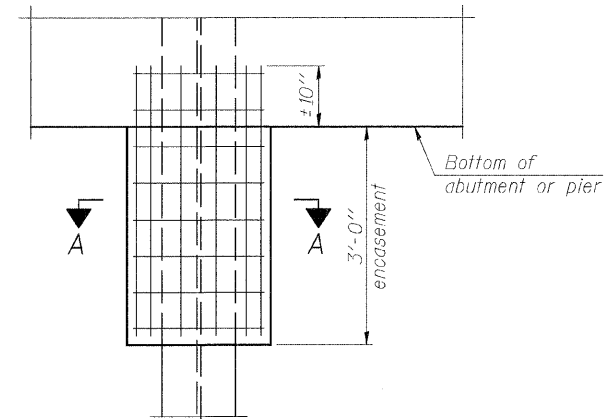


DETAIL "B"

WELDED COMMERCIAL SPLICE

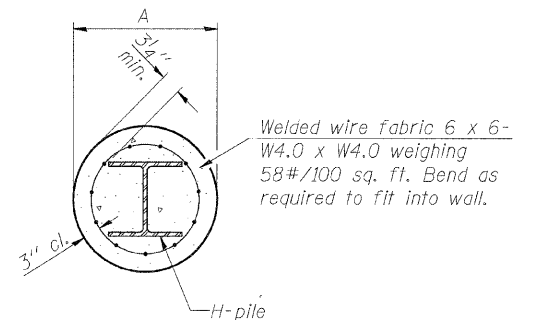


ISOMETRIC VIEW



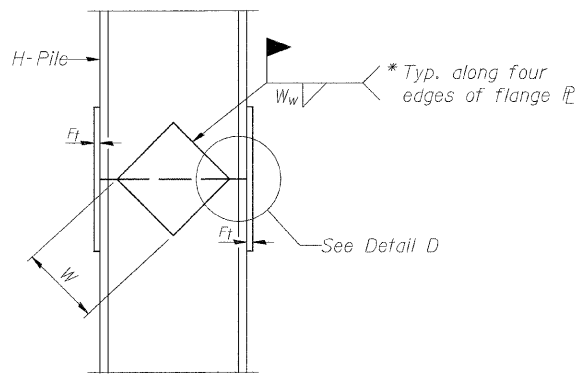
ELEVATION

PILE ENCASEMENT

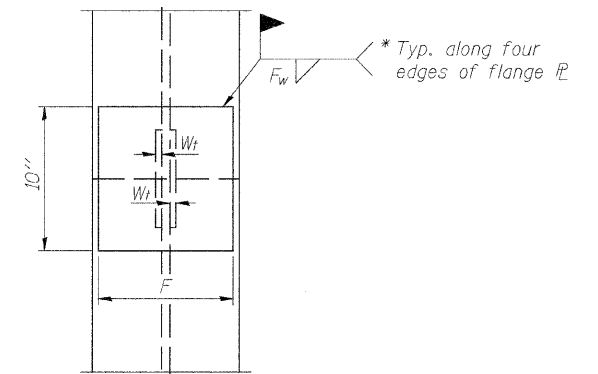


SECTION A-A

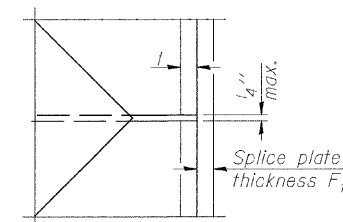
Note:  
Forms for encasement may be omitted when soil conditions permit.



ELEVATION



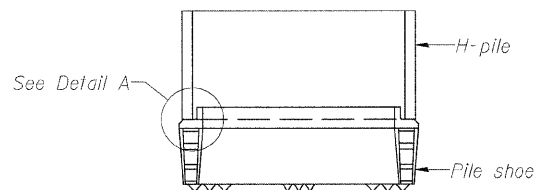
END VIEW



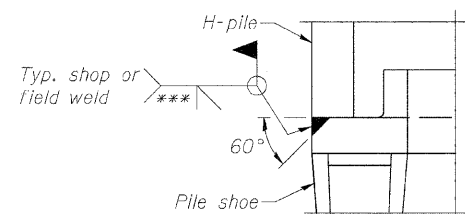
DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F <sub>t</sub>	F <sub>w</sub>	W	W <sub>t</sub>	W <sub>w</sub>
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

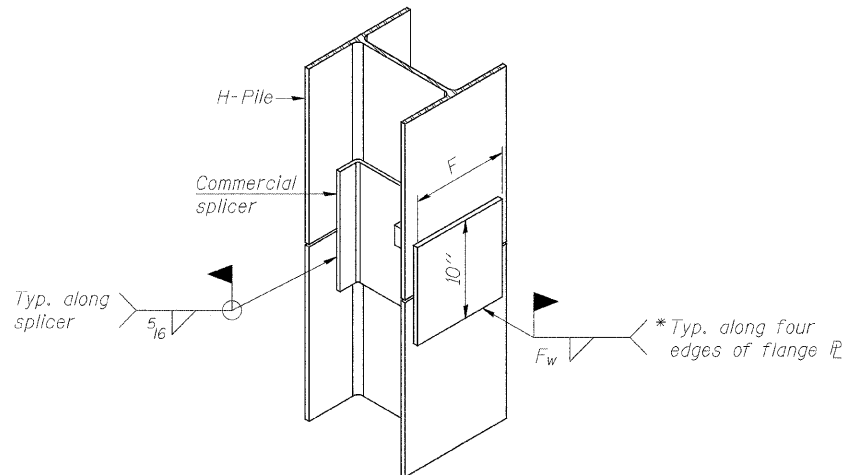


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

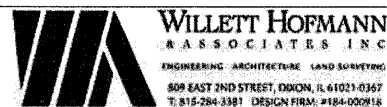
WELDED COMMERCIAL SPLICE ALTERNATE

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

NOTE:

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

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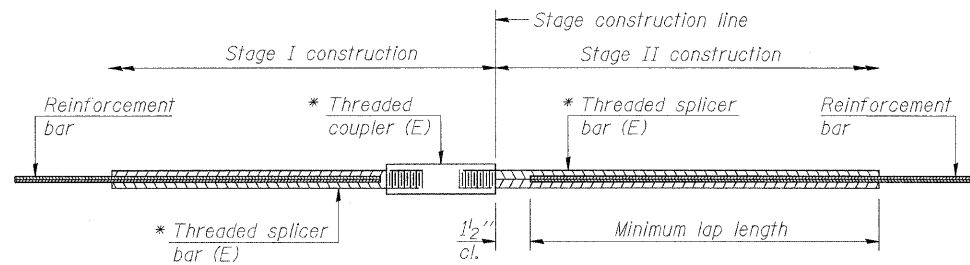
DESIGNED - B.K.C.	REVISED -
CHECKED - M.A.C.	REVISED -
DRAWN - F.D.L.	REVISED -
CHECKED - B.K.C.	REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**HP PILE DETAILS**  
**STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 16 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	33
WHA* 1156D08		CONTRACT NO. 87466		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT BRS-0260105		



**STANDARD BAR SPLICER ASSEMBLY**

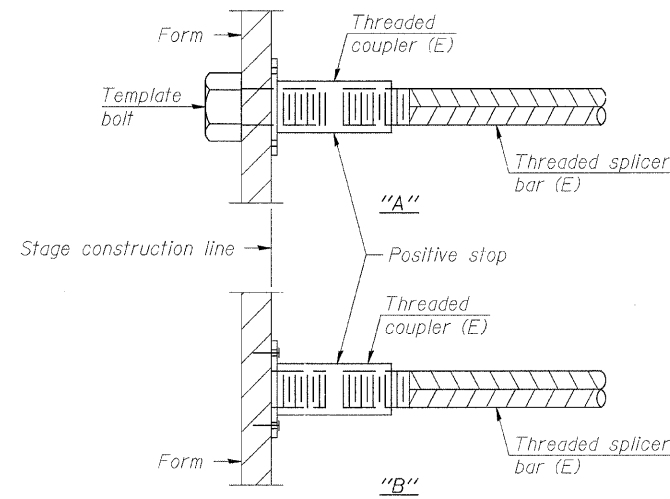
Bar size to be spliced	Minimum Lap Lengths				
	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

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

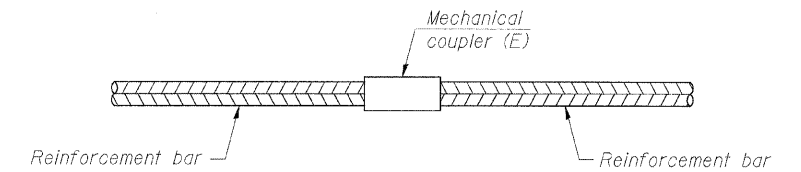
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



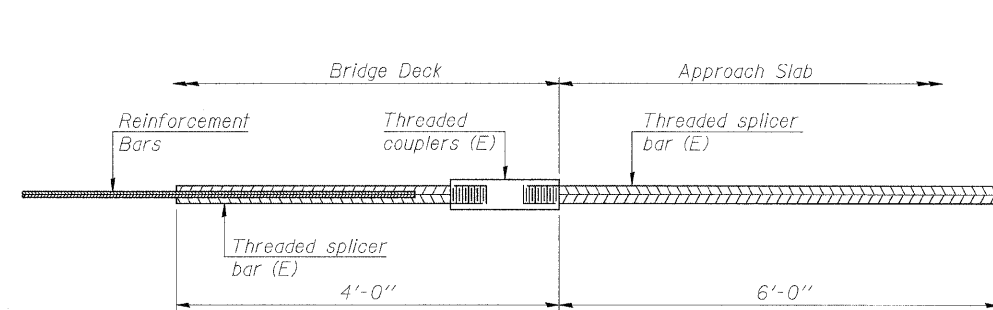
**INSTALLATION AND SETTING METHODS**

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



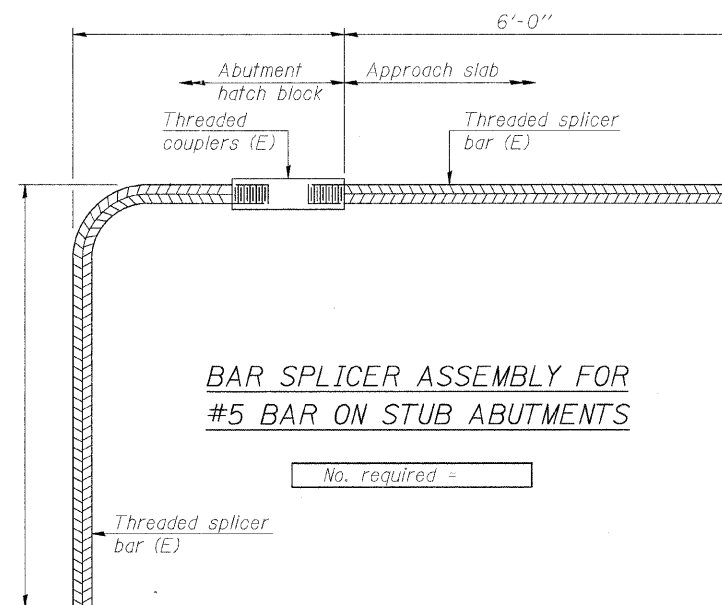
**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

No. required = 62



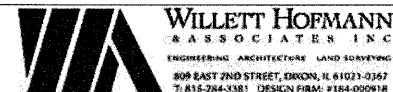
**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required =

