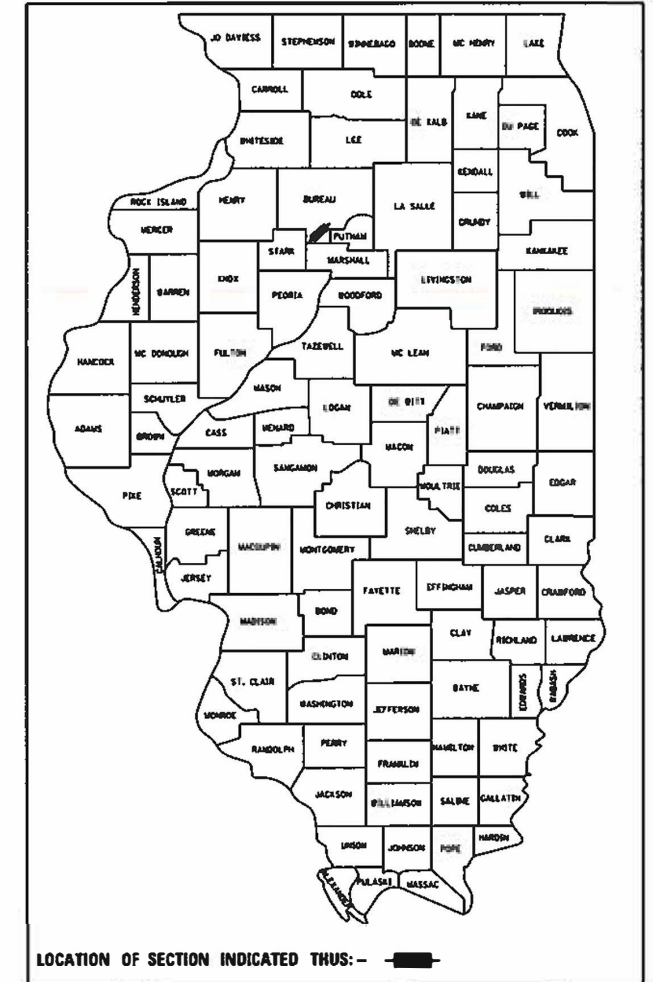


CH. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	1
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



LOCATION OF SECTION INDICATED THUS: —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID PROJECT SURFACE TRANSPORTATION RURAL – BRIDGE (FY-19)

**FAS 247 (COUNTY HIGHWAY 31)
SECTION 09-00230-00-BR
PROJECT P925(634)
STRUCTURE REHABILITATION
BUREAU COUNTY**

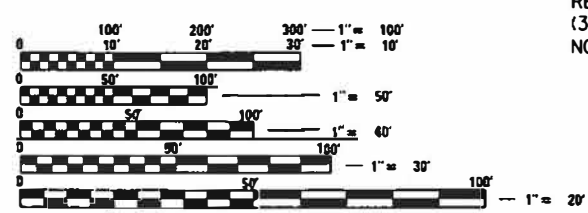
C-93-001-19



- INDEX OF SHEETS:** 11-09-2018 LETTING ITEM 092
- 1 COVER SHEET
 - 2 SUMMARY OF QUANTITIES
 - 3-4 GENERAL NOTES & SCHEDULE OF QUANTITIES
 - 5-6 TYPICAL SECTIONS
 - 7 PLAN AND PROFILE
 - 8-9 EROSION CONTROL PLAN
 - 10 GENERAL PLAN & ELEVATION
 - 11 RIPRAP LAYOUT AT CULVERT
 - 12 CULVERT DETAILS - NORTH EXTENSION SHEET PILE LAYOUT
 - 13 CULVERT DETAILS - NORTH EXTENSION PLAN & ELEVATION
 - 14 CULVERT DETAILS - NORTH EXTENSION LONGITUDINAL SECTION
 - 15 CULVERT DETAILS - SOUTH EXTENSION SHEET PILE LAYOUT
 - 16 CULVERT DETAILS - SOUTH EXTENSION PLAN & ELEVATION
 - 17 CULVERT DETAILS - SOUTH EXTENSION LONGITUDINAL SECTION
 - 18 CULVERT DETAILS - N & S EXTENSION SHEET PILE CONNECTION DETAILS
 - 19-23 SOIL BORINGS
 - 24-39 CROSS SECTIONS
 - 40-46 PRIVATE ENTRANCE CROSS SECTIONS

- STANDARDS:**
- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
 - 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
 - 515001-03 NAME PLATE FOR BRIDGES
 - 542401-03 METAL END SECTIONS FOR PIPE CULVERTS
 - 630001-12 STEEL PLATE BEAM GUARDRAIL
 - 630301-08 SHOULDER WIDENING FOR TYPE I (SPECIAL) GUARDRAIL TERMINALS
 - 635001-02 DELINEATORS
 - 701901-07 TRAFFIC CONTROL DEVICES
 - 720001-01 SIGN PANEL MOUNTING DETAILS
 - 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
 - 728001-01 TELESCOPING STEEL SIGN SUPPORT
 - 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
 - 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
 - BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
 - BLR 22-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

**FOR LIST OF UTILITIES
SEE SHEET NO. 3**



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

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

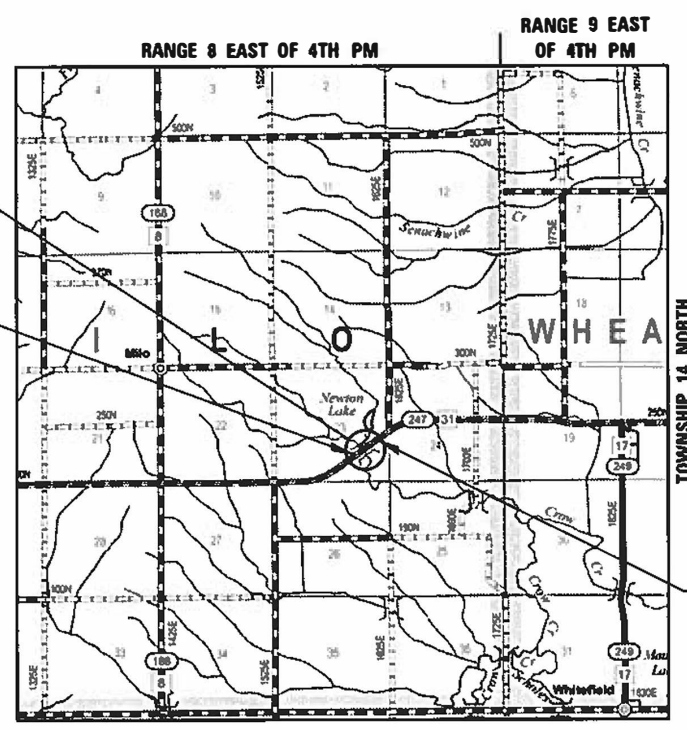
**PROJECT ENGINEER – EEL
PROJECT MANAGER – BKC**

CONTRACT NO. 87686

EXISTING STRUCTURE: SN 006-5006
REINFORCED CONCRETE TRIPLE BOX CULVERT
(3 @ 10'-0"X11'-0") AT STA 20+00.
NO SKEW.

CONSTRUCTION BEGINS
STATION 318+50.00

CONSTRUCTION ENDS
STATION 323+95.00



GROSS LENGTH = 545 FT = 0.103 MILE
NET LENGTH = 545 FT = 0.103 MILE

**FUNCTIONAL CLASSIFICATION
LOCAL ROAD (NON-URBAN)
DESIGN SPEED 30 MPH
2016 ADT = 30
3R GUIDELINES**

BUREAU COUNTY HIGHWAY DEPARTMENT		
APPROVED	<i>[Signature]</i>	2018
BUREAU COUNTY ENGINEER		
PASSED	<i>[Signature]</i>	2018
DISTRICT 3 LOCAL ROADS & STREETS ENGINEER		
RELEASING FOR BID BASED ON LIMITED REVIEW	<i>[Signature]</i>	2018
REGION 2 ENGINEER		



DATE: 8/23/2018
EXPIRES 11/30/19

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

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SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE: 0013

PAY CODE	QUANTITY	UNIT	ITEM
20100500	0.65	ACRE	TREE REMOVAL (ACRES)
25100630	946	SQ. YD.	EROSION CONTROL BLANKET
28000250	20	POUND	TEMPORARY EROSION CONTROL SEEDING
28000305	45	FOOT	TEMPORARY DITCH CHECKS
28000400	931	FOOT	PERIMETER EROSION BARRIER
28000500	1	EACH	INLET AND PIPE PROTECTION
28100205	920	TON	STONE RIPRAP, CLASS A3
* 40200800	39	TON	AGGREGATE SURFACE COURSE, TYPE B
* 48101200	324	TON	AGGREGATE SHOULDERS, TYPE B
* 50100100	1	EACH	REMOVAL OF EXISTING STRUCTURES
* 50700305	5,280	POUND	HARDWARE
50800205	59,000	POUND	REINFORCEMENT BARS, EPOXY COATED
51500100	1	EACH	NAME PLATES
* 52200015	8,928	SQ. FT.	PERMANENT SHEET PILING
54003000	188.4	CU. YD.	CONCRETE BOX CULVERTS
54262715	2	EACH	METAL FLARED END SECTIONS 15"
542D0220	30	FOOT	PIPE CULVERTS, CLASS D, TYPE 1 15"
Δ 63000001	325	FOOT	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
Δ 63100167	4	EACH	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT
63200310	858	FOOT	GUARDRAIL REMOVAL
67100100	1	L SUM	MOBILIZATION
Δ 78200005	8	EACH	GUARDRAIL REFLECTORS, TYPE A
* Z0013798	1	L SUM	CONSTRUCTION LAYOUT
* Z0023600	2	EACH	FILLING EXISTING CULVERTS
* X2020410	502	CU. YD.	EARTH EXCAVATION (SPECIAL)
* X2070302	478	TON	POROUS GRANULAR EMBANKMENT, SPECIAL
* X0326910	1	L SUM	SLOPE STABILIZATION
* X2501100	0.20	ACRE	SEEDING, CLASS 3 (SPECIAL)
* X2810208	950	TON	STONE RIPRAP, CLASS A4 (SPECIAL)
* X2810214	1,035	TON	STONE RIPRAP, CLASS A7 (SPECIAL)
* X7010216	1	L. SUM	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

* SEE BLR 11310 IN THE CONTRACT DOCUMENTS FOR SPECIAL PROVISIONS.

Δ SPECIALTY ITEMS

FILE: S:\PROJECTS\2015\1143015\BCH\DESIGN\STRUCT\20_Drawings\1143015_Summary of Quantities.dgn



DESIGNED - EEL	REVISED -
CHECKED - PLP	REVISED -
DRAWN - DAN	REVISED -
CHECKED - PLP	REVISED -

BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02

SUMMARY OF QUANTITIES

SHEET NO. 1 OF 1 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	2
WHA* 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925634				

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.

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 ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION AND APPROVED BY THE ENGINEER.

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

THE LOCATION AND ELEVATION OF THE VARIOUS UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE NOT TO BE TAKEN AS EXACT. THE CONTRACTOR SHALL USE SPECIAL CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR THEM TO PREVENT DAMAGE.

THE LOCATION OF EXISTING FIELD TILES AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN IN THE PLANS ARE NOT TO BE TAKEN AS EXACT. EXACT LOCATION OF ALL FIELD TILES AND UTILITIES IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 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.

THE UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS INCLUDE:

AMEREN ATTN: JON REICK 8420 N UNIVERSITY ST. PEORIA, IL 61615 (309) 693-4697	FRONTIER COMMUNICATIONS ATTN: TERRY SPURGEON 111 S. MAIN ST KEWANEE, IL 61443 (309) 853-6293
--	--

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.

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

WHERE THE PROPOSED CONSTRUCTION MEETS AN EXISTING BITUMINOUS SURFACE, OR WHERE SAWING IS STATED ON THE PLANS, THE EXISTING SHALL BE SAWED IN A NEAT, STRAIGHT LINE. COST OF SAWING TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER CUBIC YARD FOR EARTH EXCAVATION (SPECIAL).

ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

CULVERT FLOWS MUST BE MAINTAINED THROUGHOUT THE PROJECT. NORMAL FLOW SHALL BE ALLOWED TO PASS AT THE RATE IT ENTERS THE JOB SITE. HIGH FLOWS SHALL BE ALLOWED TO PASS WITHOUT CAUSING DAMAGE TO UPSTREAM PROPERTIES.

COMMITMENTS

- ALL TREE CLEARING SHALL TAKE PLACE BETWEEN OCTOBER 1st AND MARCH 31st TO SATISFY USFWS BAT REQUIREMENTS.
- THE CURRENT BAT ASSESSMENT IS VALID UNTIL 8/1/2020; THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING ANY EXPIRED ASSESSMENT AND RESUBMITTING TO THE ENGINEER.

CH 31 EARTHWORK TOTALS				
LOCATION	EARTH EXCAVATION (SPECIAL)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 25%	*EMBANKMENT	*FURNISHED EXCAVATION
	CU YD	CU YD	CU YD	CU YD
STA 318+50 - 323+95	502	377	1,207	830
PROJECT TOTAL	502	377	1,207	830
*X2020410				

*FOR INFORMATION ONLY, SEE SPECIAL PROVISIONS FOR EARTH EXCAVATION (SPECIAL)

SCHEDULE OF QUANTITIES

FENCE REMOVAL		
STATION	FOOT	REMARKS
LT STA 319+27.56 - 320+54.50	127	
LT STA 321+28.98 - 323+95.00	272	
RT STA 321+42.11 - 323+20.03	179	
PROJECT TOTAL	578	FOR INFORMATION ONLY, INCIDENTAL TO EARTH EXCAVATION (SPECIAL)

TREE REMOVAL		
STATION	ACRE	REMARKS
NORTHWEST QUADRANT	0.21	EDGE OF SHLDR TO EX ROW - STA. 318+50 TO CREEK
SOUTHWEST QUADRANT	0.13	EDGE OF SHLDR TO EX ROW - STA. 318+50 TO CREEK
NORTHEAST QUADRANT	0.21	EDGE OF SHLDR TO EX ROW - CREEK TO STA. 323+95
SOUTHEAST QUADRANT	0.10	EDGE OF SHLDR TO EX ROW - CREEK TO STA. 323+95
PROJECT TOTAL	0.65	

EROSION CONTROL BLANKET		
STATION	SQ. YD.	REMARKS
LT STA 318+50 - 318+90	184	
LT STA 319+20 - 320+35	24	
LT STA 322+75 - 323+95	109	
RT STA 318+50 - 320+00	535	
RT STA 322+76 - 323+95	94	
PROJECT TOTAL	946	

TEMPORARY EROSION CONTROL SEEDING		
STATION	POUND	REMARKS
LT STA 318+50 - 318+90	4	
LT STA 319+20 - 320+35	1	
LT STA 322+75 - 323+95	2	
RT STA 318+50 - 320+00	11	
RT STA 322+76 - 323+95	2	
PROJECT TOTAL	20	

SCHEDULE OF QUANTITIES - CONT.

TEMPORARY DITCH CHECKS		
STATION	FOOT	REMARKS
LT STA 318+50	15	
RT STA 318+60	15	
RT STA 319+00	15	
PROJECT TOTAL	45	

PERIMETER EROSION BARRIER		
STATION	FOOT	REMARKS
LT STA 318+96 - 320+83	200	
LT STA 320+95 - 322+98	328	
RT STA 319+75 - 320+78	114	
RT STA 321+21 - 321+28	289	
PROJECT TOTAL	931	

INLET AND PIPE PROTECTION		
STATION	EACH	REMARKS
PEL STA 318+82	1	
PROJECT TOTAL	1	

AGGREGATE SURFACE COURSE, TYPE B		
STATION	TON	REMARKS
PEL STA 318+95	39	8" ENTRANCE, CA-6
PROJECT TOTAL	39	

AGGREGATE SHOULDERS, TYPE B		
STATION	TON	REMARKS
LT STA 318+50 - 323+95	159	6" SHOULDER, CA-6
RT STA 318+50 - 323+95	165	6" SHOULDER, CA-6
PROJECT TOTAL	324	

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DESIGNED - EEL
CHECKED - PLP
DRAWN - DAN
CHECKED - PLP

REVISED -
REVISED -
REVISED -
REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

GENERAL NOTES & SCHEDULE OF QUANTITIES

SHEET NO. 1 OF 2 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	3
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

SCHEDULE OF QUANTITIES – CONT.

FILLING EXISTING CULVERTS		
STATION	EACH	REMARKS
LT STA 318+86.55 - 319+52.24	1	24"
RT STA 318+86.30 - 320+01.46	1	24"
PROJECT TOTAL	2	
Z0023600		

PIPE CULVERTS, CLASS D, TYPE 1 15"		
STATION	FOOT	REMARKS
LT STA 318+82.35 - 319+05.88	30	
PROJECT TOTAL	30	
542D0220		

METAL FLARED END SECTIONS 15"		
STATION	EACH	REMARKS
LT STA 318+82.35	1	
LT STA 319+05.88	1	
PROJECT TOTAL	2	
54262715		

STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS		
STATION	FOOT	REMARKS
LT STA 320+52.62 - 322+13.99	163	
RT STA 319+89.88 - 321+51.50	162	
PROJECT TOTAL	325	
63000001		

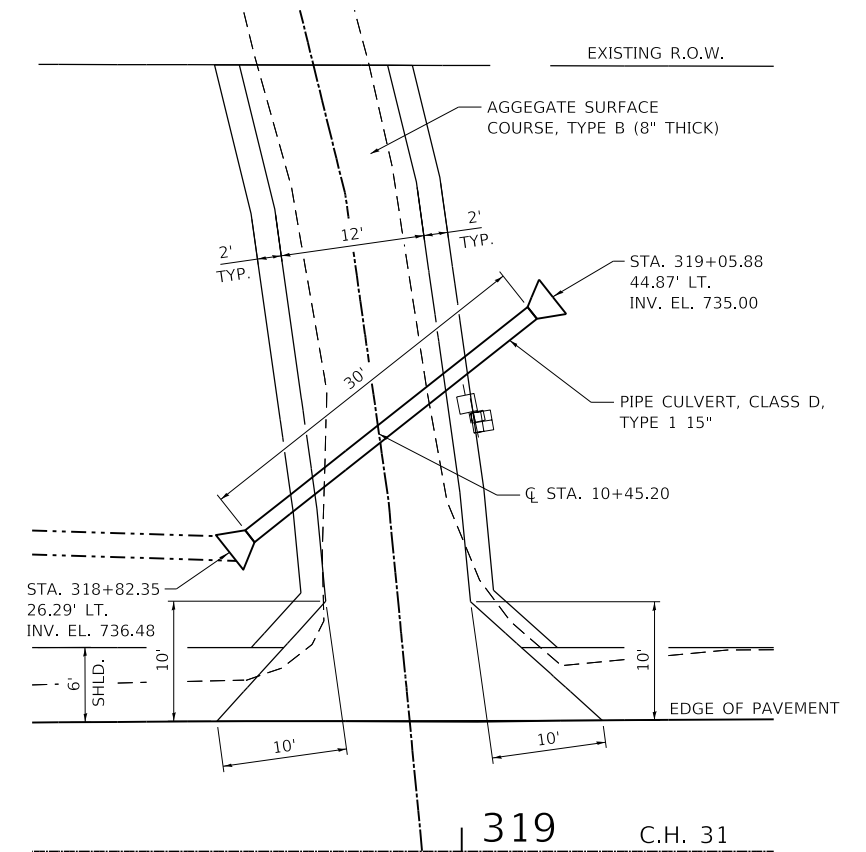
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT		
STATION	EACH	REMARKS
NORTHWEST QUADRANT	1	
SOUTHWEST QUADRANT	1	
NORTHEAST QUADRANT	1	
SOUTHEAST QUADRANT	1	
PROJECT TOTAL	4	
63100167		

SCHEDULE OF QUANTITIES – CONT.

GUARDRAIL REMOVAL		
STATION	FOOT	REMARKS
LT STA 319+10 - 322+89	379	
RT STA 319+29 - 324+08	479	
PROJECT TOTAL	858	
63200310		

TERMINAL MARKER – DIRECT APPLIED		
STATION	EACH	REMARKS
NORTHWEST QUADRANT	1	
SOUTHWEST QUADRANT	1	
NORTHEAST QUADRANT	1	
SOUTHEAST QUADRANT	1	
PROJECT TOTAL	4	FOR INFORMATION ONLY SEE SPECIAL PROVISIONS

GUARDRAIL REFLECTORS, TYPE A		
STATION	EACH	REMARKS
LT STA 320+01 - 322+65	4	
RT STA 319+38 - 322+03	4	
PROJECT TOTAL	8	
78200005		



P.E.L. STATION 318 + 95.00

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DESIGNED - EEL
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 CHECKED - PLP

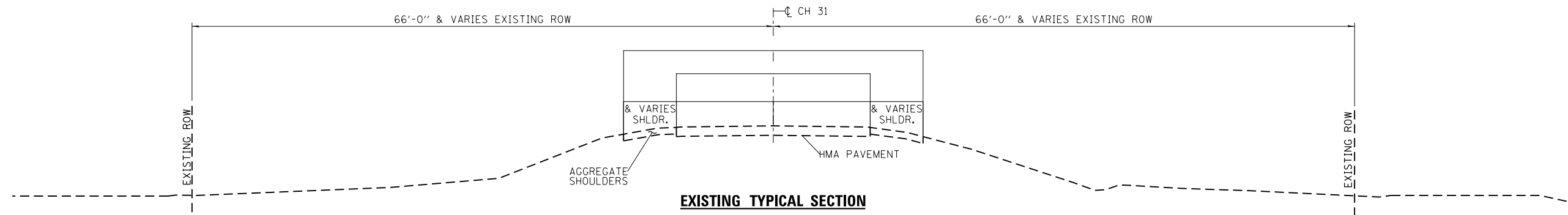
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**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

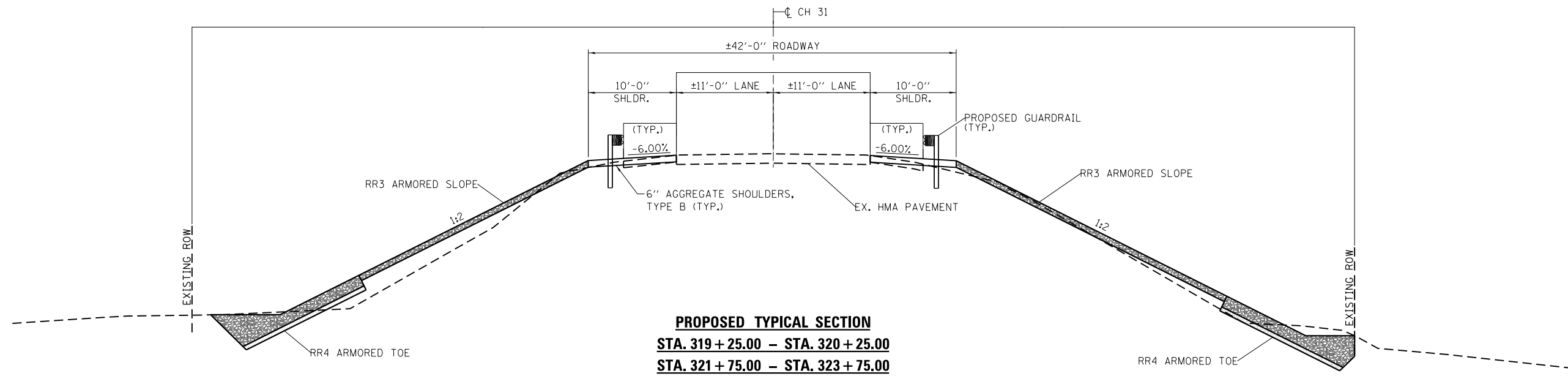
GENERAL NOTES & SCHEDULE OF QUANTITIES

SHEET NO. 2 OF 2 SHEETS

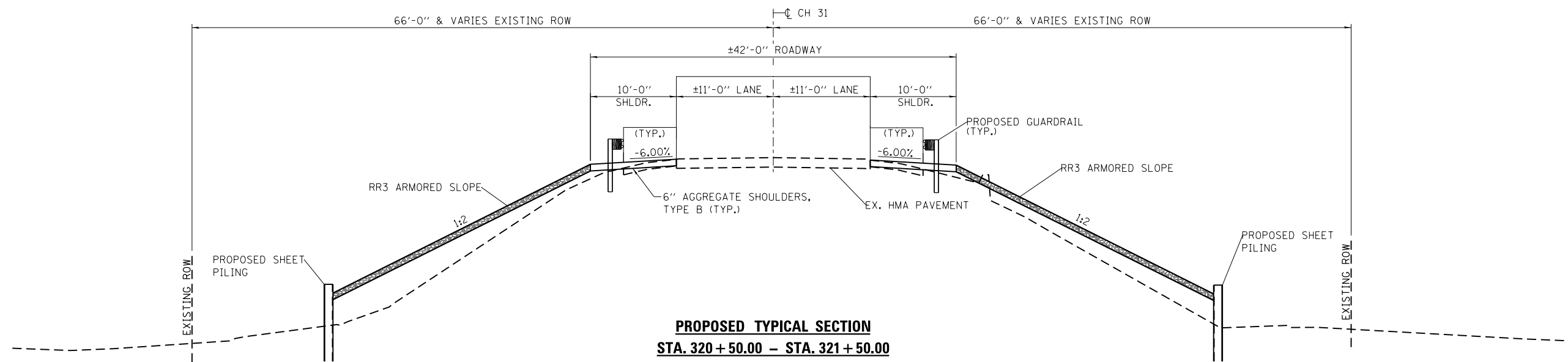
C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	4
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION
STA. 319 + 25.00 - STA. 320 + 25.00
STA. 321 + 75.00 - STA. 323 + 75.00



PROPOSED TYPICAL SECTION
STA. 320 + 50.00 - STA. 321 + 50.00

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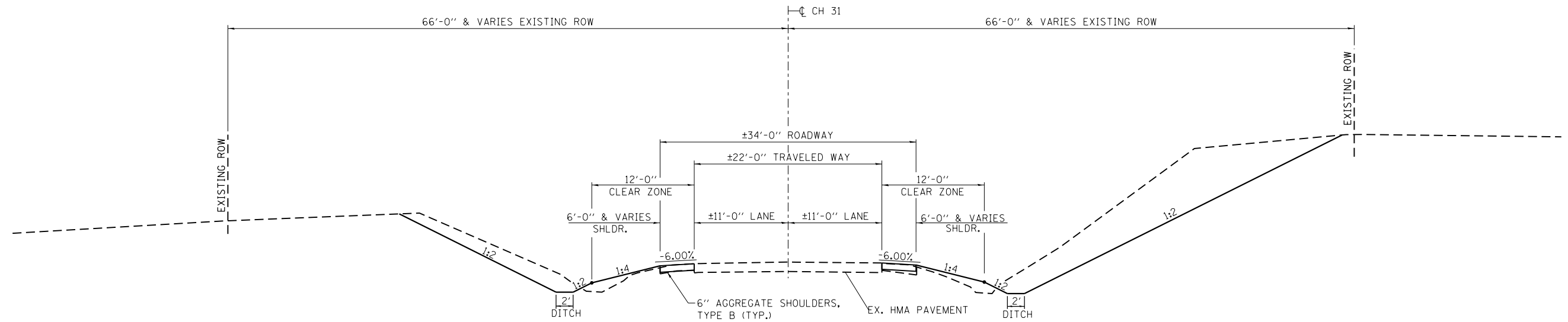
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DRAWN - DAN	REVISED -
CHECKED - PLP	REVISED -

BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02

TYPICAL SECTIONS

SHEET NO. 1 OF 2 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	5
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



