

SUMMARY OF QUANTITIES

PAY CODE	PAY ITEM	UNIT	TOTAL QUANTITY
20300100	CHANNEL EXCAVATION	CU YD	228
25100630	EROSION CONTROL BLANKET	SQ YD	977
28000305	TEMPORARY DITCH CHECKS	FOOT	80
28000400	PERIMETER EROSION BARRIER	FOOT	620
35101400	AGGREGATE BASE COURSE, TYPE B	TON	202
40200100	AGGREGATE SURFACE COURSE, TYPE A	TON	91
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	112
50300225	CONCRETE STRUCTURES	CU YD	27.0
50300280	CONCRETE ENCASEMENT	CU YD	5.5
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1680
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3390
* 50901050	STEEL RAILING, TYPE SM	FOOT	143
51200959	FURNISHING METAL SHELL PILES 14" X 0.312"	FOOT	248
51202305	DRIVING PILES	FOOT	248

PAY CODE	PAY ITEM	UNIT	TOTAL QUANTITY
51203200	TEST PILE METAL SHELLS	EACH	2
51204650	PILE SHOES	EACH	10
51500100	NAME PLATES	EACH	1
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	62
67100100	MOBILIZATION	L SUM	1
72501100	TERMINAL MARKER - POST MOUNTED	EACH	4
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
72900100	METAL POST - TYPE A	FOOT	40
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
X2020410	EARTH EXCAVATION (SPECIAL)	CU YD	174
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.21
X2810208	STONE RIPRAP, CLASS A4 (SPECIAL)	TON	484
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1

* SPECIALTY ITEM

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REVISION	DATE	BY	REMARKS	DESIGNED	ATK
1	2/5/25	ATK	REVISED PAY ITEMS AND QUANTITIES	C.J.I.	
				GBG	
				GFS	

BUREAU COUNTY HIGHWAY DEPARTMENT
T.R. 3 (600 N AVE.) OVER SILVER CREEK
STATION 20+00



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

SUMMARY OF QUANTITIES

SHEET 1 OF 1

TWP.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3	16-14122-00-BR	BUREAU	23	3
WHA# 1458D19			CONTRACT NO. 87738	
ILLINOIS FED. AID PROJECT				

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SCHEDULE OF QUANTITIES

EARTHWORK SCHEDULE

SEEDING, CLASS 2 (SPECIAL)		
STATION	ACRE	REMARKS
T.R. 3 (600 N. Avenue)		
LT 18+75 - 19+66	0.06	
RT 18+75 - 19+62	0.05	
LT 20+37 - 21+45	0.05	
RT 20+33 - 21+45	0.05	
PROJECT TOTAL	0.21	
*X2501000		

PERIMETER EROSION BARRIER		
STATION	FOOT	REMARKS
T.R. 3 (600 N. Avenue)		
LT 18+75 - 19+57	159	
RT 18+75 - 19+52	152	
LT 20+48 - 21+45	156	
RT 20+44 - 21+45	153	
PROJECT TOTAL	620	
28000400		

LOCATION	EARTH EXCAVATION (SPECIAL) X2020410 (Cu Yd)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 25%	EMBANKMENT	EARTH BALANCE WASTE (+) OR FURNISHED EXCAVATION (-) 20400800 (Cu Yd)
T.R. 3 (600 N. Avenue)	174	131	103	23
TOTALS	174	131	103	23

EROSION CONTROL BLANKET		
STATION	SQ YD	REMARKS
T.R. 3 (600 N. Avenue)		
LT 18+75 - 19+66	269	
RT 18+75 - 19+62	235	
LT 20+37 - 21+45	232	
RT 20+33 - 21+45	241	
PROJECT TOTAL	977	
25100630		

AGGREGATE BASE COURSE, TYPE B		
STATION	TON	REMARKS
T.R. 3 (600 N. Avenue)		
18+75 - 21+45	202	MAINLINE
PROJECT TOTAL	202	2.05 TON / CU YD
*35101400		

