

PROGRAM AND OFFICE ENGINEER: CHARLES RIDDLE, P.E. 847-705-4406 SCHAUMBURG, IL

04-28-2017 LETTING ITEM 175

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	1
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT BROS-0197(128)				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

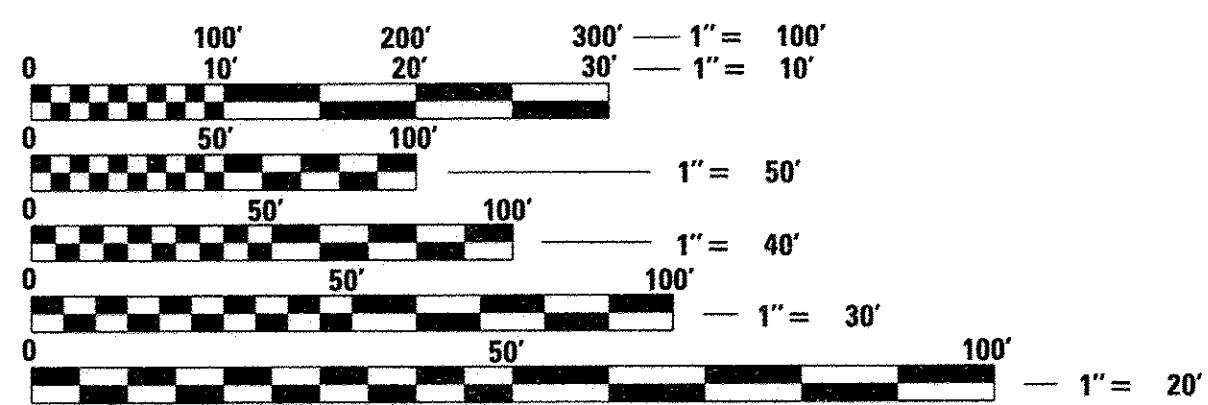
PLANS FOR PROPOSED FEDERAL-AID HIGHWAY

**TR 428 (KLEMME ROAD)
OVER BRANCH OF PLUM CREEK
BRIDGE REPLACEMENT
SECTION 12-02110-01-BR
PROJECT NO. BROS-0197(128)
CRETE TOWNSHIP
WILL COUNTY
C-91-210-13**

**FOR INDEX OF SHEETS & HIGHWAY STANDARDS
SEE SHEET NO. 2**

**PROJECT LOCATED IN
CRETE TOWNSHIP**

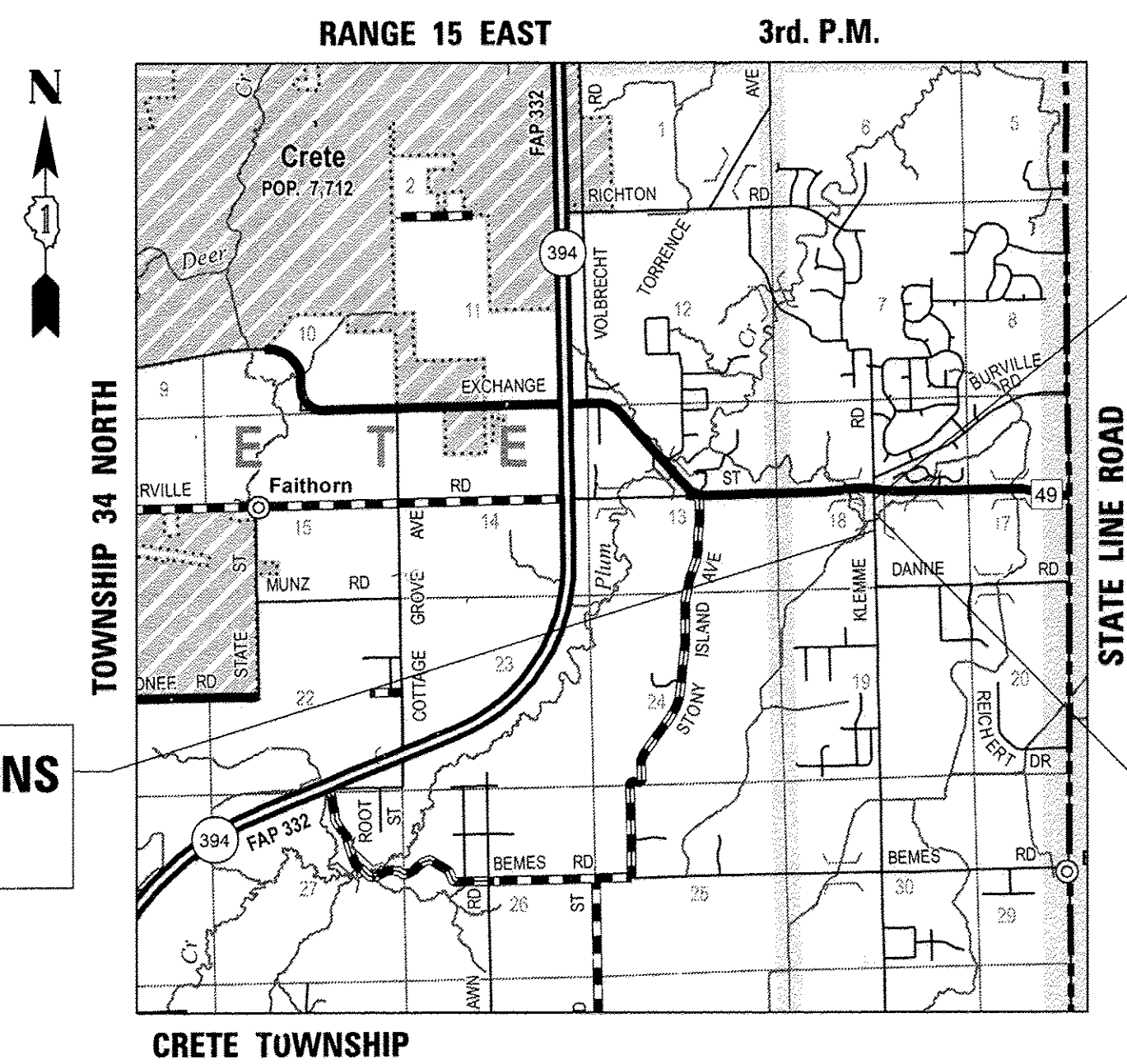
TRAFFIC DATA
T.R. 428 (KLEMME RD)
FUNCTIONAL CLASSIFICATION: LOCAL ROAD
POSTED SPEED: 45 MPH
DESIGN SPEED: 50 MPH
CURRENT ADT: 2,370 (2017)
DESIGN ADT: 3,000 (2040)
% TRUCKS: 3.0



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

CONTRACT NO. 61D68



**PROJECT BEGINS
STA. 17 + 50**

**PROJECT ENDS
STA. 22 + 50**

BRIDGE REPLACEMENT
EXISTING S.N. 099-3288
PROPOSED S.N. 099-3289
A SINGLE SPAN (1 @ 62'-8")
REINFORCED CONCRETE DECK
ON PRECAST, PRESTRESSED,
CONCRETE I-BEAMS W/SPILL THRU
ABUTMENTS AT STA. 20+00.
NO SKEW.

LOCATION MAP
NOT TO SCALE

GROSS LENGTH = 500 FT. = (0.095 MILE)
NET LENGTH = 500 FT. = (0.095 MILE)

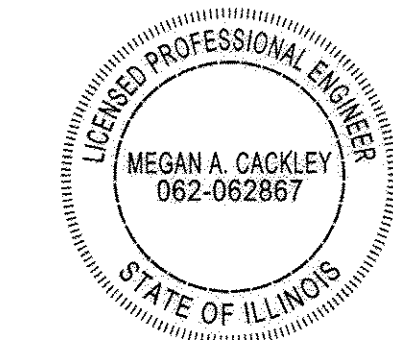
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

APPROVED *November 28, 2016* 2016
Antonio Peraza
CRETE TOWNSHIP HIGHWAY COMMISSIONER

PASSED *December 14, 2016* 2016
John Faught
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW *December 19, 2016* 2016
John Faught
REGIONAL ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**



DATE: *11/28/16*
EXPIRES 11/30/17

**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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STANDARDS

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001001-02	AREAS OF REINFORCEMENT BARS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
406201-01	MAILBOX TURNOUT
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
515001-03	NAME PLATE FOR BRIDGES
542001-06	CONCRETE END SECTIONS FOR PIPE CULVERTS 15" THRU 84" DIA.
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542601-03	REINFORCED CONCRETE PIPE ELBOW 24", 30", OR 36"
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
602401-03	MANHOLE TYPE A
604036-03	GRATE TYPE 8
630001-11	STEEL PLATE BEAM GUARDRAIL
630301-07	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
665001-02	WOVEN WIRE FENCE
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24' FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS DAY ONLY
701901-06	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
725001-01	OBJECT AND TERMINAL MARKERS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPE A & B METAL POSTS (FOR SIGNS & MARKERS)

STANDARDS (CONT.)

782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
BLR 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
TC-10	DISTRICT 1 DETAIL TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-11	DISTRICT 1 DETAIL TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS SNOW-PLOW RESISTANT
TC-13	DISTRICT 1 DETAIL TYPICAL PAVEMENT MARKINGS

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.

EXISTING STREET SIGNS AND TRAFFIC SIGNS THAT ARE WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED AND RESET BY THE CONTRACTOR IN ACCORDANCE WITH ARTICLE 107.25.

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

TEMPORARY SEEDING THAT IS DIRECTED BY THE ENGINEER SHALL BE PAID AS TEMPORARY EROSION CONTROL SEEDING.

ALL PAVEMENT SHALL BE CLEANED AND "FRESH OIL" SIGNS SHALL BE PLACED AT ALL INTERSECTIONS OF THE STREETS PRIOR TO APPLYING BITUMINOUS MATERIALS (TACK COAT).

THE FINAL TOP FOUR INCHES OF SOIL IN RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION.

ALL DISTURBED GROUND WITHIN THE TOWNSHIP RIGHT-OF-WAY SHALL BE RE-SEEDED (CLASS 2A, 4, OR 4B), FERTILIZED, AND EXCELSIOR BLANKET INSTALLED TO THE SATISFACTION OF THE ENGINEER.

THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL FIELD TILES, UNDERGROUND AND SURFACE UTILITIES AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS, EVEN THOUGH THEY MAY NOT BE SHOWN IN THE PLANS. ANY FIELD TILE THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

ALL CONSTRUCTION TO BE ACCORDING TO IDOT DESIGN AND STANDARD SPECIFICATIONS, MUST ADHERE TO THE WILL COUNTY DIVISION OF TRANSPORTATION PERMIT REGULATIONS AND ACCESS CONTROL REGULATIONS, AND SHALL FOLLOW THE LATEST WILL COUNTY STORM WATER MANAGEMENT ORDINANCE AND WILL COUNTY WATER RESOURCE ORDINANCE AT ALL TIMES.

A PROOF ROLL OF THE SUBGRADE IS REQUIRED PRIOR TO PLACING THE AGGREGATE SUB-BASE AND MUST BE OBSERVED BY A CERTIFIED TESTING COMPANY. NOTIFY THE ENGINEER PRIOR TO DOING THE PROOF ROLL.

THE CRETE TOWNSHIP HIGHWAY DEPARTMENT MUST BE NOTIFIED A MINIMUM OF TWO (2) WORKING DAYS IN ADVANCE OF ANY NON-EMERGENCY CONSTRUCTION WITHIN THE RIGHT-OF-WAY.

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

THE LOCATION AND ELEVATION OF THE 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 CONTRACTOR SHALL NOTIFY THE RESPECTIVE UTILITIES TO MAKE THE NECESSARY ADJUSTMENTS PRIOR TO THIS CONSTRUCTION.

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

AQUA ILLINOIS ATTN: PATRICK WREN 4263 COMMERCIAL WAY GLENVIEW, IL 60025 PH: (708) 580-4001 EMAIL: PMWREN@AQUAAMERICA.COM	COMED ATTN: BRAD SHINABARGAR 25000 SOUTH GOVERNORS HWY. UNIVERSITY PARK, IL 60466 PH: (708) 235-2692 EMAIL: BRADLEY.SHINABARGAR@COMED.COM
AT&T ATTN: STEVE PESOLA 1000 COMMERCE DRIVE OAK BROOK, IL 60523 PH: 630-573-5703 EMAIL: SP9653@ATT.COM	NICOR ATTN: BRUCE KOPPANG 1844 FERRY ROAD NAPERVILLE, IL 60563 PH: (630) 388-3046 EMAIL: BKOPPANG@SOUTHERNCO.COM

GENERAL NOTES (CONT.)

ALL CONSTRUCTION MATERIALS WITHIN THE TOWNSHIP ROW MUST BE IDOT CERTIFIED. DOCUMENTATION OF MATERIAL CERTIFICATION SHALL BE SUBMITTED PRIOR TO ENGINEER APPROVAL. ALL CONSTRUCTION MATERIAL NEEDING INSPECTION SHALL BE DONE ACCORDING TO THE LATEST IDOT PROJECT AND PROCEDURES GUIDE.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER A LIST OF MATERIALS USED AND IDENTIFY THEIR ASSOCIATED IDOT CERTIFICATION, SHALL PROVIDE THE ENGINEER WITH A COPY OF ALL MATERIAL TESTING COMPANY RESULTS, SHALL SIGN AND PROVIDE THE ENGINEER ON A WEEKLY BASIS WEEKLY FIELD REPORTS UTILIZING THE APPROPRIATE IDOT FORM, SHALL SUBMIT TO THE ENGINEER A CERTIFICATION LETTER THAT CERTIFIES COMPLIANCE WITH THE PLANS AND SPECIFICATIONS.

COMMITMENTS

MR. MELVIN T. OLDENDORF:

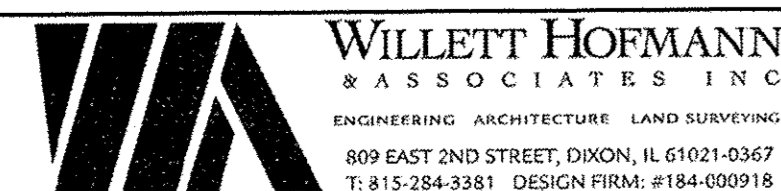
- MR. MELVIN OLDENDORF SHALL BE CONTACTED AT (708) 946-2498 A MINIMUM OF 48 HOURS IN ADVANCE OF WORK BEGINNING ALONG THE EAST SIDE OF KLEMME ROAD. MR. OLDENDORF SHALL BE PRESENT DURING TREE REMOVAL, ALL EXCAVATION, RIPRAP PLACEMENT, PIPE CULVERT PLACEMENT, MSE WALL CONSTRUCTION, FILLING, TOP SOILING AND SEEDING ACTIVITIES.
- NO EQUIPMENT WILL BE ALLOWED OUTSIDE OF THE ROADWAY BED FOR ANY WORK ON THE EAST SIDE OF KLEMME ROAD.
- NO SOIL SHALL BE REMOVED IN THE PLACEMENT OF THE RIPRAP ALONG THE SOUTH STREAMBANK TO THE EAST OF KLEMME ROAD. THE RIPRAP SHALL BE PLACED ON TOP OF THE EXISTING GROUND IN THIS AREA.
- ALL WORK FOR THE RIPRAP SHALL BE PERFORMED FROM THE ROADWAY ALONG THE EAST SIDE OF KLEMME ROAD. IF THE RIPRAP CANNOT BE PLACED FROM THE ROADWAY IN THIS AREA THE FOLLOWING WILL BE OBSERVED:
 - ONLY LOW GROUND PRESSURE VEHICLES WILL BE USED IN ACCORDANCE WITH THE RECOMMENDATION OF THE ECOLOGIST ON SITE.
 - ALL LOW GROUND PRESSURE VEHICLES WILL REMAIN AS FAR AWAY AS POSSIBLE FROM ALL TREE TRUNKS.
 - THE GROUND IS TO BE DRY (LESS THAN 25% MOISTURE CONTENT BY WEIGHT) IF USE OF LOW GROUND PRESSURE VEHICLES IS NECESSARY. TEST TO BE CONDUCTED BY THE ECOLOGIST ON SITE AS NECESSARY.
- THE PROPOSED FENCE (SPECIAL) SHALL BE INSTALLED PRIOR TO REMOVING THE EXISTING FENCE TO ENSURE THE CATTLE WITHIN THE FENCED AREA ARE CONTAINED AT ALL TIMES.

U.S. ARMY CORPS OF ENGINEERS:

- IF THE WORK IS SCHEDULED TO OCCUR BETWEEN APRIL 1 AND SEPTEMBER 31 OF ANY YEAR, THE BRIDGE/CULVERT SHALL BE INSPECTED FOR THE PRESENCE OF NORTHERN LONG-EARED BAT (MYOTIS SEPTENTRIONALIS) NO MORE THAN 7 DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITY TO ENSURE BATS HAVE NOT STARTED TO USE THE AREA OF THE BRIDGE PROPOSED FOR WORK. IF THAT SPECIES IS FOUND TO BE USING THE STRUCTURE, THE PERMITTEE SHALL IMMEDIATELY CONTACT SHAWN CIRTON OF THE U.S. FISH AND WILDLIFE SERVICE, (847) 381-2253, AND JULIE RIMBAULT OF THE U.S. ARMY CORPS OF ENGINEERS, 312-846-5542, TO ASK FOR FURTHER GUIDANCE. WORK SHALL NOT COMMENCE UNTIL CONSULTATION WITH THESE TWO AGENCIES HAS BEEN SATISFIED.
- TO AVOID POTENTIAL IMPACTS TO THE NORTHERN LONG-EARED BAT (MYOTIS SEPTENTRIONALIS), TREE CLEARING (TREES 3" DBH OR GREATER) SHALL ONLY OCCUR BETWEEN AUGUST 1 AND MAY 31 OF ANY CONSTRUCTION YEAR.

ROAD SHALL NOT BE CLOSED PRIOR TO JUNE 19, 2017. HOWEVER, TREE REMOVAL SHALL TAKE PLACE PRIOR TO MAY 31, 2017.

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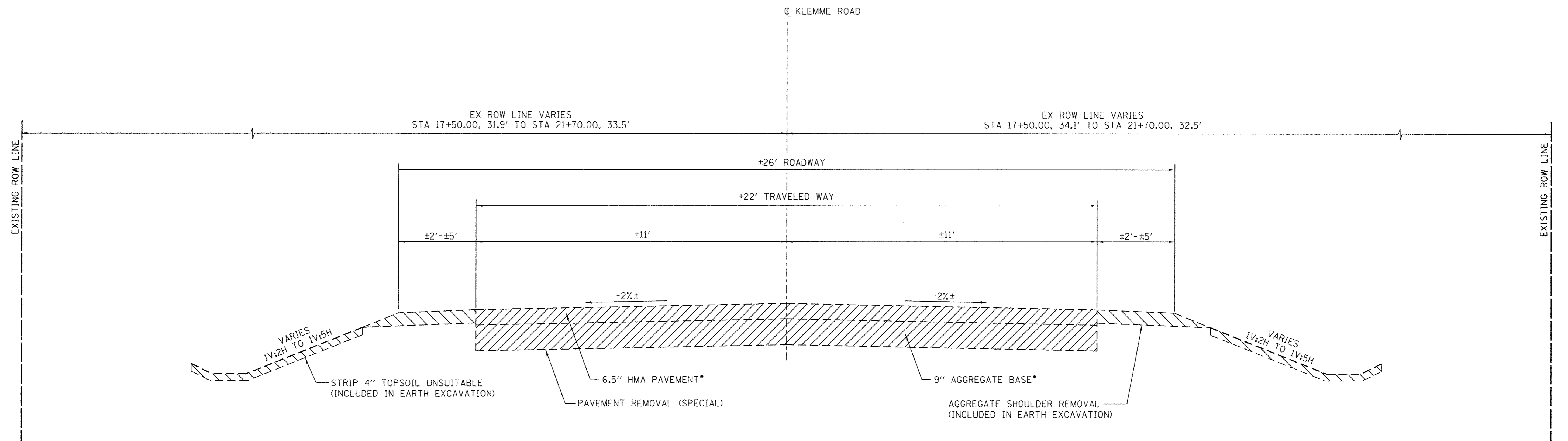
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, STANDARDS, GENERAL NOTES & COMMITMENTS
T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK

SHEET NO. 1 OF 1 SHEETS

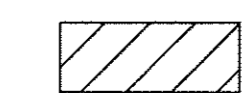
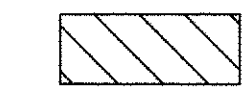
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	2
WHA* 1303D14			CONTRACT NO. 61D68	
[ILLINOIS] FED. AID PROJECT BROS-01971(28)				



EXISTING TYPICAL SECTION

(LOOKING NORTH)
 STA 17+50.00 TO STA 21+70.00, KLEMME ROAD
 STA 19+57.28 TO STA 20+42.76, BRIDGE OMISSION
 *EXISTING PAVEMENT SECTION PER TSC SOIL BORINGS

LEGEND

-  PAVEMENT REMOVAL (SPECIAL)
-  EARTH EXCAVATION

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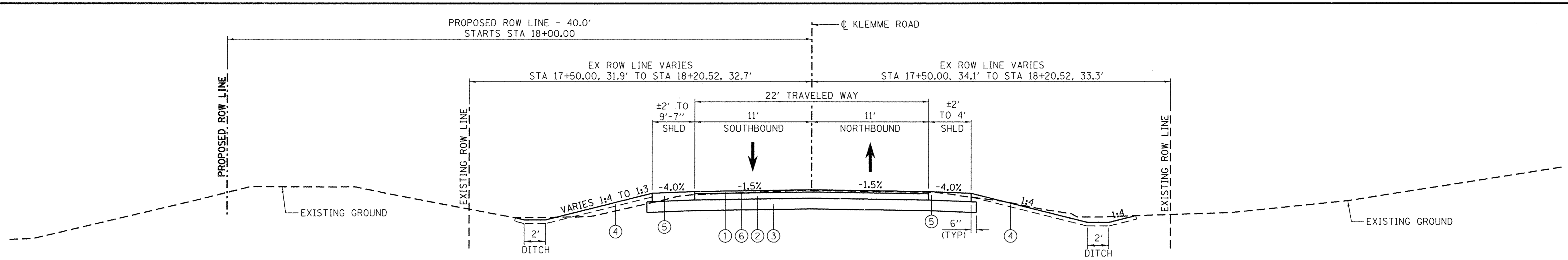
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EXISTING TYPICAL SECTIONS
 T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK**

SHEET NO. 1 OF 1 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	4
WHA* 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971128		



PROPOSED TYPICAL SECTION
(LOOKING NORTH)
STA 17+50.00 TO STA 18+20.52, KLEMME ROAD

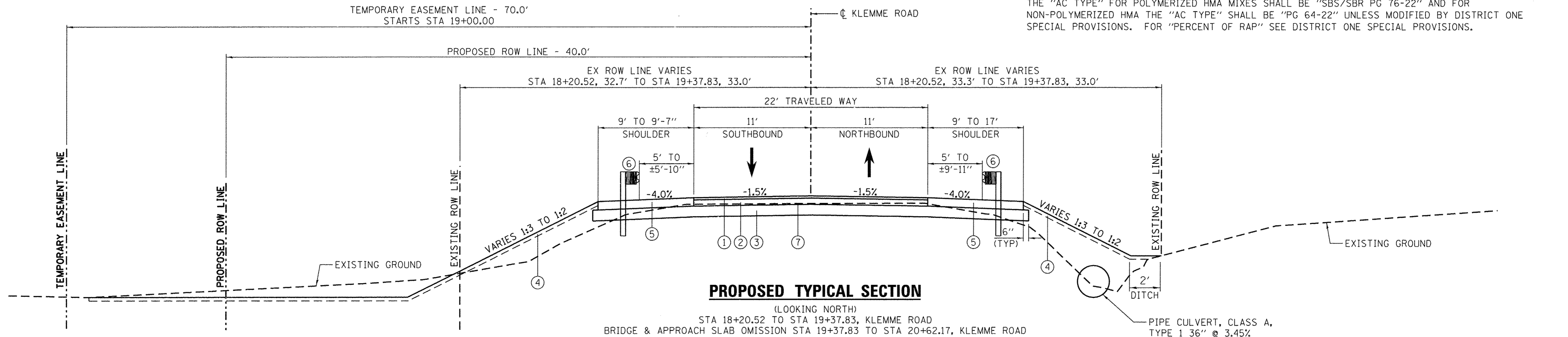
- ① HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-1.5"
- ② HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50-8"
- ③ AGGREGATE SUBGRADE IMPROVEMENT 12"
- ④ TOPSOIL FURNISH & PLACE, 6" AND SEEDING
- ⑤ HOT-MIX ASPHALT SHOULDERS, 9/2"
- ⑥ TACK COAT

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ NDES
FULL-DEPTH PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-1.5"	4% @ 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50-8" (IN 3 LIFTS)	4% @ 50 GYR.
PAVEMENT CONNECTOR	
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) MIX "D", N50 (IL 9.5 mm)	4% @ 50 GYR.
SHOULDERS	
HOT-MIX ASPHALT SHOULDERS, 9/2"	4% @ 50 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SO. YD./IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

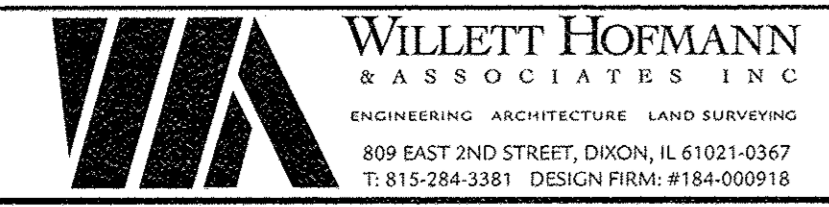


PROPOSED TYPICAL SECTION
(LOOKING NORTH)
STA 18+20.52 TO STA 19+37.83, KLEMME ROAD
BRIDGE & APPROACH SLAB OMISSION STA 19+37.83 TO STA 20+62.17, KLEMME ROAD

- ① HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-1.5"
- ② HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50-8"
- ③ AGGREGATE SUBGRADE IMPROVEMENT 12"
- ④ TOPSOIL FURNISH & PLACE, 6" AND SEEDING
- ⑤ HOT-MIX ASPHALT SHOULDERS, 9/2"
- ⑥ STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS (SHALL BE INSTALLED BASED ON FINAL ELEVATION OF PAVEMENT)
- ⑦ TACK COAT

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) FROM STA 19+27.83 TO STA 19+37.83. SEE STANDARD 420406 FOR BRIDGE APPROACH PAVEMENT CONNECTOR.

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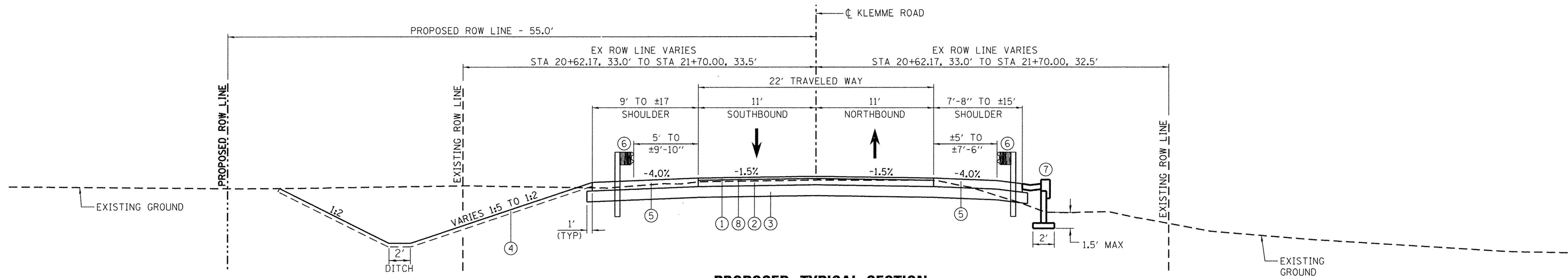
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED TYPICAL SECTIONS
T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK**

SHEET NO. 1 OF 2 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	5
WHA* 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01970281		

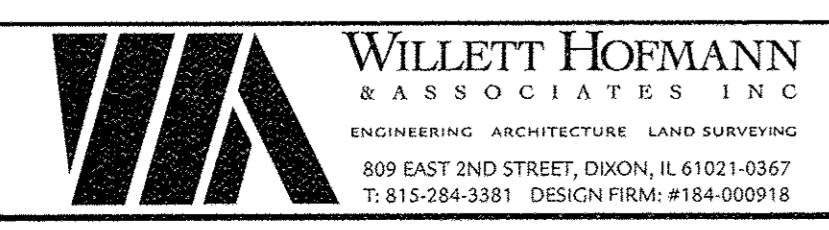


PROPOSED TYPICAL SECTION
 (LOOKING NORTH)
 STA 20+62.17 TO STA 21+70.00, KLEMME ROAD

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) FROM STA 20+62.17 TO STA 20+72.17. SEE STANDARD 420406 FOR BRIDGE APPROACH PAVEMENT CONNECTOR.

- ① HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-1.5"
- ② HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50-8"
- ③ AGGREGATE SUBGRADE IMPROVEMENT 12"
- ④ TOPSOIL FURNISH & PLACE, 6" AND SEEDING
- ⑤ HOT-MIX ASPHALT SHOULDERS, 9 1/2"
- ⑥ STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS (SHALL BE INSTALLED BASED ON FINAL ELEVATION OF PAVEMENT)
- ⑦ MSE WALL RT STA 20+33.17 TO STA 21+27.59
- ⑧ TACK COAT

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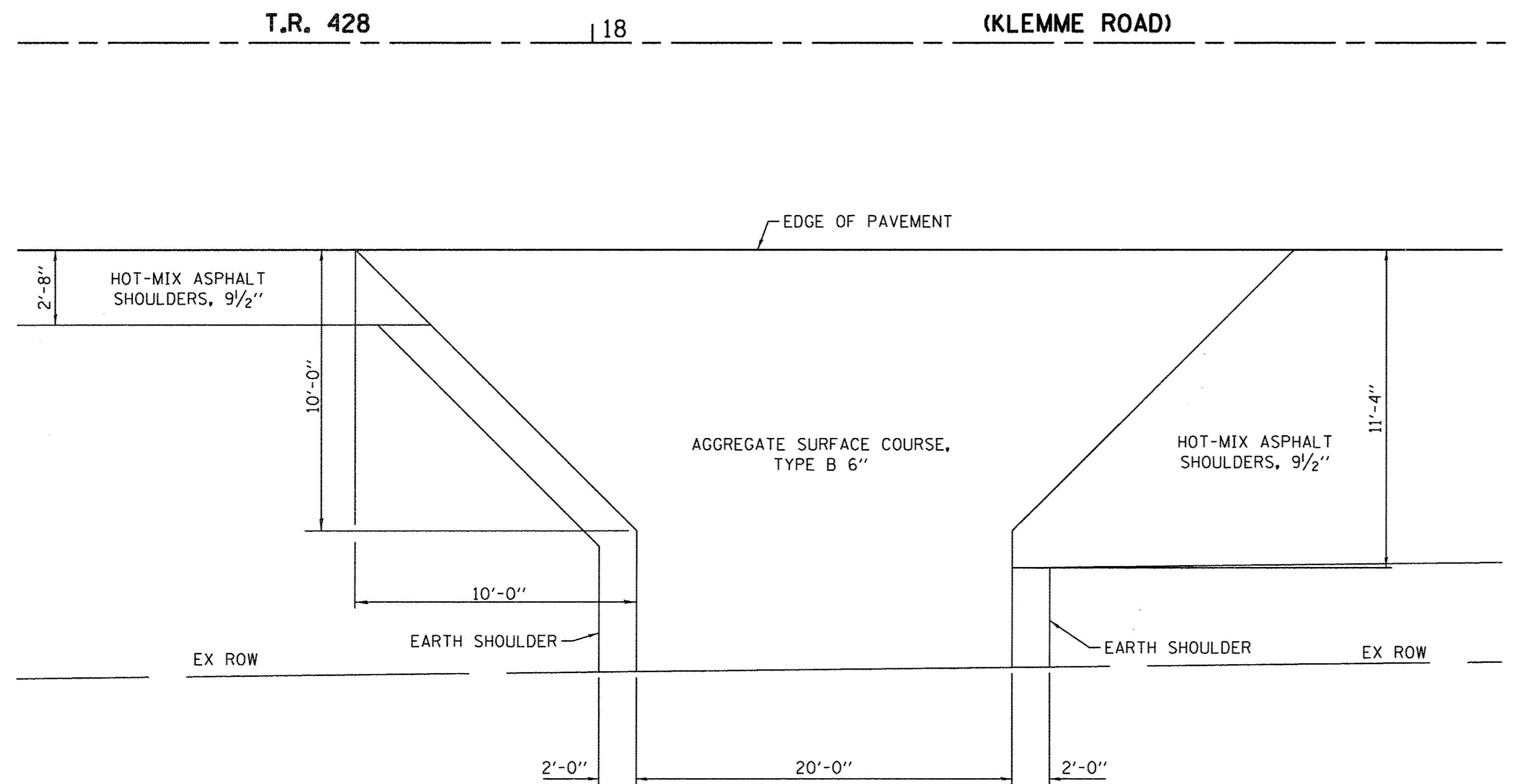
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS
T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK

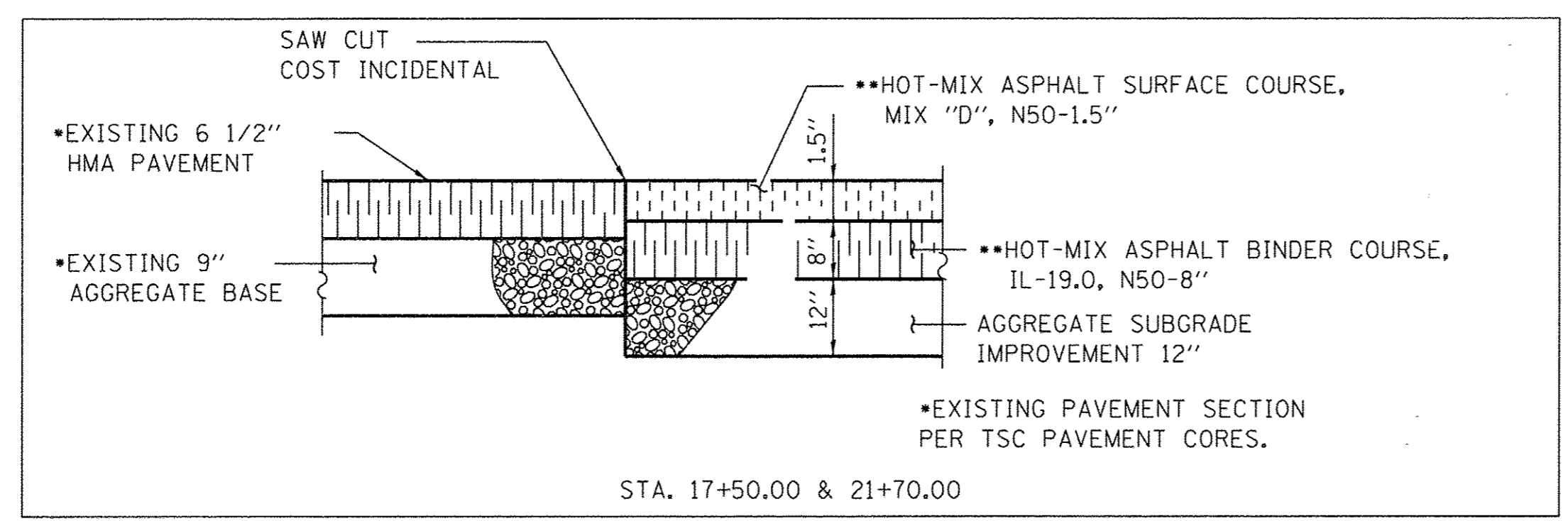
SHEET NO. 2 OF 2 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	6
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT			BROS-0197(128)	



P.E.R. STA. 18 + 12.50

CORE JOINT DETAIL

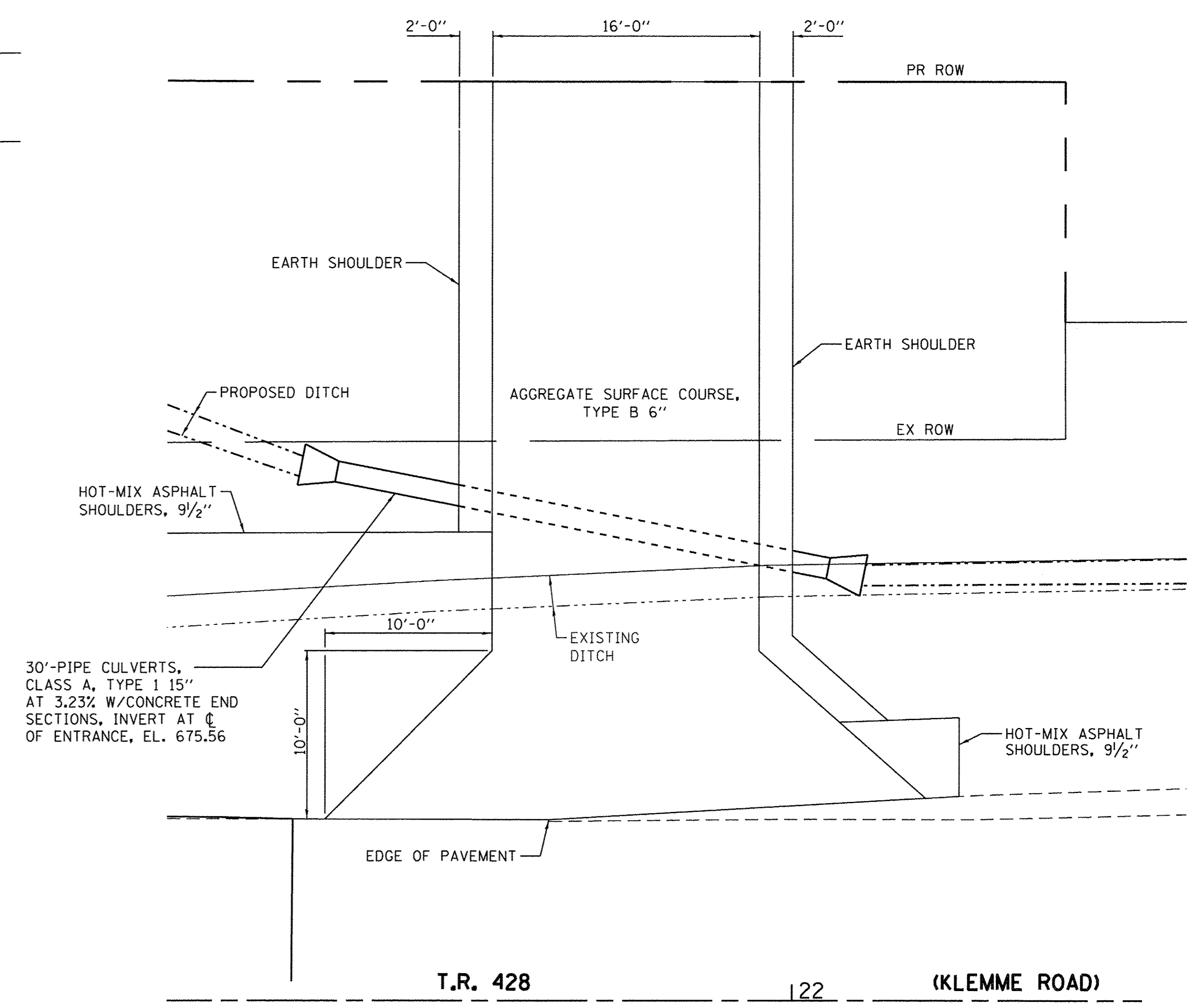


HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ NDES
FULL-DEPTH PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-1.5"	4% @ 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50-8" (IN 3 LIFTS)	4% @ 50 GYR.
PAVEMENT CONNECTOR	
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) MIX "D", N50 (IL 9.5 mm)	4% @ 50 GYR.
SHOULDERS	
HOT-MIX ASPHALT SHOULDERS, 9 1/2"	4% @ 50 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ. YD./IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



F.E.L. STA. 21 + 90.00

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTION DETAILS
T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK**