PROPOSED TYPICAL SECTION
STA. 318 + 50 - 319 + 10

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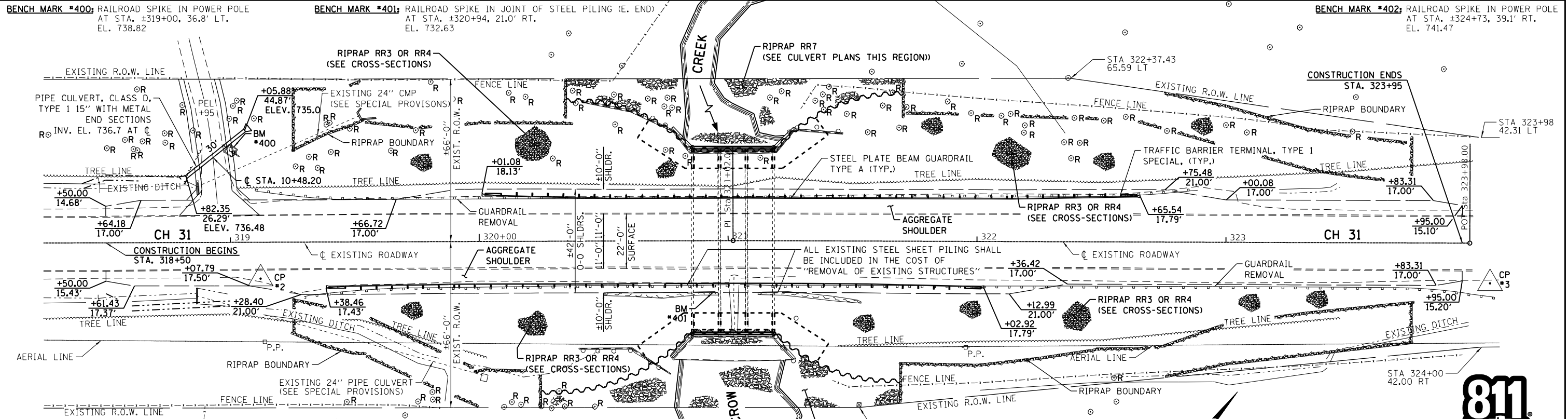
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CHECKED - PLP	REVISED -
DRAWN - DAN	REVISED -
CHECKED - PLP	REVISED -

BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02

TYPICAL SECTIONS

SHEET NO. 2 OF 2 SHEETS

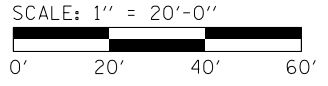
C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	6
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



CH 31 - HORIZONTAL CONTROL POINTS

PT #	STA	N	E	EL	DESCRIPTION
1	14.6' RT 319+12	1644876.833	2466644.428	738.38	5/8" IPS
2	16.2' RT 324+06	1645163.901	2467046.392	739.53	5/8" IPS

EXISTING STRUCTURE: S.N. 006-5006 REINFORCED CONCRETE TRIPLE BOX CULVERT (3@ 10'-0" x 11'-0") AT STATION 321+02.00, NO SKEW (TO BE REHABILITATED)

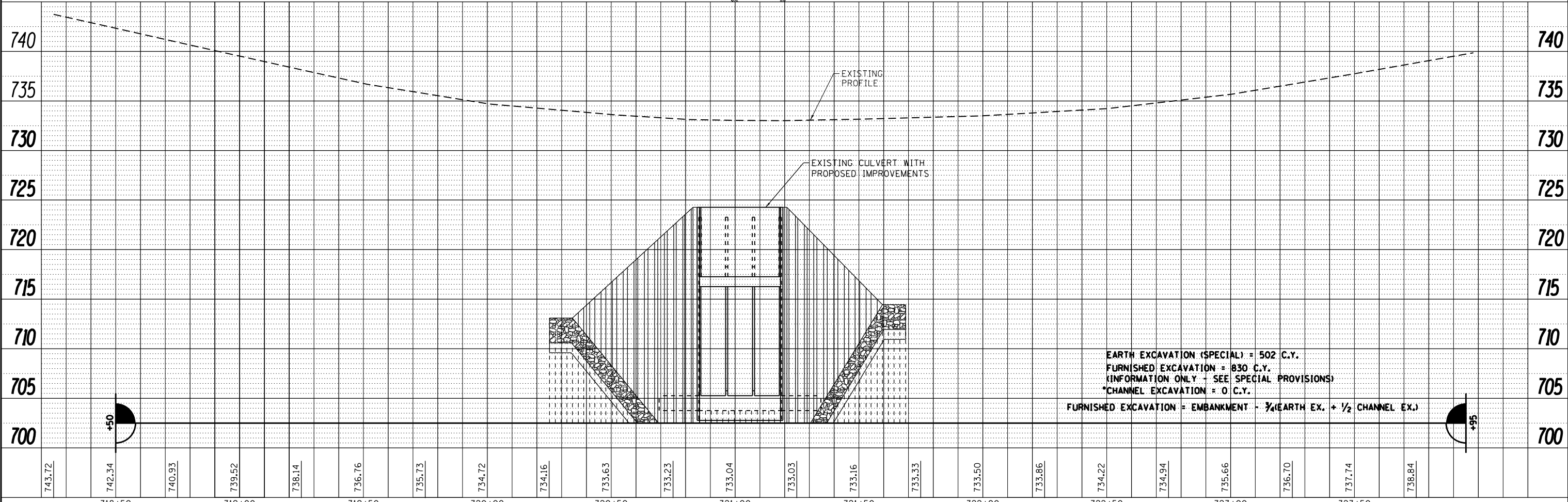


PLAN

DATE	
BY	
SURVEYED	
PLOTTED	
ALIGNED	
CHECKED	
NOTE BOOK NO.	
FIELD FILE NAME	

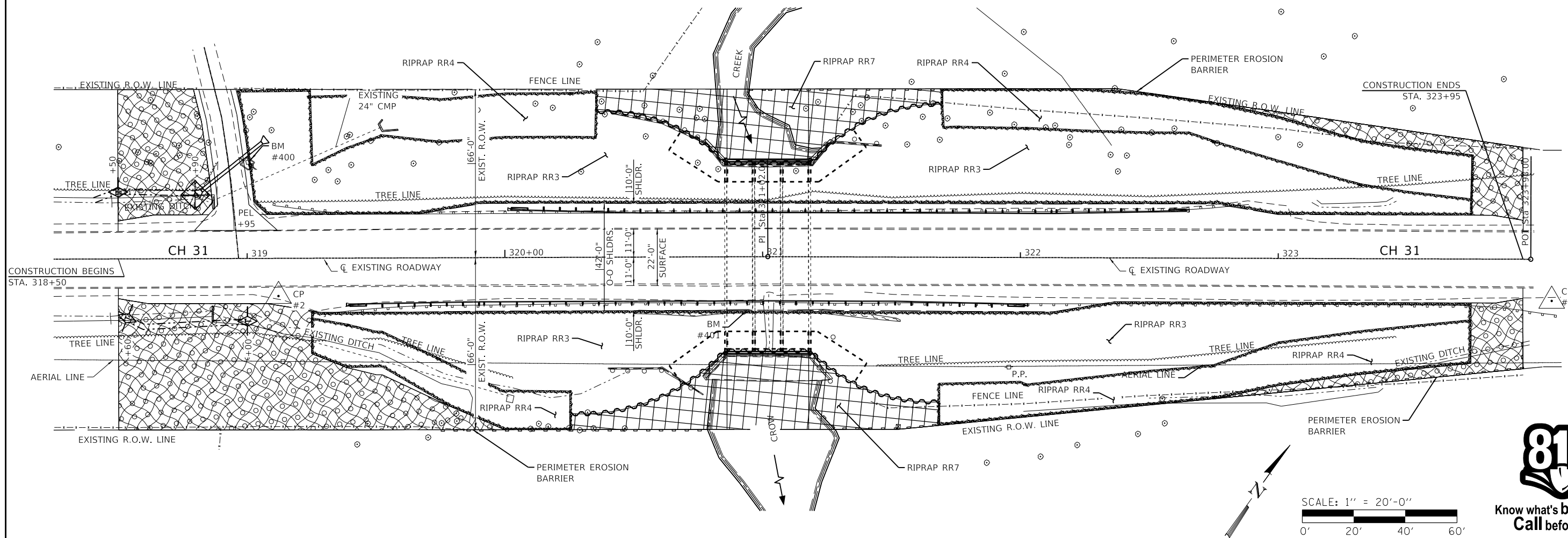
PROFILE

DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
FIELD FILE NAME	



<p>WILLET HOFMANN & ASSOCIATES INC. ENGINEERING ARCHITECTURE LAND SURVEYING 809 EAST 2ND STREET, DIXON, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918</p>	DESIGNED - BKC	REVISED -	<p align="center">BUREAU COUNTY CH 31 OVER CROW CREEK STATION 321+02</p>	<p align="center">PLAN AND PROFILE STRUCTURE NO. 006-5006</p>	<p>SCALE: 1" = 20'-0" SHEET NO. 1 OF 1 SHEETS STA. 318+25.00 TO STA. 323+98.00</p>	<table border="1"> <tr><th>C.H. RTE.</th><th>SECTION</th><th>COUNTY</th><th>TOTAL SHEETS</th><th>SHEET NO.</th></tr> <tr><td>31</td><td>09-00230-00-BR</td><td>BUREAU</td><td>46</td><td>7</td></tr> <tr><td colspan="2">WHA# 1143015</td><td colspan="3">CONTRACT NO. 87686</td></tr> <tr><td colspan="5">ILLINOIS FED. AID PROJECT P925(634)</td></tr> </table>	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	31	09-00230-00-BR	BUREAU	46	7	WHA# 1143015		CONTRACT NO. 87686			ILLINOIS FED. AID PROJECT P925(634)				
	C.H. RTE.	SECTION					COUNTY	TOTAL SHEETS	SHEET NO.																	
	31	09-00230-00-BR					BUREAU	46	7																	
	WHA# 1143015						CONTRACT NO. 87686																			
ILLINOIS FED. AID PROJECT P925(634)																										
CHECKED - PLP	REVISED -																									
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EROSION CONTROL NOTES

THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2" OF RAIN OR MORE BY THE INDIVIDUAL ON SITE IN CHARGE OF SOIL EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT.

PERIMETER EROSION BARRIER SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS AND SHALL BE PLACED AS SHOWN ON THE EROSION CONTROL PLAN AND IN ACCORDANCE WITH STATIONS SHOWN ON THE SCHEDULE OF QUANTITIES SHEET OR AS DIRECTED BY THE ENGINEER.

SILT FENCE SHALL BE INSTALLED FOLLOWING THE COMPLETION AND STABILIZATION OF ALL AREAS ADJACENT TO THE ON-SITE DRAINAGES. THE SILT FENCE WILL REMAIN IN PLACE UNTIL THE CONTRIBUTING AREA IS STABILIZED.

FOR SEEDING, CLASS 3 (SPECIAL) SEE SPECIAL PROVISIONS.

EROSION CONTROL BLANKET SHALL BE PLACED IN DITCHES AND TO ALL DISTURBED AREAS AS SHOWN ON THIS EROSION CONTROL PLAN SHEET AND IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE USE OF GREEN DYE IN THE EROSION CONTROL BLANKET IS NOT ACCEPTABLE.

TEMPORARY DITCH CHECKS SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARD 280001-07.

TEMPORARY DITCH CHECKS SHALL BE PLACED AT STATIONS CALLED OUT IN THE SCHEDULE OF QUANTITIES OR AS DIRECTED BY THE ENGINEER.

STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.

ALL ADJACENT ENTRANCES MUST BE KEPT CLEAR OF DEBRIS. INSPECTED DAILY AND CLEANED WHEN NECESSARY.

LEGEND

- PERIMETER EROSION BARRIER
- SEEDING, CLASS 3 (SPECIAL)
- TEMPORARY DITCH CHECKS
- EROSION CONTROL BLANKET
- INLET AND PIPE PROTECTION
- RIPRAP - RR3 & RR4
- RIPRAP - RR7 (FOR QUANTITY SEE BRIDGE PLANS)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
EROSION CONTROL BLANKET	SQ YD	946
TEMPORARY EROSION CONTROL SEEDING	POUND	20
TEMPORARY DITCH CHECKS	FOOT	45
PERIMETER EROSION BARRIER	FOOT	931
INLET AND PIPE PROTECTION	EACH	1
SEEDING, CLASS 3 (SPECIAL)	ACRE	0.2
STONE RIPRAP, CLASS A3	TON	920
STONE RIPRAP, CLASS A4 (SPECIAL)	TON	950

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DRAWN - DAN	REVISED -
CHECKED - PLP	REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

EROSION CONTROL PLAN
SHEET NO. 1 OF 2 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	8
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING PLAN IS ESTABLISHED AND INCORPORATED IN THE PROJECT TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM SEWER WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

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

CERTAIN EROSION CONTROL FACILITIES SHALL BE INSTALLED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION DEPENDING ON THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL INSTALL PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A TIME FRAME SPECIFIED HEREIN AND AS DIRECTED BY THE ENGINEER, THEREFORE MINIMIZING THE AMOUNT OF AREA SUSCEPTIBLE TO EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE ENGINEER WILL DETERMINE IF ANY TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS, WHICH ARE NOT INCLUDED IN THIS PLAN, SHALL BE ADDED. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 OF THE PLANS.

SECTION 280, TEMPORARY EROSION CONTROL, OF THE STANDARD SPECIFICATIONS ADDITIONALLY SUPPLEMENTS THIS PLAN.

SITE DESCRIPTION

DESCRIPTION OF CONSTRUCTION ACTIVITY:

1. THE PROJECT CONSISTS OF BRIDGE REHABILITATION ON COUNTY HIGHWAY 31 OVER CROW CREEK & APPROACH ROADWAY WORK THERETO.
2. CONSTRUCTION INCLUDES EARTH EXCAVATION, ENTRANCES, CHANNEL EXCAVATION, VARIOUS PAVEMENT ITEMS, CULVERT ITEMS AND OTHER MISCELLANEOUS ITEMS OF CONSTRUCTION.

DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:

1. EARTH EXCAVATION.
2. CHANNEL EXCAVATION.
3. FURNISHED EXCAVATION.
4. AGGREGATE SHOULDERS AND RELATED APPURTENANCES.
5. PLACEMENT OF PERMANENT EROSION CONTROL INCLUDING SEEDING.

AREA OF CONSTRUCTION SITE:

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 1.27 ACRES OF WHICH 1.27 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING, AND OTHER ACTIVITIES.

OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THE STORM WATER POLLUTION PREVENTION PLAN AS REFERENCED DOCUMENTS:

1. INFORMATION OF THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM SOIL BORINGS THAT WERE UTILIZED FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION CONTROL SYSTEMS.
2. PROJECT PLAN DOCUMENTS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND PLAN DRAWINGS INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF FROM THIS CONSTRUCTION SITE:

CROW CREEK

CONTROLS – EROSION CONTROLS AND SEDIMENT CONTROL

DESCRIPTION OF STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION.

1. THE DRAWINGS, SPECIFICATIONS AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE: TEMPORARY SEEDING, PERMANENT SEEDING, PERIMETER EROSION BARRIER, AND OTHER APPROPRIATE MEASURES AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

- (A) AREAS OF EXISTING VEGETATION (WOOD AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED BY THE ENGINEER FOR PRESERVING AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES.
- (B) DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER, ALONG WITH REQUIRED TREE REMOVAL.

- (C) AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND DIRECTED BY THE ENGINEER.
 - (D) BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN 7 DAYS.
 - (E) AT LOCATIONS WHERE A SIGNIFICANT AMOUNT OF WATER DRAINS INTO THE CONSTRUCTION ZONE FROM OUTSIDE AREAS (ADJACENT LANDOWNERS), TEMPORARY DITCH CHECKS WILL BE UTILIZED TO LOCALLY DIVERT WATER, REDUCE FLOW RATES, AND COLLECT OUTSIDE SILTATION INSIDE THE RIGHT-OF-WAY LINE.
2. ESTABLISHMENT OF THESE TEMPORARY EROSION CONTROL MEASURES WILL HAVE ADDITIONAL BENEFITS TO THE PROJECT. DESIRABLE GRASS SEED WILL BECOME ESTABLISHED IN THESE AREAS AND WILL SPREAD SEEDS ONTO THE CONSTRUCTION SITE UNTIL PERMANENT SEEDING/MOWING AND OVER SEEDING CAN BE COMPLETED.

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION:

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DESCRIBED ON THE PLANS AND DIRECTED BY THE ENGINEER), PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.
 - (A) WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
 - (B) EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN 14 DAYS.
 - (C) AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:
 - I. PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.
 - II. TEMPORARILY SEED ERODIBLE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODIBLE SURFACE AREA WITHIN THE CONTRACT LIMITS.
 - (D) EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR 7 DAYS.
 - (E) CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR OTHER POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
 - (F) THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT DAILY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE WEEKLY AND AFTER RAINS OF 1/2 INCH OR GREATER OR EQUIVALENT SNOWFALL DURING THE WINTER SHUTDOWN PERIOD. THE PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER ON A BI-WEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.
 - (G) SEDIMENT COLLECTED DURING CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.
 - (H) THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING

1. TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED.
2. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP, AND DISTURBED TURF RESEEDDED.

MAINTENANCE AFTER CONSTRUCTION

1. CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE BY IDOT'S FINAL INSPECTION. MAINTENANCE UP TO THIS DATE WILL BE BY THE CONTRACTOR.

MISCELLANEOUS

ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

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CHECKED - PLP	REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

EROSION CONTROL PLAN

SHEET NO. 2 OF 2 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	9
WHA# 1143D15		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

Existing Structure: SN 006-5006 was originally built in 1958. The existing structure is a triple 10'x11' reinforced concrete box culvert. The roadway is 22 feet wide with guardrail that extends over the top of the structure. The existing culvert measures 75'-6" (out to out of headwalls). The existing wingwalls and headwall will be removed and replaced. Traffic shall be detoured during construction.

Bench Mark: Spike & washer in Fence Post 39' Rt. of Sta. 303+30 elev. 763.97

BILL OF MATERIAL - CULVERT

ITEM	UNIT	SUB	SUPER	TOTAL
* Stone Riprap, Class A7 (Special)	Ton	1,035	---	1,035
* Removal of Existing Structures	Each	1	---	1
Concrete Box Culverts	Cu. Yd.	188.4	---	188.4
Reinforcement Bars, Epoxy Coated	Pound	59,000	---	59,000
Name Plates	Each	1	---	1
* Porous Granular Embankment, Special	Ton	478	---	478
* Permanent Sheet Piling	Sq. Ft.	8,928	---	8,928
* Hardware	Pound	5,280	---	5,280
* Slope Stabilization	L Sum	1	---	1

*See Special Provisions

GENERAL NOTES:

Reinforcement bars designated (E) shall be epoxy coated.
 Plan dimensions and details relative to existing plans 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 of 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.

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
 The structural steel plates shall conform to the requirements of AASHTO M 270 Grade 36
 Anchor rods shall be A 306 Grade 36 Steel.

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. As part of the Slope Stabilization pay item, the Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Removal of Existing Structures.
 PRECAST OPTION NOT ALLOWED.

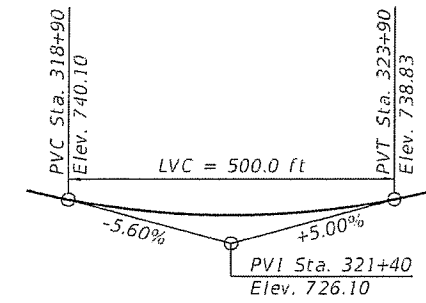
WATERWAY INFORMATION

Drainage Area = 3.4 sq. mi. Low Grade Elev. 716.89 @ Sta. 321+02

Flood	Freq. Yr.	0 C.F.S.	Opening Ft ²		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	1310	165.3	-	711.4	1.83	-	713.3	-
Base	20	1700	189.3	-	712.2	2.25	-	714.4	-
Scour	100	2640	231.3	-	713.6	3.26	-	716.9	-
Max. Calc.	200	2950	243.3	-	714.0	3.68	-	717.7	-
	500	3700	267.3	-	714.8	4.74	-	719.5	-

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 Riprap Layout at Culvert
- 3-5 Culvert Details - North Extension
- 6-8 Culvert Details - South Extension
- 9 Culvert Details - N & S Extension
- Sheet Pile Connection Details
- Boring Logs



PROFILE GRADE
(Along C Roadway)

The contractor may excavate in region required to perform proposed work. See Special Provisions for Slope Stabilization

LOADING HS-15 (Existing Culvert)
LOADING HS-20 (Culvert Extension)
 Allow 50#/sq. ft. for future wearing surface.

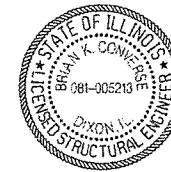
DESIGN SPECIFICATIONS
 2002 AASHTO Standard Specifications, 17th Edition

DESIGN STRESSES
FIELD UNITS

$f'_c = 4,000$ psi (Concrete)
 $f_y = 60,000$ psi (Reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.158
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.100
 Soil Site Class = D

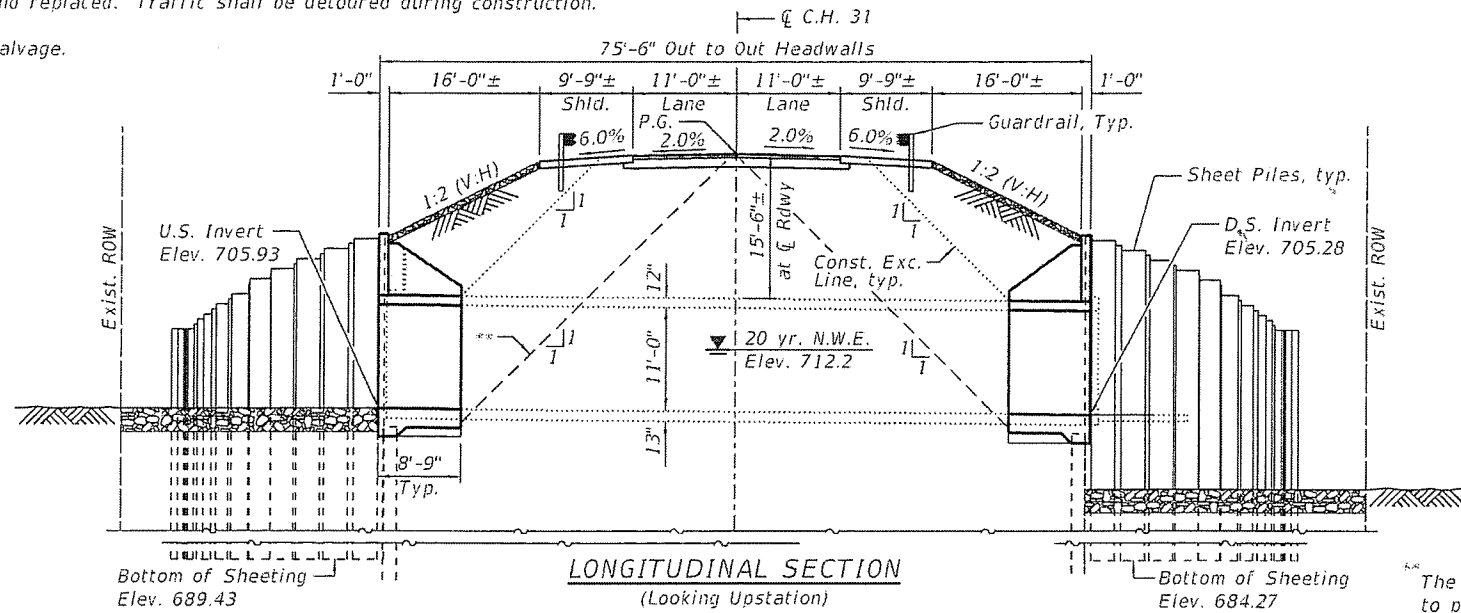


DATE: *Brian K. Combs*
 EXPIRES 11/30/18

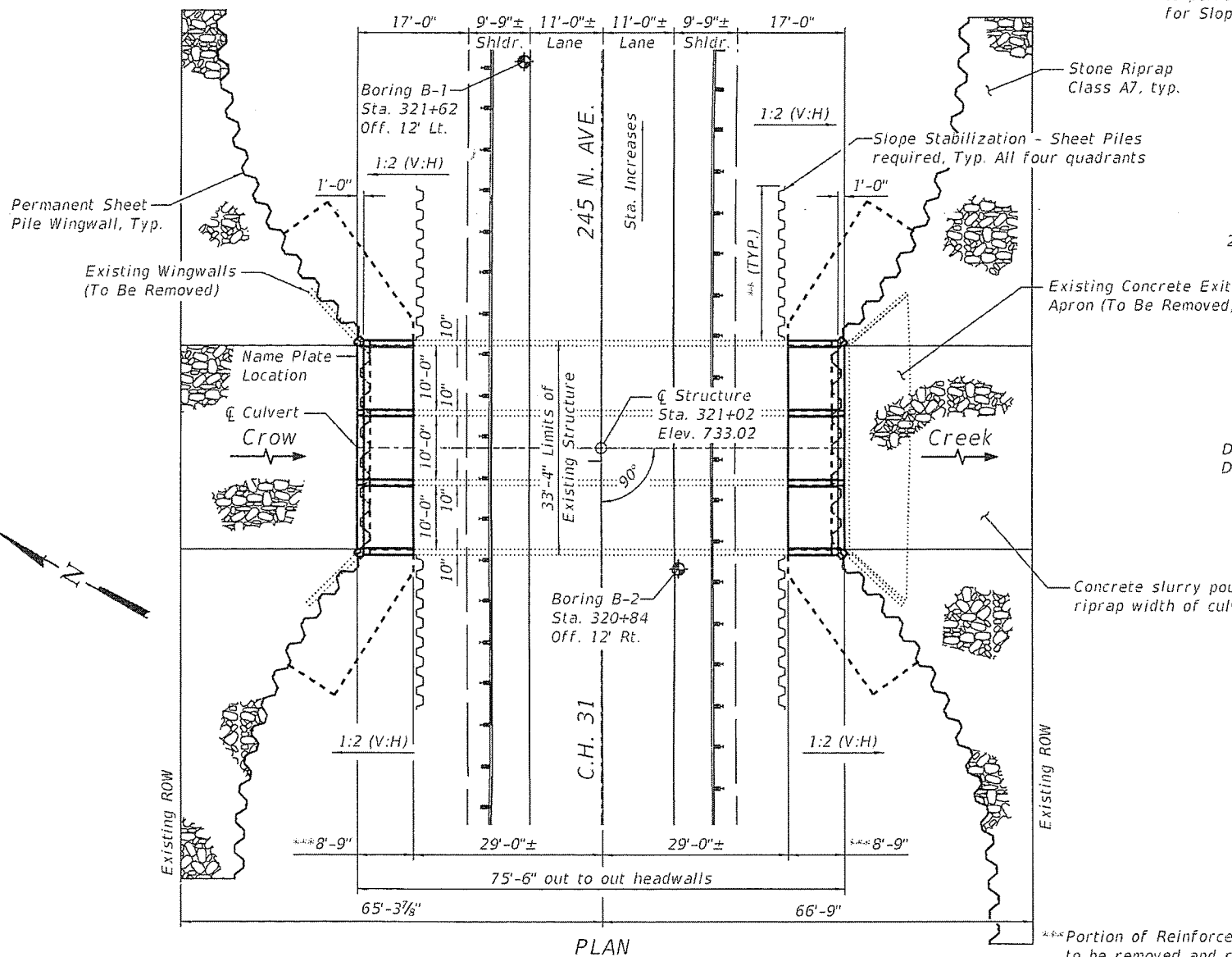
"I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE REPAIR DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS, THE DESIGN IS AN ECONOMICAL ONE COMPLIES WITH REQUIREMENTS OF THE CURRENT 'AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES'."