**NOTES:**

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

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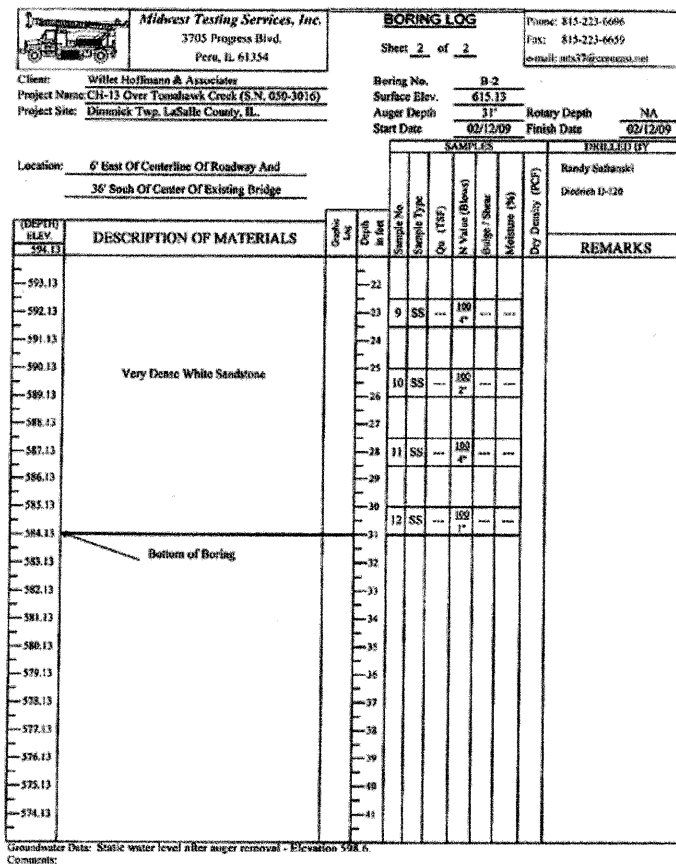
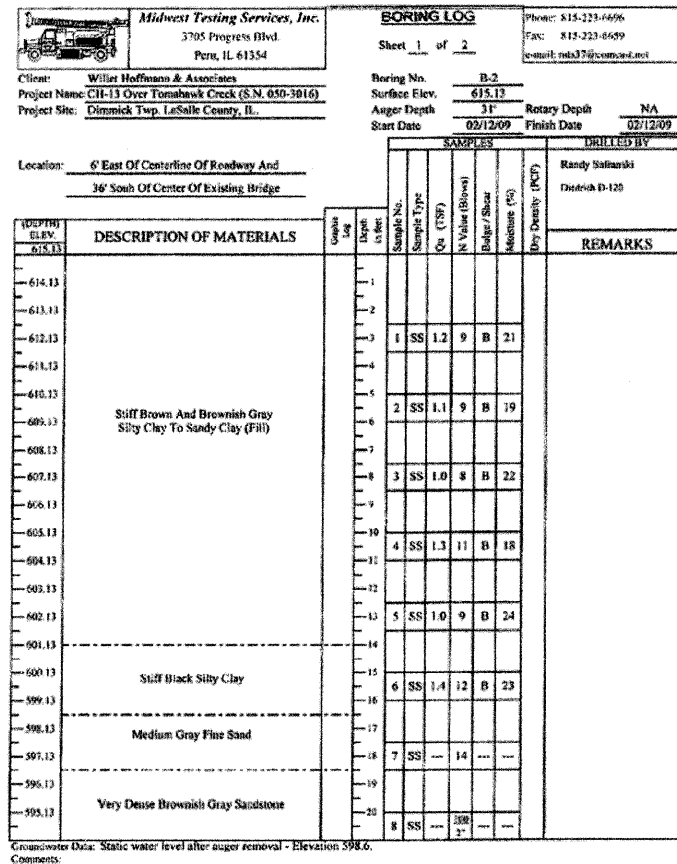
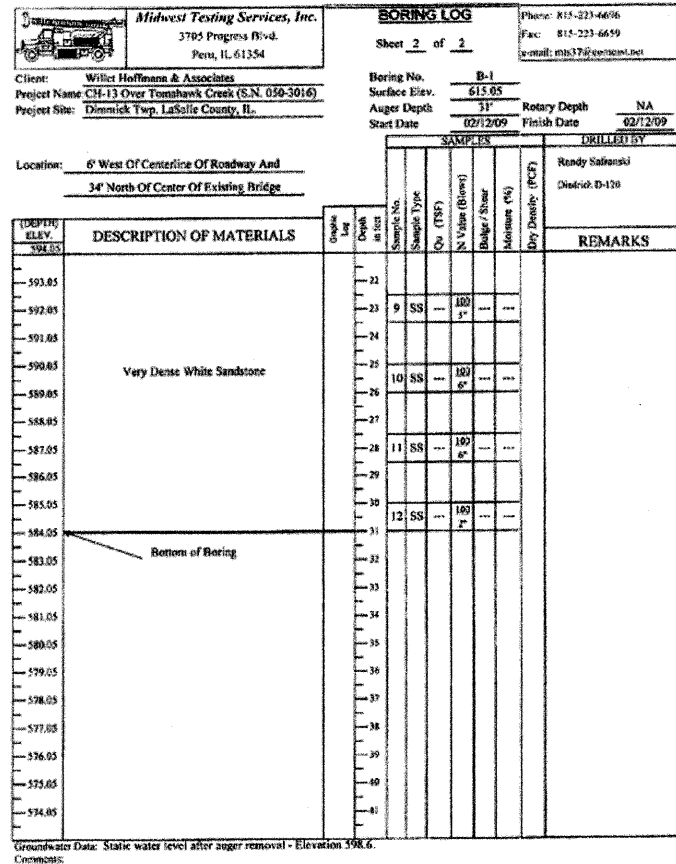
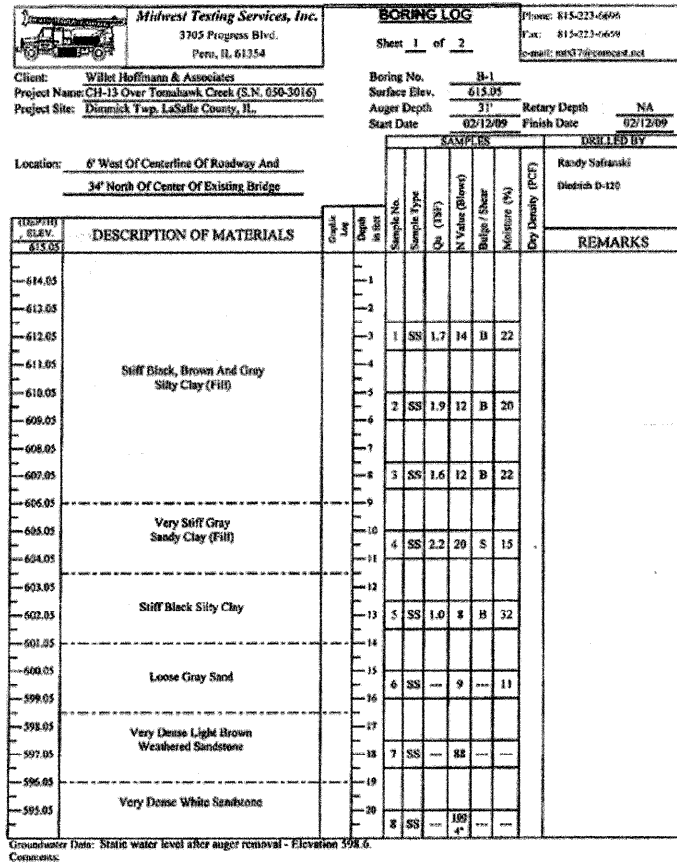
DESIGNED - B.K.C.	REVISED -
CHECKED - M.A.C.	REVISED -
DRAWN - F.D.L.	REVISED -
CHECKED - B.K.C.	REVISED -

**LASALLE COUNTY  
 C.H. 13 OVER TOMAHAWK CREEK  
 STATION 20+00**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 17 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	34
WHA* 1156008		CONTRACT NO. 87466		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT BRS-02601051		



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CHECKED - M.A.C.  
DRAWN - F.D.L.  
CHECKED - B.K.C.

REVISED -  
REVISED -  
REVISED -  
REVISED -

**LASALLE COUNTY  
C.H. 13 OVER TOMAHAWK CREEK  
STATION 20 + 00**

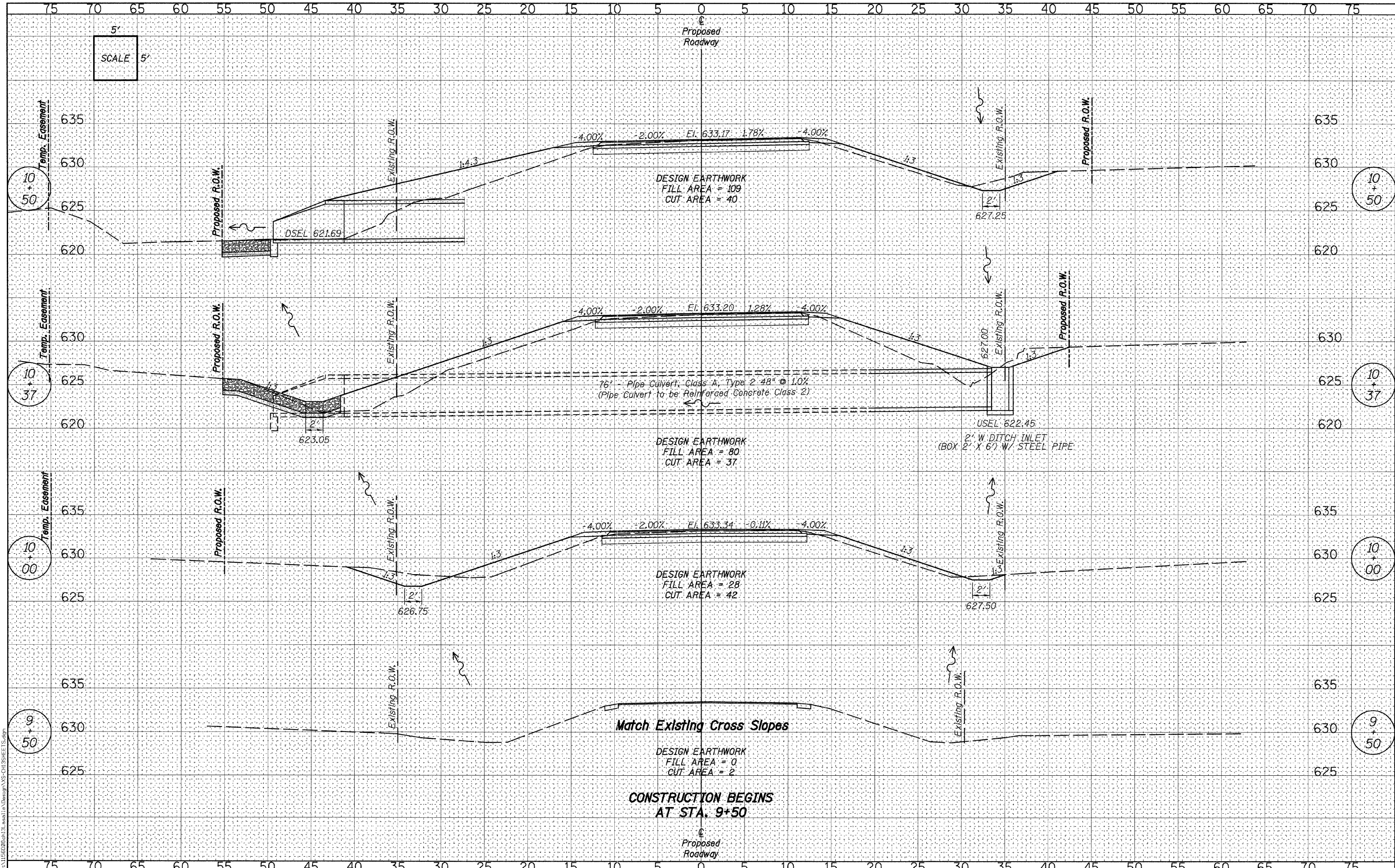
**BORING LOGS  
STRUCTURE NO. 050-3604**

STRUCTURAL SHEET NO. 18 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	35
WHA# 1156D08		CONTRACT NO. 87466		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT BRS-02601051				

