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01-19-2024 LETTING ITEM 155

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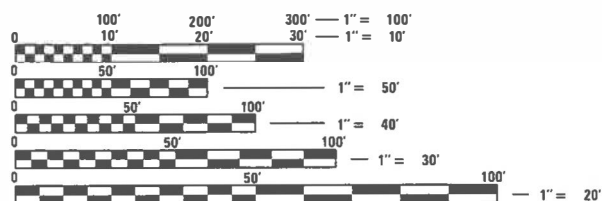
**STANDARDS**

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-04 NAME PLATES FOR BRIDGE
- 601101-02 CONCRETE HEADWALL FOR PIPE UNDERDRAINS
- 630301-09 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 701901-09 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720011-01 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS AND MARKERS)
- BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL ROADS

SEE SHEET 2 FOR A LIST OF UTILITIES

**ATTENTION CONTRACTORS**

THE ILLINOIS DEPARTMENT OF TRANSPORTATION BUREAU OF MATERIALS AND PHYSICAL RESEARCH, "PROJECT PROCEDURES GUIDE" IS APPLICABLE TO THIS PROJECT.



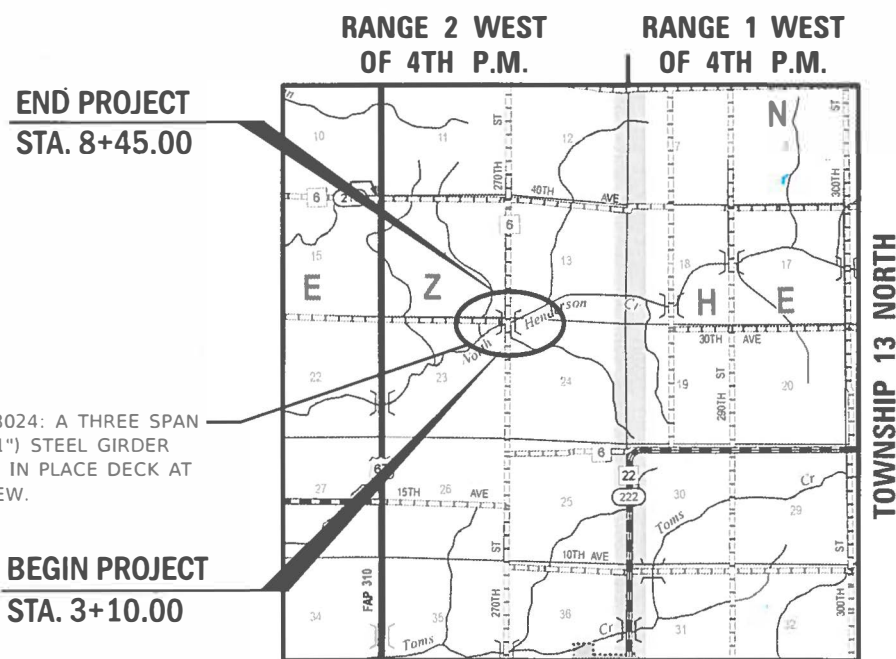
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E. DIG NO. A0220745  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

**PROJECT ENGINEER: ATK**  
**PROJECT MANAGER: MRL**  
**CONTRACT NO.: 89756**  
**CATALOG NO.: 035700-00**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
**PLAN FOR PROPOSED  
FEDERAL AID PROJECT  
SURFACE TRANSPORTATION  
RURAL - BRIDGE**

**COUNTY HIGHWAY 6 (270TH STREET)  
OVER HENDERSON CREEK  
SECTION 18-00113-00-BR  
PROJECT HF33(993)  
STRUCTURE REPLACEMENT  
MERCER COUNTY  
C-94-024-19**



STRUCTURE NO. 066-3024: A THREE SPAN (32'-11", 44'-0", 32'-11") STEEL GIRDER BRIDGE WITH A CAST IN PLACE DECK AT STA. 5+85.00. NO SKEW.

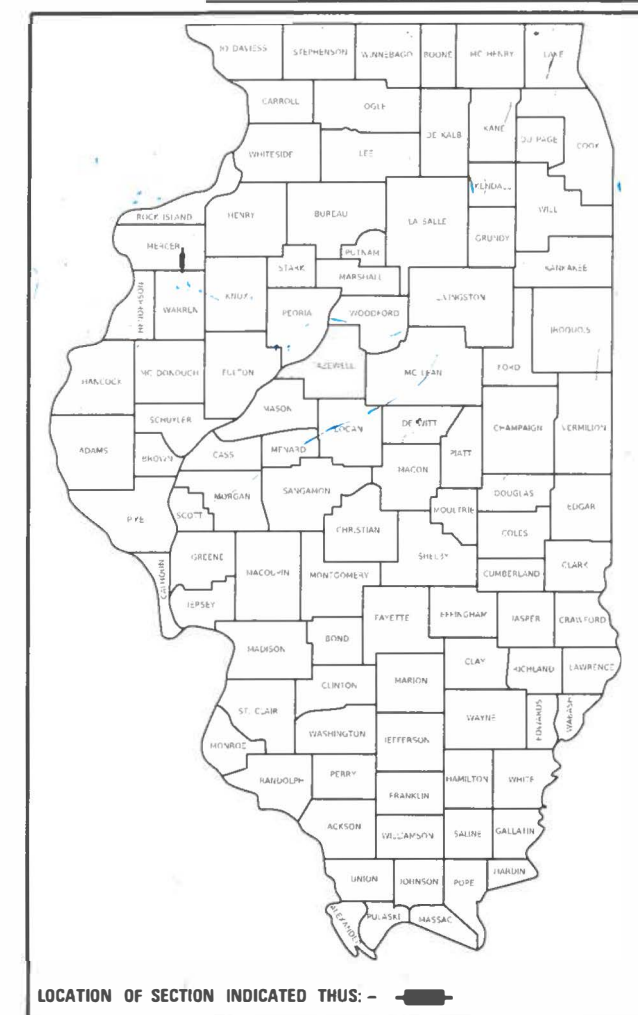


GROSS LENGTH = 535 FT. = 0.101 MILE  
NET LENGTH = 535 FT. = 0.101 MILE



Know what's below.  
Call before you dig.

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	1
WHA# 1338M18				



**FUNCTIONAL CLASSIFICATION**  
**MINOR COLLECTOR**  
**NEW CONSTRUCTION/  
RECONSTRUCTION GUIDELINES**  
**DESIGN SPEED 30 MPH**  
**POSTED SPEED 50 MPH**  
**2019 ADT - 61**

MERCER COUNTY HIGHWAY DEPARTMENT	
APPROVED	11.13.23 <i>Chris White</i> 2023 MERCER COUNTY ENGINEER
PASSED	NOV. 09 2023 <i>[Signature]</i> 2023 DISTRICT 4 LOCAL ROADS & STREETS ENGINEER
RELEASING FOR BID BASED ON LIMITED REVIEW	NOVEMBER 9 2023 <i>Kenneth A. Bennett</i> 2023 REGION 3 ENGINEER



DATE: 11-3-23  
EXPIRES 11/30/23

**WILLETT HOFMANN**  
& ASSOCIATES INC  
ENGINEERING ARCHITECTURE LAND SURVEYING

1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T: 309-517-1119 DESIGN FIRM # 184-000918

FILE = S:\PROJECTS\2018\1338M18-MCHA\DESIGN\CAD-SHEETS\1338M18-Cover.dgn

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**GENERAL NOTES**

EXISTING STRUCTURES (INCLUDING FOUNDATIONS, WALLS, CISTERNS, WELLS, OR OTHER UNDERGROUND STRUCTURES) WITHIN THE RIGHT OF WAY SHALL BE REMOVED IN ACCORDANCE WITH ARTICLE 501.04 AND 501.05 OF THE STANDARD SPECIFICATIONS, WITHOUT ADDITIONAL COMPENSATION, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS.

THE LOCATION OF UTILITIES AS SHOWN IN THE PLANS ARE NOT TO BE TAKEN AS EXACT. CONTRACTOR MUST FIELD VERIFY THE LOCATION OF THESE ITEMS AND TAKE SPECIAL CARE WHEN CONSTRUCTING NEAR THEM TO PREVENT DAMAGE.

ALL UTILITY POLES, GAS PIPES ETC. IN THE WAY OF IMPROVEMENTS SHALL BE MOVED BY THE UTILITIES PRIOR TO CONSTRUCTION AND ARE NOT PART OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE UTILITIES TO MAKE NECESSARY ADJUSTMENTS, PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.39 OF THE STANDARD SPECIFICATIONS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.

EXISTING MAIL BOXES, STREET SIGNS AND TRAFFIC SIGNS THAT ARE WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED AND RESET BY THE CONTRACTOR. COST OF REMOVING AND RESETTING TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER CUBIC YARD FOR EARTH EXCAVATION.

A NATIONWIDE 404 PERMIT HAS BEEN ISSUED FOR THIS PROJECT AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS, MONUMENTS, AND RIGHT OF WAY PINS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. ANY PROPERTY MARKERS, SECTION OR SUBSECTION MONUMENTS, UNLESS REFERENCED, DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK.

NO OVERHAUL HAS BEEN COMPUTED AND NONE SHALL BE PAID FOR FROM ANY SOURCE.

THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS.

THE FINAL TOP FOUR INCHES OF SOIL IN ALL DISTURBED AREAS MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION AND APPROVED BY THE ENGINEER.

ALL REFERENCES TO THE "DEPARTMENT" OR "ENGINEER" IN THE IDOT STANDARD SPECIFICATIONS SHALL ALSO INCLUDED THE MERCER COUNTY ENGINEER.

CONTRACTOR SHALL SUPPLY SIGNAGE AND BARRICADES INDICATING 30TH AVENUE CLOSED AT THE INTERSECTION OF 30TH AVENUE AND RTE. 67. SIGNAGE SHALL BE INSTALLED AS SPECIFIED IN THE SPECIAL PROVISIONS. COST SHALL BE INCLUDED IN THE LUMP SUM COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).

**ENVIRONMENTAL REVIEWS**

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS. THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BORROW AREAS).

BDE FORM 2290 (WASTE/USE AREA REVIEW).

A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA.

COLOR PHOTOGRAPHS DEPICTING THE USE AREA.

BORROW AREA ENTRY AGREEMENT FORM - D4P10101.

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

**SUMMARY OF QUANTITIES**

PAY CODE	PAY ITEM	UNIT	STRUCTURE (0013)	ROADWAY (0004)	TOTAL
20300100	CHANNEL EXCAVATION	CU YD	276		276
25000200	SEEDING, CLASS 2	ACRE		0.3	0.3
25000400	NITROGEN FERTILIZER NUTRIENT	POUND		27	27
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND		27	27
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND		27	27
25100630	EROSION CONTROL BLANKET	SQ YD		1,485	1,485
28000305	TEMPORARY DITCH CHECKS	FOOT		50	50
28000400	PERIMETER EROSION BARRIER	FOOT		219	219
28000500	INLET AND PIPE PROTECTION	EACH		4	4
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON		1,054	1,054
42001300	PROTECTIVE COAT	SQ YD	328		328
48101200	AGGREGATE SHOULDERS, TYPE B	TON		195	195
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
50102400	CONCRETE REMOVAL	CU YD	5.7		5.7
50105220	PIPE CULVERT REMOVAL	FOOT		106	106
50200100	STRUCTURE EXCAVATION	CU YD	24		24
50300225	CONCRETE STRUCTURES	CU YD	5.0		5.0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	93.1		93.1
50300260	BRIDGE DECK GROOVING	SQ YD	303		303
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	1,530		1,530
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	29,850		29,850
* 50901050	STEEL RAILING, TYPE SM	FOOT	227		227
51500100	NAME PLATES	EACH	1		1
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	15		15
52100510	ANCHOR BOLTS, 3/4"	EACH	30		30
52100520	ANCHOR BOLTS, 1"	EACH	10		10
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT		54	54
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT		34	34
542D0253	PIPE CULVERTS, CLASS D, TYPE 1 48"	FOOT		39	39
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	46		46
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	32		32
60146305	PIPE UNDERDRAINS FOR STRUCTURES (SPECIAL) 4"	FOOT	100		100
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT		12.5	12.5
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH		1	1
67100100	MOBILIZATION	L SUM		1	1
Z0013798	CONSTRUCTION LAYOUT	L SUM		1	1
X2020410	EARTH EXCAVATION (SPECIAL)	CU YD		351	351
X2810210	STONE RIPRAP, CLASS A5 (SPECIAL)	TON	1,034	23	1,057
* X6311205	TRAFFIC BARRIER TERMINAL, TYPE 5A (SPECIAL)	EACH		1	1
X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM		1	1
# Z0076600	TRAINEES	HOURL			1,000
# Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOURL			1,000

\*SPECIALTY ITEMS

#0042

**UTILITY CONTACTS**

NAME / PHONE / ADDRESS	TYPE
FRONTIER COMMUNICATIONS ATTN: CRAIG YOUNG 112 WEST ELM STREET SYCAMORE, IL 60178 (309) 836-1070 craig.young@ftr.com	COMMUNICATIONS
AMEREN ATTN: TAYLOR WINKELMANN 1824 KNOX HIGHWAY 9 GALESBURG, IL 61401 (309) 345-5174 TWinkelmann@ameren.com	ELECTRIC

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REVISION	DATE	BY	REMARKS	DESIGNED	KMN
				DRAWN	KMN
				REVIEWED	DKH
				APPROVED	XXX

**MERCER COUNTY HIGHWAY DEPARTMENT**  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85



**GENERAL NOTES AND SUMMARY OF QUANTITIES**

SHEET 1 OF 1

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	2
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

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EARTH WORK SUMMARY					
LOCATION	A	B	C	(C-B)	REMARKS
	EARTH EXCAVATION (SPECIAL) X2020410 (CY)	(0.75 X A) EXCAVATION ADJUSTED FOR SHRINKAGE	FILL (CY)	FURNISHED EXCAVATION (CY)	
C.H. 6 (270TH ST) S	147	110	249	139	
C.H. 6 (270TH ST) N	155	116	74	-42	
30TH AVE	49	37	83	46	
CHANNEL EXCAVATION				-104	ASSUMES 50% AFTER SHRINKAGE
RIPRAP SPOIL				-163	ASSUMES 50% AFTER SHRINKAGE
PROJECT TOTAL	351			-124	SPOIL NO PAYMENT FOR FURNISHED EX.

SEEDING, CLASS 2		
LOCATION	ACRE	REMARKS
RT STA. 3+10.00 - 4+16.65	0.05	
RT STA. 4+38.65 - 5+28.25	0.06	
LT STA. 3+10.00 - 5+28.25	0.05	
RT STA. 6+41.75 - 7+05.00	0.02	
RT STA. 7+25.25 - 8+45.00	0.03	
LT STA. 6+88.81 - 8+45.00	0.03	
RT STA. 98+10.00 - 99+84.85	0.04	
LT STA. 98+10.00 - 99+72.71	0.02	
PROJECT TOTAL	0.30	

TEMPORARY DITCH CHECKS		
LOCATION	FOOT	REMARKS
LT STA. 3+82	10	
RT STA. 7+80	10	
LT STA. 7+80	10	
RT STA. 98+82	10	
LT STA. 99+00	10	
PROJECT TOTAL	50	

CUT/FILL TABLE  
C.H. 6 (HENDERSON RD.)

STATION	CUT (SQ. FT.)	FILL (SQ. FT.)
3+10.00	26.3	2.7
3+19.42	26.0	4.9
3+25.00	25.2	6.9
3+50.00	21.5	8.7
3+75.00	13.2	16.5
4+00.00	10.4	19.7
4+09.01	4.2	35.4
4+25.00	2.3	24.6
4+28.75	2.1	27.6
4+45.81	0.0	55.4
4+50.00	13.6	44.8
4+75.00	6.3	57.1
5+00.00	6.0	51.8
5+25.00	89.0	37.3
5+28.29	87.2	61.3
BRIDGE OMISSION		
6+41.95	77.9	2.4
6+50.00	78.7	3.5
6+75.62	3.5	5.6
7+00.00	0.0	41.7
7+02.45	0.0	38.40
7+25.00	6.2	18.8
7+27.70	3.2	24.5
7+50.00	8.4	7.6
7+75.00	18.0	1.8
8+00.00	24.3	0.0
8+25.00	27.2	0.0
8+45.00	24.7	0.0

BACK OF S. ABUT.

BACK OF N. ABUT.

CUT/FILL TABLE  
30TH AVE.

STATION	CUT (SQ. FT.)	FILL (SQ. FT.)
98+10.00	18.4	0.5
98+25.00	19.3	0.5
98+50.00	17.2	0.5
98+75.00	10.9	2.3
99+00.00	0.8	8.2
99+25.00	0.0	15.2
99+50.00	0.0	21.0
99+75.17	0.0	42.3
100+00.00	0.0	0.0

NITROGEN FERTILIZER NUTRIENT		
LOCATION	POUND	REMARKS
SEEDING CLASS 2 AREA	27	90LB/ACRE
PROJECT TOTAL	27	

PHOSPHORUS FERTILIZER NUTRIENT		
LOCATION	POUND	REMARKS
SEEDING CLASS 2 AREA	27	90LB/ACRE
PROJECT TOTAL	27	

POTASSIUM FERTILIZER NUTRIENT		
LOCATION	POUND	REMARKS
SEEDING CLASS 2 AREA	27	90LB/ACRE
PROJECT TOTAL	27	

EROSION CONTROL BLANKET		
LOCATION	SQ YD	REMARKS
RT STA. 3+10.00 - 4+16.65	253	
RT STA. 4+38.65 - 5+28.25	279	
LT STA. 3+10.00 - 5+28.25	242	
RT STA. 6+41.75 - 7+05.00	116	
RT STA. 7+25.25 - 8+45.00	147	
LT STA. 6+88.81 - 8+45.00	154	
RT STA. 98+10.00 - 99+84.85	203	
LT STA. 98+10.00 - 99+72.71	91	
PROJECT TOTAL	1,485	

PERIMETER EROSION BARRIER		
LOCATION	FOOT	REMARKS
RT STA. 5+18.00	13	
RT STA. 6+51.33 - 8+45.00	206	
PROJECT TOTAL	219	

INLET AND PIPE PROTECTION		
LOCATION	EACH	REMARKS
LT STA. 3+19	1	
RT STA. 4+09	1	
LT STA. 7+05	1	
RT STA. 7+30	1	
PROJECT TOTAL	4	

AGGREGATE SURFACE COURSE, TYPE B		
LOCATION	TON	REMARKS
STA. 3+10.00 - 5+28.25	365	12" THICK
FER 4+28	31	7" THICK
STA. 6+41.75 - 8+45.00	329	12" THICK
FER 7+15	28	7" THICK
STA. 98+10.00 - 99+89.00	301	VARIES 12" TO 23"
PROJECT TOTAL	1,054	SEE CROSS SECTIONS

REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85



SCHEDULE OF QUANTITIES

SHEET 1 OF 2

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	3
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

AGGREGATE SHOULDERS, TYPE B		
LOCATION	TON	REMARKS
RT STA. 3+10.00 - 4+08.62	15	
RT STA. 4+46.62 - 5+28.25	12	
LT STA. 3+10.00 - 5+28.25	33	
RT STA. 6+41.75 - 6+96.61	8	
RT STA. 7+32.78 - 8+45.00	17	
LT STA. 7+08.71 - 8+45.00	21	
RT STA. 98+10.00 - 99+88.70	60	
LT STA. 98+10.00 - 99+89.66	29	
<b>PROJECT TOTAL</b>	<b>195</b>	

48101200

PIPE CULVERT REMOVAL		
LOCATION	FOOT	REMARKS
RT STA. 4+09 - 4+46	37	48"CMP
LT STA. 6+54 - 6+97	43	18"CMP
RT STA. 7+02 - 7+28	26	24"CMP
<b>PROJECT TOTAL</b>	<b>106</b>	

50105220

PIPE CULVERTS, CLASS D, TYPE 1 18"		
LOCATION	FOOT	REMARKS
LT STA. 6+52 - 7+05	54	CMP
<b>PROJECT TOTAL</b>	<b>54</b>	

542D0223

PIPE CULVERTS, CLASS D, TYPE 1 24"		
LOCATION	FOOT	REMARKS
RT STA. 6+96 - 7+30	34	CMP
<b>PROJECT TOTAL</b>	<b>34</b>	

542D0229

PIPE CULVERTS, CLASS D, TYPE 1 48"		
LOCATION	FOOT	REMARKS
RT STA. 4+09 - 4+48	39	CMP
<b>PROJECT TOTAL</b>	<b>39</b>	

542D0253

STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS		
LOCATION	FOOT	REMARKS
SW COR 270TH ST & 30TH AVE	12.5	
<b>PROJECT TOTAL</b>	<b>12.5</b>	

63000001

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT		
LOCATION	EACH	REMARKS
SW COR 270TH ST & 30TH AVE	1	
<b>PROJECT TOTAL</b>	<b>1</b>	

63100167

STONE RIPRAP, CLASS A5 (SPECIAL)		
LOCATION	TON	REMARKS
RT STA. 5+17.78 - 5+50.00	23	ROADWAY
RT STA. 5+28.25 - 6+41.75	1,034	SLOPEWALL AND CHANNEL
<b>PROJECT TOTAL</b>	<b>1,057</b>	

X2810210

FILTER FABRIC		
LOCATION	SQ YD	REMARKS
RT STA. 5+17.78 - 5+50.00	25	
RT STA. 5+28.25 - 6+41.75	969	SLOPEWALL AND CHANNEL
<b>PROJECT TOTAL</b>	<b>994</b>	

FOR INFORMATIONAL PROPOSES ONLY, INCLUDED IN THE COST OF STONE RIPRAP, CLASS A5 (SPECIAL)

TRAFFIC BARRIER TERMINAL, TYPE 5A (SPECIAL)		
LOCATION	EACH	REMARKS
SW COR 270TH ST & 30TH AVE	1	OUTSIDE RADIUS = 21'-6"
<b>PROJECT TOTAL</b>	<b>1</b>	

X6311205

REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85



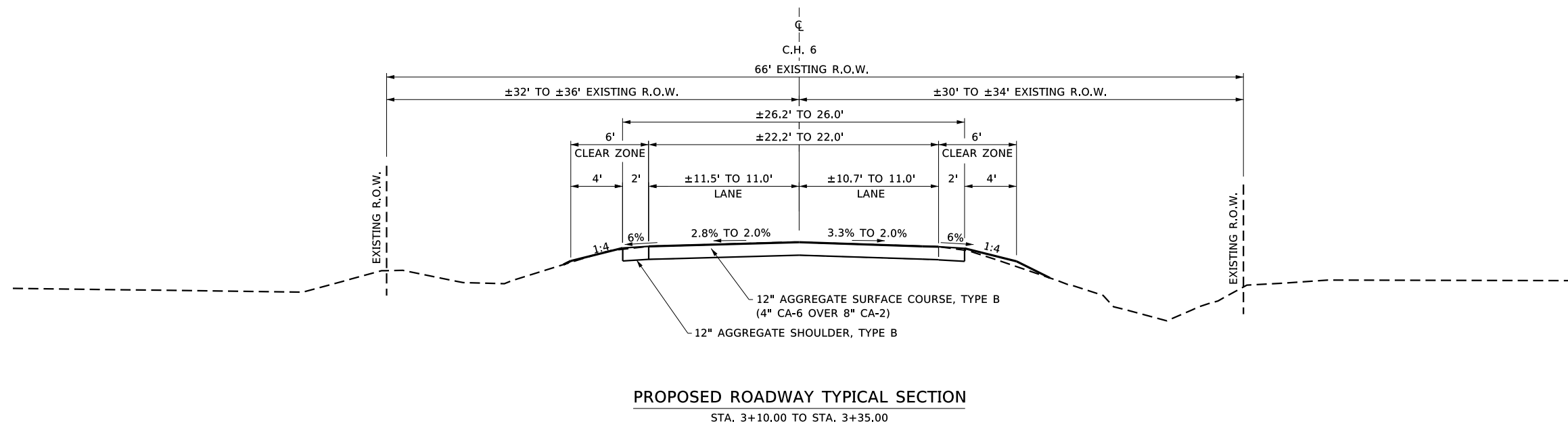
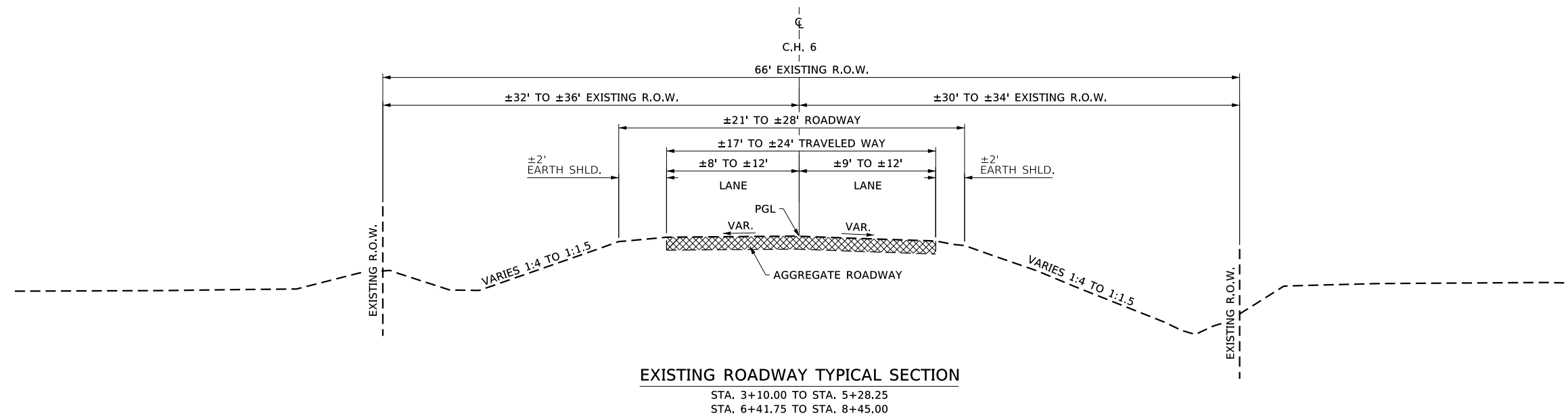
**WILLET HOFMANN & ASSOCIATES, INC.**  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T: 309-517-1119 DESIGN FIRM: # 184-000918

**SCHEDULE OF QUANTITIES**

SHEET 2 OF 2

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	4
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				





REVISION	DATE	BY	REMARKS

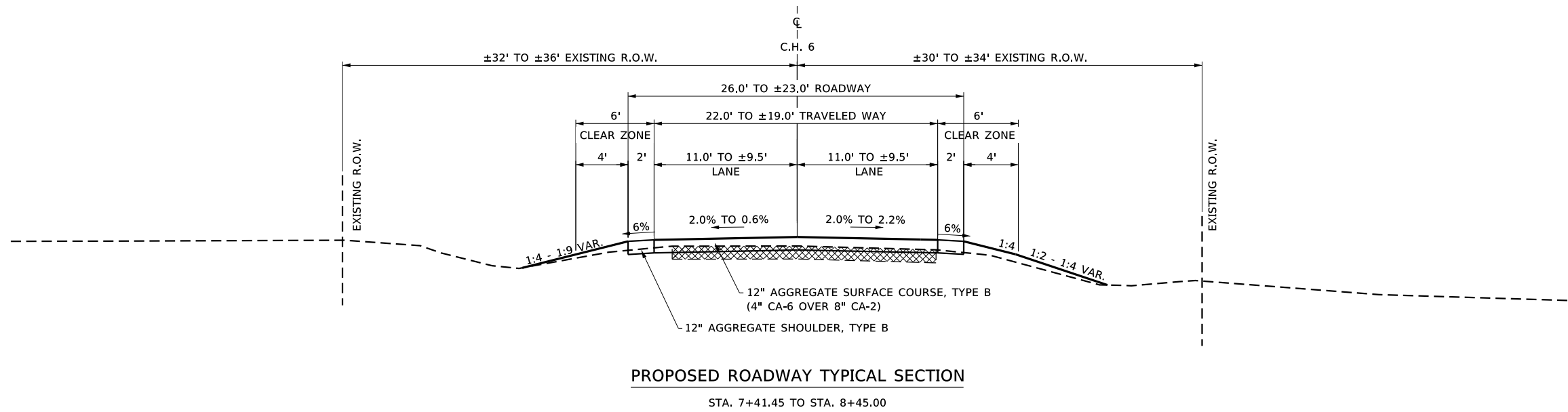
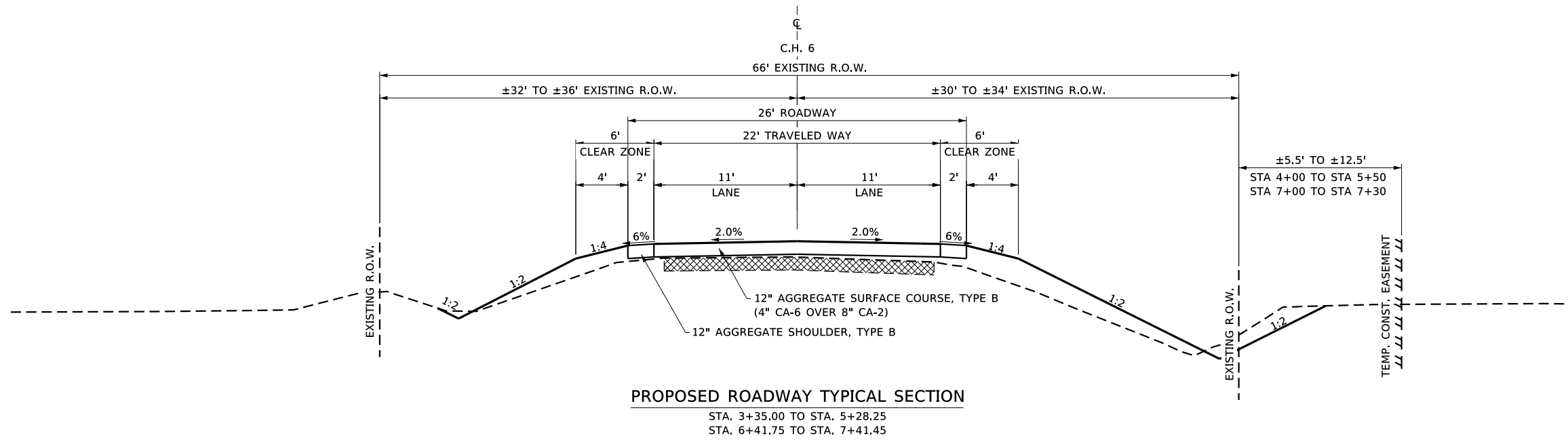
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DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