**Portion of Reinforced Concrete Box to be removed and reconstructed.

Salvage.



LONGITUDINAL SECTION
(Looking Upstation)

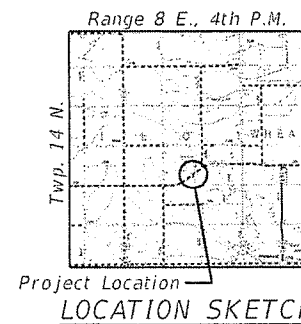


PLAN

CROW CREEK
 REHABILITATED 2018 BY
 BUREAU COUNTY
 SECTION 09-0230-00-BR
 C.H. 31 (245 N. AVE.) STATION 321+02
 STR. NO. 006-5006 LOADING HS20

NAME PLATE LETTERING
 Refer To Std. 515001

GENERAL PLAN & ELEVATION
COUNTY HIGHWAY 31 OVER
CROW CREEK
SECTION 09-0230-00-BR
BUREAU COUNTY
STATION 321+02
STRUCTURE NO. 006-5006



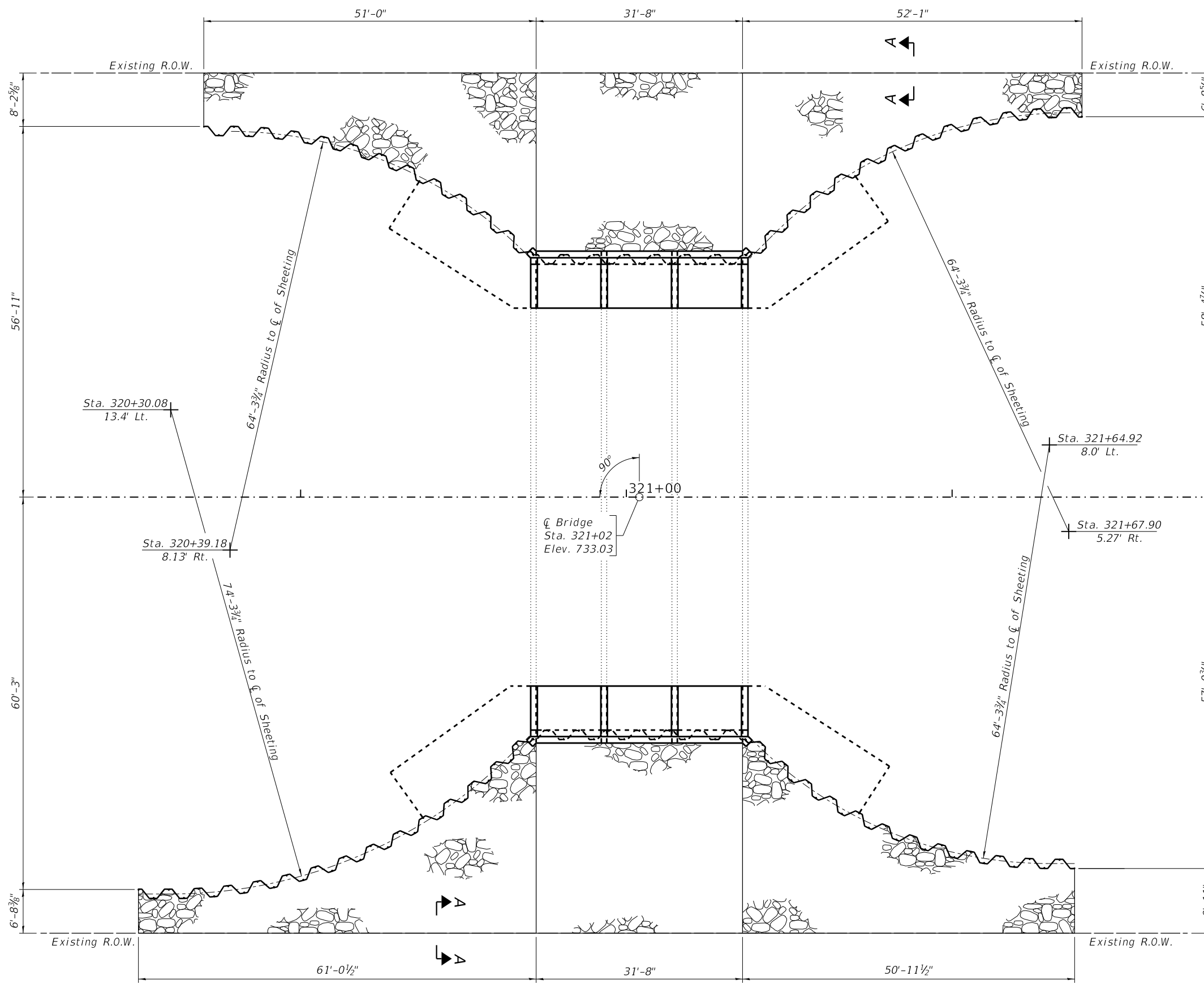
Project Location
LOCATION SKETCH

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	10
WHA# 1143D15			CONTRACT NO. 87686	
[ILLINOIS] FED. AID PROJECT P2516349				

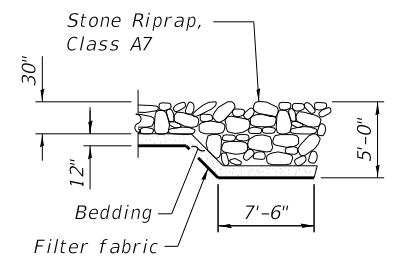


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DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02



PLAN



SECTION A-A

BILL OF MATERIAL

Item	Unit	Quantity
Stone Riprap, Class A7 (Special)	Ton	1,035

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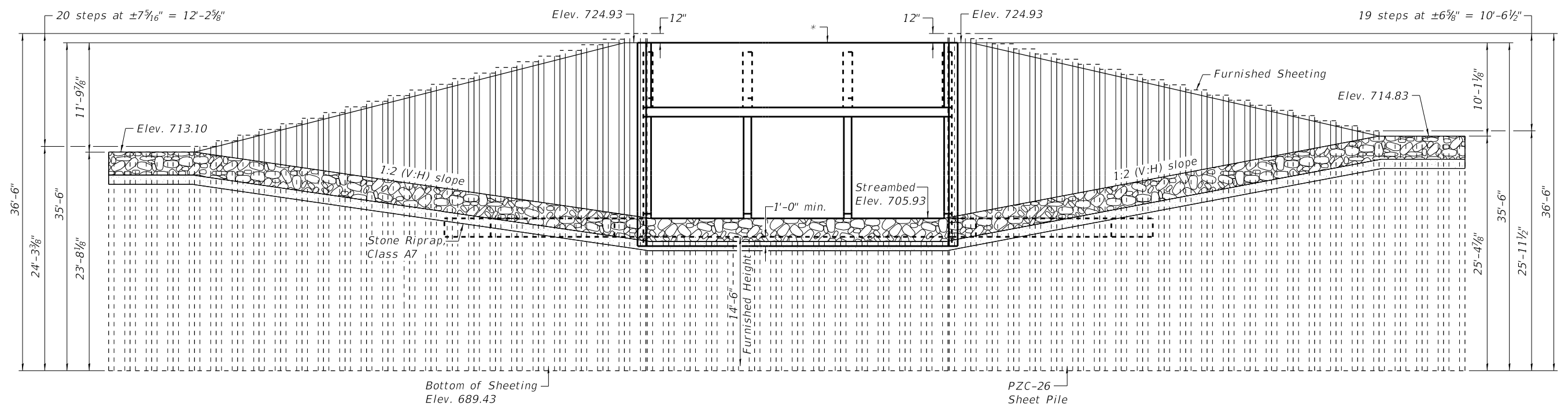
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DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02

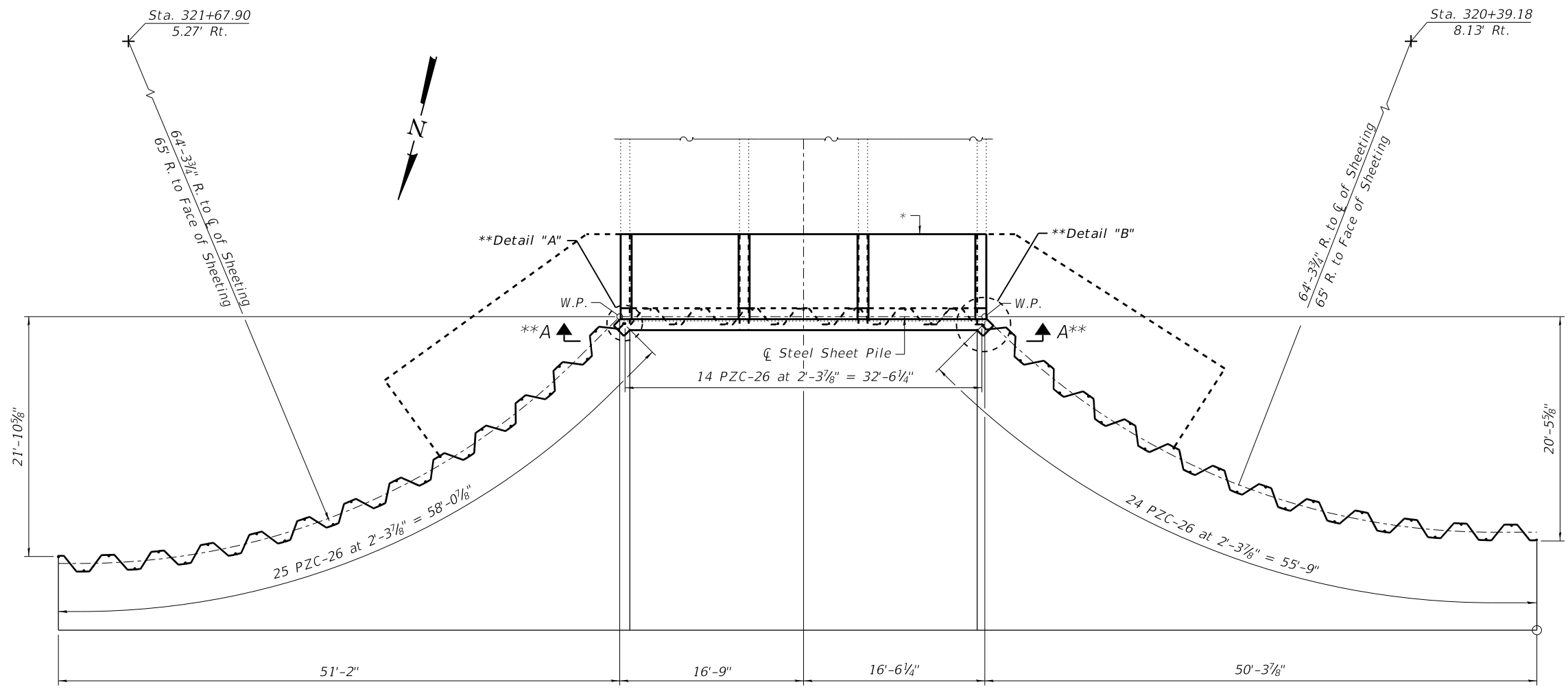
RIPRAP LAYOUT AT CULVERT
STRUCTURE NO. 006-5006

SHEET NO. 2 OF 14 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	11
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



ELEVATION
(Looking South)
(Sheeting shown straight for clarity)



PLAN

BILL OF MATERIAL

Item	Unit	Total
Permanent Sheet Piling	Sq. Ft.	3,937

NOTES:
 * Culvert Extension details not shown for clarity. See Structural Sheet 4, 5 & 9 of 14 for details.
 The Contractor shall be paid for furnished sheeting as shown and Contractor shall drive the sheeting an extra 6" if top is not damaged, as directed by the Engineer.

** See Structural Sheet 9 of 14 for details

FILE: S:\PROJECTS\2015\1143015.BCH\DESIGN\STRUCT\20.Dr\arrngs\1143015 North Extension Sheet Pile Layout.dgn

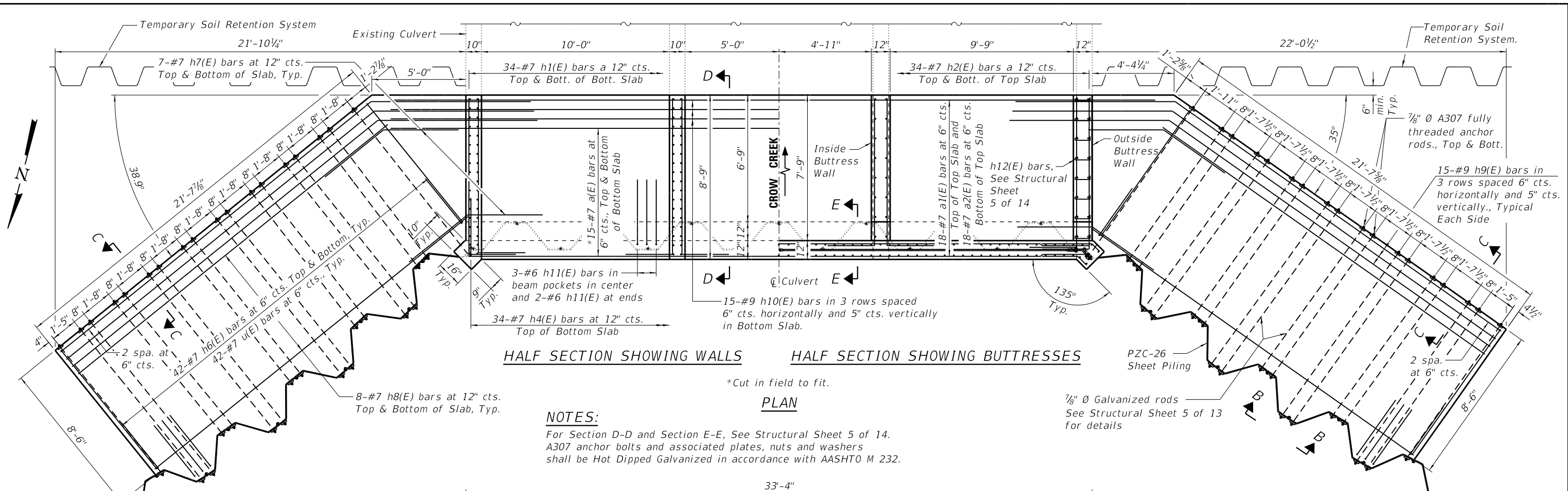


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DRAWN - FDL	REVISED -
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**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

**CULVERT DETAILS - NORTH EXTENSION SHEET PILE LAYOUT
 STRUCTURE NO. 006-5006**
 SHEET NO. 3 OF 14 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	12
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



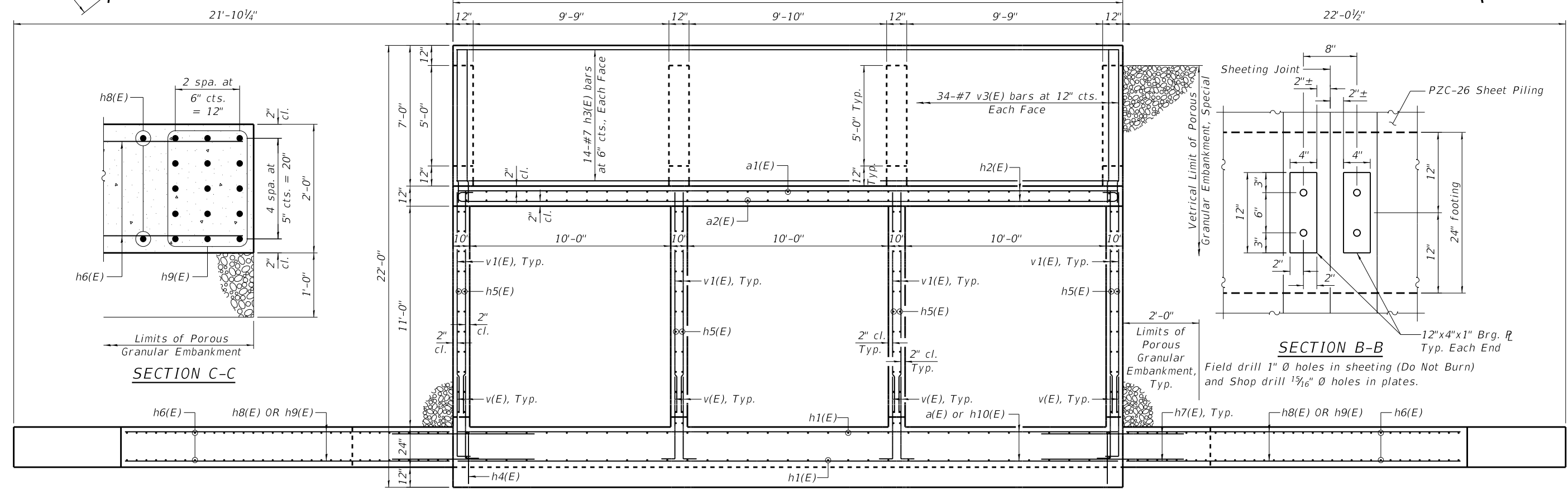
HALF SECTION SHOWING WALLS HALF SECTION SHOWING BUTTRESSES

NOTES:

For Section D-D and Section E-E, See Structural Sheet 5 of 14.
 A307 anchor bolts and associated plates, nuts and washers shall be Hot Dipped Galvanized in accordance with AASHTO M 232.

*Cut in field to fit.

PLAN



END ELEVATION

(Sheet Piling not shown for clarity)

**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

**CULVERT DETAILS - NORTH EXTENSION PLAN & END ELEVATION
 STRUCTURE NO. 006-5006**

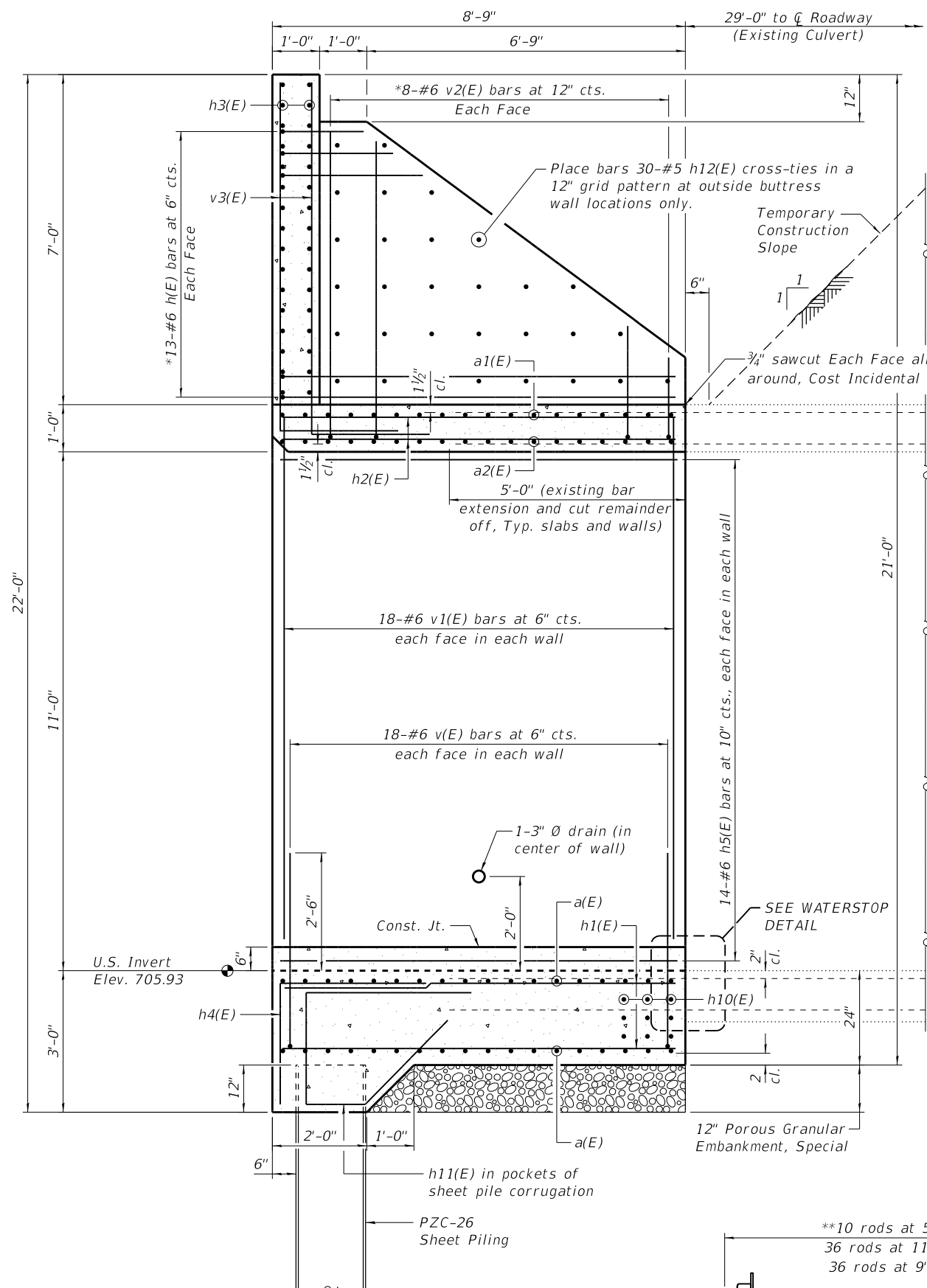
SHEET NO. 4 OF 14 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

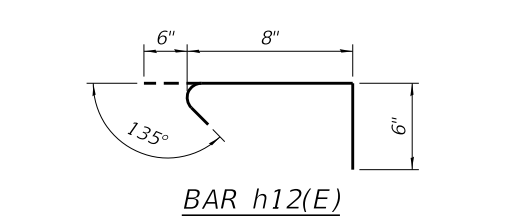
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CHECKED - BKC	REVISED -



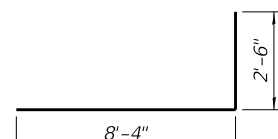
SECTION D-D: NORTH LONGITUDINAL SECTION



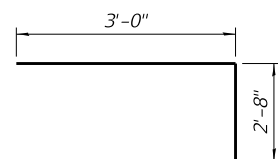
BAR h12(E)



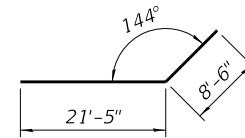
BAR a2(E)



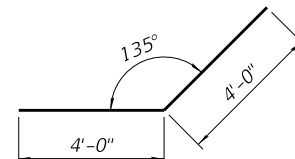
BARS h(E)



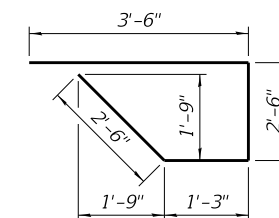
BARS h4(E)



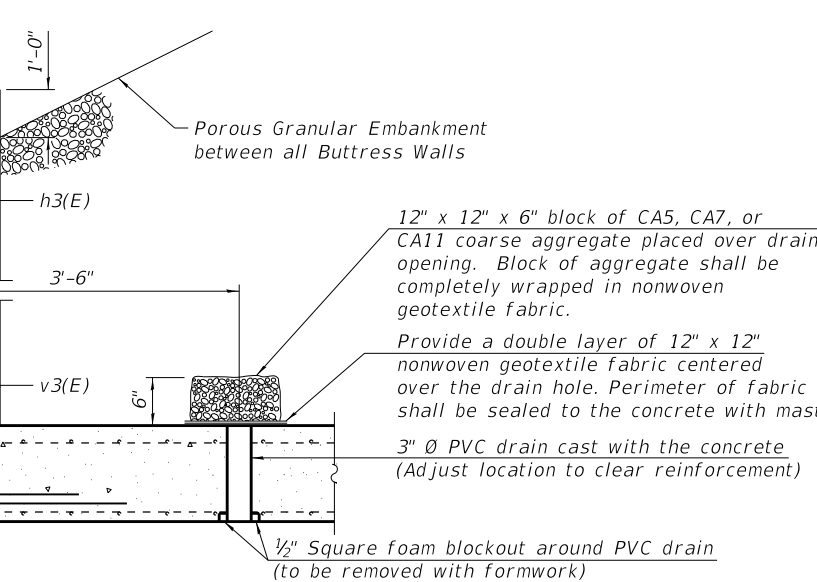
BARS h9(E)



BARS h7(E)



BARS h11(E)



SECTION E-E

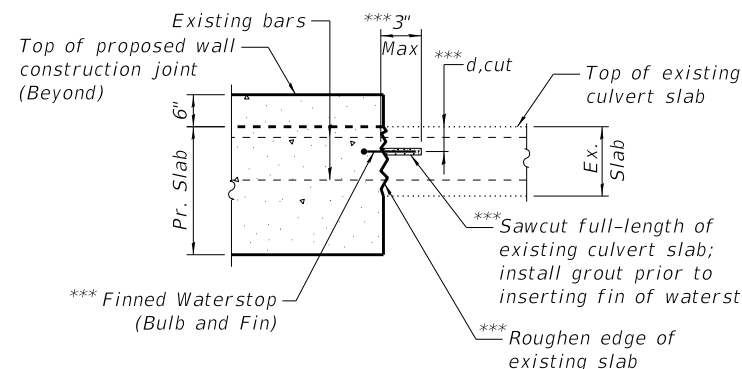
(Looking East Thru Upstream End, Typical at Center of Each Barrel)
 (All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

BILL OF MATERIAL

Bar No.	Size	Length	Shape
a(E)	30 #7	34'-8"	—
a1(E)	18 #7	33'-0"	—
a2(E)	18 #7	34'-8"	—
h(E)	104 #6	10'-10"	┌
h1(E)	68 #7	8'-3"	—
h2(E)	68 #7	8'-3"	—
h3(E)	28 #7	33'-0"	—
h4(E)	34 #7	5'-8"	┌
h5(E)	112 #6	8'-5"	┌
h6(E)	168 #7	8'-4"	—
h7(E)	32 #7	8'-0"	┌
h8(E)	32 #7	21'-0"	—
h9(E)	30 #9	29'-11"	┌
h10(E)	15 #9	40'-8"	—
h11(E)	22 #6	9'-9"	┌
h12(E)	60 #5	1'-8"	┌
u(E)	84 #6	7'-6"	┌
v(E)	144 #6	5'-11"	┌
v1(E)	144 #6	11'-3"	┌
v2(E)	64 #6	8'-7"	┌
v3(E)	68 #7	10'-1"	┌
Porous Granular Embankment, Special	Ton	232	
Reinforcement Bars, Epoxy Coated	Pound	29,500	
Concrete Box Culverts	Cu. Yd.	94.2	
Hardware	Pound	2,640	

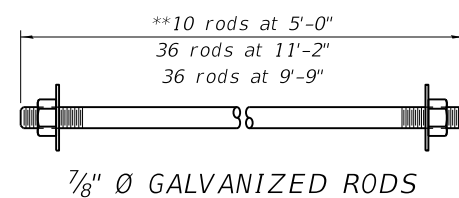
NOTES

NO PRECAST OPTION ALLOWED.
 All exposed edges shall be chamfered 3/4" unless otherwise noted.
 *Cut in field to fit.
 **See Structural sheet 9 of 14 for layout, Cut to fit in field.