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

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



**WILLETT HOFMANN ASSOCIATES INC.**  
ENGINEERING ARCHITECTURE LAND SURVEYING  
809 EAST 2ND STREET, DUNCAN, IL 61021-0387  
T: 815-284-3381 DESIGN FIRM: #184-005910

DESIGNED - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -
DRAWN - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -

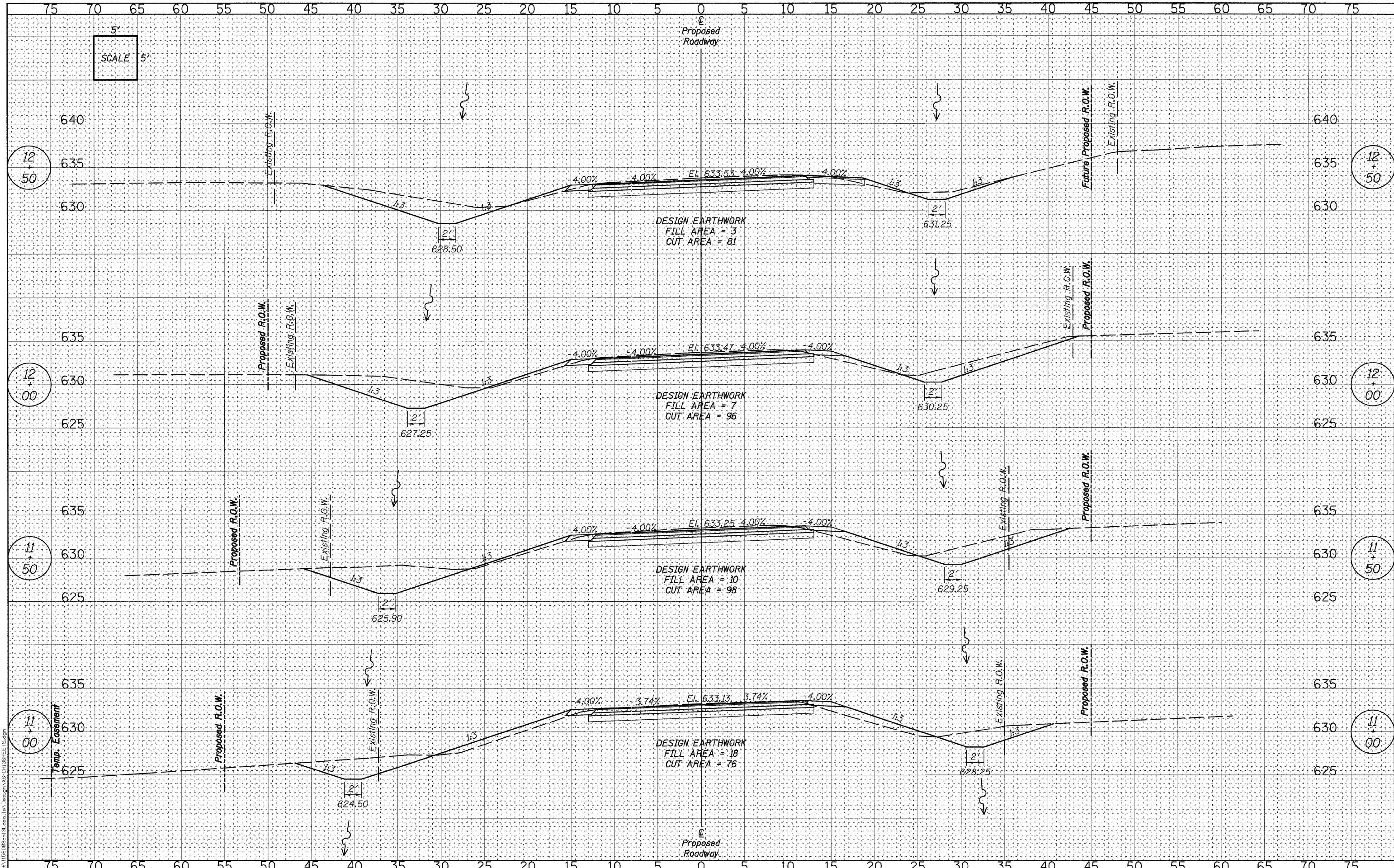
**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

<b>CROSS SECTIONS - C.H. 13</b>	
<b>STRUCTURE NO. 050-3604</b>	
SHEET NO. 1 OF 13 SHEETS	STA. 9+50 TO STA. 10+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	36
WHA* 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105D				

DATE	
BY	
FINAL SURVEY	
NOTED SURVEY	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTED SURVEY	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	



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DESIGNED	-	J.M.K.	REVISED	-	
CHECKED	-	G.F.S.	REVISED	-	
DRAWN	-	J.M.K.	REVISED	-	
CHECKED	-	G.F.S.	REVISED	-	

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

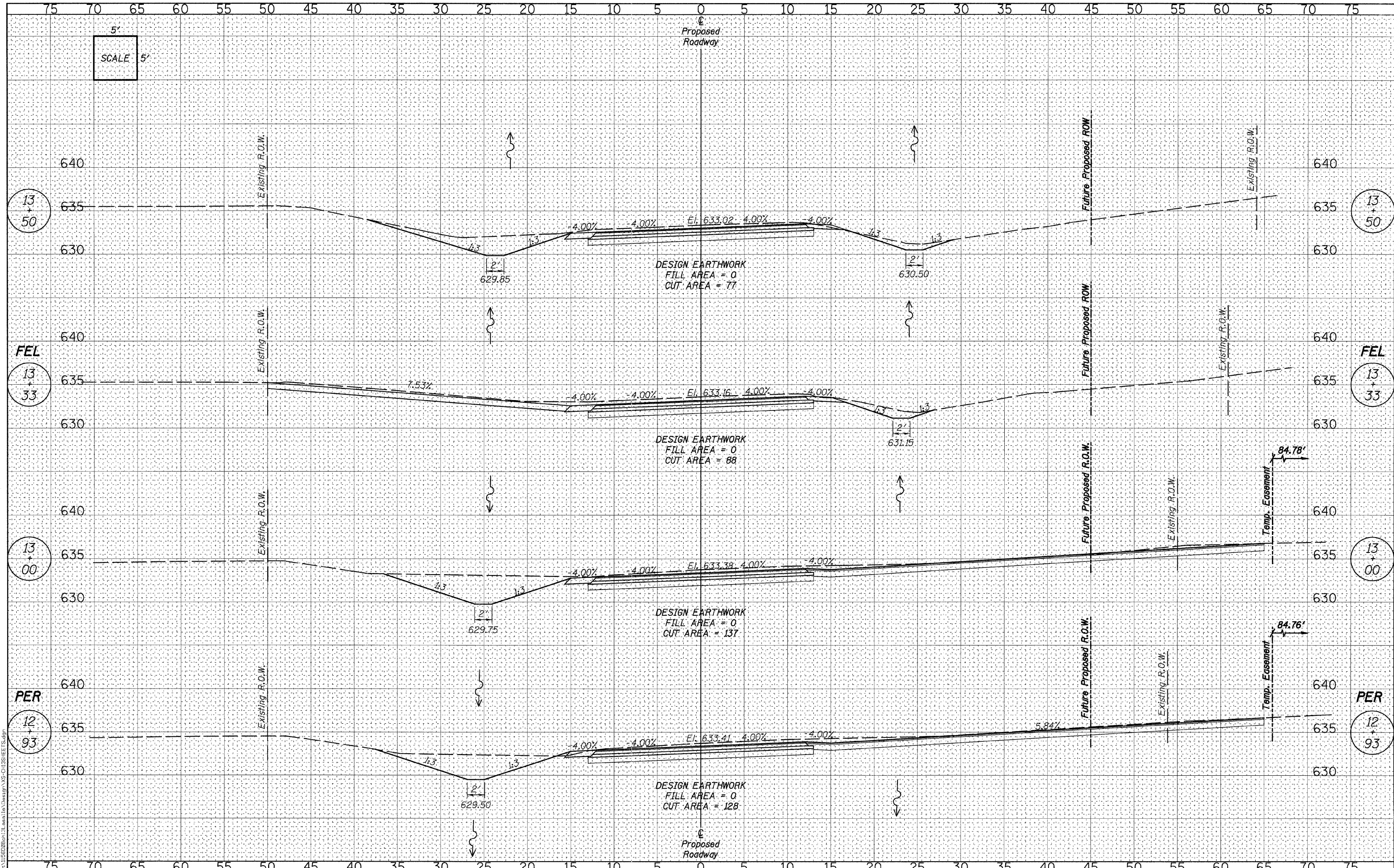
**CROSS SECTIONS - C.H. 13**  
**STRUCTURE NO. 050-3604**

SHEET NO. 2 OF 13 SHEETS STA. 11+00 TO STA. 12+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	37
WHA* 1156008			CONTRACT NO. 87466	
ILLINOIS FED. AID PROJECT BRS-02601051				

DATE	
BY	
FINAL SURVEY	
NOTED SURVEY	
NOTE BOOK	
NO.	
DESIGNED	
CHECKED	
DRAWN	
REVISIONS	

DATE	
BY	
ORIGINAL SURVEY	
NOTED SURVEY	
NOTE BOOK	
NO.	
DESIGNED	
CHECKED	
DRAWN	
REVISIONS	



SCALE 5'

**WILLET HOFMANN ASSOCIATES INC.**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 809 EAST 2ND STREET, QUINDA, IL 61021-0267  
 T: 815-384-3381 DESIGN FIRM #784-000998

DESIGNED	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-
DRAWN	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-

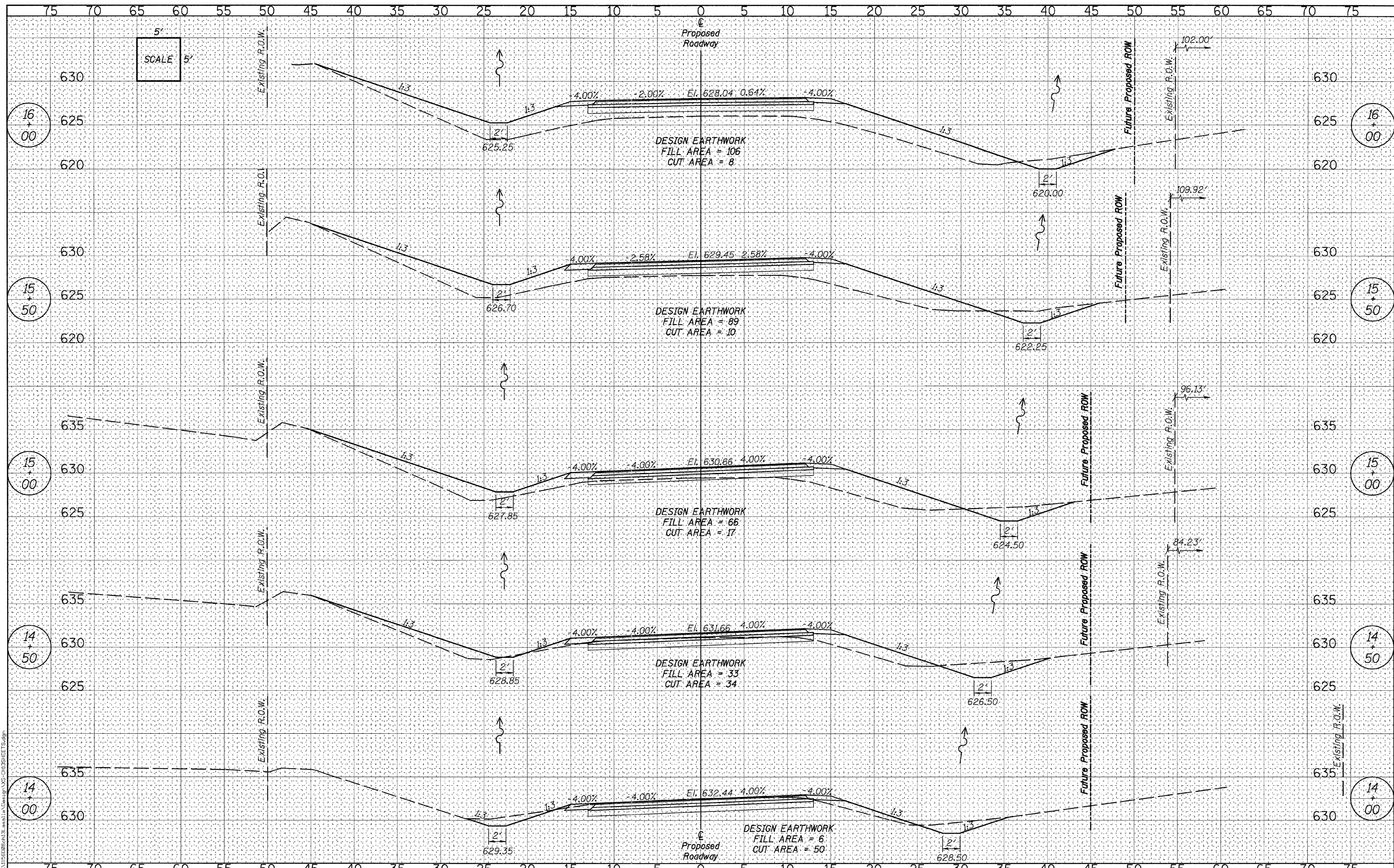
**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**CROSS SECTIONS - C.H. 13**  
**STRUCTURE NO. 050-3604**  
 SHEET NO. 3 OF 13 SHEETS STA. 12+93 TO STA. 13+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	38
WHA# 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				