TYPICAL SECTIONS  
 C.H. 6 (270TH STREET)  
 SHEET 1 OF 4

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	5
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



REVISION	DATE	BY	REMARKS

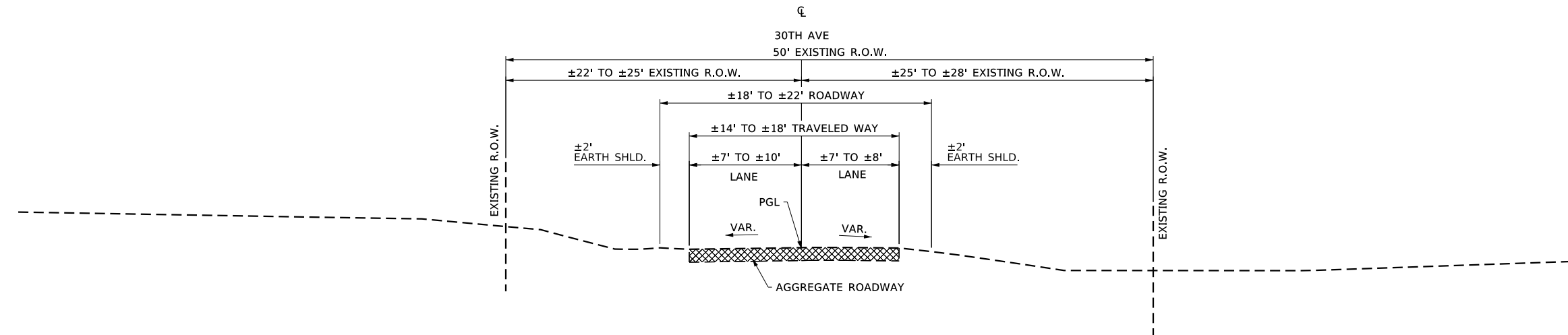
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DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



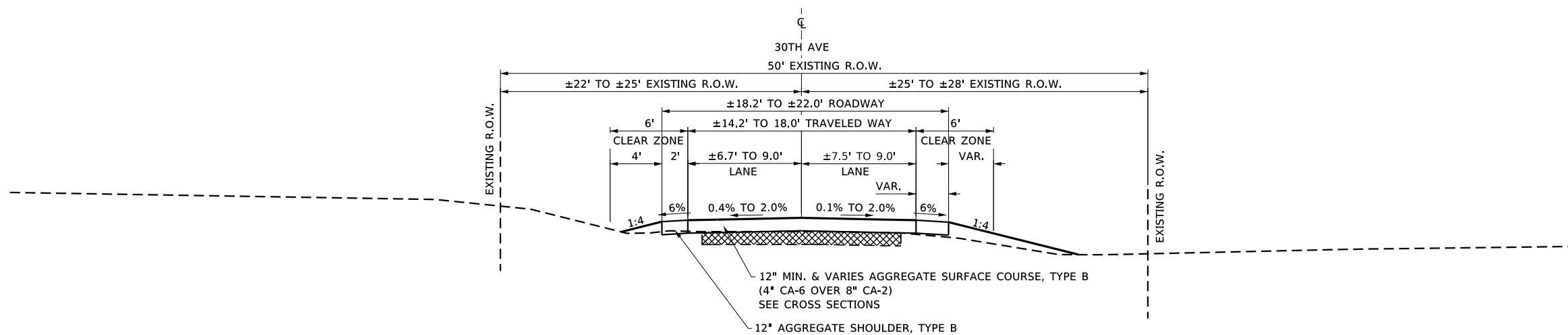
TYPICAL SECTIONS  
 C.H. 6 (270TH STREET)  
 SHEET 2 OF 4

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	6
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



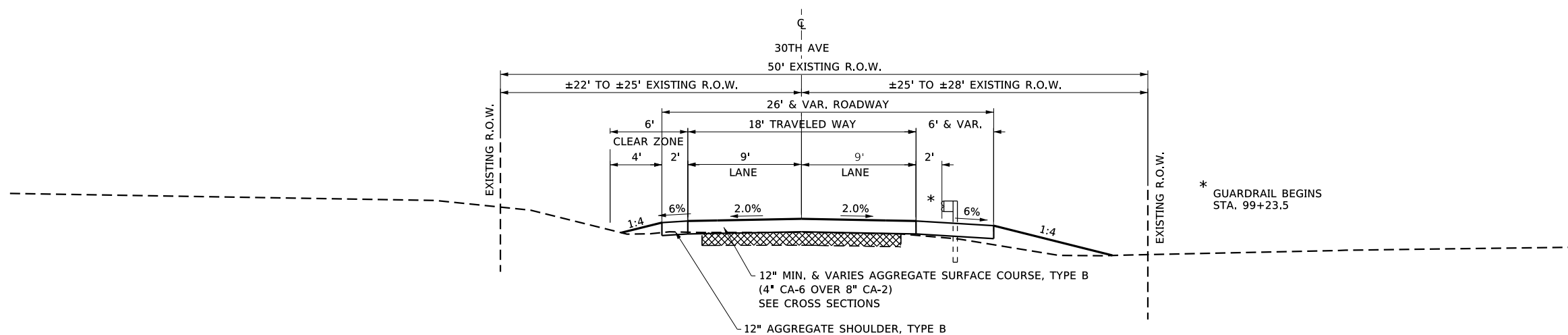
**EXISTING ROADWAY TYPICAL SECTION**

STA. 97+75.00 TO STA. 99+64.67



**PROPOSED ROADWAY TYPICAL SECTION**

STA. 98+10.00 TO STA. 99+10.00



**PROPOSED ROADWAY TYPICAL SECTION**

STA. 99+10.00 TO STA. 99+64.67

\* GUARDRAIL BEGINS  
STA. 99+23.5

REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

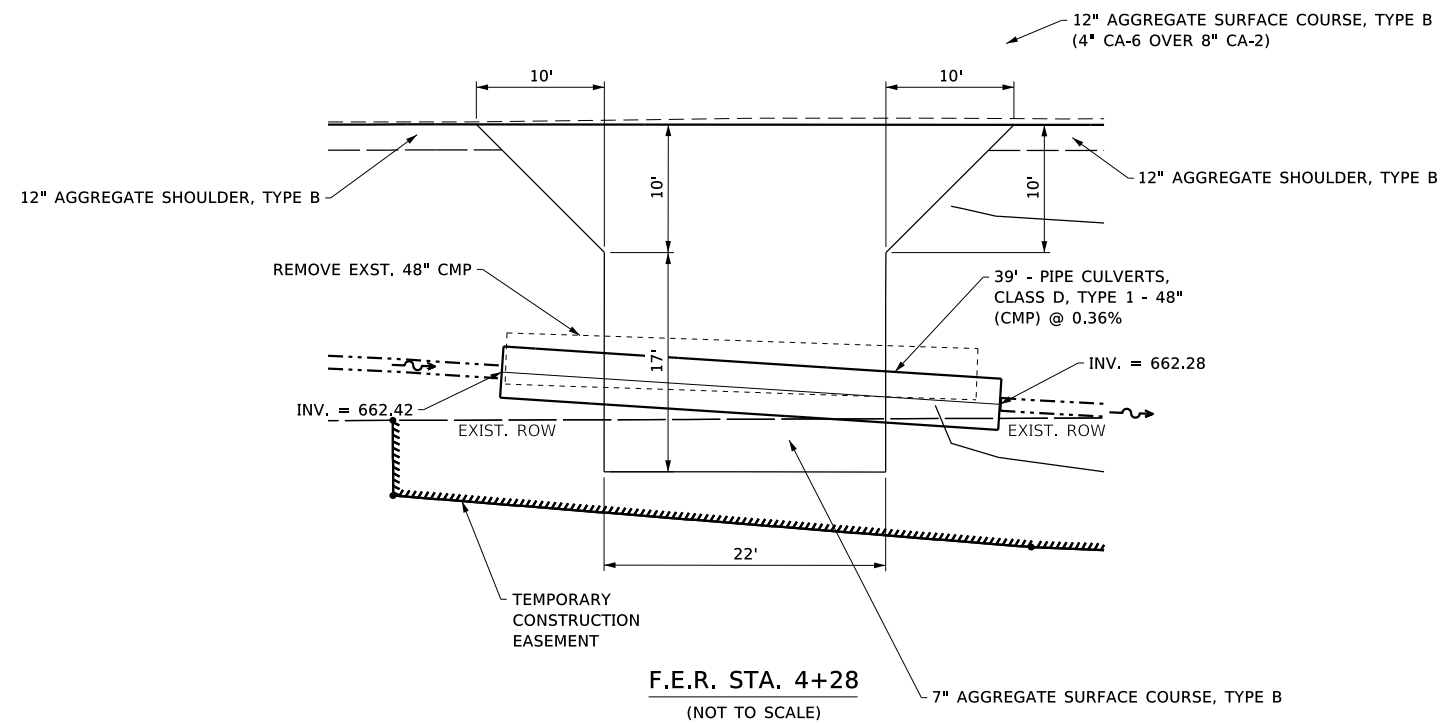
MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85



**TYPICAL SECTIONS**  
**30TH AVENUE**  
**SHEET 3 OF 4**

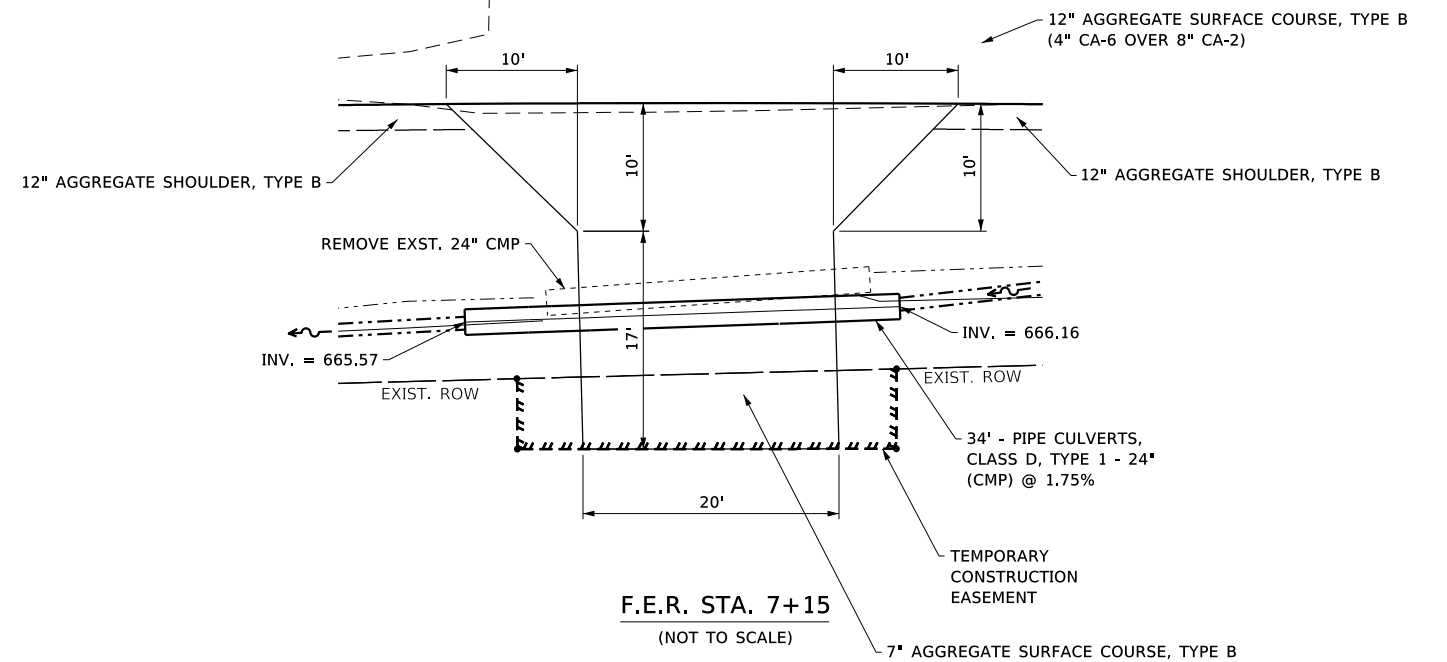
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6	18-00113-00-BR	MERCER	42	7
WHA # 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

C.H. 6 (270TH ST.)



F.E.R. STA. 4+28  
(NOT TO SCALE)

C.H. 6 (270TH ST.)



F.E.R. STA. 7+15  
(NOT TO SCALE)

REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	DAN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85



DRIVEWAY DETAILS  
C.H. 6 (270TH STREET)  
SHEET 4 OF 4

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	8
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



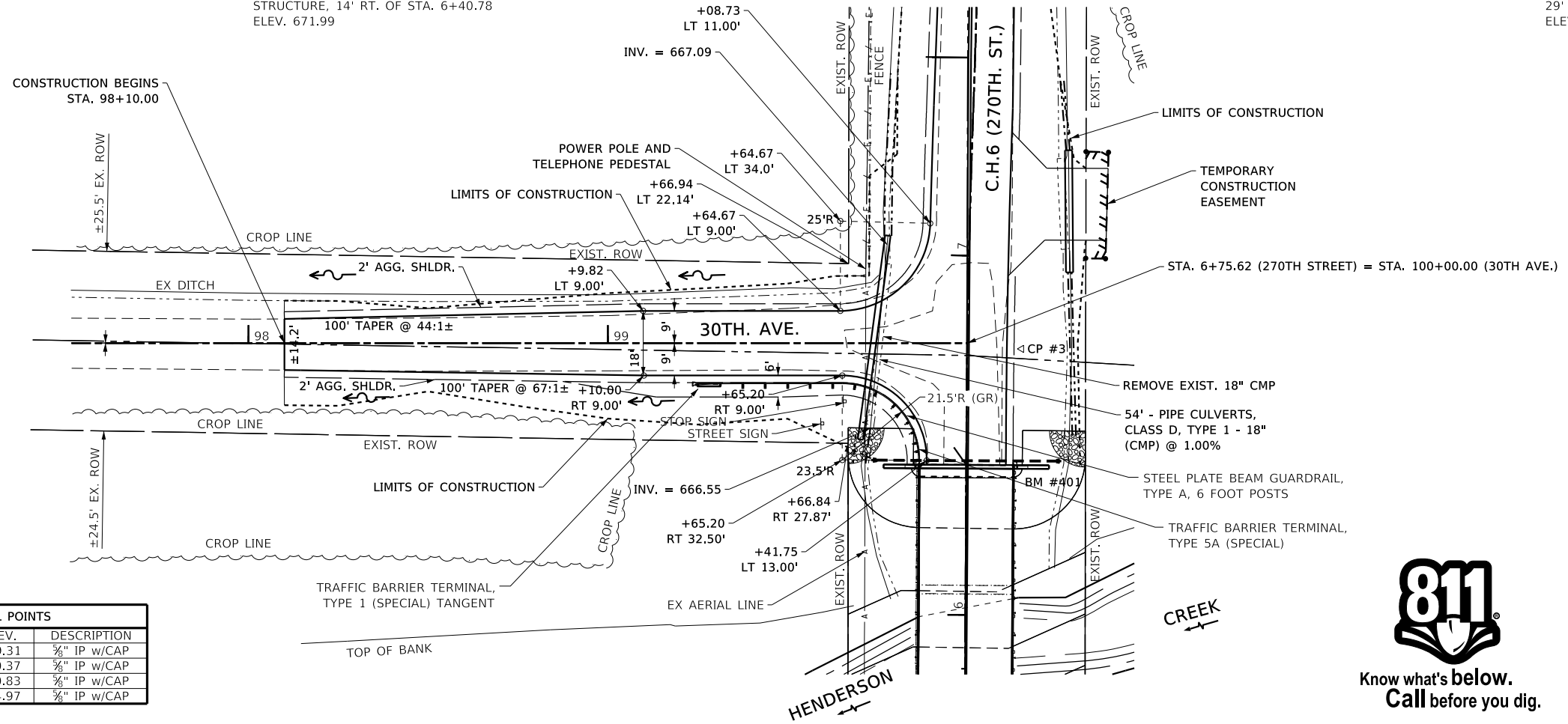


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**BENCH MARK #400:** RR SPK IN 1ST PP S. OF STRUCTURE  
27' LT. OF STA. 3+66.01  
ELEV. 668.04

**BENCH MARK #401:** FOUND CHSLD "□" ON NE WINGWALL OF  
STRUCTURE, 14' RT. OF STA. 6+40.78  
ELEV. 671.99

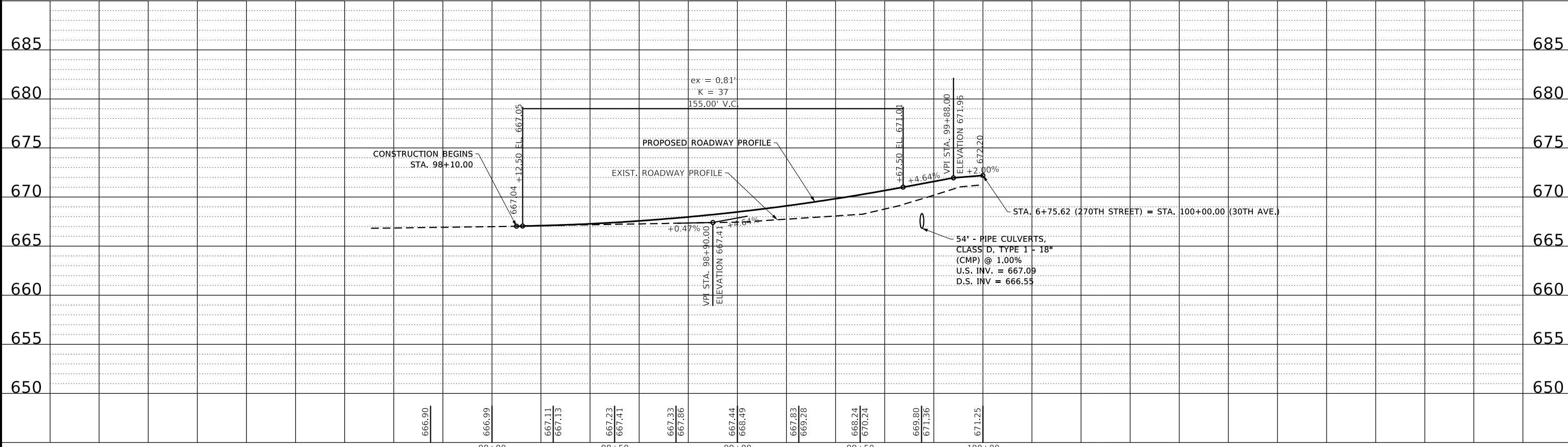
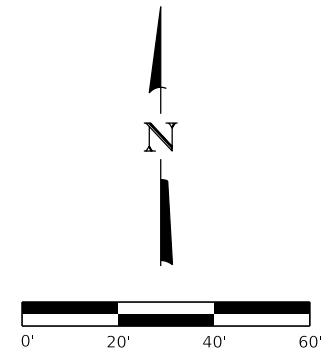
**BENCH MARK #402:** RR SPK IN 2ND PP N. OF STRUCTURE  
29' LT. OF STA. 10+07.15  
ELEV. 679.49



C.H. 6 (270TH STREET) - HORIZONTAL CONTROL POINTS					
PT #	STA	N	E	ELEV.	DESCRIPTION
1	14.9' LT. ±0+75.73	1617619.37	2185769.12	669.31	5/8" IP w/CAP
2	12.9' LT. ±4+71.43	1618014.87	2185781.88	670.37	5/8" IP w/CAP
3	14.4' RT. ±6+74.20	1618216.58	2185816.49	670.83	5/8" IP w/CAP
4	14.1' RT. ±10+63.93	1618606.00	2185831.84	674.97	5/8" IP w/CAP



Know what's below.  
Call before you dig.



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REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	DCB
REVIEWED	DKH
APPROVED	XXX

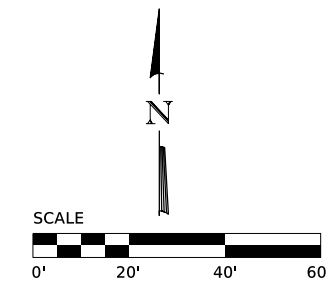
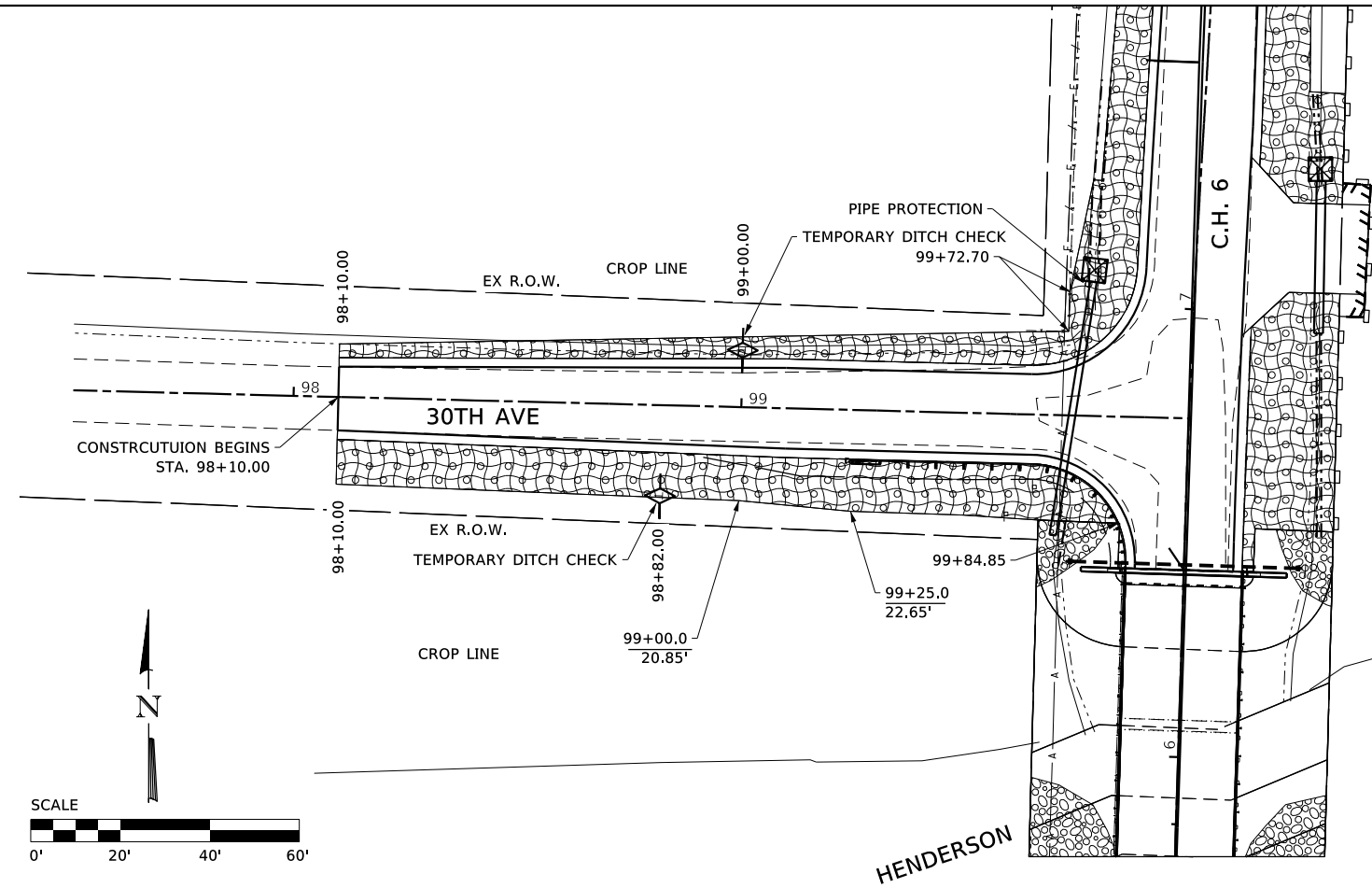
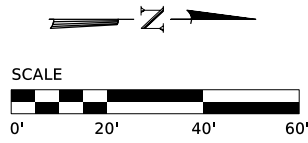
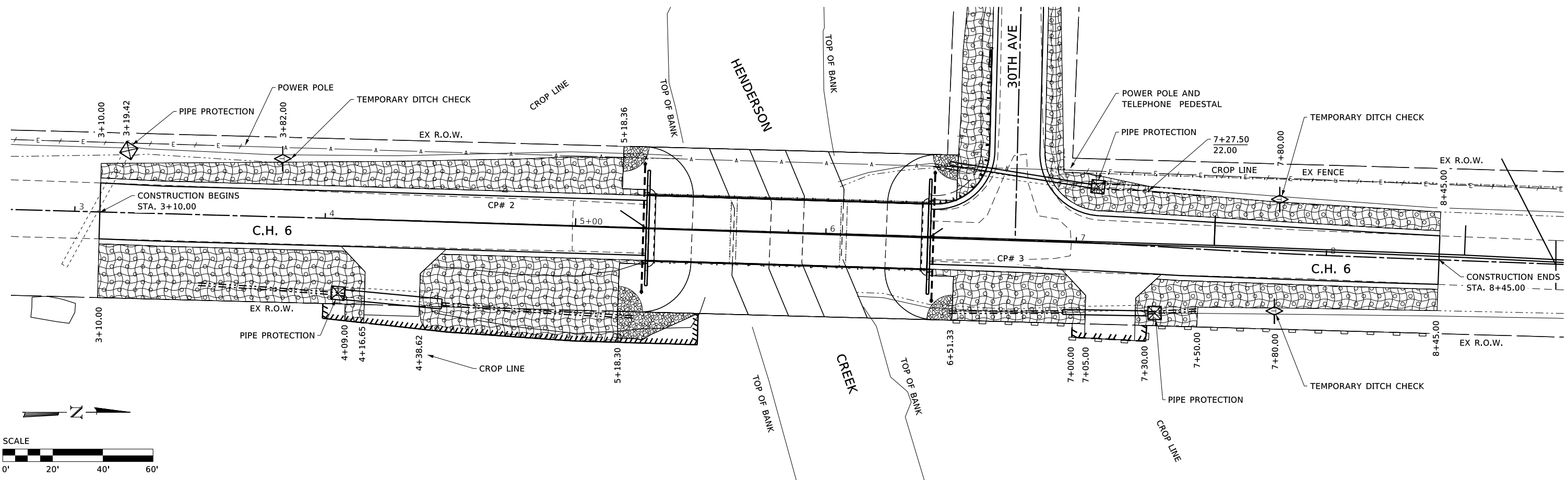
MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

**WILLET HOFMANN & ASSOCIATES, INC.**  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T: 309-517-1119 DESIGN FIRM: # 184-000918

PLAN AND PROFILE  
30TH AVE  
SHEET NO. 1 OF 1 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	10
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

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**LEGEND**

- INLET AND PIPE PROTECTION
- TEMPORARY DITCH CHECK
- PERIMETER EROSION BARRIER
- EROSION CONTROL BLANKET
- SEEDING CLASS 2
- STONE RIPRAP, CL A5

**GENERAL NOTES**

SEEDING, CLASS 2 SHALL COMPLY WITH SECTION 250 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THIS WORK SHALL NOT BE STARTED BEFORE ALL REQUIREMENTS OF SECTION 212 HAVE BEEN MET.

INLET & PIPE PROTECTION, PERIMETER EROSION BARRIER AND TEMPORARY DITCH CHECKS SHOULD BE INSTALLED ACCORDING TO THE STATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

EROSION CONTROL BLANKET SHOULD BE INSTALLED ON ALL DISTURBED AREAS AND SHALL BE PLACED WITHIN 24 HOURS OF SEED PLACEMENT. THIS WORK SHALL COMPLY WITH SECTION 251 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE CONTRACTOR SHALL KEEP ALL ADJACENT STREETS AND PROPERTY CLEAR OF DEBRIS AND CLEAN WHEN NECESSARY.

REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85

**WILLET HOFMANN & ASSOCIATES, INC.**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
 T: 309-517-1119 DESIGN FIRM: # 184-000918

**EROSION CONTROL PLAN**

SHEET 1 OF 1

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	11
WHA# 1338M18		CONTRACT NO. 89756		
[ILLINOIS] FED. AID PROJECT				



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**Existing Structure:** S.N. 066-3024 built in 1975 by Mercer County at Sta. 5+85.00 as a three span (32'-11", 44'-0", 32'-11") No Skew, Continuous Steel WF Beam structure over Henderson Creek on individually encased steel H-pile bent piers and steel H-pile bent abutments. 113'-6" back-to-back of abutments and 26'-0" out to out of deck. **Bench Mark:** #401 Chiseled "□" in Northeast Wingwall of Structure, 13.5' Rt. Sta. 6+40.78, Elev. 671.99

The existing structure is to be rehabilitated, by removing and replacing the existing superstructure and converting the existing abutment to semi-integral.