DETAIL - WATERSTOP

Proposed Bars not shown for clarity
 ***d.cut shall be centered between the top and bottom mat of existing bars. Work to construct the sawcut, grout, and work to furnish and install the waterstop shall be incidental to REMOVAL OF EXISTING STRUCTURES. See Special Provisions



7/8" Ø GALVANIZED RODS



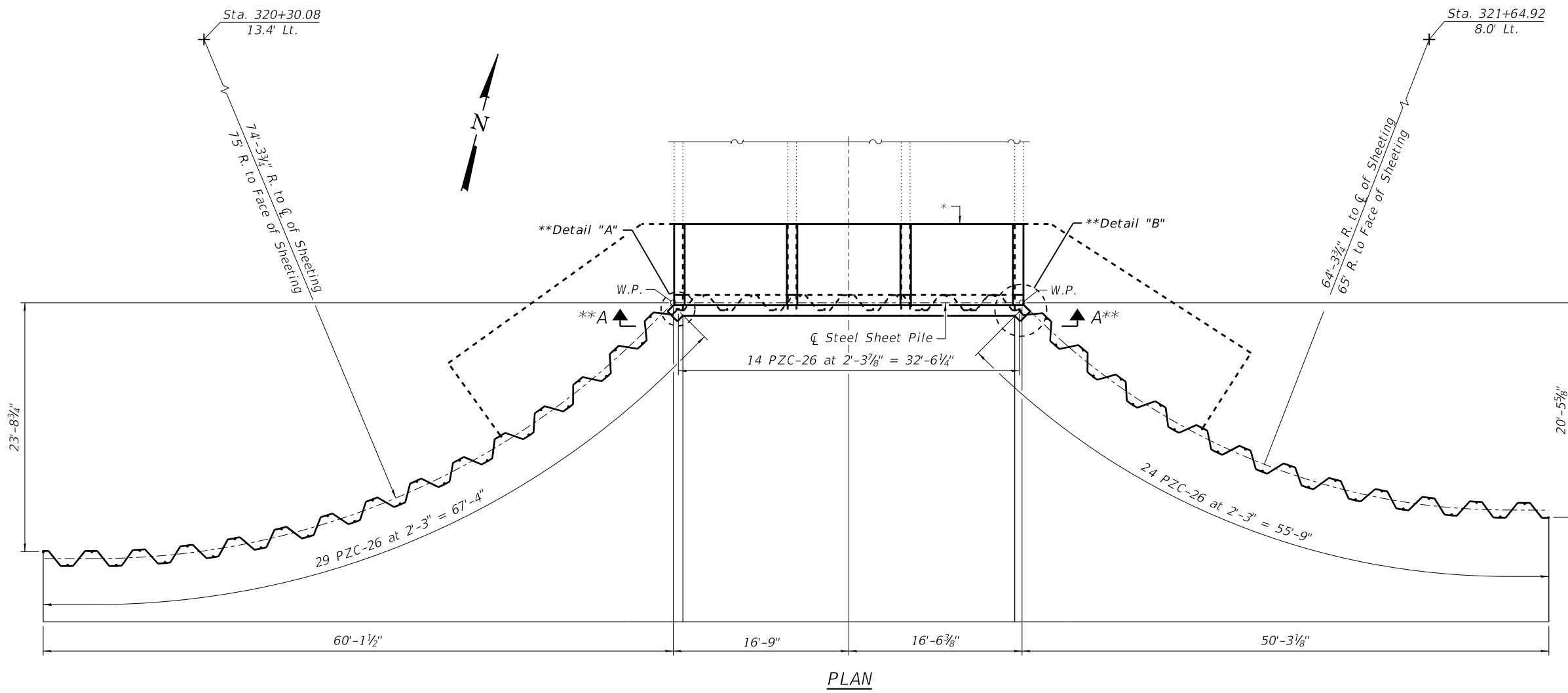
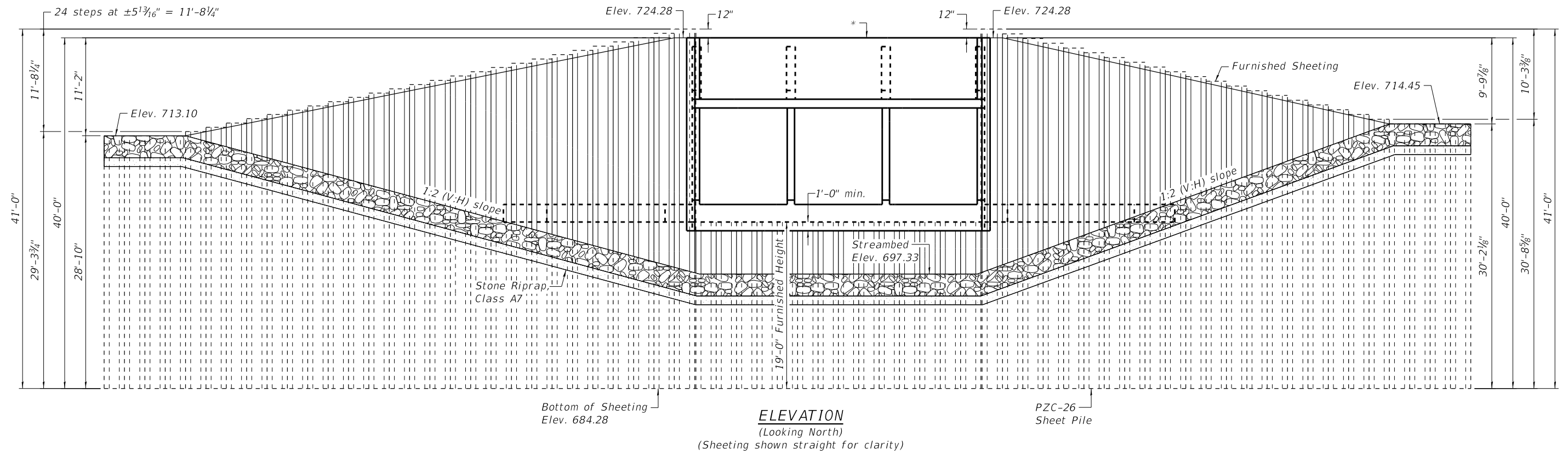
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CHECKED - EEL	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02

CULVERT DETAILS - NORTH EXTENSION LONGITUDINAL SECTION
 STRUCTURE NO. 006-5006

SHEET NO. 5 OF 14 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	14
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



BILL OF MATERIAL

Item	Unit	Total
Permanent Sheet Piling	Sq. Ft.	4,991

NOTES:
 * Culvert Extension details not shown for clarity. See Structural Sheet 7, 8 & 9 of 14 for details.
 The Contractor shall be paid for furnished sheeting as shown and Contractor shall drive the sheeting an extra 6" if top is not damaged, as directed by the Engineer.

** See Structural Sheet 9 of 14 for details

FILE : S:\PROJECTS\2015\1143015.BCH\DESIGN\STRUCT\20.Draining\1143015.South_Extension_Sheet_Pile_Layout.dgn

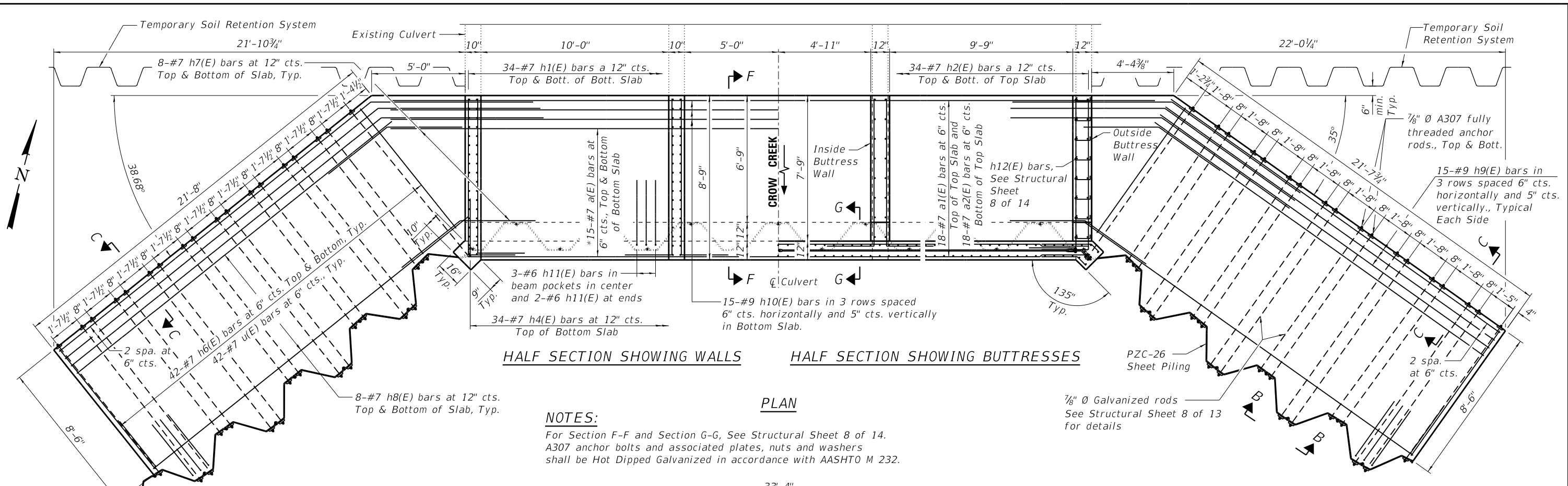


DESIGNED - BKC	REVISED -
CHECKED - EEL	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

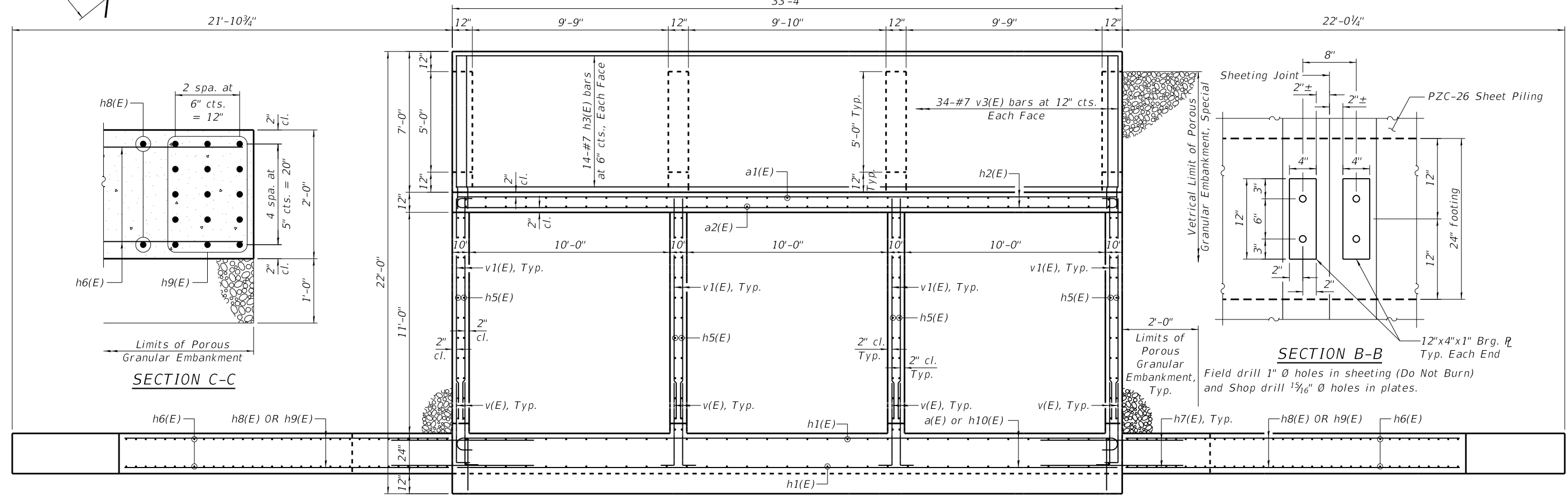
**CULVERT DETAILS - SOUTH EXTENSION SHEET PILE LAYOUT
STRUCTURE NO. 006-5006
SHEET NO. 6 OF 14 SHEETS**

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	15
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



NOTES:
 For Section F-F and Section G-G, See Structural Sheet 8 of 14.
 A307 anchor bolts and associated plates, nuts and washers shall be Hot Dipped Galvanized in accordance with AASHTO M 232.

PLAN



END ELEVATION
 (Sheet Piling not shown for clarity)

FILE: S:\PROJECTS\2015\1143015.BCH\DESIGN\STRUCT\20.Draining\1143015.South_Culvert_Extension_Details.dgn

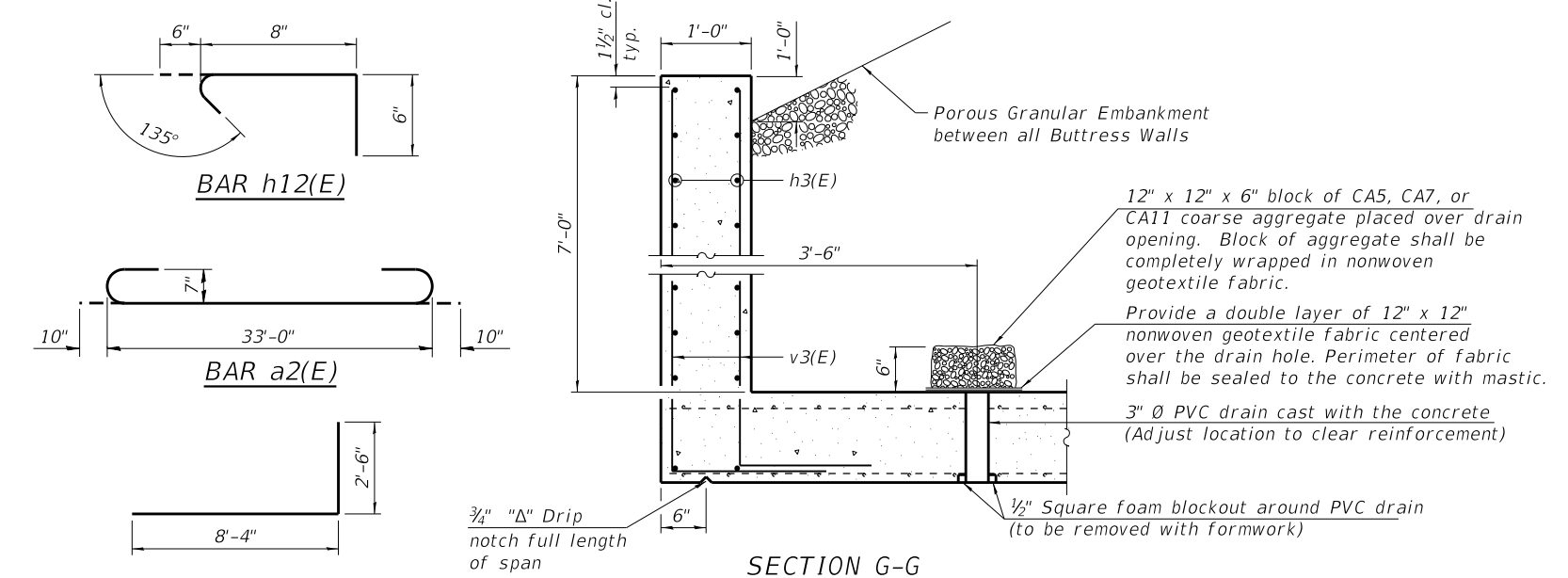
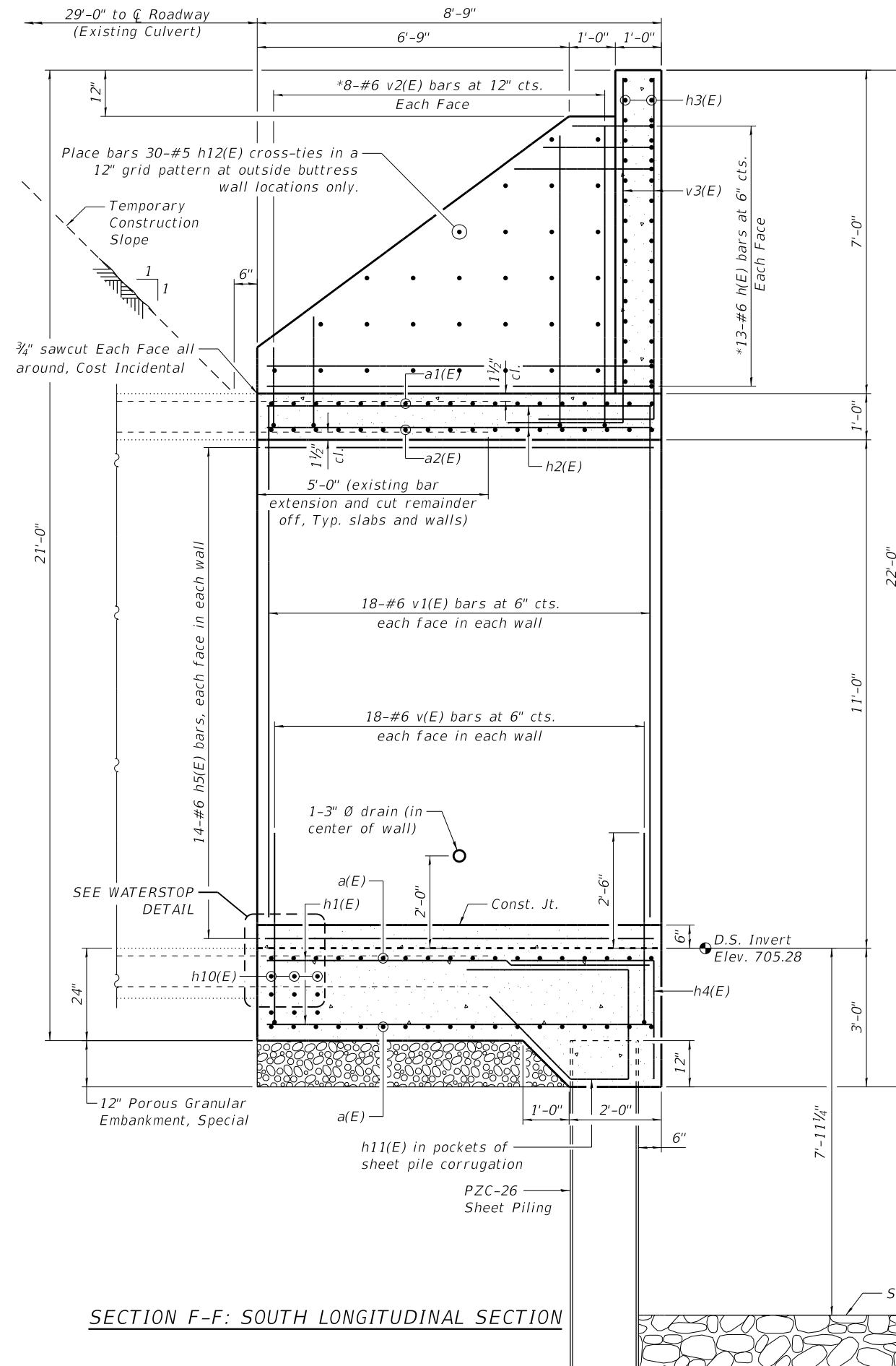


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CHECKED - EEL	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

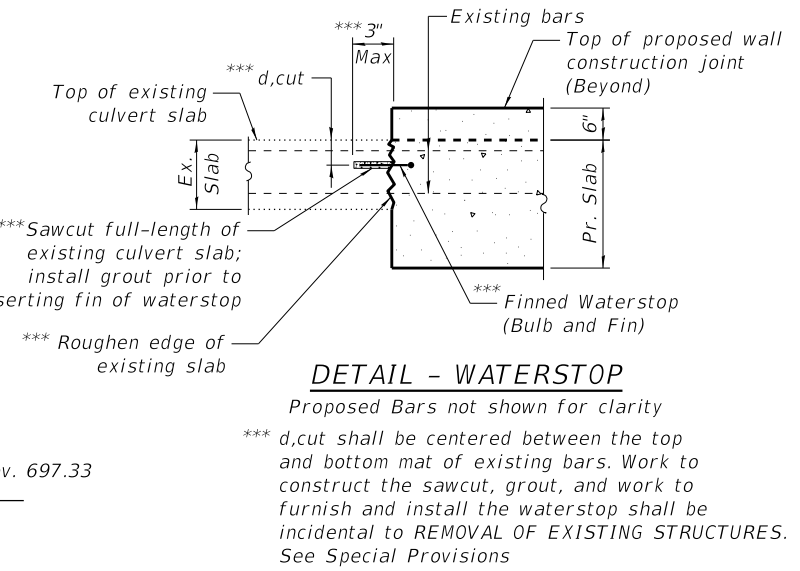
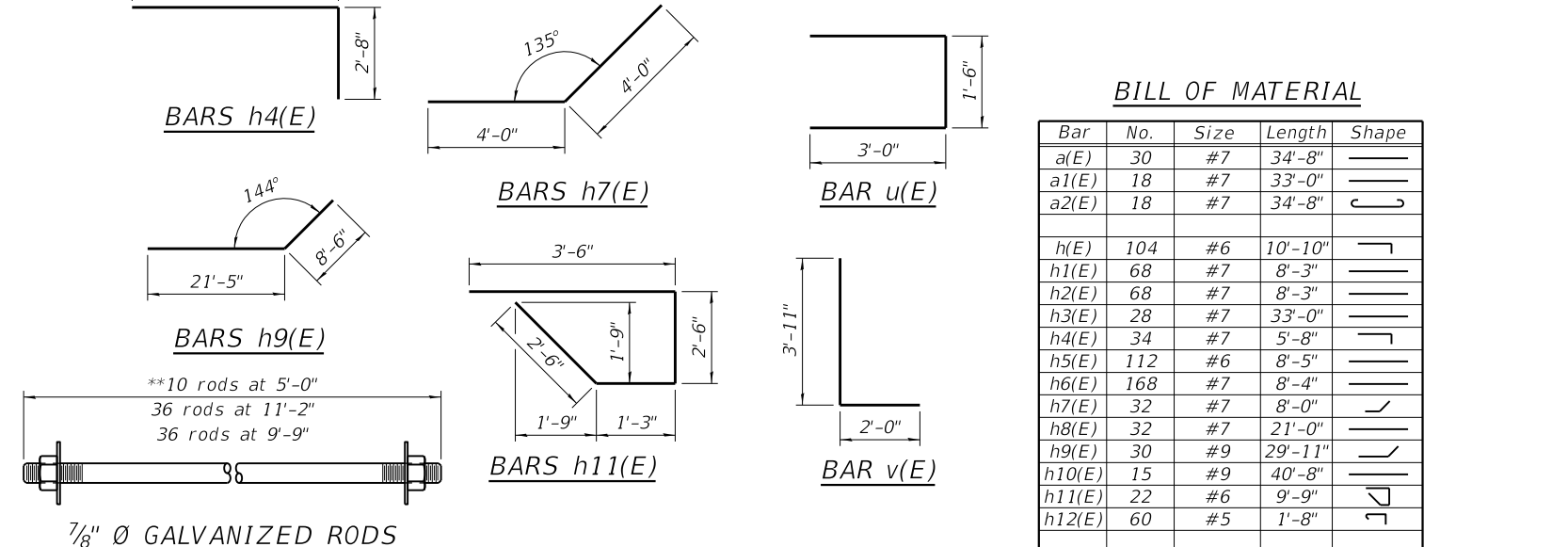
BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02

CULVERT DETAILS - SOUTH EXTENSION PLAN & END ELEVATION
STRUCTURE NO. 006-5006
 SHEET NO. 7 OF 14 SHEETS

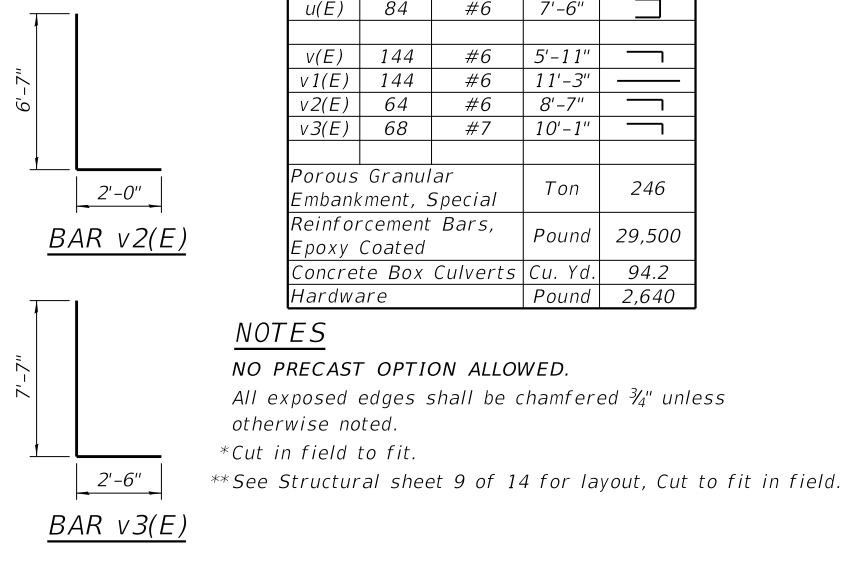
C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	16
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



SECTION G-G
 (Looking West Thru Downstream End, Typical at Center of Each Barrel)
 (All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

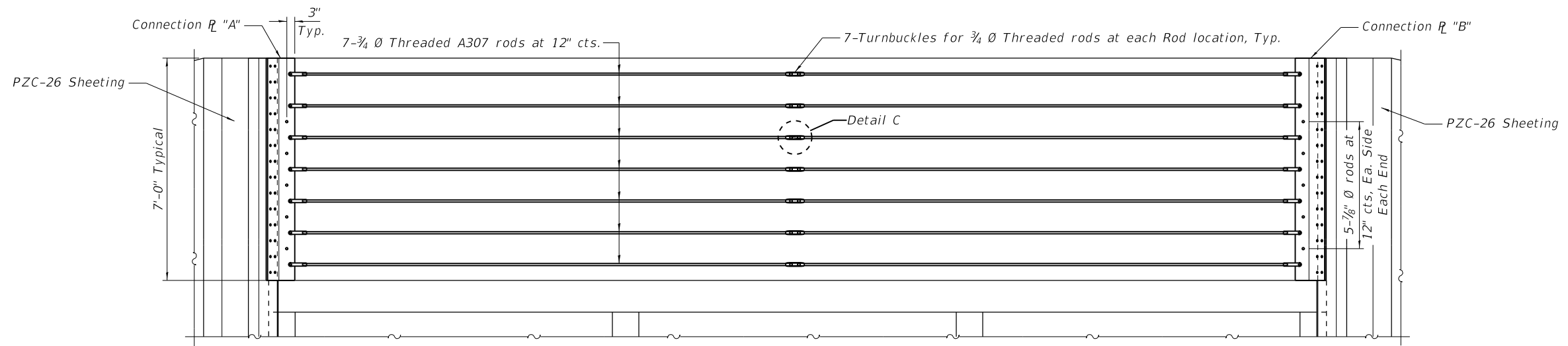


DETAIL - WATERSTOP
 Proposed Bars not shown for clarity
 *** d, cut shall be centered between the top and bottom mat of existing bars. Work to construct the sawcut, grout, and work to furnish and install the waterstop shall be incidental to REMOVAL OF EXISTING STRUCTURES. See Special Provisions



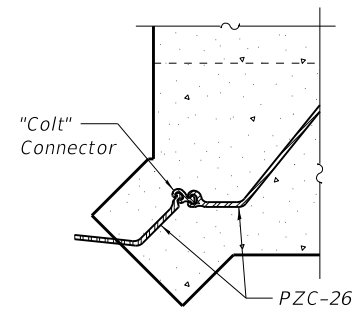
NOTES
 NO PRECAST OPTION ALLOWED.
 All exposed edges shall be chamfered 3/4" unless otherwise noted.
 *Cut in field to fit.
 **See Structural sheet 9 of 14 for layout, Cut to fit in field.