SHEET NO. 1 OF 1 SHEETS

TWP. RTE. 428	SECTION 12-02110-01-BR	COUNTY WILL	TOTAL SHEETS 50	SHEET NO. 7
WHA* 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197(128)		

EARTHWORK SCHEDULE

LOCATION	A	B	C	D	E	F
	EARTH EXCAVATION 20200100 (CY)	CHANNEL EXCAVATION 20300100 (CY)	CHANNEL EXCAVATION REDUCED 50% (0.5 X B)	EXCAVATION ADJUSTED FOR SHRINKAGE 15% (0.85 X (A+C))	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
T.R. 428 (KLEMM ROAD)						
STA. 17+50 - 22+00	937	81	41	861	267	594

SCHEDULE OF QUANTITIES

TREE REMOVAL (6 TO 15 UNITS DIAMETER)

STATION	UNIT	REMARKS
LT 18+79	14	PART OF MULTI-STEMMED TREE
LT 18+87	6	
LT 19+00	9	PART OF MULTI-STEMMED TREE
LT 19+24	9	
LT 19+37	9	
LT 19+49	10	PART OF MULTI-STEMMED TREE
LT 19+49	7	PART OF MULTI-STEMMED TREE
LT 20+35	8	
LT 20+43	7	PART OF MULTI-STEMMED TREE
LT 20+43	6	PART OF MULTI-STEMMED TREE
LT 20+81	13	
LT 20+83	12	PART OF MULTI-STEMMED TREE
LT 20+83	10	PART OF MULTI-STEMMED TREE
LT 20+88	10	PART OF MULTI-STEMMED TREE
LT 20+88	8	PART OF MULTI-STEMMED TREE
LT 21+23	7	PART OF MULTI-STEMMED TREE
LT 21+25	6	PART OF MULTI-STEMMED TREE
LT 21+65	9	
LT 21+70	7	PART OF MULTI-STEMMED TREE
LT 21+70	7	PART OF MULTI-STEMMED TREE
PROJECT TOTAL	174	

TREE REMOVAL (OVER 15 UNITS DIAMETER)

STATION	UNIT	REMARKS
LT 18+79	19	PART OF MULTI-STEMMED TREE
LT 19+00	16	PART OF MULTI-STEMMED TREE
RT 20+30	17	
PROJECT TOTAL	52	

TOPSOIL FURNISH AND PLACE, 6"

STATION	SO YD	REMARKS
LT 17+80 - 21+70	808	
RT 17+80 - 21+70	360	
PROJECT TOTAL	1,168	

SEEDING, CLASS 2A

STATION	ACRE	REMARKS
LT 17+50 - 18+20	0.02	
LT 21+70 - 22+50	0.02	
RT 17+50 - 18+02	0.01	
RT 21+41 - 21+80	0.01	
PROJECT TOTAL	0.06	

SEEDING, CLASS 4

STATION	ACRE	REMARKS
LT 17+50 - 19+00	0.05	
LT 20+65 - 22+50	0.11	
RT 17+50 - 19+84	0.05	
RT 20+50 - 21+80	0.01	
PROJECT TOTAL	0.22	

NITROGEN FERTILIZER NUTRIENT

STATION	POUND	REMARKS
LT 17+50 - 18+20	2	SEEDING, CLASS 2A REGION ONLY
LT 21+70 - 22+50	2	
RT 17+50 - 18+02	1	
RT 21+41 - 21+80	1	
PROJECT TOTAL	6	

POTASSIUM FERTILIZER NUTRIENT

STATION	POUND	REMARKS
LT 17+50 - 18+20	2	SEEDING, CLASS 2A REGION ONLY
LT 21+70 - 22+50	2	
RT 17+50 - 18+02	1	
RT 21+41 - 21+80	1	
PROJECT TOTAL	6	

EROSION CONTROL BLANKET

STATION	SO YD	REMARKS
LT 17+50 - 22+50	609	
RT 17+50 - 21+80	387	
PROJECT TOTAL	954	

TURF REINFORCEMENT MAT

STATION	SO YD	REMARKS
LT 17+50 - 19+57	321	
RT 17+50 - 17+94	42	
RT 20+43 - 21+70	134	
PROJECT TOTAL	497	

TEMPORARY EROSION CONTROL SEEDING

STATION	POUND	REMARKS
LT 17+50 - 19+78	10	1 APPLICATION @ 100 LBS / ACRE
LT 20+08 - 22+50	15	1 APPLICATION @ 100 LBS / ACRE
RT 17+50 - 19+84	7	1 APPLICATION @ 100 LBS / ACRE
RT 20+22 - 21+80	2	1 APPLICATION @ 100 LBS / ACRE
PROJECT TOTAL	34	

TEMPORARY DITCH CHECKS

STATION	FOOT	REMARKS
LT 17+60	9	
LT 17+88	9	
LT 18+00	9	
LT 18+50	9	
LT 18+80	9	
LT 19+06	9	
LT 19+20	9	
LT 20+50	9	
LT 20+80	9	
LT 21+10	9	
LT 21+36	9	
LT 22+06	9	
RT 17+68	9	
PROJECT TOTAL	117	

PERIMETER EROSION BARRIER

STATION	FOOT	REMARKS
LT 19+00 - 19+68	68	
RT 20+24 - 21+80	178	
PROJECT TOTAL	246	

INLET FILTERS

STATION	EACH	REMARKS
RT 17+93	1	
PROJECT TOTAL	1	

AGGREGATE SUBGRADE IMPROVEMENT 12"

STATION	SO YD	REMARKS
17+50 - 19+27.83	830	
20+72.17 - 21+70	520	
PROJECT TOTAL	1,350	

AGGREGATE SURFACE COURSE, TYPE B

STATION	TON	REMARKS
PER 18+12.50	26	6"
FEL 21+90	30	6"
PROJECT TOTAL	56	

BITUMINOUS MATERIALS (TACK COAT)

STATION	POUND	REMARKS
17+50 - 19+27.83	293	0.025 LB/SF 3 APP ON BIT
19+27.83 - 19+37.83	17	PVT CONNECT 0.025 LB/SF 3 APP ON BIT
20+62.17 - 20+72.17	17	PVT CONNECT 0.025 LB/SF 3 APP ON BIT
20+72.17 - 21+70	161	0.025 LB/SF 3 APP ON BIT
PROJECT TOTAL	488	

HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50

STATION	TON	REMARKS
17+50 - 19+27.83	195	8" 3 LIFTS
20+72.17 - 21+70	107	8" 3 LIFTS
PROJECT TOTAL	302	

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50

STATION	TON	REMARKS
17+50 - 19+27.83	37	1.5"
20+72.17 - 21+70	20	1.5"
PROJECT TOTAL	57	

PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB

STATION	SO YD	REMARKS
19+27.83 - 19+37.83	38	
20+62.17 - 20+72.17	38	
PROJECT TOTAL	76	

HOT-MIX ASPHALT SHOULDERS, 9 1/2"

STATION	SO YD	REMARKS
LT 17+50 - 19+66.83	162	
LT 20+33.17 - 21+82	168	
LT 22+03 - 22+10	2	
RT 17+50 - 17+91	16	
RT 18+22 - 19+66.83	152	
RT 20+33.17 - 21+76	102	
RT 21+24 - 21+40	5	
PROJECT TOTAL	607	

PIPE CULVERT REMOVAL

STATION	FOOT	REMARKS
RT 17+95 - 18+27	32	15" PIPE
LT 20+93 - 21+13	20	15" PIPE
PROJECT TOTAL	52	

PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"

STATION	EACH	REMARKS
LT 21+73	1	
LT 22+02	1	
PROJECT TOTAL	2	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
T.R. 428 (KLEMM ROAD) OVER BRANCH OF PLUM CREEK

SHEET NO. 1 OF 2 SHEETS

TWP. RTE. 428	SECTION 12-0210-01-BR	COUNTY WILL	TOTAL SHEETS 50	SHEET NO. 8
WHA* 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197128		

SCHEDULE OF QUANTITIES

REINFORCED CONCRETE PIPE ELBOW 36"		
STATION	EACH	REMARKS
RT 18+26.25	1	6.72°
PROJECT TOTAL	1	

54215991

CONCRETE END SECTION, STANDARD 542001, 36", 1:2		
STATION	EACH	REMARKS
RT 19+79	1	
PROJECT TOTAL	1	

54261236

PIPE CULVERTS, CLASS A, TYPE 1 15"		
STATION	FOOT	REMARKS
LT 21+73 - 22+02	30	
PROJECT TOTAL	30	

542A0220

PIPE CULVERTS, CLASS A, TYPE 1 36"		
STATION	FOOT	REMARKS
RT 17+94 - 19+79	188	
PROJECT TOTAL	188	

542A0241

MANHOLES, TYPE A, 4'-DIAMETER, TYPE 8 GRATE		
STATION	EACH	REMARKS
27.45', RT 17+93	1	
PROJECT TOTAL	1	

60219000

STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS		
STATION	FOOT	REMARKS
LT 18+72 - 19+10	38	
RT 18+85 - 19+10	25	1:16.3 FLARE
LT 20+90 - 21+15	25	1:17.4 FLARE
PROJECT TOTAL	88	

63000001

TRAFFIC BARRIER TERMINAL, TYPE 6		
STATION	EACH	REMARKS
LT 19+10 - 19+55	1	
RT 19+10 - 19+55	1	
LT 20+45 - 20+90	1	
RT 20+45 - 20+90	1	
PROJECT TOTAL	4	

63100085

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT		
STATION	EACH	REMARKS
LT 18+20 - 18+72	1	
RT 18+34 - 18+85	1	1:16.3 FLARE
RT 20+90 - 21+42	1	1:19.8 FLARE
LT 21+15 - 21+67	1	1:17.4 FLARE
PROJECT TOTAL	4	

63100167

CHANGEABLE MESSAGE SIGN		
STATION	CAL MO	REMARKS
KLEMME ROAD AND EXCHANGE STREET	1	SOUTHBOUND
KLEMME ROAD AND DANNE ROAD	1	NORTHBOUND
PROJECT TOTAL	2	

70106800

SIGN PANEL - TYPE 1		
STATION	SO FT	REMARKS
RT 19+10	6	W3-3 SIGNAL AHEAD (30x30)
RT 19+10	2	W16-8P "EXCHANGE ST." (VARIESx8)
PROJECT TOTAL	8	

72000100

TERMINAL MARKER - DIRECT APPLIED		
STATION	EACH	REMARKS
LT 18+20	1	
RT 18+34	1	
RT 21+42	1	
LT 21+67	1	
PROJECT TOTAL	4	

72501000

TELESCOPING STEEL SIGN SUPPORT		
STATION	FOOT	REMARKS
RT 19+10	13	SIGNAL AHEAD
PROJECT TOTAL	13	

72800100

PAINT PAVEMENT MARKING - LINE 4"		
STATION	FOOT	REMARKS
17+50 - 21+70	840	DBL YELLOW C/L
LT 17+50 - 21+70	420	SOLID WHITE EDGE LINE
RT 17+50 - 21+70	420	SOLID WHITE EDGE LINE
PROJECT TOTAL	1,680	

78001110

RAISED REFLECTIVE PAVEMENT MARKER		
STATION	EACH	REMARKS
17+75	2	TWO-WAY AMBER MARKER
18+55	2	TWO-WAY AMBER MARKER
19+35	2	TWO-WAY AMBER MARKER
20+95	2	TWO-WAY AMBER MARKER
21+35	2	TWO-WAY AMBER MARKER
PROJECT TOTAL	10	

78100100

RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)		
STATION	EACH	REMARKS
20+15	2	TWO-WAY AMBER MARKER
PROJECT TOTAL	2	

78100105

GUARDRAIL REFLECTORS, TYPE A		
STATION	EACH	REMARKS
LT 18+72 - 20+90	4	
RT 19+10 - 20+90	4	
PROJECT TOTAL	8	

78200005

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL		
STATION	EACH	REMARKS
19+09 - 21+35	13	
PROJECT TOTAL	13	

78300200

SEEDING, CLASS 4B (SPECIAL)		
STATION	ACRE	REMARKS
LT 19+00 - 19+78	0.05	
LT 20+08 - 20+65	0.02	
RT 20+22 - 20+50	0.002	
PROJECT TOTAL	0.07	

X2502019*

PAVEMENT REMOVAL (SPECIAL)		
STATION	SO YD	REMARKS
17+50 - 19+57	531	±6.5" ROADWAY PAVEMENT
20+43 - 21+70	314	±6.5" ROADWAY PAVEMENT
PROJECT TOTAL	845	

X4404400*

PAVED DITCH (SPECIAL)		
STATION	FOOT	REMARKS
20+33.17 - 21+42	110	
PROJECT TOTAL	110	

X6061460*

REMOVE SIGN PANEL ASSEMBLY - TYPE A (SPECIAL)		
STATION	EACH	REMARKS
RT 19+08	1	SIGNAL AHEAD
LT 19+57	1	OBJECT MARKER
RT 19+57	1	OBJECT MARKER
LT 20+43	1	OBJECT MARKER
RT 20+43	1	OBJECT MARKER
PROJECT TOTAL	5	

X7240110*

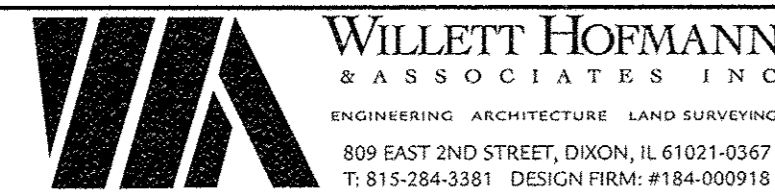
FENCE (SPECIAL)		
STATION	FOOT	REMARKS
RT 19+65 - 19+80	27	
RT 20+32 - 20+50	43	
PROJECT TOTAL	70	

XX006653

FENCE REMOVAL		
STATION	EACH	REMARKS
RT 19+65 - 19+80	32	
RT 20+19 - 20+50	58	
PROJECT TOTAL	90	

Z0022800

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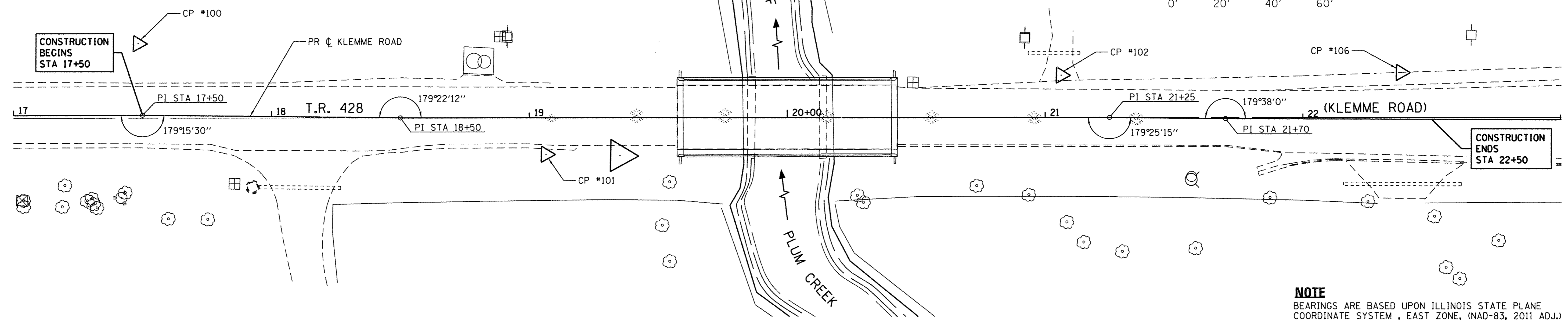
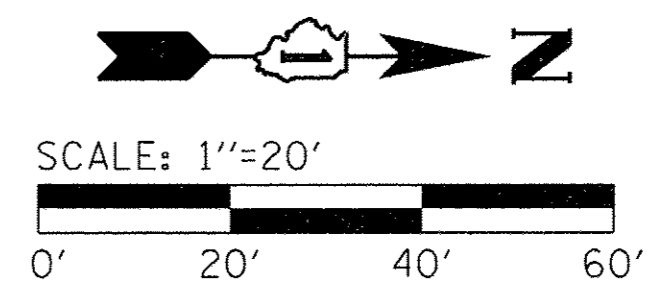
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

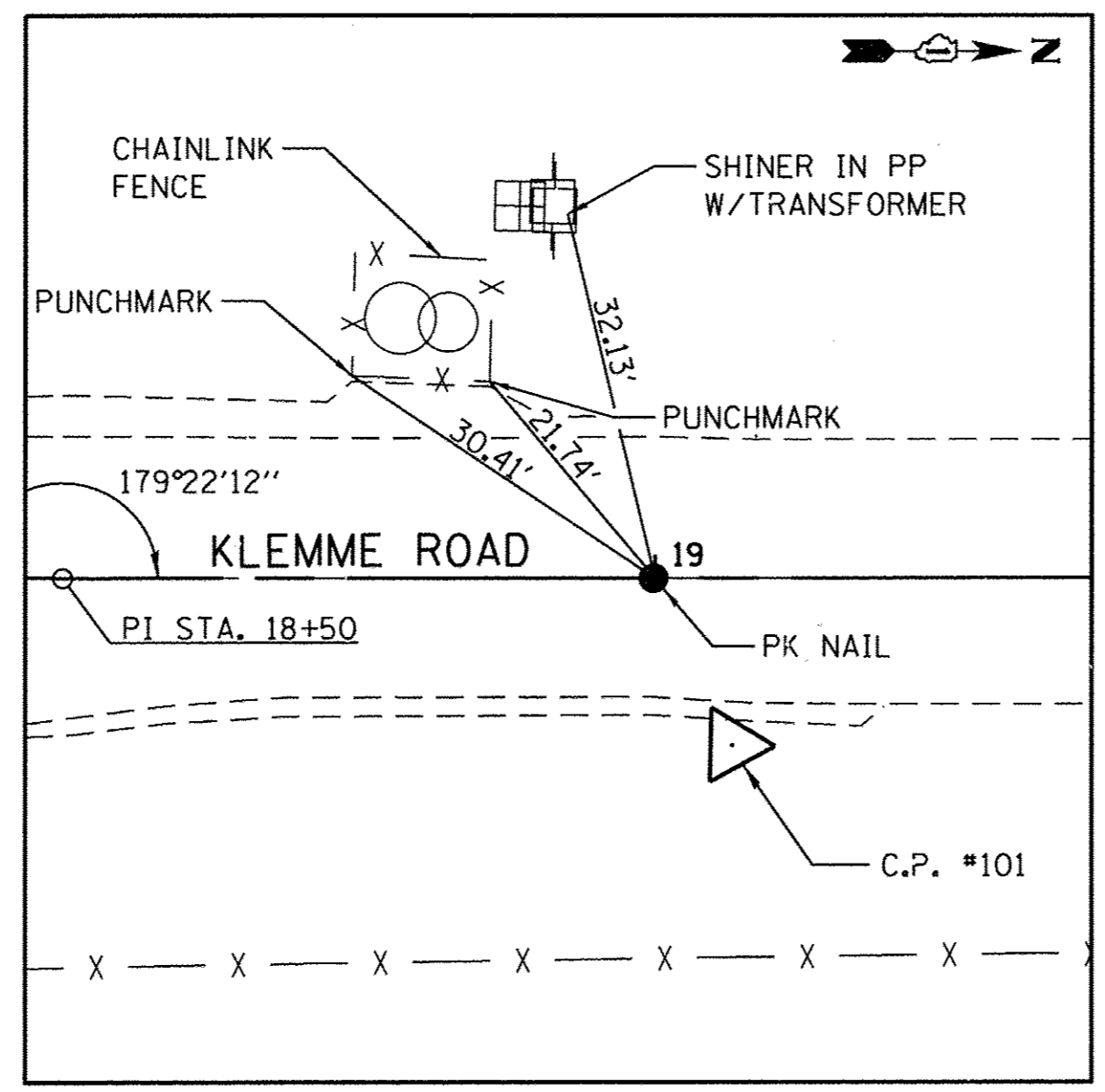
**SCHEDULE OF QUANTITIES
T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK**

SHEET NO. 2 OF 2 SHEETS

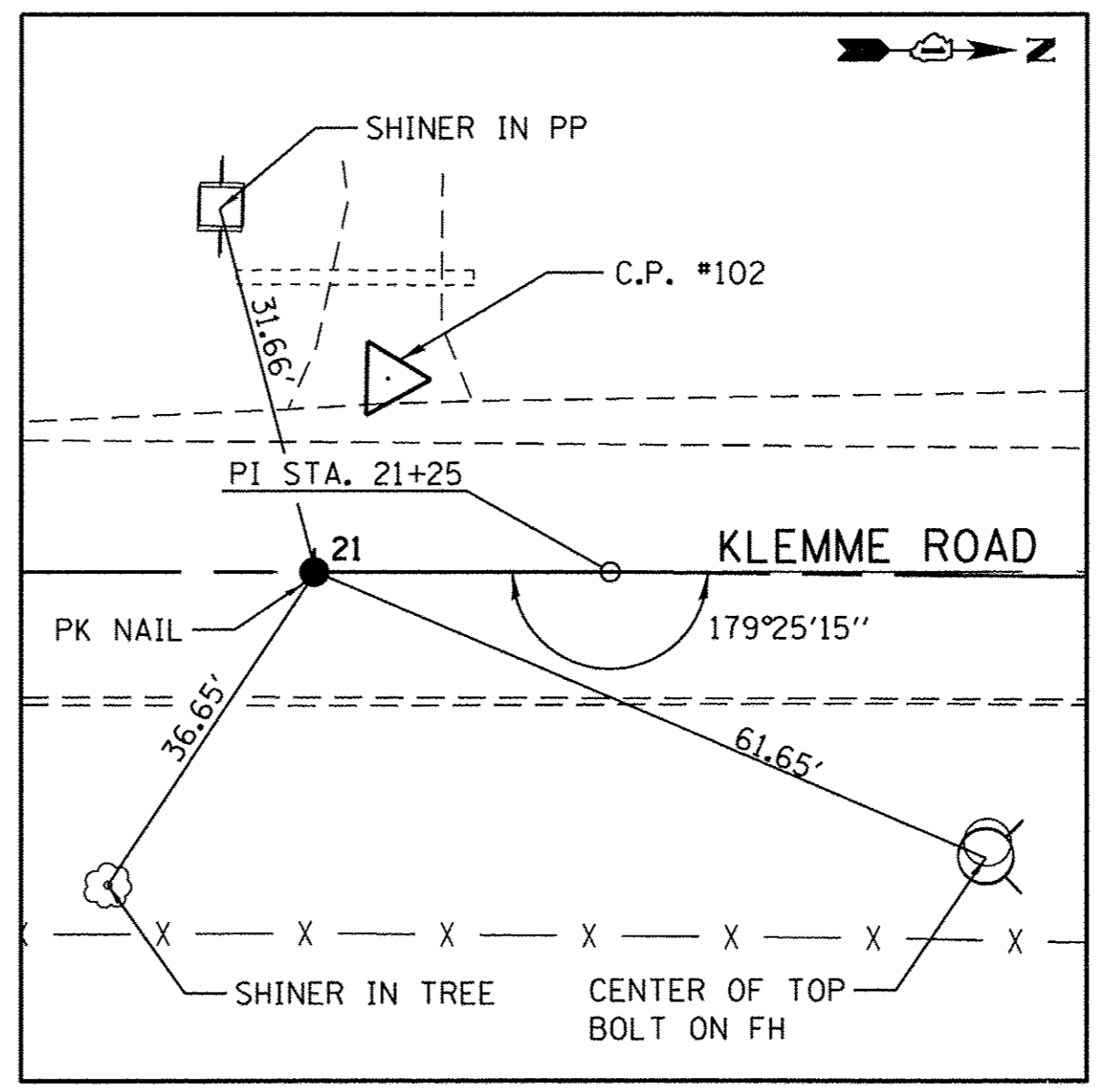
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	9
WHA* 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971281		



NOTE
 BEARINGS ARE BASED UPON ILLINOIS STATE PLANE
 COORDINATE SYSTEM, EAST ZONE, (NAD-83, 2011 ADJ.)
 WILL COUNTY GPS 1524 PID AE2498



CONTROL POINT #101



CONTROL POINT #102

T.R. 428 (KLEMME ROAD) - HORIZONTAL CONTROL POINTS					
CP PT #	STA.	N	E	EL.	DESCRIPTION
100	27.6' LT. 17+48.30	1737079.99	1200246.97	682.56	5/8" IRON PIN
101	14.2' RT. 19+06.51	1737239.14	1200286.41	679.26	5/8" IRON PIN
102	16.3' LT. 21+06.21	1737438.13	1200251.62	678.07	5/8" IRON PIN
106	18.0' LT. 22+38.05	1737569.99	1200247.76	680.03	5/8" IRON PIN

T.R. 428 (KLEMME ROAD) - VERTICAL CONTROL POINTS					
BM PT #	STA.	N	E	EL.	DESCRIPTION
400	±29.8' LT. 16+86.77	1737018.47	1200246.27	687.19	RAILROAD SPIKE IN 2ND POWER POLE
401	±12.2' LT. 19+57.32	1737289.41	1200258.52	679.46	CHISELED SQUARE ON THE SOUTHWEST HUB GUARD
402	±39.8' LT. 24+29.26	1737760.81	1200222.76	685.47	RAILROAD SPIKE IN 3RD POWER POLE

T.R. 428 (KLEMME ROAD) - ALIGNMENT COORDINATES			
	STA.	N	E
POT	14+00.00	1736732.44	1200282.79
PI	17+50.00	1737082.34	1200274.54
PI	18+50.00	1737182.34	1200273.48
PI	21+25.00	1737457.27	1200267.53
PI	21+70.00	1737502.27	1200267.02
POT	25+50.00	1737882.21	1200260.21

BENCHMARK #400

RAILROAD SPIKE IN 2ND POWER POLE SOUTH OF BRIDGE, ±29.8' LT. OF STA. 16+86.77, EL. 687.19

BENCHMARK #401

CHIS. "□" ON SOUTHWEST HUB GUARD OF STRUCTURE, ±12.2' LT. OF STA. 19+57.32, EL. 679.46

BENCHMARK #402

RAILROAD SPIKE IN 3RD POWER POLE NORTH OF BRIDGE, ±39.8' LT. OF STA. 24+29.26, EL. 685.47

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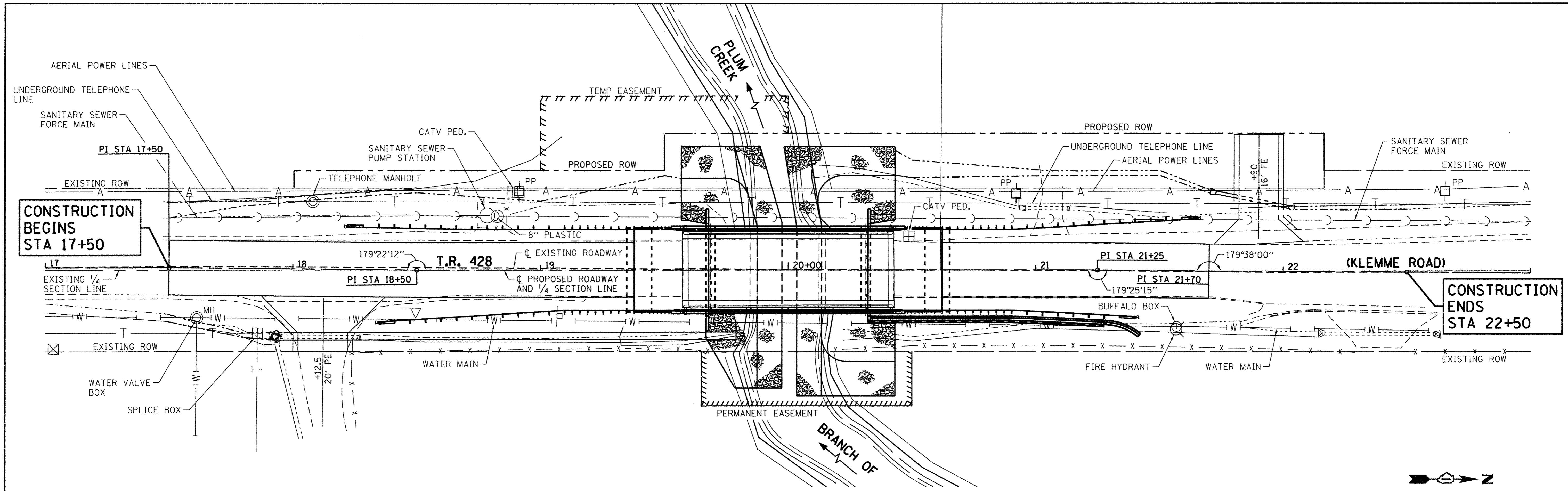
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ALIGNMENT, TIES & BENCHMARKS
 T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK**

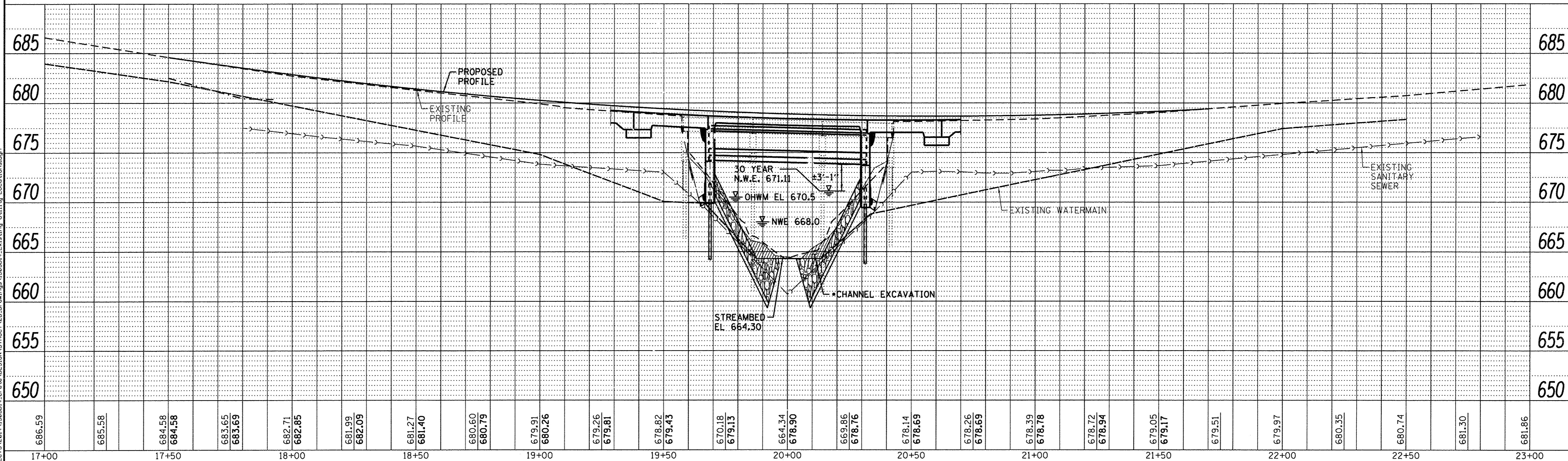
SHEET NO. 1 OF 1 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	10
WHA# 1303014		CONTRACT NO. 61D68		
(ILLINOIS) FED. AID PROJECT		BROS-01971281		

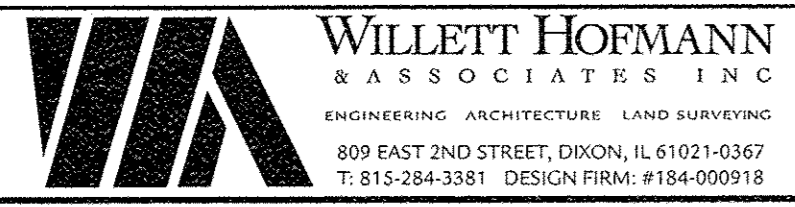
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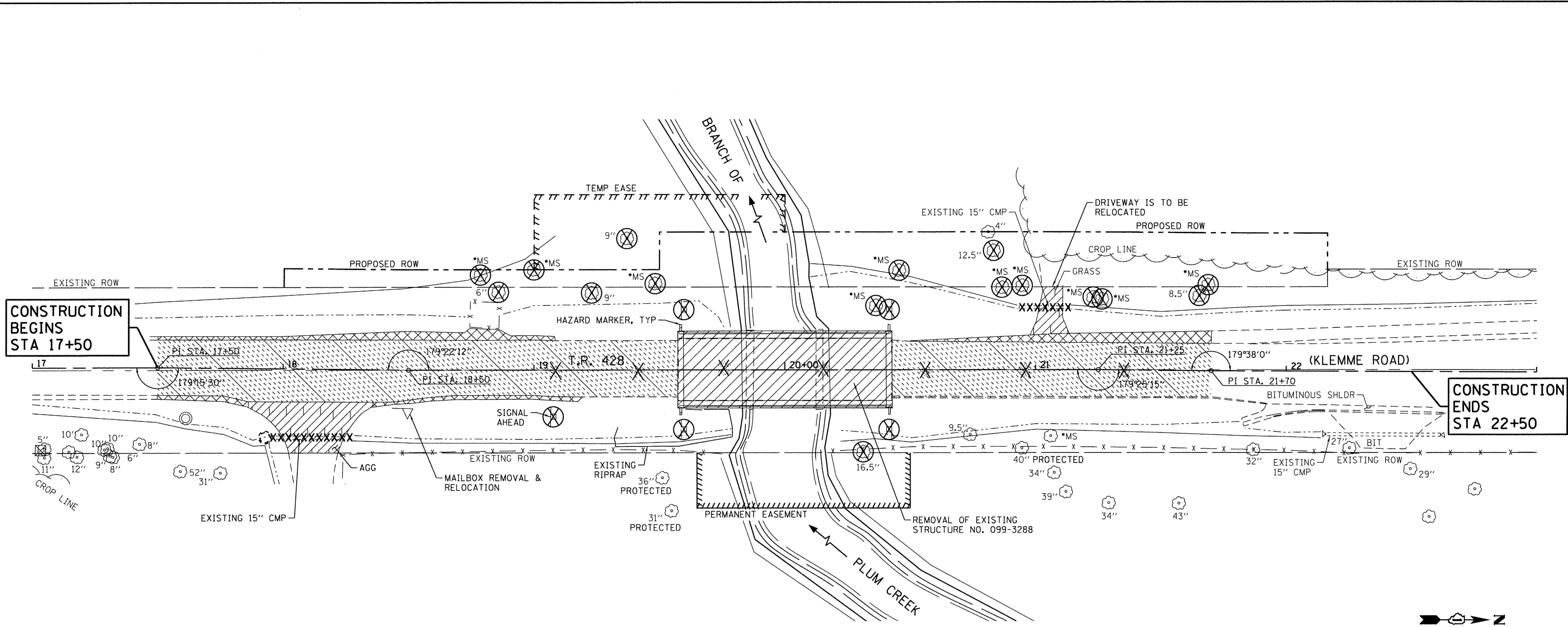


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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING UTILITY LOCATIONS
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK
SCALE: 1" = 20'-0" SHEET NO. 1 OF 1 SHEETS STA. 17+00 TO STA. 23+00



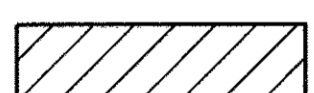

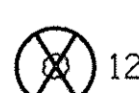
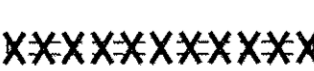


TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	11
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01911267		

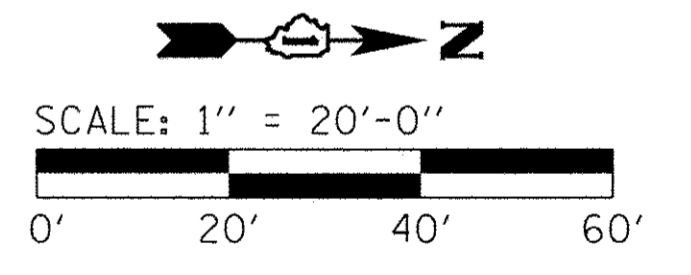


CONSTRUCTION BEGINS STA 17+50

CONSTRUCTION ENDS STA 22+50

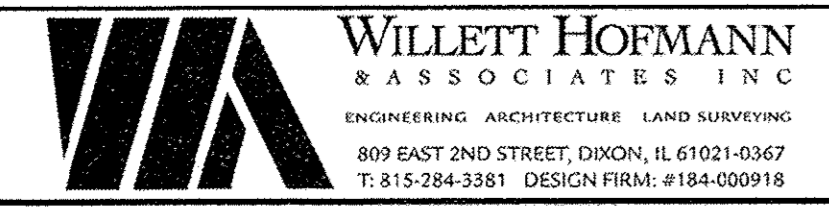
LEGEND

-  PAVEMENT REMOVAL (SPECIAL)
-  AGGREGATE SHOULDER REMOVAL (INCLUDED IN EARTH EXCAVATION)
-  REMOVAL OF EXISTING STRUCTURES
-  DRIVEWAY ENTRANCE REMOVAL (INCLUDED IN EARTH EXCAVATION)
-  12" TREE REMOVAL AND SIZE (IN DIA.)
-  PIPE CULVERT REMOVAL
-  REMOVE SIGN PANEL ASSEMBLY TYPE A (SPECIAL)
-  RAISED REFLECTIVE PAVEMENT MARKER REMOVAL



*MULTI-STEMMED

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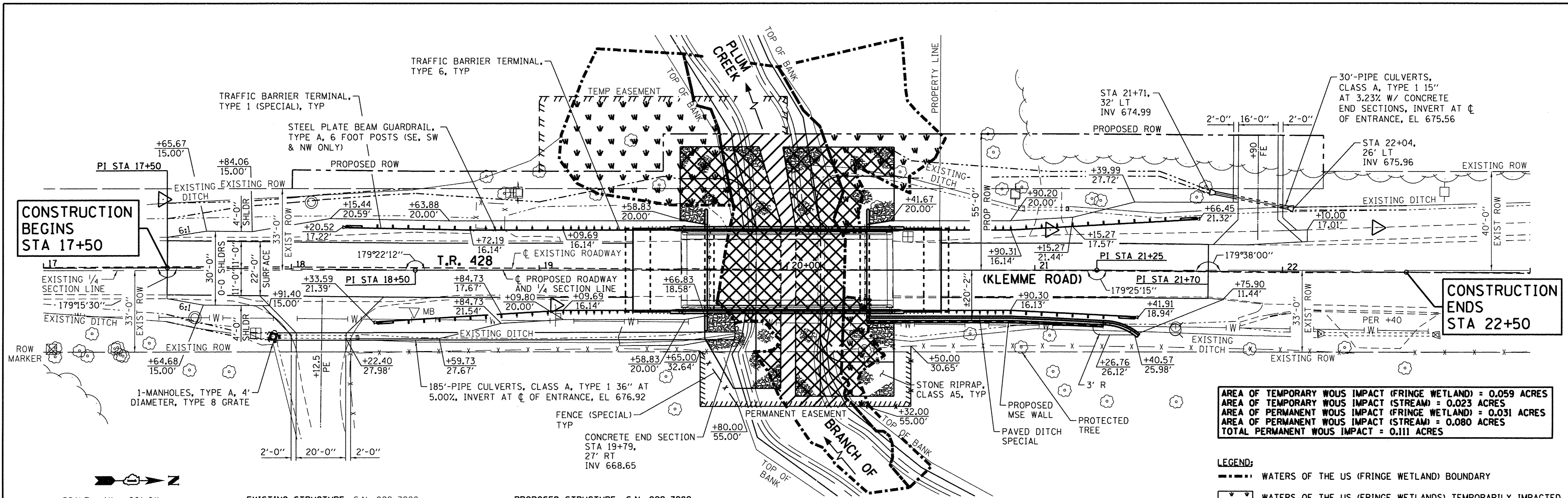
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**REMOVAL PLAN
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK**

SCALE: 1" = 20'-0" SHEET NO. 1 OF 1 SHEETS STA. 17+00 TO STA. 23+00

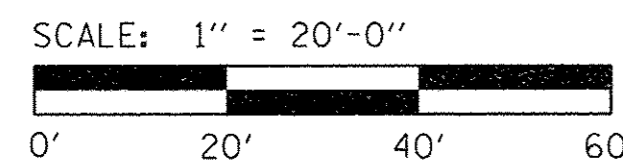
TWP. RTE. 428	SECTION 12-02110-01-BR	COUNTY WILL	TOTAL SHEETS 50	SHEET NO. 12
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BR05-0197(128)		

DATE	
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REVISIONS	
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DESCRIPTION	



AREA OF TEMPORARY WOUS IMPACT (FRINGE WETLAND) = 0.059 ACRES
 AREA OF TEMPORARY WOUS IMPACT (STREAM) = 0.023 ACRES
 AREA OF PERMANENT WOUS IMPACT (FRINGE WETLAND) = 0.031 ACRES
 AREA OF PERMANENT WOUS IMPACT (STREAM) = 0.080 ACRES
 TOTAL PERMANENT WOUS IMPACT = 0.111 ACRES

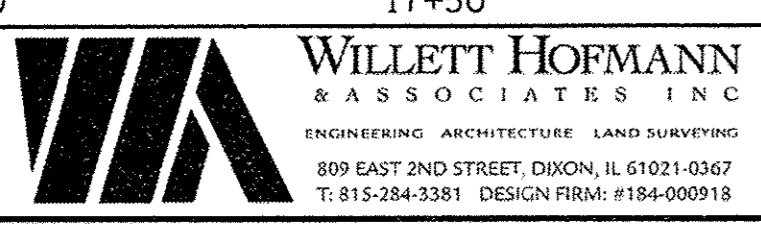
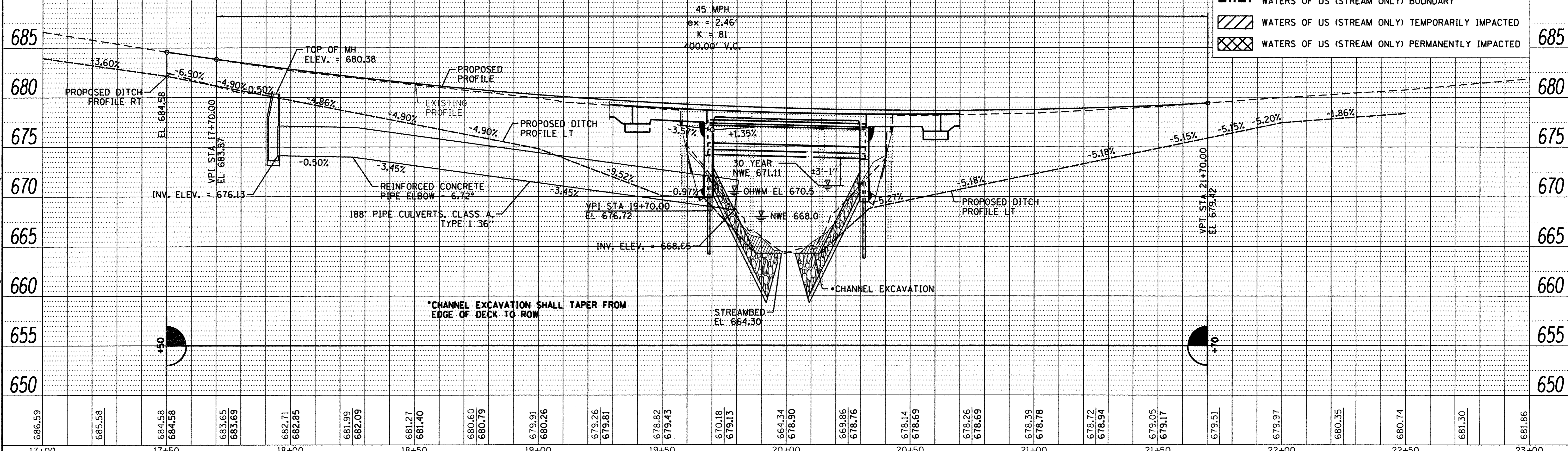
- LEGEND:**
- WATERS OF THE US (FRINGE WETLAND) BOUNDARY
 - WATERS OF THE US (FRINGE WETLANDS) TEMPORARILY IMPACTED
 - WATERS OF THE US (FRINGE WETLANDS) PERMANENTLY IMPACTED
 - WATERS OF US (STREAM ONLY) BOUNDARY
 - WATERS OF US (STREAM ONLY) TEMPORARILY IMPACTED
 - WATERS OF US (STREAM ONLY) PERMANENTLY IMPACTED



EXISTING STRUCTURE; S.N. 099-3288
 A THREE SPAN (3 @ 28'-0") PRECAST, PRESTRESSED CONCRETE DECK BEAM BRIDGE ON PRECAST CONCRETE PILE ABUTMENTS AT STATION 20+00. NO SKEW.