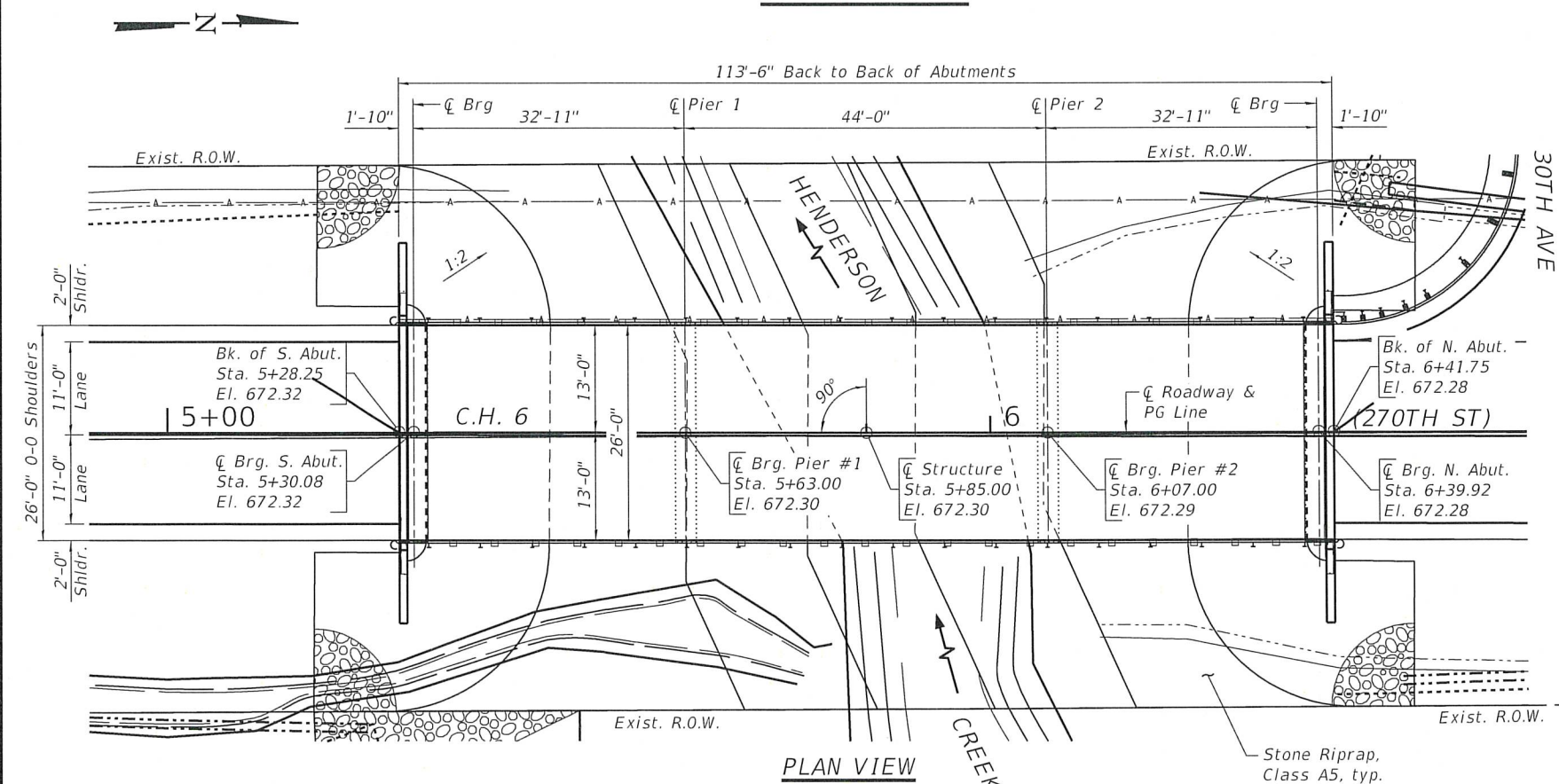
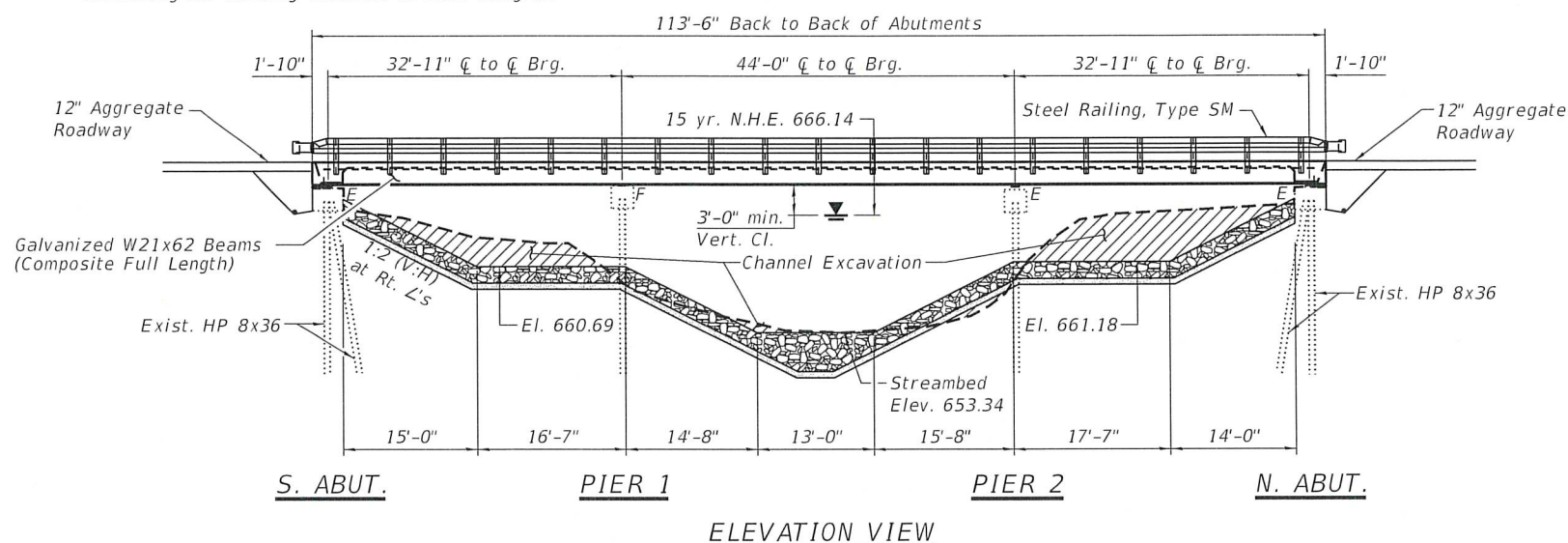
**INDEX OF STRUCTURAL SHEETS**

- 1-2 General Plan and Elevation
- 3 Riprap Layout
- 4 Abutment Removal Details
- 5 Top of Slab Elevations
- 6 Superstructure
- 7 Superstructure Details
- 8 Diaphragm Details
- 9-10 Structural Steel Details
- 11-12 Bearing Details
- 13 South Abutment Details
- 14 North Abutment Details
- 15 Pier 1 Details
- 16 Pier 2 Details
- 17 Steel Railing, Type SM
- 18-21 Existing Plans

**BILL OF MATERIAL - BRIDGE**

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.	276		276
Stone Riprap, Class A5 (Special)	Ton	1034		1034
Protective Coat	Sq. Yd.	328		328
Removal of Existing Superstructures	Each			1
Concrete Removal	Cu. Yd.	5.7		5.7
Structure Excavation	Cu. Yd.	24		24
Concrete Structures	Cu. Yd.	5.0		5.0
Concrete Superstructure	Cu. Yd.	93.1		93.1
Bridge Deck Grooving	Sq. Yd.	303		303
** Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Sheer Connectors	Each	1,530		1,530
Reinforcement Bars, Epoxy Coated	Pound	29,200	650	29,850
Steel Railing, Type SM	Foot	227		227
Name Plates	Each	1		1
Elastomeric Bearing Assembly, Type I	Each	15		15
Anchor Bolts, 3/4"	Each	30		30
Anchor Bolts, 1"	Each	10		10
* Granular Backfill for Structures	Cu. Yd.	46		46
* Geocomposite Wall Drain	Sq. Yd.	32		32
* Pipe Underdrains for Structures, (SP) 4"	Foot	100		100

\*See Special Provisions  
\*\*See General Notes, Sheet 2 of 41



HENDERSON CREEK  
BUILT 2022 BY  
MERCER COUNTY  
SECTION 18-00113-00-BR  
C.H. 6 STATION 5+85  
STR. NO. 066-3024 LOADING HL-93

**NAME PLATE LETTERING**  
Refer To Std. 515001-04

**LOADING HL-93**  
No future wearing surface.

**DESIGN SPECIFICATIONS**  
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

**SEISMIC DATA**  
Seismic Performance Zone (SPZ) = 0  
Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.068  
Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.116  
Soil Site Class = E

**DESIGN STRESSES**

**EXISTING FIELD UNITS**  
 $f'_c = 3,500$  psi  
 $f_y = 40,000$  psi (Reinforcement)

**PROPOSED FIELD UNITS**  
 $f'_c = 3,500$  psi (Abutment)  
 $f'_c = 4,000$  psi (Deck)  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (Structural Steel)

**DESIGN SCOUR ELEVATION TABLE**

Event / Limit	Design Scour Elevations (ft.)				Item 113
	State	S. Abut.	Pier 1	Pier 2	
Q100	-	652.87	653.36	-	5
Q200	-	651.90	652.39	-	
Design	666.79	652.87	653.56	666.79	
Check	666.79	651.90	652.39	666.79	

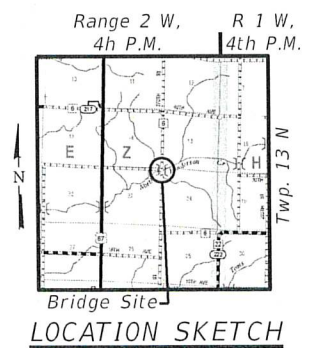
**WATERWAY INFORMATION**

Drainage Area = 30.07 SQ. MI. Low Grade Ex. Elev. 668.76 @ Sta. 2+25

Flood	Freq. Yr.	Q C.F.S.	Opening Ft <sup>2</sup>		Head - Ft.		Headwater El.		
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	15	3,419	570.4	691.4	666.1	0.99	0.70	667.1	666.8
Base (Overtopping, EX, PR)	100	5,360	646.1	762.2	666.9	2.27	2.10	669.2	669.0
Scour	200	6,114	780.6	868.8	668.2	1.50	1.27	669.7	669.5
Max. Calc	500	7,120	854.0	941.6	668.9	1.23	0.99	670.1	669.9

STATE OF ILLINOIS  
MICHAEL R. LESCH  
081-005726  
DATE: 12/7/2023  
EXPIRES 11/30/24

"I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE DESIGN IS STRUCTURALLY DEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF STRUCTURE AND COMPLIES WITH REQUIREMENTS OF THE CURRENT 'AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS'."



**GENERAL PLAN AND ELEVATION**  
C.H. 6 (270TH STREET) OVER  
HENDERSON CREEK  
SEC. 18-00113-00-BR  
MERCER COUNTY  
STATION 5+85.00  
STRUCTURE NO. 066-3024

REVISION	DATE	BY	REMARKS

DESIGNED ATK  
DRAWN DAN  
REVIEWED ATK  
APPROVED MRI

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

**WILLET HOFMANN & ASSOCIATES INC**  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T. 309-517-1119 DESIGN FIRM # 184-000918

GENERAL PLAN AND LAYOUT  
STRUCTURAL SHEET NO. 1 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	12
WHA # 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

**GENERAL NOTES:**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts, Bolts 7/8" Ø, holes 1 1/8" Ø, unless otherwise noted.

Calculated weight of Structural Steel = 42,750 lbs.

All structural steel shall be AASHTO M 270 Grade 50.

\*\* All structural steel shall be galvanized per ASTM A123/A123M-13 and AASHTO M111. See Special Provisions for Hot-Dip Galvanizing for Structural Steel.

Painting of galvanized structural steel is NOT specified for this project.

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

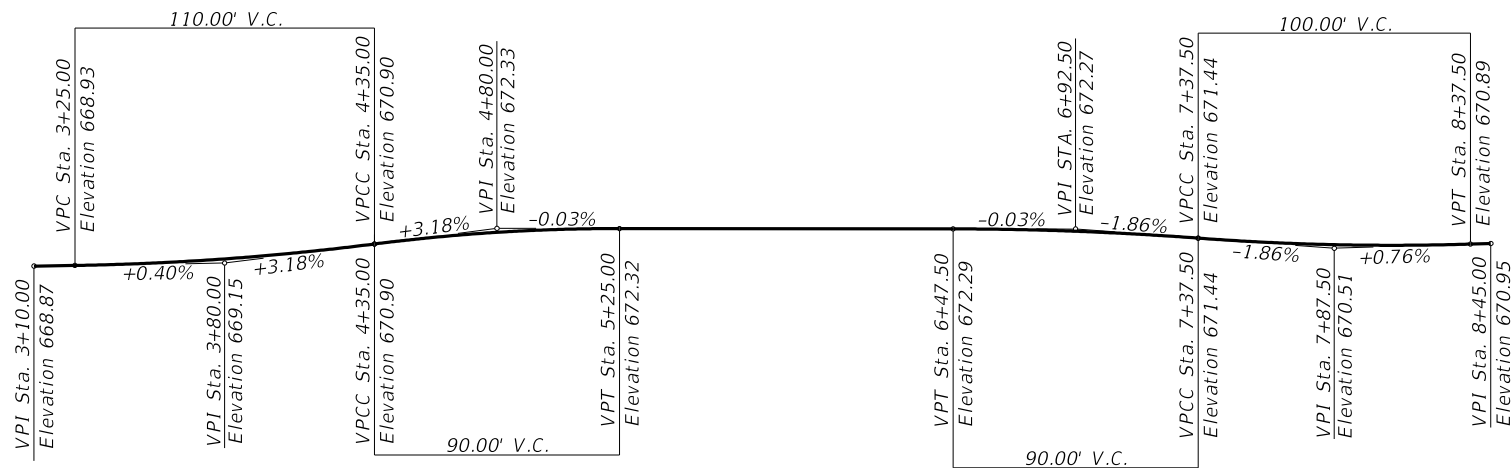
Reinforcement bars designated (E) shall be epoxy coated.

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

The finishing machine rails shall be placed on the top flange of the exterior beams within the deck pour. Beam blocks shall be placed between beams at all tie locations in each bay for the full width of the deck pour.

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

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



VERTICAL PROFILE

**GENERAL PLAN AND ELEVATION  
C.H. 6 (270TH STREET) OVER  
HENDERSON CREEK  
SEC. 18-00113-00-BR  
MERCER COUNTY  
STATION 5+85.00  
STRUCTURE NO. 066-3024**

REVISION	DATE	BY	REMARKS
1	5/13/22	ATK	FASTENER TYPE CHANGED TYPE 1 TO TYPE 3

DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

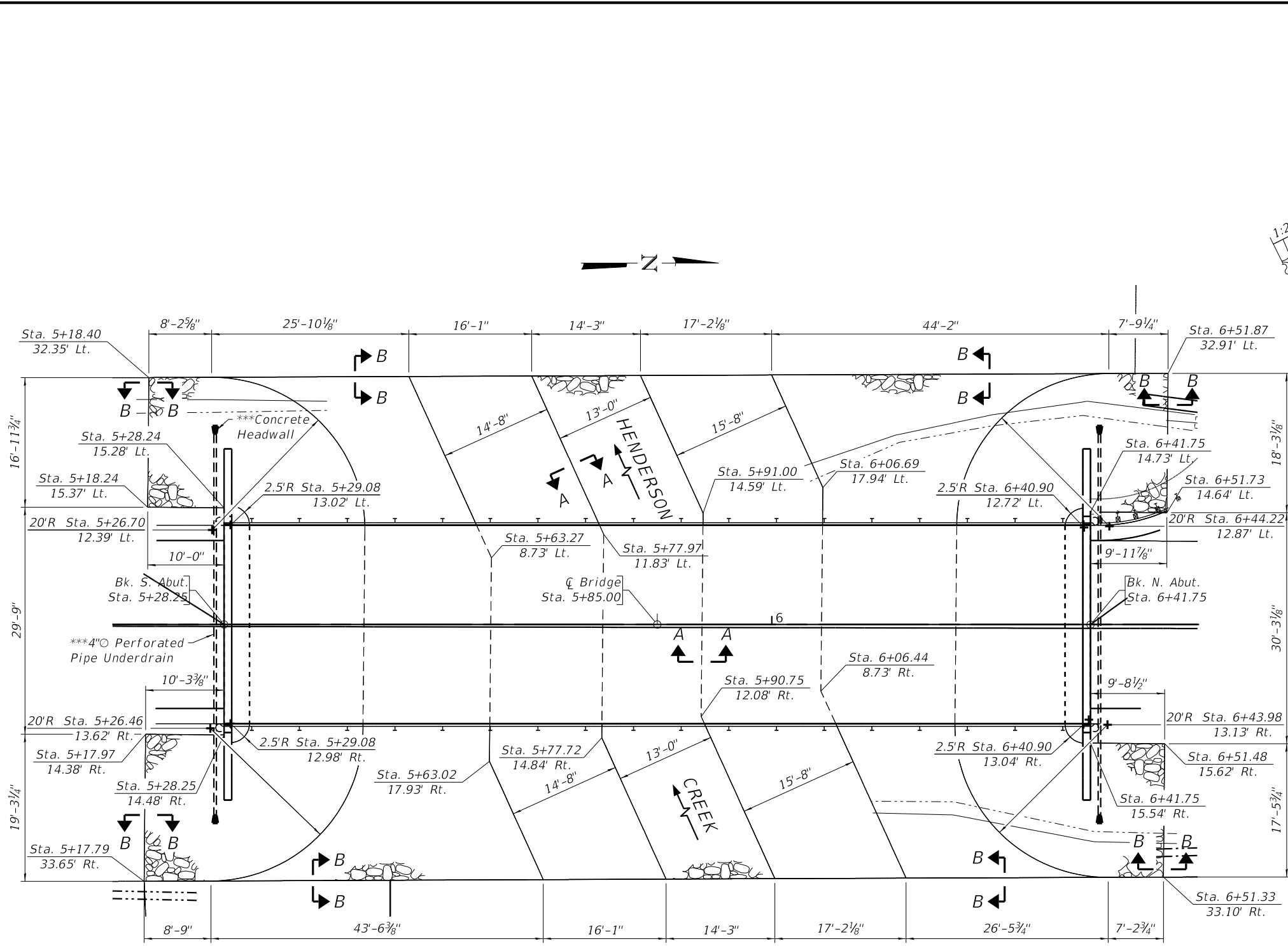
**MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85**



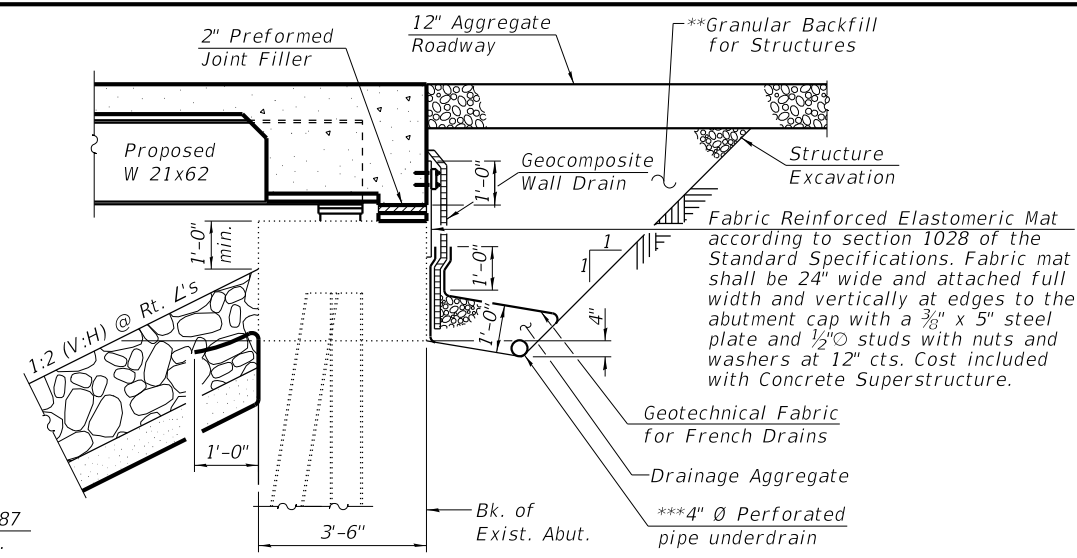
GENERAL PLAN AND LAYOUT	
<b>STRUCTURAL SHEET NO. 2 OF 21 SHEETS</b>	

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	13
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

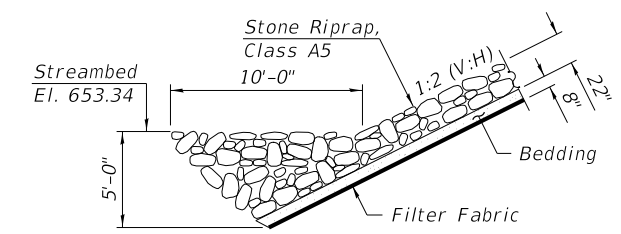




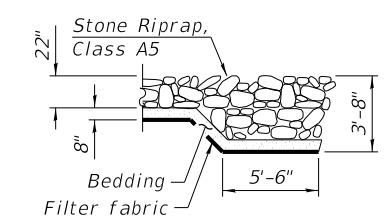
PLAN VIEW



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



SECTION A-A



SECTION B-B

BILL OF MATERIAL

Item	Unit	Quantity
Stone Riprap, Class A5 (SPECIAL)	TON	1,034

NOTES:

- \*\* Pay Limits of Granular Backfill for Structures shall extend to 2'-0" from the end of each wingwall. Granular Backfill behind the abutments shall be compacted according to Article 205.06 of the Standard Specifications.
- \*\*\* All drainage system components shall extend to 2'-0" from end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. Cost of concrete headwalls and all components to be included with Pipe Underdrains for Structures. (See Special Provisions)

REVISION	DATE	BY	REMARKS
DESIGNED		ATK	
DRAWN		DAN	
REVIEWED		ATK	
APPROVED		MRL	

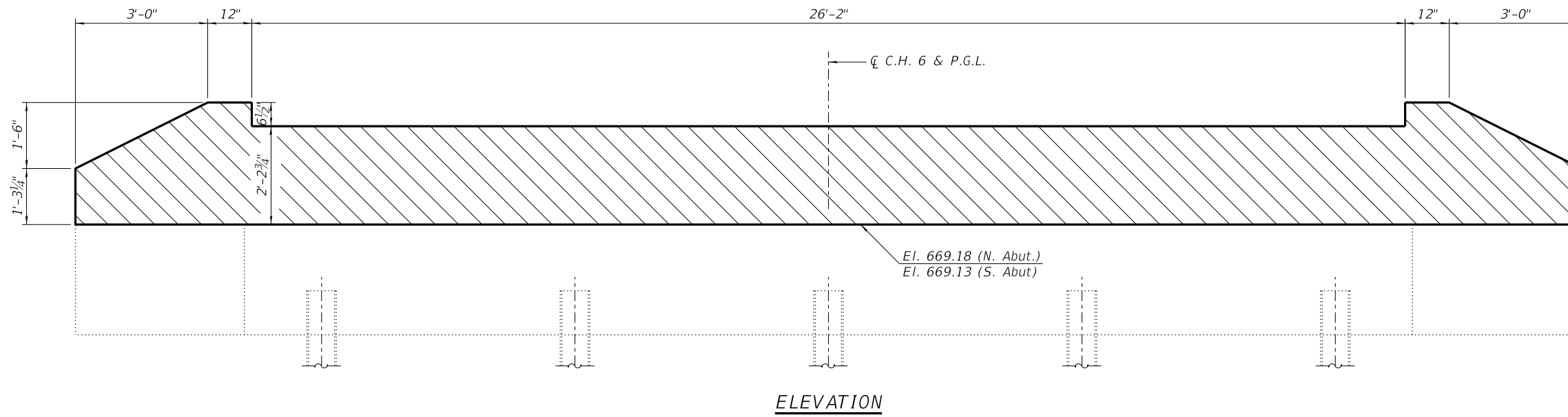
MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

RIPRAP LAYOUT  
STRUCTURAL SHEET NO. 3 OF 21 SHEETS

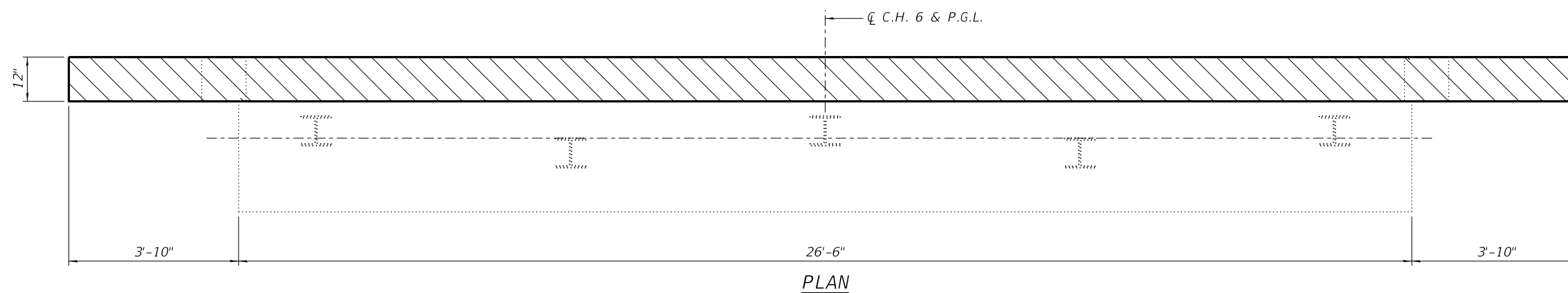
CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	14

WHA# 1338M18 CONTRACT NO. 89756  
ILLINOIS FED. AID PROJECT

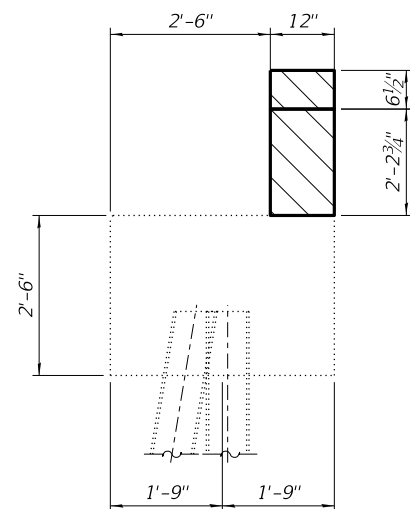




ELEVATION

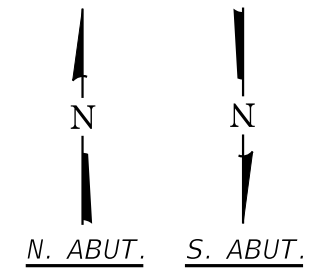


PLAN



SEC. THRU ABUT.

Note:  
Contractor shall take care to not damage existing vertical reinforcement in the wingwalls. Any bars damaged shall be repaired or replaced to the satisfaction of the Engineer, at the contractor's expense.



INDEX



BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	5.7

NOTES:

All saw cuts shall be to such a depth that when concrete is removed, a clean, neat edge will result with no spalling of the remaining concrete. Saw cuts cost included with "Concrete Removal."

Existing dimensions are based on existing plans and shall be field verified.

REVISION	DATE	BY	REMARKS

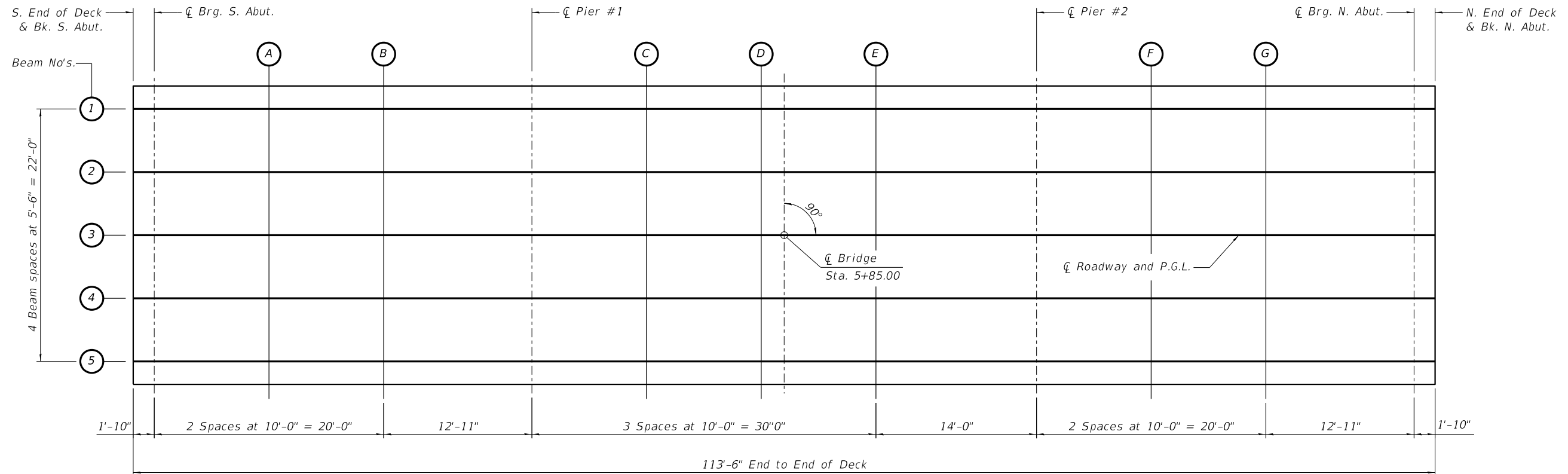
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DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

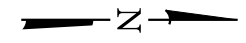
**WILLET HOFMANN & ASSOCIATES, INC.**  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T. 309-517-1119 DESIGN FIRM: # 184-000918

**ABUTMENT REMOVAL DETAILS**  
STRUCTURE NO. 066-3024  
STRUCTURAL SHEET NO. 4 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	15
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



PLAN VIEW



BEAM 1 & BEAM 5

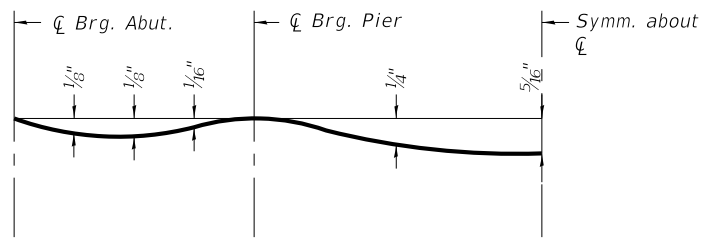
Location	Station	Offset BM 1- Lt. BM 2- Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
S. End of Deck	5+28.25	11	672.14	672.14
C. Brg. S. Abut.	5+30.08	11	672.14	672.14
A	5+40.08	11	672.14	672.15
B	5+50.08	11	672.14	672.15
CL Brg. Pier #1	5+63.00	11	672.13	672.13
C	5+73.00	11	672.13	672.14
D	5+83.00	11	672.13	672.15
E	5+93.00	11	672.13	672.14
CL Brg. Pier #2	6+07.00	11	672.12	672.12
F	6+17.00	11	672.12	672.12
G	6+27.00	11	672.12	672.13
C. Brg. N. Abut.	6+39.92	11	672.11	672.11
N. End of Deck	6+41.75	11	672.11	672.11

BEAM 2 & BEAM 4

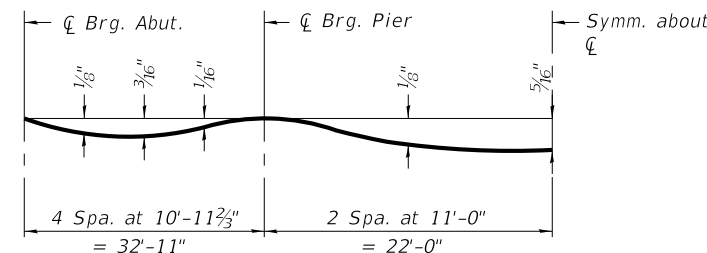
Location	Station	Offset BM 2- Lt. BM 4- Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
S. End of Deck	5+28.25	5.5	672.23	672.23
C. Brg. S. Abut.	5+30.08	5.5	672.23	672.23
A	5+40.08	5.5	672.23	672.24
B	5+50.08	5.5	672.22	672.23
C. Brg. Pier #1	5+63.00	5.5	672.22	672.22
C	5+73.00	5.5	672.22	672.23
D	5+83.00	5.5	672.21	672.24
E	5+93.00	5.5	672.21	672.23
C. Brg. Pier #2	6+07.00	5.5	672.21	672.21
F	6+17.00	5.5	672.20	672.21
G	6+27.00	5.5	672.20	672.21
C. Brg. N. Abut.	6+39.92	5.5	672.20	672.20
N. End of Deck	6+41.75	5.5	672.20	672.20

BEAM 3, CENTERLINE OF ROADWAY AND PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
S. End of Deck	5+28.25	0	672.32	672.32
C. Brg. S. Abut.	5+30.08	0	672.32	672.32
A	5+40.08	0	672.31	672.32
B	5+50.08	0	672.31	672.32
C. Brg. Pier #1	5+63.00	0	672.31	672.31
C	5+73.00	0	672.3	672.32
D	5+83.00	0	672.3	672.33
E	5+93.00	0	672.3	672.32
C. Brg. Pier #2	6+07.00	0	672.29	672.29
F	6+17.00	0	672.29	672.3
G	6+27.00	0	672.29	672.3
C. Brg. N. Abut.	6+39.92	0	672.28	672.28
N. End of Deck	6+41.75	0	672.28	672.28

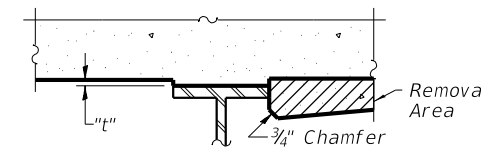


DEAD LOAD DEFLECTION DIAGRAM  
BEAMS 1 & 2  
(Includes weight of concrete only.)