FILE: S:\PROJECTS\2015\1143015.BCH\DESIGN\STRUCT\20-Drainage\1143015_South_Culvert_Extension_Detail.sdw

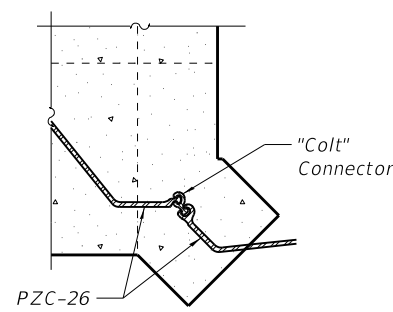


SECTION A-A

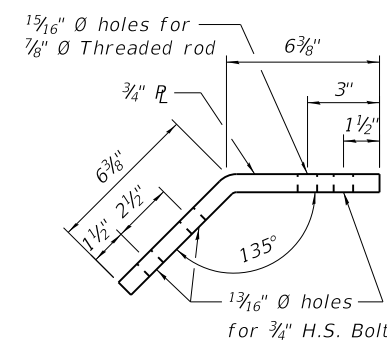
(Look thru Buttress wall, Reinforcement not shown for clarity)
 (7/8" Ø Threaded rods are detailed on Structural Sheets 5 & 8 of 14)



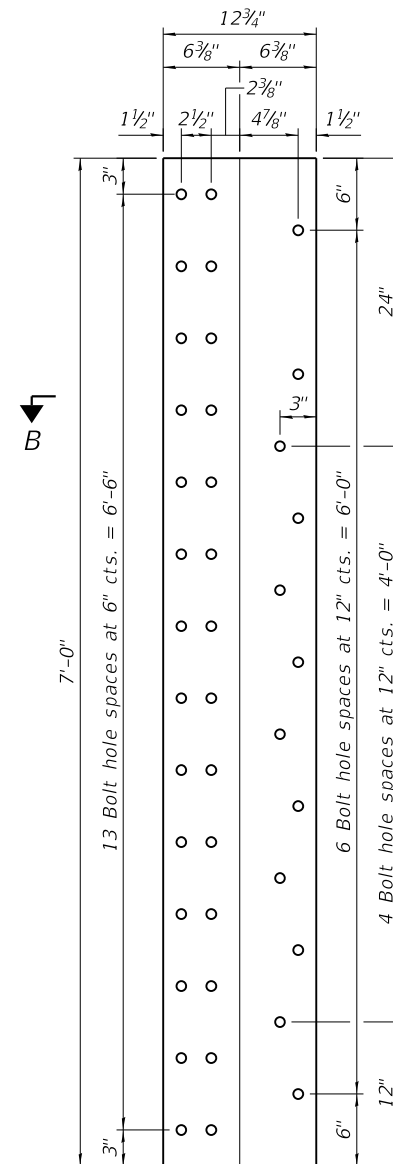
DETAIL "A"
 (At Bottom of Bottom Slab)



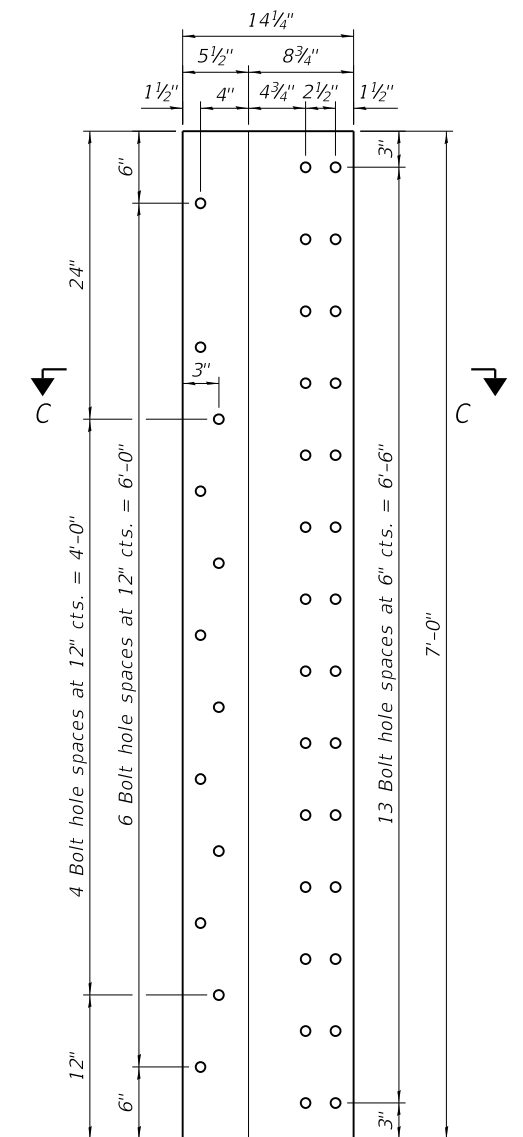
DETAIL "B"
 (At Bottom of Bottom Slab)



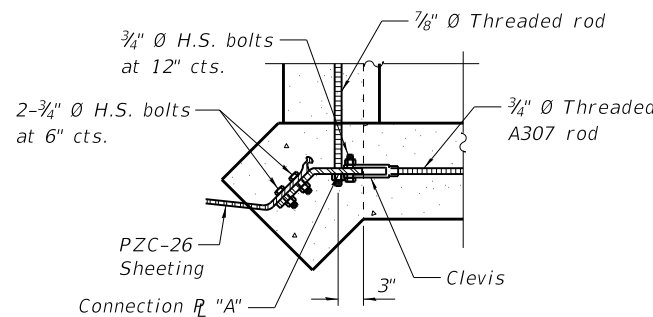
SECTION B-B



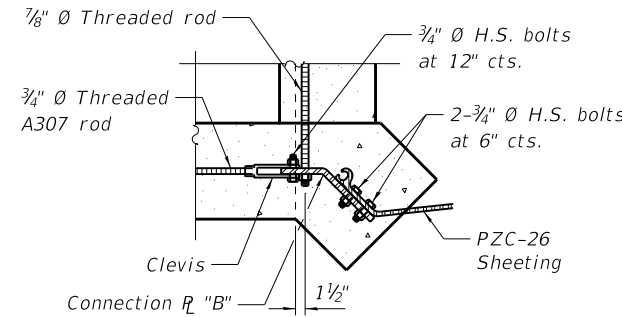
Connection R "A"



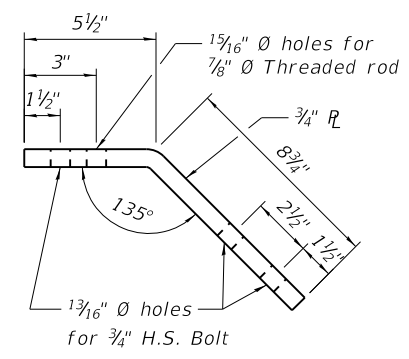
Connection R "B"



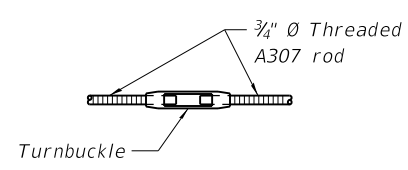
DETAIL "A"
 (In Buttress Wall)



DETAIL "B"
 (In Buttress Wall)



SECTION C-C



DETAIL "C"
 (In Buttress Wall, 7 Locations)

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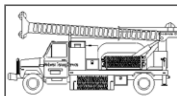


DESIGNED - BKC	REVISED -
CHECKED - EEL	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

CULVERT DETAILS - N. & S. EXTENSION SHEET PILE CONNECTION DETAILS
STRUCTURE NO. 006-5006
 SHEET NO. 9 OF 14 SHEETS

C.H. RTE. 31	SECTION 09-00230-00-BR	COUNTY BUREAU	TOTAL SHEETS 46	SHEET NO. 18
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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

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

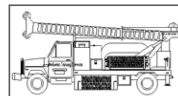
Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-BR
Project Site: Bureau County, Illinois

Boring No. B-1
Surface Elev. 732.90
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Left of Station 20+60

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
732.90										Randy Safranski Diedrich D-120	
731.90			1								
730.90			2								
729.90	Medium Brown Clay Mixed With Sand And Gravel (Fill)		3	1	SS	---	15	---	12		
728.90			4								
727.90			5								
726.90			6	2	SS	---	12	---	15		
725.90			7								
724.90			8	3	SS	1.8	14	S	15		
723.90	Stiff Brown And Black Clay (Fill)		9								
722.90			10	4	SS	1.8	12	S	17		
721.90			11								
720.90			12								
719.90			13	5	SS	1.6	12	S	18		
718.90			14								
717.90			15	6	SS	2.2	14	B	16		
716.90	Very Stiff Brownish Gray Clay (Fill)		16								
715.90			17								
714.90			18	7	SS	2.1	13	B	17		
713.90			19								
712.90			20	8	SS	2.4	15	B	16		
	Very Stiff Black Clay Mixed With Gravel										

Groundwater Data: Static water after auger removal - Elevation 702.0
Comments:

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

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

Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-
Project Site: Bureau County, Illinois

Boring No. B-1
Surface Elev. 732.90
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Left of Station 20+60

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
711.90										Randy J. Safranski Diedrich D-120	
710.90			22								
709.90	Very Stiff Black Clay Mixed With Gravel (Possible Fill)		23	9	SS	2.0	12	S	18		
708.90			24								
707.90	Loose Brown Fine Sand		25								
706.90			26	10	SS	---	9	---	13		
705.90			27								
704.90			28	11	SS	2.8	15	S	13		
703.90	Very Stiff Gray Clay Till		29								
702.90			30	12	SS	3.1	16	S	13		
701.90			31								
700.90			32								
699.90			33	13	SS	3.3	15	S	12		
698.90			34								
697.90	Stiff Brownish Gray Clay Till		35	14	SS	1.2	7	B	18		
696.90			36								
695.90			37								
694.90			38								
693.90	Medium Gray Silty Sand		39								
692.90			40	15	SS	---	26	---	---		
691.90			41								

Groundwater Data: Static water after auger removal - Elevation 702.0
Comments:

FILE : S:\PROJECTS\2015\1143015.BCH\DESIGN\STRUCT\20-Dr-Log\1143015_Soil Borings.dgn



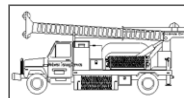
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CHECKED - EEL	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

**SOIL BORINGS
STRUCTURE NO. 006-5006**

SHEET NO. 10 OF 14 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	19
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



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

BORING LOG

Sheet 3 of 5

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

Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-BR
Project Site: Bureau County, Illinois

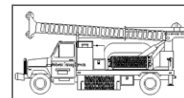
Boring No. B-1
Surface Elev. 732.90
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Left of Station 20+60

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						Dry Density (PCF)	DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		REMARKS
690.90										Randy J. Safranski Diedrich D-120	
689.90			43								
688.90			44								
687.90			45	16	SS	2.7	20	B	15		
686.90			46								
685.90			47								
684.90			48								
683.90			49								
682.90			50	17	SS	3.0	23	B	14		
681.90			51								
680.90			52								
679.90			53								
678.90	Very Stiff Brownish Gray Clay Till		54								
677.90			55								
676.90			56	18	SS	3.4	23	B	14		
675.90			57								
674.90			58								
673.90			59								
672.90			60								
671.90			61	19	SS	3.2	21	B	14		
670.90			62								

Groundwater Data: Static water after auger removal - Elevation 702.0

Comments:



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

BORING LOG

Sheet 4 of 5

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

Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-BR
Project Site: Bureau County, Illinois

Boring No. B-1
Surface Elev. 732.90
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Left of Station 20+60

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						Dry Density (PCF)	DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		REMARKS
669.90										Randy J. Safranski Diedrich D-120	
668.90			64								
667.90	Very Stiff Light Brown Gravelly Clay Till		65	20	SS	2.1	12	B	15		
666.90			66								
665.90			67								
664.90			68								
663.90			69								
662.90			70	21	SS	---	32	---	16		
661.90			71								
660.90	Dense Brownish Gray Clay Till With Silt And Sand Seams		72								
659.90			73								
658.90			74								
657.90			75	22	SS	---	31	---	17		
656.90			76								
655.90			77								
654.90			78								
653.90			79								
652.90			80	23	SS	---	34	---	16		
651.90			81								
650.90			82								
649.90	Very Stiff Tan And Brownish Gray Silty Clay Loam Till		83								

Groundwater Data: Static water after auger removal - Elevation 702.0

Comments:

FILE: S:\PROJECTS\2015\1143015.BCH\DESIGN\STRUCT\20-Dr-00-rings\1143015_Soil_Borings.dgn



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CHECKED - EEL
DRAWN - FDL
CHECKED - BKC

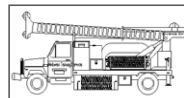
REVISED -
REVISED -
REVISED -
REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

**SOIL BORINGS
STRUCTURE NO. 006-5006**

SHEET NO. 11 OF 14 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	20
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



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

BORING LOG

Sheet 5 of 5

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

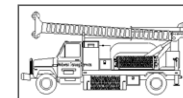
Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-BR
Project Site: Bureau County, Illinois

Boring No. B-1
Surface Elev. 732.90
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Left of Station 20+60

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						Dry Density (PCF)	DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		Randy J. Safranski Diedrich D-120
648.90										REMARKS	
647.90	Very Stiff Tan And Brownish Gray Silty Clay Loam Till With Gravel Seams		85	24	SS	3.8	21	B	12		
646.90			86								
645.90			87								
644.90			88								
643.90			89								
642.90			90								
641.90			91		25	SS	3.5	20	B	13	
640.90			92								
639.90			93								
638.90			94								
637.90		95									
636.90		96									
635.90		97									
634.90		98									
633.90		99									
630.90		102									
629.90		103									
628.90		104									

Groundwater Data: Static water after auger removal - Elevation 702.0
Comments:



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

BORING LOG

Sheet 1 of 5

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

Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-BR
Project Site: Bureau County, Illinois

Boring No. B-2
Surface Elev. 732.70
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Right of Station 19+82

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						Dry Density (PCF)	DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		Randy Safranski Diedrich D-120
732.70										REMARKS	
731.70	Stiff Brownish Gray And Black Clay (Fill)		1								
730.70			2								
729.70			3	1	SS	1.6	10	B	18		
728.70		4									
727.70		5									
726.70		6		2	SS	1.4	12	S	20		
725.70	Very Stiff Brownish Gray Clay (Fill)		7								
724.70			8	3	SS	1.8	12	S	18		
723.70			9								
722.70			10								
721.70			11	4	SS	2.0	14	S	15		
720.70			12								
719.70			13	5	SS	2.2	13	B	16		
718.70			14								
717.70			15								
716.70			16	6	SS	2.2	13	B	16		
715.70		17									
714.70	Stiff Brownish Gray Clay (Fill)		18	7	SS	1.9	12	B	20		
713.70			19								
712.70			20	8	SS	1.6	13	S	18		

Groundwater Data: Static water after auger removal - Elevation 705.0
Comments:

FILE: S:\PROJECTS\2015\1143015.BCH\DESIGN\STRUCT\20-Dr-001.rvt; 11/4/2015 5:01:14 PM; 1143015_S01_Borings.dgn



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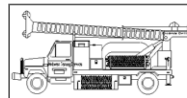
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REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

**SOIL BORINGS
STRUCTURE NO. 006-5006**

SHEET NO. 12 OF 14 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	21
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



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

BORING LOG

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

Sheet 2 of 5

Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-
Project Site: Bureau County, Illinois

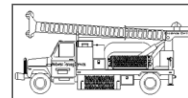
Boring No. B-2
Surface Elev. 732.70
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Right of Station 19+82

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						Dry Density (PCF)	DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		Randy J. Safranski Diedrich D-120
REMARKS											
711.70											
710.70	Very Stiff Brownish Gray Clay (Fill)		22								
709.70			23	9	SS	2.1	13	B	17		
708.70			24								
707.70			25	10	SS	---	13	---	16		
706.70			26								
705.70			27								
704.70			28	11	SS	3.2	15	B	15		
703.70			29								
702.70	Very Stiff Gray To Brownish Gray Clay Till		30	12	SS	2.7	14	B	16		
701.70			31								
700.70			32								
699.70			33	13	SS	2.6	14	B	16		
698.70			34								
697.70			35	14	SS	2.4	12	B	17		
696.70			36								
695.70			37								
694.70			38								
693.70			39								
692.70	Very Stiff Brownish Gray Clay Till		40								
691.70			41	15	SS	3.4	21	B	15		

Groundwater Data: Static water after auger removal - Elevation 705.0

Comments:



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

BORING LOG

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

Sheet 3 of 5

Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-BR
Project Site: Bureau County, Illinois

Boring No. B-2
Surface Elev. 732.70
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Right of Station 19+82

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						Dry Density (PCF)	DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		Randy J. Safranski Diedrich D-120
REMARKS											
690.70											
689.70			43								
688.70			44								
687.70			45	16	SS	2.7	18	B	15		
686.70			46								
685.70			47								
684.70			48								
683.70			49								
682.70			50								
681.70	Very Stiff Brownish Gray Clay Till		51	17	SS	2.9	20	B	14		
680.70			52								
679.70			53								
678.70			54								
677.70			55								
676.70			56	18	SS	2.5	18	B	16		
675.70			57								
674.70			58								
673.70			59								
672.70			60								
671.70			61	19	SS	2.6	16	B	16		
670.70			62								

Groundwater Data: Static water after auger removal - Elevation 705.0

Comments:

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DRAWN - FDL
CHECKED - BKC

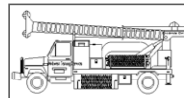
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REVISED -
REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

**SOIL BORINGS
STRUCTURE NO. 006-5006**

SHEET NO. 13 OF 14 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	22
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				



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

BORING LOG

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

Sheet 4 of 5

Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-BR
Project Site: Bureau County, Illinois

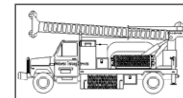
Boring No. B-2
Surface Elev. 732.70
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Right of Station 19+82

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						Dry Density (PCF)	DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		Randy J. Safranski Diedrich D-120
669.70										REMARKS	
668.70	Very Stiff Light Brown Gravely Clay Till		64								
667.70			65	20	SS	2.3	14	B	16		
666.70			66								
665.70			67								
664.70			68								
663.70			69								
662.70	Dense Brown Fine Sand And Silt Seams		70	21	SS	---	38	---	---		
661.70			71								
660.70			72								
659.70			73								
658.70			74								
657.70			75	22	SS	---	31	---	---		
656.70	Very Stiff Tan And Brownish Clay Silty Clay Loam With Till Gravel Seams		76								
655.70			77								
654.70			78								
653.70			79								
652.70			80	23	SS	3.7	20	B	13		
651.70			81								
650.70			82								
649.70			83								

Groundwater Data: Static water after auger removal - Elevation 705.0

Comments:



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

BORING LOG

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

Sheet 5 of 5

Client: Willet Hofmann & Associates, Inc
Project Name: C.H. 31 Over Crow Creek, Section 09-00230-00-BR
Project Site: Bureau County, Illinois

Boring No. B-2
Surface Elev. 732.70
Auger Depth 91' Rotary Depth NA
Start Date 10/01/16 Finish Date 10/01/16

Location: 12' Right of Station 19+82

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						Dry Density (PCF)	DRILLED BY
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		Randy J. Safranski Diedrich D-120
648.70										REMARKS	
647.70	Very Stiff Tan And Brownish Gray Silty Clay Loam Till With Gravel Seams		85								
646.70			86	24	SS	3.0	18	B	12		
645.70			87								
644.70			88								
643.70			89								
642.70			90								
641.70	Boring Terminated		91	25	SS	3.7	22	B	11		
640.70			92								
639.70			93								
638.70			94								
637.70			95								
636.70			96								
635.70			97								
634.70			98								
633.70			99								
632.70			100								
631.70			101								
630.70			102								
629.70			103								
628.70			104								

Groundwater Data: Static water after auger removal - Elevation 705.0

Comments:

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CHECKED - EEL
DRAWN - FDL
CHECKED - BKC

REVISED -
REVISED -
REVISED -
REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

**SOIL BORINGS
STRUCTURE NO. 006-5006**

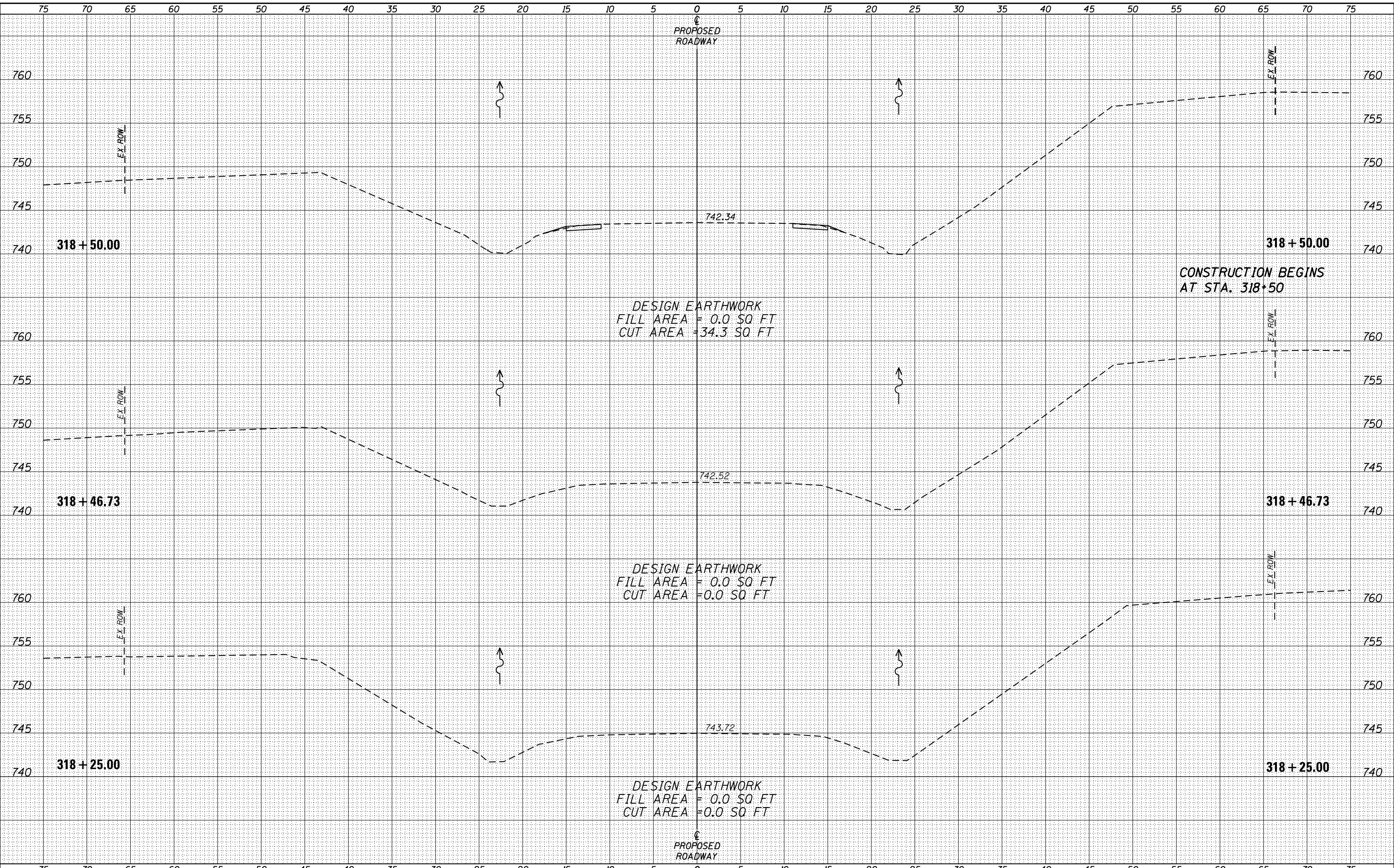
SHEET NO. 14 OF 14 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	23
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
NO.	
FINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	
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PLOTTED	
TEMPLATE	
AREAS CHECKED	
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ORIGINAL SURVEY	
NOTE BOOK	
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WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - EEL	REVISED -
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DRAWN - DAN	REVISED -
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**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

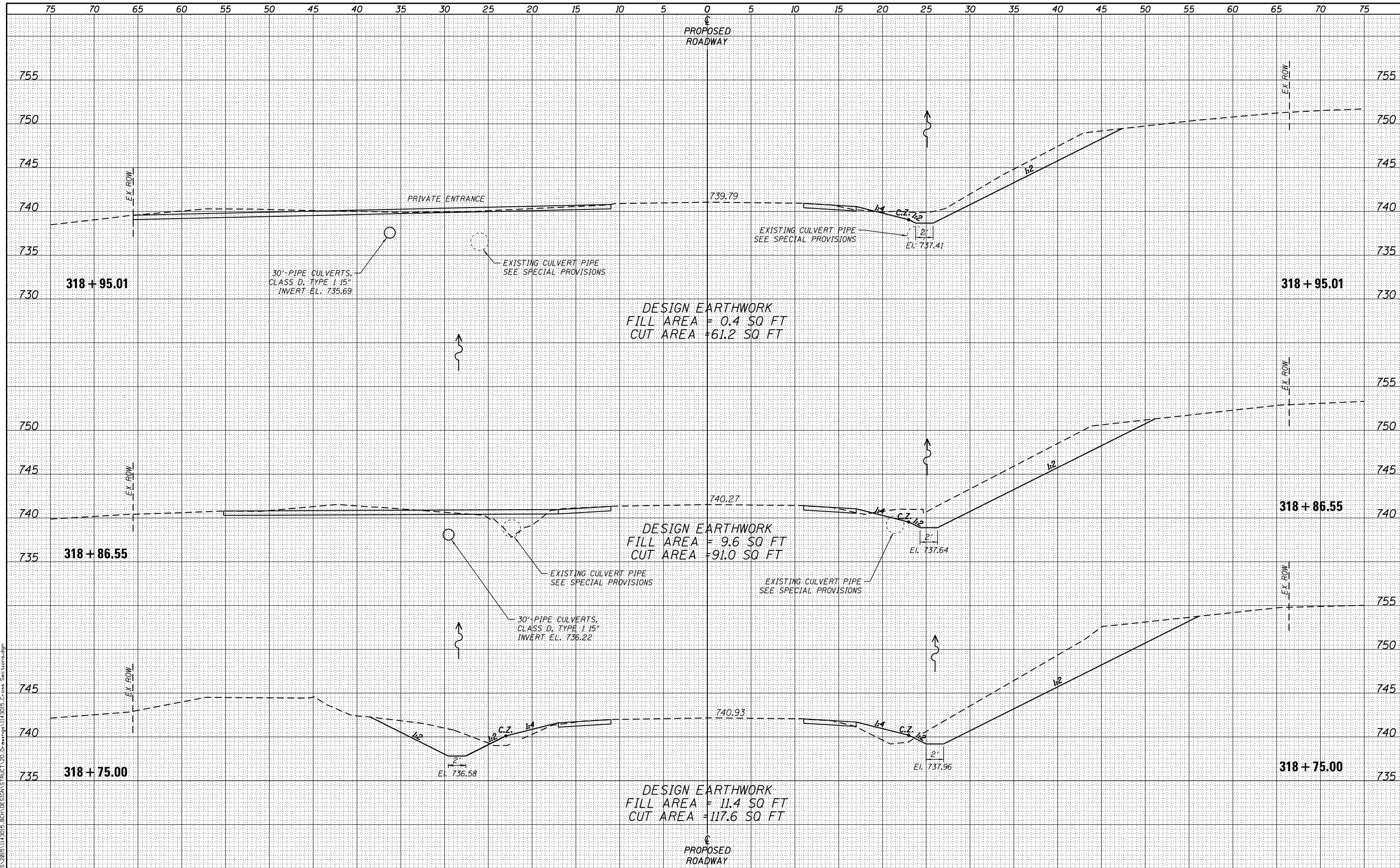
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CH. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	24
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
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ORIGINAL SURVEY	
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DESIGNED - EEL	REVISED -
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DRAWN - DAN	REVISED -
CHECKED - BKC	REVISED -