DATE	
BY	
FINAL SURVEY	
SUBMITTED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
SUBMITTED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
AREAS CHECKED	



**WILLET HOFMANN ASSOCIATES INC.**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 809 EAST 2ND STREET, DIXON, IL 61021-0367  
 T: 815-284-3381 DESIGN FIRM #184-000938

DESIGNED	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-
DRAWN	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-

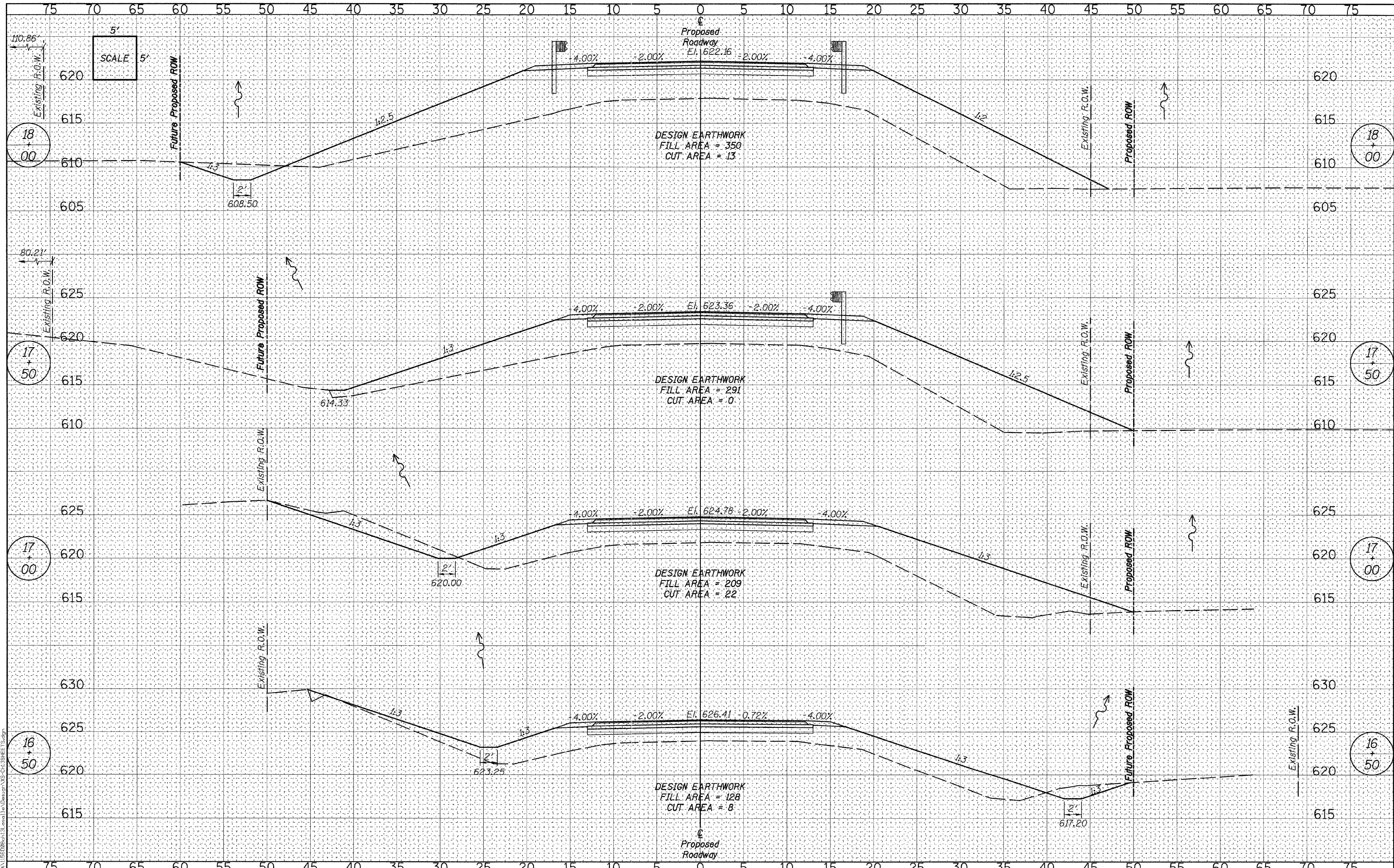
**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**CROSS SECTIONS - C.H. 13**  
**STRUCTURE NO. 050-3604**  
 SHEET NO. 4 OF 13 SHEETS STA. 14+00 TO STA. 16+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	39
WHA# 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260(105)				

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

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



**WILLET HOFMANN ASSOCIATES INC.**  
 809 EAST 2ND STREET, DUKOTA, IL 61021-0367  
 T: 815-284-3381 DESIGN FIRM: #384-009948

DESIGNED	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-
DRAWN	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-

**LASALLE COUNTY  
 C.H. 13 OVER TOMAHAWK CREEK  
 STATION 20+00**

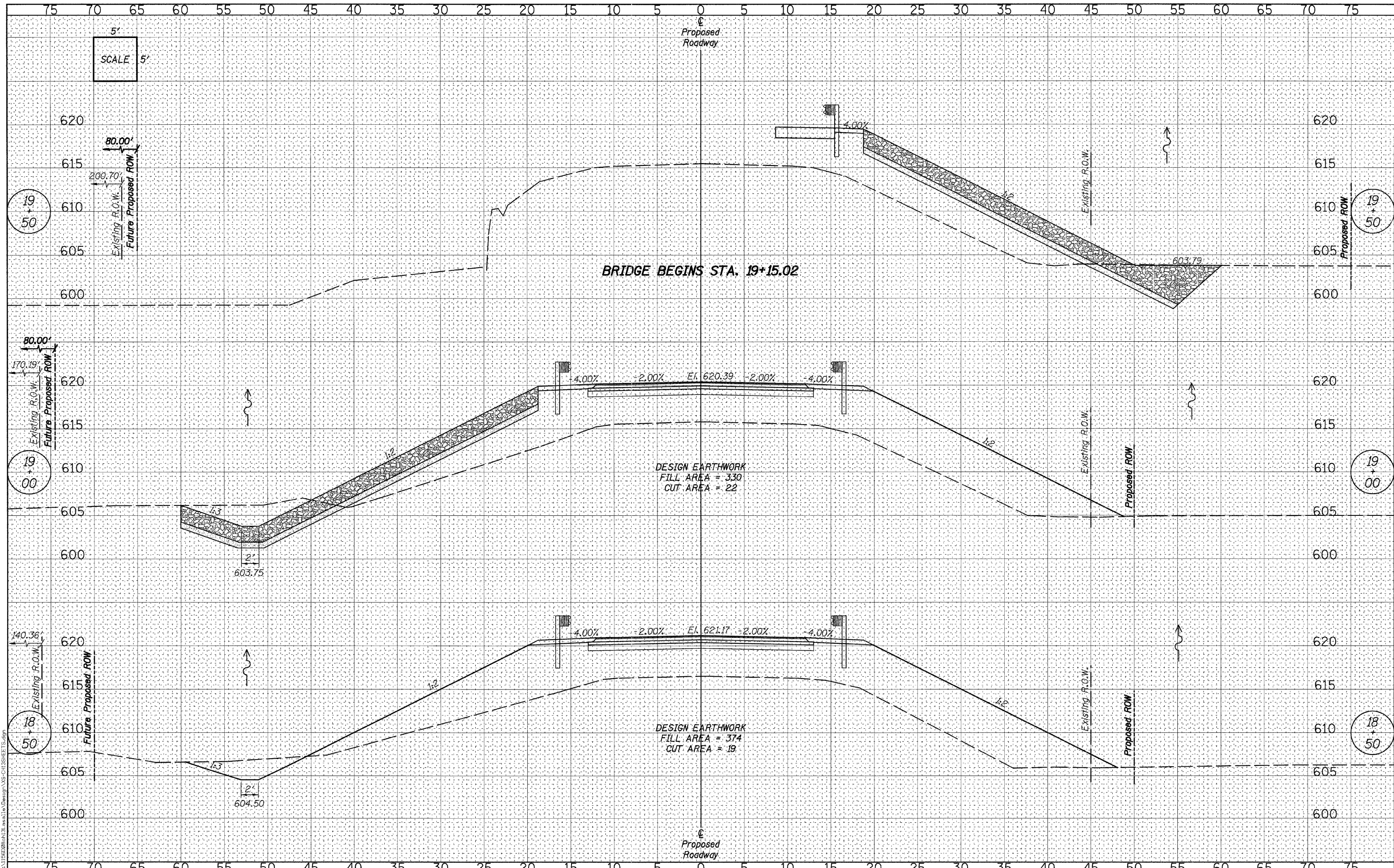
**CROSS SECTIONS - C.H. 13  
 STRUCTURE NO. 050-3604**  
 SHEET NO. 5 OF 13 SHEETS STA. 16+50 TO STA. 18+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	40
WHA# 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260(105)				



DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 TEMPLATE \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
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 PLOTTED \_\_\_\_\_  
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 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_



**WILLET HOFMANN ASSOCIATES INC.**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 809 EAST 2ND STREET, DIXON, IL 61021-0367  
 T: 815-284-3381 DESIGN FIRM: #184-000948

DESIGNED - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -
DRAWN - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