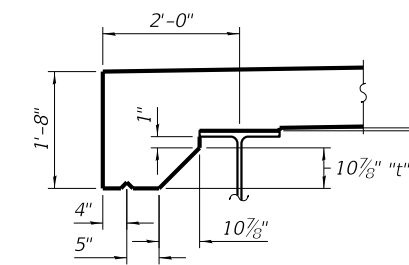


DEAD LOAD DEFLECTION DIAGRAM  
BEAMS 3, 4 & 5  
(Includes weight of concrete only.)

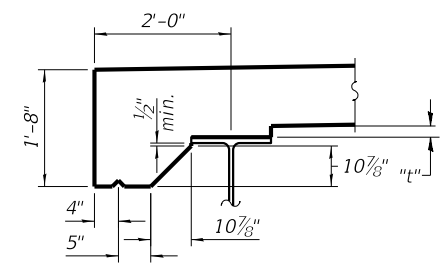
Note:  
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



Interior Fillet



At Minimum Fillet



At Maximum Fillet

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

FILLET HEIGHTS

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

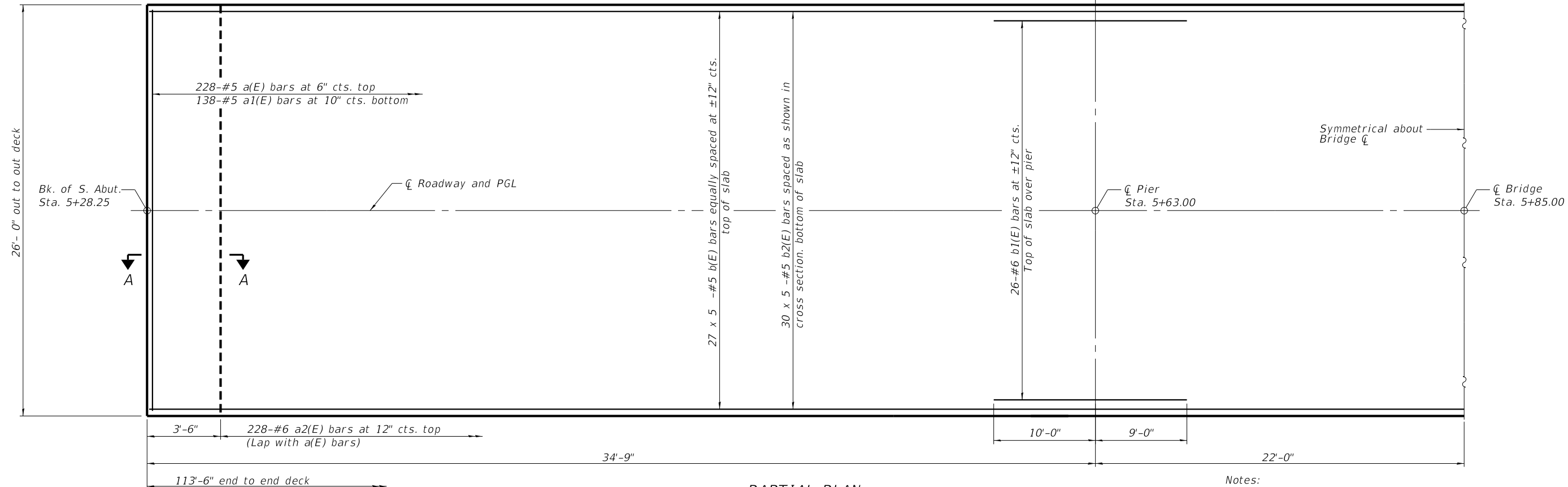
MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85



TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 066-3024

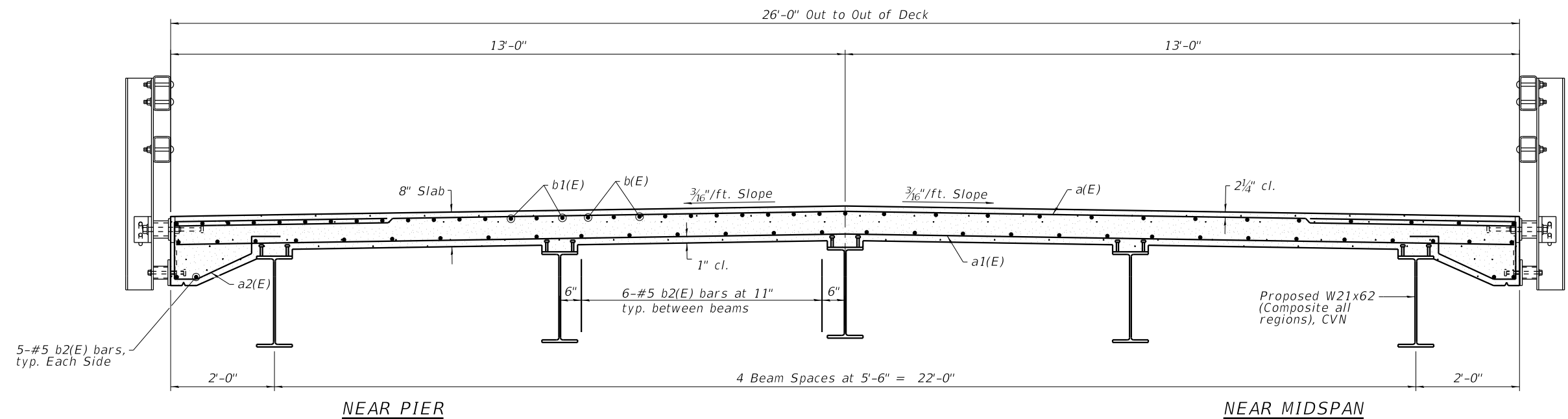
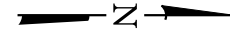
STRUCTURAL SHEET NO. 5 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	16
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



Notes:  
See Structural sheet 7 of 21 for superstructure details and Bill of Material.  
See Structural sheet 8 of 21 for Section A-A.  
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

**MINIMUM BAR LAP**  
#5 bar = 3'-6"  
#6 bar = 4'-10"



REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

**WILLET HOFMANN & ASSOCIATES, INC.**  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T: 309-517-1119 DESIGN FIRM: # 184-000918

**SUPERSTRUCTURE**  
STRUCTURE NO. 066-3024  
STRUCTURAL SHEET NO. 6 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	17
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

**SUPERSTRUCTURE  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	228	#5	25'-8"	—
a1(E)	138	#5	25'-8"	—
a2(E)	456	#6	11'-8"	⌒
b(E)	135	#5	25'-6"	—
b1(E)	52	#6	19'-0"	—
b2(E)	170	#5	25'-6"	—
m(E)	10	#6	25'-8"	—
m1(E)	16	#6	5'-2"	—
m2(E)	8	#6	1'-8"	—
m3(E)	16	#6	5'-4"	—
m4(E)	8	#6	1'-10"	—
m5(E)	4	#4	25'-8"	—
s(E)	60	#5	7'-9"	U
s1(E)	60	#5	7'-2"	U
u(E)	60	#4	3'-2"	U
Protective Coat		Sq. Yd.	328	
Concrete Superstructure		Cu. Yd.	93.1	
Bridge Deck Grooving		Sq. Yd.	303	
Reinforcement Bars, Epoxy Coated		Pound	29,200	

**NOTES:**

All exposed edges shall have 3/4" chamfer, except as noted.

Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

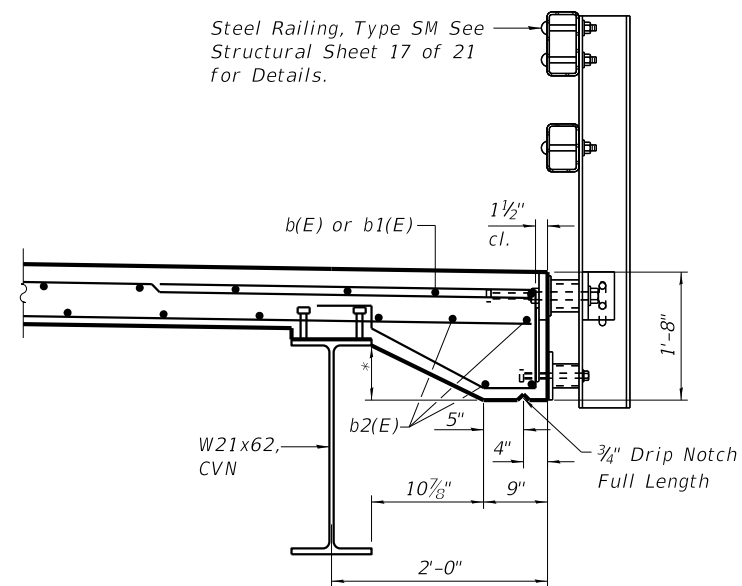
Bars indicated thus 27 x 5 -#5 etc. indicates 27 lines of bars with 5 lengths per line.

Reinforcement bars in the top of the deck may be placed with a 1/2" minimum clearance in the area of the rail post anchor devices. The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

Concrete in diaphragm is included with Concrete Superstructure.

Reinforcement bars in diaphragm are billed with superstructure.

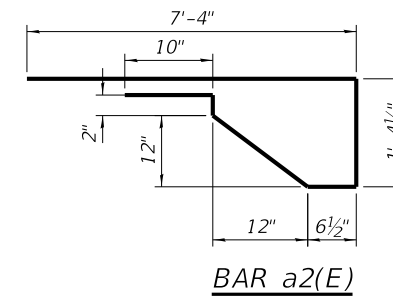
Protective coat shall be applied on the entire deck top surface.



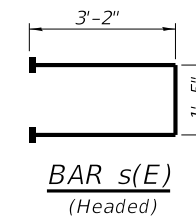
**SECTION THRU EDGE OF DECK**

\*Varies. See Structural Sheet 5 of 21

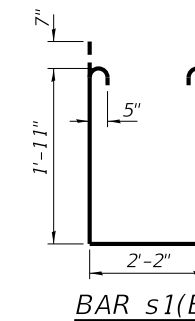
Steel Railing, Type SM See Structural Sheet 17 of 21 for Details.



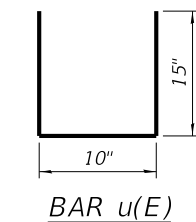
**BAR a2(E)**



**BAR s(E)  
(Headed)**



**BAR s1(E)**



**BAR u(E)**

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85



WILLET HOFMANN  
& ASSOCIATES, INC.  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
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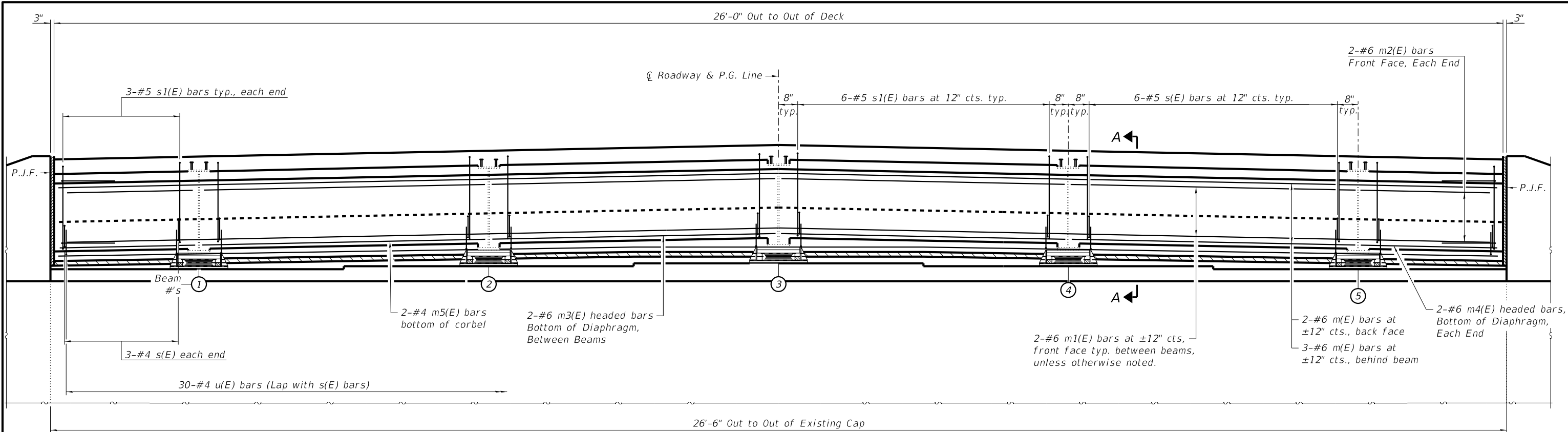
**SUPERSTRUCTURE DETAILS**

STRUCTURAL SHEET NO. 7 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	18
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

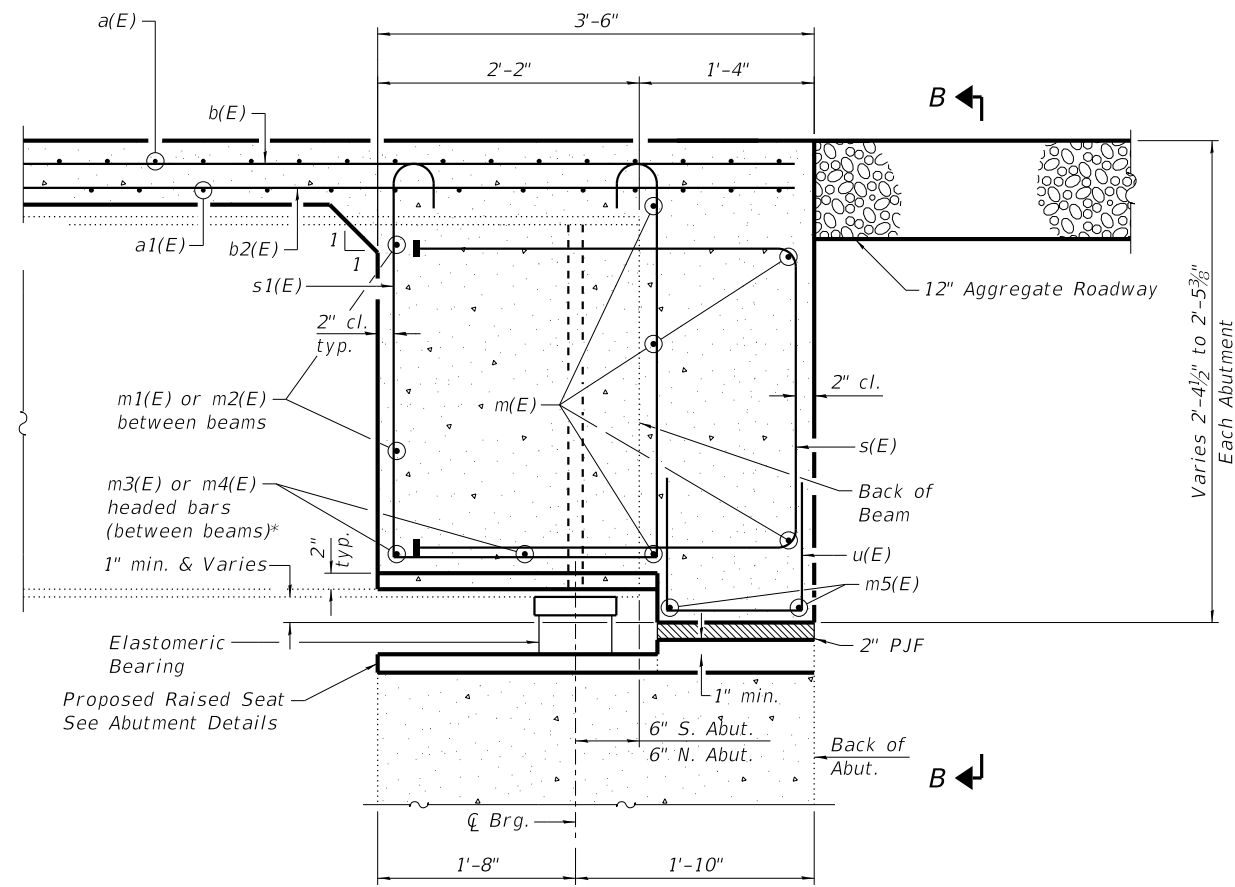
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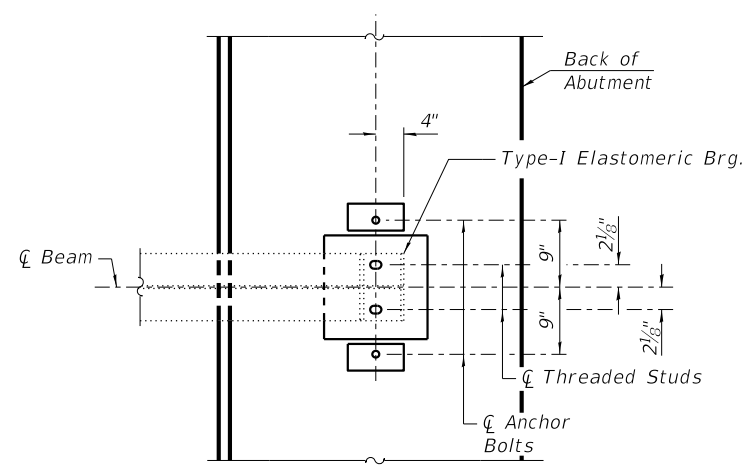
**DIAPHRAGM ELEVATION AT ABUTMENTS**

(Looking South at South Abutment  
Looking North at North Abutment)



**SECTION A-A**

\*Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

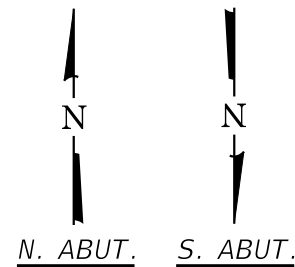


**PARTIAL PLAN AT ABUTMENT**

(Showing bottom flange of beam)

**NOTES:**

- Reinforcement bars in diaphragm are billed with superstructure on Structural Sheet 7 of 21.
- Concrete in diaphragm is included with Concrete Superstructure on Structural Sheet 7 of 21.
- For details of bars, see Structural Sheet 7 of 21.
- For bearing details, see Structural Sheet 11 of 21.



REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

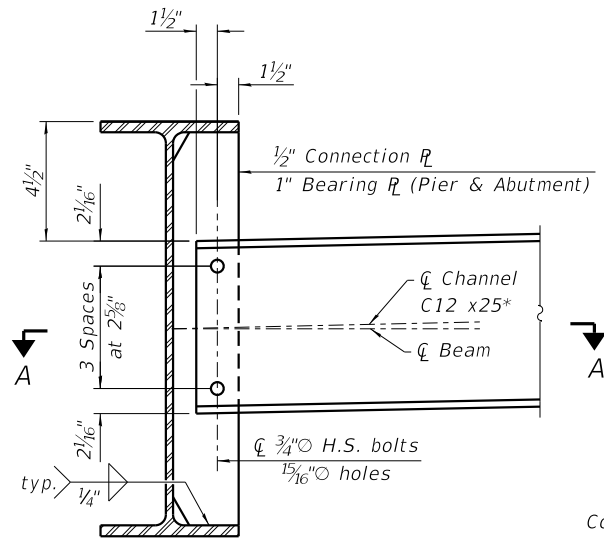
DIAPHRAGM DETAILS  
STRUCTURE NO. 066-3024  
STRUCTURAL SHEET NO. 8 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	19
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

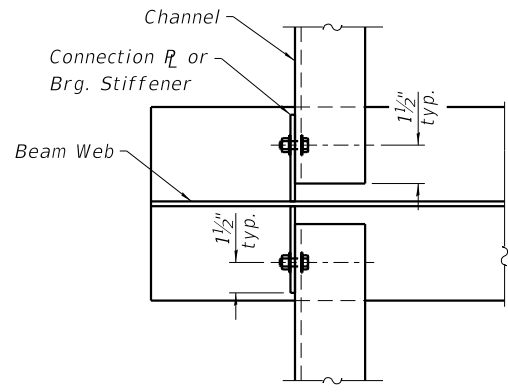
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**WIDE FLANGE BEAMS**



**SECTION A-A**

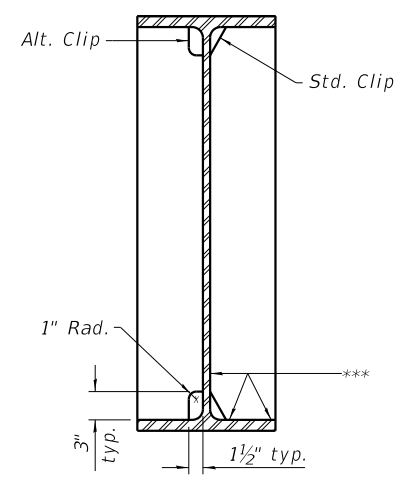
**INTERIOR DIAPHRAGM**

**NOTE:**  
Two hardened washers required for each set of oversized holes.

\*Alternate C 12X30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

The alternate, if utilized, shall be provided at no additional cost to the County.

\*\* 3/4" O HS bolts, 1 5/16" O holes



**WELD LIMITS AND CLIP DETAILS**

\*\*\*Stop welds 1/4" (±1/8") from edges as shown

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier	0.5 Sp. 2
<i>I<sub>s</sub></i>	(in <sup>4</sup> )	1330	1330	1330
<i>I<sub>c</sub>(n)</i>	(in <sup>4</sup> )	4949	—	—
<i>I<sub>c</sub>(3n)</i>	(in <sup>4</sup> )	3765	—	—
<i>I<sub>c</sub>(cr)</i>	(in <sup>4</sup> )	—	2040	—
<i>S<sub>s</sub></i>	(in <sup>3</sup> )	125	125	125
<i>S<sub>c</sub>(n)</i>	(in <sup>3</sup> )	220	—	220
<i>S<sub>c</sub>(3n)</i>	(in <sup>3</sup> )	197	—	197
<i>S<sub>c</sub>(cr)</i>	(in <sup>3</sup> )	—	161	—
<i>DC1</i>	(k/')	0.628	0.628	0.628
<i>MDC1</i>	(k)	43.9	95.6	56.2
<i>DC2</i>	(k/')	0.040	0.040	0.040
<i>MDC2</i>	(k)	2.8	6.1	3.6
<i>DW</i>	(k/')	0.275	0.275	0.275
<i>MDW</i>	(k)	19.2	42.0	24.6
<i>LLDF</i>		0.589	0.589	0.589
<i>MLL + IM</i>	(k)	221	249	218
<i>M<sub>u</sub> (Strength I)</i>	(k)	473	625	494
<i>M<sub>u</sub> + 1/3f<sub>l</sub> S<sub>xc</sub></i>	(k)	473	625	494
<i>φ<sub>f</sub> M<sub>n</sub></i>	(k)	1011	629	1011
<i>f<sub>s</sub> DC1</i>	(ksi)	4.22	9.19	5.40
<i>f<sub>s</sub> DC2</i>	(ksi)	0.17	0.45	0.22
<i>f<sub>s</sub> DW</i>	(ksi)	1.17	3.12	1.50
<i>f<sub>s</sub> (LL + IM)</i>	(ksi)	12.05	18.48	11.92
<i>f<sub>s</sub> (Service II)</i>	(ksi)	21.22	36.79	22.61
<i>f<sub>s</sub> + f<sub>i</sub>/2 (Service II)</i>	(ksi)	22.66	29.83	22.66
<i>0.95R<sub>n</sub>F<sub>yf</sub></i>	(ksi)	47.50	47.50	47.50
<i>f<sub>s</sub> (Total)Strength I</i>	(ksi)	—	49.1	—
<i>φ<sub>f</sub> F<sub>n</sub></i>	(ksi)	*	**	*
<i>V<sub>f</sub></i>	(k)	73.3	155.8	73.3

INTERIOR GIRDER REACTION TABLE		
	Abut.	Pier
<i>LLDF</i>	0.59	0.59
<i>OCF</i>	—	—
<i>RDC1</i>	(k) 7.42	27.04
<i>RDC2</i>	(k) 0.47	1.72
<i>RDW</i>	(k) 3.25	11.85
<i>RLL</i>	(k) 46.30	83.70
<i>RIM</i>	(k) 12.22	18.41
<i>RTOTAL</i>	(k) 69.66	142.72

\*NA - Section is compact per AASHTO 6.10.6.2.2

\*\*Section qualifies for AASHTO A6 per A6.1 ;  
A moment-based check per AASHTO A6.1.1-1 is sufficient

*I<sub>s</sub>, S<sub>s</sub>*: Non-composite moment of inertia and section modulus of the steel section used for computing *f* (Total-Strength I, and Service II) due to non-composite dead loads (*f<sub>in</sub>* and *f<sub>in3</sub>*).

*I<sub>c</sub>(n), S<sub>c</sub>(n)*: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing *f<sub>s</sub>* (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (*f<sub>in</sub>* and *f<sub>in3</sub>*).

*I<sub>c</sub>(3n), S<sub>c</sub>(3n)*: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing *f<sub>s</sub>* (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (*in<sup>4</sup>* and *in<sup>3</sup>*).

*I<sub>c</sub>(cr), S<sub>c</sub>(cr)*: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing *f* (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (*f<sub>in</sub>* and *f<sub>in3</sub>*).

*DC1*: Un-factored non-composite dead load (kips/ft.).  
*MDC1*: Un-factored moment due to non-composite dead load (kip-ft.).  
*DC2*: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).  
*MDC2*: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).  
*DW*: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).  
*MDW*: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).  
*LLDF*: Interior girder live load distribution factor (Lanes/Beam) (kip-ft.).  
*M<sub>u</sub> + IM*: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).  
*M<sub>u</sub> (Strength I)*: Factored design moment (kip-ft.).  
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{u} + IM$   
*f<sub>r</sub> M<sub>n</sub>*: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).  
*f<sub>s</sub> DC1*: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).  
 $M_{DC1} / S_{nc}$   
*f<sub>s</sub> DC2*: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).  
 $M_{DC2} / S_c(3n)$  or  $M_{DC2} / S_c(cr)$  as applicable.  
*f<sub>s</sub> DW*: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).  
 $M_{DW} / S_c(3n)$  or  $M_{DW} / S_c(cr)$  as applicable.  
*f<sub>s</sub> (L+IM)*: Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).  
 $M_{u} + IM / S(n)$  or  $M_{DW} / S(cr)$  as applicable.  
*f<sub>s</sub> (Service II)*: Sum of stresses as computed below (ksi).  
 $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s(L+IM)$   
*0.95R<sub>n</sub>F<sub>yf</sub>*: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).  
*f<sub>s</sub> (Total)Strength I*: Sum of stresses as computed below on non-compact section (ksi).  
 $1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_s(L+IM)$   
*f<sub>r</sub> F<sub>n</sub>*: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).  
*V<sub>f</sub>*: Maximum factored shear range in span computed according to Article 6.10.10.

**BILL OF MATERIAL**

Item	Unit	Quantity
Stud Shear Connectors	Each	1,530

**NOTES:**

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Load carrying components designated "CVN" shall conform to the Charpy-VNotch Impact Energy Requirement, Zone 2.