METAL POST - TYPE A		
STATION	FOOT	REMARKS
T.R. 3 (600 N. Avenue)		
LT 19+60	10	
RT 19+60	10	
LT 20+40	10	
RT 20+40	10	
PROJECT TOTAL	40	
72900100		

TEMPORARY DITCH CHECKS		
STATION	FOOT	REMARKS
T.R. 3 (600 N. Avenue)		
24.5' LT 19+00	10	
26.8' RT 19+25	10	
25.0' LT 19+50	10	
25.0' LT 20+25	10	
28.0' LT 20+50	10	
26.5' LT 20+75	10	
25.2' LT 21+00	10	
24.2' LT 21+25	10	
PROJECT TOTAL	80	
28000305		

AGGREGATE SURFACE COURSE, TYPE A		
STATION	TON	REMARKS
T.R. 3 (600 N. Avenue)		
18+75 - 21+45	91	MAINLINE
PROJECT TOTAL	91	2.05 TON / CU YD
*40200100		

TERMINAL MARKER - DIRECT APPLIED		
STATION	EACH	REMARKS
T.R. 3 (600 N. Avenue)		
LT 19+60	1	
RT 19+60	1	
LT 20+40	1	
RT 20+40	1	
PROJECT TOTAL	4	
72501000		

TERMINAL MARKER - POST MOUNTED		
STATION	EACH	REMARKS
T.R. 3 (600 N. Avenue)		
LT 19+60	1	
RT 19+60	1	
LT 20+40	1	
RT 20+40	1	
PROJECT TOTAL	4	
72501100		

1

REVISION	DATE	BY	REMARKS
1	2/5/25	ATK	REVISED PAY ITEMS AND QUANTITIES

DESIGNED	ATK
DRAWN	C.J.I
REVIEWED	GBG
APPROVED	MRL

BUREAU COUNTY HIGHWAY DEPARTMENT
T.R. 3 (600 N AVE.) OVER SILVER CREEK
STATION 20+00



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

SCHEDULE OF QUANTITIES

SHEET 1 OF 1

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3	16-14122-00-BR	BUREAU	23	5
WHA# 1458D19		CONTRACT NO. 87738		
ILLINOIS FED. AID PROJECT				

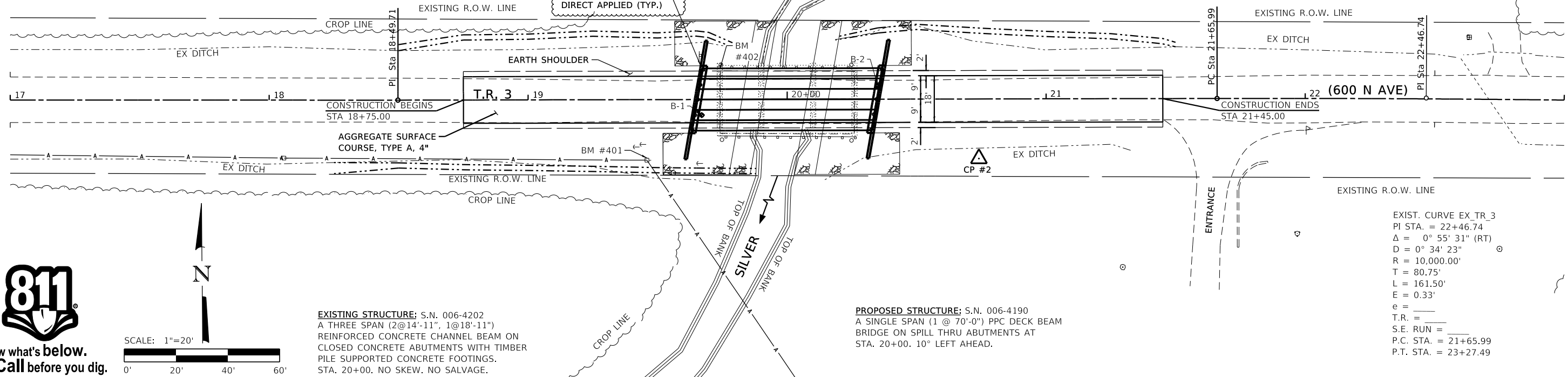
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BENCH MARK #400: RR SPIKE IN 3RD PP W. OF STRUCTURE
(NOT SHOWN) ±21' RT. OF STA. ±15+23
EL. 734.23