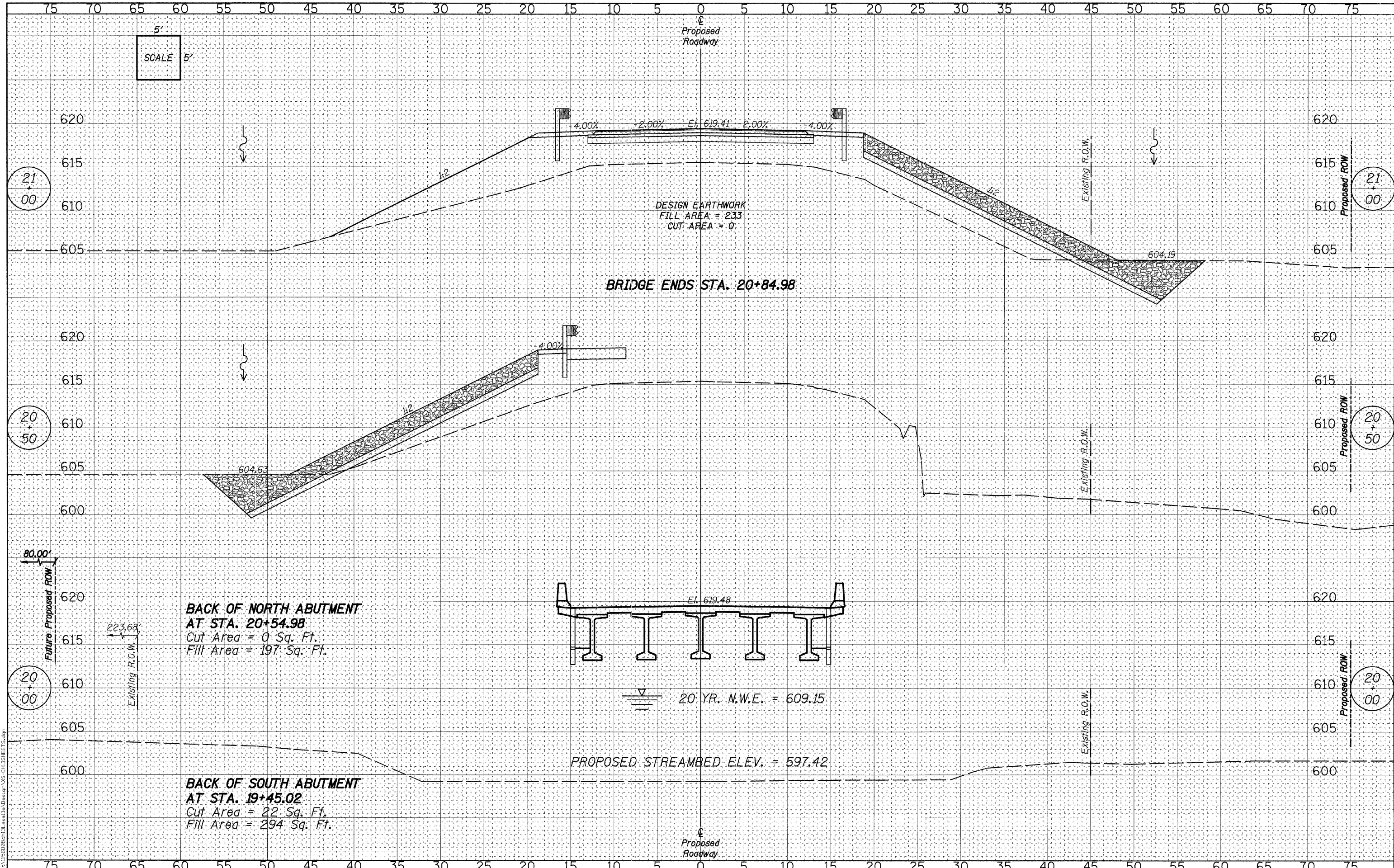
**CROSS SECTIONS - C.H. 13**  
**STRUCTURE NO. 050-3604**

SHEET NO. 6 OF 13 SHEETS	STA. 18+50 TO STA. 19+50
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F.A.S. RTE. 260	SECTION 10-00651-00-BR	COUNTY LASALLE	TOTAL SHEETS 51	SHEET NO. 41
WHA# 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260(105)				

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

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



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DESIGNED	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-
DRAWN	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

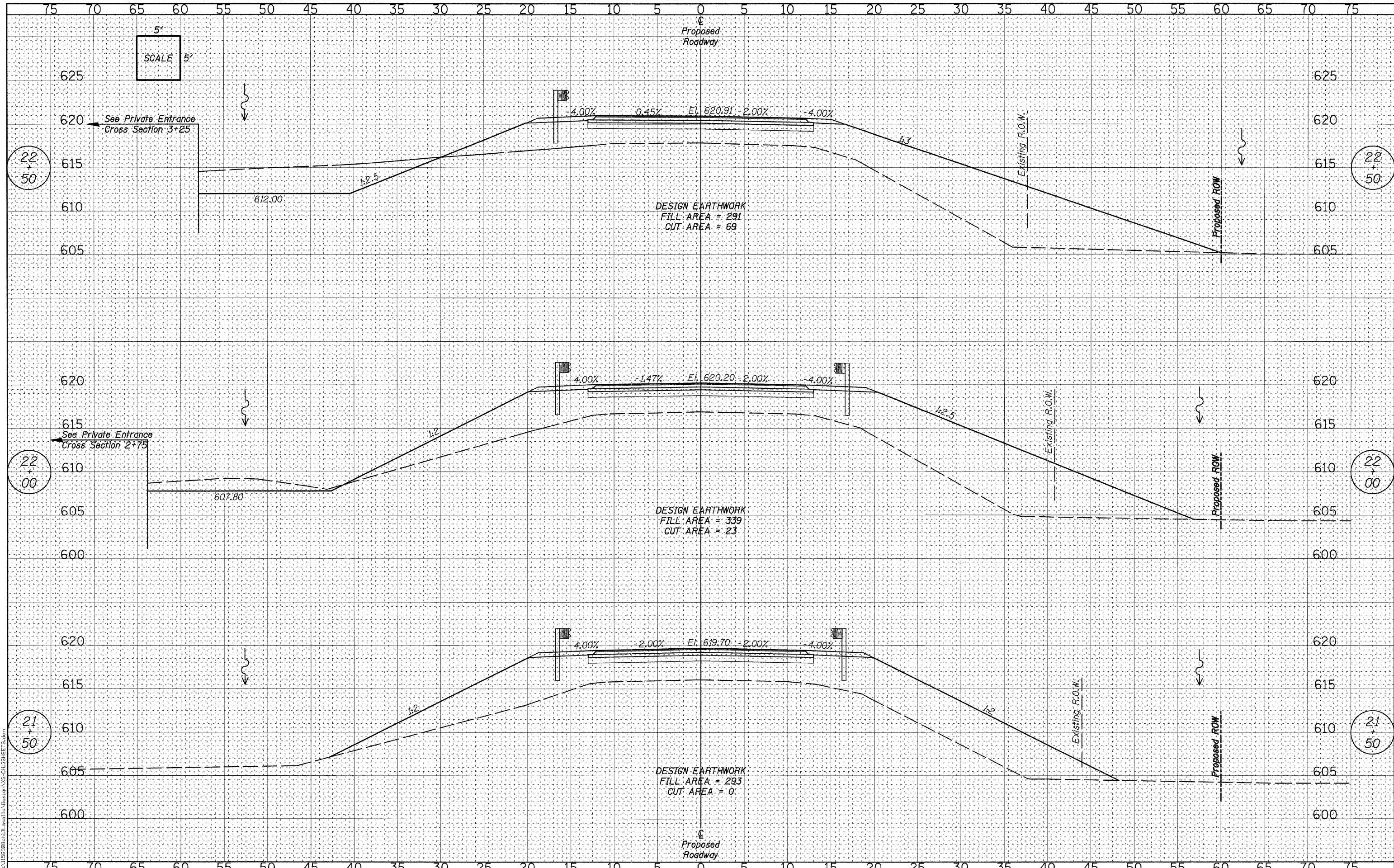
**CROSS SECTIONS - C.H. 13**  
**STRUCTURE NO. 050-3604**

SHEET NO. 7 OF 13 SHEETS      STA. 20+00 TO STA. 21+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	42
WHA# 1156008			CONTRACT NO. 87466	
ILLINOIS FED. AID PROJECT BRS-0260105				

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

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



**WILLET HOFMANN ASSOCIATES INC.**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 809 EAST 2ND STREET, DECATUR, IL 61021-0287  
 T: 815-284-3381 DESIGN FIRM #184-000988

DESIGNED - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -
DRAWN - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

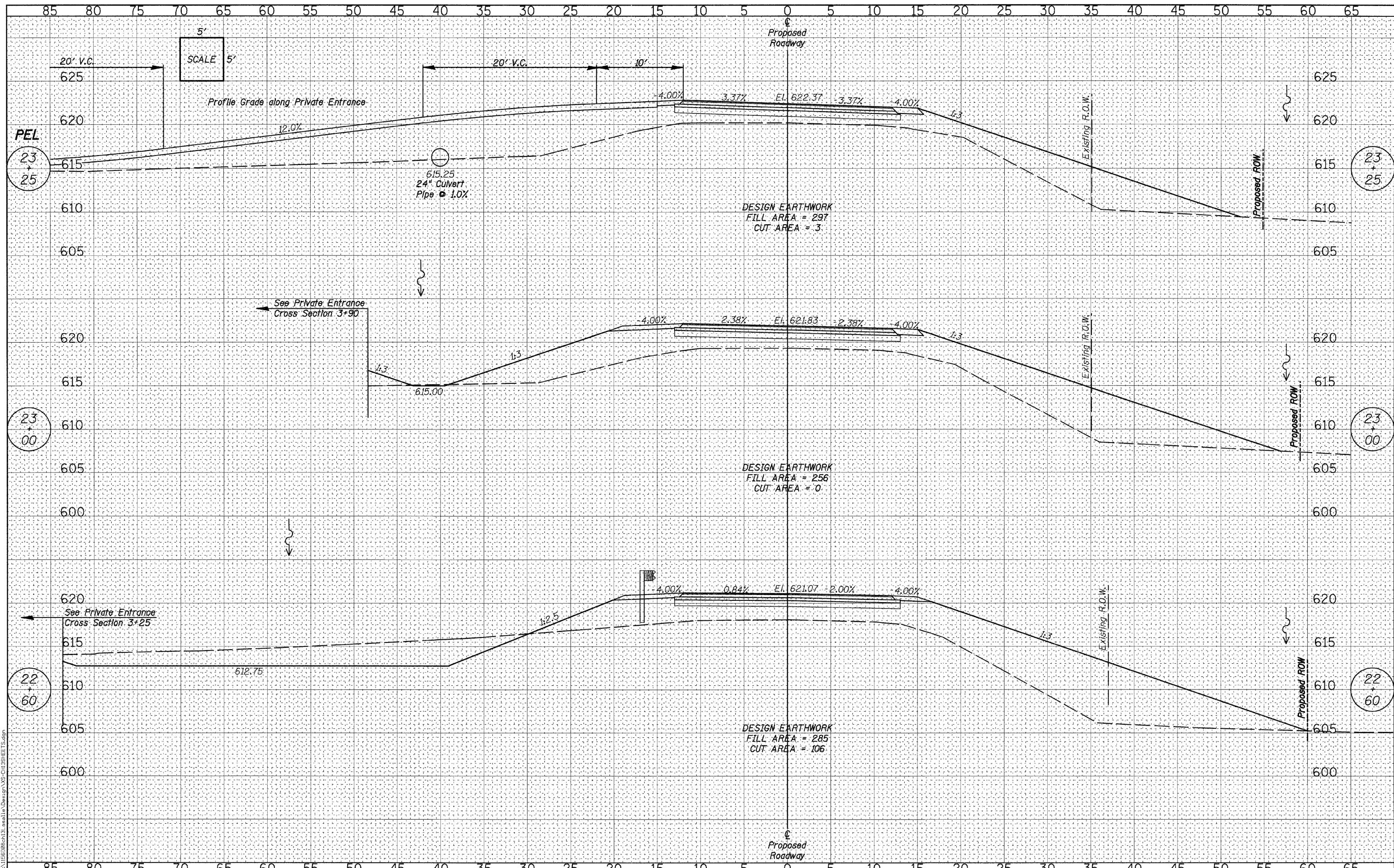
<b>CROSS SECTIONS - C.H. 13</b>	
<b>STRUCTURE NO. 050-3604</b>	
SHEET NO. 8 OF 13 SHEETS	STA. 21+50 TO STA. 22+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	43
WHA# 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				

FILE = S:\Projects\1156008\21+50\1156008-21+50.dwg

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

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



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DESIGNED	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-
DRAWN	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-