**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

SCALE: 1" = 5'-0" SHEET NO. 2 OF 16 SHEETS STA. 318+75.00 TO STA. 318+95.01

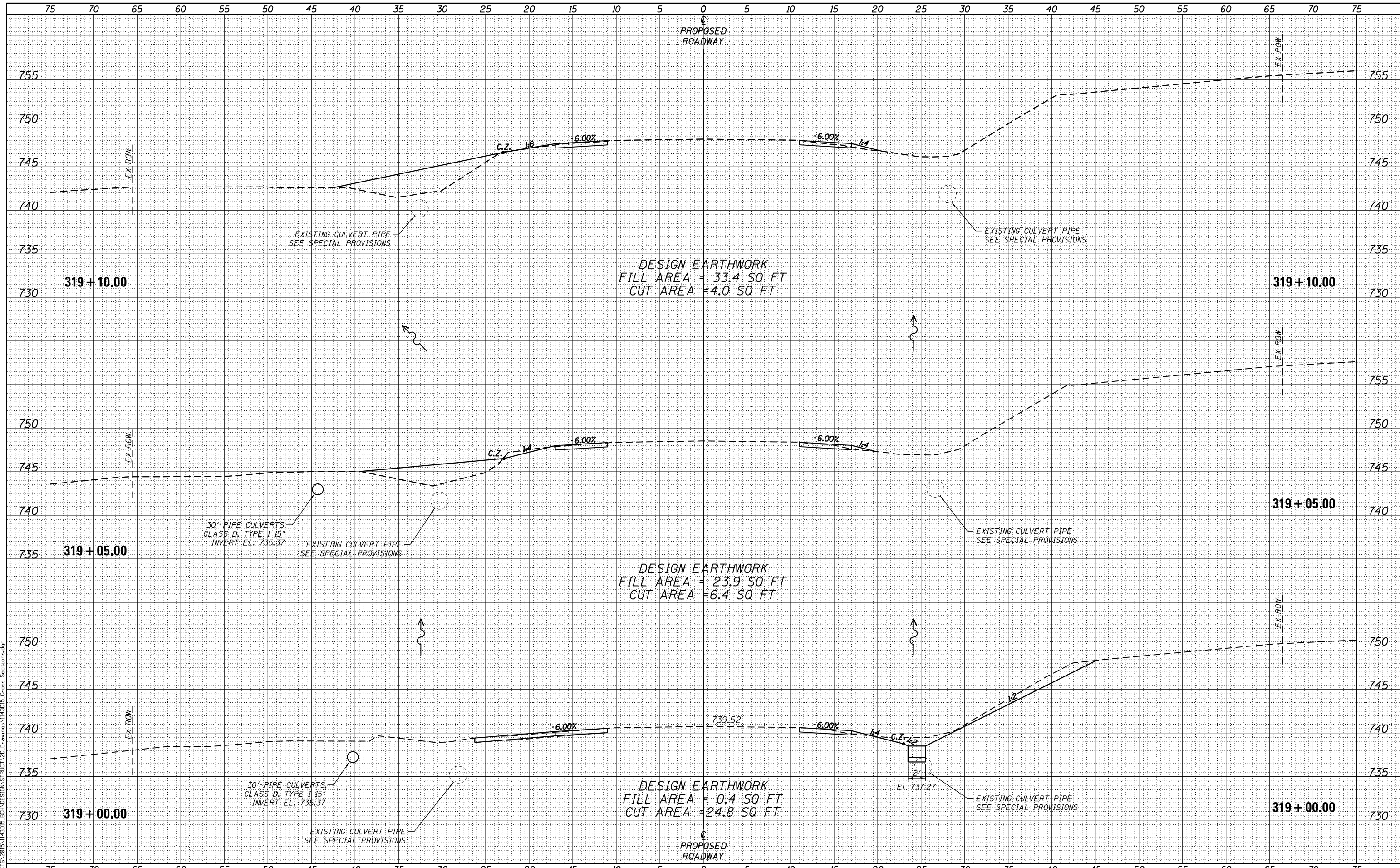
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CH. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	25
WHA# 1143015		CONTRACT NO. 87686		

ILLINOIS FED. AID PROJECT P925(634)

DATE	
BY	
ORIGINAL SURVEY	
NOTED SURVEY	
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TEMPLATE	
AREAS CHECKED	
AREAS CHECKED	

DATE	
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ORIGINAL SURVEY	
NOTED SURVEY	
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**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

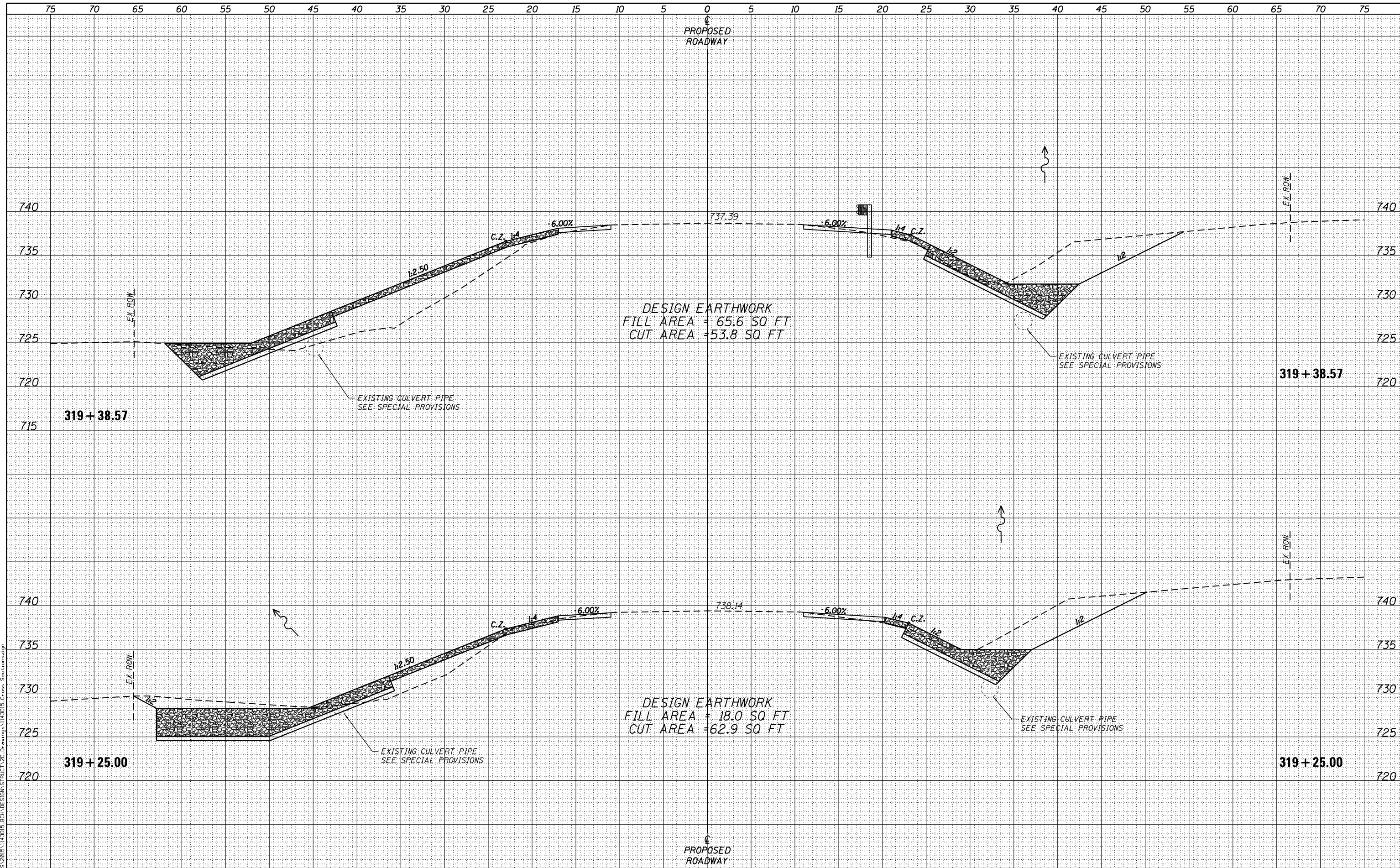
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WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P9256341				

DATE	
BY	
FINAL SURVEY	
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NOTE BOOK	
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BY	
ORIGINAL SURVEY	
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NOTE BOOK	
AREAS CHECKED	



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

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CHECKED - BKC	REVISED -
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**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

CROSS SECTIONS

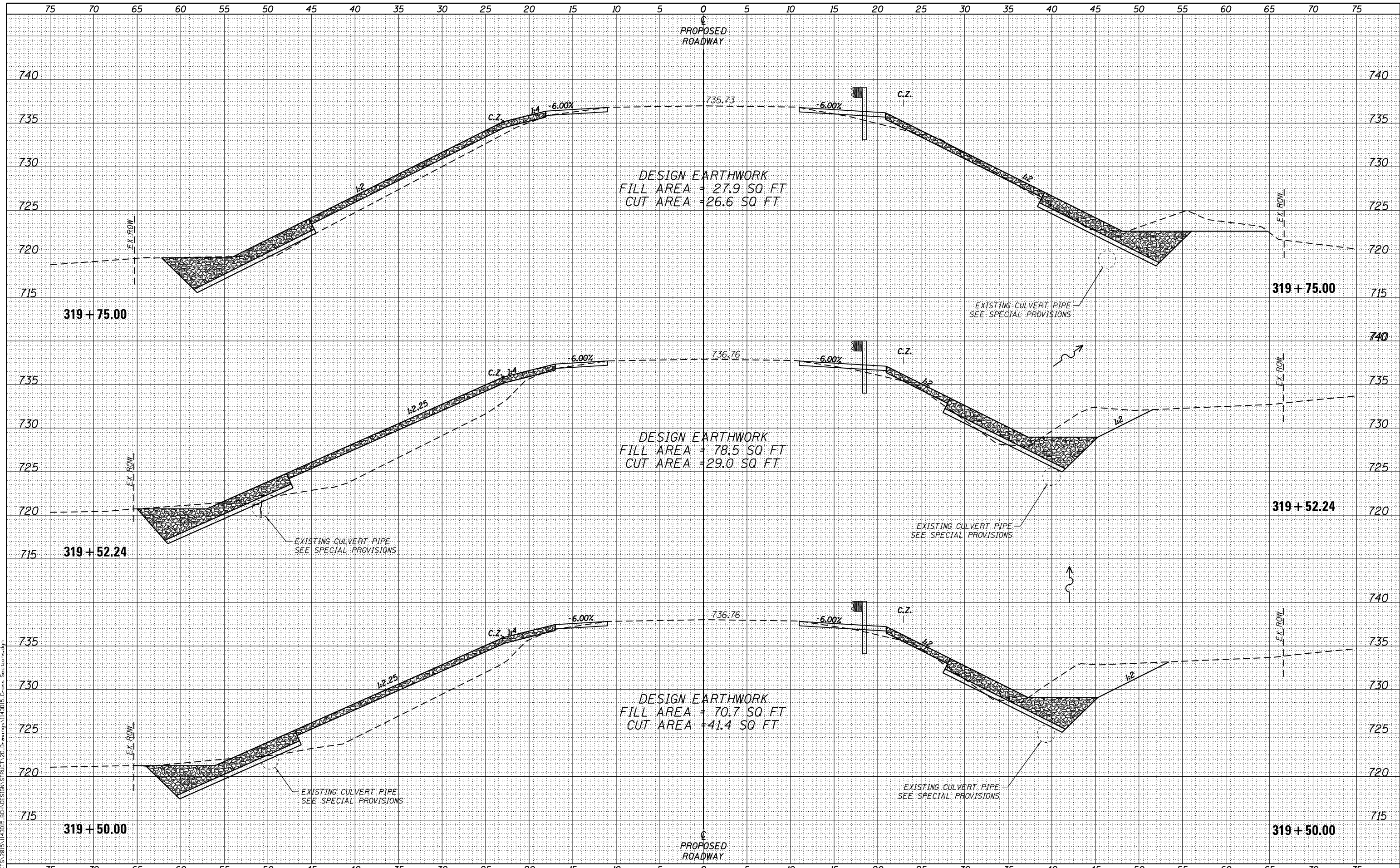
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CH RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	27
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P9256341				

DATE	
BY	
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PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
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DATE	
BY	
ORIGINAL SURVEY	
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TEMPLATE	
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WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - EEL	REVISED -
CHECKED - BKC	REVISED -
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CHECKED - BKC	REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

CROSS SECTIONS

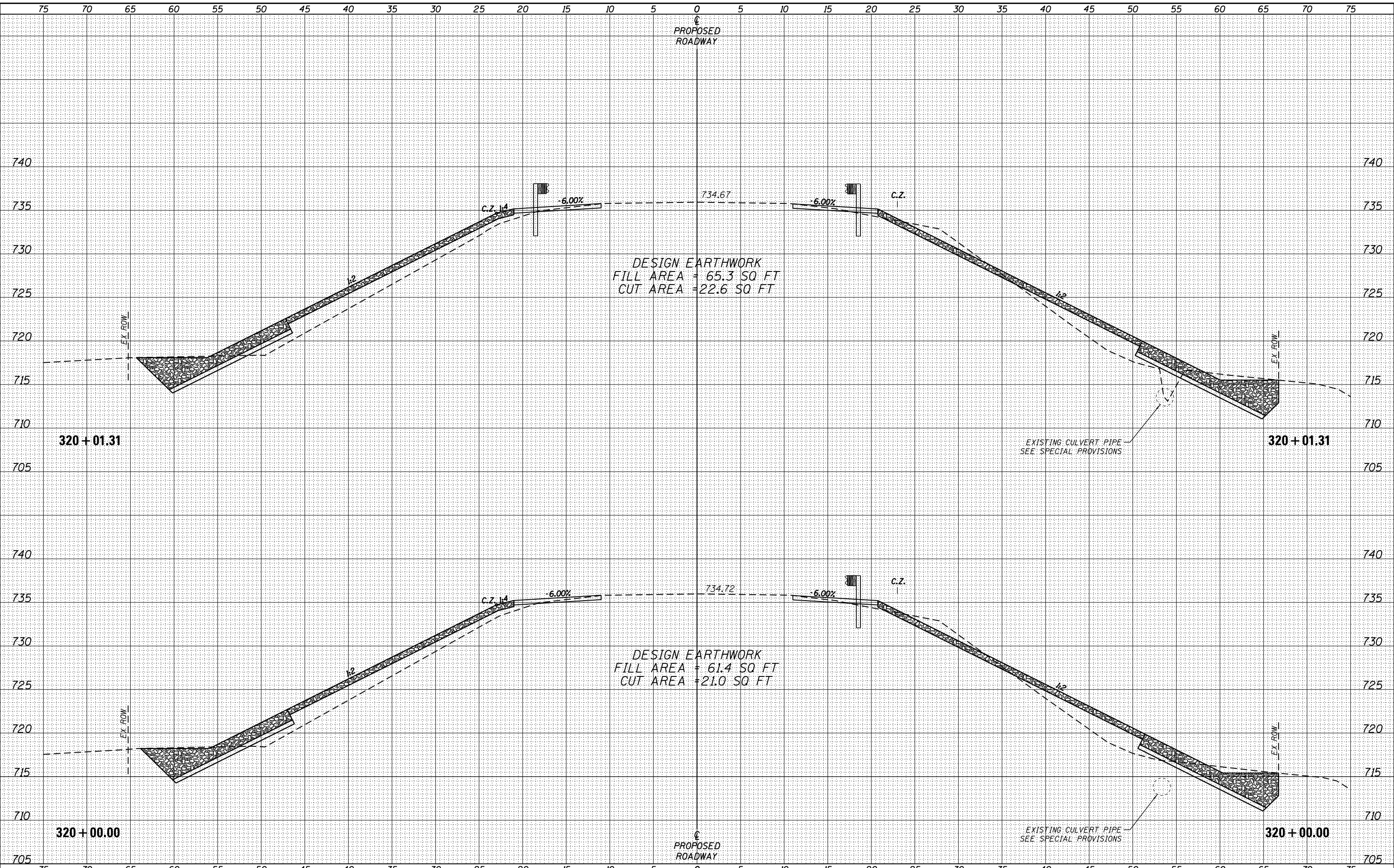
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CH RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	28
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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

DATE	
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SURVEYED	
PLOTTED	
TEMPLATE	
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NOTE BOOK	
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DESIGNED - EEL	REVISED -
CHECKED - BKC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - BKC	REVISED -

**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

CROSS SECTIONS

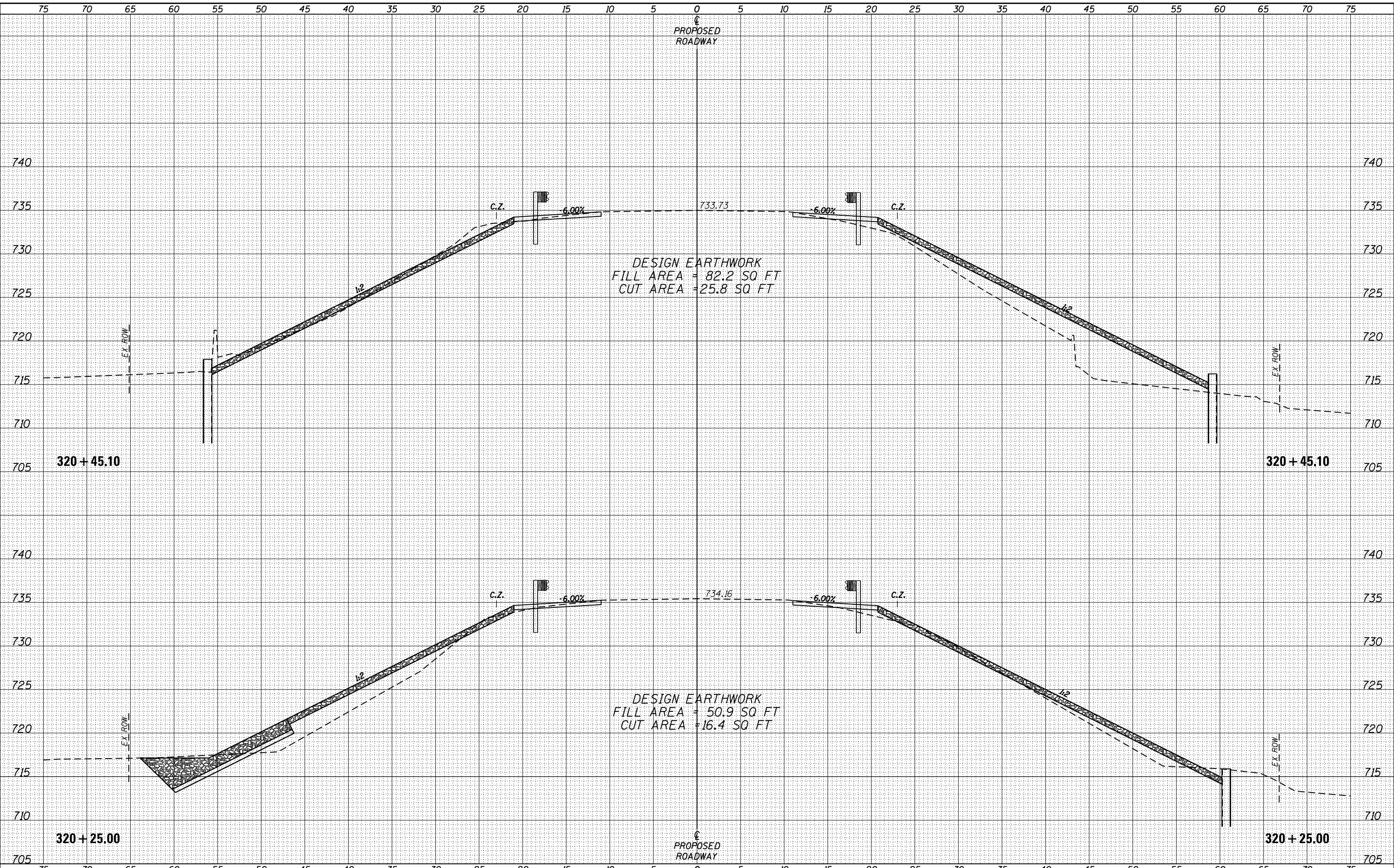
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CH RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	29
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
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SURVEYED	
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TEMPLATE	
AREAS CHECKED	

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

DESIGNED - EEL	REVISED -
CHECKED - BKC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - BKC	REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

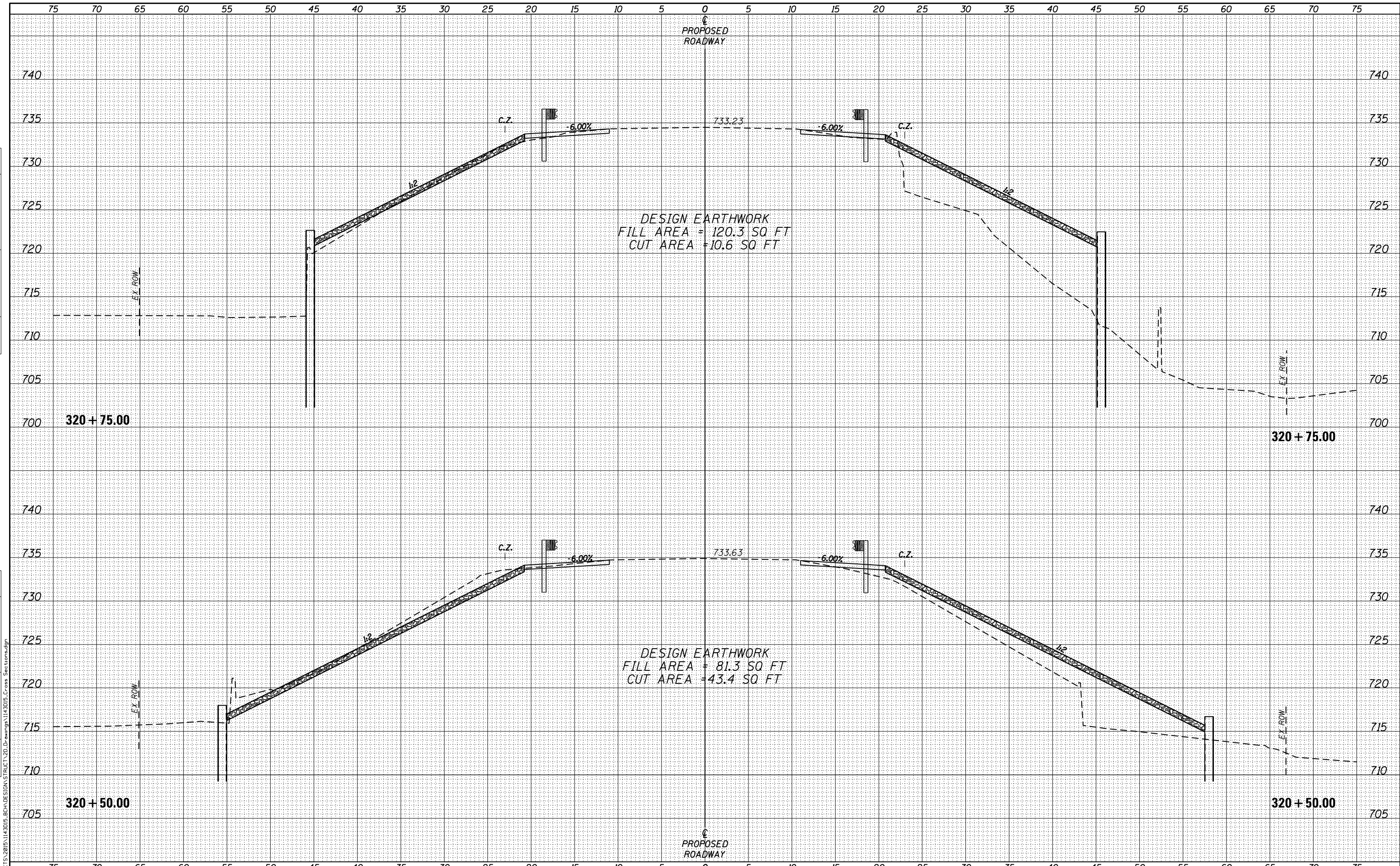
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CH. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	30
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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

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



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

DESIGNED - EEL	REVISED -
CHECKED - BKC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - BKC	REVISED -

**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

CROSS SECTIONS

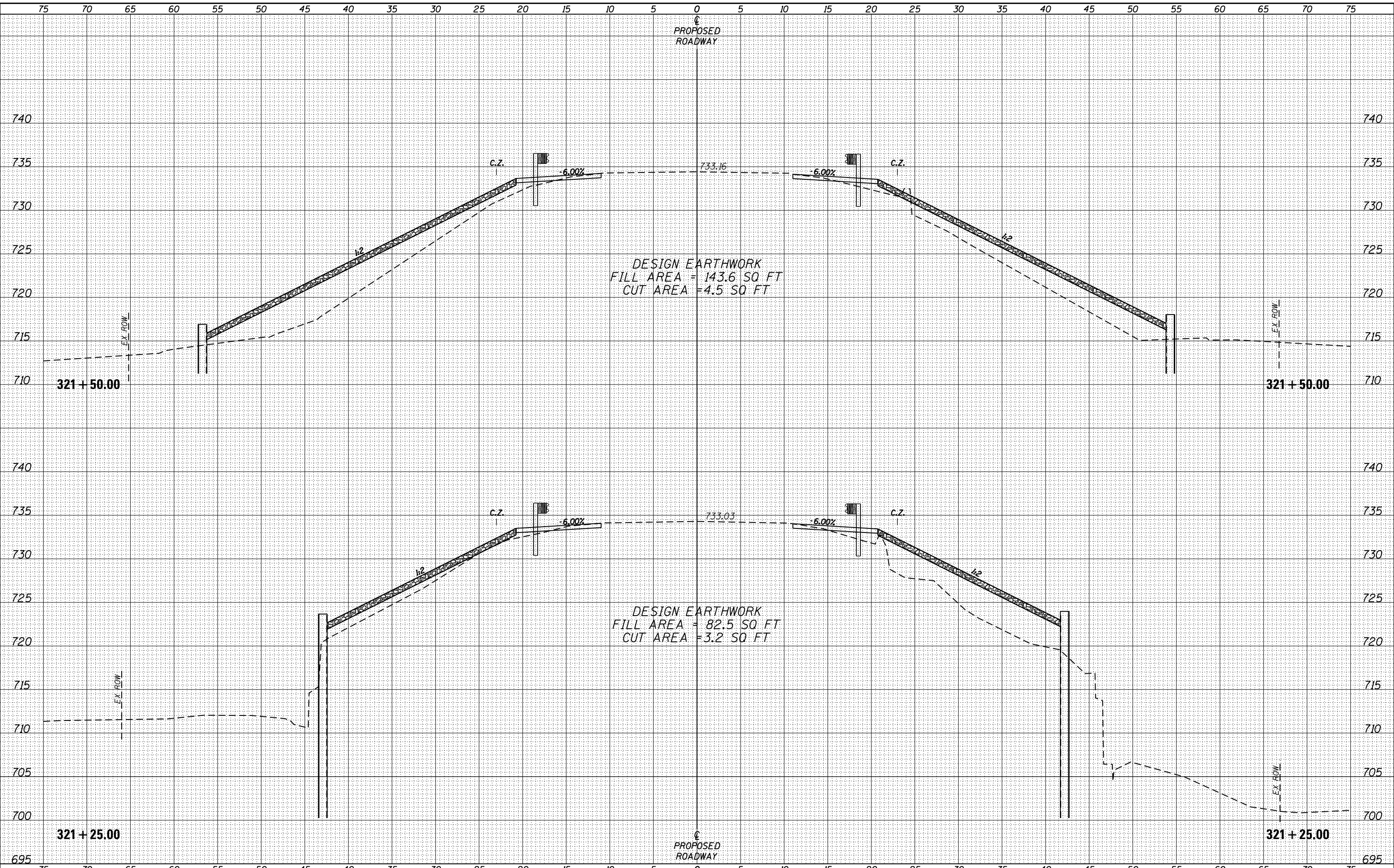
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CH. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	31
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
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FILE : S:\PROJECTS\2015\1143015_BCH\DESIGN\PROJECT\20-Drawing\1143015-Cross Sections.dgn