PROPOSED STRUCTURE; S.N. 099-3289
 A SINGLE SPAN (1 @ 62'-8") PRECAST, PRESTRESSED CONCRETE I-BEAM BRIDGE ON SPILL-THRU PILE BENT INTEGRAL ABUTMENTS AT STATION 20+00. NO SKEW.

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



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CHECKED - MAC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - MAC	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK
 SCALE: 1" = 20'-0" SHEET NO. 1 OF 1 SHEET STA. 17+00 TO STA. 23+00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	13
WHA# 1303014			CONTRACT NO. 61D68	
ILLINOIS FED. AID PROJECT			BROS-01971287	

DETOUR GENERAL NOTES

1. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016, THE "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES" ADOPTED 2010, THE DETAILS IN THESE PLANS, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
2. THE CONTRACTOR SHALL SCHEDULE ALL WORK IN AN EXPEDIENT MANNER TO REDUCE THE LENGTH OF TIME THAT THE DETOUR NEEDS TO BE IN EFFECT.
3. IF DEEMED NECESSARY BY THE ENGINEER A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT.
4. THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVES FOR THE DETOUR SIGNING PRIOR TO THE START OF WORK.
THE CRETE TOWNSHIP ROAD DISTRICT REPRESENTATIVE FOR THE DETOUR IS:
 ANTHONY RECUPITO, HIGHWAY COMMISSIONER
 CRETE TOWNSHIP ROAD DISTRICT
 25405 S. STATE STREET
 CRETE, ILLINOIS 60417
 (708) 672-7732
5. IF REQUESTED BY THE CONTRACTOR IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT THE ENGINEER WILL FIELD LOCATE THE POSITIONS OF ANY SIGNS.
6. LONGITUDINAL DIMENSIONS SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND INSPECTED AND APPROVED BY THE ENGINEER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE DETOUR IS IN EFFECT.
9. THE CONTRACTOR SHALL MAKE ALL CHANGES IN SIGNING THAT ARE DEEMED NECESSARY BY THE ENGINEER.
10. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR, IN A MANNER APPROVED BY THE ENGINEER.
11. ALL DETOUR SIGNING SHALL BE POST MOUNTED IF THE ROAD CLOSURE IS TO EXCEED FOUR (4) CALENDAR DAYS.
12. ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1106.01 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR LIKE NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION AND ACCEPTANCE OF THE SIGNS.
13. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
14. AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THIS DETOUR SHALL MEET THE REQUIREMENTS FOR TYPE A-LOW INTENSITY FLASHING LIGHTS IN ARTICLE 1106.02 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING THE HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.
15. THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THE PLANS ARE 18" X 18".
16. ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED 9'-0" IN WIDTH EACH, FOR A SINGLE APPROACH LANE.
17. THE "ROAD CLOSED" (R11-2), THE "ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY" (R11-3), AND THE "ROAD CLOSED TO THRU TRAFFIC" (R11-4) SIGNS SHALL BE MOUNTED ABOVE THE TOP OF THE BARRICADE. ALL TYPE III BARRICADES SHALL HAVE TWO (2) AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINE OF THE SUPPORTS.
18. THE ROAD NAME SIGN SHALL HAVE A BLACK LEGEND ON FLUORESCENT ORANGE REFLECTIVE SHEETING. THE SIGN BLANK SHALL BE A 9" BY VARIABLE OR A 12" BY VARIABLE WITH DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6" WITH 5" LOWER CASE.
19. DURING NON-WORKING HOURS AT THE POINT OF ROAD CLOSURE TO ALL TRAFFIC THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.
20. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IMMEDIATELY BEHIND THE TYPE III BARRICADES DURING NON-WORKING HOURS. IN ANY EVENT ARTICLE 701.04 OF THE STANDARD SPECIFICATIONS SHALL APPLY.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNING. BRUSHING BACK VEGETATION IF DEEMED BY THE ENGINEER.

22. THE FOLLOWING ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS ARE APPLICABLE FOR THIS WORK:
STANDARDS 701301, 701311, 701901, 704001, 720001, 720006, 720011, 728001, 729001, 731001
23. THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) HOURS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
24. THE CONTRACTOR SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF ERECTING DETOUR SIGNS.

CONSTRUCTION SEQUENCE

1. INSTALLATION OF CHANGEABLE MESSAGE SIGNS WITH DATE OF CLOSURE.
2. INSTALLATION OF ALL DETOUR SIGNAGE PRIOR TO ROAD CLOSURE.
ALL SIGNS TO REMAIN COVERED PRIOR TO CLOSURE.
3. ROAD CLOSURE, REMOVAL OF CHANGEABLE MESSAGE SIGNS, AND INSTALLATION OF PERIMETER EROSION BARRIER.
4. REMOVAL OF EXISTING BRIDGE AND ASSOCIATED CHANNEL EXCAVATION.
5. CONSTRUCTION OF PROPOSED PRECAST PRESTRESSED CONCRETE I-BEAM BRIDGE.
6. REMOVAL OF EXISTING PAVEMENT, EARTH EXCAVATION, AND DITCH SHAPING.
7. PLACEMENT OF AGGREGATE AND BITUMINOUS BASE COURSES FOLLOWED BY BITUMINOUS BINDER AND SURFACE COURSES.
8. PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.
9. REOPENING OF THE ROADWAY TO THROUGH TRAFFIC & REMOVAL OF ALL DETOUR SIGNS.

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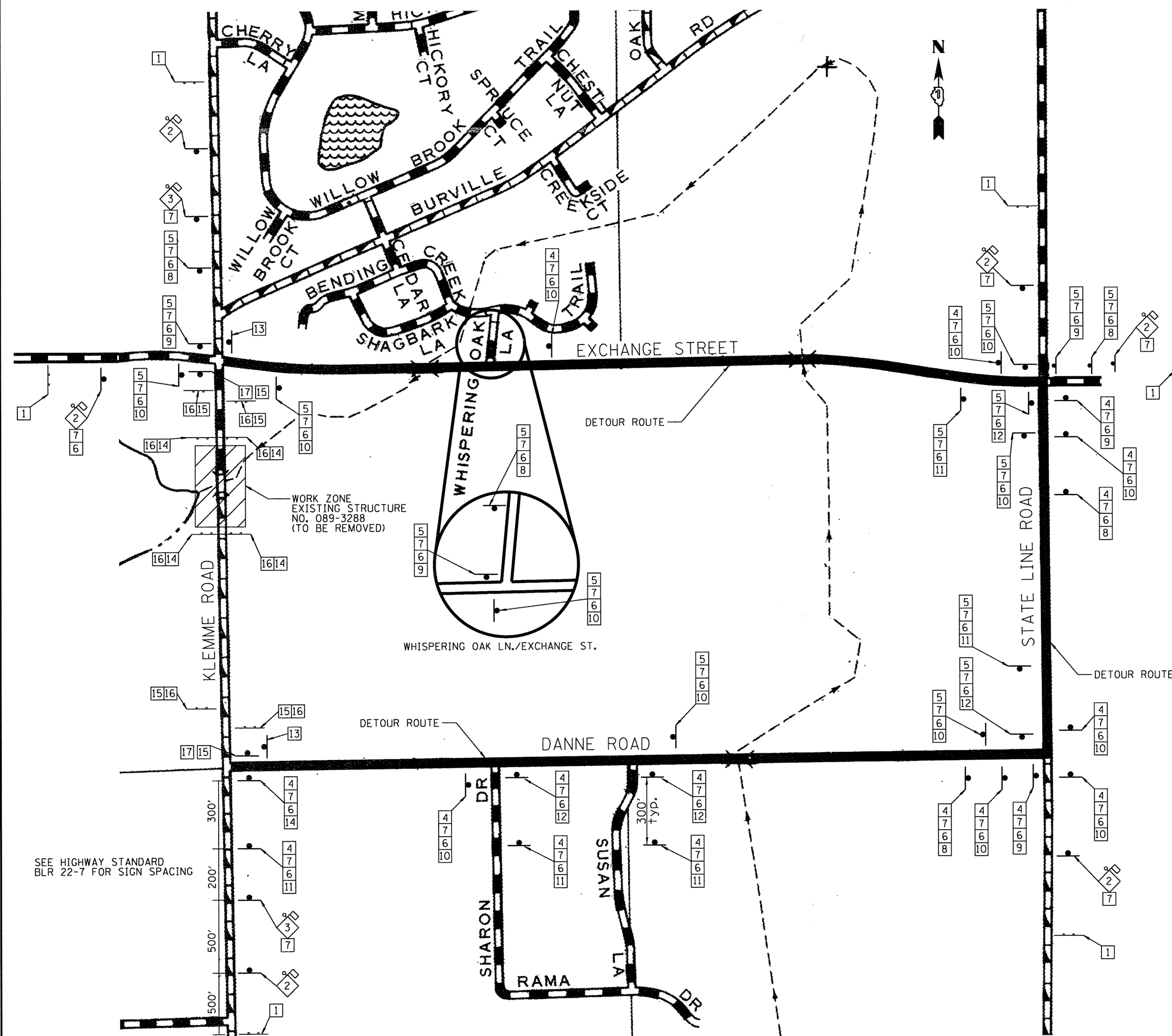
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ROAD CLOSURE AND DETOUR PLAN
T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK**

SHEET NO. 1 OF 2 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	14
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT			BROS-0191U28	

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SIGN LEGEND

- 1 CUSTOM R11-3a, 60" X 30" WITH 2 AMBER FLASHING LIGHTS, 5" BLACK TEXT ON ORANGE BACKGROUND (6 REQ'D)
- 2 W20-2, 48" X 48" WITH AMBER FLASHING LIGHTS AND FLAG. (6 REQ'D)
- 3 W20-3, 48" X 48" WITH AMBER FLASHING LIGHTS AND FLAG. (2 REQ'D)
- 4 M3-4(O), 24" X 12" (17 REQ'D)
- 5 M3-2(O), 24" X 12" (18 REQ'D)
- 6 M4-8, 30" X 15" (35 REQ'D)
- 7 M1-1100 (40 REQ'D)
- 8 M5-1L(O), 30" X 21" (5 REQ'D)
- 9 M6-1L(O), 30" X 21" (5 REQ'D)
- 10 M6-3(O), 30" X 21" (14 REQ'D)
- 11 M5-1R(O), 30" X 21" (5 REQ'D)
- 12 M6-1R(O), 30" X 21" (4 REQ'D)
- 13 M4-8A, 24" X 18" (2 REQ'D)
- 14 R11-2, 48" X 30" (5 REQ'D)
- 15 R11-3a, 60" X 30" (6 REQ'D)
- 16 TYPE III BARRICADES WITH TWO FLASHING LIGHTS EACH. (8 REQ'D)
- 17 CHANGEABLE MESSAGE SIGN

EXAMPLE ASSEMBLY
NOT TO SCALE

LEGEND

- DETOUR ROUTE
- 48" X 48" CONSTRUCTION SIGN WITH AMBER FLASHING LIGHT AND ORANGE WARNING FLAG (OPTIONAL) NUMBER DENOTES SIGN TYPE
- DETOUR SIGNS, NUMBER DENOTES TYPE
- TYPE 3 BARRICADE
- SIGN

SPECIAL DETOUR NOTES

1. THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO THE DETOUR GENERAL NOTES. SEE SHEET 14 FOR THE DETOUR GENERAL NOTES.
2. SEE SHEET 14 FOR INFORMATION REGARDING THE CONSTRUCTION SEQUENCING.
3. THREE (3) TYPE III BARRICADES WILL BE NEEDED ON EACH SIDE OF THE WORK ZONE LIMITS.
4. TOTAL LENGTH OF THE DETOUR IS 2.5 MILES.
5. ALL DETOUR SIGNS, SHALL BE COMPLETELY COVERED AT ALL TIMES THE ROADWAY IS NOT CLOSED TO TRAFFIC
6. CHANGEABLE MESSAGE SIGNS ONLY REQUIRED PRIOR TO CLOSURE OF KLEMMER ROAD. SIGNS CAN BE REMOVED ONCE THE DETOUR IS IN PLACE.

SEE HIGHWAY STANDARD BLR 22-7 FOR SIGN SPACING

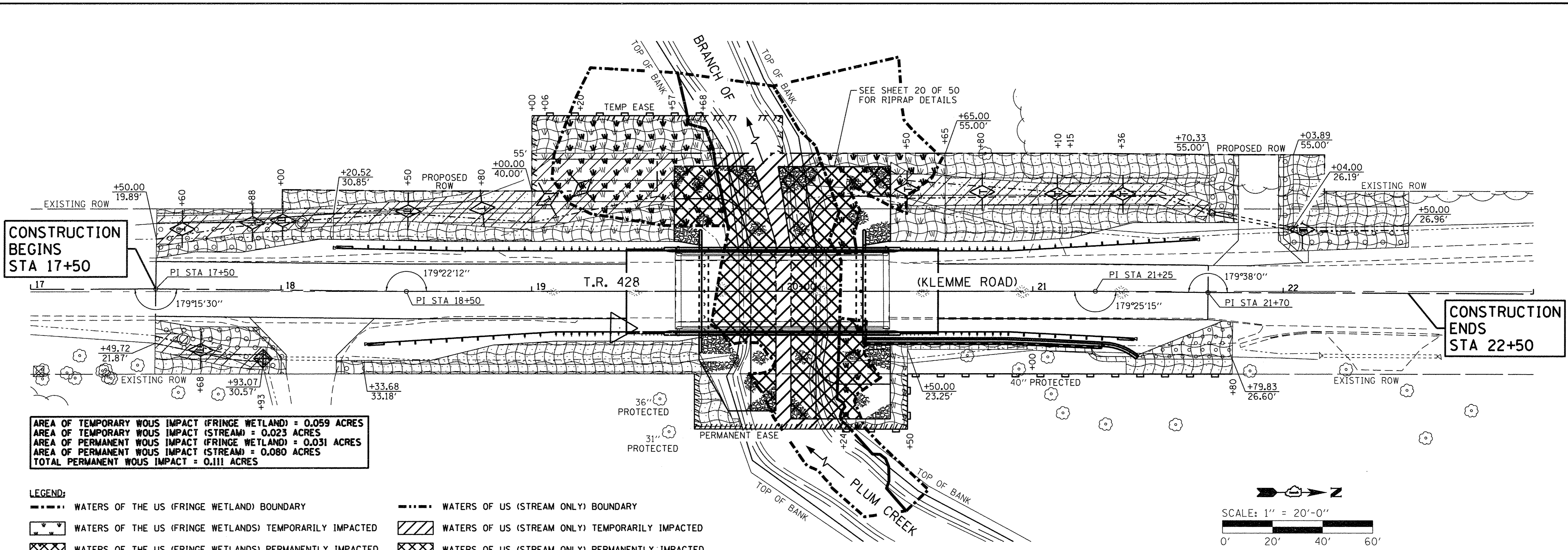
WILLET HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
TEL: 815-284-3381 DESIGN FIRM: #184-000918

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROAD CLOSURE AND DETOUR PLAN
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK
SHEET NO. 2 OF 2 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	15
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT BROS-0197(12B)				

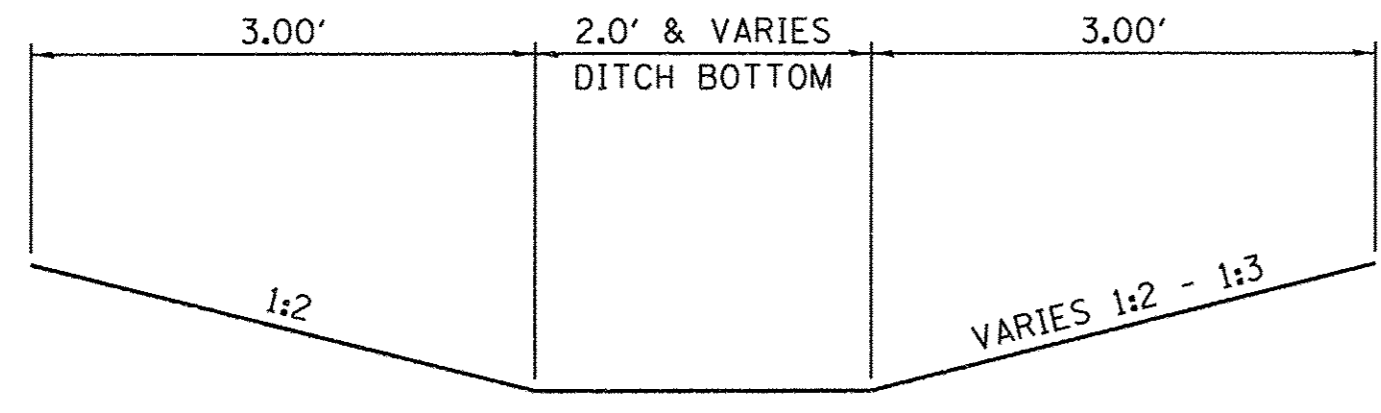
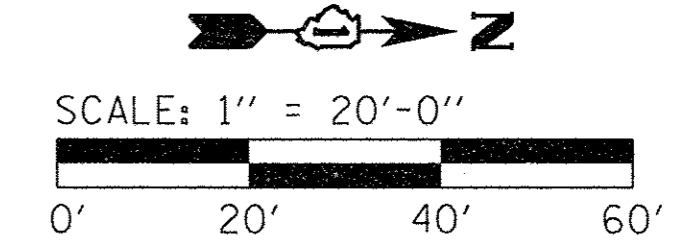


CONSTRUCTION BEGINS STA 17+50

CONSTRUCTION ENDS STA 22+50

AREA OF TEMPORARY WOUS IMPACT (FRINGE WETLAND) = 0.059 ACRES
 AREA OF TEMPORARY WOUS IMPACT (STREAM) = 0.023 ACRES
 AREA OF PERMANENT WOUS IMPACT (FRINGE WETLAND) = 0.031 ACRES
 AREA OF PERMANENT WOUS IMPACT (STREAM) = 0.080 ACRES
 TOTAL PERMANENT WOUS IMPACT = 0.111 ACRES

- LEGEND:**
- WATERS OF THE US (FRINGE WETLAND) BOUNDARY
 - WATERS OF US (STREAM ONLY) BOUNDARY
 - [Symbol] WATERS OF THE US (FRINGE WETLANDS) TEMPORARILY IMPACTED
 - [Symbol] WATERS OF US (STREAM ONLY) TEMPORARILY IMPACTED
 - [Symbol] WATERS OF THE US (FRINGE WETLANDS) PERMANENTLY IMPACTED
 - [Symbol] WATERS OF US (STREAM ONLY) PERMANENTLY IMPACTED



TURF REINFORCEMENT MAT DETAIL

EROSION CONTROL NOTES

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

ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL.

ALL ITEMS SHALL BE CONSTRUCTED AS SHOWN ON STANDARD 280001 AND AS DIRECTED BY THE ENGINEER. MAINTENANCE AND CLEANING OF THE EROSION CONTROL ITEMS SHALL BE INCLUDED IN THE RESPECTIVE EROSION CONTROL PAY ITEM.

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

IMPACTS TO WATERS OF THE US SHALL BE NO GREATER THAN WHAT IS SHOWN IN THESE PLANS, THE CONTRACTOR SHALL TAKE GREAT CARE IN NOT IMPACTING ANY ADDITIONAL WATERS OF THE US.

IN-STREAM OR STREAM-SIDE NOTES

THE CONTRACTOR SHALL CONTACT THE CORPS OF ENGINEERS WITH A PROPOSED COFFERDAM PLAN MEETING THE STANDARDS LISTED BELOW. MEANS AND METHODS FOR COMPLETING WORK WITHIN A WATERWAY MUST BE APPROVED BY THE CORPS PRIOR TO COMMENCEMENT OF WORK. THE CORPS WILL APPROVE THE COFFERDAM PLAN TO ENSURE IT MEETS THE EROSION AND SEDIMENT CONTROL STANDARDS. HOWEVER, IT IS INCUMBENT UPON THE CONTRACTOR TO ENSURE THAT ALL COFFERDAMS ARE CONSTRUCTED TO WITHSTAND EXPECTED FLOWS.

1. WORK IN THE WATERWAY SHALL BE TIMED TO TAKE PLACE DURING LOW OR NO-FLOW CONDITIONS.
2. WATER SHALL BE ISOLATED FROM THE IN-STREAM WORK AREA USING A NON-ERODIBLE COFFERDAM (STEEL SHEETS, AQUA BARRIERS, ETC.). EARTHEN COFFERDAMS ARE NOT PERMISSIBLE.
3. WORK MAY NOT BE PERFORMED IN THE WATER, EXCEPT FOR THE PLACEMENT OF THE MATERIALS NECESSARY FOR THE CONSTRUCTION OF THE COFFERDAM. THE COFFERDAM MUST BE CONSTRUCTED FROM THE UPLAND AREA AND NO EQUIPMENT MAY ENTER THE WATER AT ANY TIME. ONCE THE COFFERDAM IS IN PLACE AND THE ISOLATED AREA IS DEWATERED, EQUIPMENT MAY ENTER THE COFFERED AREA TO PERFORM THE REQUIRED WORK.
4. IF BYPASS PUMPING IS NECESSARY, THE PUMP SHALL BE PLACED ON A STABLE SURFACE OR FLOATED TO PREVENT SEDIMENT FROM BEING SUCKED INTO THE HOSE. THE BYPASS DISCHARGE SHALL BE PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE PRIOR TO REJOINING THE STREAM FLOW AND SHALL NOT CAUSE EROSION OF DOWNSTREAM AREAS. CLEANING OR FILTERING OF BYPASS WATER IS NOT NECESSARY UNLESS OTHERWISE REQUIRED.
5. DURING DEWATERING OF THE COFFERED AREA, ALL WATER MUST BE FILTERED TO REMOVE SEDIMENT. POSSIBLE OPTIONS FOR SEDIMENT REMOVAL INCLUDE BAFFLE SYSTEMS, ANIONIC POLYMERS, DEWATERING BAGS, OR OTHER APPROPRIATE METHODS. WATER SHALL HAVE SEDIMENT REMOVED PRIOR TO BEING RE-INTRODUCED TO THE DOWNSTREAM WATERWAY. DISCHARGE WATER IS CONSIDERED CLEAN IF IT DOES NOT RESULT IN A VISUALLY IDENTIFIABLE DEGRADATION OF WATER CLARITY.
6. THE SIDE SLOPES SHALL BE RESEEDED AND STABILIZED WITH AN APPROPRIATE EROSION CONTROL BLANKET PRIOR TO ACCEPTING FLOWS. THE SUBSTRATE SHALL BE RESTORED TO PRECONSTRUCTION CONDITIONS AND STABLE ENOUGH TO ACCEPT FLOWS.
7. ALL MATERIALS USED FOR TEMPORARY CONSTRUCTION ACTIVITY WILL BE REMOVED TO UPLAND AREAS IMMEDIATELY FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITY.

- LEGEND**
- [Symbol] SEEDING, CLASS 2A
 - [Symbol] SEEDING, CLASS 4
 - [Symbol] SEEDING, CLASS 4B (SPECIAL)
 - [Symbol] EROSION CONTROL BLANKET
 - [Symbol] TURF REINFORCEMENT MAT
 - [Symbol] TEMPORARY DITCH CHECKS
 - [Symbol] PERIMETER EROSION BARRIER
 - [Symbol] INLET FILTERS

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLAN
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK**
SCALE: 1" = 20'-0" SHEET NO. 1 OF 1 SHEET STA. 17+00 TO STA. 23+00

TWP. RTE. 428	SECTION 12-02110-01-BR	COUNTY WILL	TOTAL SHEETS 50	SHEET NO. 16
WHA* 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197028		

PART OF THE SOUTHWEST QTR. AND SOUTHEAST QTR. OF SEC. 18, TWP. 34 N., R. 15 E. OF THE 3RD. P.M., IN WILL COUNTY, ILLINOIS.

COORDINATE TABLE			
ILLINOIS STATE PLANE, EAST ZONE, NAD 83 (2011)			
STATION	OFFSET	NORTH	EAST
17+50.00	0.00 RT	1737082.3415	1200274.5421
18+00.00	39.45 LT	1737131.9195	1200234.5604
18+00.44	0.55 RT	1737132.7843	1200274.5511
18+50.00	0.00 RT	1737182.3359	1200273.4796
19+50.00	40.00 LT	1737281.4477	1200231.3271
19+50.00	55.00 LT	1737281.1235	1200216.3306
20+50.00	33.00 RT	1737383.0025	1200302.1481
20+50.00	55.00 RT	1737383.4781	1200324.1430
19+65.00	33.00 RT	1737298.0224	1200303.9857
19+65.00	55.00 RT	1737298.4980	1200325.9806
20+61.46	0.00 RT	1737393.7435	1200268.9082
20+61.75	55.00 LT	1737392.8484	1200213.9147
21+25.00	0.00 RT	1737457.2716	1200267.5344
21+70.00	0.00 RT	1737502.2686	1200267.0164
22+16.28	55.63 LT	1737547.5478	1200210.5695
22+16.49	0.63 LT	1737548.7369	1200265.5566

PARCEL NUMBER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA		PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
					ACRES	SQUARE FEET		
00010ED	32.010	0.278	0.198	31.732			23-16-18-300-008 23-16-18-300-009 23-16-18-300-014	
0001TE					0.052	2250	23-16-18-300-008	
00020ED	21.472	0.196	0.117	21.276			23-16-18-300-004 23-16-18-300-006	
0003PE	77.440*				0.043	1870	23-16-18-400-001	

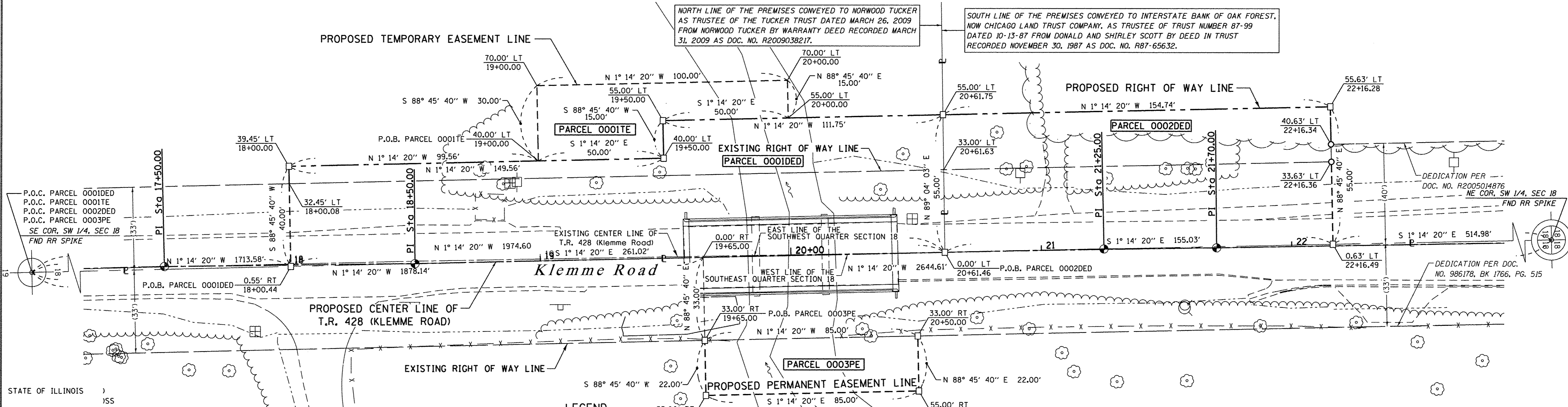
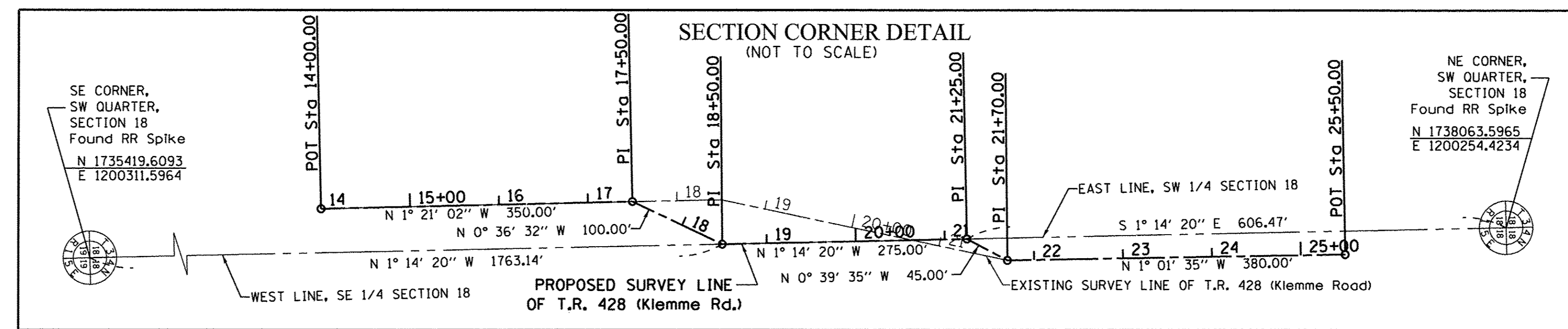
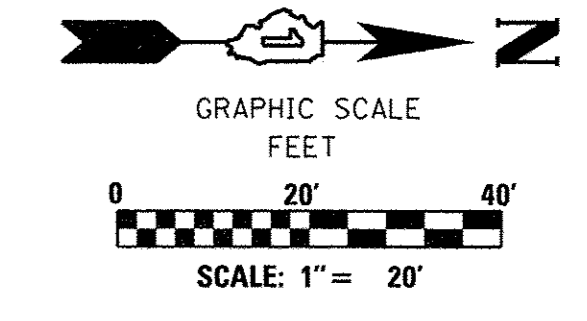
* AREA PER WILL COUNTY ASSESSOR

NOTES:
ALL DIMENSIONS ARE MEASURED UNLESS OTHERWISE SPECIFIED.

BEARINGS AND DISTANCES SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT) "GRID".

ALL MEASUREMENTS AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND". TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES SHOWN BY THE COMBINATION FACTOR OF 0.999995869.

AREA SHOWN ON THIS PLAT ARE GROUND.



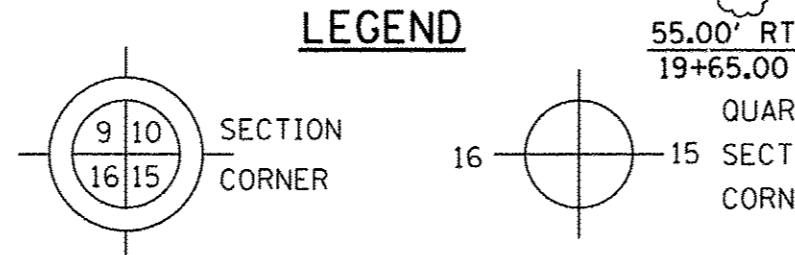
STATE OF ILLINOIS)
COUNTY OF LEE)

THIS IS TO CERTIFY THAT I, JEFFREY B. ROHDE, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, ARE AN ILLINOIS PROFESSIONAL DESIGN FIRM, LAND SURVEYING CORPORATION, NUMBER 184-000918), HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 18, TOWNSHIP 34 NORTH, RANGE 15 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILL COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT _____, ILLINOIS THIS _____ DAY OF _____ 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3906
LICENSE EXPIRATION DATE: NOVEMBER 30, 2016

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.



- FOR THE PURPOSE OF THIS PLAT BEARINGS ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, (NAD-83, 2011 ADJ.) WILL COUNTY GPS 1524 PID AE2498
- IRON PIPE OR ROD FOUND
 - ⊕ "MAG" NAIL SET
 - + CUT CROSS FOUND OR SET
 - 5/8" REBAR SET
 - STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
 - M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
 - ⊙ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
 - RIGHT OF WAY STAKING PROPOSED TO BE SET



PLAT OF HIGHWAYS
WILL COUNTY
DIVISION OF TRANSPORTATION
T.R. 428 (KLEMME ROAD)

LIMITS: OVER BR. OF PLUM CREEK COUNTY; WILL
SECTION: 12-02110-01-BR JOB NUM: R-55-001-97
STA. 17+50 TO STA. 22+50
SCALE: 1" = 20' SHEET: 02 OF 03 SHEETS

16841 W. LARAWAY RD.
JOLIET, IL 60433

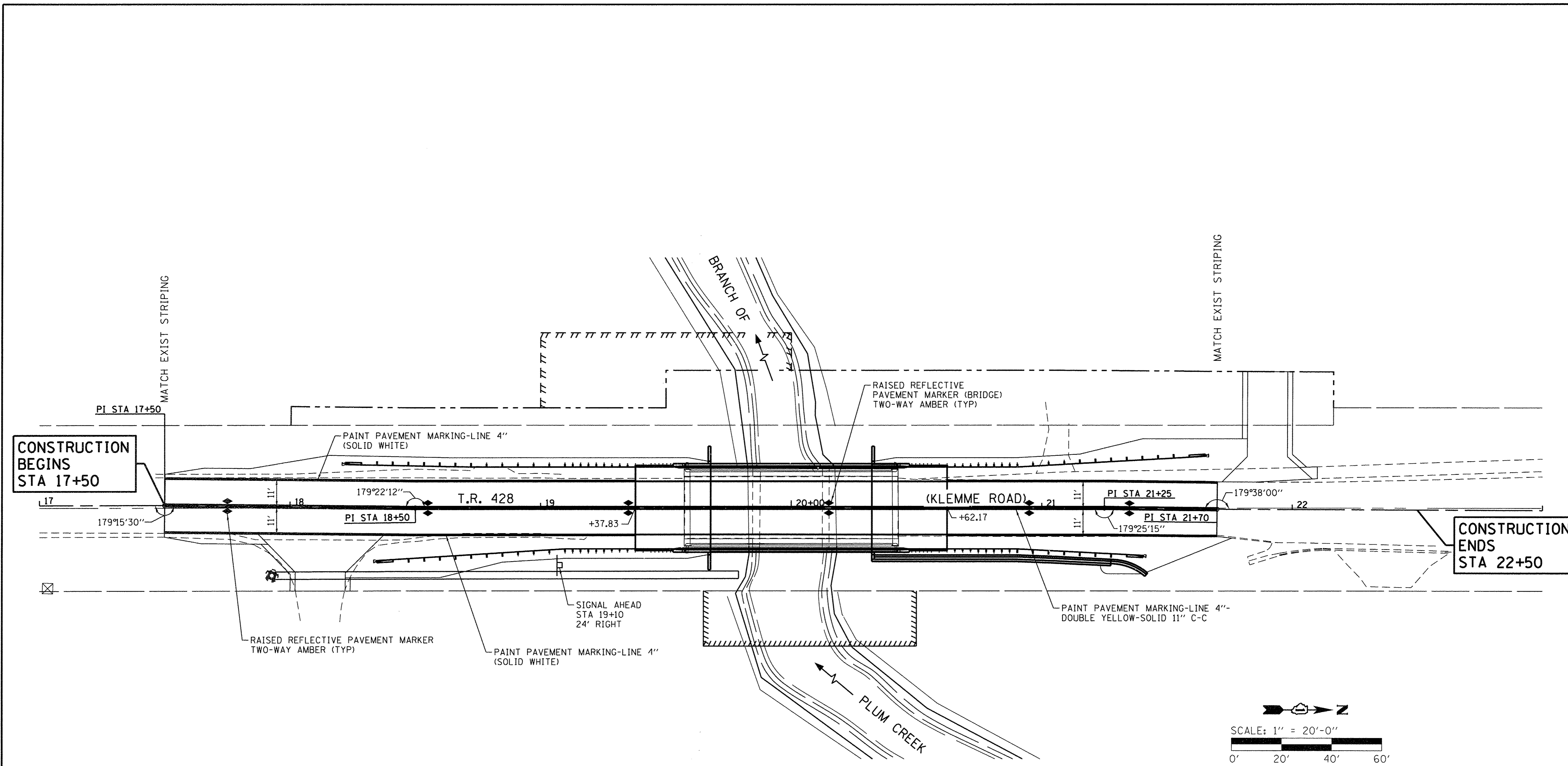
DESIGNED - DAN	REVISED -
CHECKED - MAC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - MAC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY PLAN
T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK
SHEET NO. 1 OF 1 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	17
WHA* 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197(128)		

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CONSTRUCTION BEGINS STA 17+50

CONSTRUCTION ENDS STA 22+50

NOTE:
 1. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST IDOT DISTRICT 1 STANDARDS (TC-11). THE MARKERS SHOULD BE RECESSED IN THE PAVEMENT.

WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FIRM: #184-009918

DESIGNED - DAN	REVISED -
CHECKED - MAC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - MAC	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING PLAN
 T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK**
 SCALE: 1" = 20'-0" SHEET NO. 1 OF 1 SHEETS STA. 17+00 TO STA. 23+00

TWP. RTE. 428	SECTION 12-02110-01-BR	COUNTY WILL	TOTAL SHEETS 50	SHEET NO. 18
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT BR05-0197(128)				

EXISTING STRUCTURE: S.N. 099-3288

Originally built in 1964 as T.R. 428 under Section 110B-TR. The existing structure consists of three spans (3 @ 28'-0") of precast, prestressed concrete deck beams. The structure measures 85'-8" back to back of abutments and 30'-4" out to out of deck. Structure is to be removed and replaced. Road will be closed to traffic during construction. No salvage.

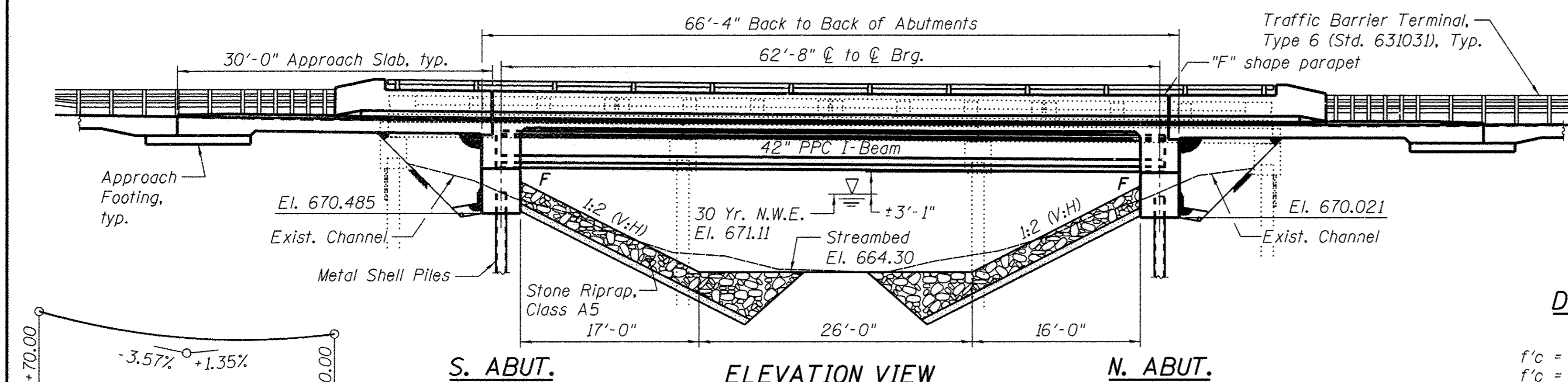
BENCH MARK #40: Chis. "□" on southwest hub guard of structure, ±12.2' Lt. of Sta. 19+57.32, El. 679.46

INDEX OF SHEETS

- 1 General Plan And Elevation
- 2 Riprap And Pile Layout
- 3 Top of Slab Elevations
- 4-5 Top of Approach Slab Elevations
- 6 Superstructure
- 7 Superstructure Details
- 8 Diaphragm Details
- 9-10 Bridge Approach Slab Details
- 11 Aluminum Rail Details
- 12 Framing Plan
- 13 42" PPC I-Beam
- 14 42" PPC I-Beam Details
- 15-16 Abutment Details
- 17 MSE Wall Details
- 18 Metal Shell Pile Details
- 19-20 Boring Logs

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.		81	81
Stone Riprap, Class A5	Sq. Yd.		757	757
Filter Fabric	Sq. Yd.		757	757
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu. Yd.		181	181
Floor Drains	Each	6		6
Concrete Structures	Cu. Yd.		71.0	71.0
Concrete Superstructure	Cu. Yd.	117.5		117.5
Bridge Deck Grooving	Sq. Yd.	414		414
Protective Coat	Sq. Yd.	632		632
Concrete Superstructure (Approach Slab)	Cu. Yd.	96.5		96.5
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42 in.	Foot	318.5		318.5
Reinforcement Bars, Epoxy Coated	Pound	56,270	11,990	68,260
Furnishing Metal Shell Piles 12" x 0.25"	Foot		606	606
Driving Piles	Foot		606	606
Test Pile Metal Shells	Each		2	2
Name Plates	Each	1		1
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	307		307
Geocomposite Wall Drain	Sq. Yd.		56	56
Granular Backfill for Structures	Cu. Yd.		139	139
Railing	Foot	169		169
Pipe Underdrains for Structures 4"	Foot		123	123



DESIGN STRESSES

FIELD UNITS
 f'c = 4,000 psi (Superstructure)
 f'c = 3,500 psi (Substructure)
 fy = 60,000 psi (Reinforcement)
PRECAST PRESTRESSED UNITS
 f'c = 6,000 psi
 f'ci = 5,000 psi
 fpu = 270,000 psi (1/2" φ Low Lax Strands)
 fpbt = 201,960 psi (1/2" φ Low Lax Strands)

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 Interims.
SEISMIC DATA
 Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.094g
 Design Spectral Acceleration at 2.0 sec. (S_{D5}) = 0.154g
 Soil Site Class = D

LOADING HL-93

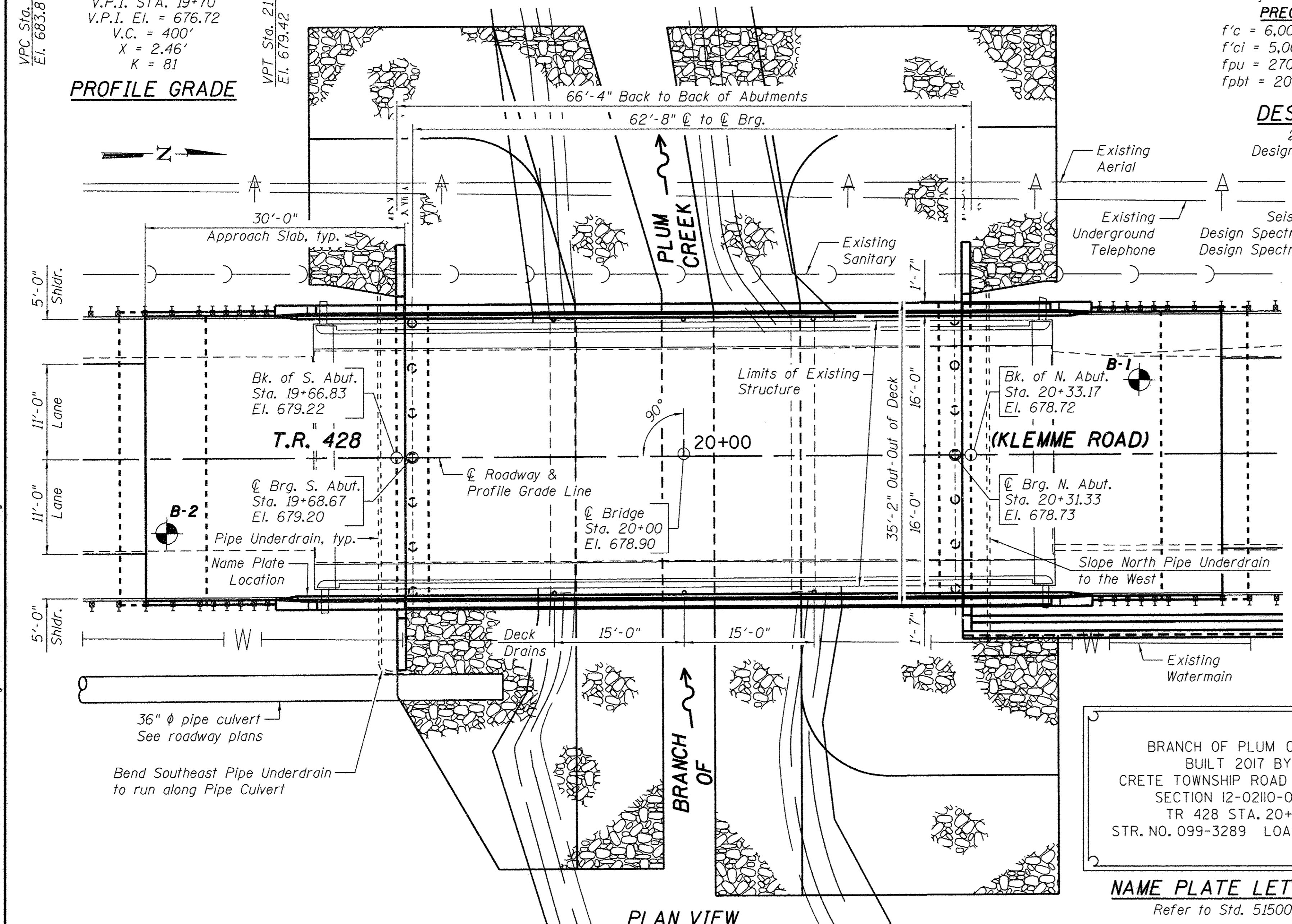
Allow 50#/sq. ft. for future wearing surface.

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
 Slipforming of the parapets is not allowed.
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 * Includes 30' of Bridge Approach Pavement.
 ** See Special Provisions

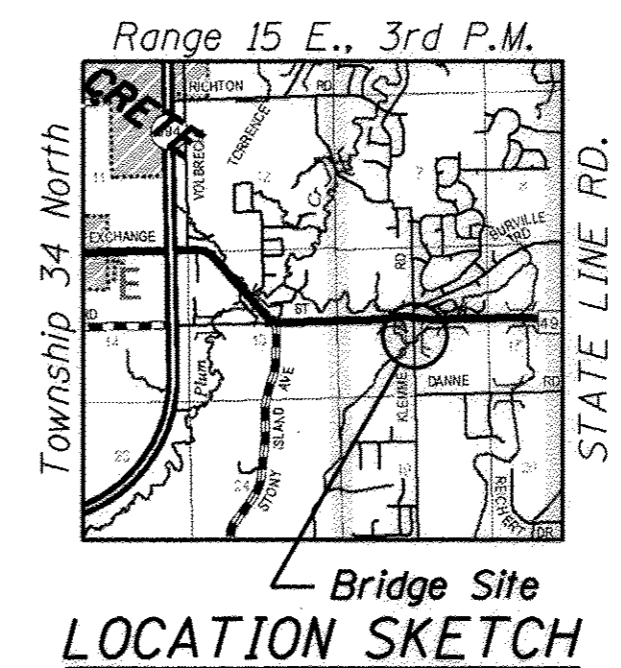
WATERWAY INFORMATION

Drain. Area = 8.23 sq. mi.		Prop. Low Grade El. 678.69 @ Sta. 20+50.00							
Flood	Freq. Yr.	Q C.F.S.	Opening	Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.	Exist.	Prop.
	10	602	241	268	670.58	0.12	0.06	670.70	670.64
Design	30	740	241	268	671.11	0.15	0.10	671.26	671.21
Base	100	886	263	289	671.49	0.17	0.12	671.66	671.61
Max Calc.	500	1,100	287	311	671.89	0.21	0.16	672.10	672.05



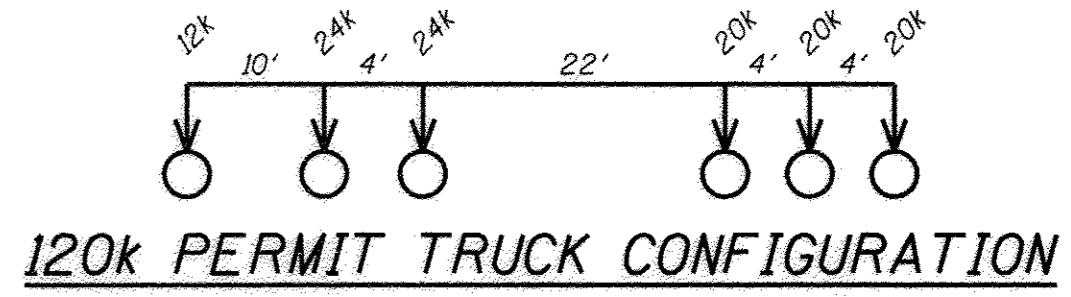
DATE: 12/15/2016
 EXPIRES 11/30/18

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO LRFD Bridge Design Specifications'."

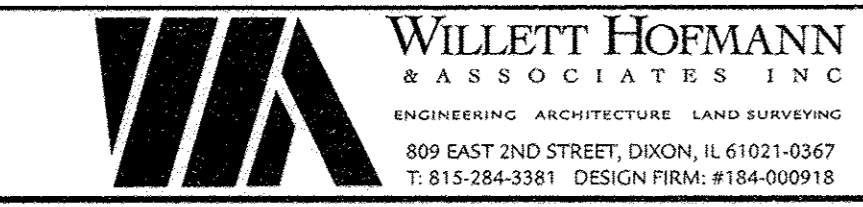


DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation - ft.	North Abut.	South Abut.
	669.91	670.38



GENERAL PLAN AND ELEVATION
T.R. 428 (KLEMM RD.) OVER BR. OF PLUM CR.
SEC 12-02110-01-BR
CRETE TOWNSHIP
STATION 20+00
STRUCTURE NO. 099-3289



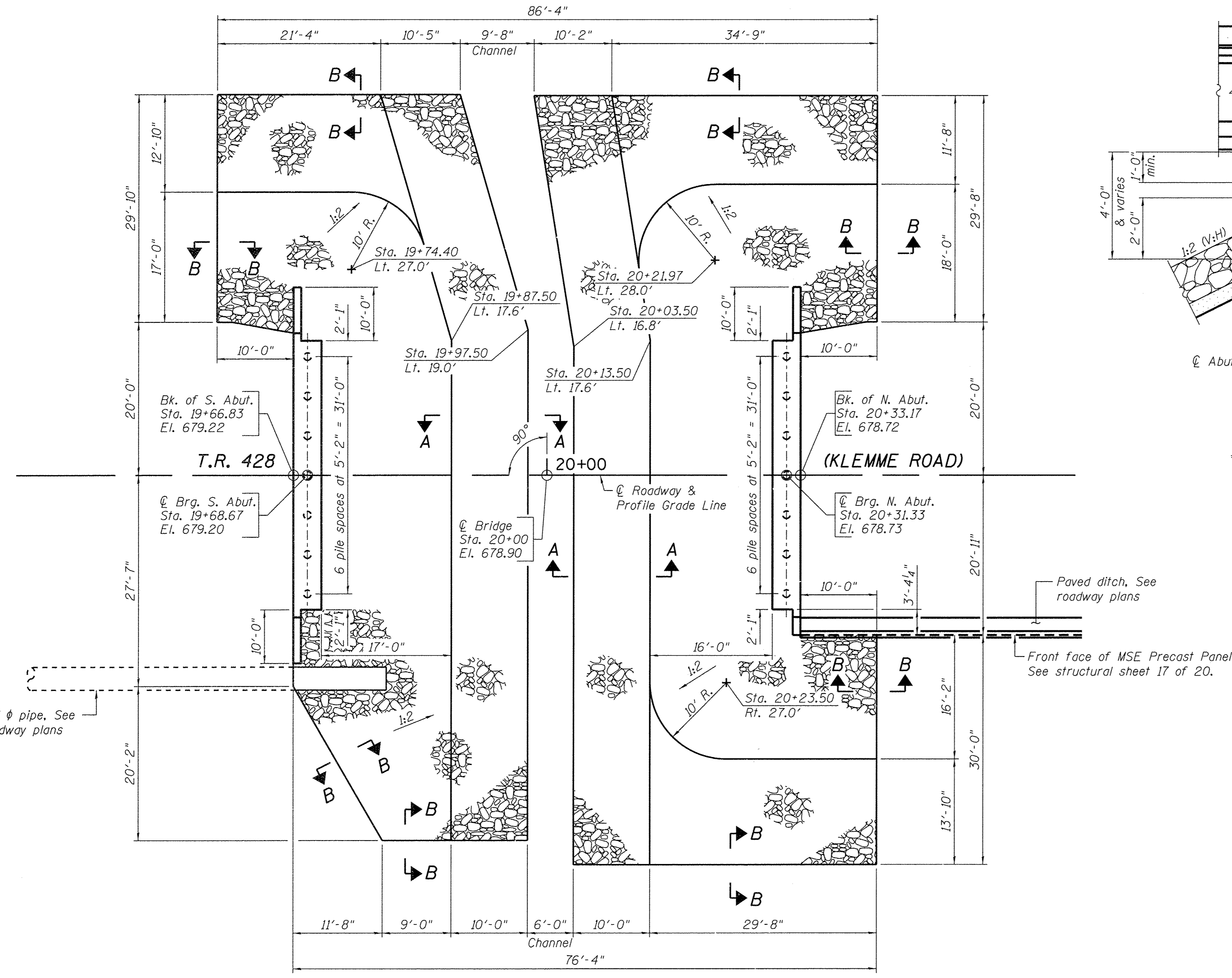
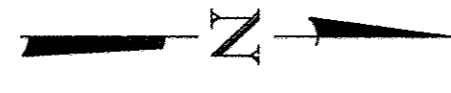
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DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

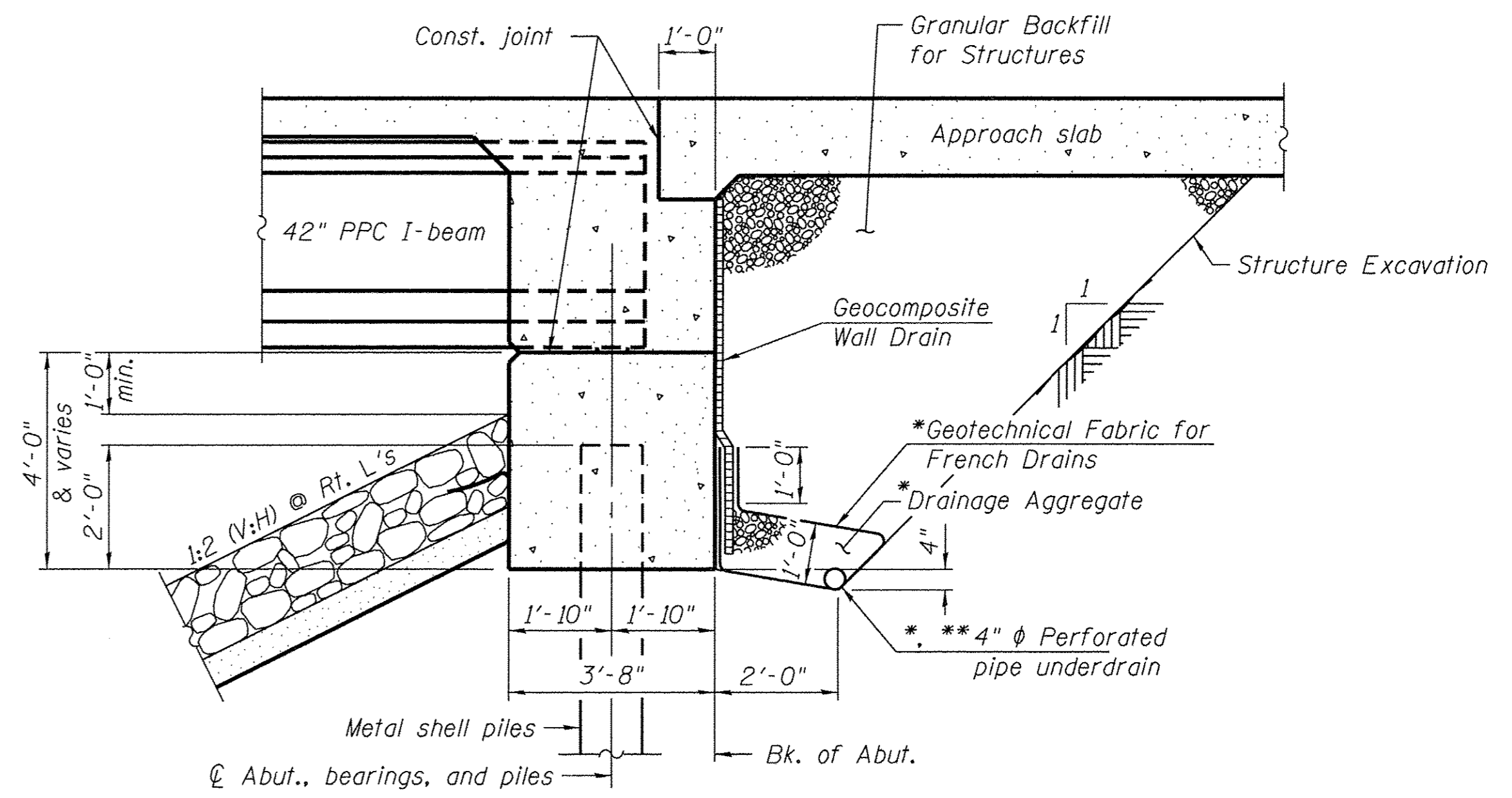
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TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	19
WHA* 1303014			CONTRACT NO. 61D68	
ILLINOIS FED. AID PROJECT BROS-01970281				

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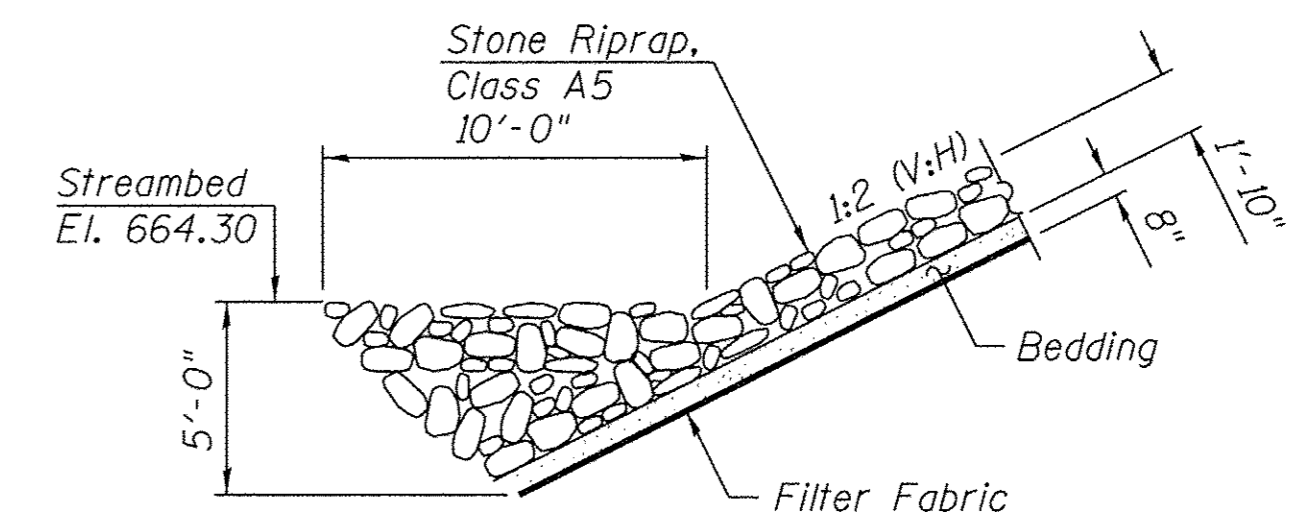


PLAN VIEW
Utilities not shown for clarity

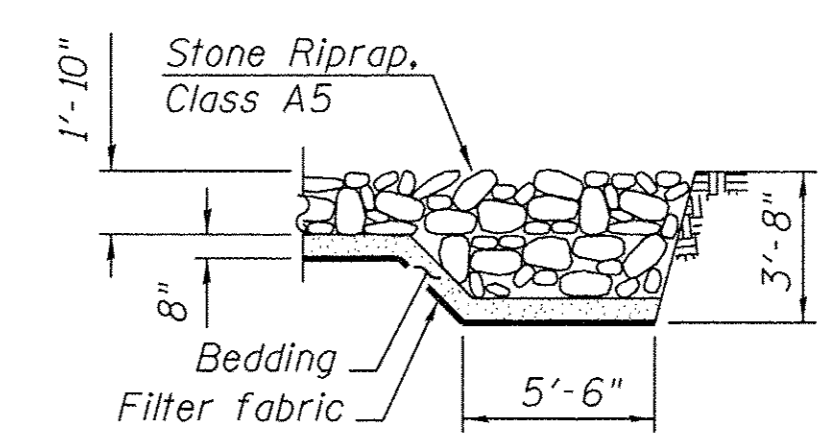


SECTION THRU ABUTMENT

- * Included in the cost of Pipe Underdrain for Structures 4" (See Special Provisions)
- ** Bend Southeast Pipe Underdrain to run along side 36" ϕ Pipe. Slope entire North Pipe Underdrain to the West.



SECTION A-A



SECTION B-B

BILL OF MATERIAL

Item	Unit	Quantity
Stone Riprap, Class A5	Sq. Yd.	757
Filter Fabric	Sq. Yd.	757

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ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
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DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**RIPRAP AND PILE LAYOUT
STRUCTURE NO. 099-3289**

STRUCTURAL SHEET NO. 2 OF 20 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	20
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0191U28		

BEAM 1

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+66.83	14.00	678.95	678.95
S. ϕ Brg.	19+68.67	14.00	678.93	678.93
A	19+78.67	14.00	678.82	678.84
B	19+88.67	14.00	678.73	678.78
C	19+98.67	14.00	678.65	678.70
D	20+08.67	14.00	678.58	678.63
E	20+18.67	14.00	678.52	678.55
N. ϕ Brg.	20+31.33	14.00	678.47	678.47
Back N. Abut.	20+33.17	14.00	678.46	678.46

BEAM 2

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+66.83	7.00	679.11	679.11
S. ϕ Brg.	19+68.67	7.00	679.09	679.09
A	19+78.67	7.00	678.98	679.00
B	19+88.67	7.00	678.89	678.94
C	19+98.67	7.00	678.80	678.85
D	20+08.67	7.00	678.73	678.78
E	20+18.67	7.00	678.68	678.71
N. ϕ Brg.	20+31.33	7.00	678.62	678.62
Back N. Abut.	20+33.17	7.00	678.62	678.62

BEAM 3 - ϕ OF ROADWAY

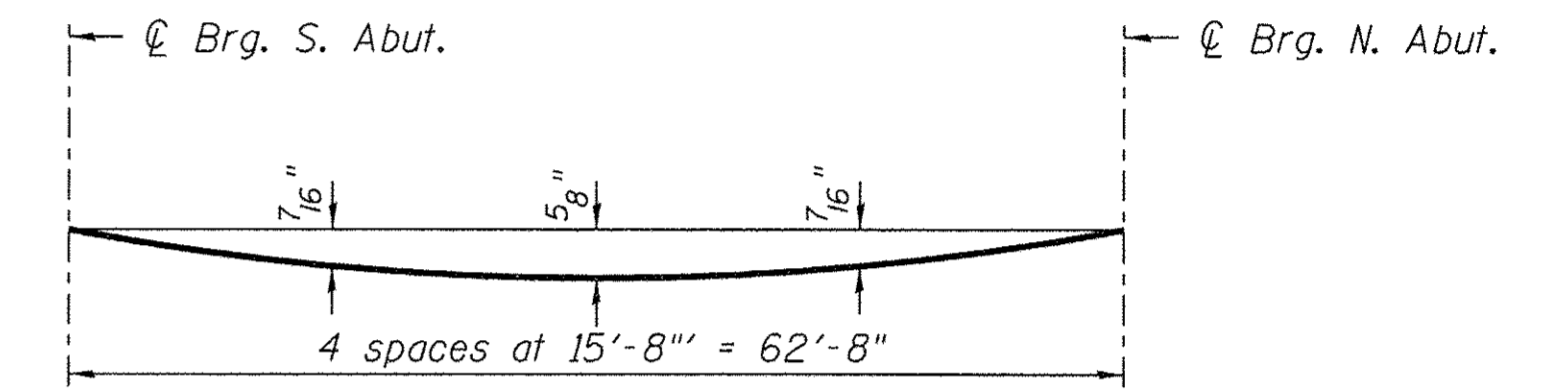
Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+66.83	0.00	679.22	679.22
S. ϕ Brg.	19+68.67	0.00	679.20	679.20
A	19+78.67	0.00	679.09	679.11
B	19+88.67	0.00	679.00	679.05
C	19+98.67	0.00	678.91	678.96
D	20+08.67	0.00	678.84	678.89
E	20+18.67	0.00	678.79	678.82
N. ϕ Brg.	20+31.33	0.00	678.73	678.73
Back N. Abut.	20+33.17	0.00	678.72	678.72

BEAM 4

Location	Station	Offset Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+66.83	7.00	679.11	679.11
S. ϕ Brg.	19+68.67	7.00	679.09	679.09
A	19+78.67	7.00	678.98	679.00
B	19+88.67	7.00	678.89	678.94
C	19+98.67	7.00	678.80	678.85
D	20+08.67	7.00	678.73	678.78
E	20+18.67	7.00	678.68	678.71
N. ϕ Brg.	20+31.33	7.00	678.62	678.62
Back N. Abut.	20+33.17	7.00	678.62	678.62

BEAM 5

Location	Station	Offset Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back S. Abut.	19+66.83	14.00	678.95	678.95
S. ϕ Brg.	19+68.67	14.00	678.93	678.93
A	19+78.67	14.00	678.82	678.84
B	19+88.67	14.00	678.73	678.78
C	19+98.67	14.00	678.65	678.70
D	20+08.67	14.00	678.58	678.63
E	20+18.67	14.00	678.52	678.55
N. ϕ Brg.	20+31.33	14.00	678.47	678.47
Back N. Abut.	20+33.17	14.00	678.46	678.46



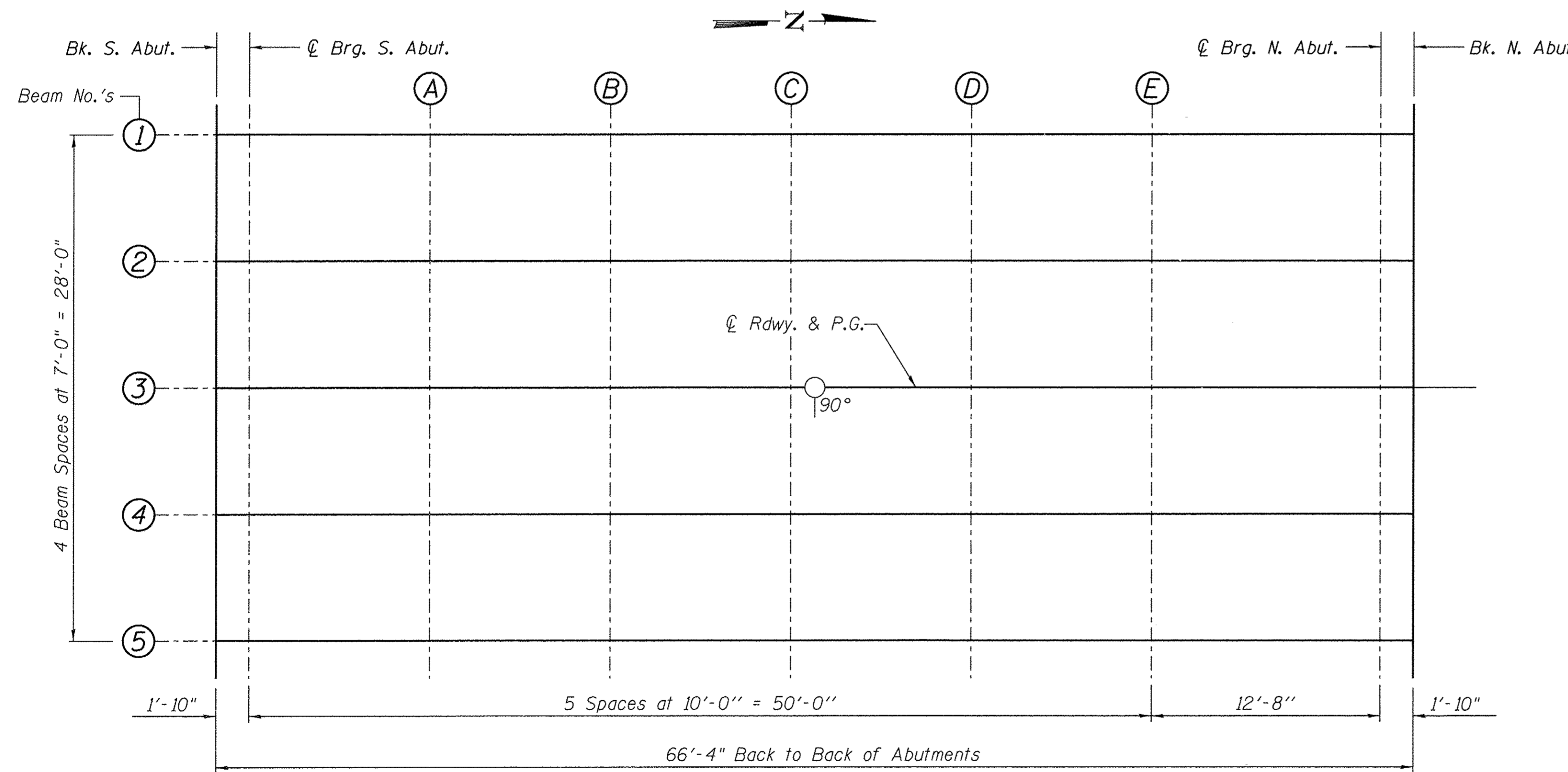
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

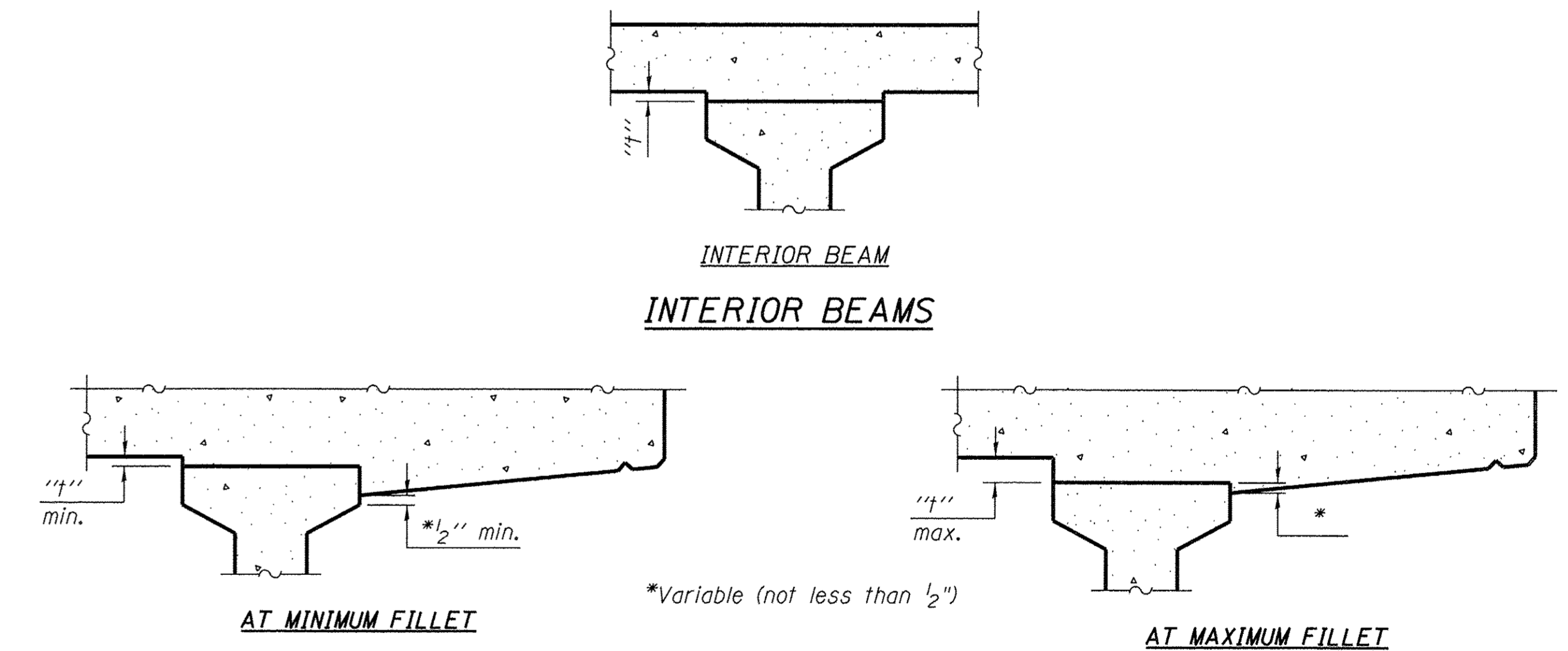
Note:

The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown on this sheet.