REVISION	DATE	BY	REMARKS

DESIGNED ATK  
DRAWN DAN  
REVIEWED ATK  
APPROVED MRL

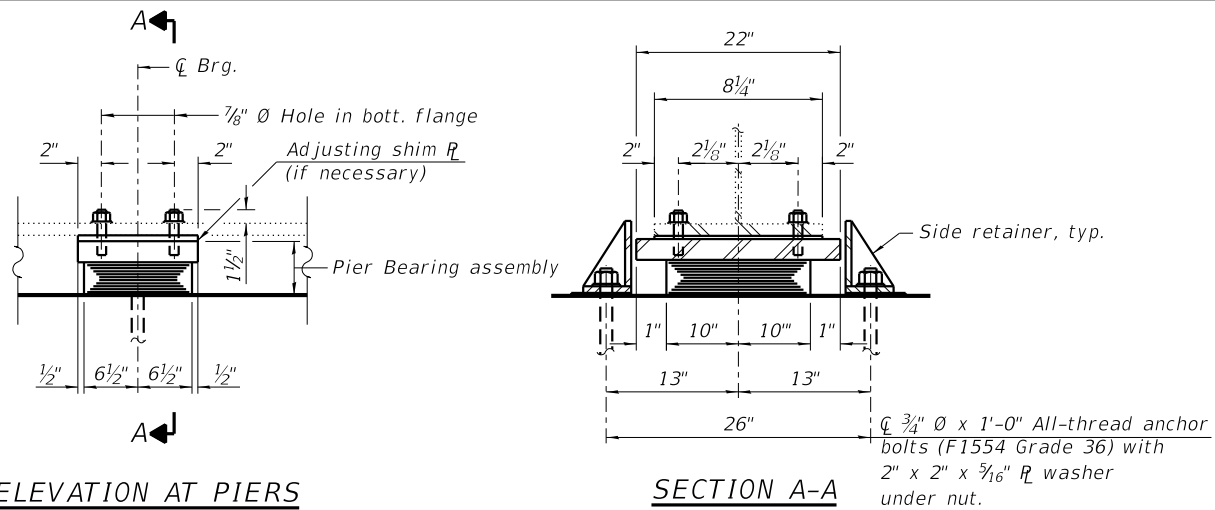
MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

WILLET HOFMANN & ASSOCIATES INC.  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOULNE, IL 61265  
T: 309-517-1119 DESIGN FIRM: # 184-000918

STRUCTURAL STEEL DETAILS  
STRUCTURE NO. 066-3024

STRUCTURAL SHEET NO. 10 OF 21 SHEETS

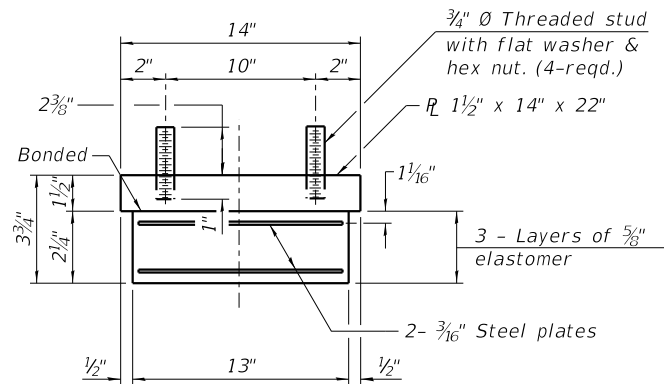
CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	21
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



ELEVATION AT PIERS

SECTION A-A

TYPE I ELASTOMERIC EXP. BRG. - PIER #2 (NORTH PIER)

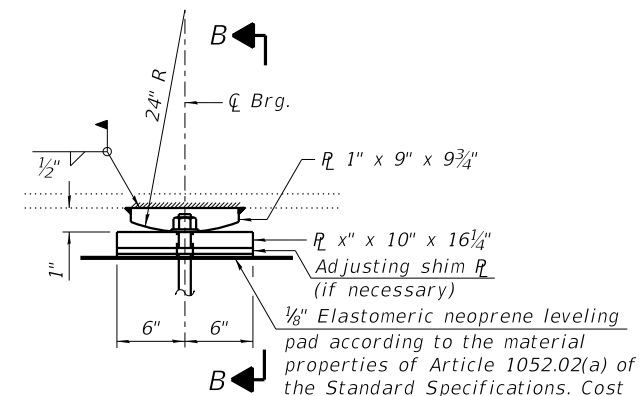


PIER BEARING ASSEMBLY

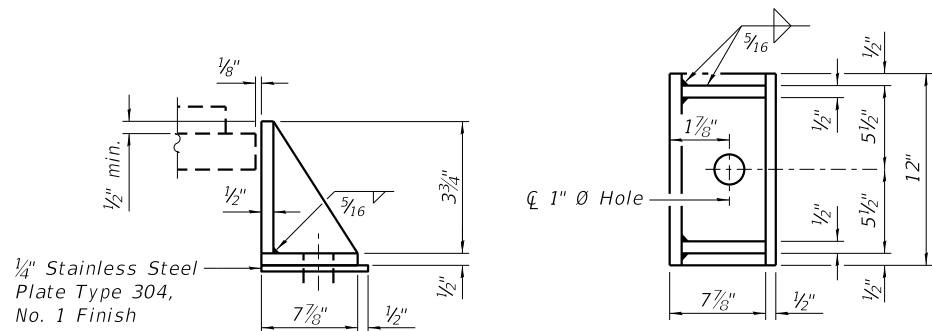
Shim plates shall not be placed under bearing assembly.

FIXED BEARINGS  
BOTTOM PLATE  
THICKNESS

Beam	X
1 & 5	1 1/2"
2 & 4	2 1/2"
3	3 1/2"

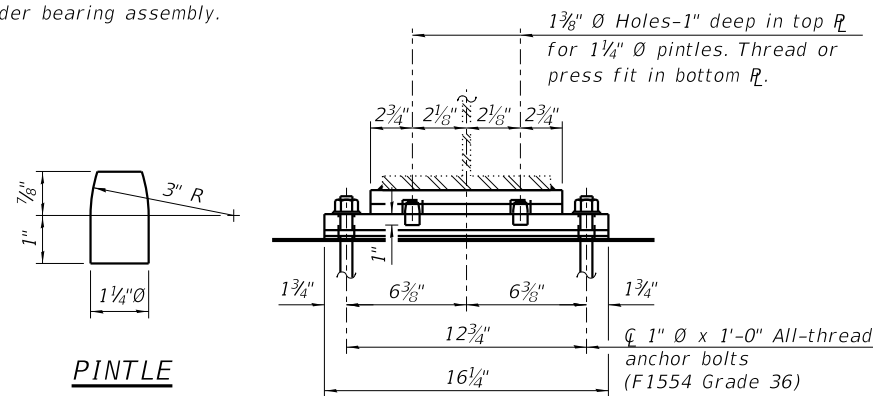


ELEVATION AT PIER



SIDE RETAINER - PIER #2 (NORTH PIER)

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



PINTLE

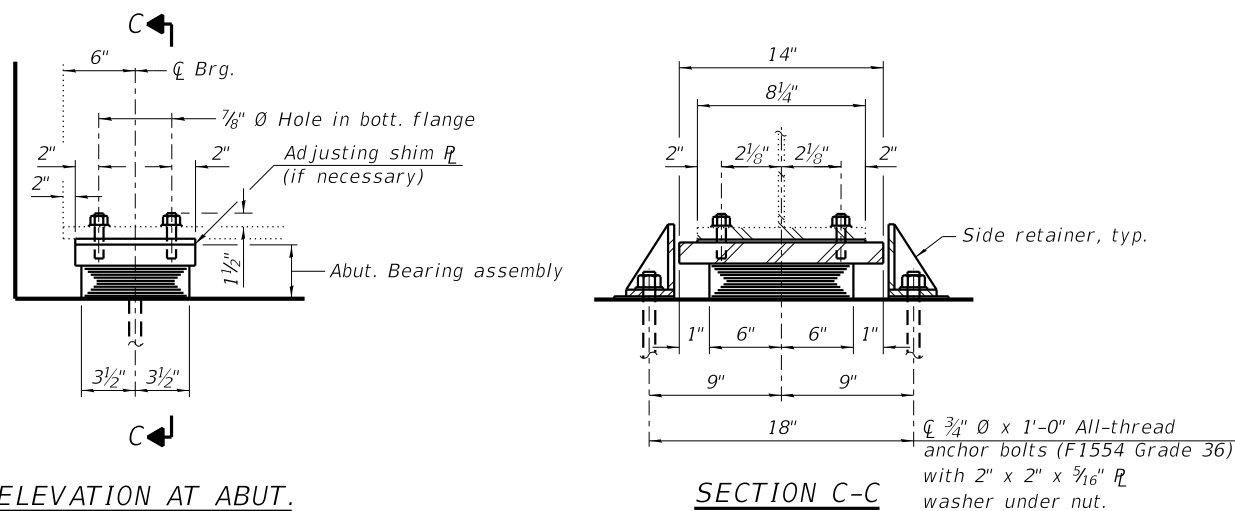
SECTION B-B

FIXED BEARING - PIER #1 (SOUTH PIER)

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	660
Elastomeric Bearing Assembly Type I	Each	15
Anchor Bolts, 3/4"	Each	30
Anchor Bolts, 1"	Each	10

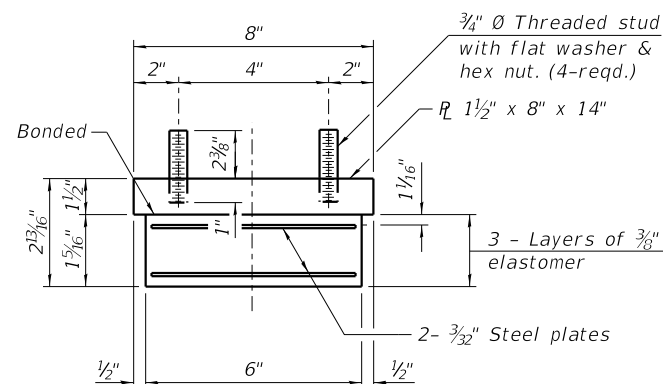
\*For information only. Weight of fixed bearings included in calculated weight of structural steel on Structural sheet 2 of 21.



ELEVATION AT ABUT.

SECTION C-C

TYPE I ELASTOMERIC EXP. BRG. - SOUTH ABUT.



ABUTMENT BEARING ASSEMBLY

Shim plates shall not be placed under bearing assembly.

NOTES:

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

Side retainers and stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

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

Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHT M111 or M232 as applicable.

REVISION	DATE	BY	REMARKS

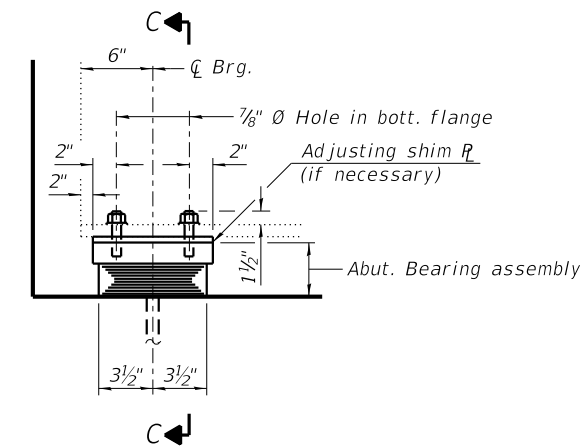
DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

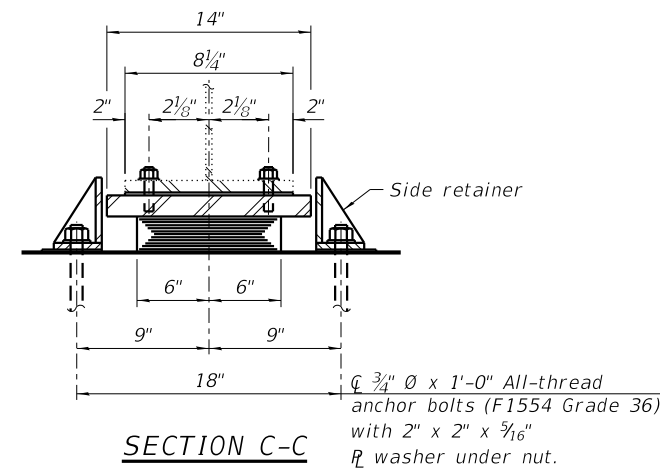
**WILLET HOFMANN**  
& ASSOCIATES INC  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T: 309-517-1119 DESIGN FIRM: # 184-000918

BEARING DETAILS  
STRUCTURE NO. 066-3024  
STRUCTURAL SHEET NO. 11 OF 21 SHEETS

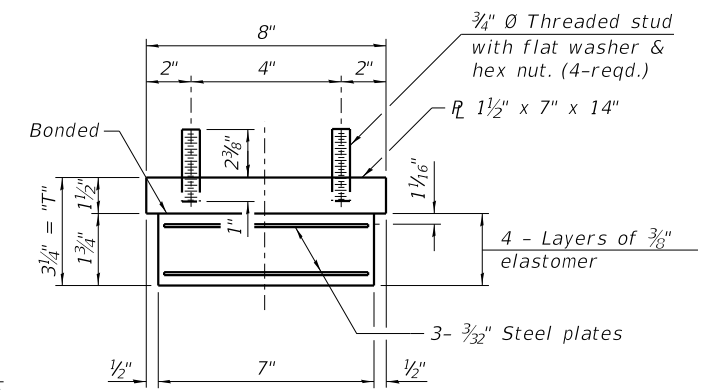
CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	22
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



ELEVATION AT ABUT.

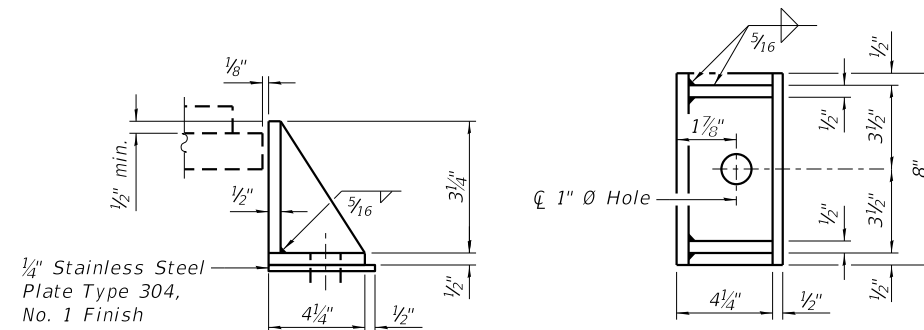


SECTION C-C



ABUTMENT BEARING ASSEMBLY

TYPE I ELASTOMERIC EXP. BRG. - NORTH ABUT.



SIDE RETAINER - NORTH & SOUTH ABUT.

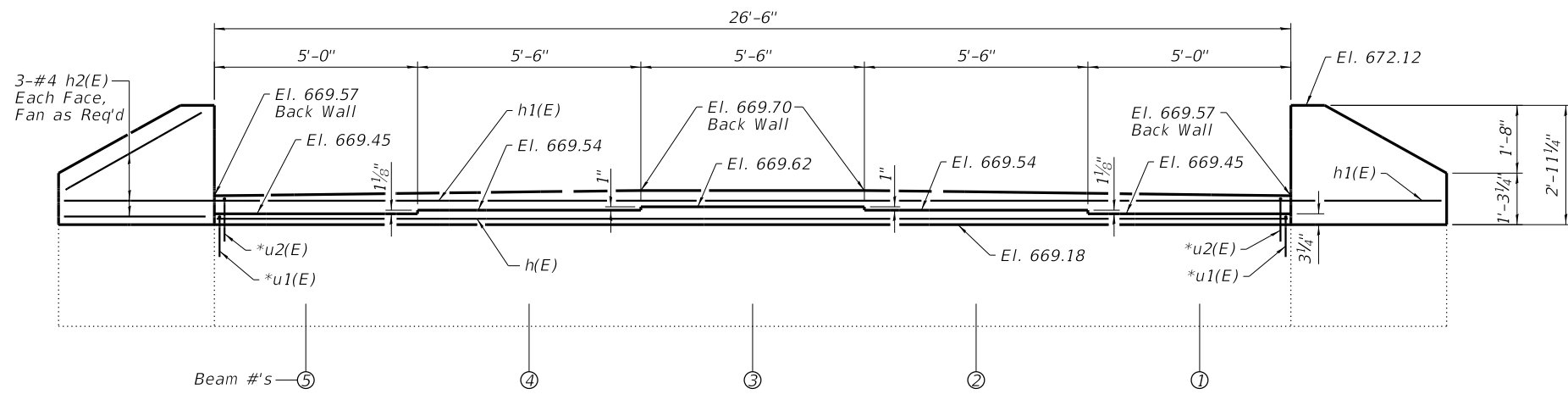
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

REVISION	DATE	BY	REMARKS	DESIGNED
				DRAWN
				REVIEWED
				APPROVED

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

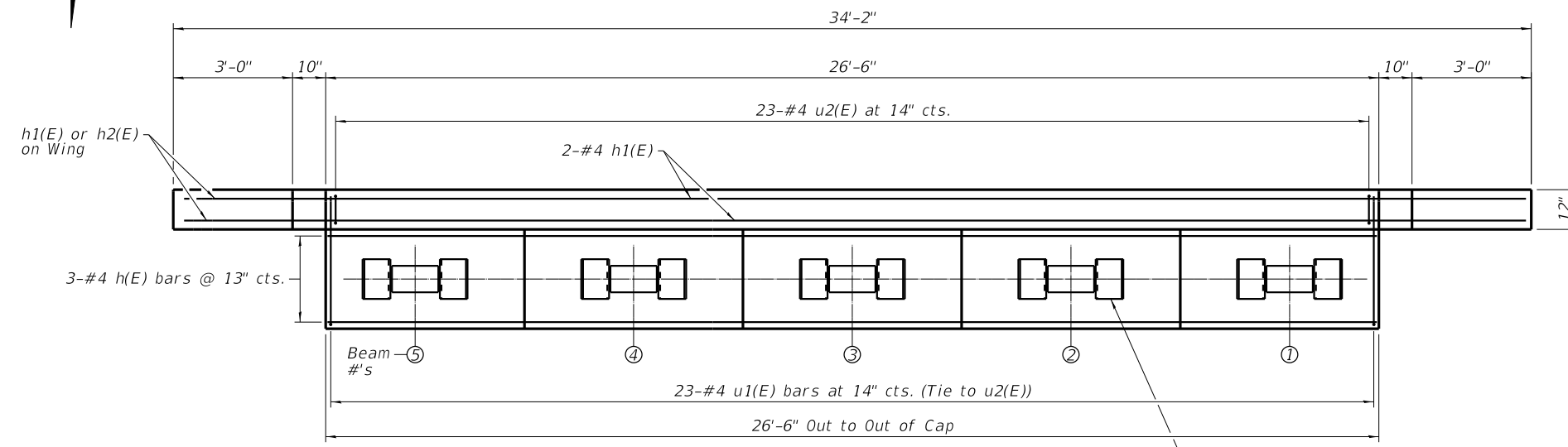
BEARING DETAILS  
STRUCTURE NO. 066-3024  
STRUCTURAL SHEET NO. 12 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	23
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



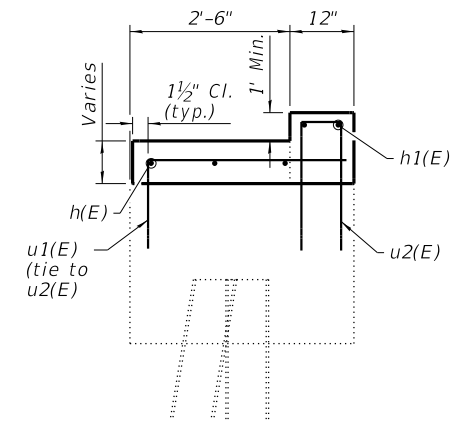
**ELEVATION**

\*Drill & Grout into existing Cap.

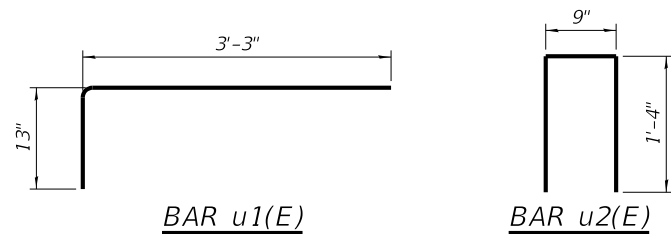


**PLAN**

Bearing Assembly, typ. See Structural Sheet 11 of 21



**SEC. THRU ABUT.**  
Dimensions at right angles to abutment.



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	3	#4	26'-2"	—
h1(E)	2	#4	31'-10"	—
h2(E)	12	#4	3'-8"	—
u1(E)	23	#4	4'-4"	┌
u2(E)	23	#4	3'-5"	└
Structure Excavation		Cu. Yd.	12	
Concrete Structures		Cu. Yd.	2.0	
Reinforcement Bars, Epoxy Coated		Pound	250	
Pipe Underdrain for Structures 4"		Foot	51	
Granular Backfill for Structures		Cu. Yd.	23	
Geocomposite Wall Drain		Sq. Yd.	16	

**NOTES:**  
 Reinforcement bars designated (E) shall be epoxy coated.  
 All exposed edges shall have standard 3/4" chamfers. Except as noted.  
 For drainage details, see Structural Sheet 3 of 21.  
 Rebar placement for bearing seat adjustments shall be adjusted as required to accommodate anchor bolt installation.

REVISION	DATE	BY	REMARKS
DESIGNED	ATK		
DRAWN	DAN		
REVIEWED	ATK		
APPROVED	MRL		

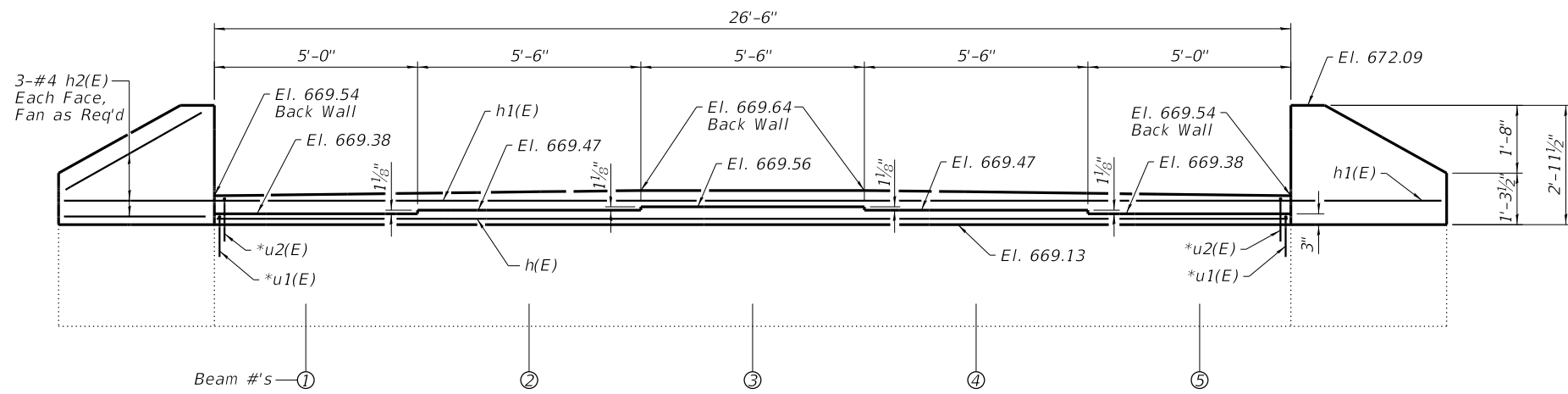
MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



**SOUTH ABUTMENT DETAILS**  
**STRUCTURE NO. 066-3024**  
 STRUCTURAL SHEET NO. 13 OF 21 SHEETS

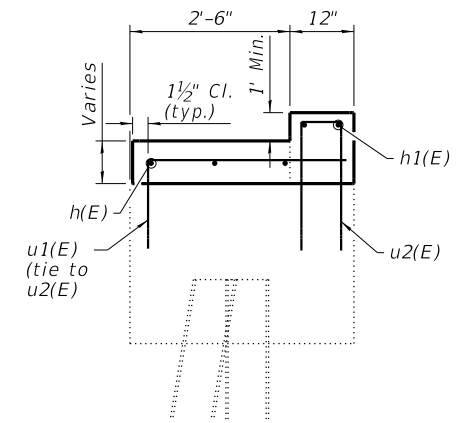
CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	24
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



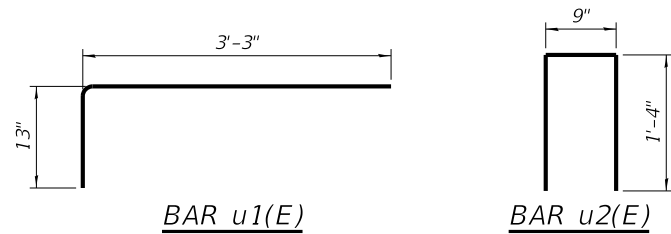


**ELEVATION**

\*Drill & Grout into existing Cap.

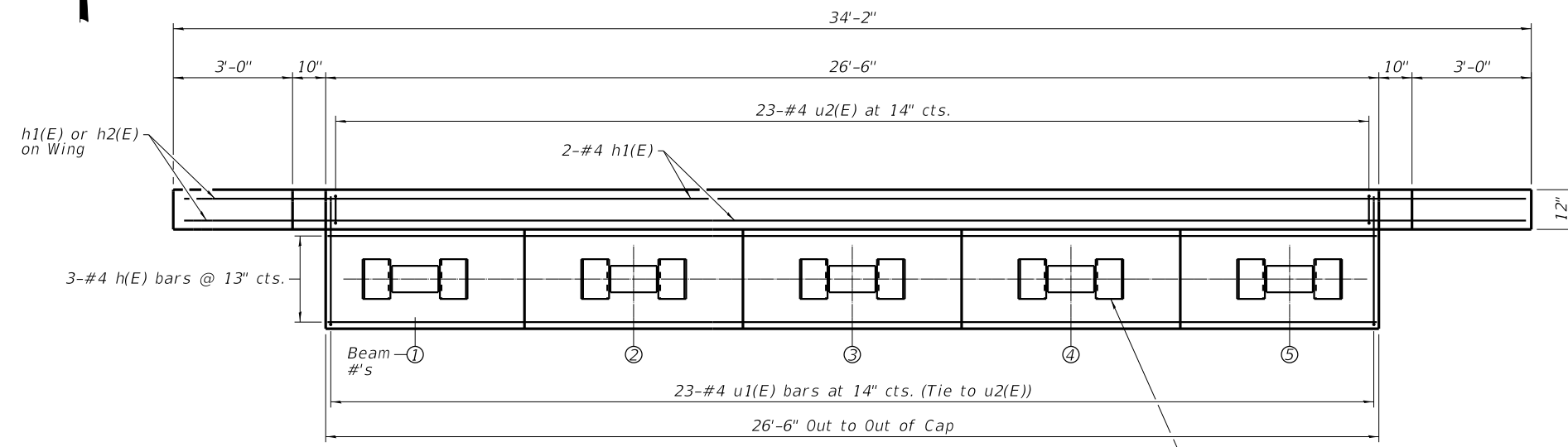


**SEC. THRU ABUT.**  
Dimensions at right angles to abutment.



**BAR u1(E)**

**BAR u2(E)**



**PLAN**

Bearing Assembly, typ. See Structural Sheet 11 of 21

**BILL OF MATERIAL**

Bar No.	Size	Length	Shape
h(E)	#4	26'-2"	—
h1(E)	#4	31'-10"	—
h2(E)	#4	3'-8"	—
u1(E)	#4	4'-4"	┌
u2(E)	#4	3'-5"	┐
Structure Excavation	Cu. Yd.	12	
Concrete Structures	Cu. Yd.	2.0	
Reinforcement Bars, Epoxy Coated	Pound	250	
Pipe Underdrain for Structures 4"	Foot	49	
Granular Backfill for Structures	Cu. Yd.	23	
Geocomposite Wall Drain	Sq. Yd.	16	

**NOTES:**

- Reinforcement bars designated (E) shall be epoxy coated.
- All exposed edges shall have standard 3/4" chamfers. Except as noted.
- For drainage details, see Structural Sheet 3 of 21.
- Rebar placement for bearing seat adjustments shall be adjusted as required to accommodate anchor bolt installation.

REVISION	DATE	BY	REMARKS
DESIGNED	ATK		
DRAWN	DAN		
REVIEWED	ATK		
APPROVED	MRL		

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85



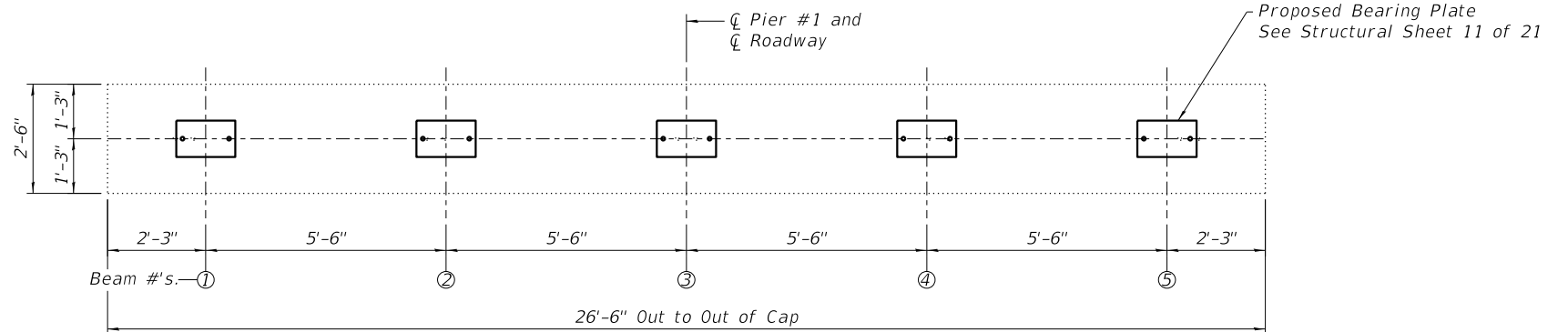
**NORTH ABUTMENT DETAILS**  
**STRUCTURE NO. 066-3024**  
STRUCTURAL SHEET NO. 14 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	25
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

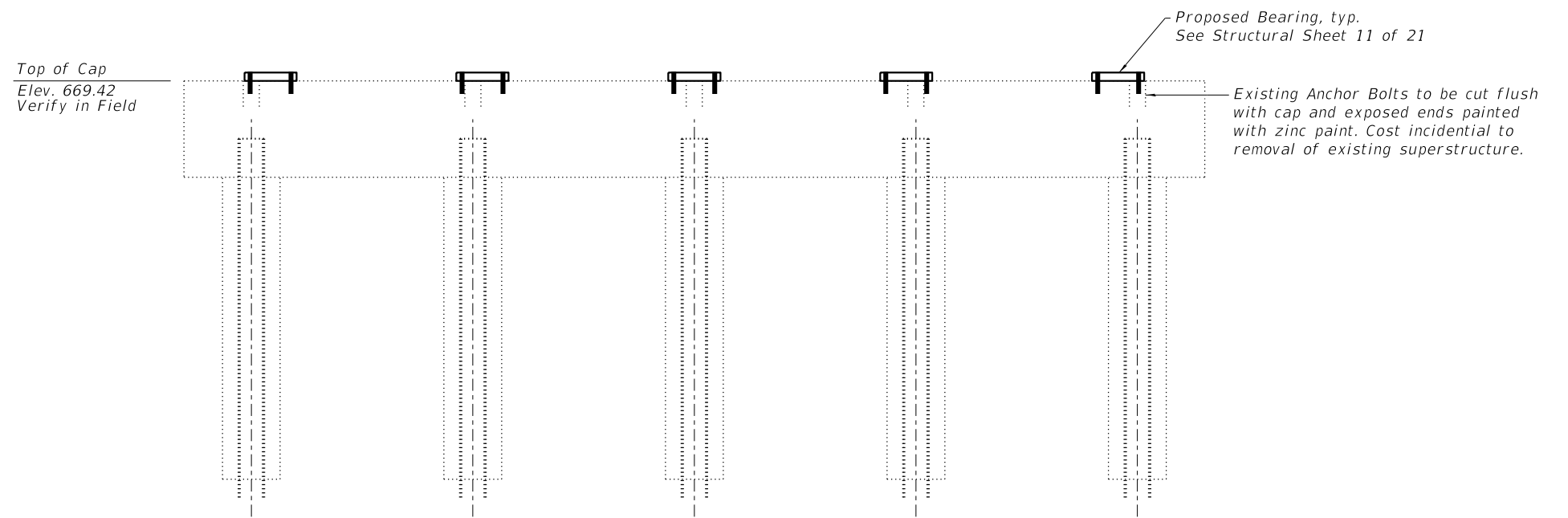
Notes:  
 Fixed Bearings are designed for seat elevation 669.42 at each beam, to match existing cap elevation. Contractor shall verify existing elevation at each seat location.