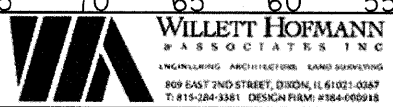
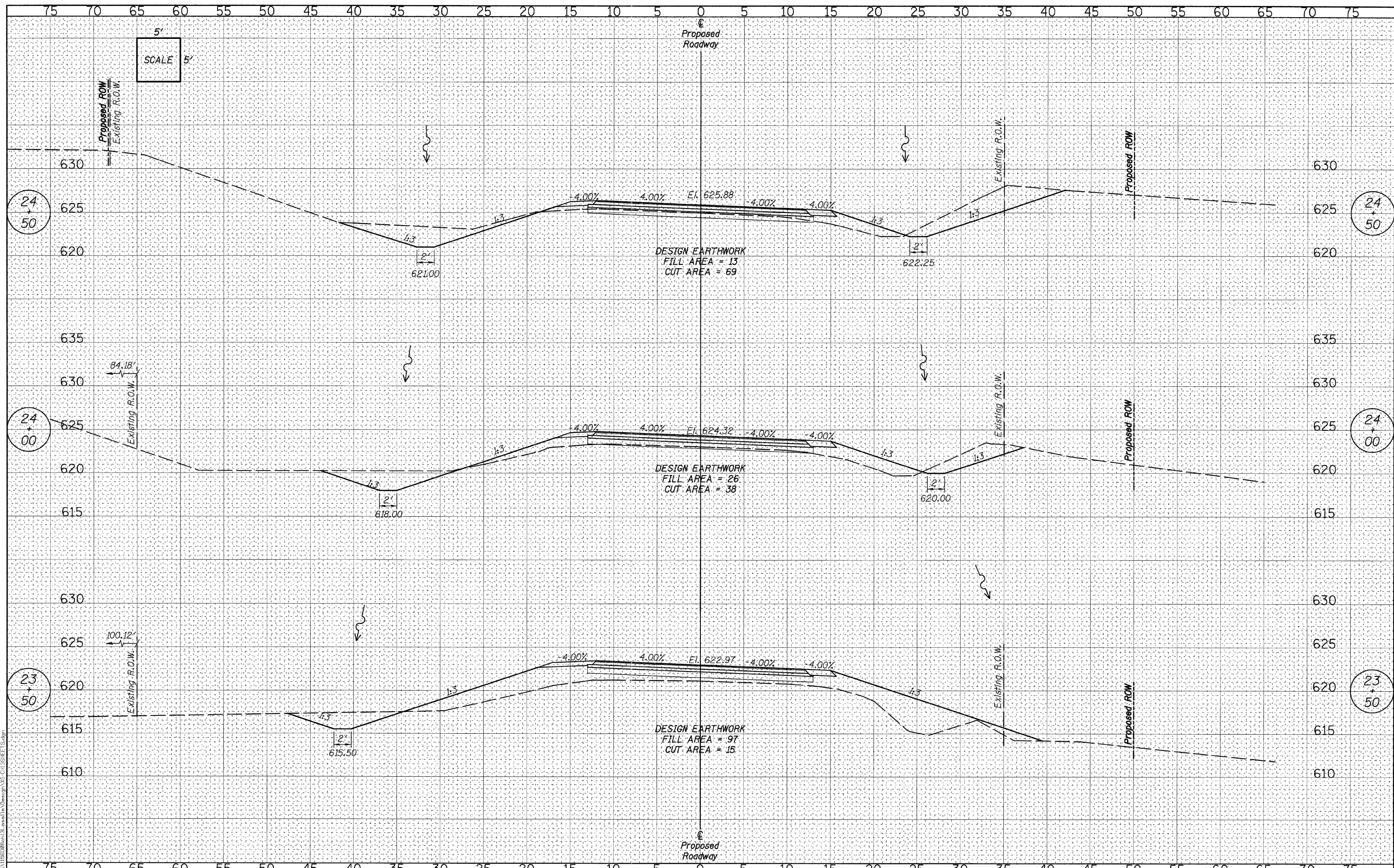
**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**CROSS SECTIONS - C.H. 13**  
**STRUCTURE NO. 050-3604**  
 SHEET NO. 9 OF 13 SHEETS STA. 22+60 TO STA. 23+25

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	44
WHA* 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260105				

BY	DATE

BY	DATE



DESIGNED	-	J.M.K.	REVISED	-
CHECKED	-	G.F.S.	REVISED	-
DRAWN	-	J.M.K.	REVISED	-
CHECKED	-	G.F.S.	REVISED	-

**LASALLE COUNTY  
 C.H. 13 OVER TOMAHAWK CREEK  
 STATION 20 + 00**

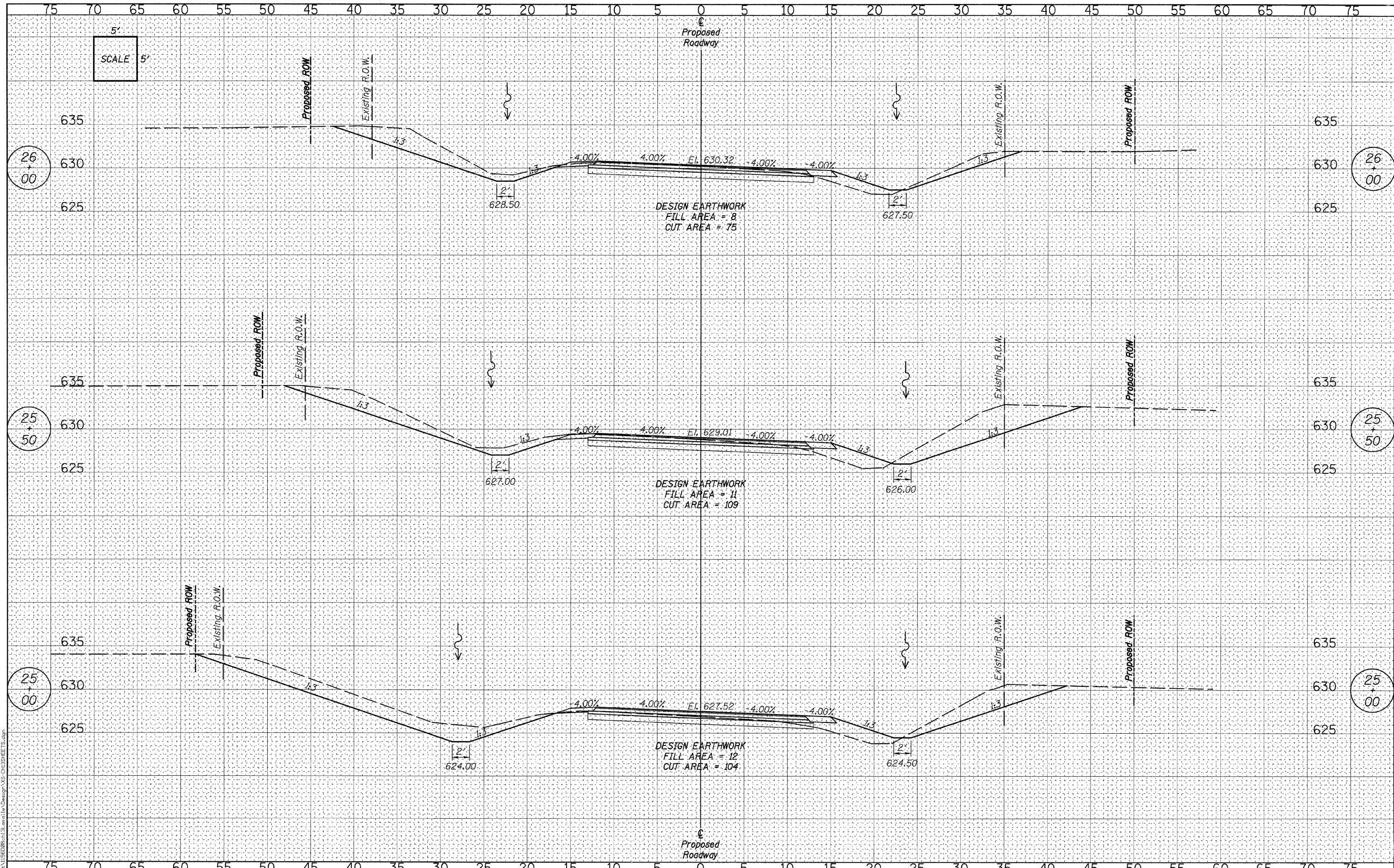
**CROSS SECTIONS - C.H. 13  
 STRUCTURE NO. 050-3604**

SHEET NO. 10 OF 13 SHEETS STA. 23+50 TO STA. 24+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	45
WHA* 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260(105)				

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

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



**WILLET HOFMANN ASSOCIATES INC.**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 809 EAST 2ND STREET, DODON, IL 61021-0367  
 T: 815-284-3381 DESIGN FIRM #184-060918

DESIGNED	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-
DRAWN	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-

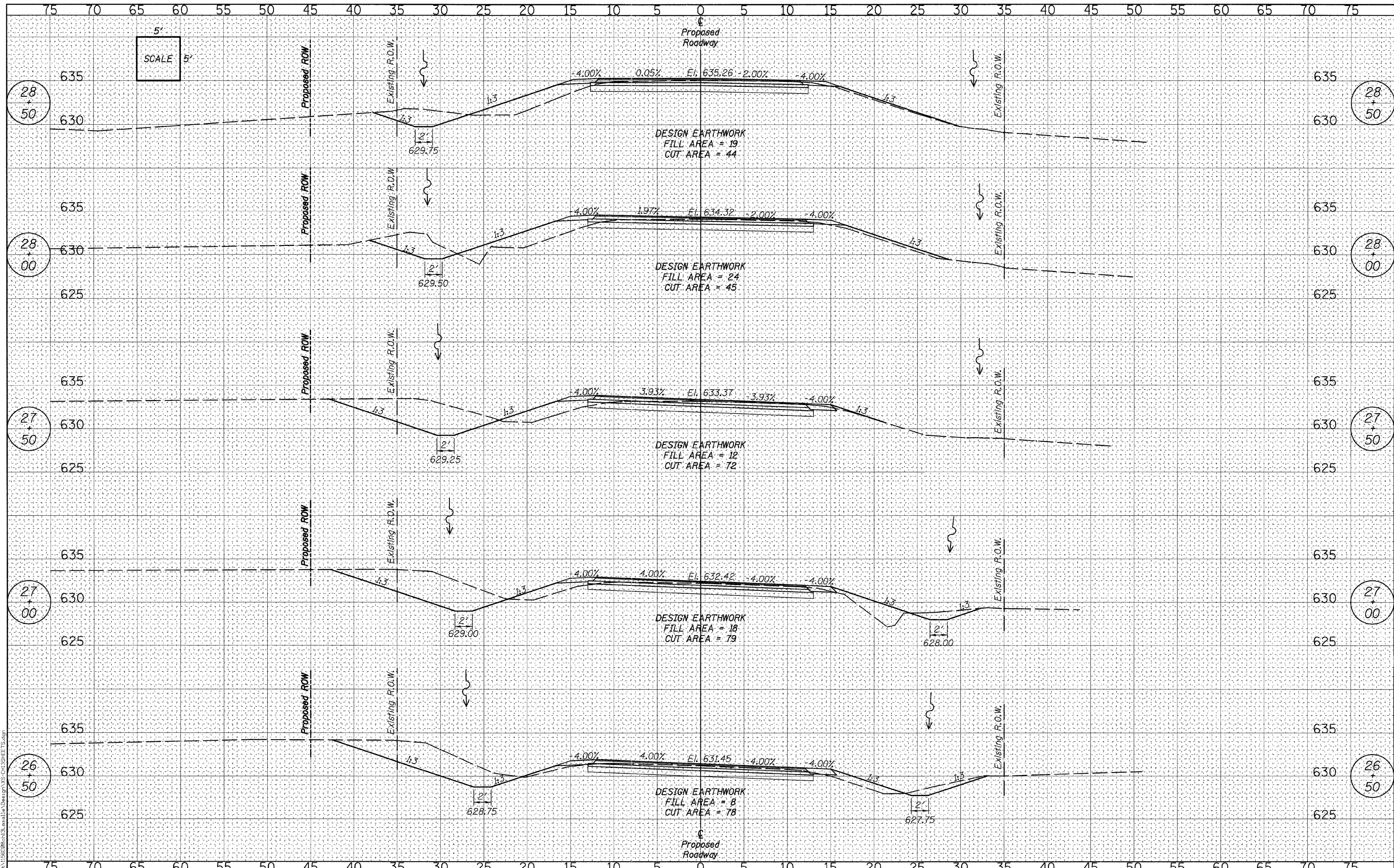
**LASALLE COUNTY  
 C.H. 13 OVER TOMAHAWK CREEK  
 STATION 20+00**