**Top of Slab Elevations are based on beam's respective deflection.



PLAN

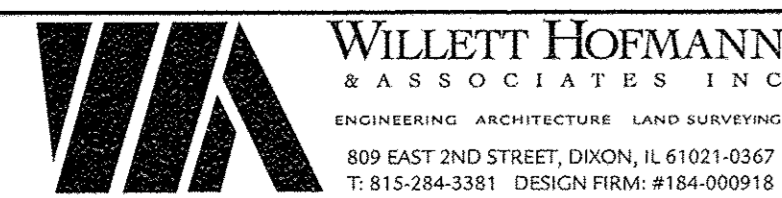


EXTERIOR BEAMS

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

FILLET HEIGHTS

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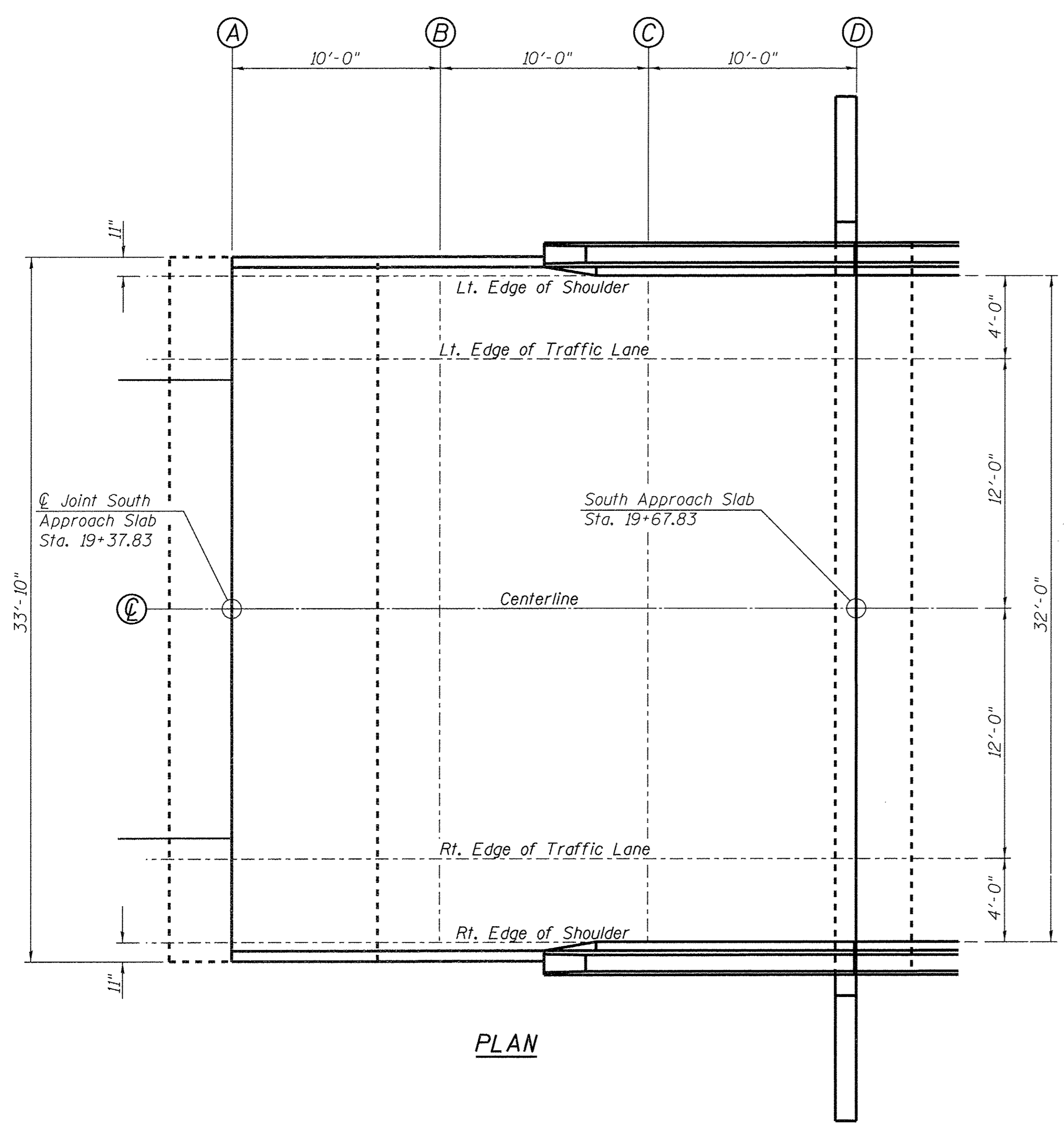
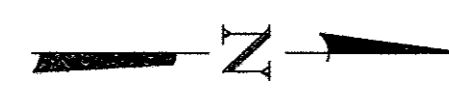
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CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 099-3289**

STRUCTURAL SHEET NO. 3 OF 20 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	21
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971281		



PLAN

LEFT EDGE OF SHOULDER

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	19+37.83	16.00	679.33
B	19+47.83	16.00	679.19
C	19+57.83	16.00	679.05
D	19+67.83	16.00	678.93

LEFT EDGE OF TRAFFIC LANE

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	19+37.83	12.00	679.42
B	19+47.83	12.00	679.27
C	19+57.83	12.00	679.14
D	19+67.83	12.00	679.02

CENTERLINE

Location	Station	Offset	Theoretical Grade Elevations
A	19+37.83	0.00	679.60
B	19+47.83	0.00	679.46
C	19+57.83	0.00	679.33
D	19+67.83	0.00	679.21

RIGHT EDGE OF TRAFFIC LANE

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	19+37.83	12.00	679.42
B	19+47.83	12.00	679.27
C	19+57.83	12.00	679.14
D	19+67.83	12.00	679.02

RIGHT EDGE OF SHOULDER

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	19+37.83	16.00	679.33
B	19+47.83	16.00	679.19
C	19+57.83	16.00	679.05
D	19+67.83	16.00	678.93

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 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3387 DESIGN FIRM: #184-000918

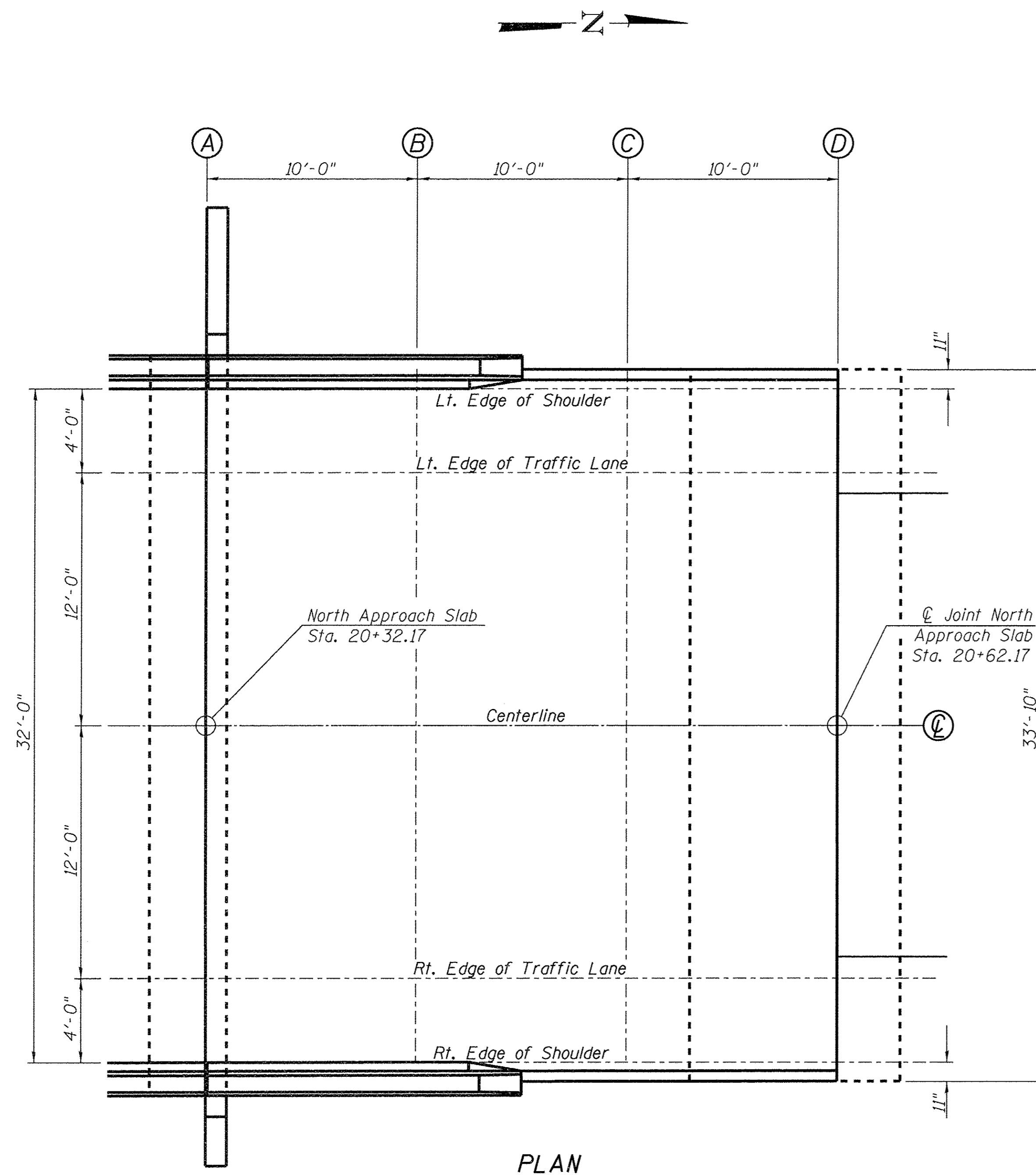
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CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 099-3289**

STRUCTURAL SHEET NO. 4 OF 20 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	22
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197(128)		



PLAN

LEFT EDGE OF SHOULDER

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	20+32.17	16.00	678.46
B	20+42.17	16.00	678.43
C	20+52.17	16.00	678.41
D	20+62.17	16.00	678.41

LEFT EDGE OF TRAFFIC LANE

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	20+32.17	12.00	678.54
B	20+42.17	12.00	678.51
C	20+52.17	12.00	678.50
D	20+62.17	12.00	678.49

CENTERLINE

Location	Station	Offset	Theoretical Grade Elevations
A	20+32.17	0.00	678.73
B	20+42.17	0.00	678.70
C	20+52.17	0.00	678.68
D	20+62.17	0.00	678.68

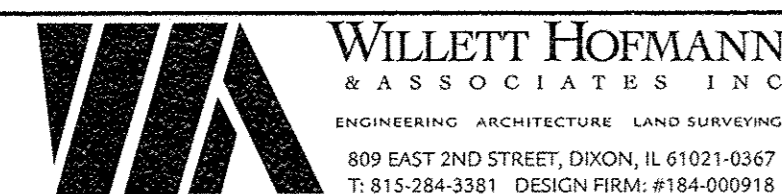
RIGHT EDGE OF TRAFFIC LANE

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	20+32.17	12.00	678.54
B	20+42.17	12.00	678.51
C	20+52.17	12.00	678.50
D	20+62.17	12.00	678.49

RIGHT EDGE OF SHOULDER

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	20+32.17	16.00	678.46
B	20+42.17	16.00	678.43
C	20+52.17	16.00	678.41
D	20+62.17	16.00	678.41

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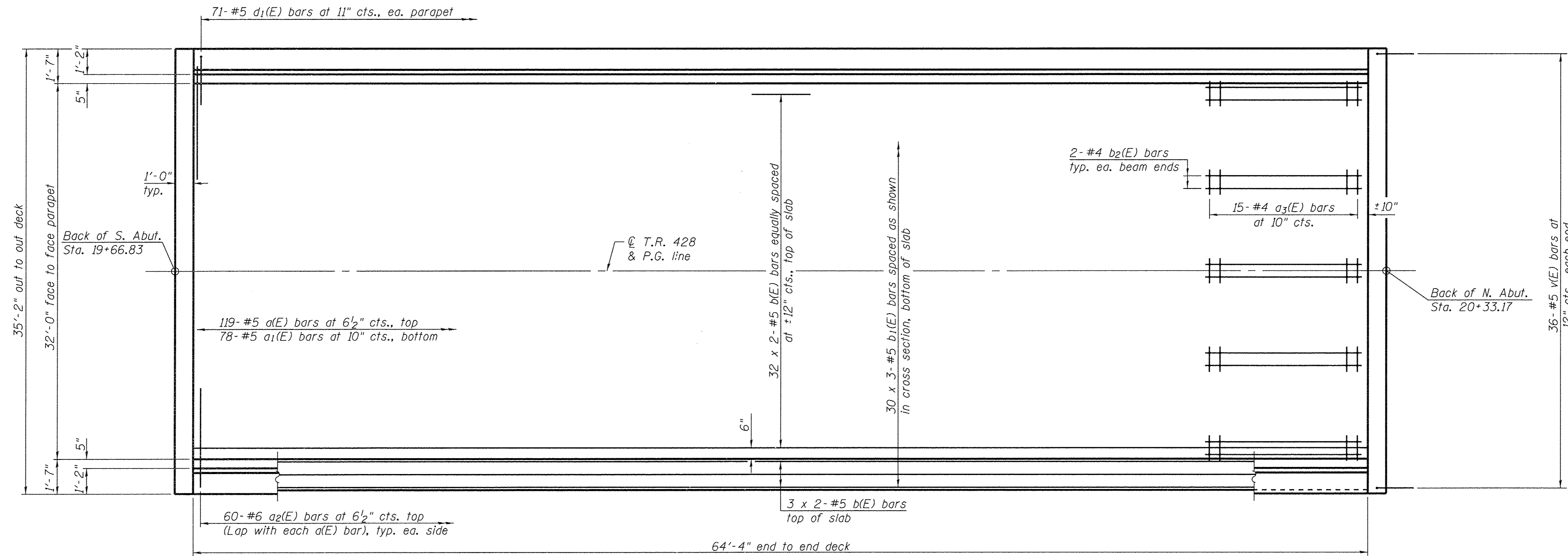
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CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 099-3289**

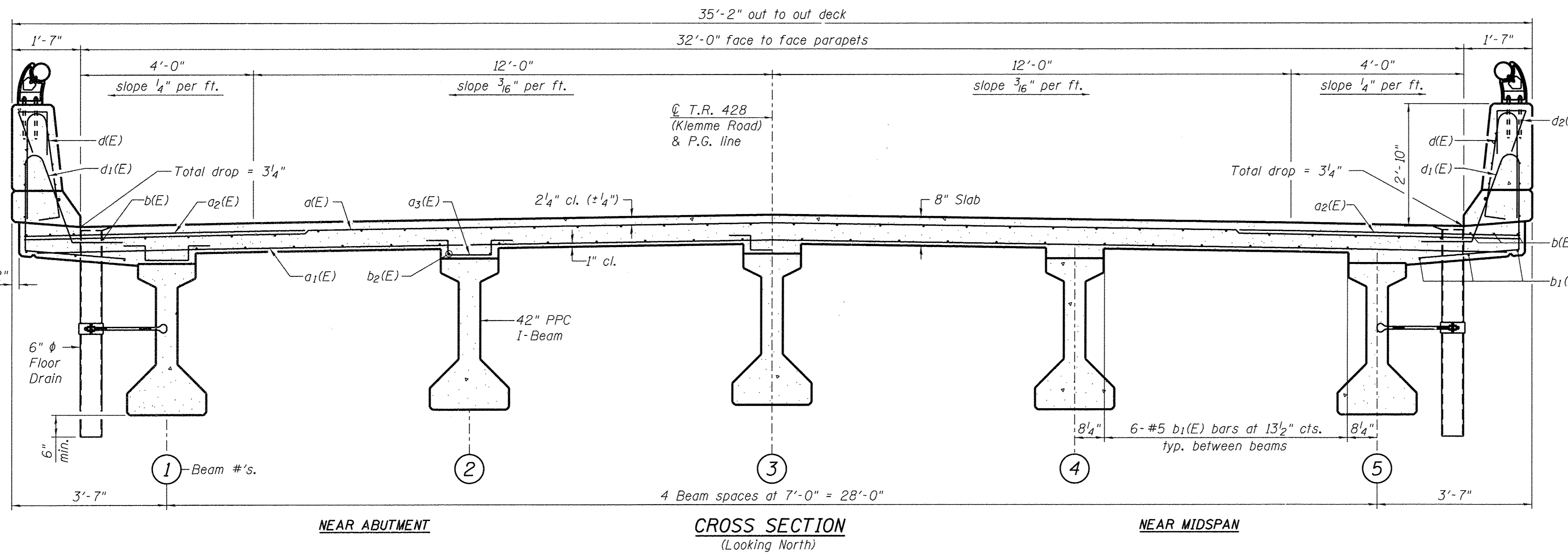
STRUCTURAL SHEET NO. 5 OF 20 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	23
WHA* 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT BR05-019T128				



PLAN

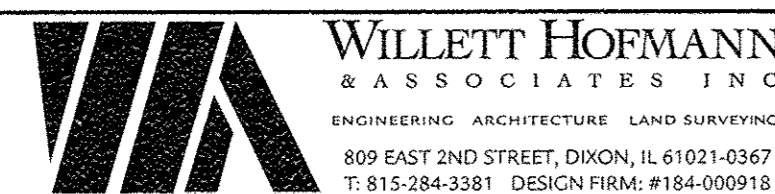
MINIMUM BAR LAP
#5 bar = 3'-6"



NOTES:

- See Structural Sheet 7 of 20 for Superstructure Details and Bill of Material.
- For Section A-A and Diaphragm Details, see Structural Sheet 8 of 20.
- See Structural Sheet 7 of 20 for parapet reinforcement.
- Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
- * Required where fillet exceeds 2 1/2", exact number of a4(E) bars & length of b2(E) bars to be determined during construction.

FILE = S:\PROJECTS\2011\1303014_Cross Section\DESIGN\STRUCT\20.DWG.dwg, 1303014_Superstructure.dwg

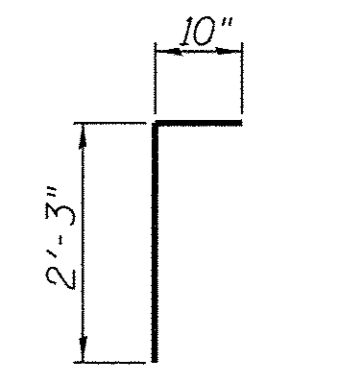
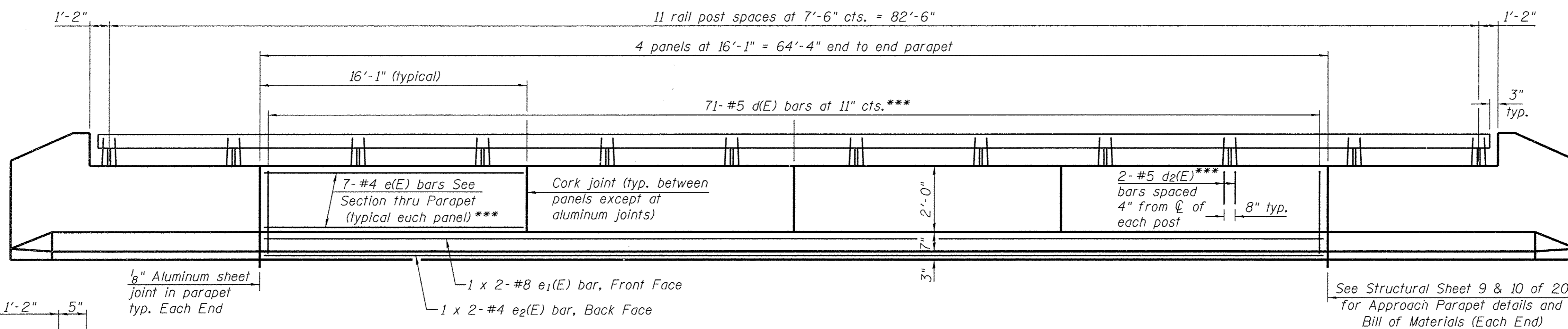


DESIGNED - BKC	REVISED -
CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

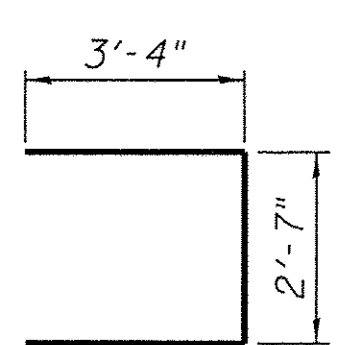
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 099-3289
STRUCTURAL SHEET NO. 6 OF 20 SHEETS

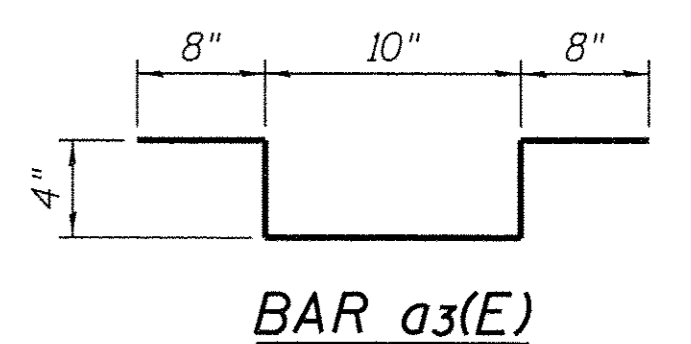
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428	12-02110-01-BR	WILL	50	24
WHA# 1303014			CONTRACT NO. 61D68	
ILLINOIS FED. AID PROJECT			BROS-0197(128)	



BAR v(E)



BAR s(E)

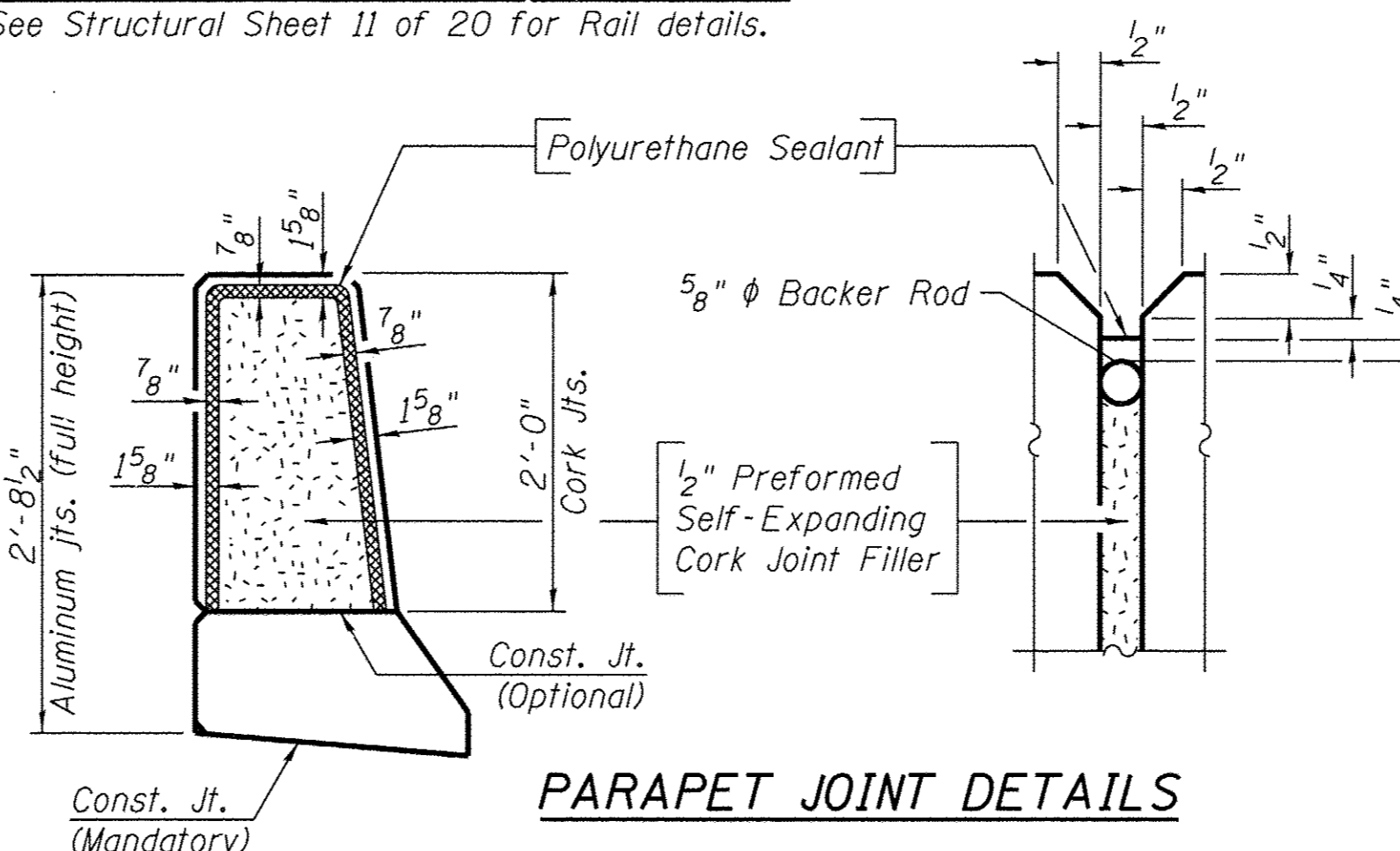


BAR a3(E)

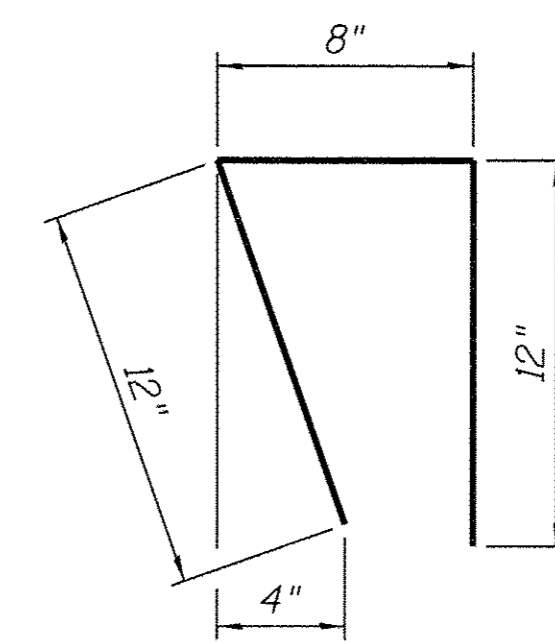
MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-8"
#8 bar = 5'-11"

INSIDE ELEVATION OF PARAPET
See Structural Sheet 11 of 20 for Rail details.

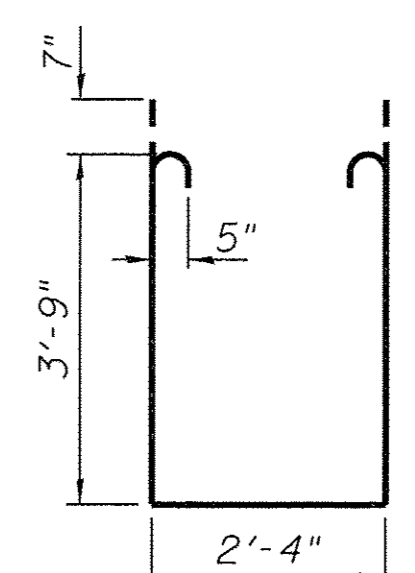
***Coordinate placement with railing anchor rods. See Structural Sheet 11 of 20.



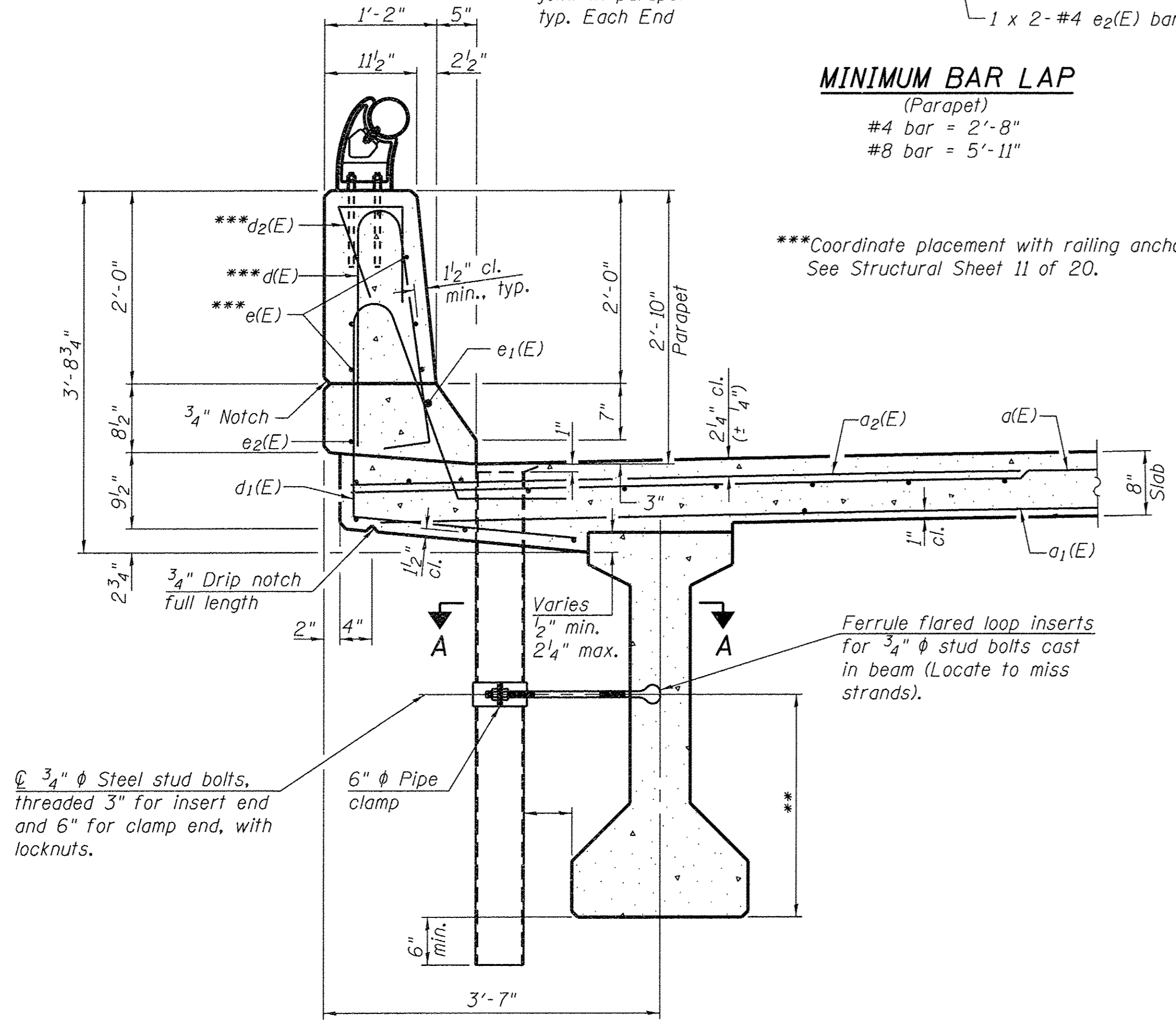
PARAPET JOINT DETAILS



BAR d2(E)



BAR s1(E)



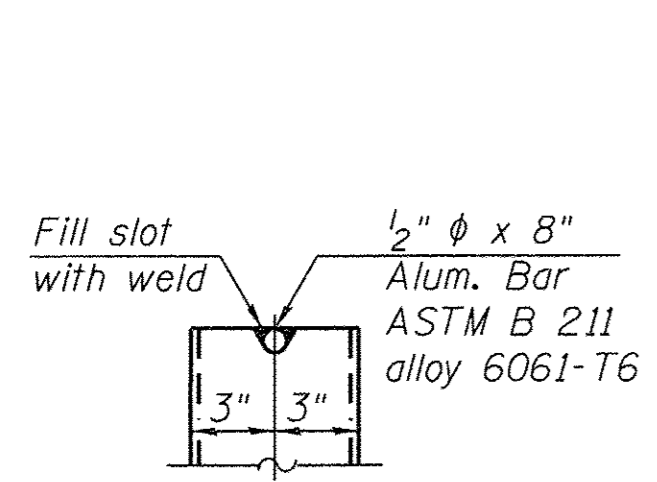
SECTION THRU PARAPET

**For insert locations See sheet 13 of 20.

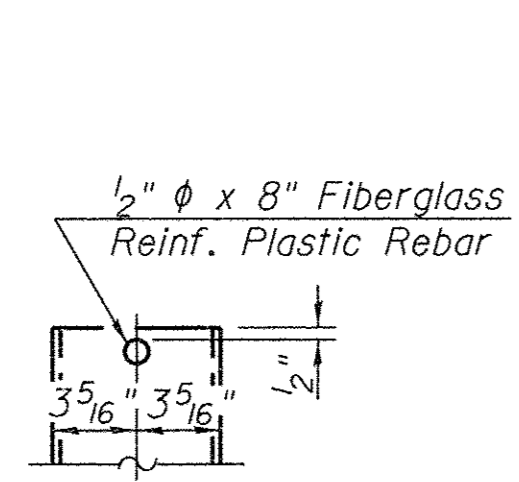
NOTES:

Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the fiberglass floor drains shall be pigmented by the manufacturer with a color that matches the concrete.
The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.
The clamping device and inserts shall be galvanized according to AASHTO M 232. Cost of clamping device and inserts included with Floor Drains.
The 1/8" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be non-staining gray one component non-sag elastomeric gun grade meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25. Use T with a 5/8" backer rod.
The 1/2" Preformed Self-Expanding Cork Joint Filler shall be according to Article 1051.07 of the Std. Spec. Cost included with Concrete Superstructure.

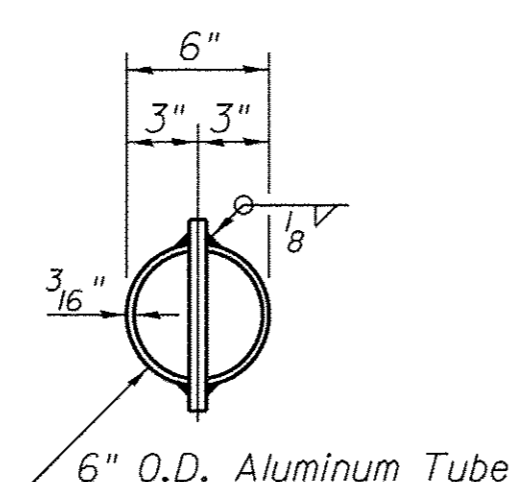
@ 3/4" diameter steel stud bolts, threaded 3" for insert end and 6" for clamp end, with locknuts.



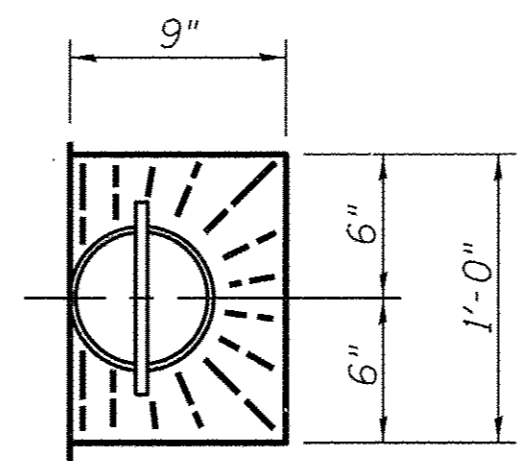
ALUMINUM TUBE



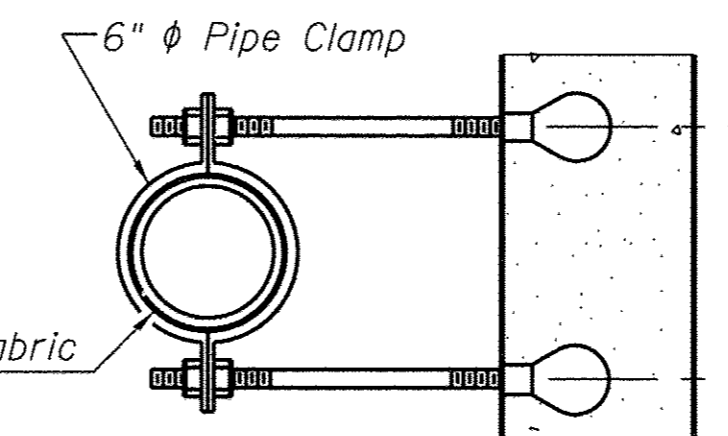
FIBERGLASS PIPE



TOP PLAN (Showing Aluminum Tube)

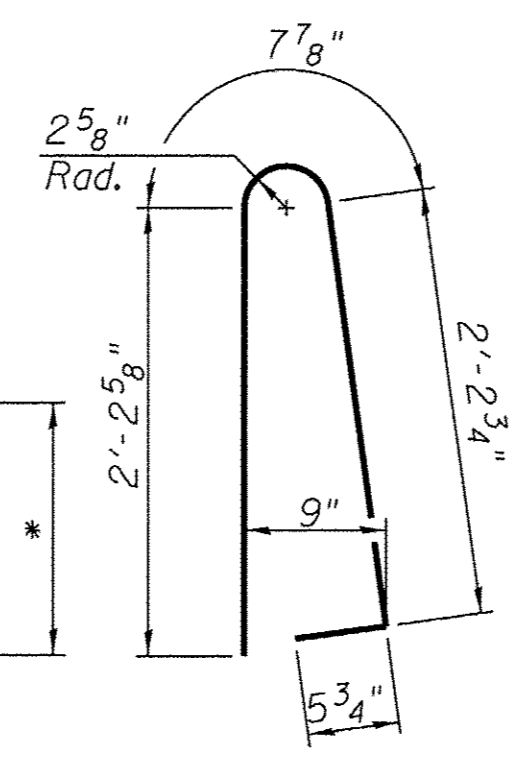


TOP PLAN

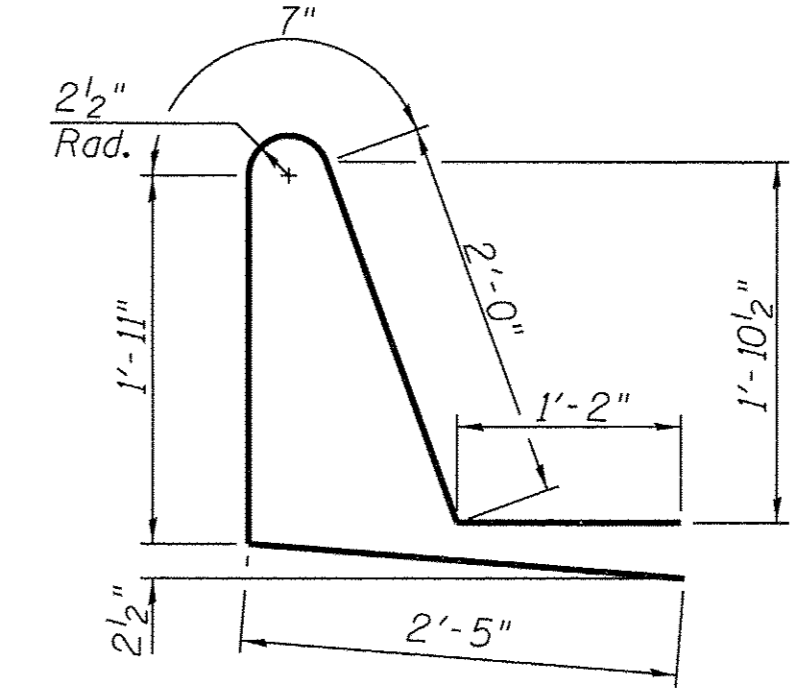


SECTION A-A

*Dimension as required by Pipe Clamp



BAR d(E)



BAR d1(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	119	#5	34'-6"	—
a1(E)	78	#5	33'-10"	—
a2(E)	240	#6	6'-6"	—
a3(E)	150	#4	2'-10"	—
b(E)	76	#5	33'-9"	—
b1(E)	90	#5	23'-8"	—
b2(E)	20	#4	12'-0"	—
d(E)	142	#5	5'-7"	—
d1(E)	142	#5	8'-1"	—
d2(E)	32	#5	2'-8"	—
e(E)	56	#4	15'-9"	—
e1(E)	4	#8	35'-0"	—
e2(E)	4	#4	33'-4"	—
m(E)	12	#6	34'-10"	—
m1(E)	16	#6	6'-2"	—
m2(E)	8	#6	3'-0"	—
m3(E)	8	#6	4'-10"	—
m4(E)	4	#6	2'-4"	—
m5(E)	20	#5	4'-0"	—
s(E)	60	#5	9'-3"	—
s1(E)	60	#5	11'-0"	—
v(E)	72	#5	3'-1"	—
Reinforcement Bars, Epoxy Coated		Lbs.	20,350	
Concrete Superstructure		Cu. Yds.	109.9	
Floor Drains		Each	6	
Bridge Deck Grooving		Sq. Yds.	214	
Protective Coating		Sq. Yds.	271	

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

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WILLET HOFMANN ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
7:815-284-3381 DESIGN FIRM: #184-000918

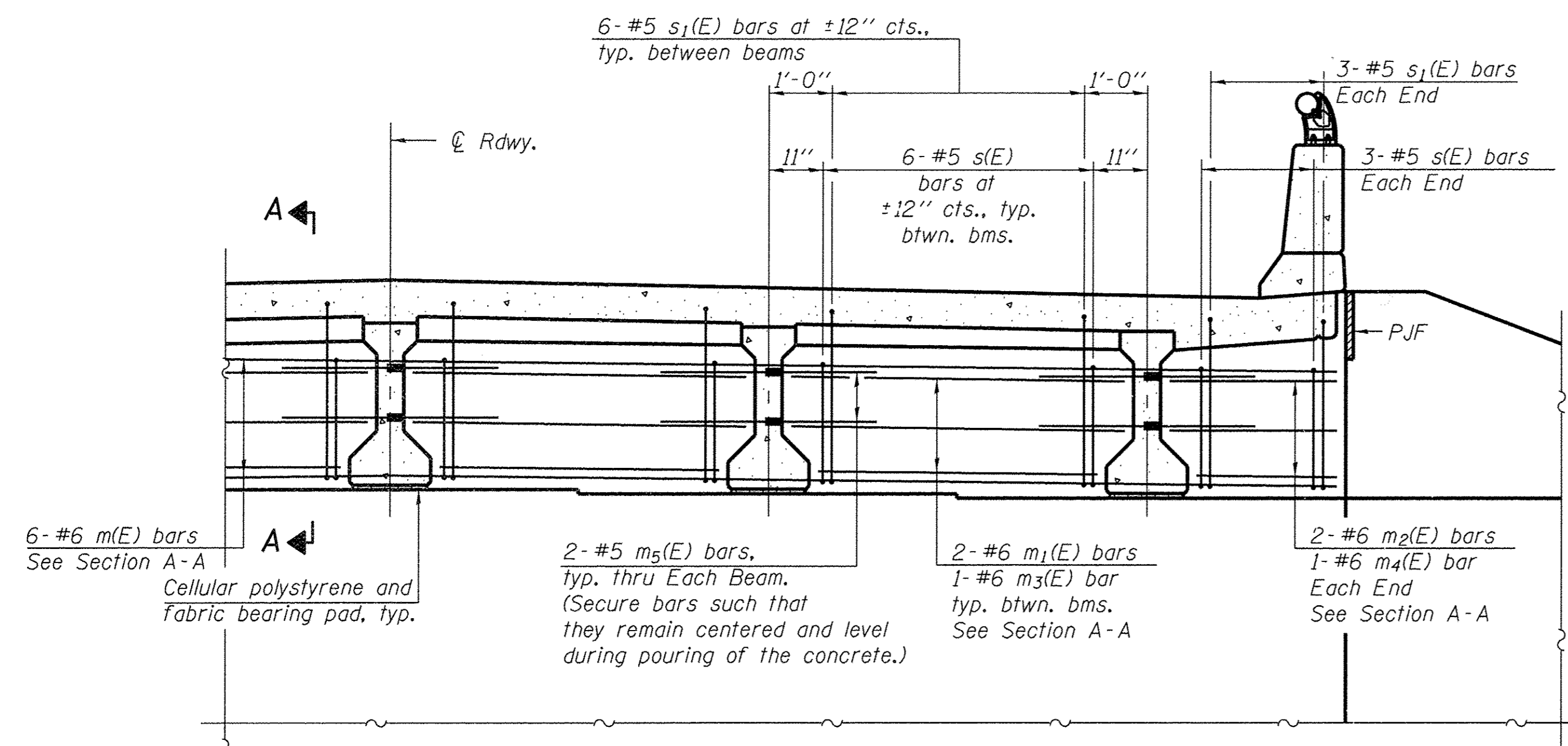
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DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