DESIGNED - EEL	REVISED -
CHECKED - BKC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - BKC	REVISED -

**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

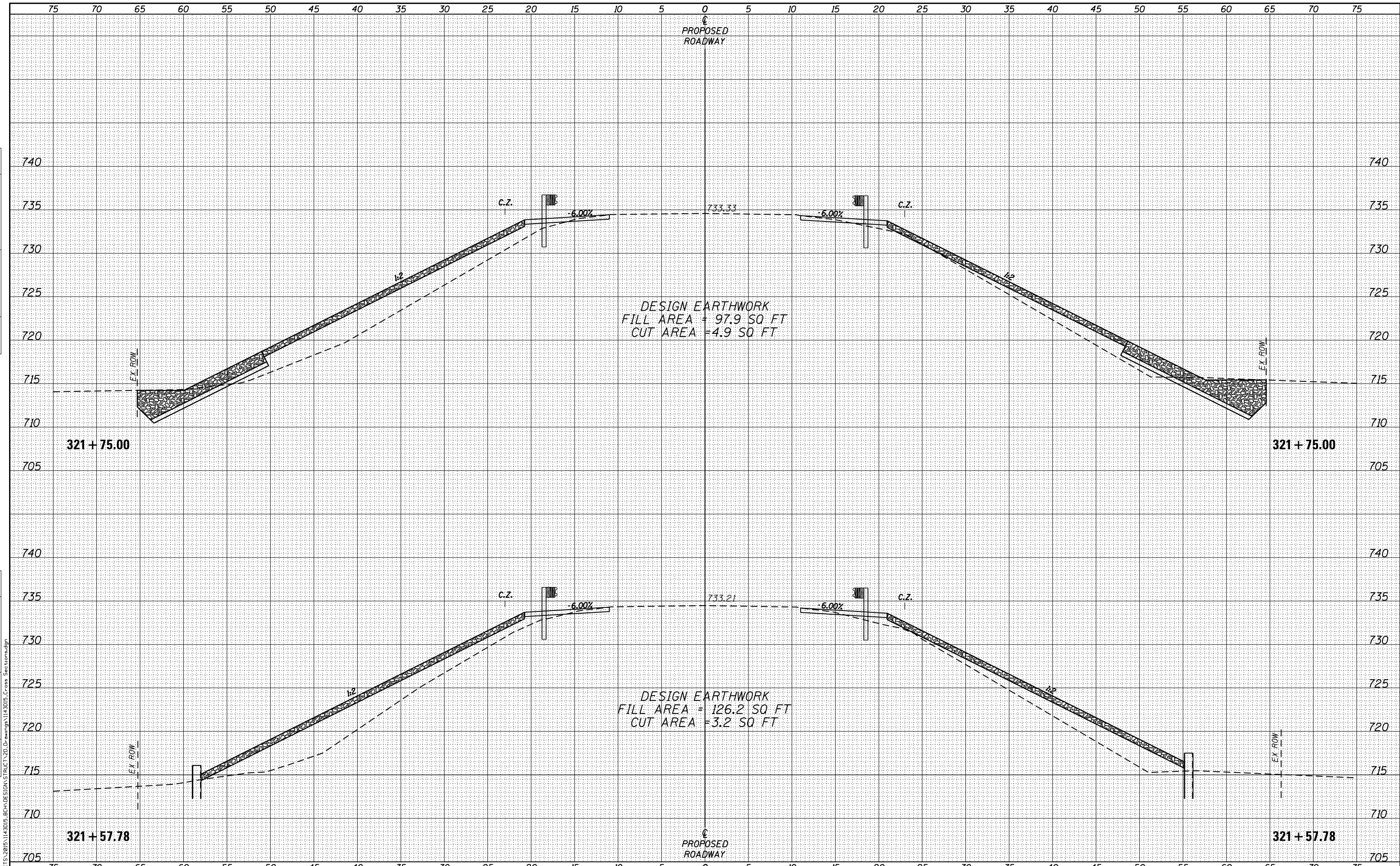
CROSS SECTIONS

SCALE: 1" = 5'-0" SHEET NO. 10 OF 16 SHEETS STA. 321+25.00 TO STA. 321+50.00

CH. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	33
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

DATE	
BY	
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TEMPLATE	
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FINAL SURVEY	
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WILLETTS HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - EEL	REVISED -
CHECKED - BKC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - BKC	REVISED -

BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02

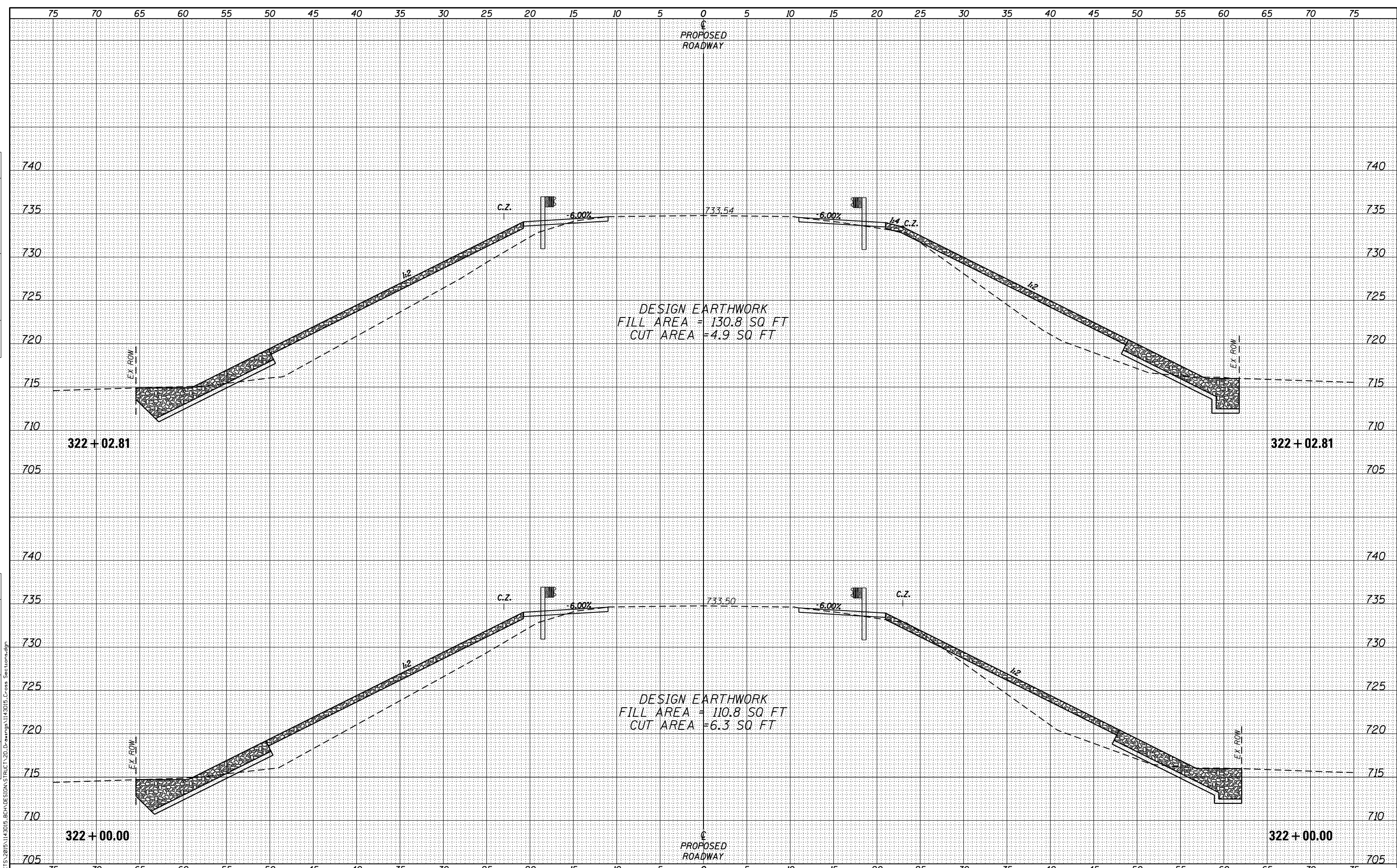
CROSS SECTIONS

SCALE: 1" = 5'-0" SHEET NO. 11 OF 16 SHEETS STA. 321+57.78 TO STA. 321+75.00

CH RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	34
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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

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



FILE : S:\PROJECTS\2015\1143015_BCH\DESIGN\PROJECT\2D\Drawings\1143015_Cross Sections.dwg

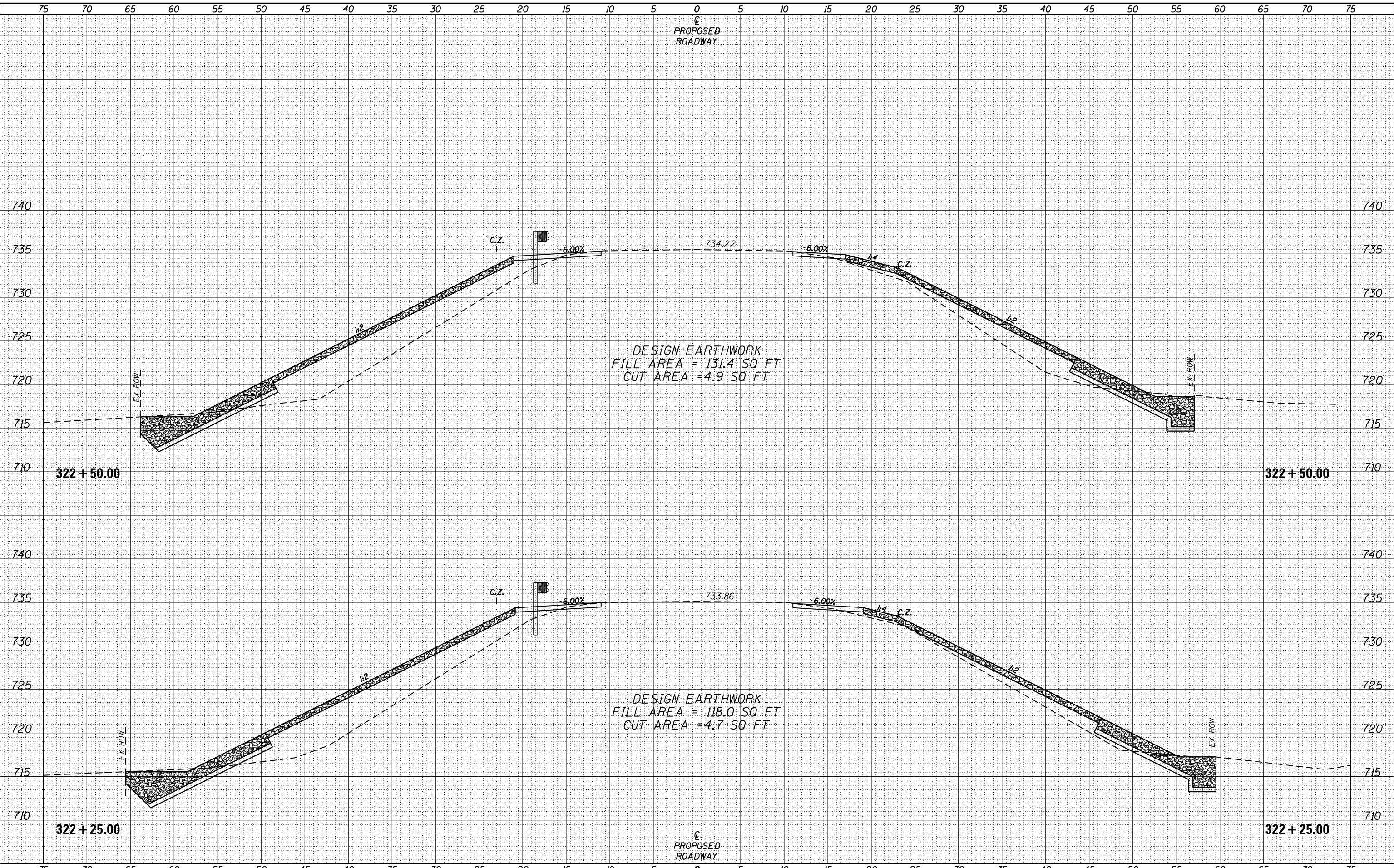
<p>WILLETTS HOFMANN & ASSOCIATES INC. ENGINEERING ARCHITECTURE LAND SURVEYING 809 EAST 2ND STREET, DIXON, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918</p>	DESIGNED - EEL	REVISED -	<p>BUREAU COUNTY CH 31 OVER CROW CREEK STATION 321+02</p>	CROSS SECTIONS		CH RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED - BKC	REVISED -		31	09-00230-00-BR	BUREAU	46	35		
DRAWN - DAN	REVISED -	WHA* 1143015			CONTRACT NO. 87686					
CHECKED - BKC	REVISED -	ILLINOIS FED. AID PROJECT P9256341								

SCALE: 1" = 5'-0" SHEET NO. 12 OF 16 SHEETS STA. 322+00.00 TO STA. 322+02.81

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
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TEMPLATE	
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DESIGNED - EEL	REVISED -
CHECKED - BKC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - BKC	REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

CROSS SECTIONS

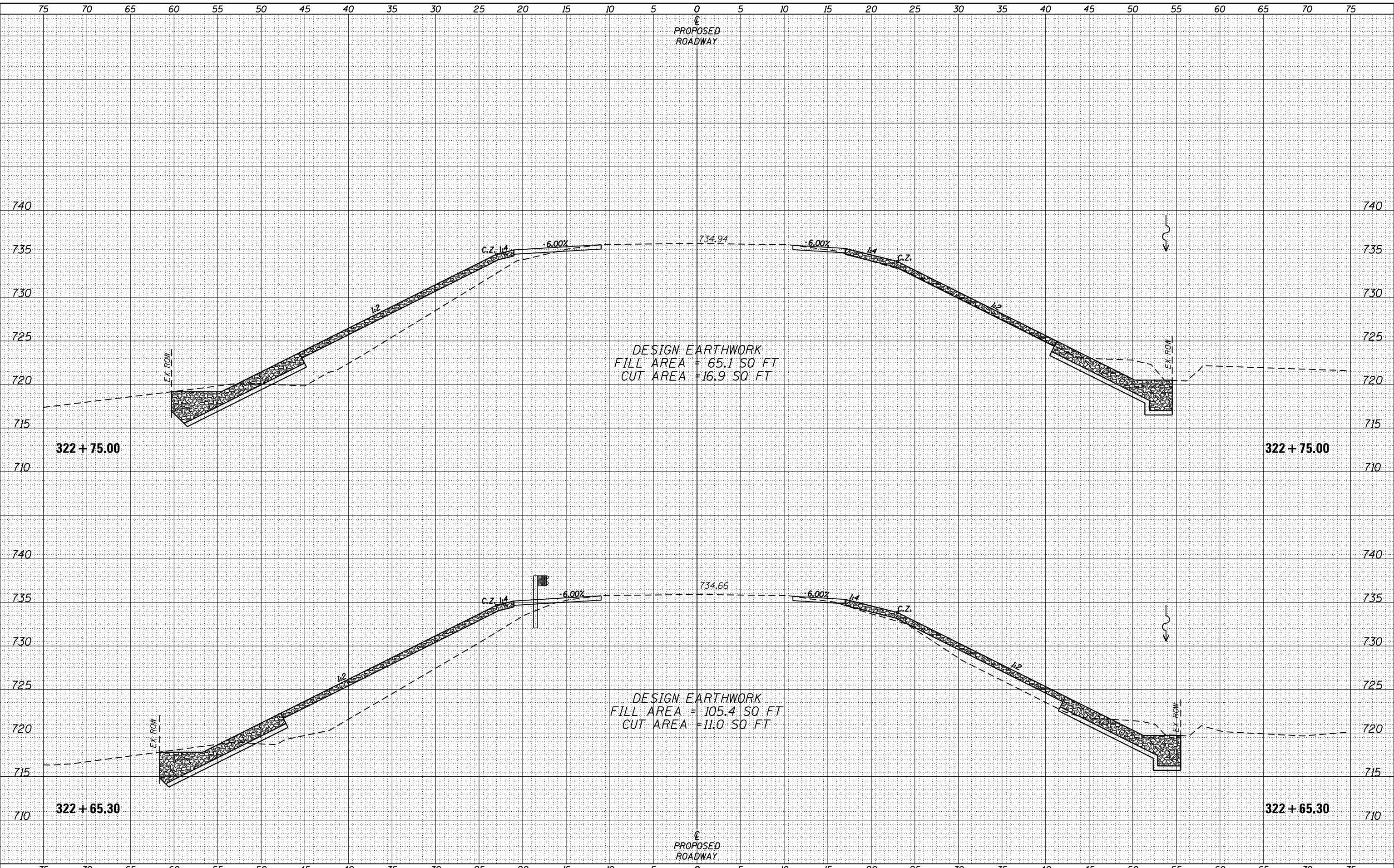
SCALE: 1" = 5'-0" SHEET NO. 13 OF 16 SHEETS STA. 322+25.00 TO STA. 322+50.00

CH RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	36
WHA* 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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

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ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
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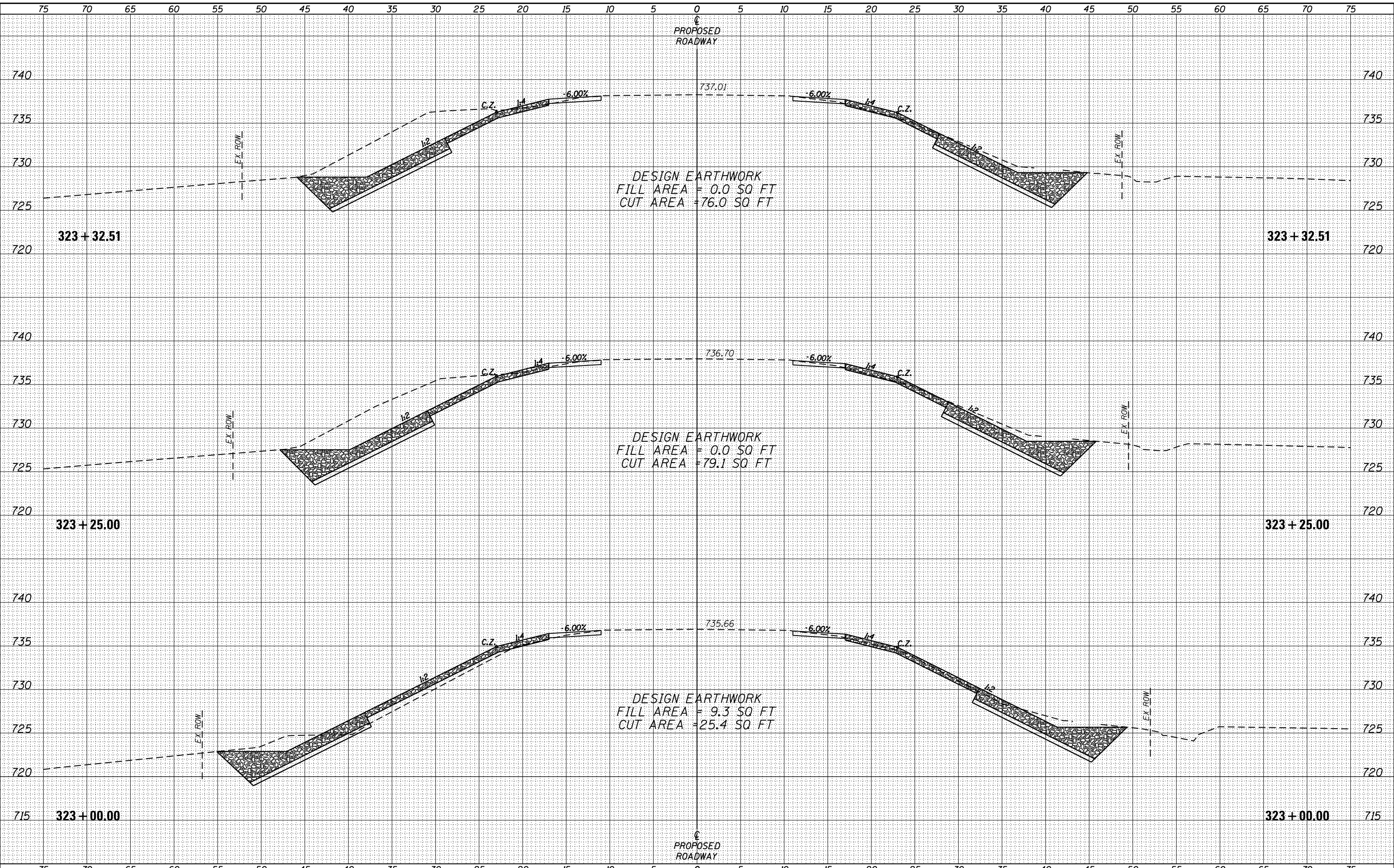


<p>WILLET HOFMANN & ASSOCIATES INC ENGINEERING ARCHITECTURE LAND SURVEYING 809 EAST 2ND STREET, DIXON, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918</p>	DESIGNED - EEL	REVISED -	<p>BUREAU COUNTY CH 31 OVER CROW CREEK STATION 321+02</p>	CROSS SECTIONS		CH	SECTION	COUNTY	TOTAL	SHEET
	CHECKED - BKC	REVISED -		31	09-00230-00-BR	BUREAU	SHEETS	46	37	
DRAWN - DAN	REVISED -	SCALE: 1" = 5'-0"		SHEET NO. 14 OF 16 SHEETS		STA. 322+65.30 TO STA. 322+75.00		CONTRACT NO. 87686		
CHECKED - BKC	REVISED -					ILLINOIS FED. AID PROJECT P925(634)				

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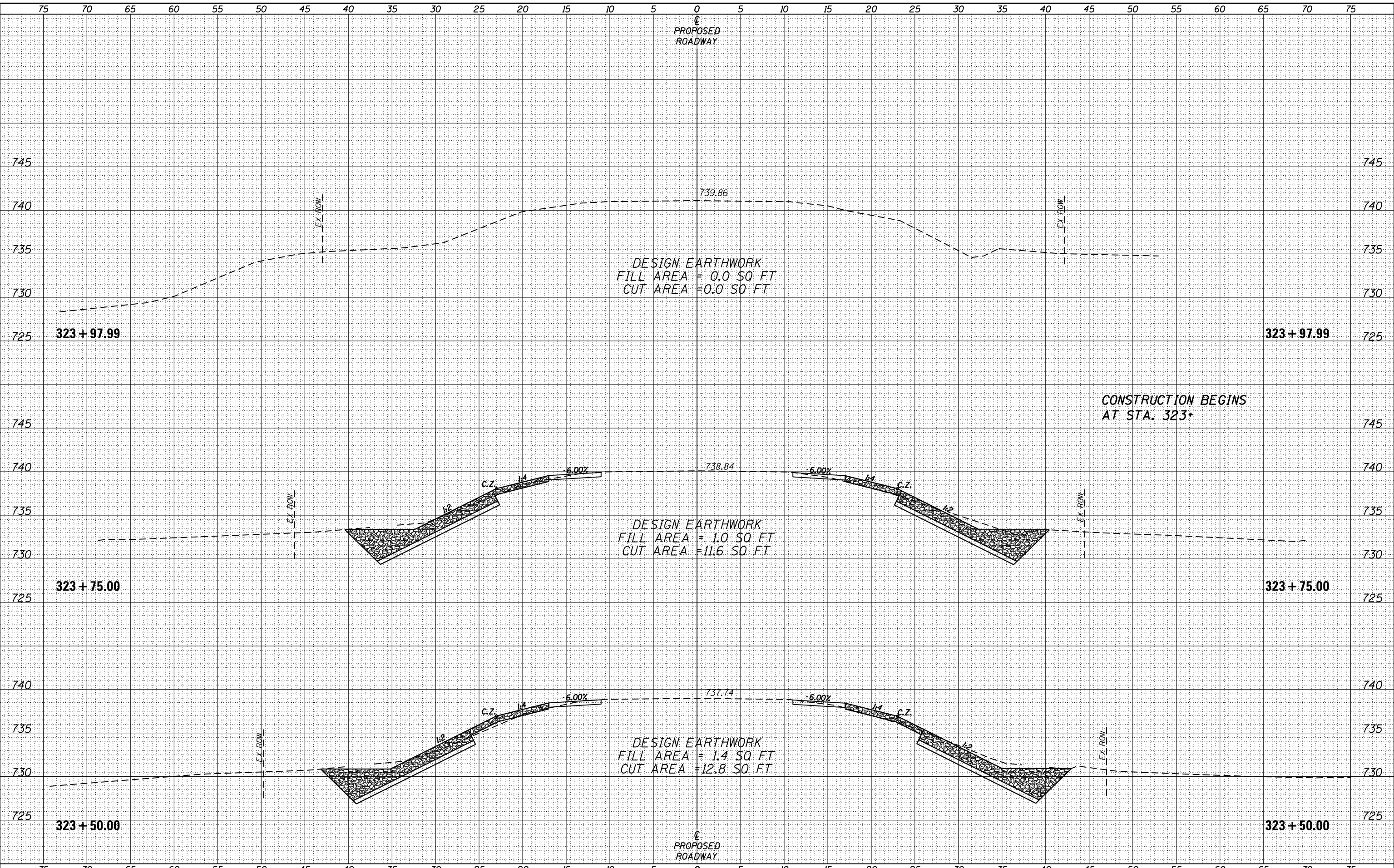


 WILLET HOFMANN & ASSOCIATES INC. ENGINEERING ARCHITECTURE LAND SURVEYING 809 EAST 2ND STREET, DIXON, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918	DESIGNED - EEL CHECKED - BKC DRAWN - DAN CHECKED - BKC	REVISED - REVISED - REVISED - REVISED -	BUREAU COUNTY CH 31 OVER CROW CREEK STATION 321+02	CROSS SECTIONS SCALE: 1" = 5'-0" SHEET NO. 15 OF 16 SHEETS STA. 323+00.00 TO STA. 323+32.51	<table border="1"> <tr> <th>CH RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td>31</td> <td>09-00230-00-BR</td> <td>BUREAU</td> <td>46</td> <td>38</td> </tr> <tr> <td colspan="2">WHA# 1143015</td> <td colspan="3">CONTRACT NO. 87686</td> </tr> <tr> <td colspan="5">ILLINOIS FED. AID PROJECT P9256341</td> </tr> </table>	CH RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	31	09-00230-00-BR	BUREAU	46	38	WHA# 1143015		CONTRACT NO. 87686			ILLINOIS FED. AID PROJECT P9256341				
	CH RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																				
31	09-00230-00-BR	BUREAU	46	38																					
WHA# 1143015		CONTRACT NO. 87686																							
ILLINOIS FED. AID PROJECT P9256341																									

DATE	
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FINAL SURVEY NO.	
NOTE BOOK NO.	