**CROSS SECTIONS - C.H. 13  
 STRUCTURE NO. 050-3604**  
 SHEET NO. 11 OF 13 SHEETS STA. 25+00 TO STA. 26+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	46
WHA* 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260(105)				

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 TEMPLATE \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 TEMPLATE \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_



**WILLET HOFMANN ASSOCIATES INC.**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 809 EAST 7<sup>TH</sup> STREET, DIXON, IL 61021-0187  
 T: 815-284-3381 DESIGN FIRM #184-000918

DESIGNED - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -
DRAWN - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -

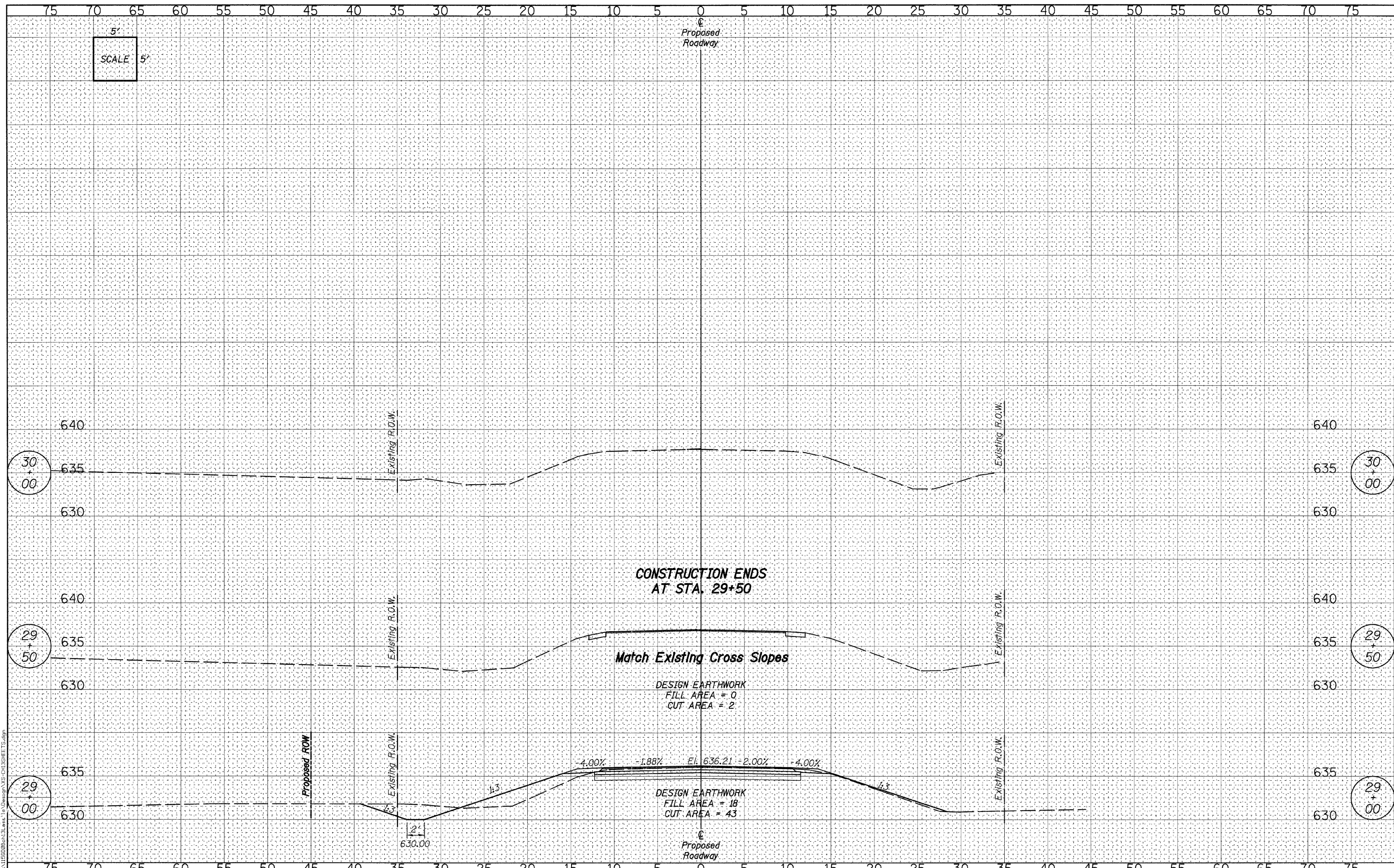
**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**CROSS SECTIONS - C.H. 13**  
**STRUCTURE NO. 050-3604**  
 SHEET NO. 12 OF 13 SHEETS STA. 26+50 TO STA. 28+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	47
WHA# 1156008		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260(105)				

DATE	
BY	
FINAL SURVEY	
NOTED SURVEY	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
NOTED SURVEY	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	



CONSTRUCTION ENDS  
AT STA. 29+50

Match Existing Cross Slopes

DESIGN EARTHWORK  
FILL AREA = 0  
CUT AREA = 2

DESIGN EARTHWORK  
FILL AREA = 18  
CUT AREA = 43

**WILLETTT HOFMANN ASSOCIATES INC.**  
 809 EAST 2ND STREET, CHICAGO, IL 60621-0287  
 T. 815-284-3381 DESIGN FIRM #184-000988

DESIGNED	J.M.K.	REVISED	-
CHECKED	G.F.S.	REVISED	-
DRAWN	J.M.K.	REVISED	-
CHECKED	G.F.S.	REVISED	-

**LASALLE COUNTY  
C.H. 13 OVER TOMAHAWK CREEK  
STATION 20+00**

**CROSS SECTIONS - C.H. 13  
STRUCTURE NO. 050-3604**  
 SHEET NO. 13 OF 13 SHEETS    STA. 29+00 TO STA. 30+00

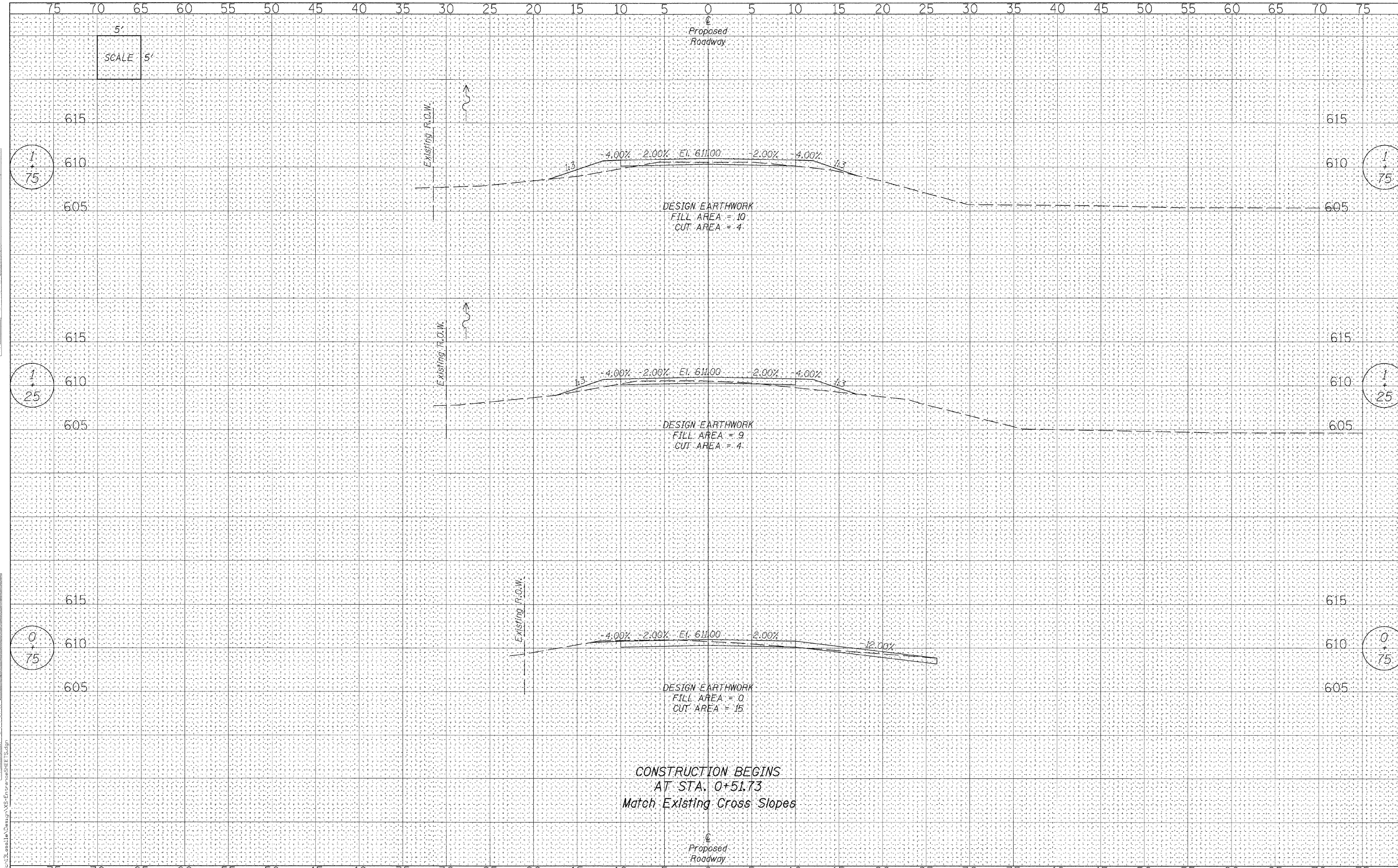
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	48
WHA* 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260(105)				

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

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



CONSTRUCTION BEGINS  
AT STA. 0+51.73  
Match Existing Cross Slopes



DESIGNED	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-
DRAWN	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20+00**