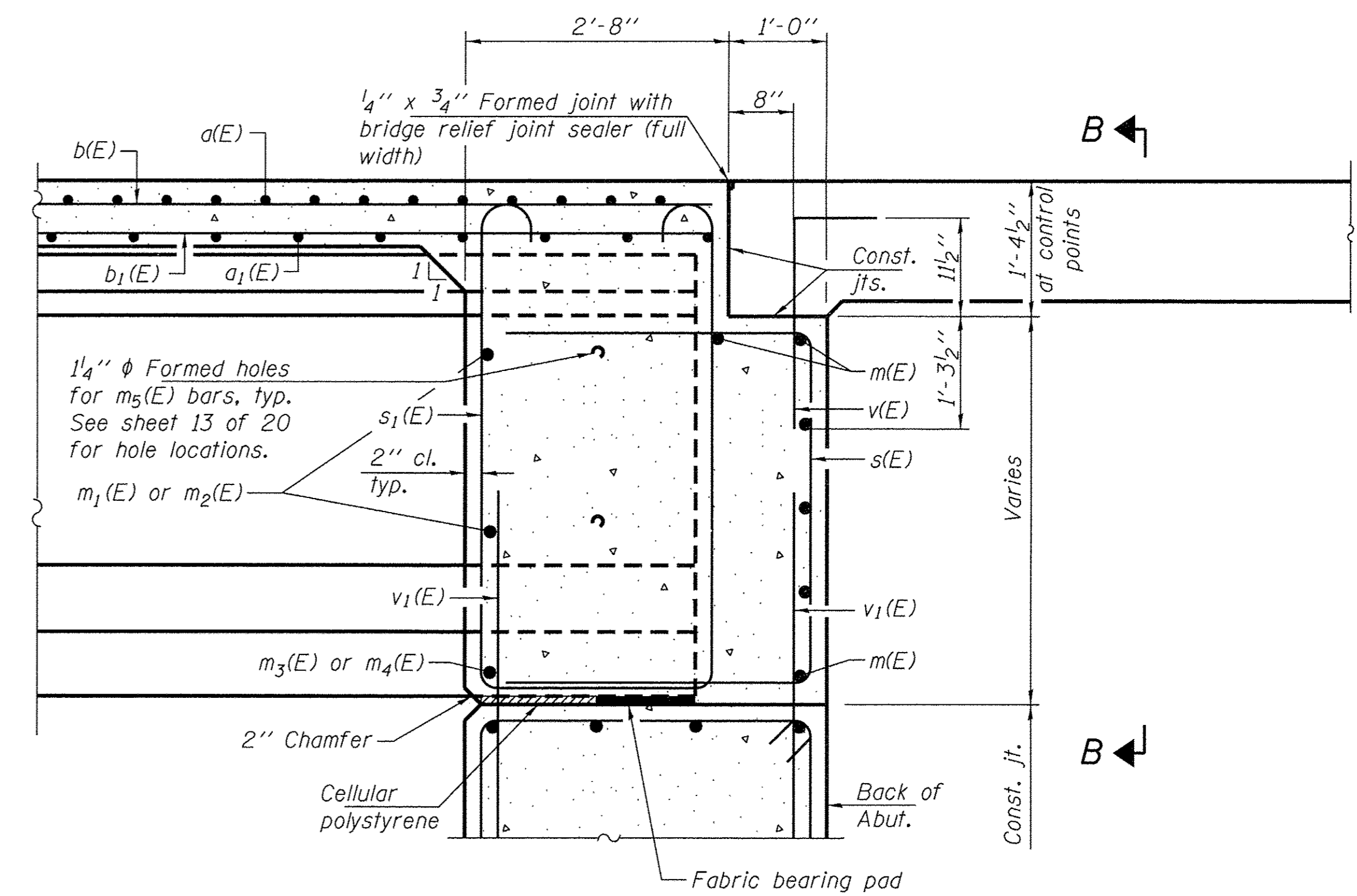
SUPERSTRUCTURE DETAILS STRUCTUE NO. 099-3289

STRUCTURAL SHEET NO. 7 OF 20 SHEETS

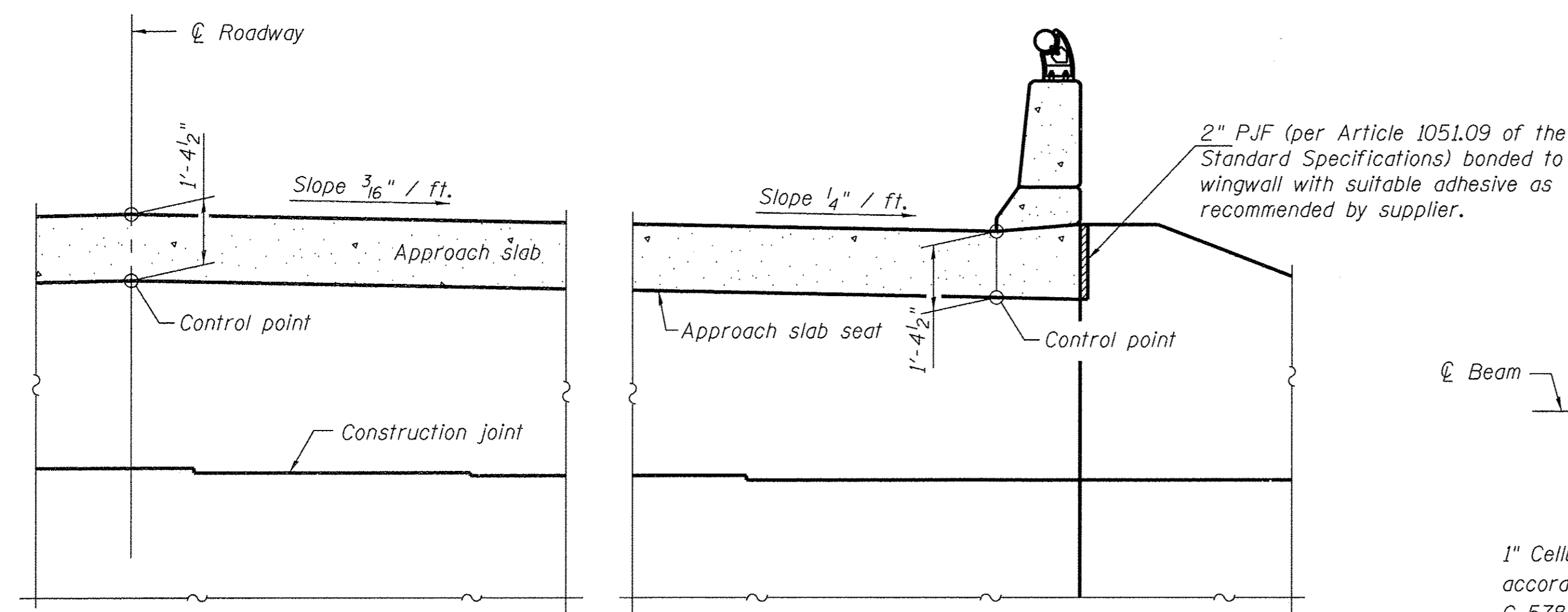
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WHA* 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT BR05-019T028				



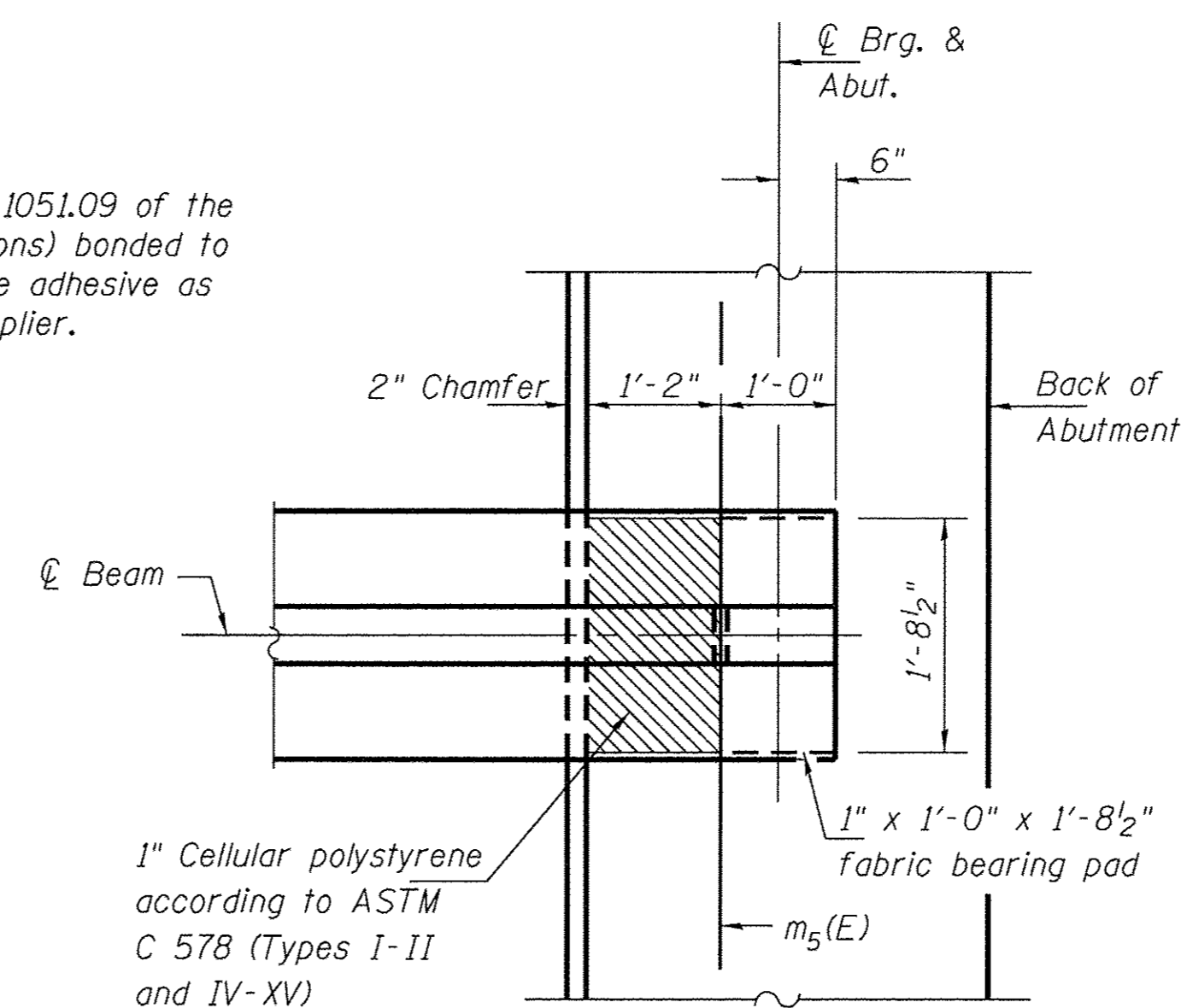
DIAPHRAGM AT ABUTMENT



SECTION A-A



SECTION B-B



PARTIAL PLAN AT ABUTMENT
(Showing bottom flange of beam)

NOTES:

Reinforcement bars in diaphragm are billed with superstructure on sheet 7 of 20.

Concrete in diaphragm is included with Concrete Superstructure on sheet 7 of 20.

For details of bars s(E), s1(E) and v(E) see sheet 7 of 20.

The approach slab seat shall have a constant slope determined from the control points shown.

Cost of cellular polystyrene is included with Concrete Superstructure.

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

FILE = S:\PROJECTS\2014\1303014-Crete\DESIGN\STRUCT\20-Diaphragm\1303014-Diaphragm_Details.dgn



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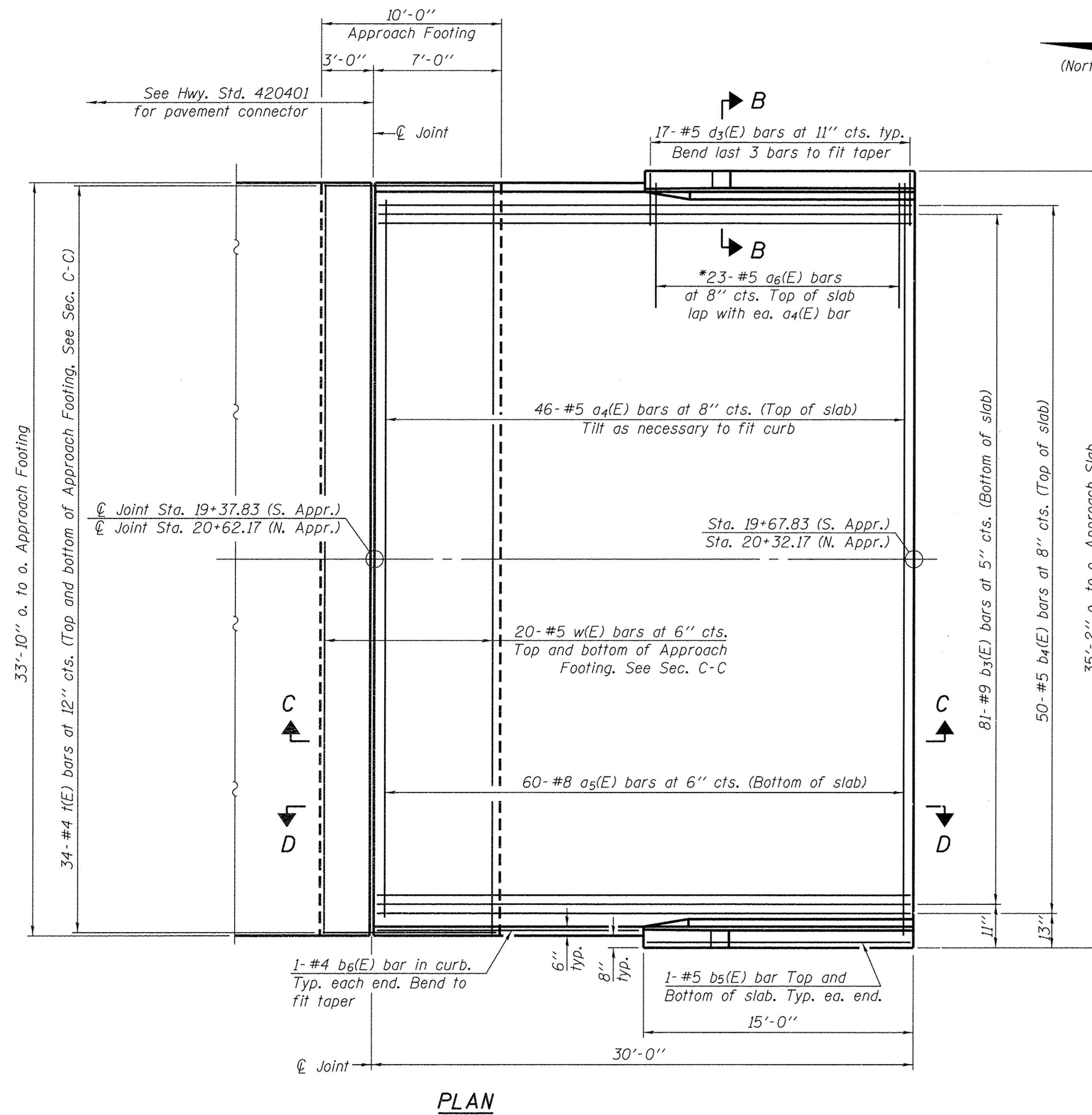
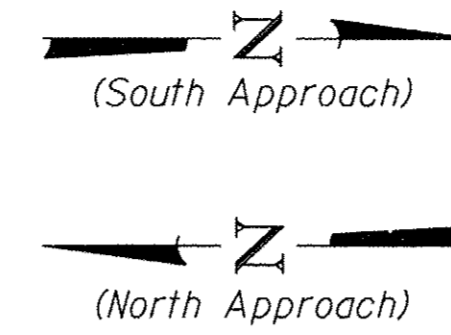
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
STRUCTURE NO. 099-3289

STRUCTURAL SHEET NO. 8 OF 20 SHEETS

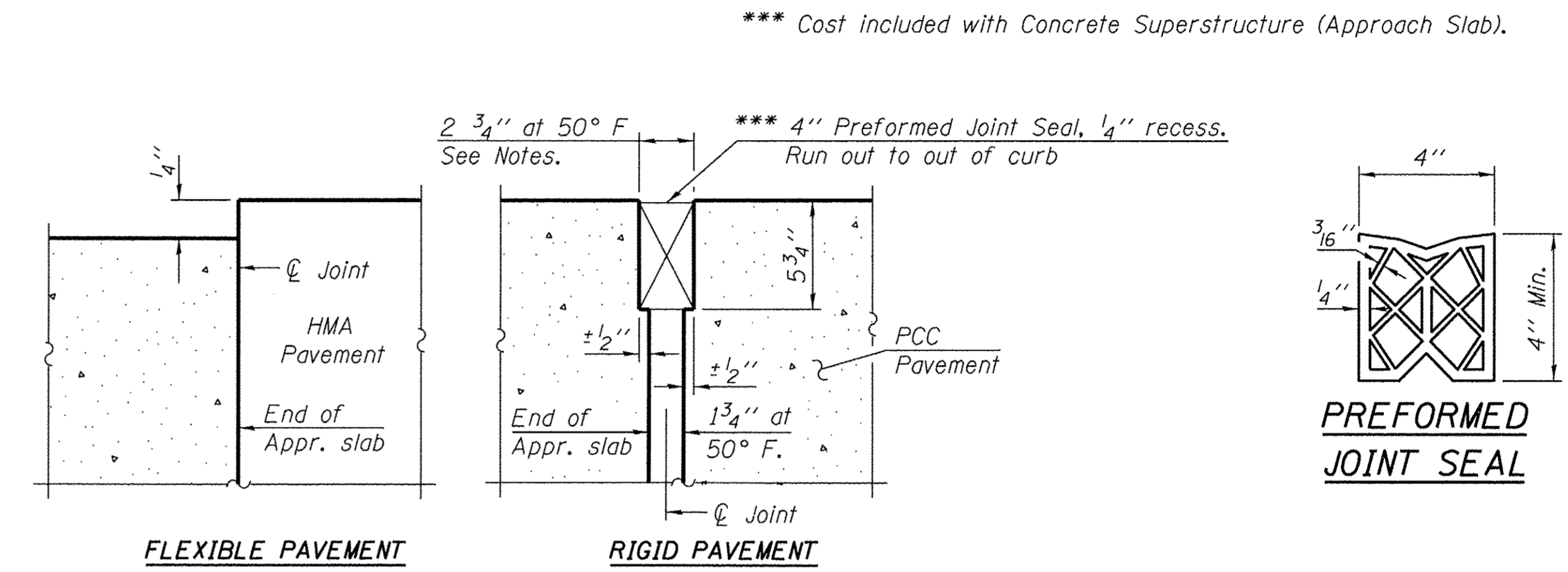
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	26
WHA* 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT BR05-01971(28)				

Notes:
 See sheet 10 of 20 for Section C-C and View D-D.
 a4(E) and a5(E) bar spacings measured along C Rdwy.
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1/2" for installation purposes.

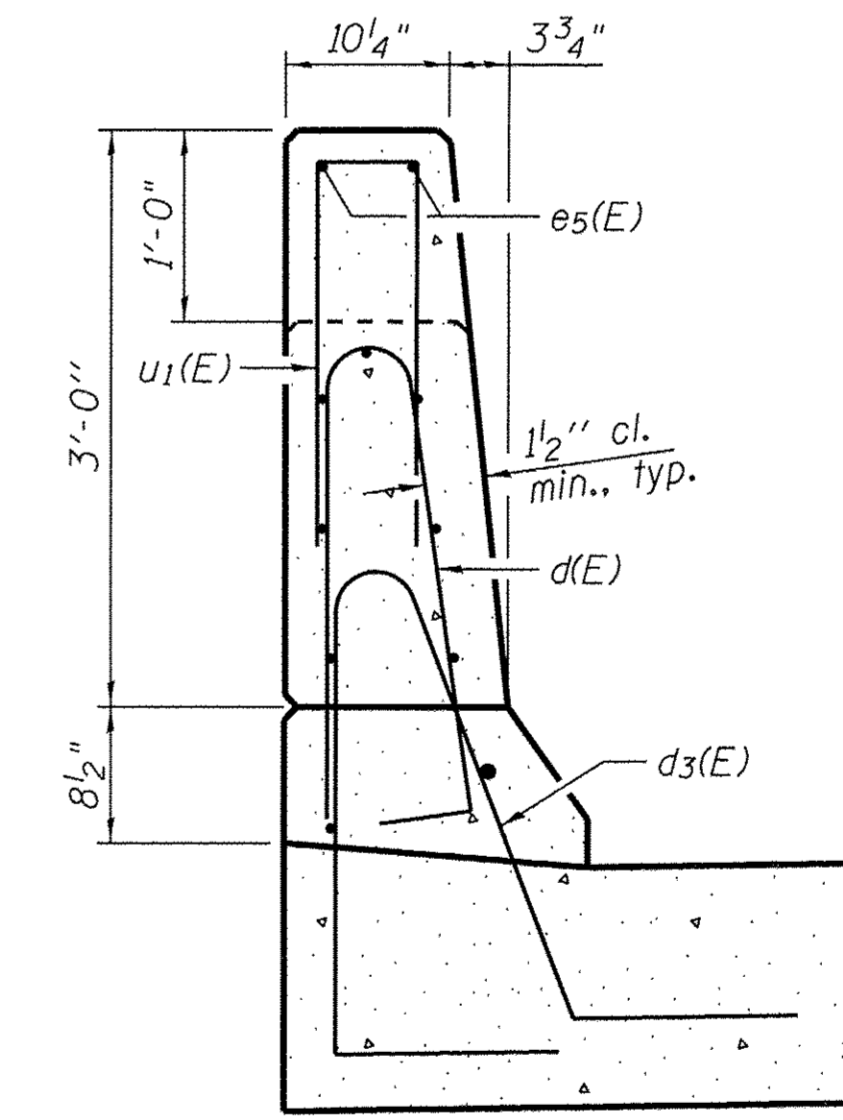
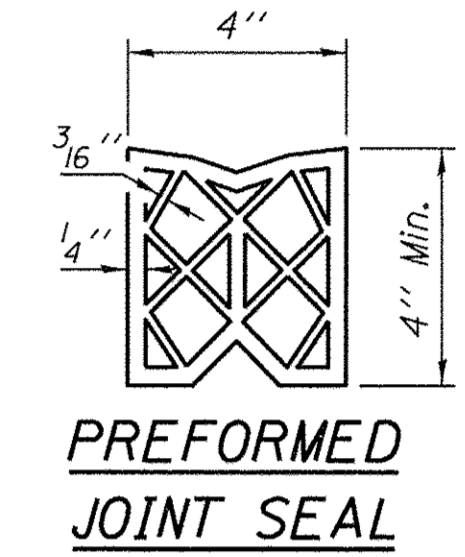


PLAN

*Lap with each a4(E) bar

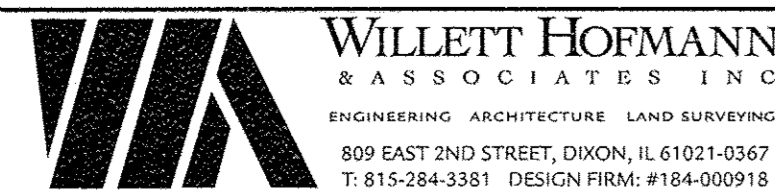


DETAIL A



VIEW B-B

(Sheet 1 of 2)



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DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

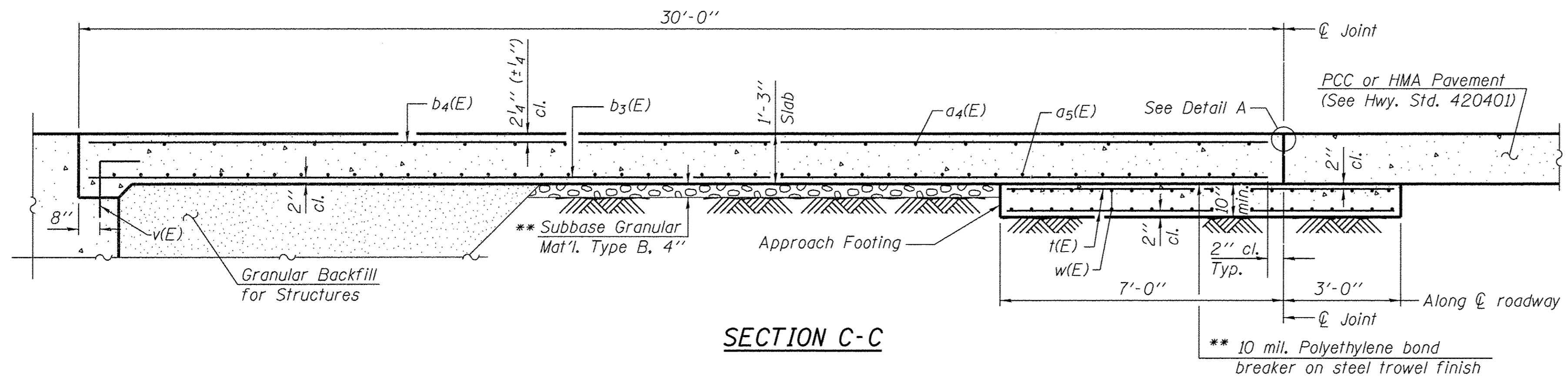
STATE OF ILLINOIS
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SOUTH & NORTH BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 099-3289

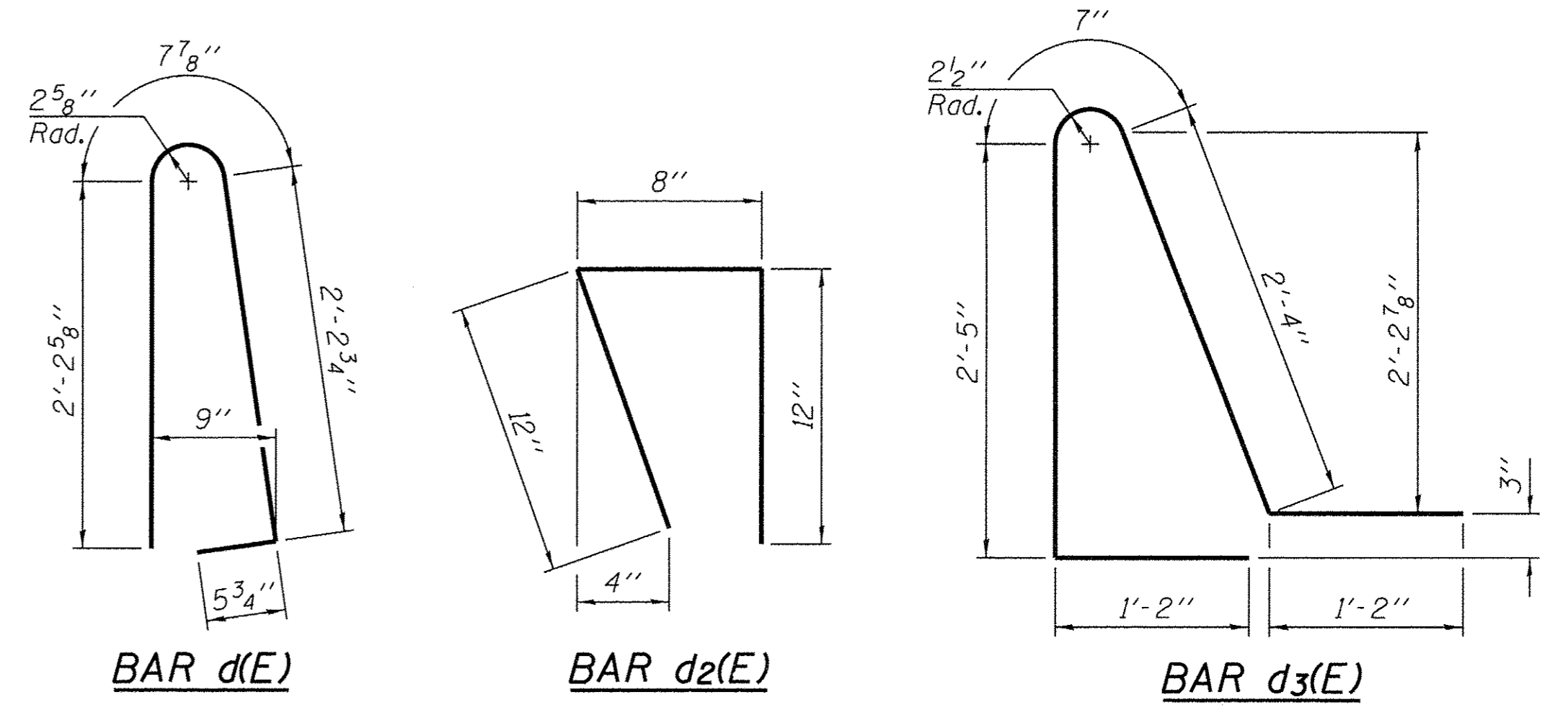
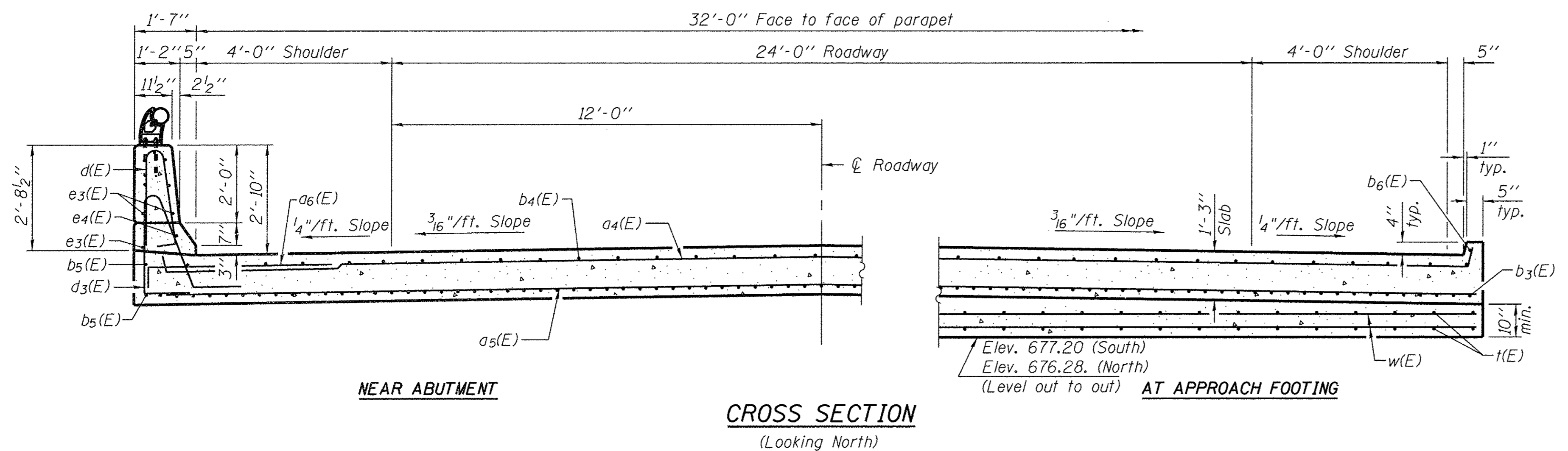
STRUCTURAL SHEET NO. 9 OF 20 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	27
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197128		

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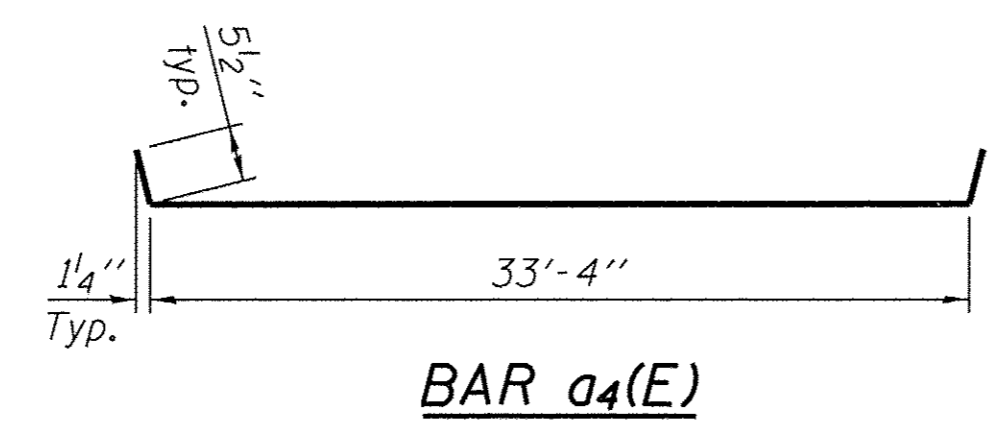
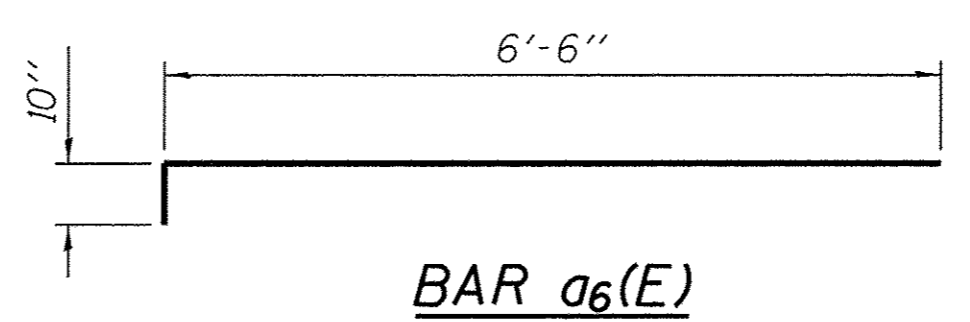
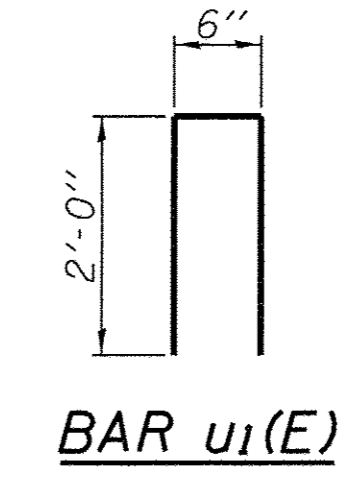
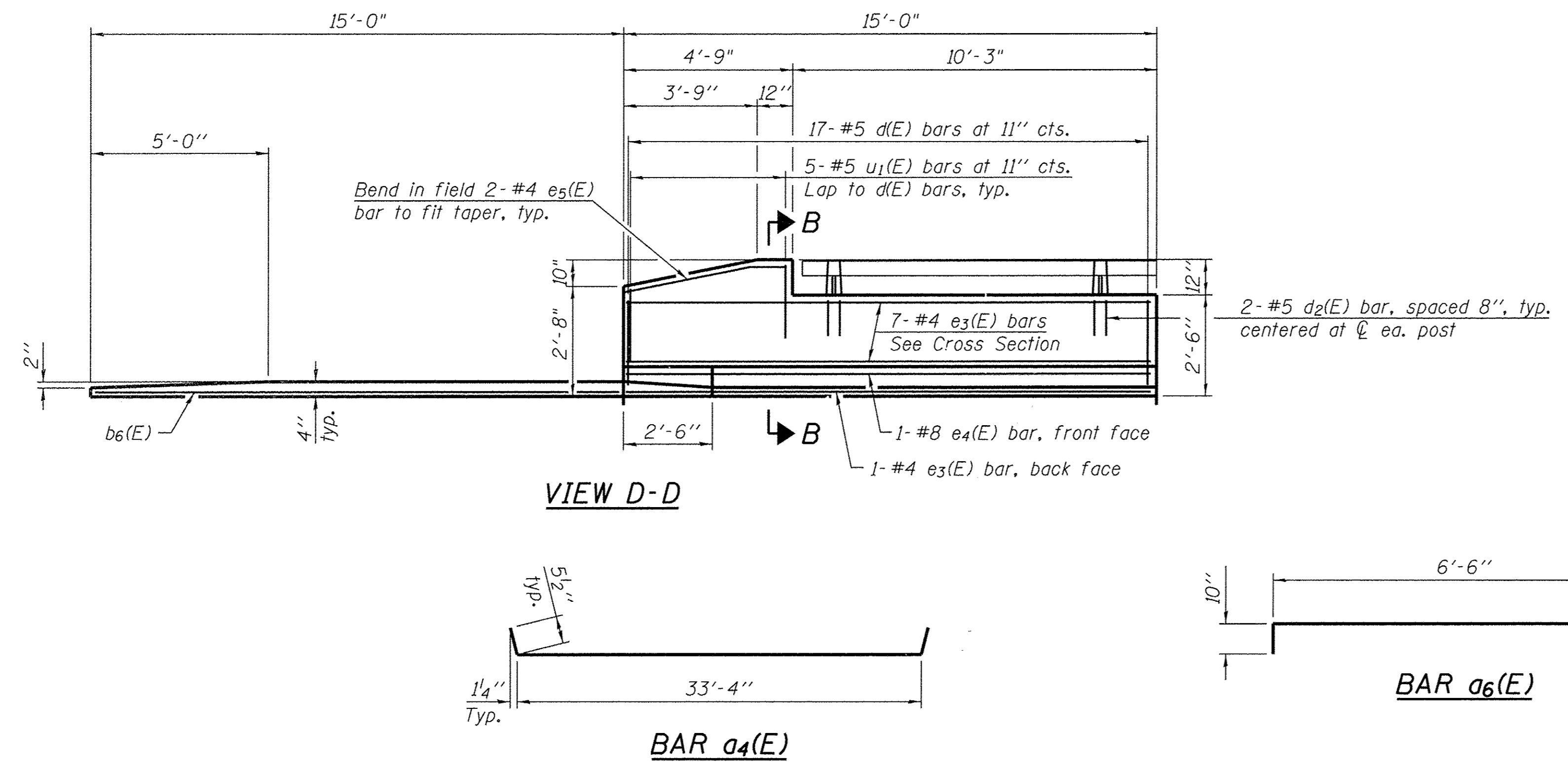
Notes:
 See sheet 9 of 20 for Detail A and View B-B.
 Parapet concrete shall be paid for as Concrete Superstructure.
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheet 7 of 20.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 20.
 For additional parapet details, see sheet 9 of 20.