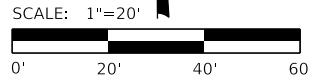
BENCH MARK #401: RR SPIKE IN 1ST PP W. OF STRUCTURE
±23' RT. OF STA. ±19+46
EL. 732.81

BENCH MARK #402: CHIS. "□" NW CORNER HUB GUARD
±11' LT. OF STA. ±19+74
EL. 735.99

T.R. 3 (600 N AVE.) - HORIZONTAL CONTROL POINTS					
PT #	STA	N	E	ELEV.	DESCRIPTION
1	13.6' LT. 15+20.74	1663778.15	2435142.67	735.40	3/8" IP w/CAP (NOT SHOWN)
2	22.8' RT. 19+74.19	1663745.45	2435596.10	732.58	3/8" IP w/CAP (NOT SHOWN)
3	12.6' LT. 24+00.34	1663782.52	2436022.24	744.24	3/8" IP w/CAP (NOT SHOWN)



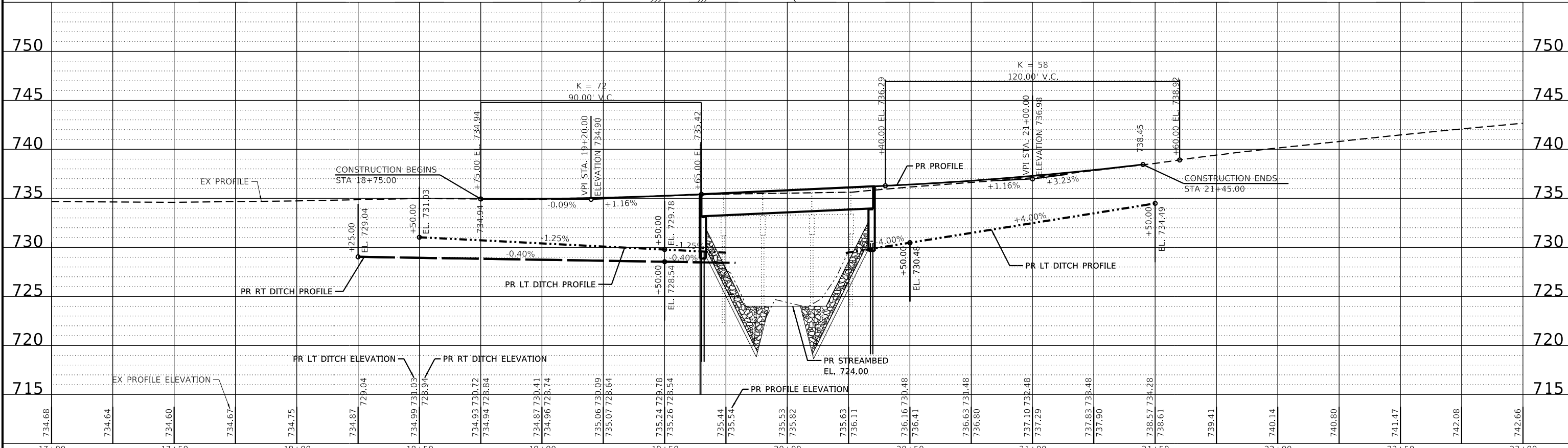
Know what's below.
Call before you dig.



EXISTING STRUCTURE: S.N. 006-4202
A THREE SPAN (2@14'-11", 1@18'-11")
REINFORCED CONCRETE CHANNEL BEAM ON
CLOSED CONCRETE ABUTMENTS WITH TIMBER
PILE SUPPORTED CONCRETE FOOTINGS.
STA. 20+00. NO SKEW. NO SALVAGE.