Bearing seat surface adjustments shall be made either by grinding the pier surface or shimming the bearing if required.

Cost of grinding and shims shall be incidental to Furnishing and Erecting Structural Steel.



PLAN



ELEVATION

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

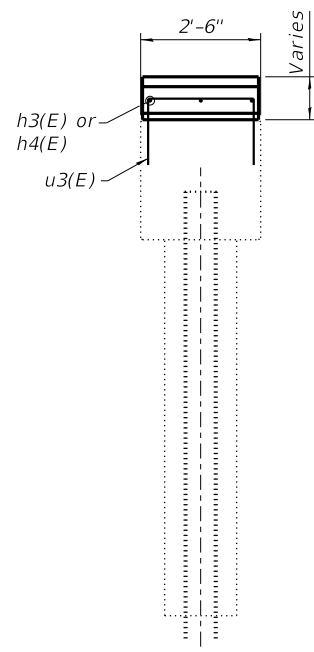
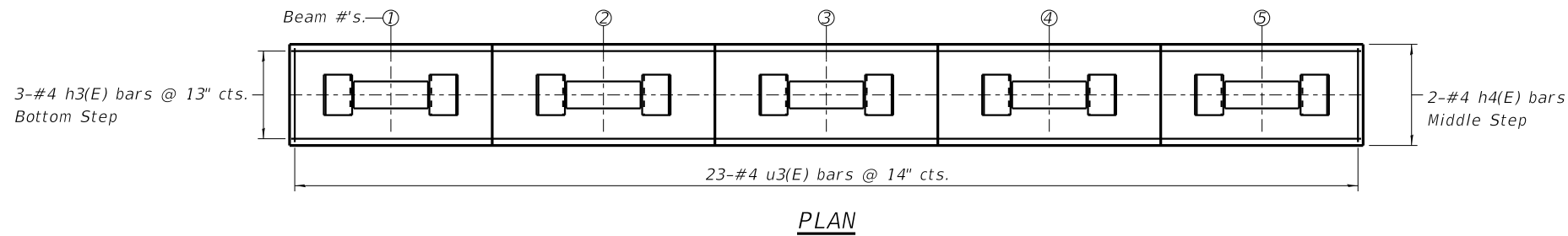
MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85

**WILLET HOFMANN & ASSOCIATES INC**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
 T: 309-517-1119 DESIGN FIRM: # 184-000918

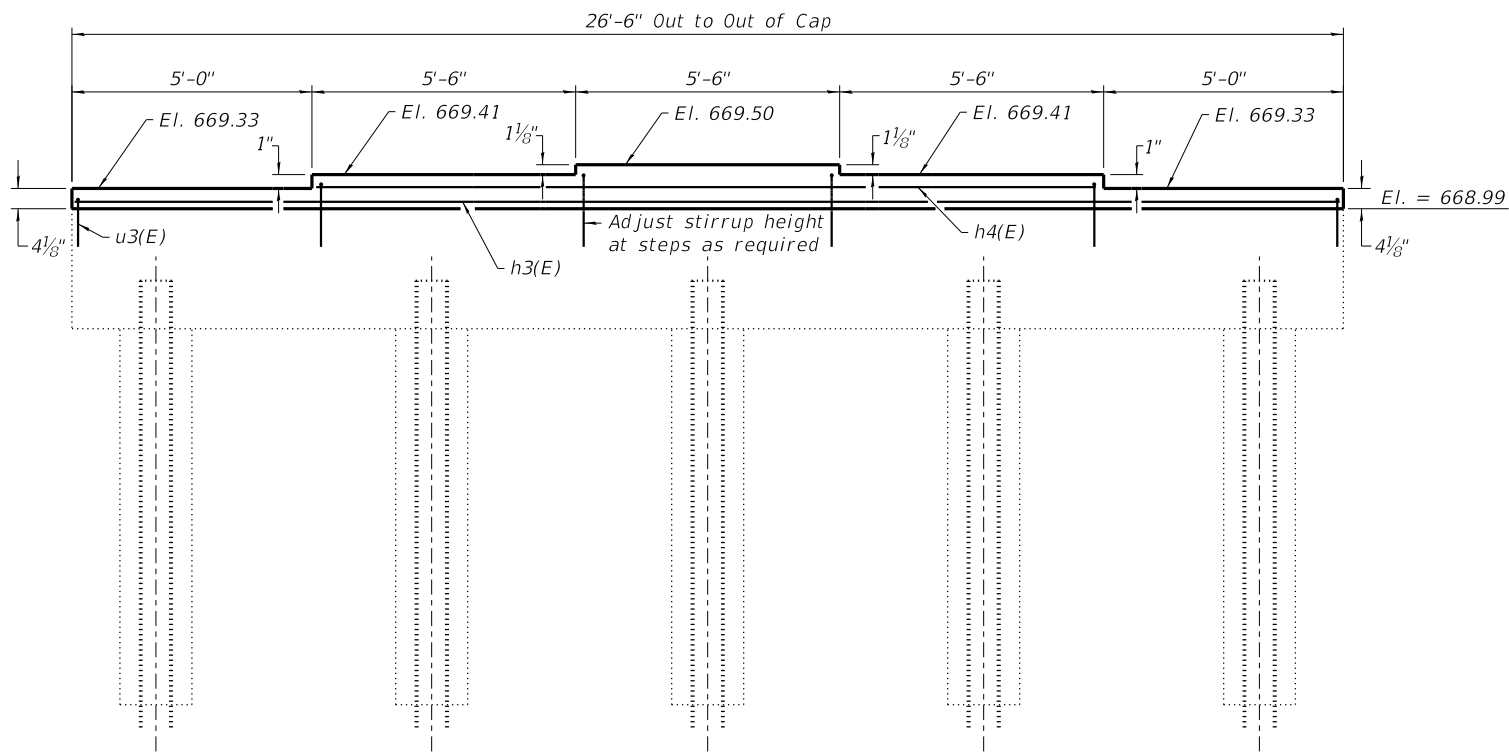
PIER 1 DETAILS  
 STRUCTURE NO. 066-3024

STRUCTURAL SHEET NO. 15 OF 21 SHEETS

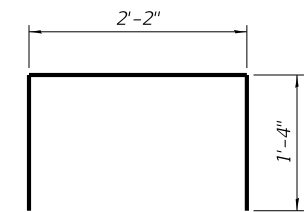
CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	26
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



END VIEW



ELEVATION



BAR u3(E)

**PIER #2  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h3(E)	3	#4	26'-2"	—
h4(E)	2	#4	16'-3"	—
u3(E)	23	#4	4'-10"	└┘
Concrete Structures		Cu. Yd.		1.0
Reinforcement Bars, Epoxy Coated		Pound		150

**NOTES:**

Reinforcement bars designated (E) shall be epoxy coated.

All exposed edges shall have standard 3#4" chamfers. Except as noted.

Rebar placement for bearing seat adjustments shall be adjusted as required to accommodate anchor bolt installation.

REVISION	DATE	BY	REMARKS

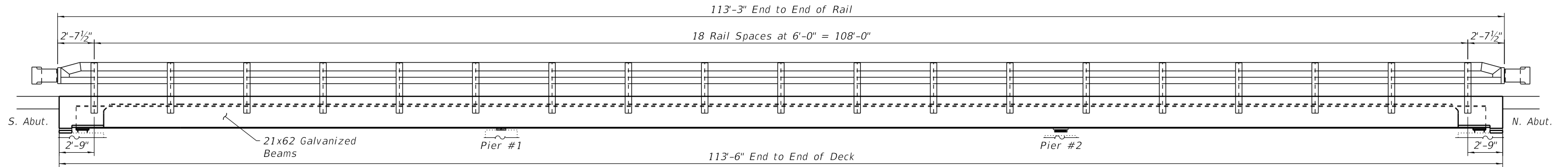
DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

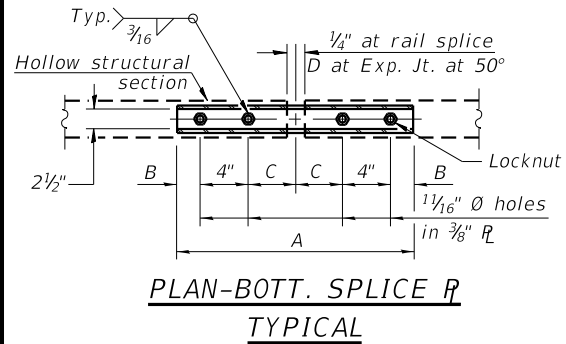
**WILLET HOFMANN & ASSOCIATES INC.**  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T: 309-517-1119 DESIGN FIRM: # 184-000918

**PIER 2 DETAILS**  
**STRUCTURE NO. 066-3024**  
STRUCTURAL SHEET NO. 16 OF 21 SHEETS

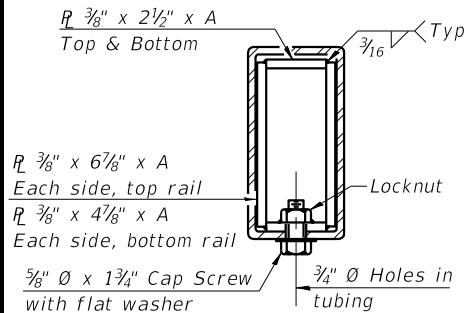
CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	27
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



ELEVATION VIEW

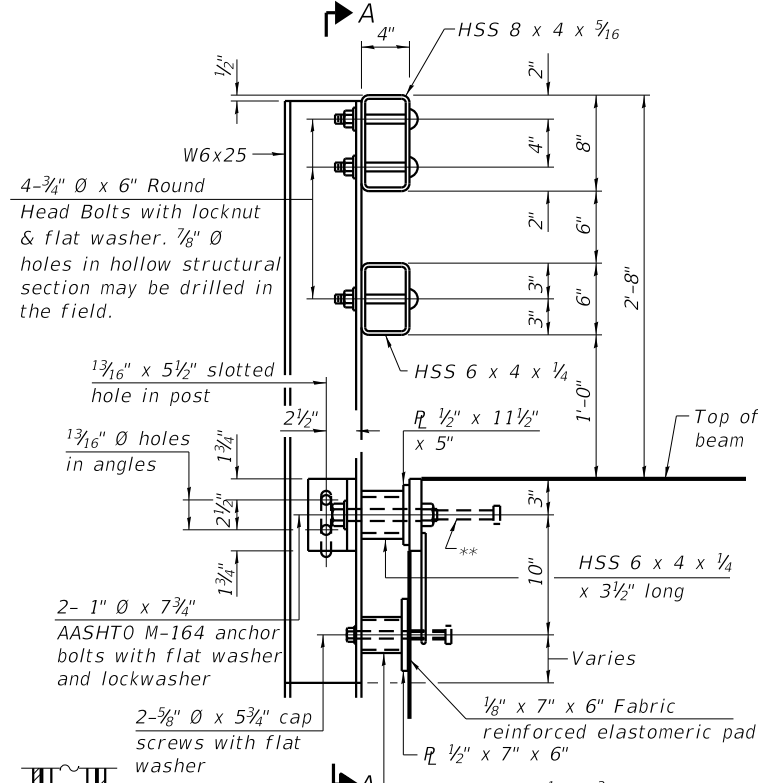


DETAIL OF 3/4" Ø ROUND HEAD BOLT

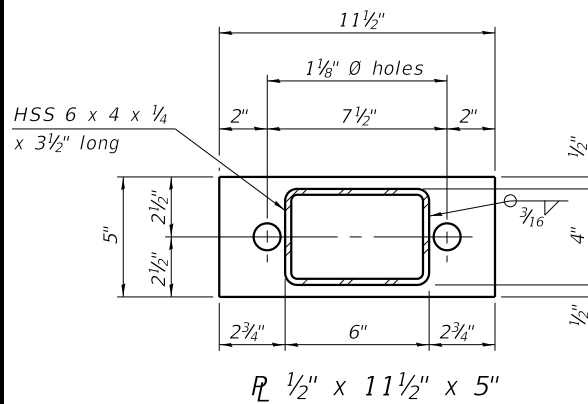


SECTION AT RAIL SPLICE

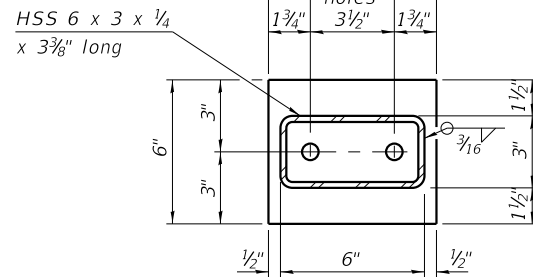
RAIL SPLICE CONNECTION AT EXPANSION JT.



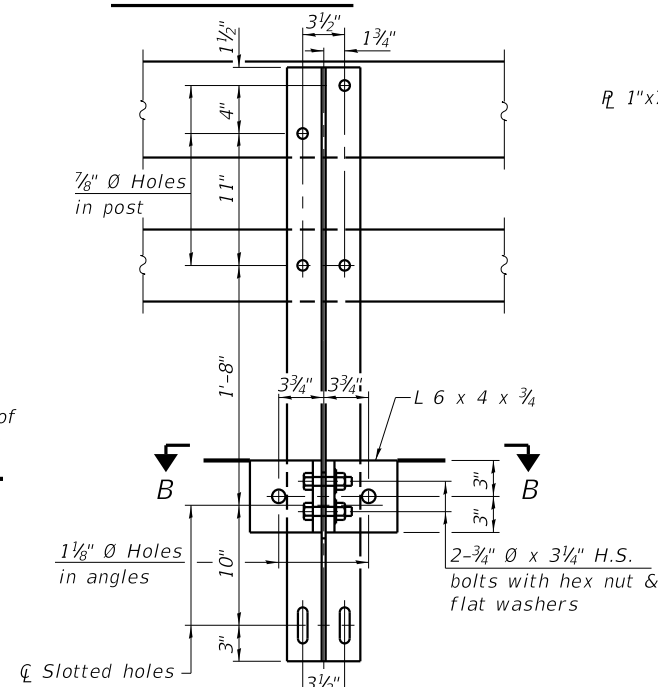
SECTION AT RAIL POST



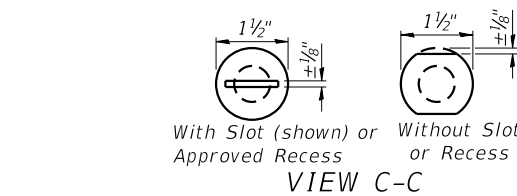
R 1/2" x 11 1/2" x 5"



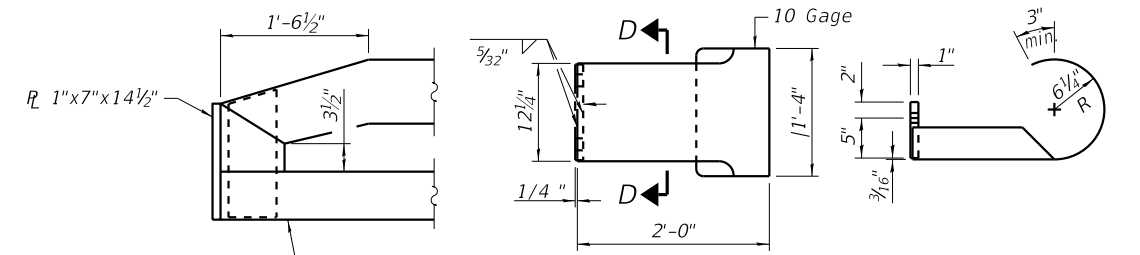
R 1/2" x 7" x 6"



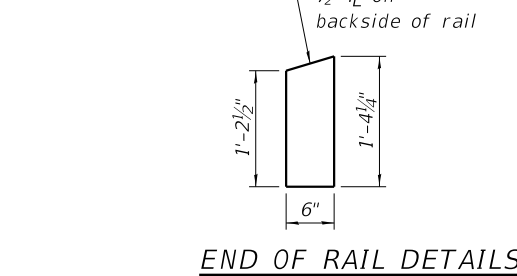
SECTION A-A



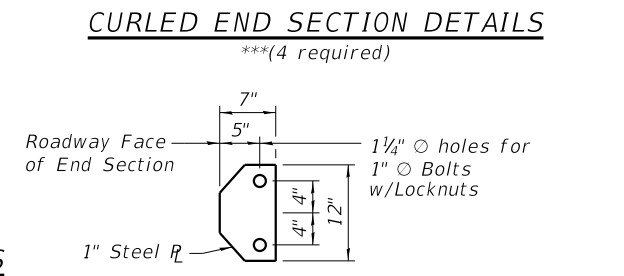
VIEW C-C



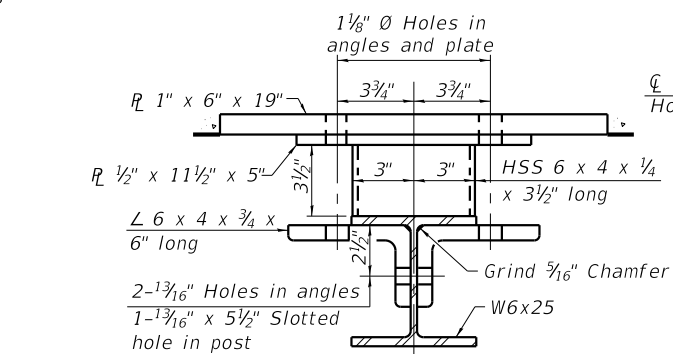
CURLLED END SECTION DETAILS



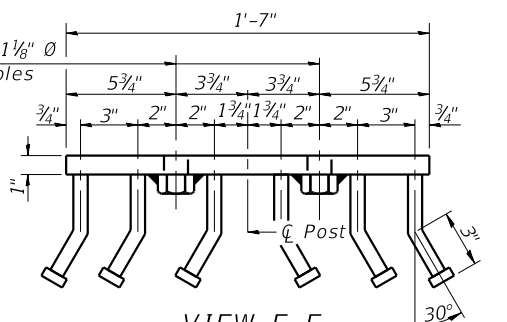
END OF RAIL DETAILS



SECTION D-D



SECTION B-B



VIEW E-E

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	227

NOTES:

- For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
- All Steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.
- \*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.
- \*\*The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.
- Cost of rail end sections incidental to Steel Railing, Type SM.

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

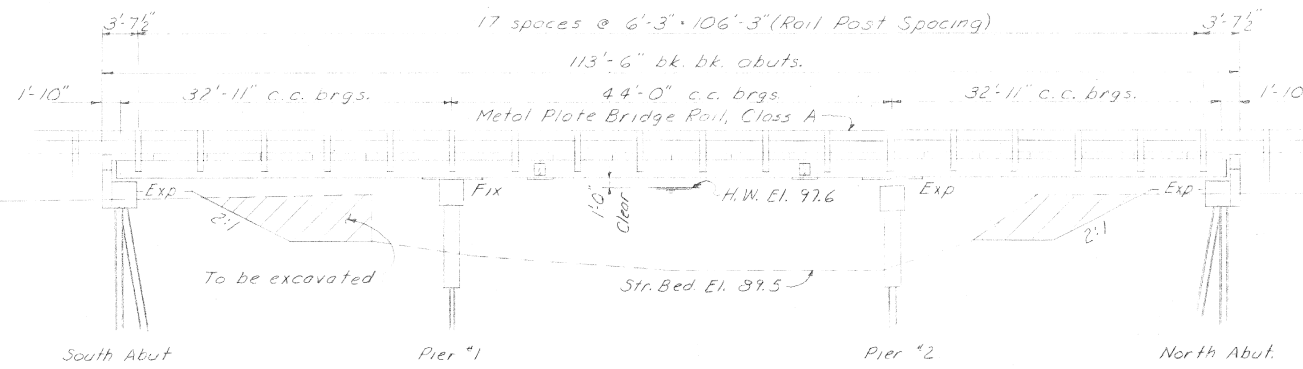
WILLET HOFMANN & ASSOCIATES INC.  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T: 309-517-1119 DESIGN FIRM: # 184-000918

STEEL RAILING, TYPE SM  
STRUCTURE NO. 066-3024

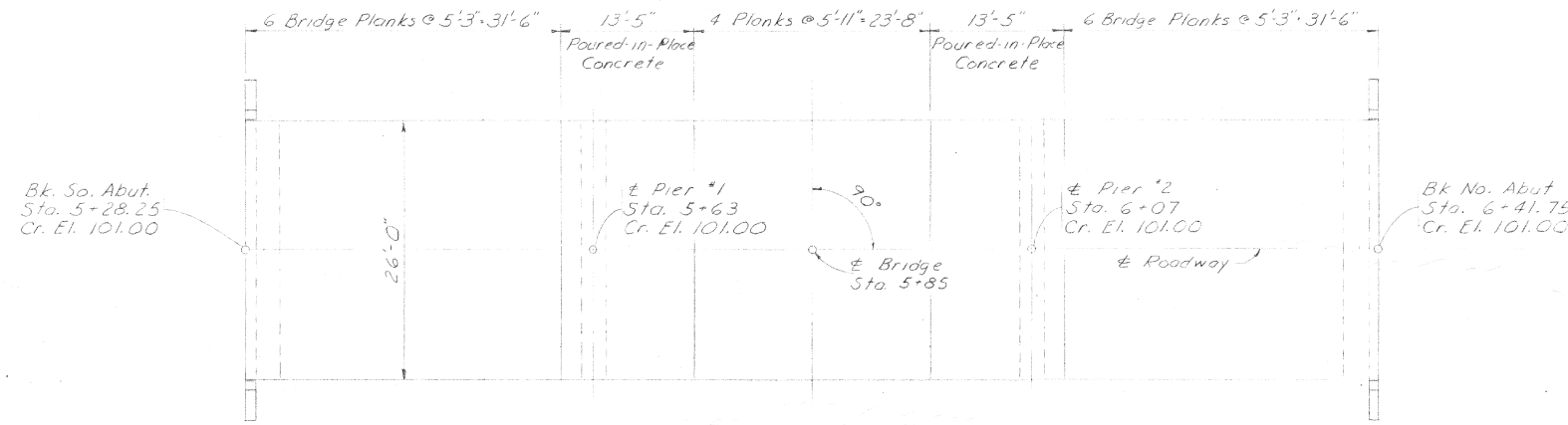
STRUCTURAL SHEET NO. 17 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	28
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

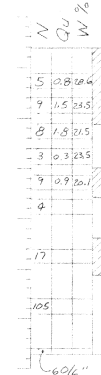
B.M.: 3&W Top F.P. Rt. Sta. 7+00  
Elev. = 100.00



ELEVATION

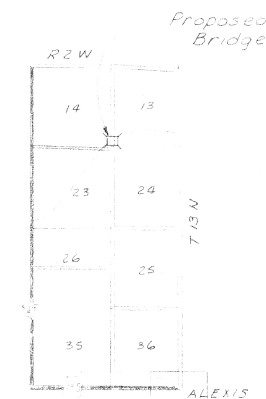


PLAN



Medium to stiff dark brown organic silty clay  
Stiff, becoming soft yellow-brown and gray silty clay  
Medium yellow & gray clayey silt  
Very loose yellow-brown silty fine sand to sandy silt  
Medium yellow-brown sand and fine gravel "trace silt"  
Hard dark gray shale with thin gray sandstone seams

BORING DATA  
12 ft. Rt. Sta. 6+66



LOCATION PLAN

TOTAL BILL OF MATERIAL

ITEM	SUPER	SUB	TOTAL
Class X Concrete Cu. Yd.	15.2	41.3	56.5
Reinforcement Bars Lb.	4,000	3,700	7,700
Steel Piles HPB x 36 Lin. Ft.		500	500
Precast Concrete Bridge Plank Sq. Ft.	2,253		2,253
Metal Plate Bridge Rail, Cl. A Lin. Ft.	213		213

DESIGN STRESSES

$f_c = 1,800$  p.s.i. (Precast Plank)  
 $f_c = 1,400$  p.s.i. (Class X Concrete)  
 $f_s = 20,000$  p.s.i. (Reinforcement Bars)  
 $f_s = 18,000$  p.s.i. (Salvaged Struc. Steel)  
 $f_s = 20,000$  p.s.i. (New Struc. Steel)  
 $n = 8$  (Precast Plank), 10 (Class X Concrete)

Loading H15-44

GENERAL PLAN & ELEVATION  
MCCONNELL BRIDGE  
OVER HENDERSON CREEK  
CH 6  
MERCER COUNTY

COLLINS AND RICE  
CONSULTING ENGINEERS

DESIGNED M.J.R. CHECKED M.J.R.  
DRAWN M.J.R. DATE 10/31/23 NO. 1050

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

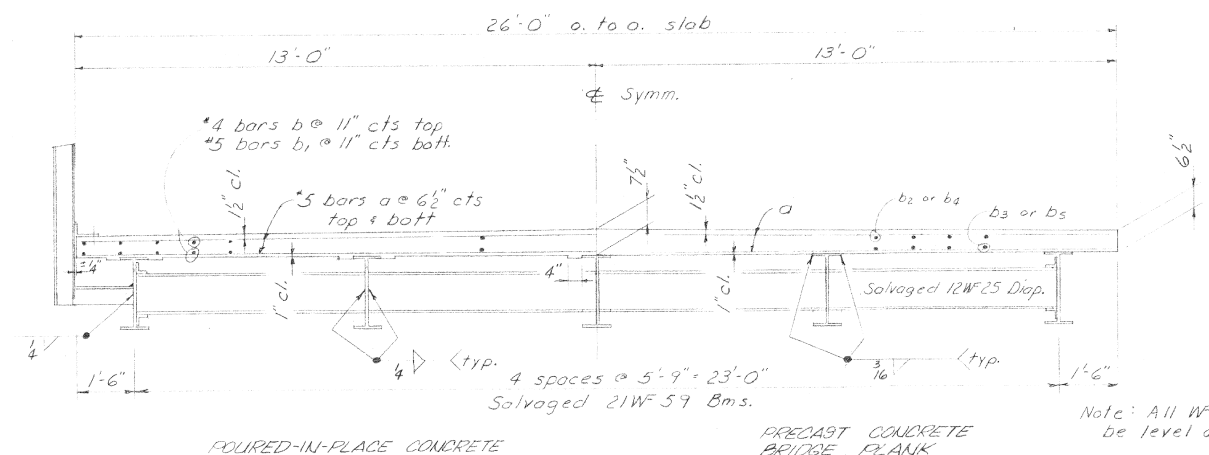
MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

**WILLET HOFMANN**  
& ASSOCIATES INC  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOULNE, IL 61265  
T: 309-517-1119 DESIGN FIRM: # 184-000918

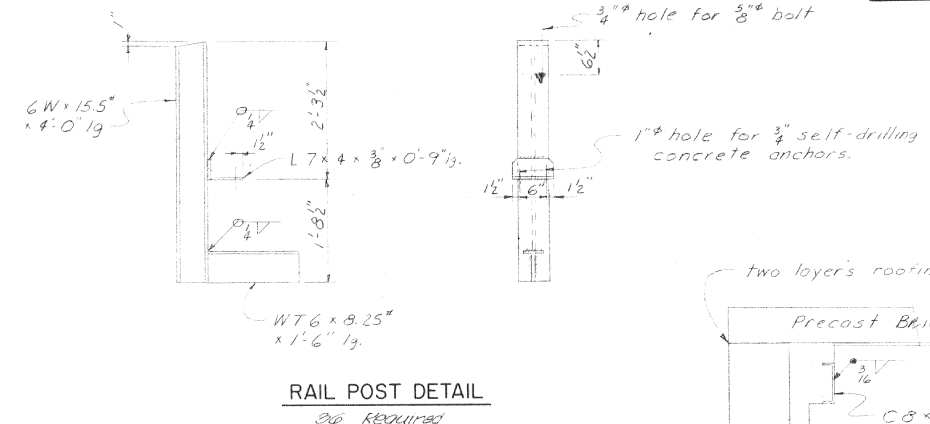
EXISTING PLANS  
STRUCTURE NO. 066-3024  
STRUCTURAL SHEET NO. 18 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	29
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

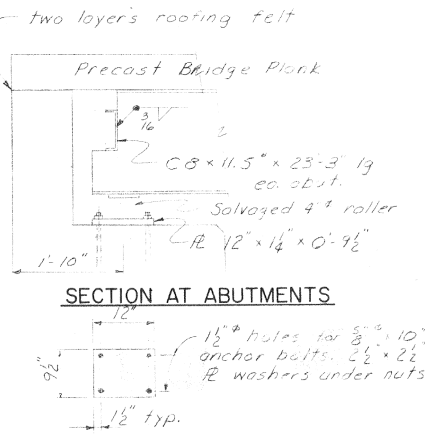
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
CW 6		MERCER	4	2
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT		



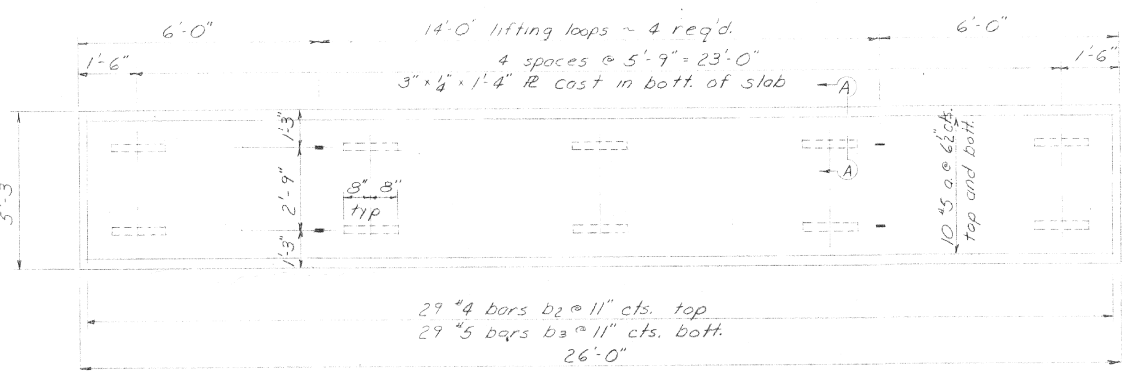
CROSS SECTION



RAIL POST DETAIL  
3/8" Required



SECTION AT ABUTMENTS



PLAN-PRECAST CONCRETE BRIDGE PLANK (5'-3")

**BILL OF MATERIAL**  
**POURED-IN-PLACE CONCRETE**

BAR	NO.	SIZE	LENGTH	SHAPE
a	100	#5	25'-9"	
b	58	#4	13'-3"	
b1	58	#5	13'-3"	
Class X Concrete		Cu. Yd.	15.2	
Reinforcement Bars		Lb.	4,000	

**\* ESTIMATED QUANTITIES**

**ONE 5'-3" PLANK**

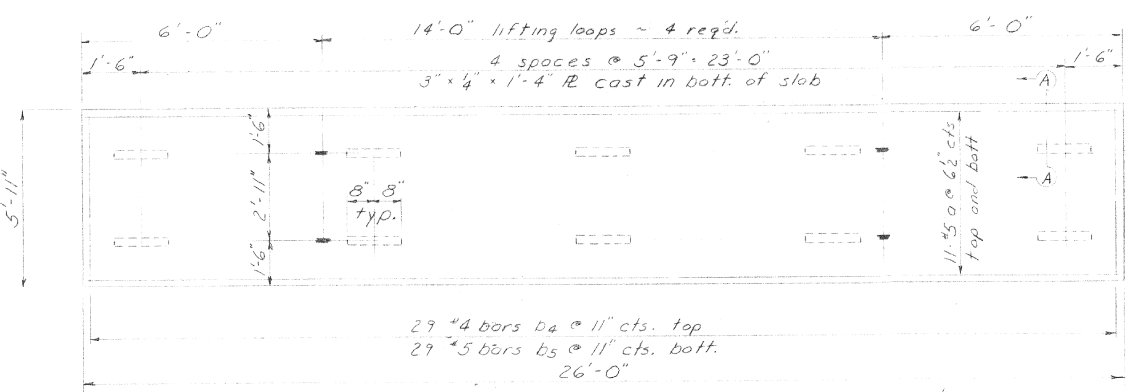
BAR	NO.	SIZE	LENGTH	SHAPE
a	20	#5	25'-9"	
b2	29	#4	5'-0"	
b3	29	#5	5'-0"	
Class X Concrete		Cu. Yd.	2.95	
Reinforcement Bars		Lb.	785	

\* For informational purposes only.