**CROSS SECTIONS - PRIVATE ENTRANCE**  
**STRUCTURE NO. 050-3604**

SHEET NO. 1 OF 2 SHEETS      STA. 0+75 TO STA. 1+75

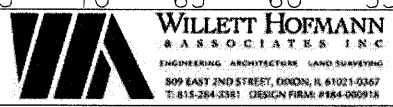
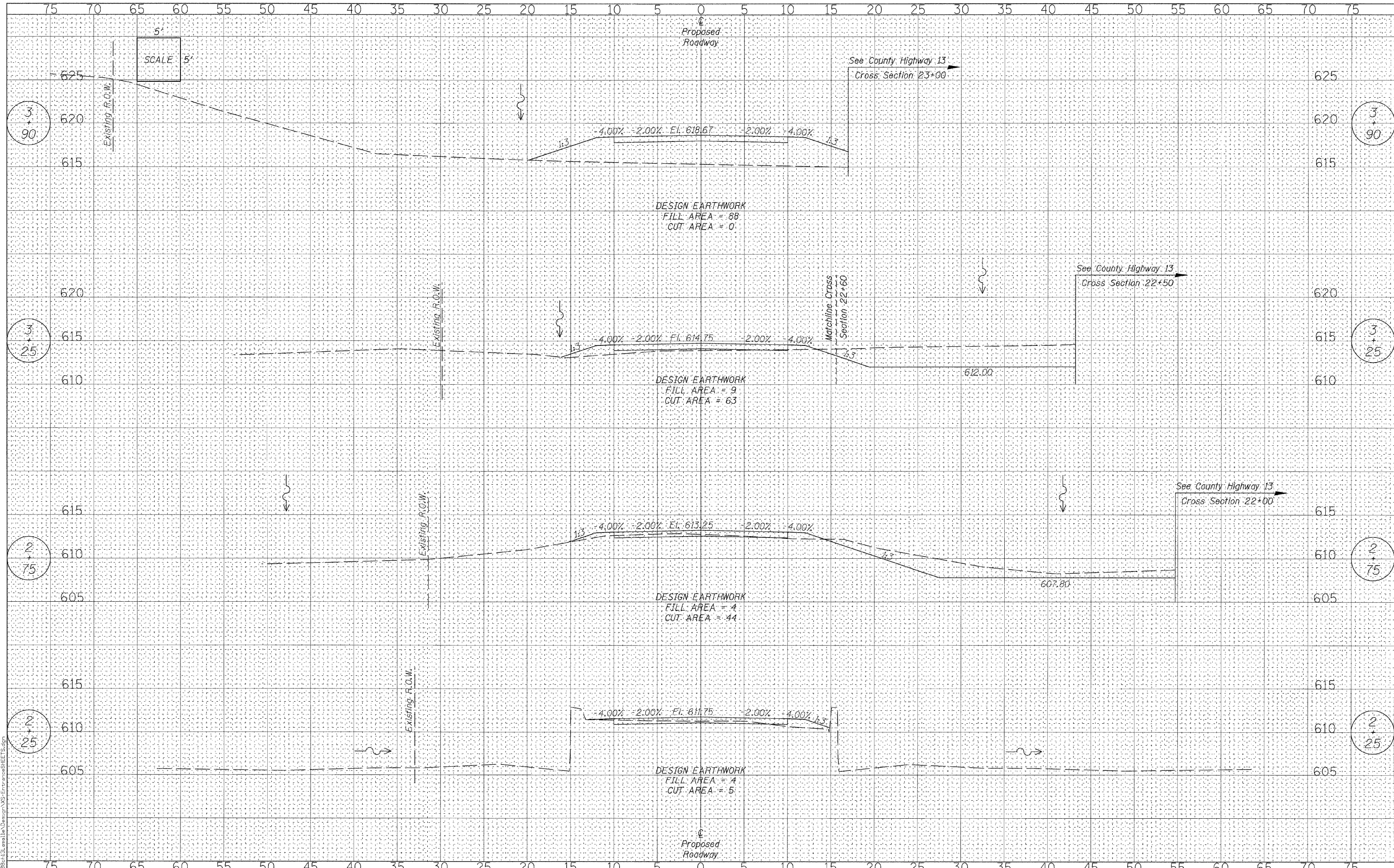
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	49
WHA# 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-02601051				

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DATE	
BY	
FINAL SURVEY	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
NO.	

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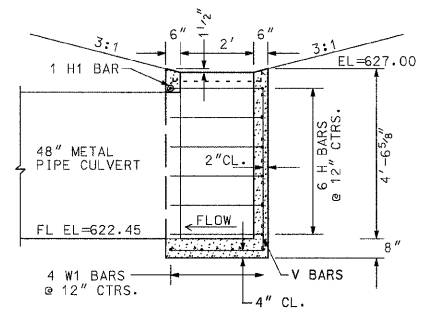
DESIGNED	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-
DRAWN	- J.M.K.	REVISED	-
CHECKED	- G.F.S.	REVISED	-

**LASALLE COUNTY  
C.H. 13 OVER TOMAHAWK CREEK  
STATION 20+00**

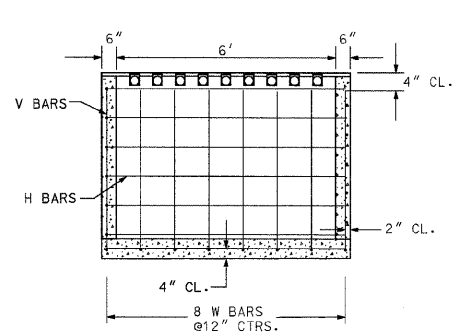
**CROSS SECTIONS - PRIVATE ENTRANCE  
STRUCTURE NO. 050-3604**

SHEET NO. 2 OF 2 SHEETS    STA. 2+25 TO STA. 3+90

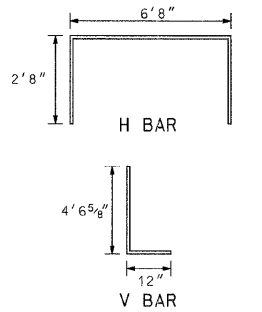
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	50
WHA* 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-0260(105)				



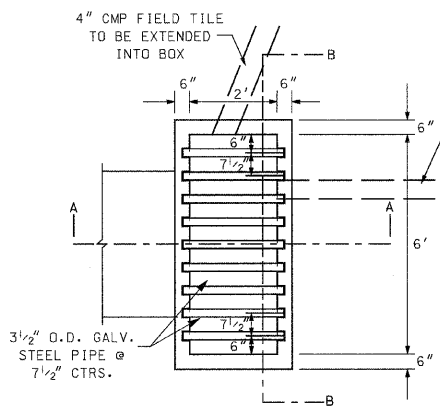
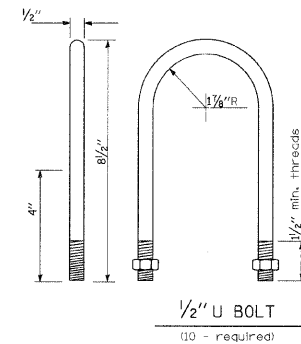
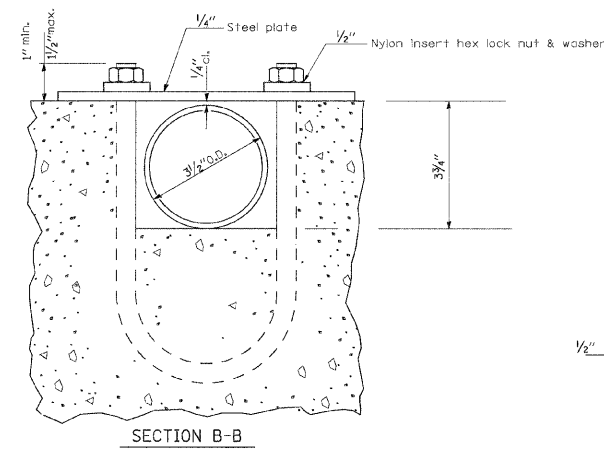
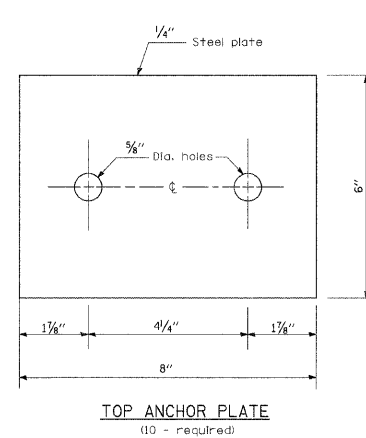
SIDE VIEW SECTION A-A



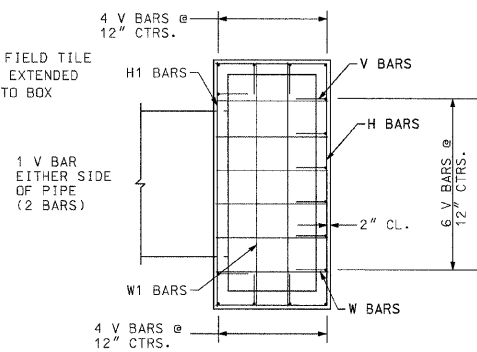
END VIEW SECTION B-B



BAR NO.	SIZE	LENGTH
H	#4	12'-0"
H1	#4	6'-8"
V	#4	5'-6 5/8"
W	#4	2'-8"
W1	#4	6'-8"



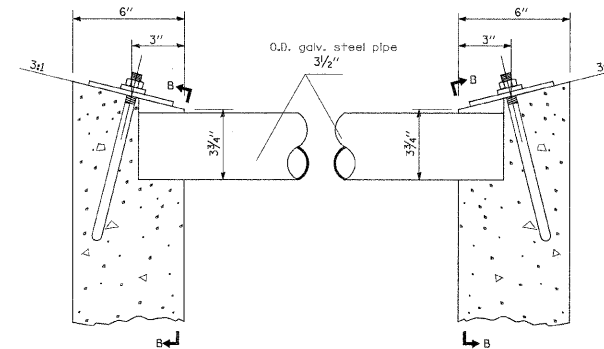
PLAN VIEW



PLAN VIEW (SHOWING REINFORCEMENT)

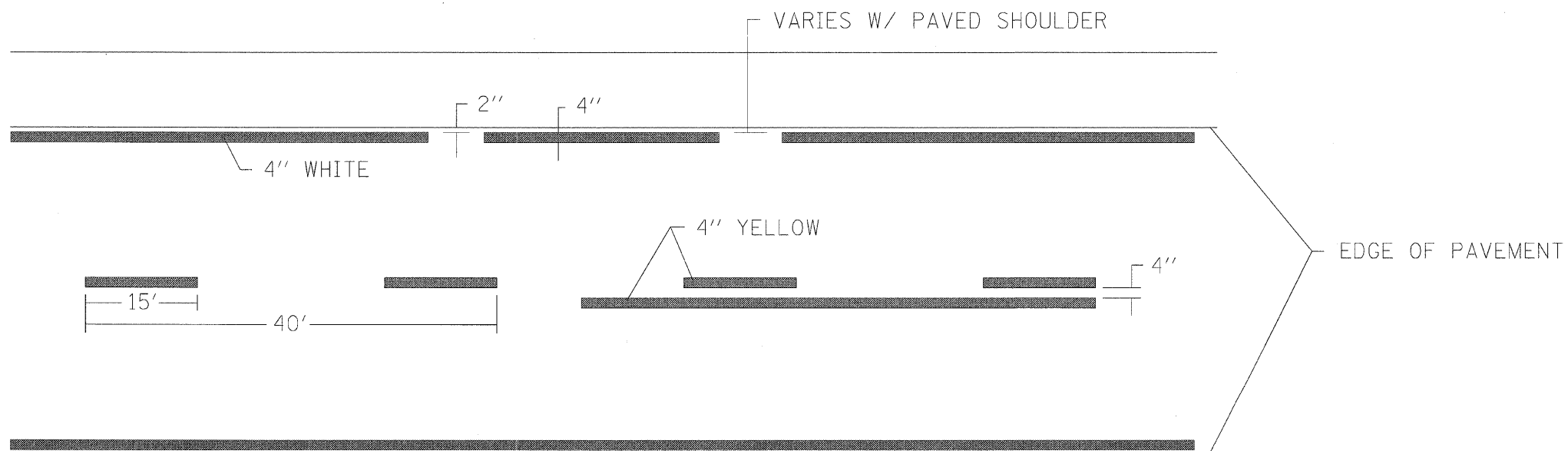
**GENERAL NOTES**

CLASS PC CONCRETE SHALL BE USED THROUGHOUT.  
 EXPOSED EDGES SHALL BE BEVELED 3/4".  
 REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 GRADE 60.  
 CUT OR BEND BARS IN FIELD TO FIT AROUND PIPES.  
 ANY EXISTING FIELD TILE WHICH IS DAMAGED SHALL BE REPLACED AND THE FIELD TILE SHALL BE EXTENDED INTO THE INLET BOX.  
 THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR INLET BOX. (SPECIAL) AND SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE WORK.



DETAIL AT BLOCKOUTS

**INLETS, SPECIAL DETAILS**



**PAVEMENT STRIPING DETAILS**

FILE = J:\1156008ch13\asalle\Plans\Detail.dgn



DESIGNED - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -
DRAWN - J.M.K.	REVISED -
CHECKED - G.F.S.	REVISED -

**LASALLE COUNTY**  
**C.H. 13 OVER TOMAHAWK CREEK**  
**STATION 20 + 00**

**INLETS, SPECIAL & PAVEMENT STRIPING DETAILS**  
**STRUCTURE NO. 050-3604**

SHEET NO. 1 OF 1 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
260	10-00651-00-BR	LASALLE	51	51
WHA# 1156D08		CONTRACT NO. 87466		
ILLINOIS FED. AID PROJECT BRS-02601051				