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NOTE BOOK NO.	

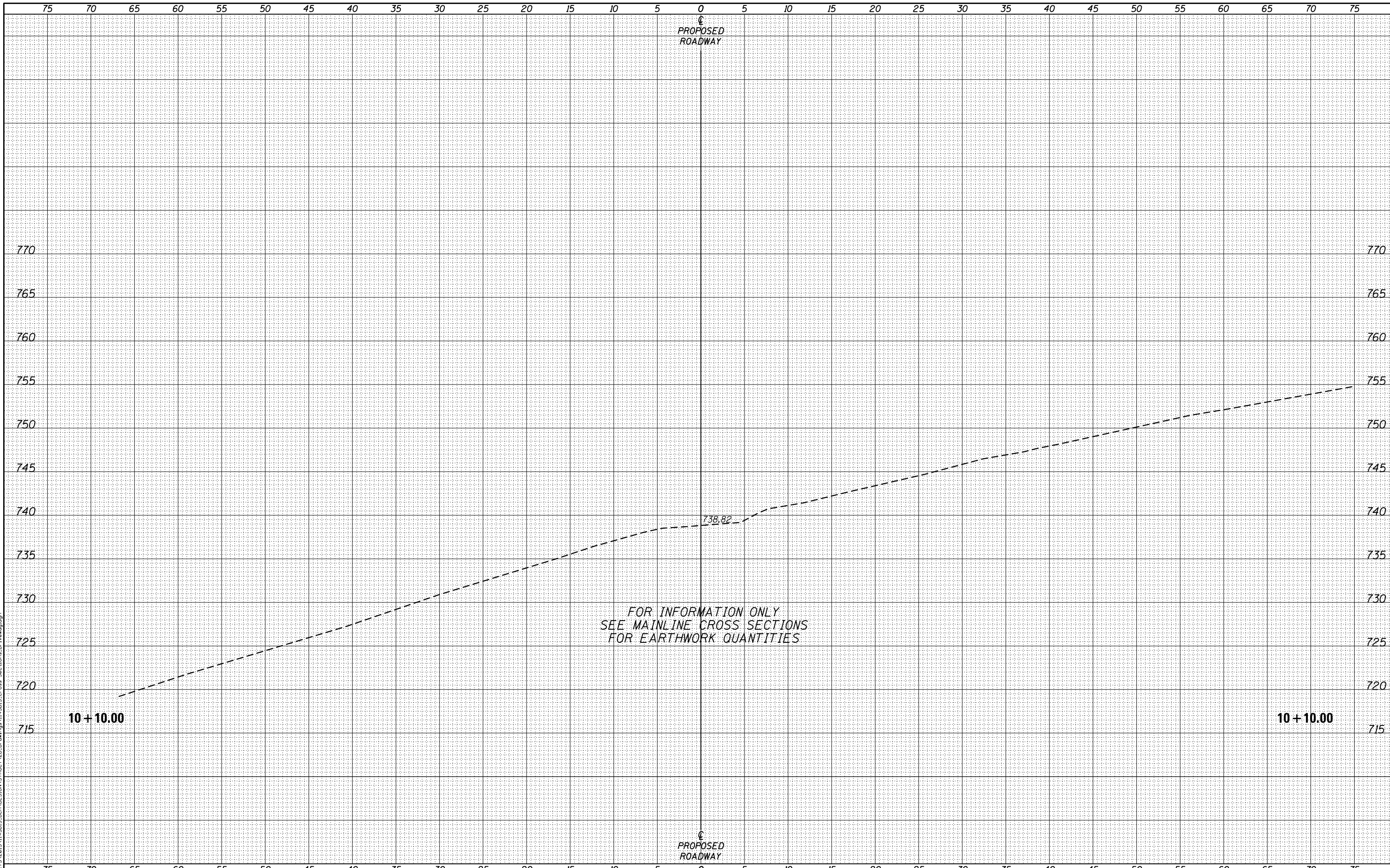
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FINAL SURVEY NOTE BOOK NO.	

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ORIGINAL SURVEY NOTE BOOK NO.	

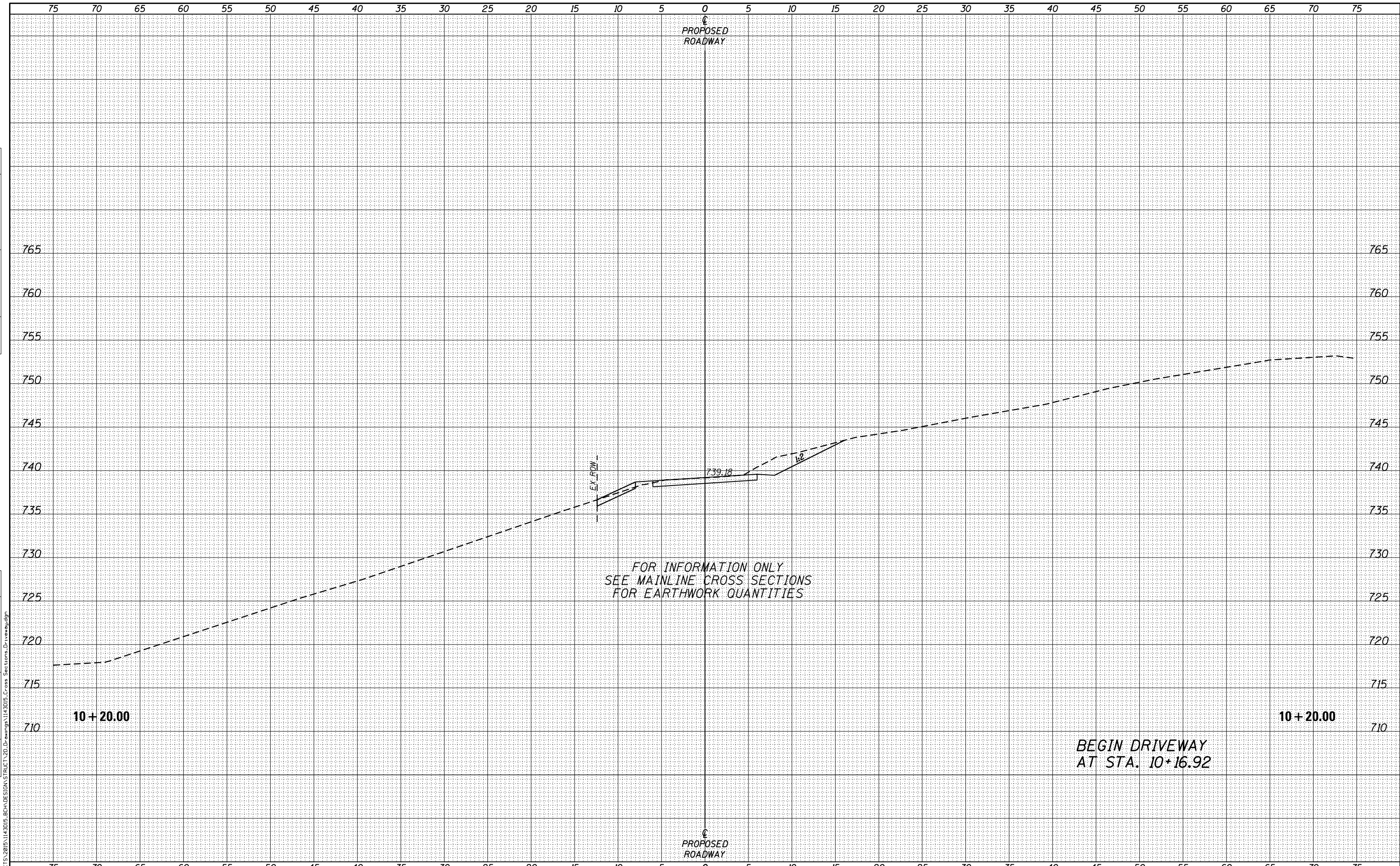
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FOR INFORMATION ONLY
SEE MAINLINE CROSS SECTIONS
FOR EARTHWORK QUANTITIES

DATE	
BY	
ORIGINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
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NOTE BOOK	
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WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - BKC	REVISED -
CHECKED - PLP	REVISED -
DRAWN - DAN	REVISED -
CHECKED - PLP	REVISED -

**BUREAU COUNTY
 CH 31 OVER CROW CREEK
 STATION 321+02**

**PRIVATE ENTRANCE CROSS SECTIONS
 P.E.L. AT STA. 318+95**

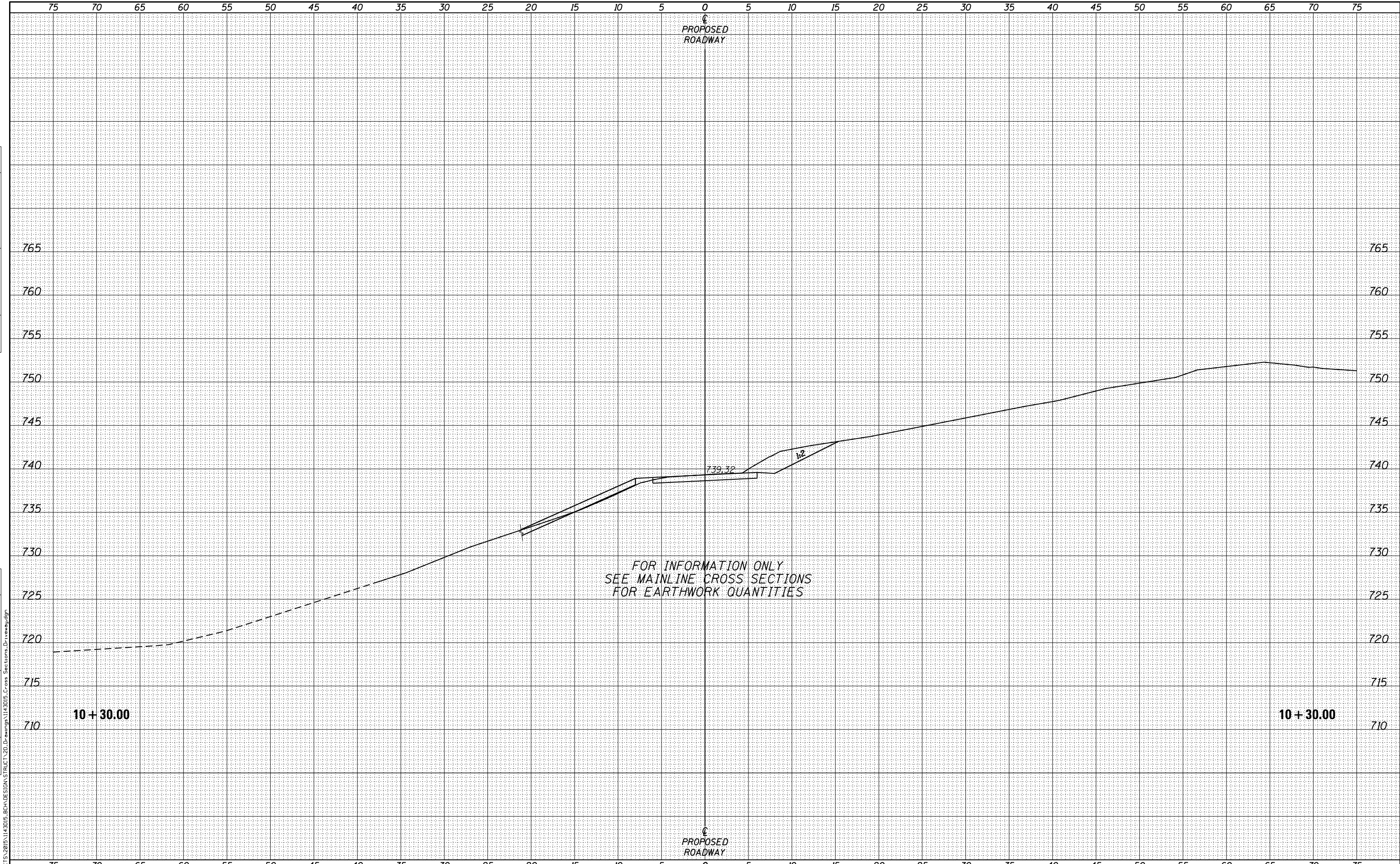
SCALE: 1" = 5'-0" SHEET NO. 2 OF 7 SHEETS STA. 10+20.00 TO STA. 10+20.00

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	41
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

FILE : S:\PROJECTS\2015\1143015.BCH\DESIGN\PROJECT\20-Drawings\1143015-Cross Sections\Drawings\1143015.dgn

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FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

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



FOR INFORMATION ONLY
SEE MAINLINE CROSS SECTIONS
FOR EARTHWORK QUANTITIES

10 + 30.00

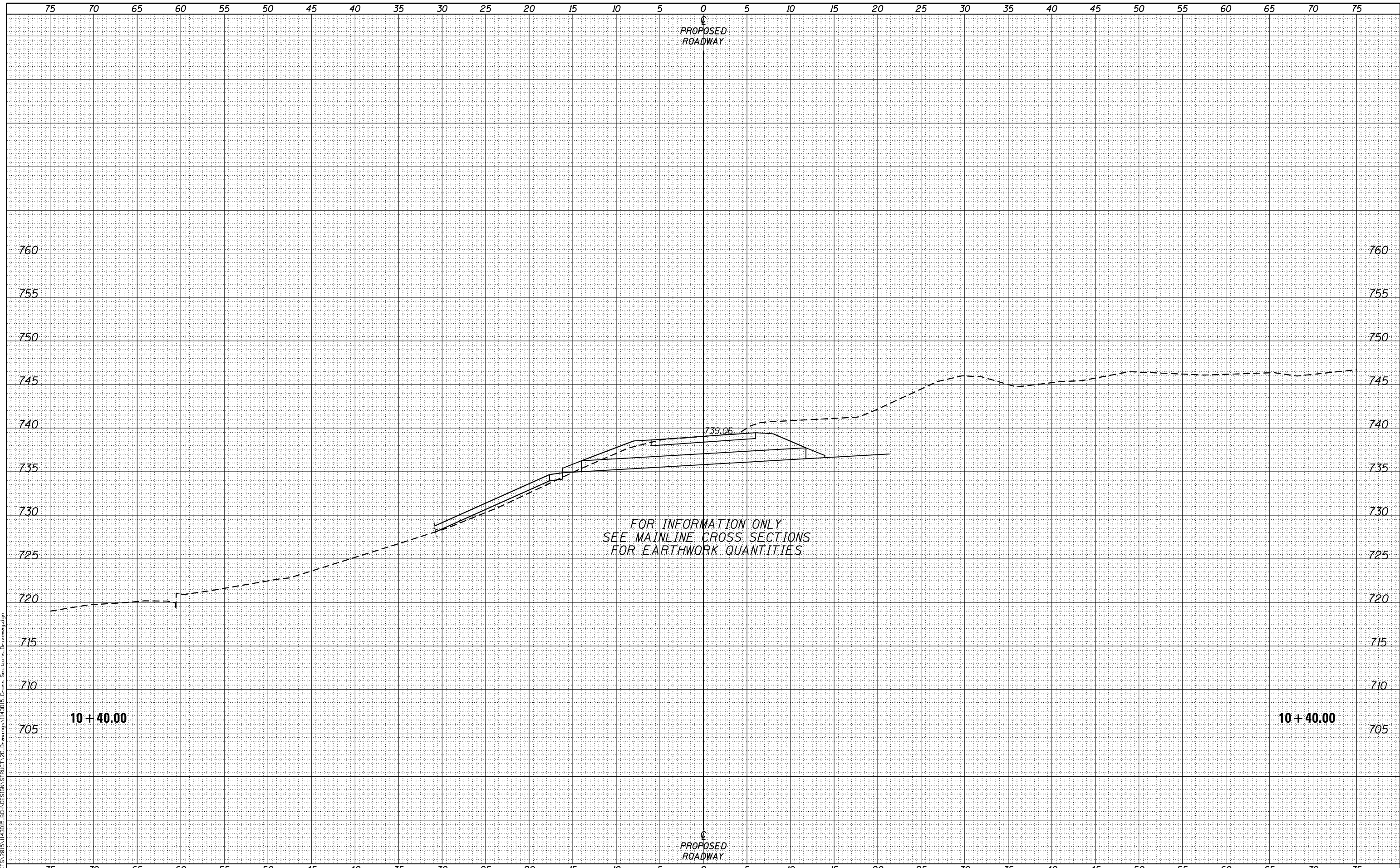
10 + 30.00

WILLET HOFMANN & ASSOCIATES INC. ENGINEERING ARCHITECTURE LAND SURVEYING 809 EAST 2ND STREET, DIXON, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918		DESIGNED - BKC CHECKED - PLP DRAWN - DAN CHECKED - PLP	REVISED - REVISED - REVISED - REVISED -	BUREAU COUNTY CH 31 OVER CROW CREEK STATION 321+02	PRIVATE ENTRANCE CROSS SECTIONS P.E.L. AT STA. 318+95	SCALE: 1" = 5'-0" SHEET NO. 3 OF 7 SHEETS STA. 10+30.00 TO STA. 10+30.00	<table border="1"> <tr> <th>C.H. RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td>31</td> <td>09-00230-00-BR</td> <td>BUREAU</td> <td>46</td> <td>42</td> </tr> <tr> <td colspan="3">WHA# 1143015</td> <td colspan="2">CONTRACT NO. 87686</td> </tr> <tr> <td colspan="5">ILLINOIS FED. AID PROJECT P925(634)</td> </tr> </table>	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	31	09-00230-00-BR	BUREAU	46	42	WHA# 1143015			CONTRACT NO. 87686		ILLINOIS FED. AID PROJECT P925(634)				
C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																							
31	09-00230-00-BR	BUREAU	46	42																							
WHA# 1143015			CONTRACT NO. 87686																								
ILLINOIS FED. AID PROJECT P925(634)																											

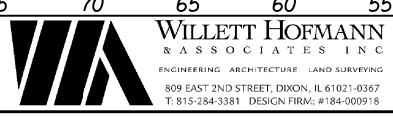
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TEMPLATE	
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AREAS CHECKED	
ORIGINAL SURVEY NOTE BOOK NO.	



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DESIGNED - BKC	REVISED -
CHECKED - PLP	REVISED -
DRAWN - DAN	REVISED -
CHECKED - PLP	REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

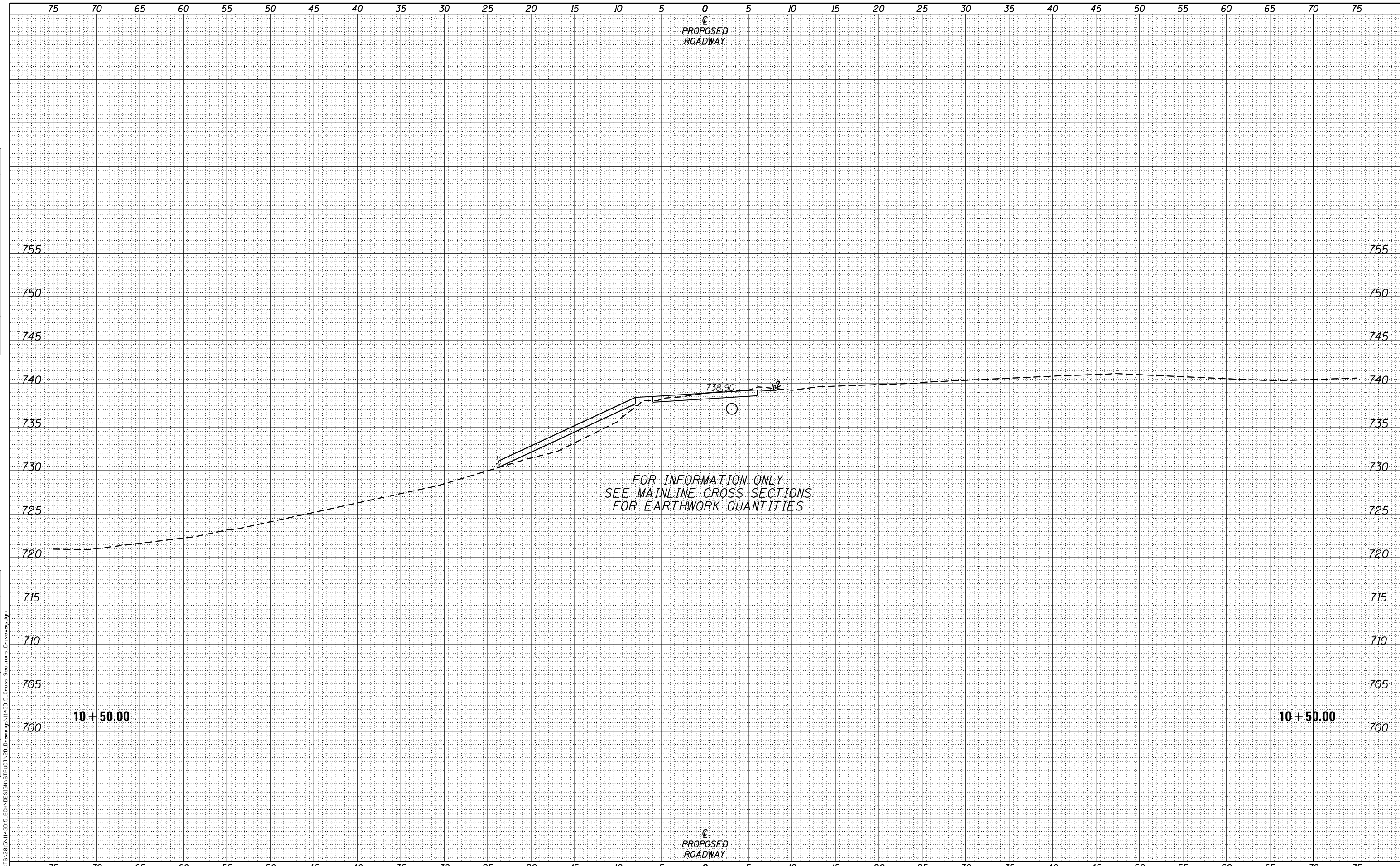
**PRIVATE ENTRANCE CROSS SECTIONS
P.E.L. AT STA. 318+95**

SCALE: 1" = 5'-0" SHEET NO. 4 OF 7 SHEETS STA. 10+40.00 TO STA. 10+40.00

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	43
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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

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SURVEYED PLOTTED AREAS CHECKED	
FINAL SURVEY NOTE BOOK NO.	
TEMPLATES AREAS CHECKED	



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

DESIGNED - BKC	REVISED -
CHECKED - PLP	REVISED -
DRAWN - DAN	REVISED -
CHECKED - PLP	REVISED -

**BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02**

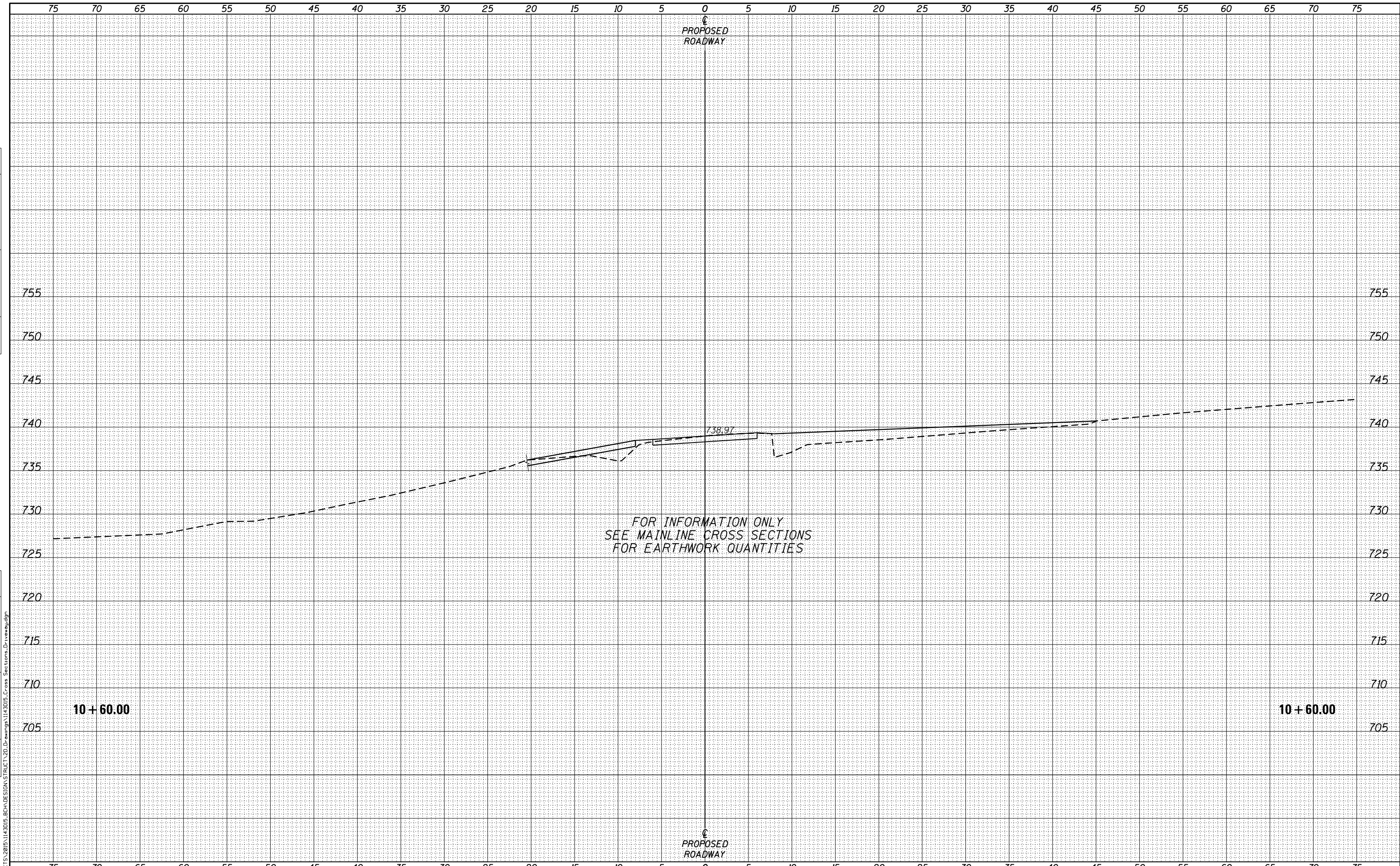
**PRIVATE ENTRANCE CROSS SECTIONS
P.E.L. AT STA. 318+95**

SCALE: 1" = 5'-0" SHEET NO. 5 OF 7 SHEETS STA. 10+50.00 TO STA. 10+50.00

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	44
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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

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ORIGINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
FINAL SURVEY NO.	
NOTE BOOK NO.	
TEMPLATES AREAS CHECKED	




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

DESIGNED - BKC	REVISED -
CHECKED - PLP	REVISED -
DRAWN - DAN	REVISED -
CHECKED - PLP	REVISED -

BUREAU COUNTY
CH 31 OVER CROW CREEK
STATION 321+02

PRIVATE ENTRANCE CROSS SECTIONS
P.E.L. AT STA. 318+95

SCALE: 1" = 5'-0" SHEET NO. 6 OF 7 SHEETS STA. 10+60.00 TO STA. 10+60.00

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
31	09-00230-00-BR	BUREAU	46	45
WHA# 1143015		CONTRACT NO. 87686		
ILLINOIS FED. AID PROJECT P925(634)				

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TEMPLATE	
AREAS CHECKED	
FINAL SURVEY NOTE BOOK NO.	

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ORIGINAL SURVEY NOTE BOOK NO.	

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