PROPOSED STRUCTURE: S.N. 006-4190
A SINGLE SPAN (1 @ 70'-0") PPC DECK BEAM
BRIDGE ON SPILL THRU ABUTMENTS AT
STA. 20+00. 10° LEFT AHEAD.

EXIST. CURVE EX_TR_3
PI STA. = 22+46.74
Δ = 0° 55' 31" (RT)
D = 0° 34' 23"
R = 10,000.00'
T = 80.75'
L = 161.50'
E = 0.33'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 21+65.99
P.T. STA. = 23+27.49



REVISION	DATE	BY	REMARKS
1	2/5/25	ATK	TERMINAL MARKERS REVISED

DESIGNED	MRL
DRAWN	DAL
REVIEWED	GBG
APPROVED	MRL

BUREAU COUNTY HIGHWAY DEPARTMENT
T.R. 3 (600 N AVE.) OVER SILVER CREEK
STATION 20+00



PLAN AND PROFILE
SHEET NO: 1 OF 1 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3	16-14122-00-BR	BUREAU	23	6
WHA# 1458D19		CONTRACT NO. 87738		
ILLINOIS FED. AID PROJECT				

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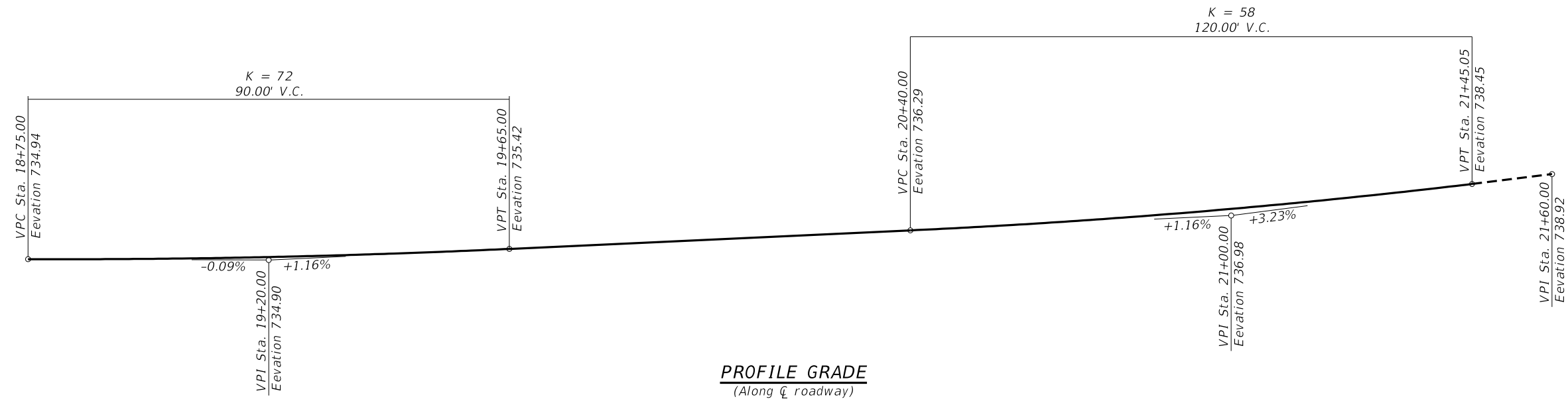
GENERAL NOTES:

Reinforcement bars designated (E) shall be epoxy coated.
 The channel shall be transitioned to fit the proposed structure inside the right of way. Cost shall be included in the Price per Cubic Yard for Channel Excavation.
 Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