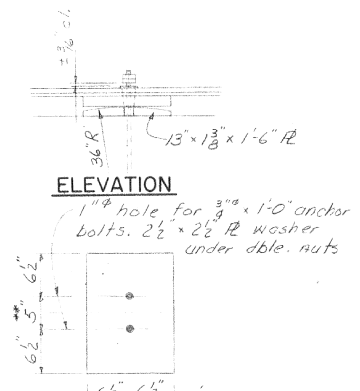
**ESTIMATED QUANTITIES**

**ONE 5'-11" PLANK**

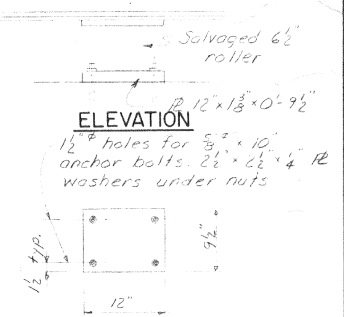
BAR	NO.	SIZE	LENGTH	SHAPE
a	22	#5	25'-9"	
b4	29	#4	5'-8"	
b5	29	#5	5'-8"	
Class X Concrete		Cu. Yd.	3.32	
Reinforcement Bars		Lb.	872	



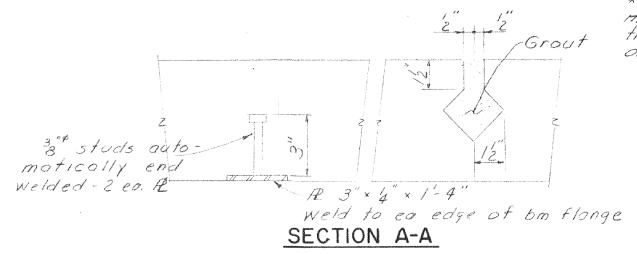
PLAN-PRECAST CONCRETE BRIDGE PLANK (5'-11")



ELEVATION  
BOTT. BRG. PLATE  
PIER 1  
5 Required



ELEVATION  
BOTT. BRG. PLATE  
PIER 2  
5 Required



SECTION A-A

**SUPERSTRUCTURE**  
McCONNELL BRIDGE  
OVER HENDERSON CREEK  
CH 6  
MERCER COUNTY

**COLLINS AND RICE**  
CONSULTING ENGINEERS

DESIGNED: M.J.R.  
DRAWN: M.J.R.

CHECKED: M.J.R.  
DATE: 5-23-75 NO. 1050

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

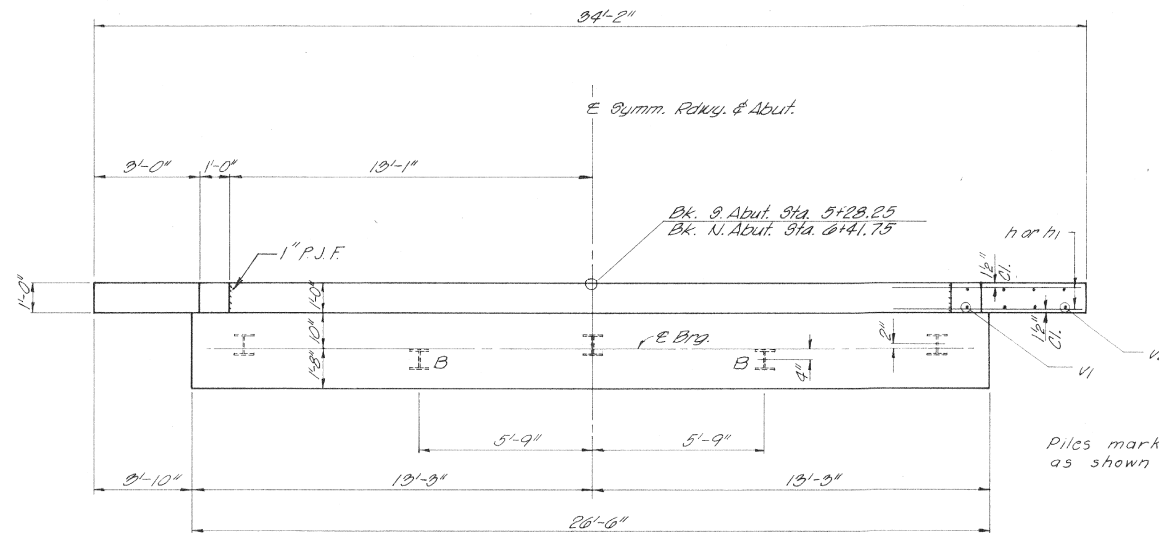
MERCER COUNTY HIGHWAY DEPARTMENT  
C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
STATION 5+85

**WILLET HOFMANN & ASSOCIATES INC.**  
ENGINEERING ARCHITECTURE LAND SURVEYING  
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
T. 309-517-1119 DESIGN FIRM: # 184-000918

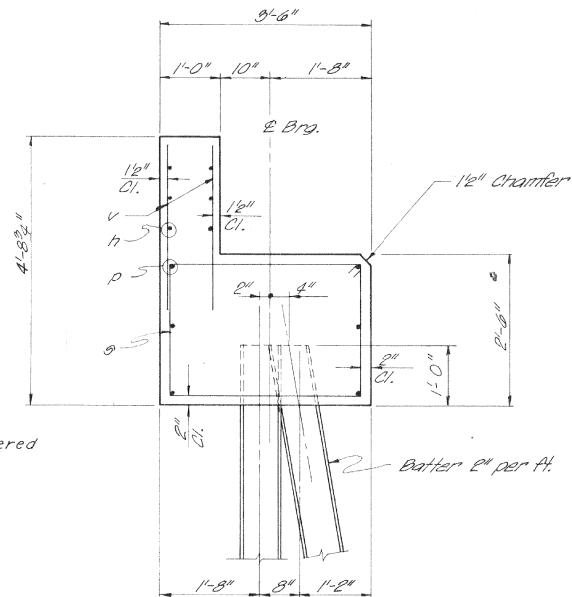
EXISTING PLANS  
STRUCTURE NO. 066-3024  
STRUCTURAL SHEET NO. 19 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	30
WHA # 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
CH 6		MERCER	4	3
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

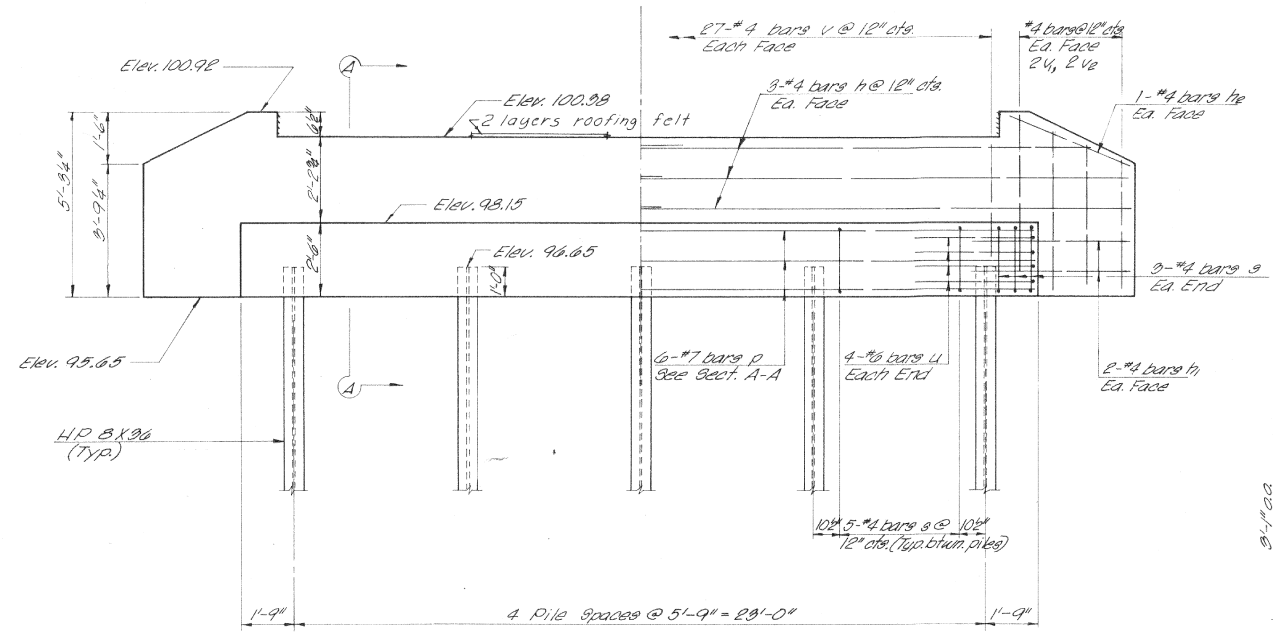


P L A N

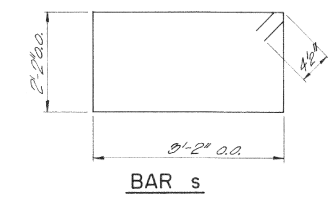


SECTION A-A

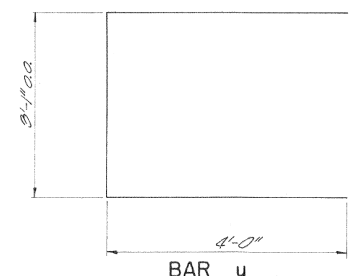
Piles marked "B" to be battered as shown in Section A-A.



E L E V A T I O N



BAR S



BAR U

BILL OF MATERIAL - 2 ABUTS.

BAR	NO.	SIZE	LENGTH	SHAPE
h	24	#4	17'-6"	—
h1	16	#4	5'-0"	—
h2	8	#4	4'-0"	—
p	12	#7	28'-2"	—
u	52	#4	11'-5"	□
v	16	#6	11'-1"	—
v1	108	#4	9'-8"	—
v2	16	#4	4'-6"	—
v2	16	#4	9'-9"	—

Class X Concrete	Cu. Yd.	242
Reinforcement Bars	Pounds	1,980
Steel Piles HP 8x36	Lin. Ft.	250

**PILE DATA**  
 Type ----- Steel Piles HP 8x36  
 No. Reg'd ----- 10  
 Min Capacity ----- Drive to Refusal  
 Est. Length ----- 25 Feet / Pile

<b>ABUTMENTS</b>	
McCONNELL BRIDGE OVER HENDERSON CREEK CH 6 MERCER COUNTY	
COLLINS AND RICE CONSULTING ENGINEERS	
DESIGNED M.J.R. DRAWN C.R.	CHECKED M.J.R. DATE 5-13-15 NO. 10.50

REVISION	DATE	BY	REMARKS

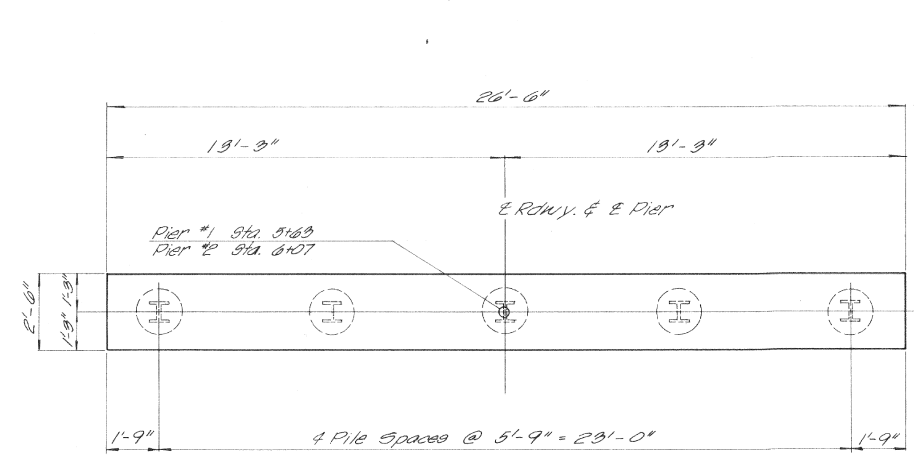
DESIGNED	ATK
DRAWN	DAN
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85

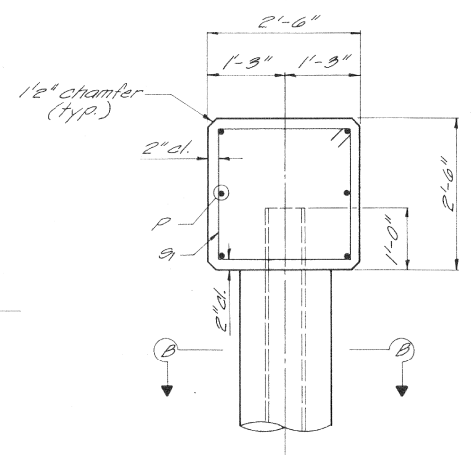
EXISTING PLANS  
 STRUCTURE NO. 066-3024  
 STRUCTURAL SHEET NO. 20 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	31
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

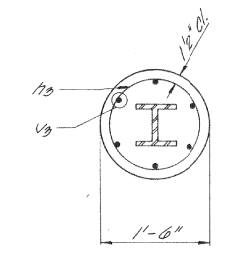
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
CH 6		MERCER	4	4
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



P L A N

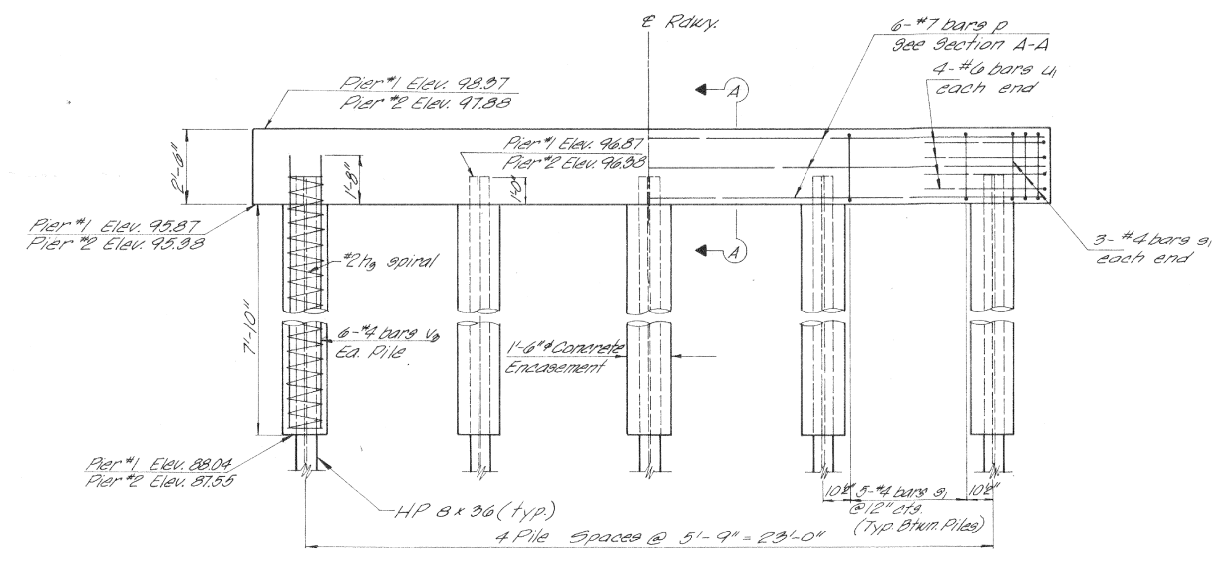


SECTION A-A



SECTION B-B

4.9 Cu. Yds. of concrete encasement included in quantity of Class X Concrete. Excavation required for the encasement of the piles is unclassified excavation and will not be measured for payment.

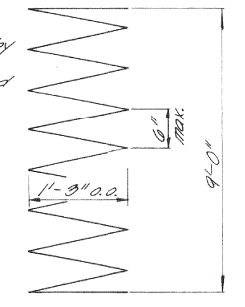


E L E V A T I O N

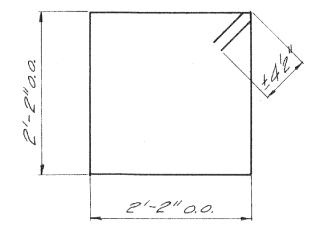
PILE DATA

Type ----- Steel Piles HP 8x36  
 No. Req'd ----- 10  
 Min. Capacity ----- Drive to Refusal  
 Est. Length ----- 25 Feet / Pile

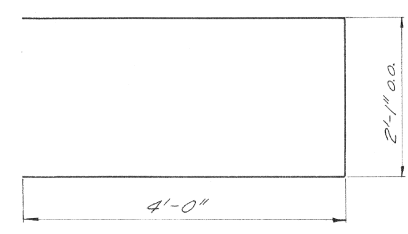
Note:  
 #2 spiral with 6" max. pitch-  
 12 extra turns at top & bottom.  
 Splices in spiral shall be made by  
 a lap of 12 turns. Spacers and  
 1/2 splice turns are to be included  
 in the cost of spirals.



BAR h3



BAR s1



BAR u1

BILL OF MATERIAL—2 PIERS

BAR	NO.	SIZE	LENGTH	SHAPE
p	12	#7	26'-2"	
v3	60	#4	9'-8"	
u3	10	#2	31'-8"	WWW
u1	16	#6	10'-1"	
s1	52	#4	9'-5"	
Class X Concrete			Cu. Yd.	171
Reinforcement Bars			Found	1,720
Steel Piles HP8x36			Lin. Ft.	250

**PIERS**  
 McCONNELL BRIDGE  
 OVER HENDERSON CREEK  
 CH 6  
 MERCER COUNTY

**COLLINS AND RICE**  
 CONSULTING ENGINEERS

DESIGNED W.S. CHECKED M.J.R.  
 DRAWN G.B. DATE 5-13-15 NO. 1050

REVISION	DATE	BY	REMARKS
DESIGNED	ATK		
DRAWN	DAN		
REVIEWED	ATK		
APPROVED	MRL		

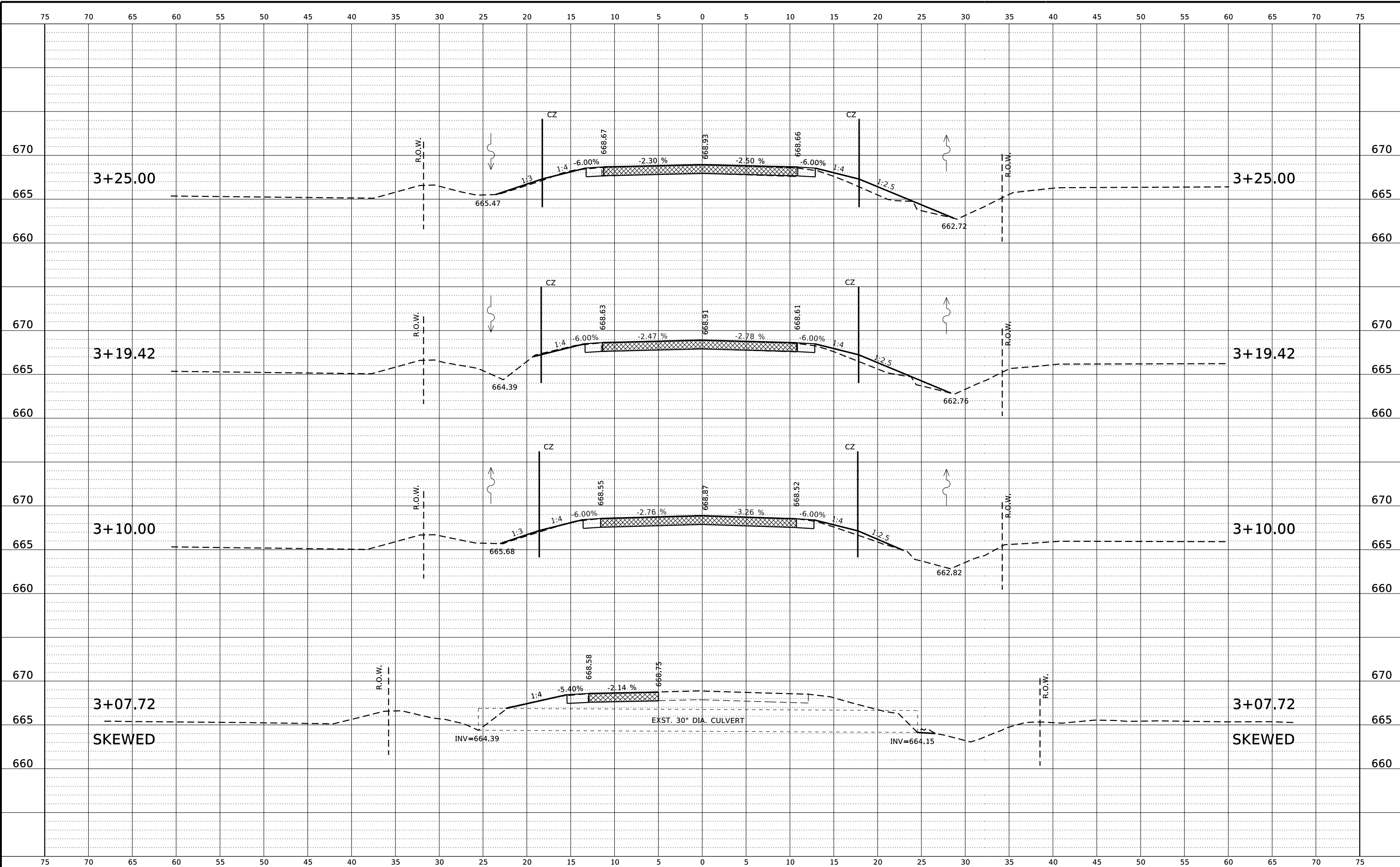
MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85

**WILLET HOFMANN & ASSOCIATES INC**  
 ENGINEERING ARCHITECTURE LAND SURVEYING  
 1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265  
 T. 309-517-1119 DESIGN FIRM: # 184-000918

EXISTING PLANS  
 STRUCTURE NO. 066-3024  
 STRUCTURAL SHEET NO. 21 OF 21 SHEETS

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	32
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				





REVISION	DATE	BY	REMARKS

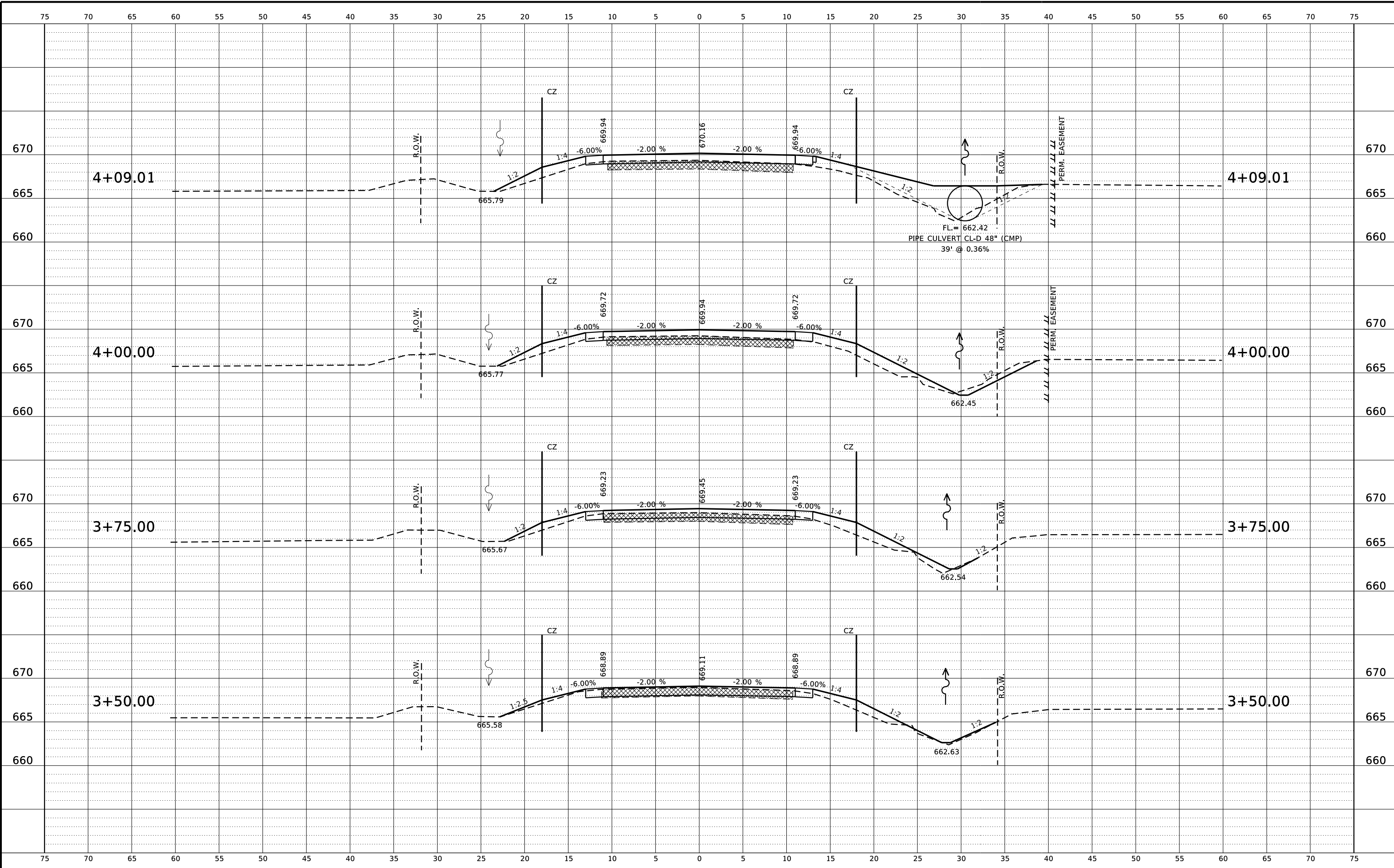
DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



CROSS SECTIONS - C.H. 6  
 STA 3+07.72 TO 3+25.00

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	33
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