** Cost included with Concrete Superstructure (Approach Slab).

**TWO APPROACHES
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a4(E)	92	#5	34'-3"	—
a5(E)	120	#8	33'-6"	—
a6(E)	92	#5	7'-4"	—
b3(E)	162	#9	29'-8"	—
b4(E)	100	#5	29'-8"	—
b5(E)	8	#5	14'-8"	—
b6(E)	4	#4	14'-8"	—
d(E)	68	#5	5'-7"	∩
d2(E)	16	#5	2'-8"	∩
d3(E)	68	#5	7'-8"	∩
e3(E)	32	#4	14'-8"	—
e4(E)	4	#8	14'-8"	—
e5(E)	8	#4	4'-6"	—
t(E)	136	#4	9'-8"	—
u1(E)	20	#4	4'-6"	□
w(E)	80	#5	33'-6"	—
Concrete Superstructure			Cu. Yd.	7.6
Concrete Superstructure (Approach Slab)			Cu. Yd.	96.5
Concrete Structures			Cu. Yd.	24.4
Reinforcement Bars, Epoxy Coated			Pound	39,590
Bridge Deck Grooving			Sq. Yd.	200
Protective Coat			Sq. Yd.	361



(Sheet 2 of 2)

FILE = S:\PROJECTS\2014\1303D14-Creva\DESIGN\STRUCT\2D\Drawings\1303D14-Bridge Approach Slab Details.dgn

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

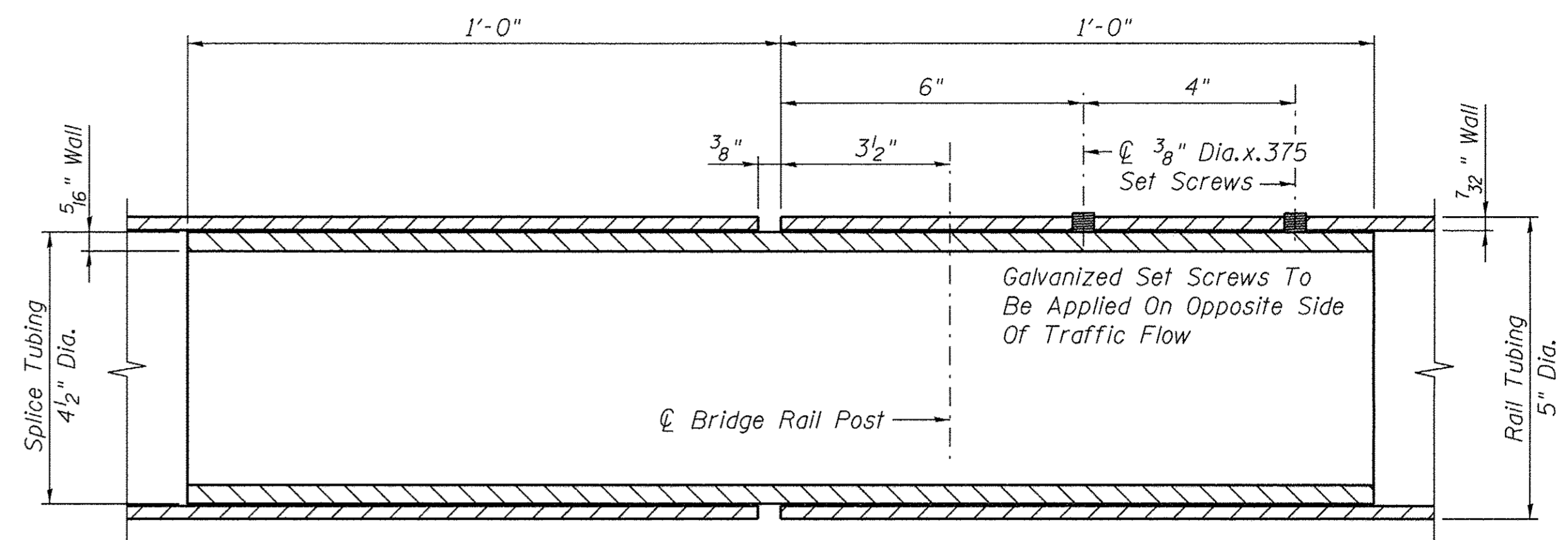
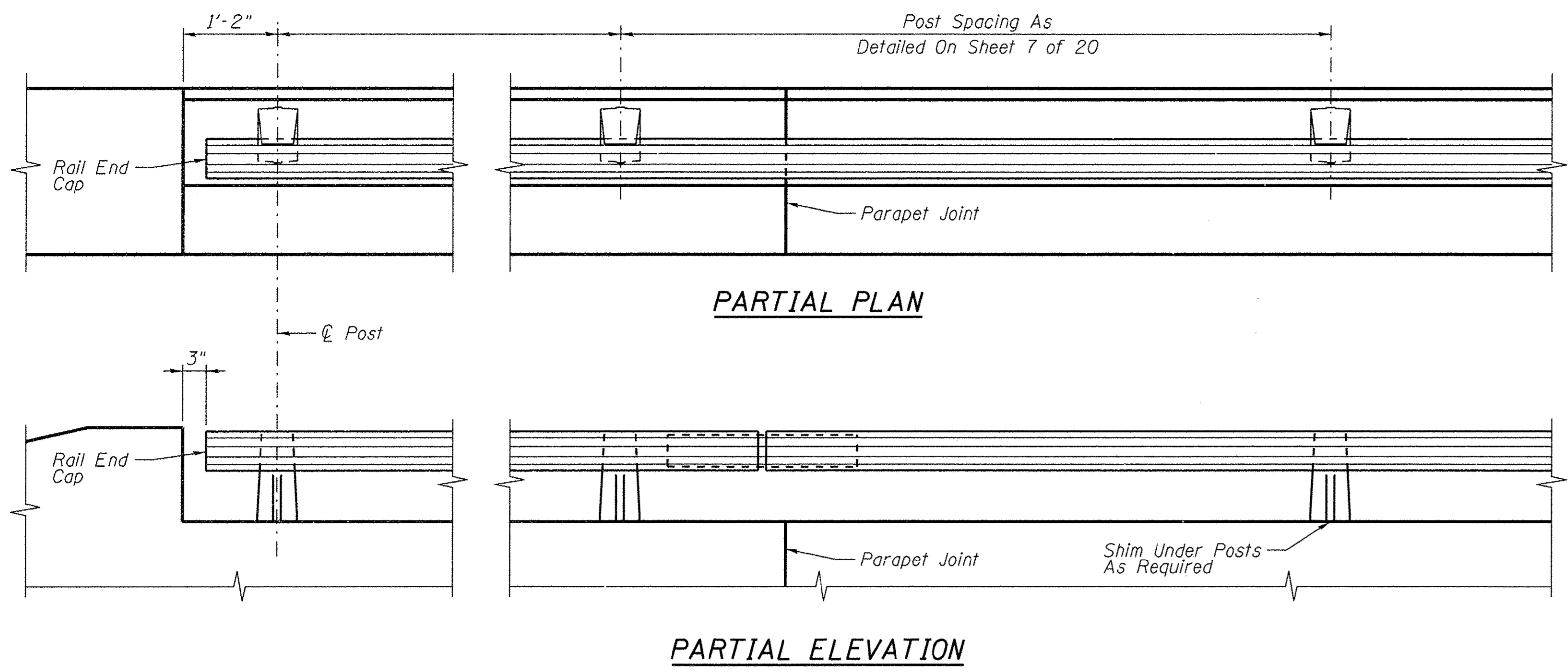
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DRAWN - FDL	REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SOUTH & NORTH BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 099-3289**

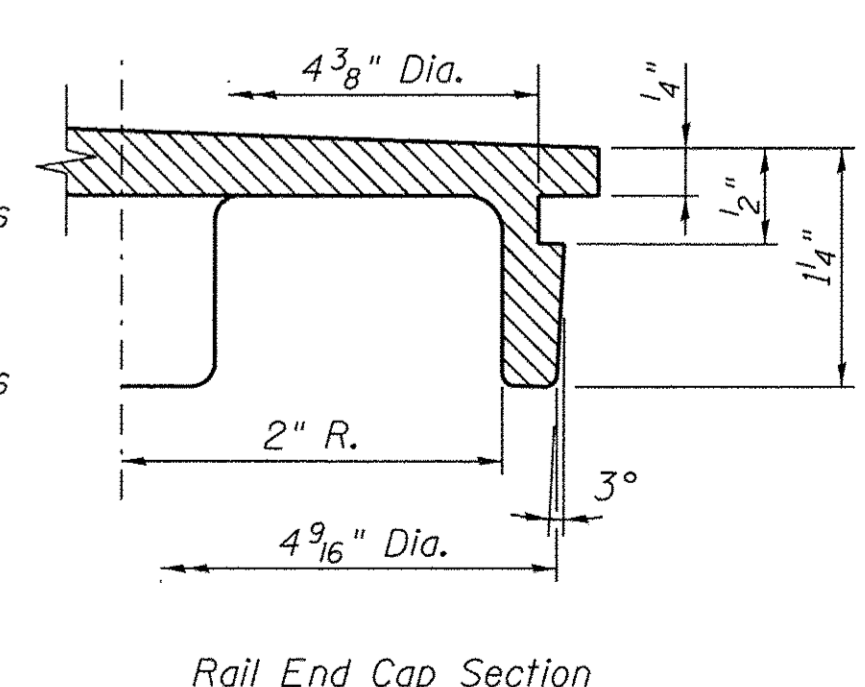
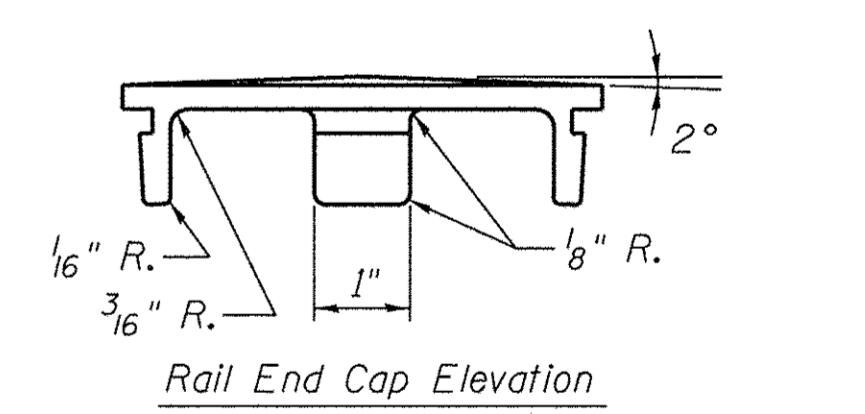
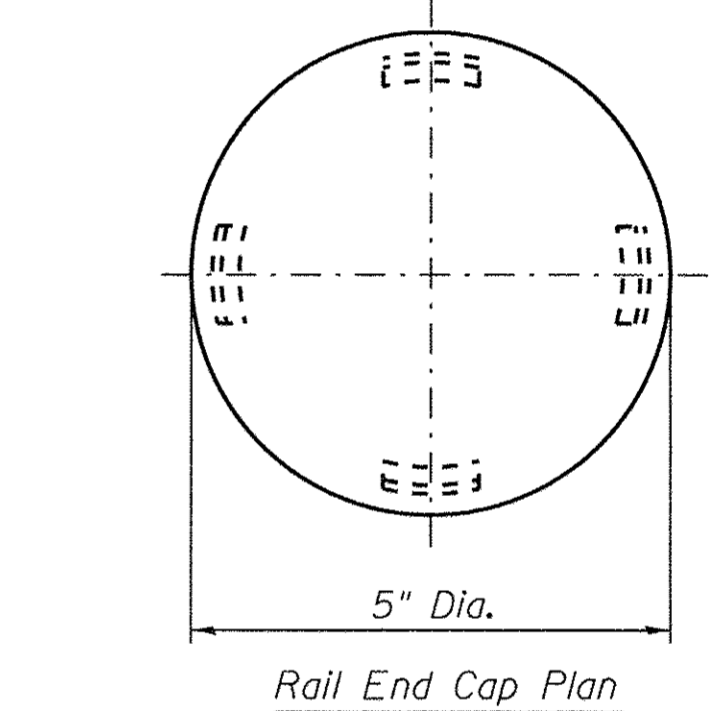
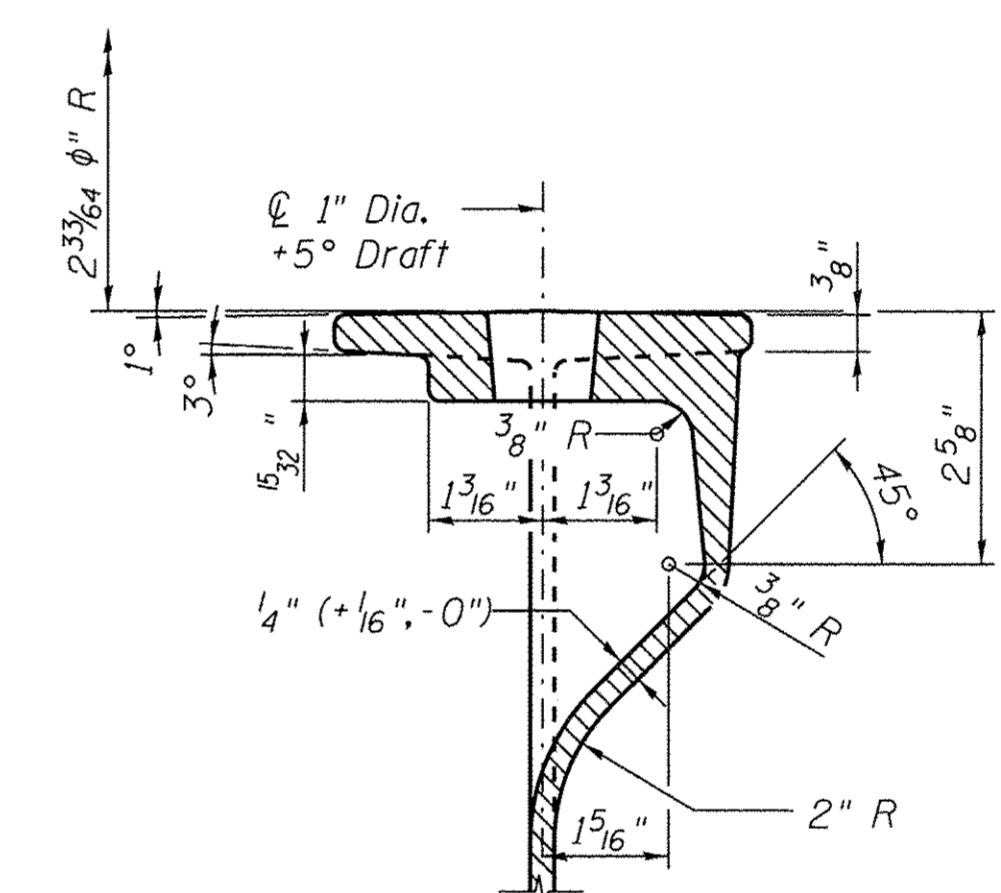
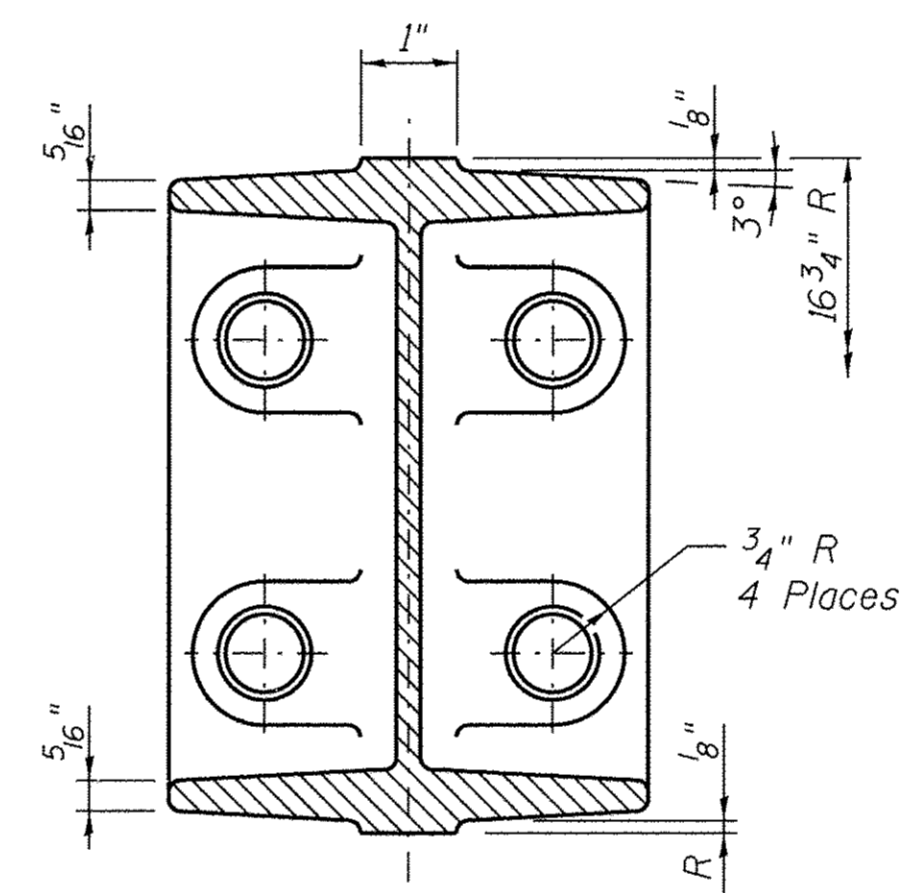
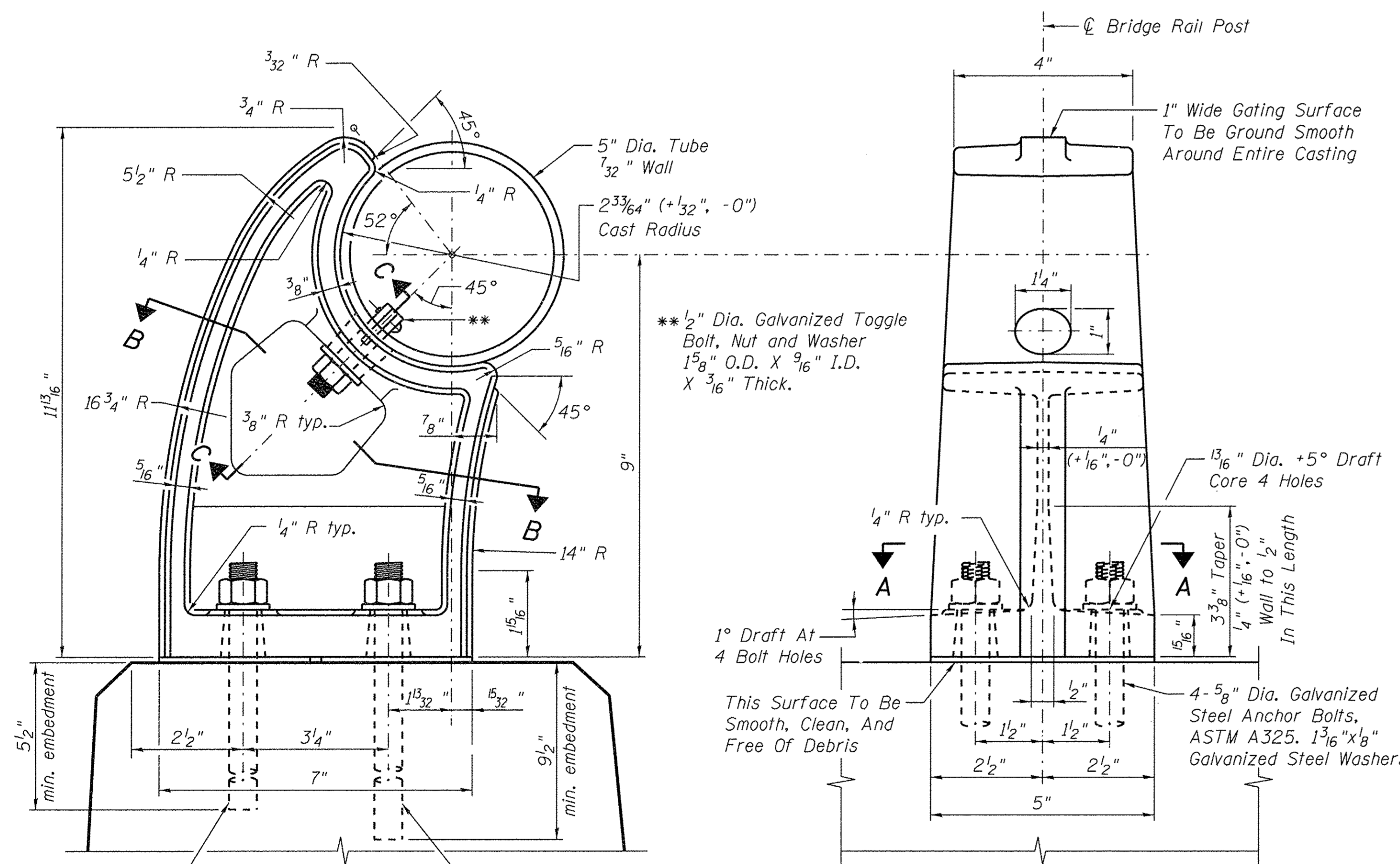
STRUCTURAL SHEET NO. 10 OF 20 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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WHA* 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971281		



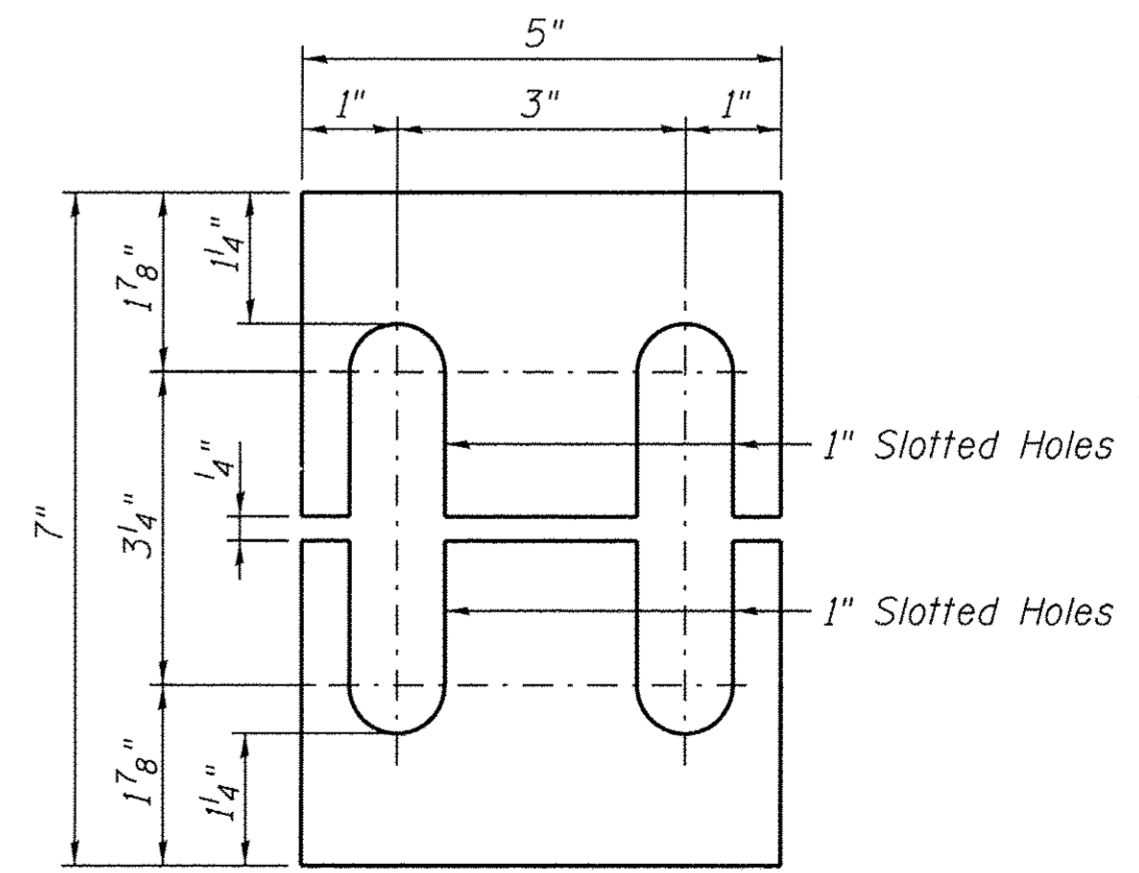
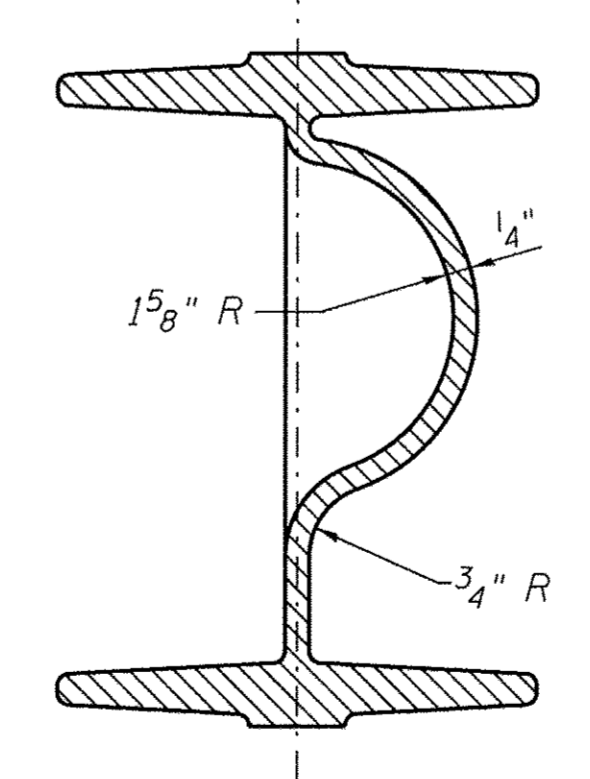
NOTES:

- Railing shall conform to vertical and horizontal alignment.
- Joints shall be placed at 25'-0" center-to-center (max).
- Slip joint shall be placed in panels to match end of deck.
- Design weight: 6 1/4 lbs. per foot.
- Unless otherwise specified, all draft shall be 3°.
- All unmarked Radii shall be 1/8" R.
- See Special Provisions for requirements of finishes.
- Three aluminum shims per post, one at 1/8" and two at 1/16" shall be provided for 25 percent of the posts.
- At the Contractor option, either cast in place anchor devices or drilled and set anchor rods may be used to attach the posts to the concrete. Drilling and setting of anchor rods shall be according to Article 509.06 and shall be installed to miss d(E), d2(E), and e(E) bars (See Sheet 7 of 20). Cost of anchor devices and rods shall be included in the cost of Railing.



SECTION A-A

SECTION C-C



SECTION B-B

SHIM DETAIL

RAIL END CAP DETAILS

RAILING DETAILS

BILL OF MATERIAL

Item	Unit	Total
Railing	Ft.	169

FILE = S:\PROJECTS\2014\1303014-CONCRETE DESIGN\STRUCTURE\2D Drawings\1303014-BrIDGE Railing.dgn

2'-0"-8" x 5/8" Dia. Galvanized Steel Anchor Rods, ASTM F1554 Grade 105. 1 3/16" x 1/8" Galvanized Steel Washers.

2'-1'-0" x 5/8" Dia. Galvanized Steel Anchor Rods, ASTM F1554 Grade 105. 1 3/16" x 1/8" Galvanized Steel Washers.



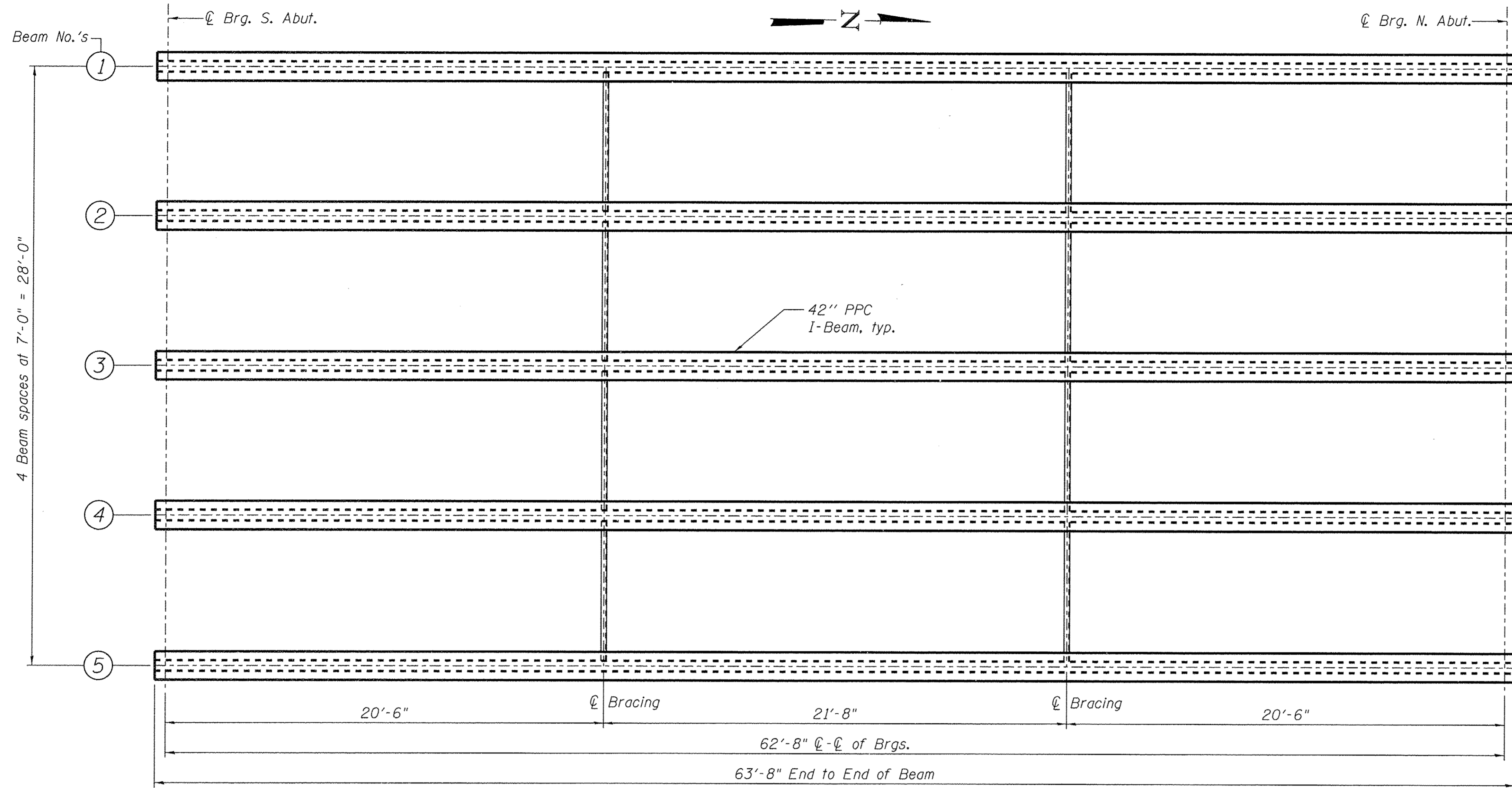
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CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ALUMINUM RAIL DETAILS
STRUCTURE NO. 099-3286**

STRUCTURAL SHEET NO. 11 OF 20 SHEETS

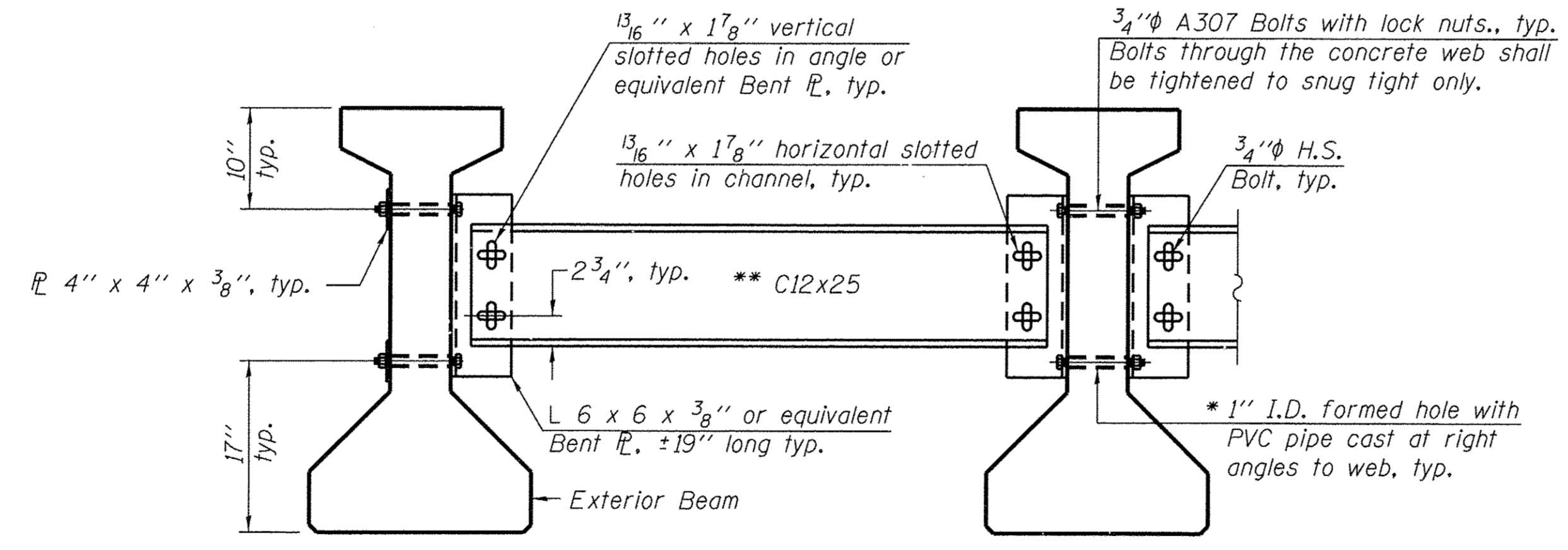
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WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197(28)		



INTERIOR BEAM MOMENT TABLE		
		0.5 of span
I	(in ⁴)	90,956
I'	(in ⁴)	309,490
S _b	(in ³)	5,152
S _b '	(in ³)	9,246
S _t	(in ³)	3,735
S _t '	(in ³)	36,282
DC1	(k/')	1,214
M _{DC1}	(k)	589
DC2	(k/')	0.18
M _{DC2}	(k)	88.4
DW	(k/')	0.32
M _{DW}	(k)	157.1
M _{L + IM}	(k)	960
LLDF		0.666

INTERIOR BEAM REACTION TABLE		
		Abut.
R _{DC1}	(k)	78.6
R _{DC2}	(k)	8.5
R _{DW}	(k)	15.1
R _{L + IM}	(k)	45.5
R _{Total}	(k)	177.7

I: Non-composite moment of inertia of beam section (in.⁴).
 I': Composite moment of inertia of beam section (in.⁴).
 S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in.³).
 S_b': Composite section modulus for the bottom fiber of the prestressed beam (in.³).
 S_t: Non-composite section modulus for the top fiber of the prestressed beam (in.³).
 S_t': Composite section modulus for the top fiber of the prestressed beam (in.³).
 DC1: Un-factored non-composite dead load (kips/ft.).
 M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
 M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
 M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 M_{L + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
 LLDF: Interior girder live load distribution factor (Lanes/Beam).



* Fabricator shall locate to miss strands within permissible tolerances.
 ** Alternate C12x30 channels are permitted to facilitate material acquisition.