BILL OF MATERIAL - BRIDGE

ITEM	UNIT	SUPER	SUB	TOTAL
CHANNEL EXCAVATION	CU YD	—	228	228
REMOVAL OF EXISTING STRUCTURES	EACH	—	—	1
STRUCTURE EXCAVATION	CU YD	—	112	112
CONCRETE STRUCTURES	CU YD	—	27.0	27.0
CONCRETE ENCASEMENT	CU YD	—	5.5	5.5
PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1680	—	1680
REINFORCEMENT BARS, EPOXY COATED	POUND	—	3390	3390
STEEL RAILING, TYPE SM	FOOT	143	—	143
FURNISHING METAL SHELL PILES 14" X 0.312"	FOOT	—	248	248
DRIVING PILES	FOOT	—	248	248
TEST PILE METAL SHELLS	EACH	—	2	2
PILE SHOES	EACH	—	10	10
NAME PLATES	EACH	—	1	1
GRANULAR BACKFILL FOR STRUCTURES	CU YD	—	62	62
*STONE RIPRAP, CLASS A4 (SPECIAL)	TON	—	484	484

*See Special Provisions.



PROFILE GRADE
(Along \bar{C} roadway)

GENERAL DATA
 T.R. 3 (600 N. AVE.)
 OVER SILVER CREEK
 SECTION 16-14122-00-BR
 EXISTING S.N. 006-4202
 PROPOSED S.N. 006-4190
 MACON TOWNSHIP
 BUREAU COUNTY
 STATION 20+00

REVISION	DATE	BY	REMARKS
1	2/5/25	ATK	Updated elevations for abutments.

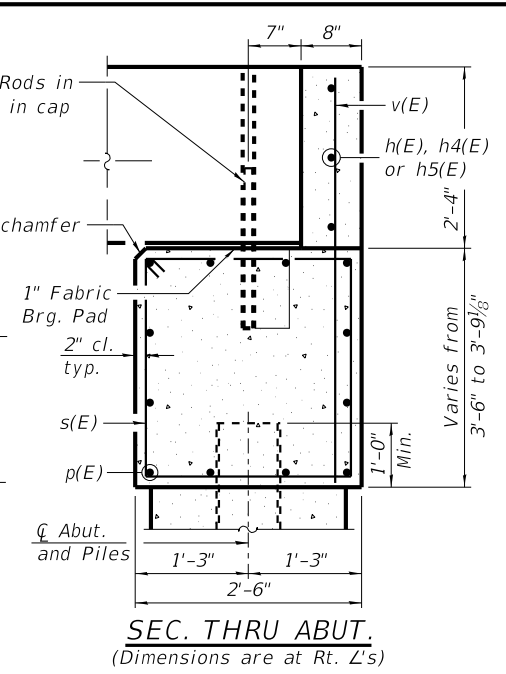
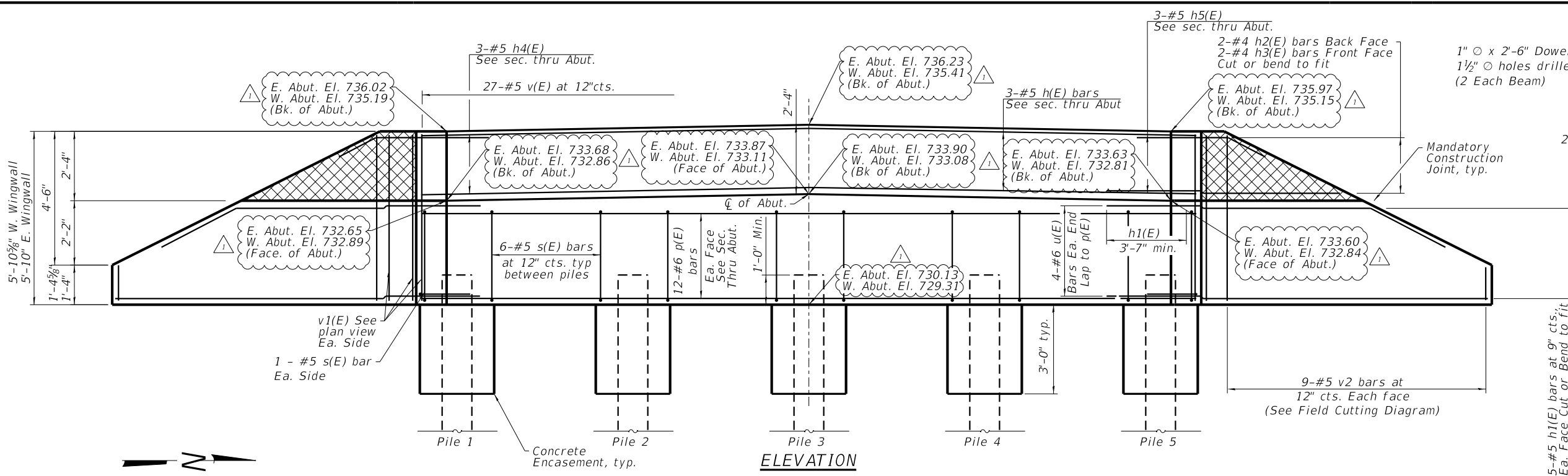
DESIGNED	MCW
DRAWN	DAN
REVIEWED	MCW
APPROVED	MRL