REVISION	DATE	BY	REMARKS

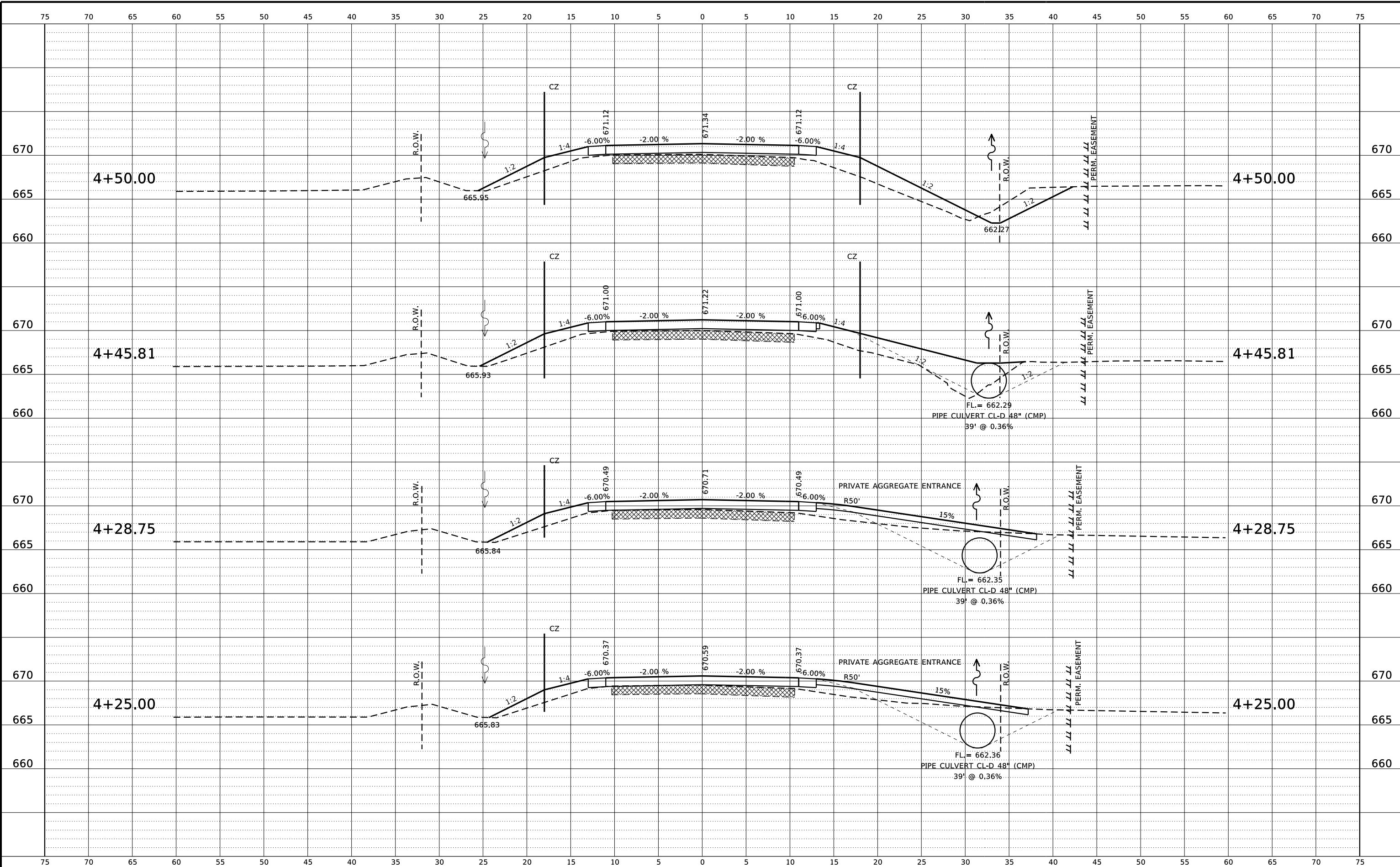
DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



CROSS SECTIONS - C.H. 6  
 STA 3+50.00 TO 4+09.01  
 SHEET 2 OF 8

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	34
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



REVISION	DATE	BY	REMARKS

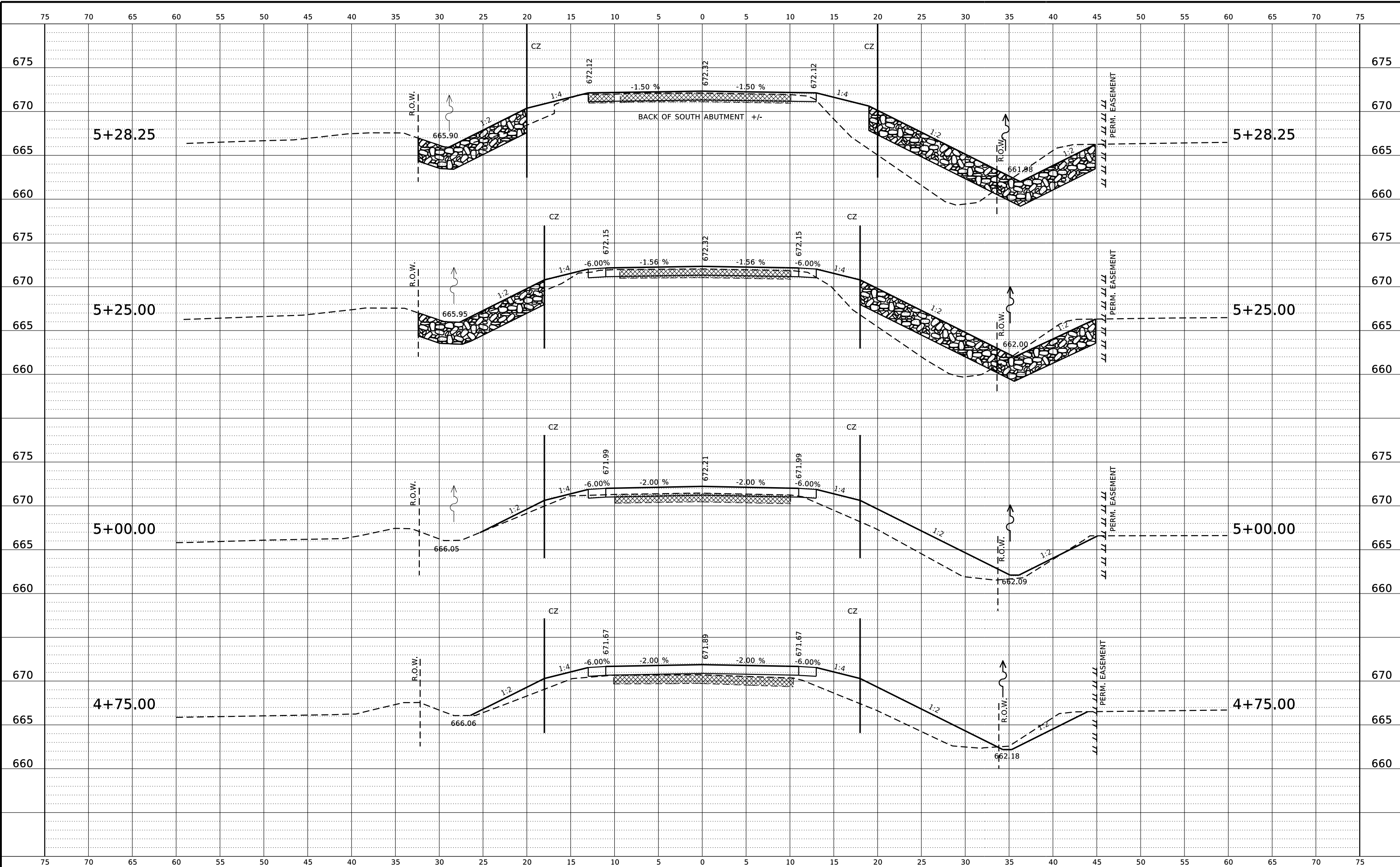
DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



CROSS SECTIONS - C.H. 6  
 STA 4+25.00 TO 4+50.00  
 SHEET 3 OF 8

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	35
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85

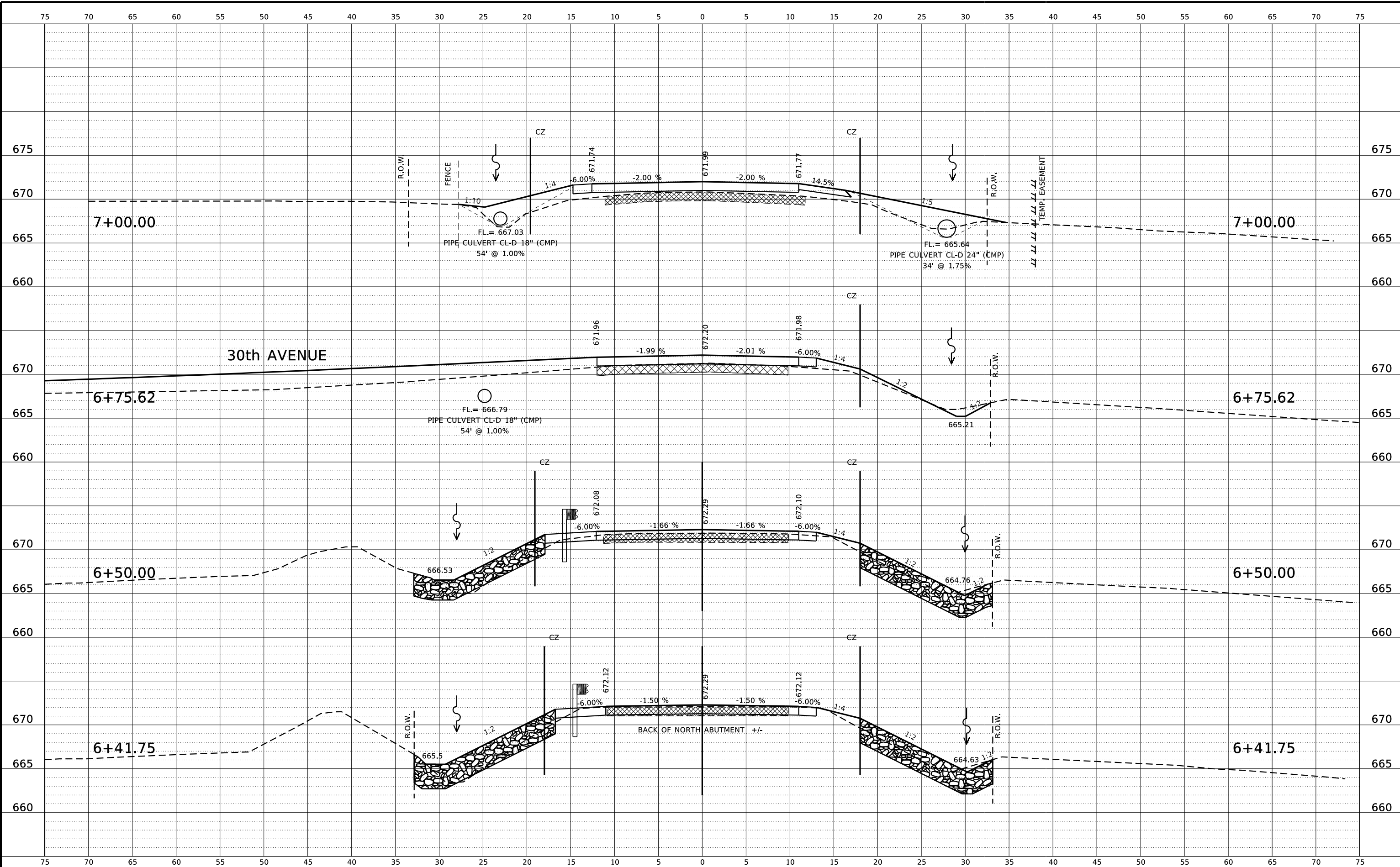


CROSS SECTIONS - C.H. 6  
 STA 4+75.00 TO 5+28.25  
 SHEET 4 OF 8

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	36
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

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REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85

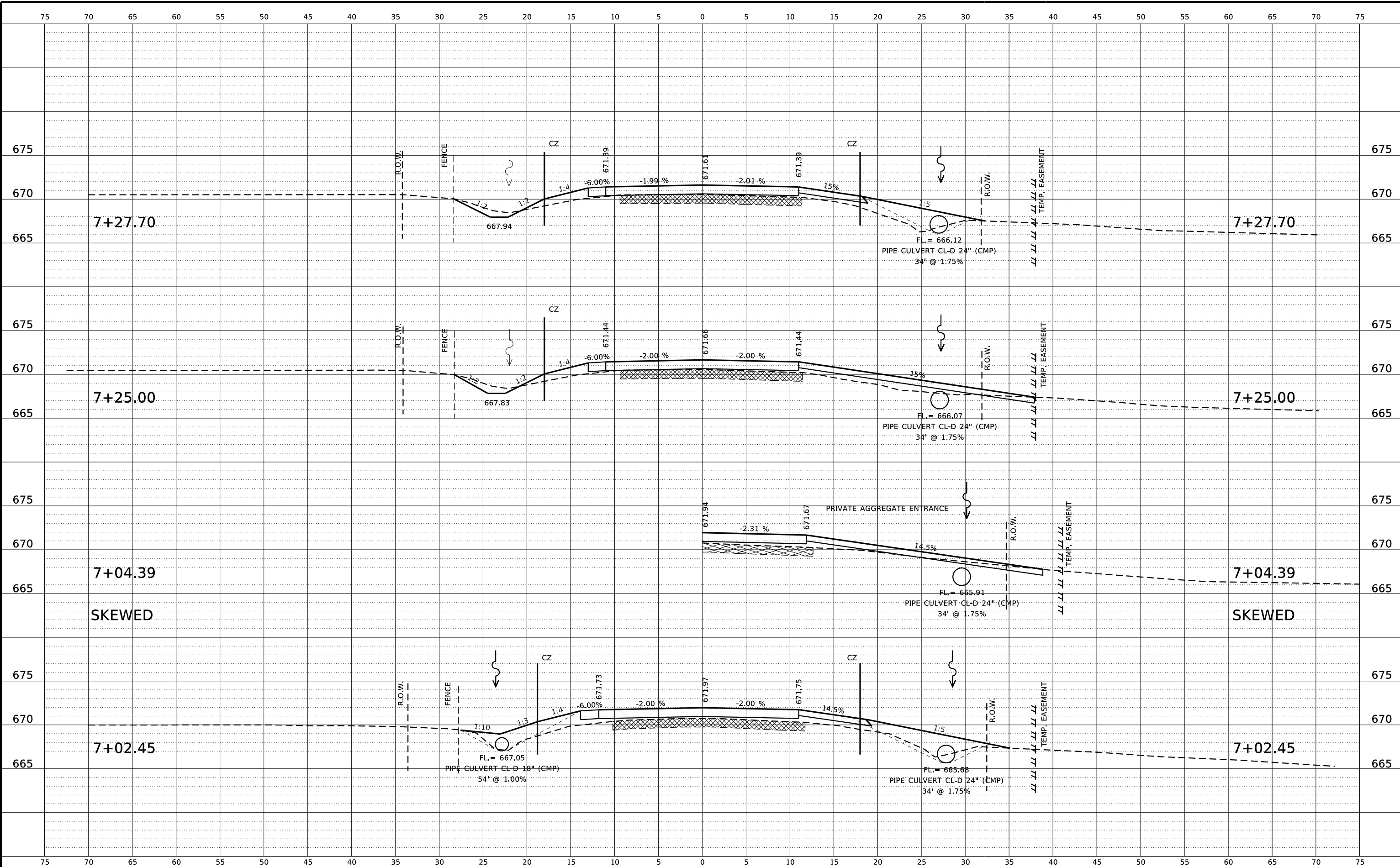


CROSS SECTIONS - C.H. 6  
 STA 6+41.75 TO 7+00.00

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	37
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

SHEET 5 OF 8

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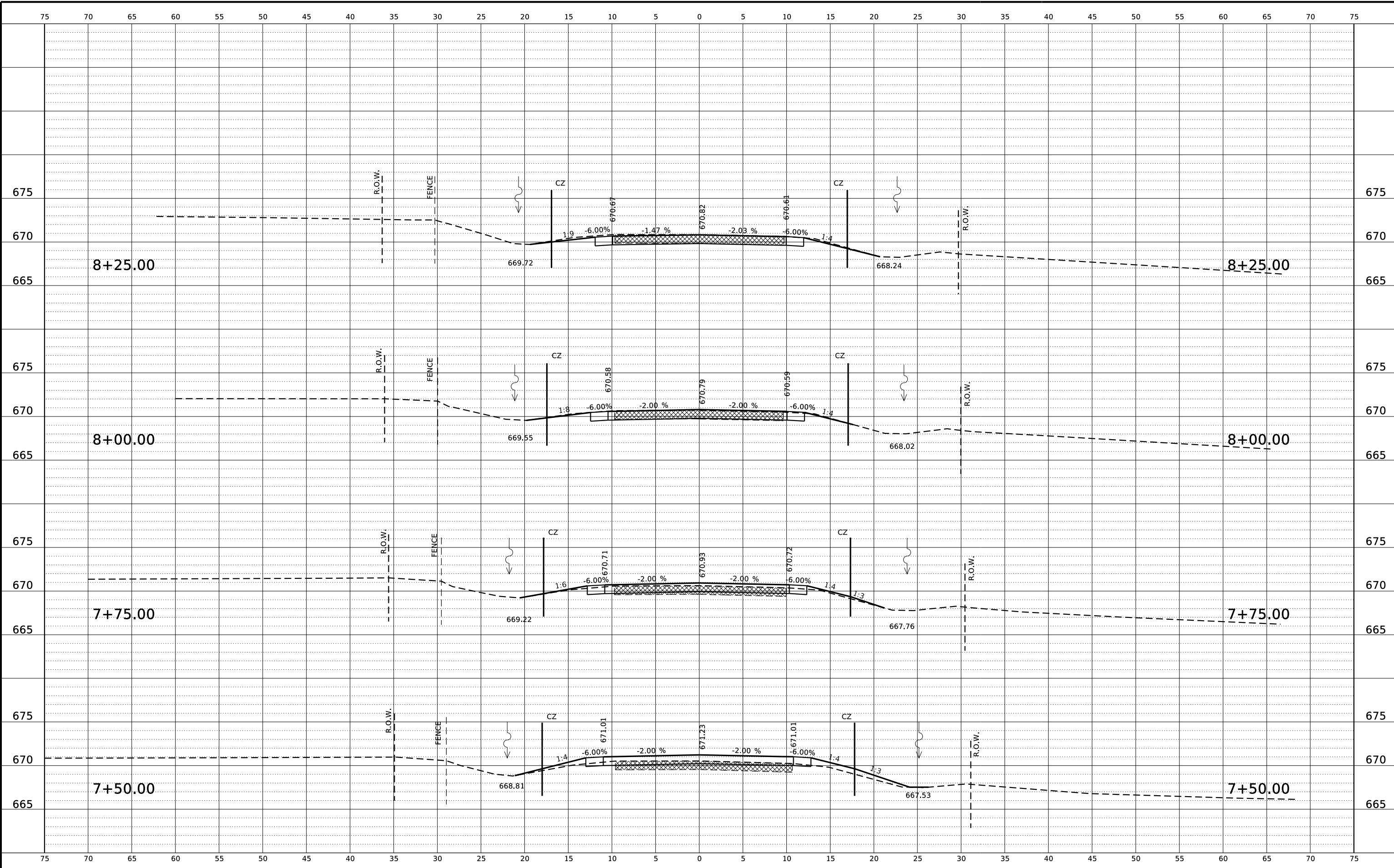
DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



CROSS SECTIONS - C.H. 6  
 STA 7+02.45 TO 7+27.70  
 SHEET 6 OF 8

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	38
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



REVISION	DATE	BY	REMARKS

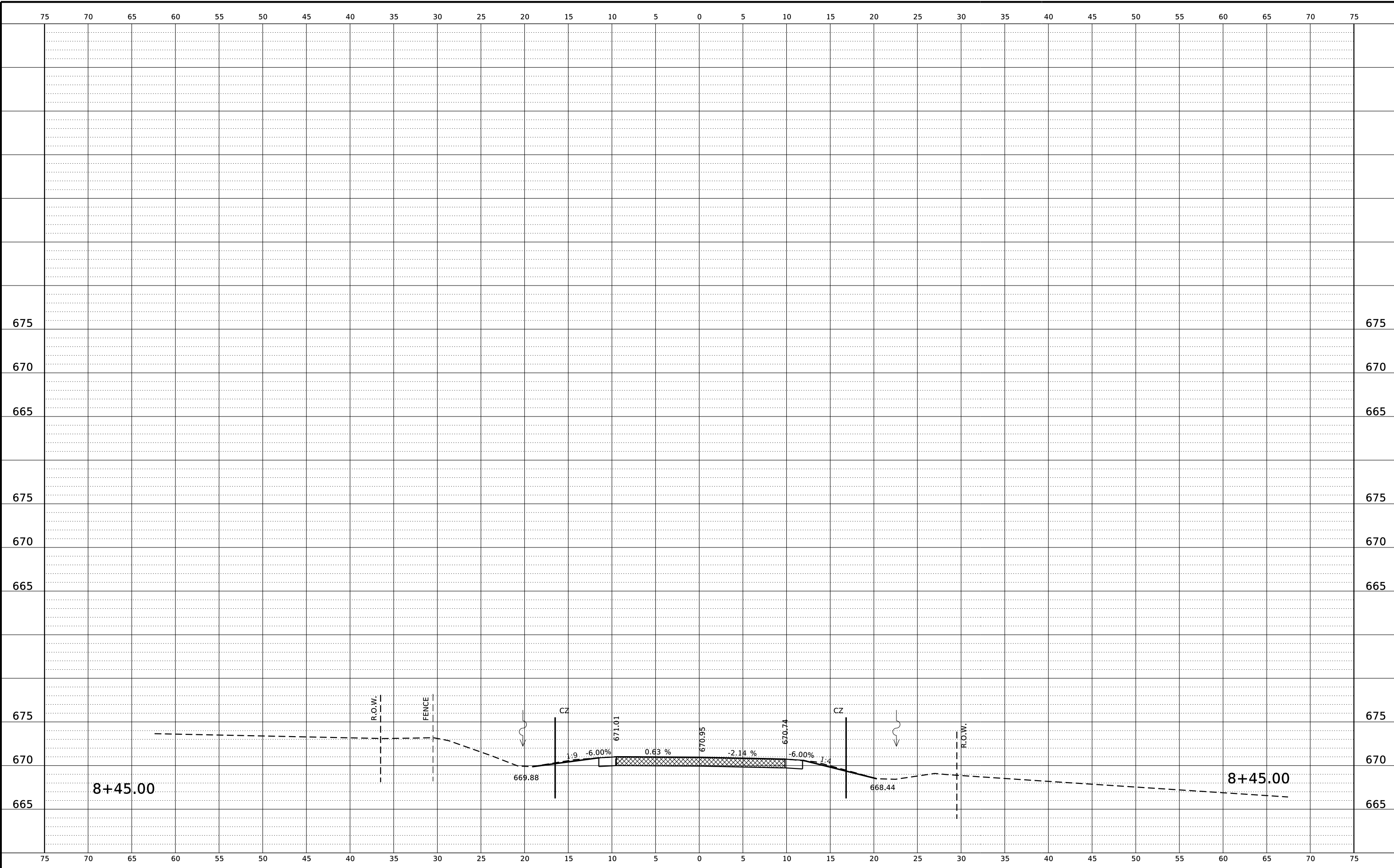
DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



CROSS SECTIONS - C.H. 6  
 STA 7+50.00 TO 8+25.00  
 SHEET 7 OF 8

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	39
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				



REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

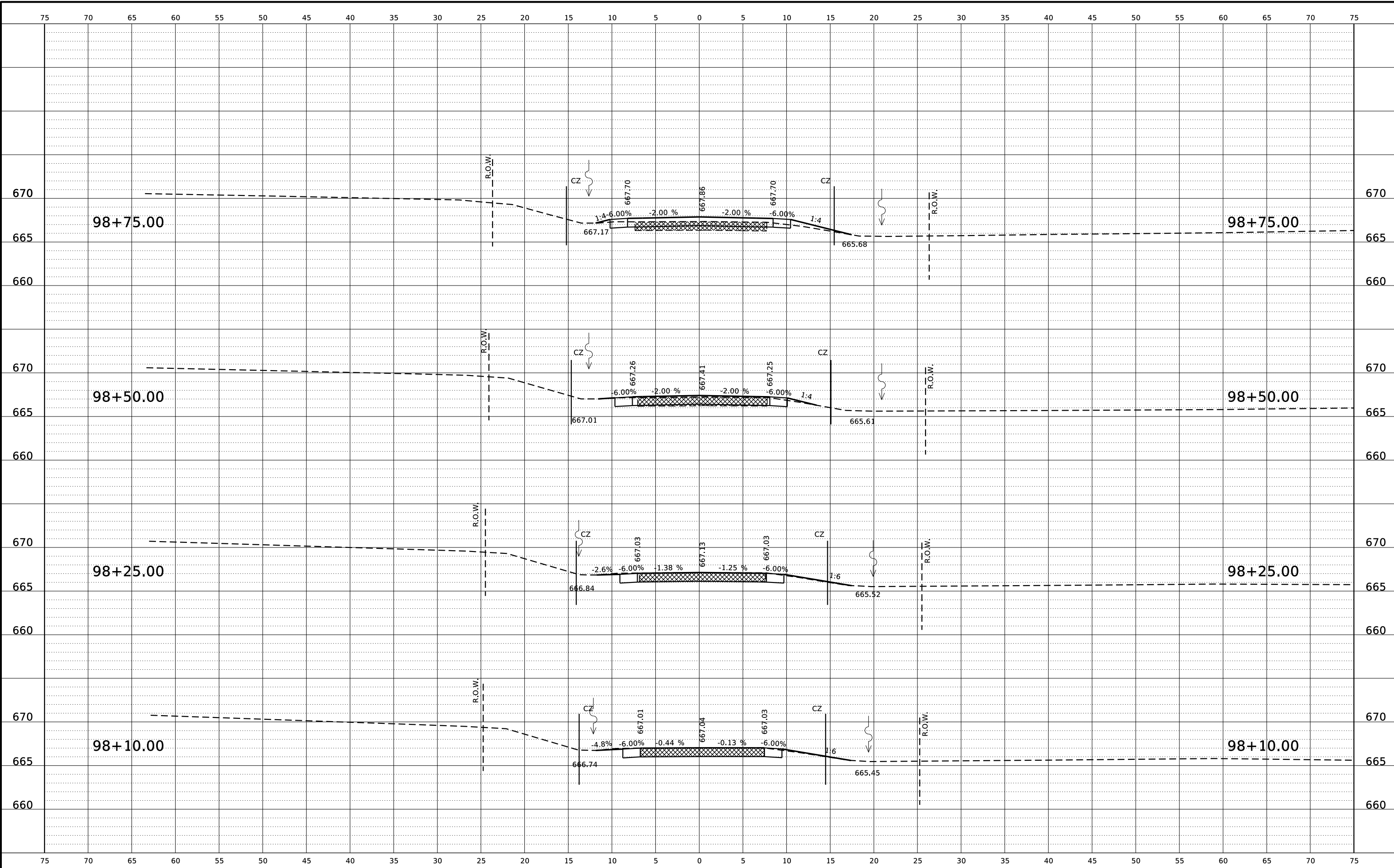
**MERCER COUNTY HIGHWAY DEPARTMENT**  
**C.H. 6 (270TH ST.) OVER HENDERSON CREEK**  
**STATION 5+85**



**CROSS SECTIONS - C.H. 6**  
**STA 8+45.00 TO 8+75.00**  
**SHEET 8 OF 8**

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	40
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				





REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



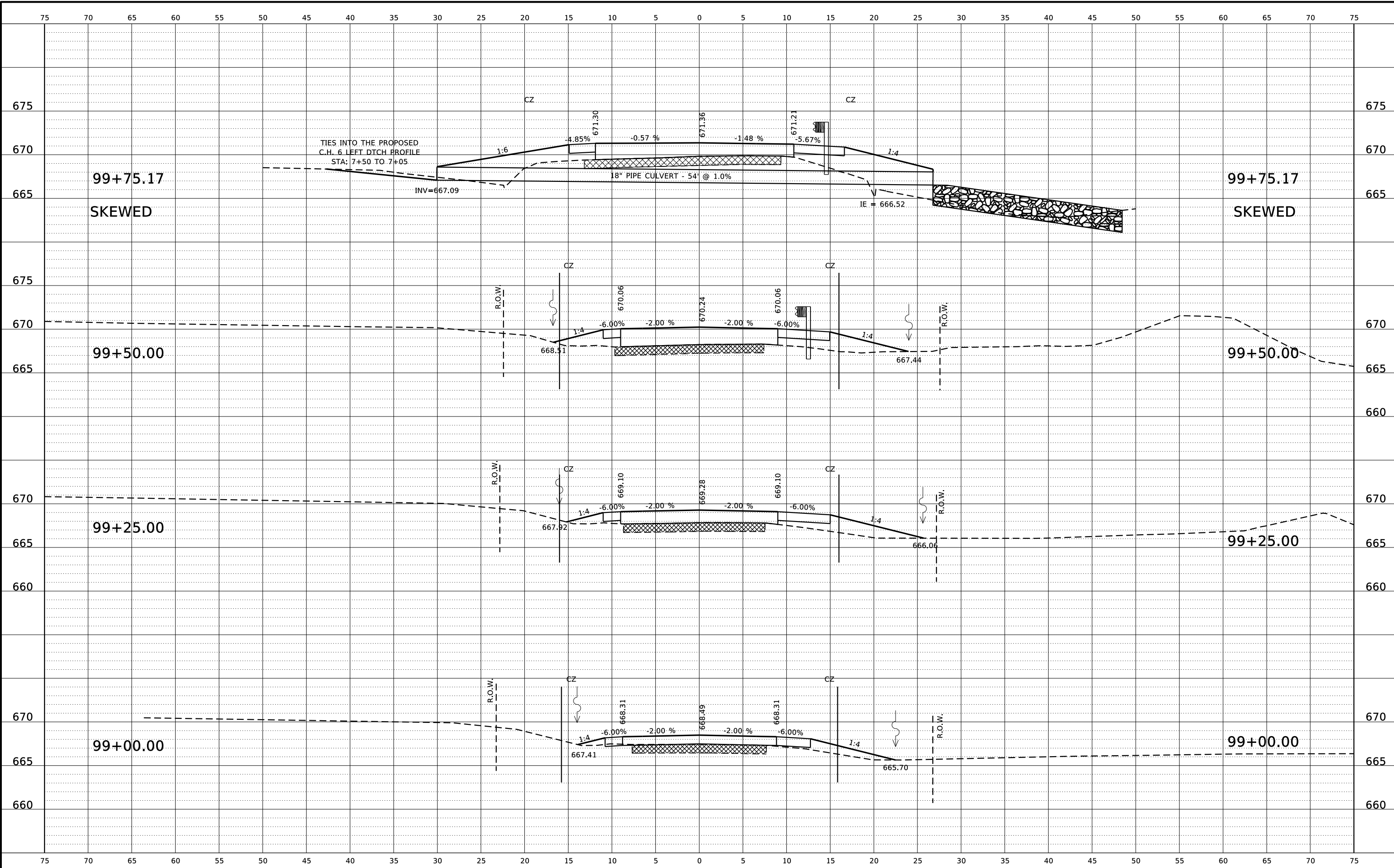
CROSS SECTIONS - 30TH AVENUE  
 STA 98+10.00 TO 98+75.00

SHEET 1 OF 2

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	41
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

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REVISION	DATE	BY	REMARKS

DESIGNED	KMN
DRAWN	KMN
REVIEWED	DKH
APPROVED	XXX

MERCER COUNTY HIGHWAY DEPARTMENT  
 C.H. 6 (270TH ST.) OVER HENDERSON CREEK  
 STATION 5+85



CROSS SECTIONS - 30TH AVENUE  
 STA 99+00.00 TO 99+75.17

SHEET 2 OF 2

CO. HWY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	18-00113-00-BR	MERCER	42	42
WHA# 1338M18		CONTRACT NO. 89756		
ILLINOIS FED. AID PROJECT				

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