BUREAU COUNTY HIGHWAY DEPARTMENT
 T.R. 3 (600 N AVE.) OVER SILVER CREEK
 STATION 20+00



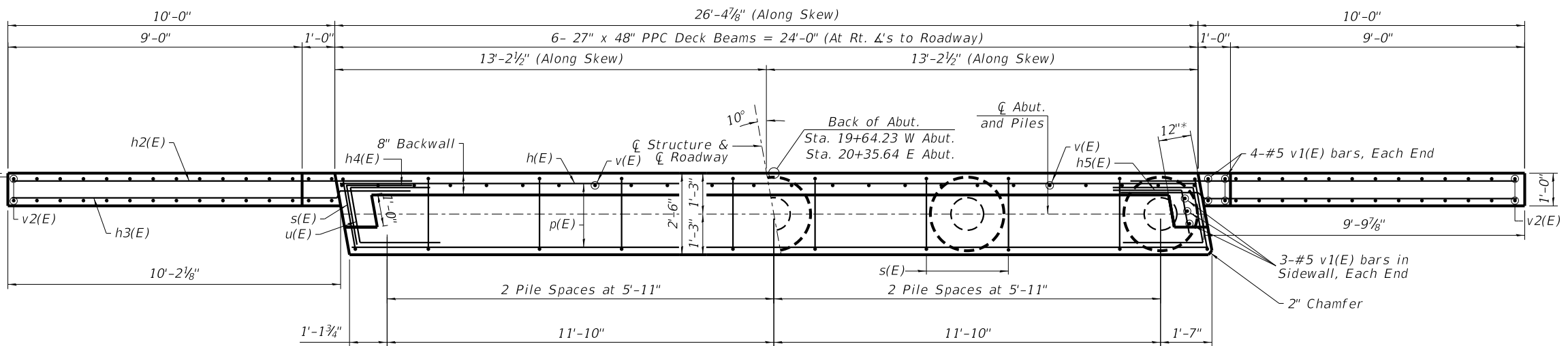
STRUCTURAL SHEET NO. 2 OF 12 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3	16-14122-00-BR	BUREAU	23	9
WHA# 1458019		CONTRACT NO. 87738		
ILLINOIS FED. AID PROJECT				



BILL OF MATERIAL
2 ABUTMENTS

Bar	No.	Size	Length	Shape
h(E)	6	5	26'-0"	—
h1(E)	40	5	13'-7"	—
h2(E)	8	4	9'-3"	—
h3(E)	8	4	6'-5"	—
h4(E)	6	5	4'-11"	7
h5(E)	6	5	4'-11"	7
p(E)	24	6	26'-0"	—
s(E)	52	5	11'-5"	□
u(E)	16	6	10'-11"	—
v(E)	54	5	5'-5"	—
v1(E)	24	5	5'-5"	—
v2(E)	36	5	6'-8"	—
Structure Excavation		Cu. Yd.	112	
Concrete Structures		Cu. Yd.	27.0	
Concrete Encasement		Cu. Yd.	5.5	
Reinforcement Bars, Epoxy Coated		Pound	3390	
Furnishing Metal Shell Piles 14" X 0.312"		Foot	248	
Driving Piles		Foot	248	
Test Pile Metal Shells		Each	2	
Name Plates		Each	1	
** Granular Backfill for Structures		Cu. Yd.	62	
Pile Shoes		Each	10	



ABOVE CONSTRUCTION JOINT
IN WINGWALL

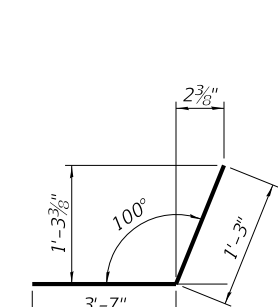
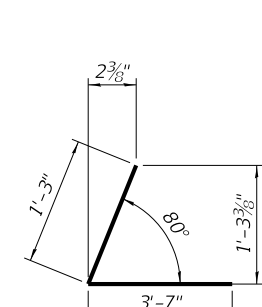
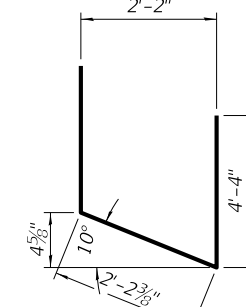
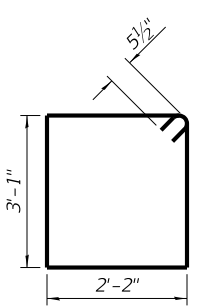
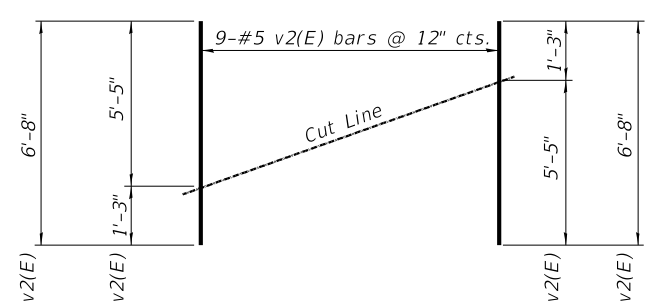
BELOW CONSTRUCTION JOINT
IN WINGWALL

PILE DATA - WEST ABUTMENT

Type: Metal Shell 14" with 0.312" Walls
 Nominal Required Bearing: 339 kips
 Factored Resistance Available: 186 kips
 Est. Length: 30'
 No. Production Piles: 4
 No. Test Piles: 1
 Piles Shoes: 5

PILE DATA - EAST ABUTMENT

Type: Metal Shell 14" with 0.312" Walls
 Nominal Required Bearing: 339 kips
 Factored Resistance Available: 186 kips
 Est. Length: 30'
 No. Production Piles: 4
 No. Test Piles: 1
 Pile Shoes: 5



NOTES:

Hatched portion of wingwalls to be poured with the backwall after the deck beams have been installed and grout has cured for a minimum of 24 hours. All exposed edges shall have standard 3/4" chamfers, except as noted. Space reinforcement in cap to miss dowel rods. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a min. of 24 hours prior to grouting the shear keys. For pile details, see Structural Sheet 8 of 12. Reinforcement bars designated (E) shall be Epoxy coated. * May vary due to overrun of beams. ** For Backfill details, see Structural Sheet 3 of 12.

REVISION	DATE	BY	REMARKS
1	2/5/25	ATK	Updated elevations for abutments.

DESIGNED	DRAWN	REVIEWED	APPROVED
DAL	DAL	ATK	MRL

BUREAU COUNTY HIGHWAY DEPARTMENT
T.R. 3 (600 N AVE.) OVER SILVER CREEK
STATION 20+00

WILLET HOFMANN & ASSOCIATES INC
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FIRM: #184-00918

ABUTMENT DETAILS
STRUCTURE NO. 006-4284
STRUCTURAL SHEET NO. 6 OF 12 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3	16-14122-00-BR	BUREAU	23	13
WHA# 1458019			CONTRACT NO. 87738	

ILLINOIS FED. AID PROJECT