**PERMANENT BRACING DETAILS FOR
 42" PPC I-BEAMS**

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

FILE = S:\PROJECTS\2814\1303D14-Crescent\DESIGN\STRUCT\20.D\Framing\1303D14-Framing Plan.dgn

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

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CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

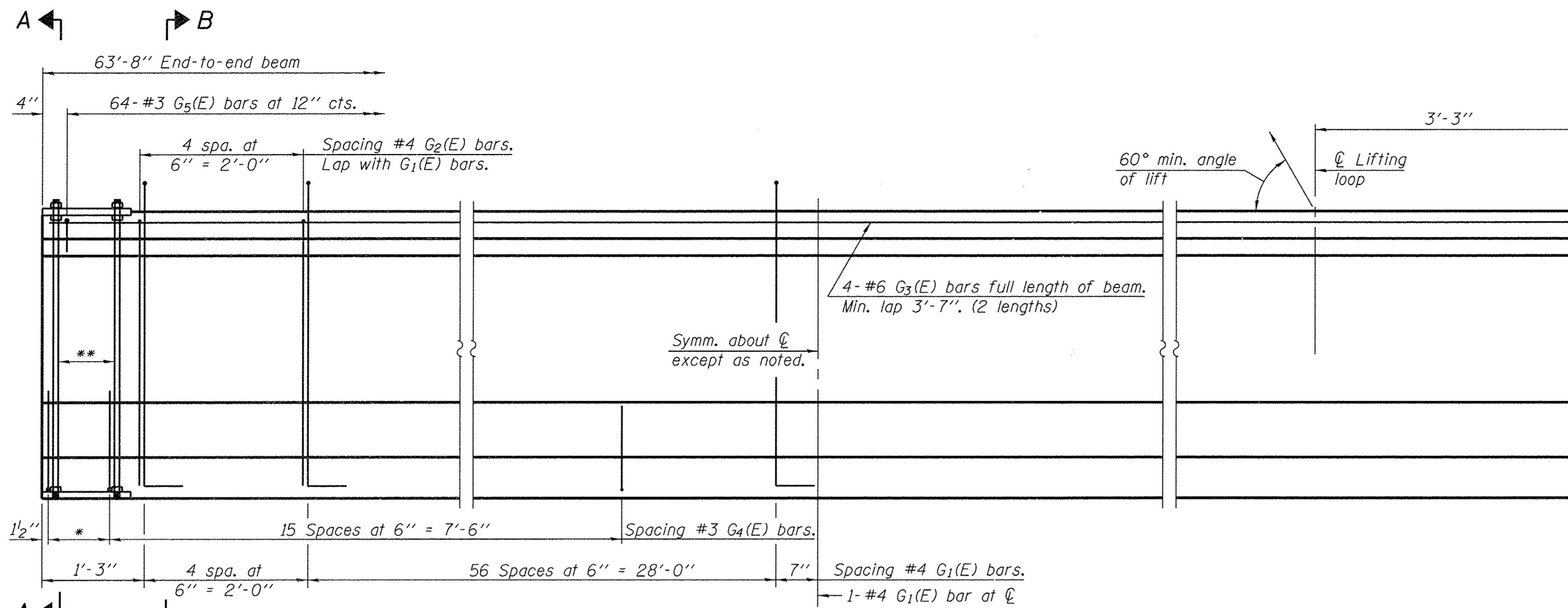
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN
 STRUCTURE NO. 099-3289**

TWP. RTE. 428	SECTION 12-02110-01-BR	COUNTY WILL	TOTAL SHEETS 50	SHEET NO. 30
WHA* 1303D14		CONTRACT NO. 61D68		

STRUCTURAL SHEET NO. 12 OF 20 SHEETS

ILLINOIS FED. AID PROJECT BROS-0197(128)



ELEVATION OF BEAM

(Showing reinforcement & dimensions)

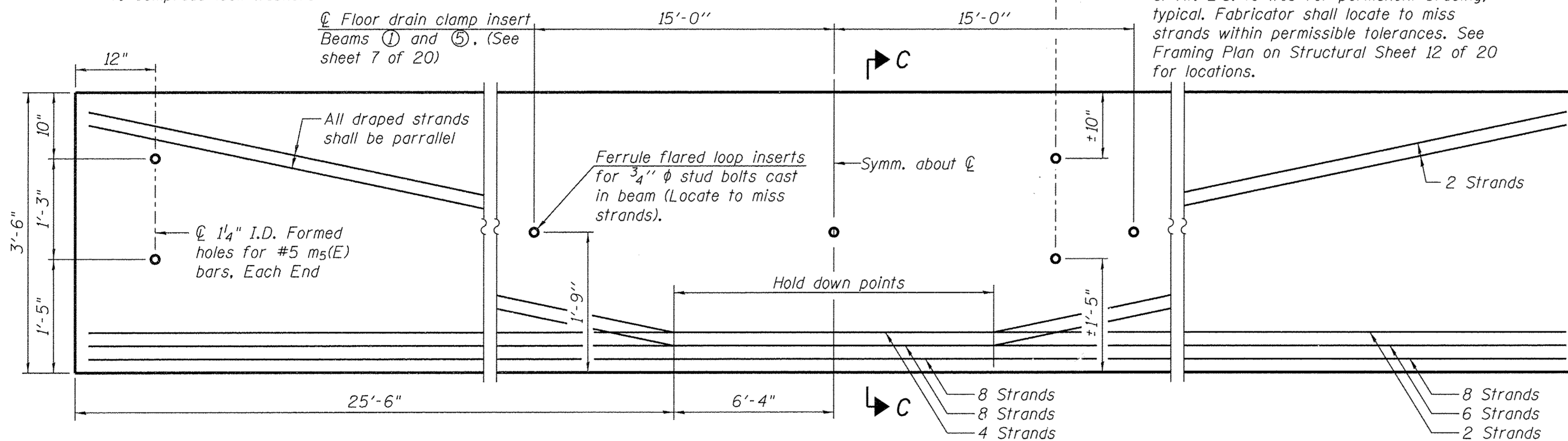
* 3 spaces at 3" = 9"

** 4-3/4" φ threaded dowel rods at 3" cts., Each Face

*** Only tighten sufficiently to compress lock washers

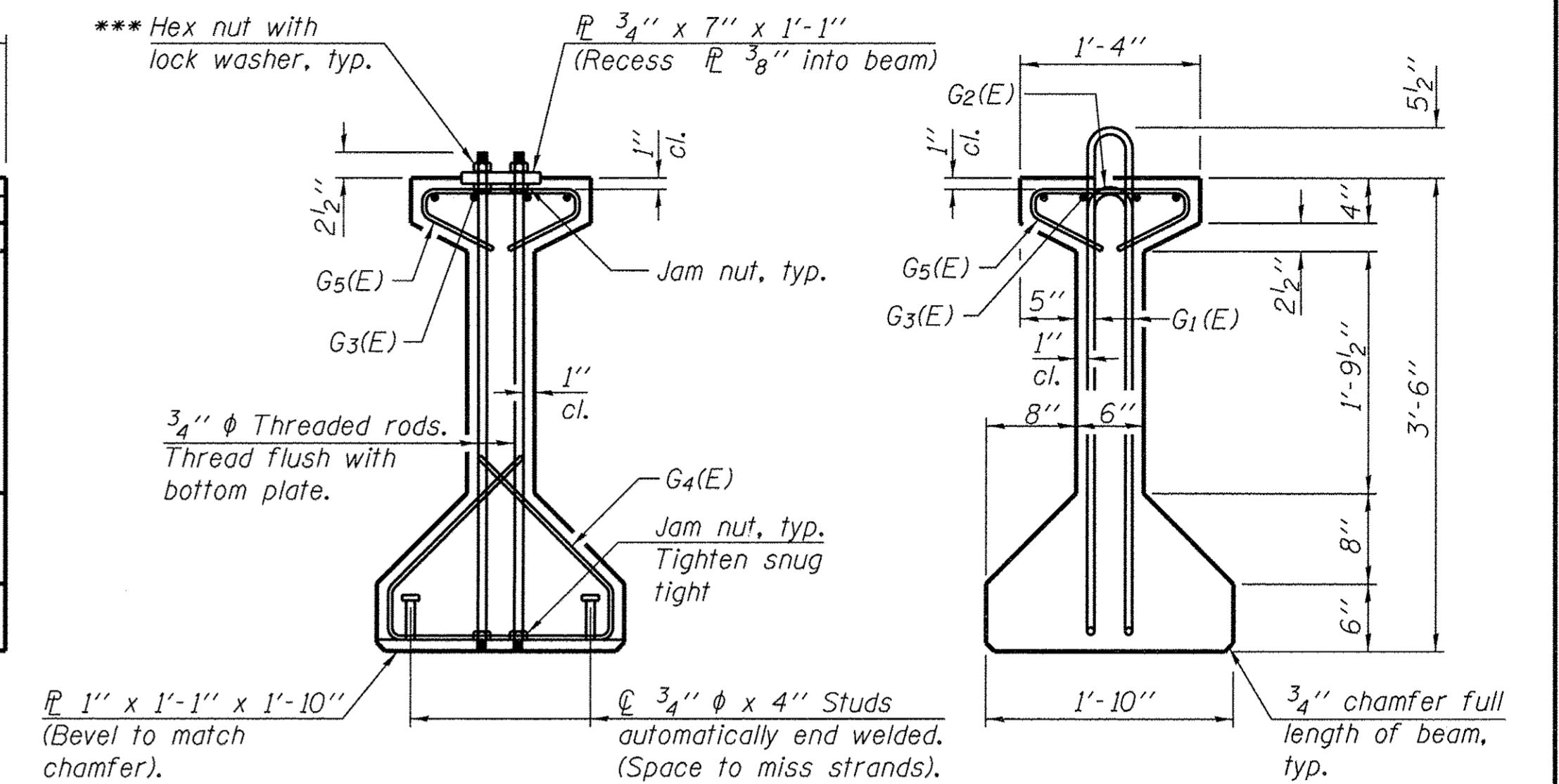
⊕ Floor drain clamp insert Beams ① and ⑤. (See sheet 7 of 20)

⊕ 1" I.D. formed holes with PVC pipe cast at Rt. L's. to web for permanent bracing, typical. Fabricator shall locate to miss strands within permissible tolerances. See Framing Plan on Structural Sheet 12 of 20 for locations.



ELEVATION OF BEAM

(Showing prestressing steel)



SECTION A-A

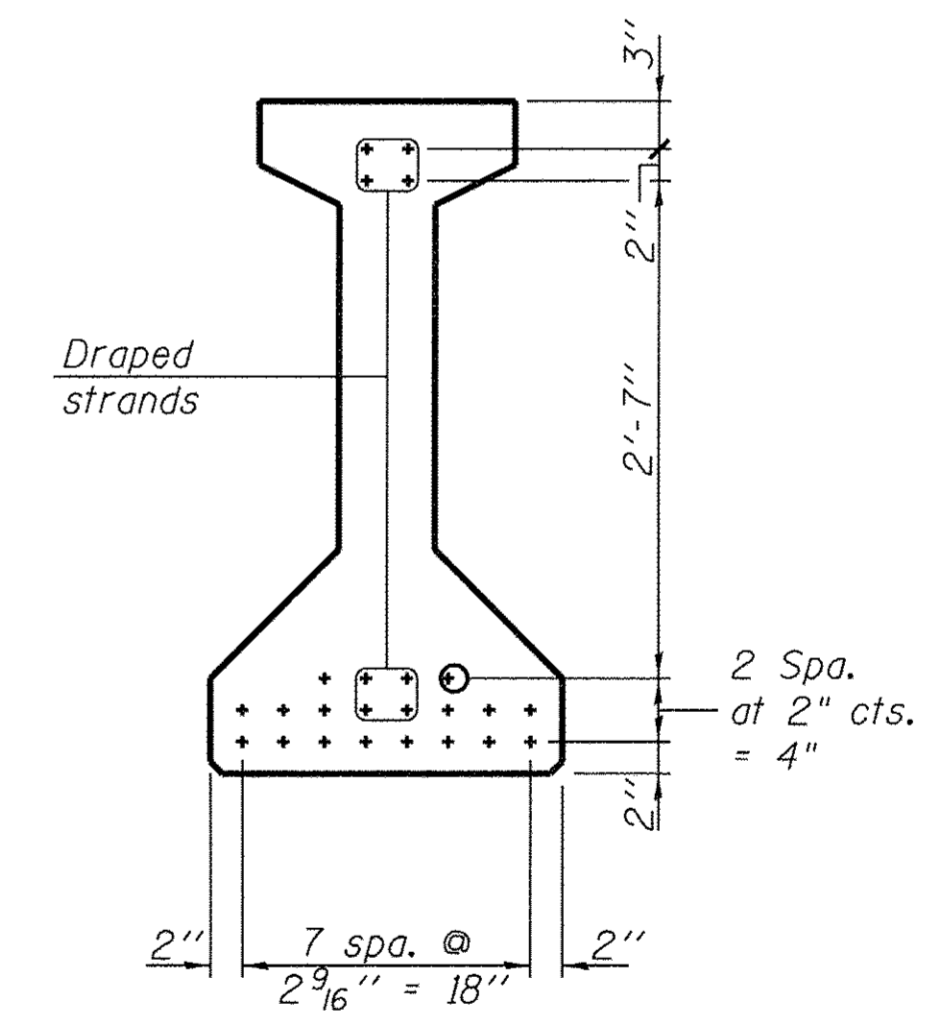
SECTION B-B

BAR LIST
ONE BEAM ONLY

(For information only)

Bar	No.	Size	Length	Shape
G ₁ (E)	123	#4	8'-7"	⊏
G ₂ (E)	10	#4	6'-8"	⊏
G ₃ (E)	8	#6	33'-6"	⊏
G ₄ (E)	36	#3	4'-11"	⊏
G ₅ (E)	64	#3	2'-6"	⊏

Notes:
See sheet 14 of 20 for additional details and Bill of Material.



SECTION C-C

(20 - 1/2" φ 270 ksi strands)

FILE = S:\PROJECTS\2014\1303014-C-PPC\DESIGN\STRUCT\20.Dr-ppc\1303014_42_PPC_I-Beam.dgn



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DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

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DEPARTMENT OF TRANSPORTATION

42" PPC I-BEAM
STRUCTURE NO. 099-3289

STRUCTURAL SHEET NO. 13 OF 20 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	31
WHA# 1303014			CONTRACT NO. 61D68	
ILLINOIS FED. AID PROJECT			BROS-0197128	

NOTES

Inserts for $\frac{3}{4}$ " ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be $\frac{1}{2}$ " and the nominal cross-sectional area shall be 0.153 sq. in.

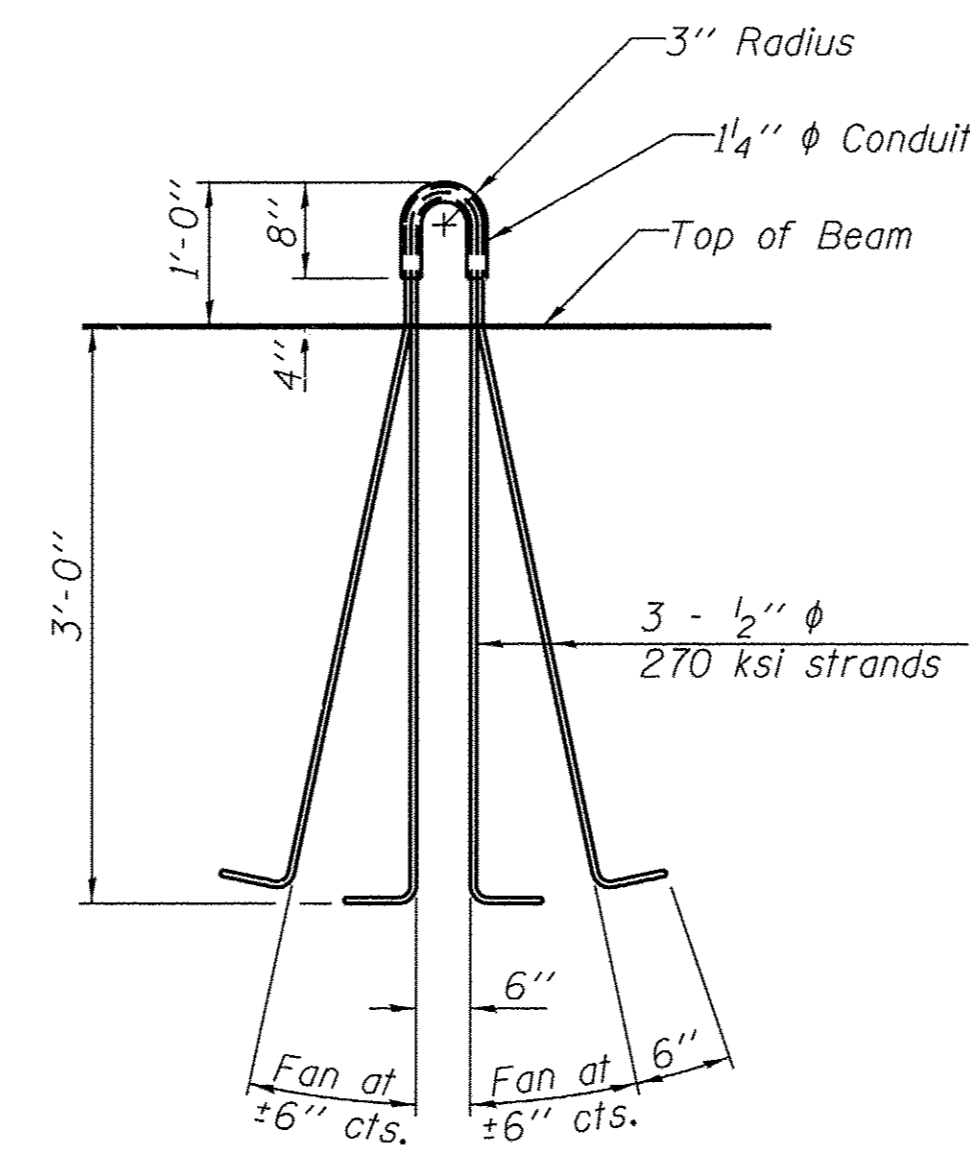
The beams shall have a final concrete compressive strength, $f'c$, of 6,000 psi and a release concrete compressive strength, $f'ci$, of 5,000 psi.

A minimum $2\frac{1}{2}$ " ϕ lifting pin shall be used to engage the lifting loops during handling. The top and bottom plates shall be AASHTO M270 Grade 50.

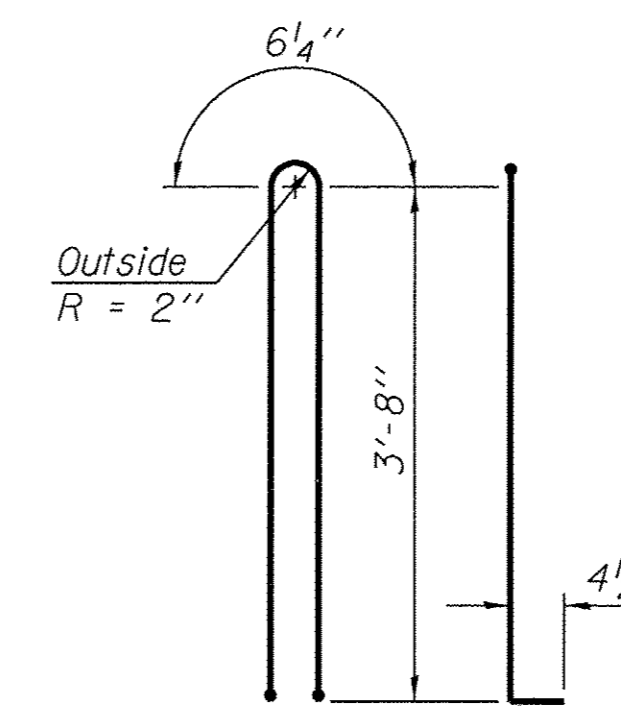
The top and bottom plates shall be galvanized according to AASHTO M111. The threaded rods, nuts and washers shall be galvanized according to AASHTO M232.

Threaded rods shall be ASTM F 1554 Grade 55.

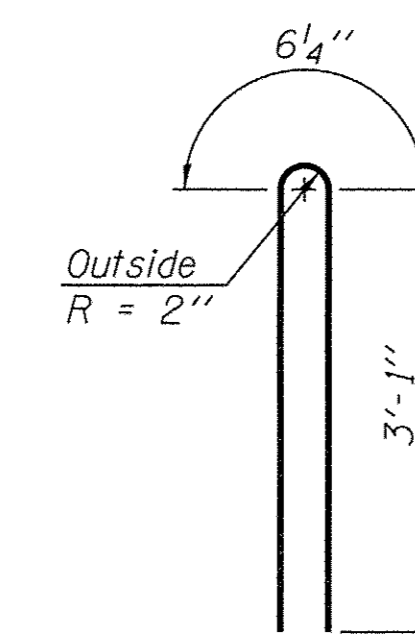
Beams shall not be released from the fabricator until they have attained 45 days of age or older.



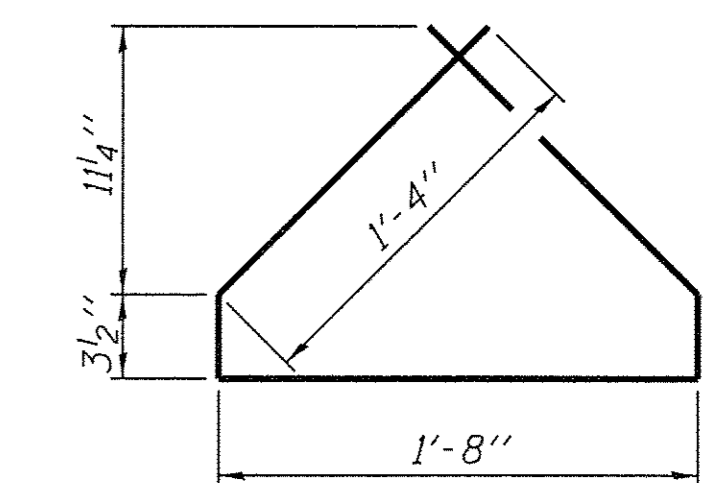
LIFTING LOOP DETAIL



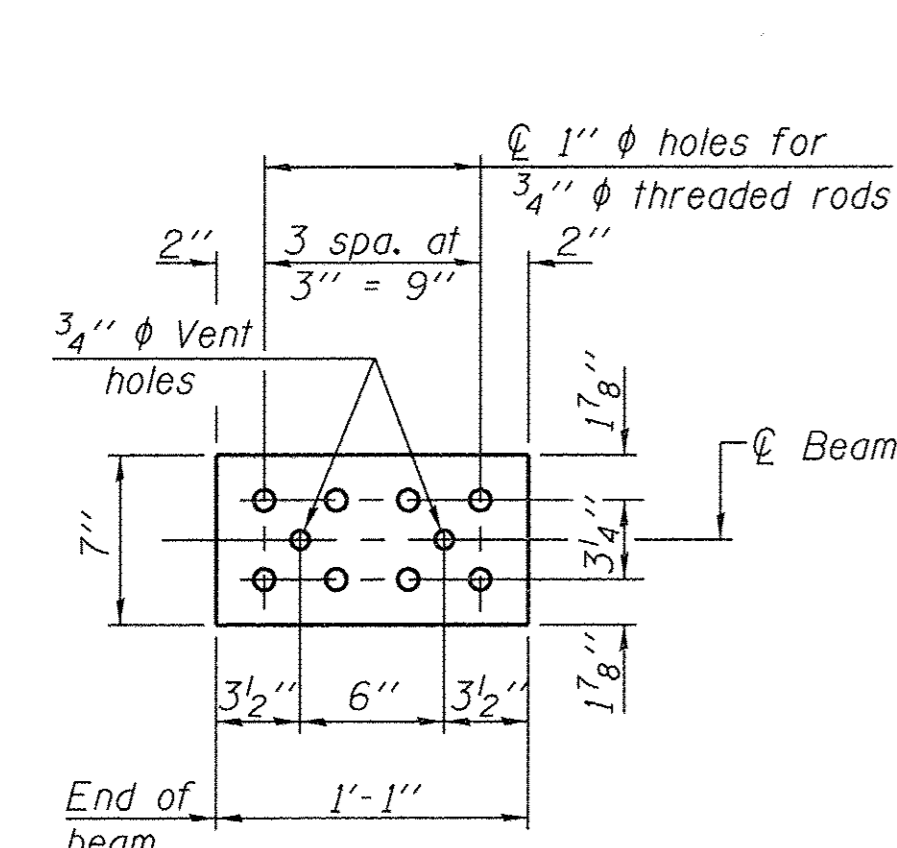
BAR G1(E)



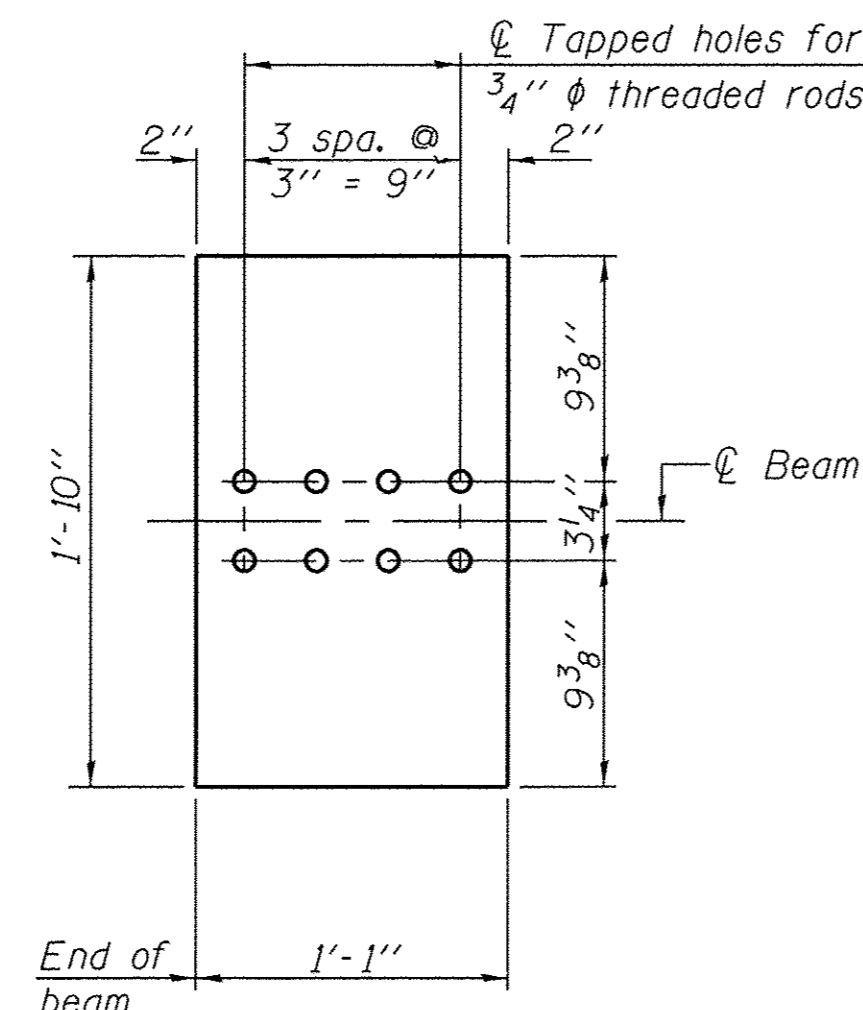
BAR G2(E)



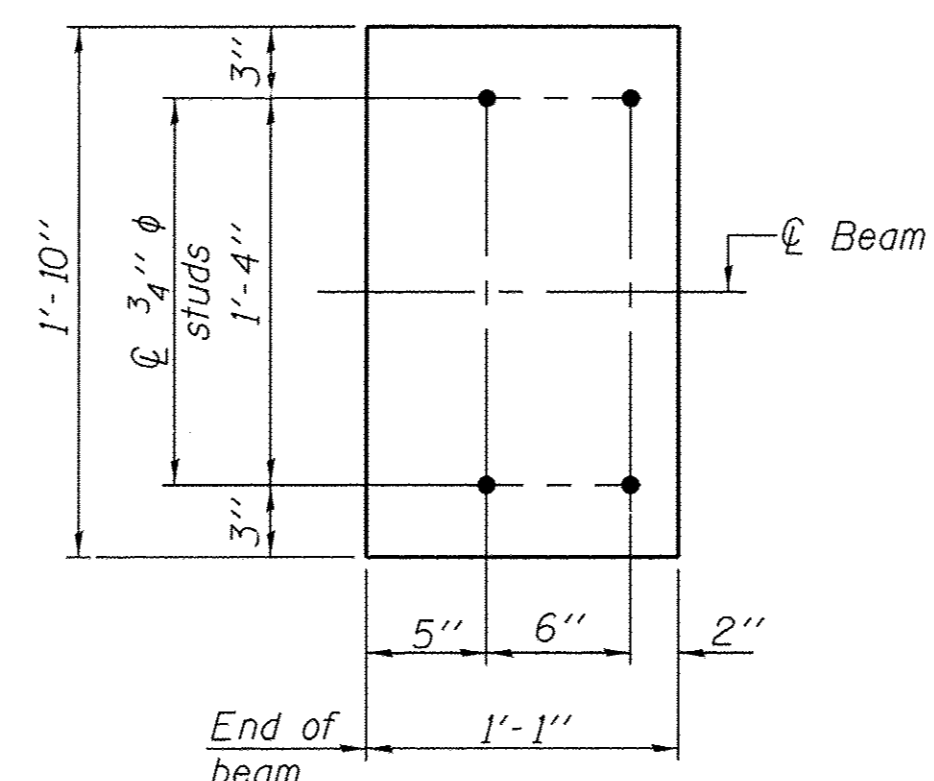
BAR G4(E)



TOP PLATE

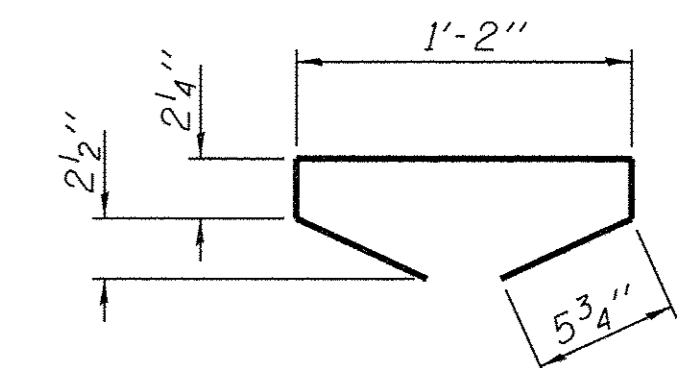


BOTTOM PLATE
(Showing threaded rods)



BOTTOM PLATE
(Showing studs)

See bearing details for pintle hole locations when required.



BAR G5(E)

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42 in.	Ft.	318.5

FILE = S:\PROJECTS\2014\1303014-C-00-DESIGN\STRUCT\20.D-Drawings\1303014_42_PPC_I-Beam_Details.scdgn

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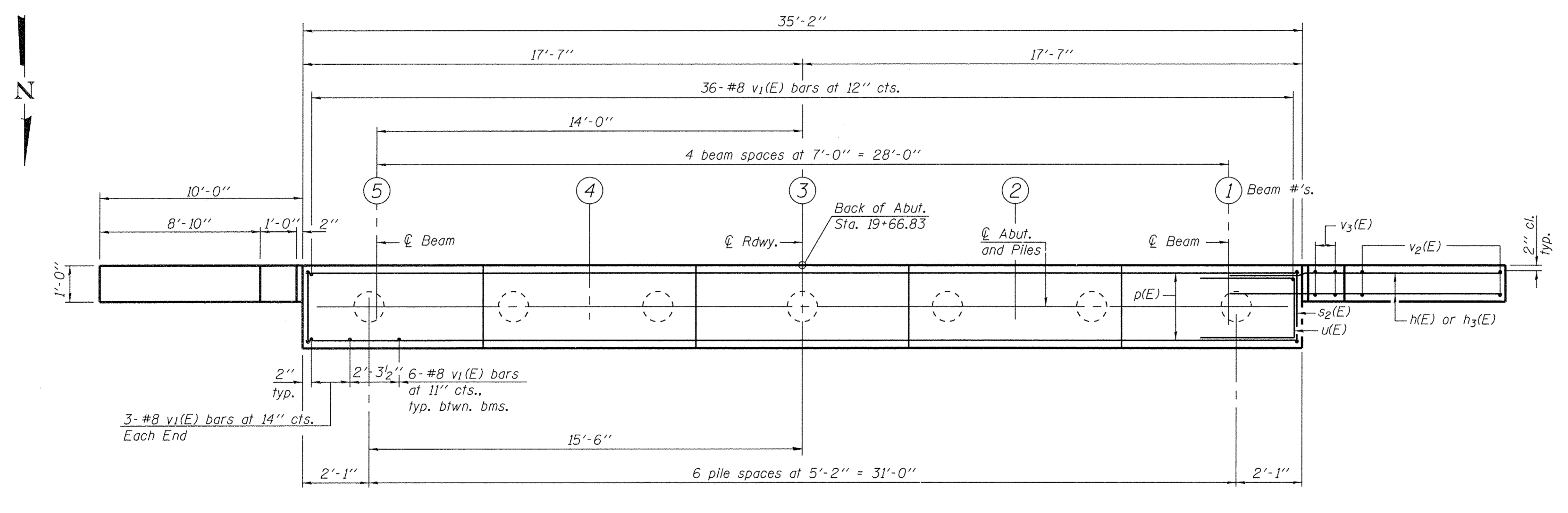
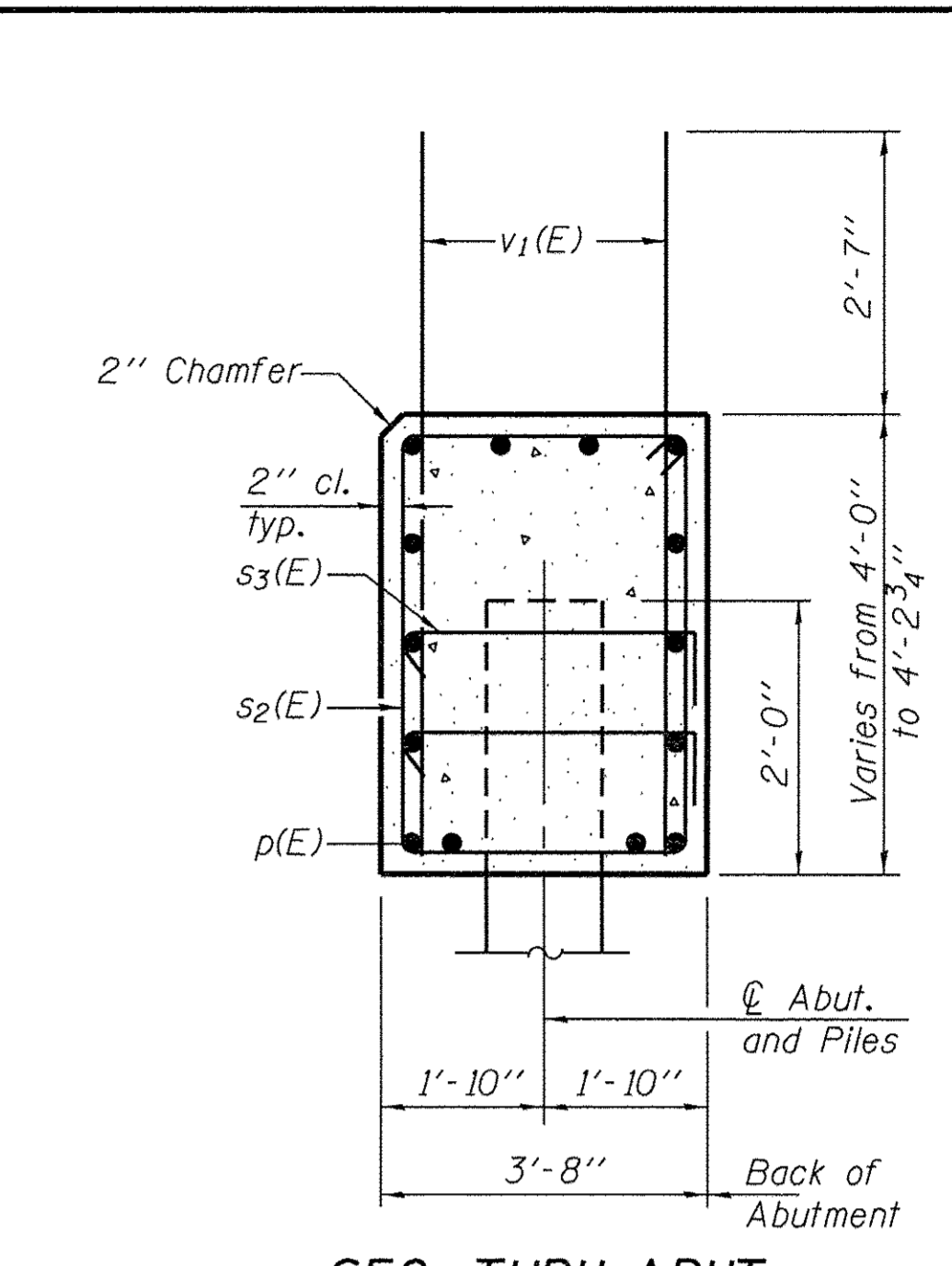
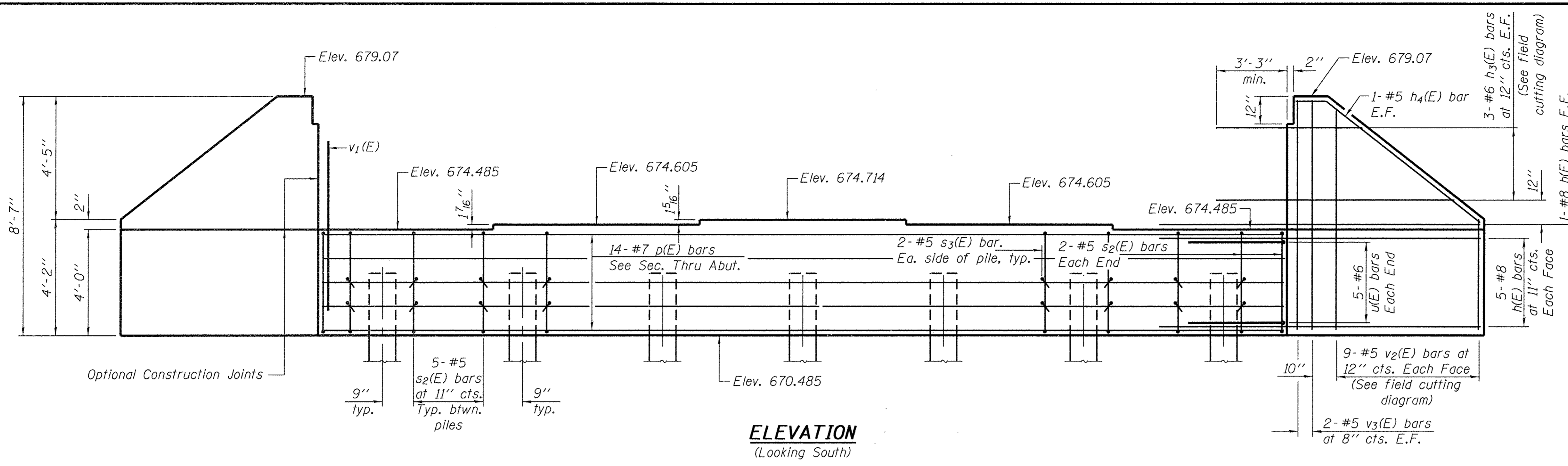
DESIGNED - BKC	REVISED -
CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

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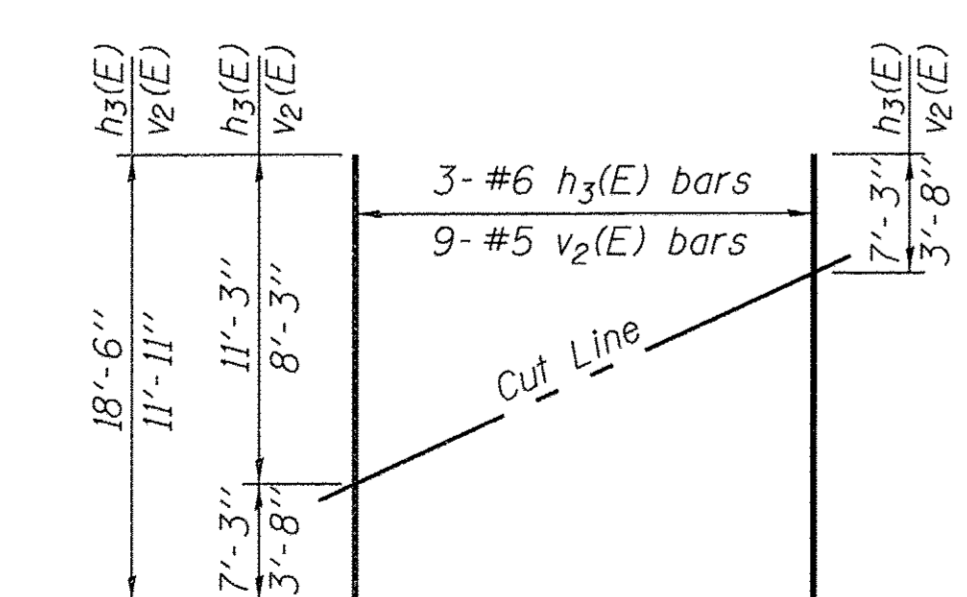
42" PPC I-BEAM DETAILS
STRUCTURE NO. 099-3289

STRUCTURAL SHEET NO. 14 OF 20 SHEETS

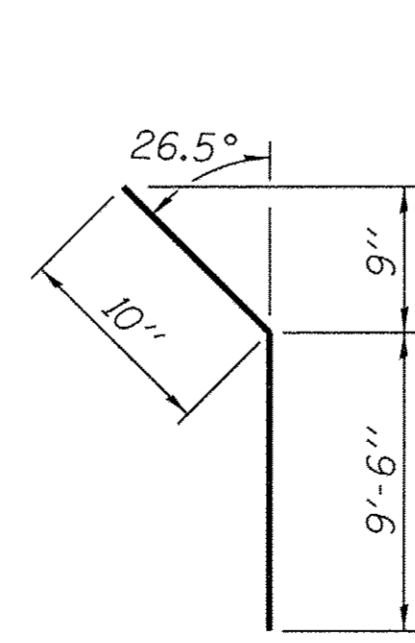
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	32
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971028		



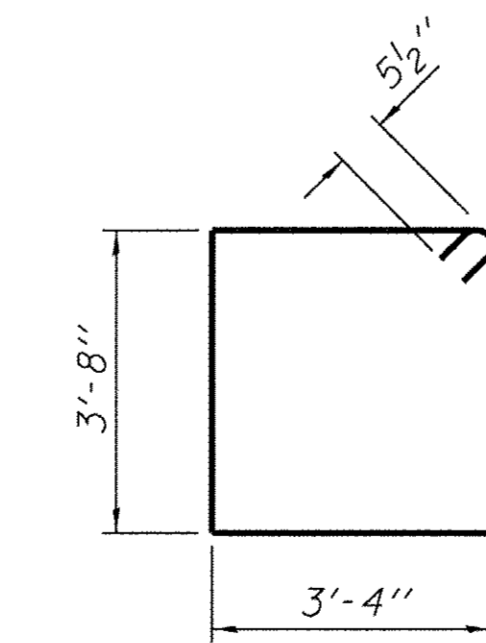
PILE DATA
 Type: Metal Shell Piles 12" x 0.25"
 Nominal Required Bearing: 308k
 Factored Resistance Available: 170k
 Est. Length: 50'
 No. Production Piles: 6
 No. Test Piles: 1



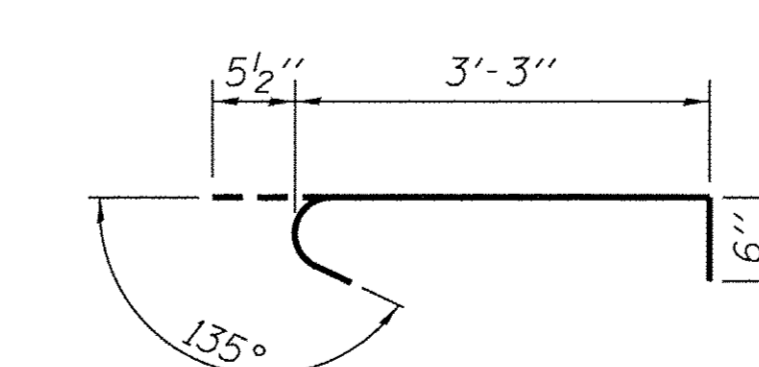
FIELD CUTTING DIAGRAM
 Order h3(E) and v2(E) full length. Cut as shown and use remainder of bars in opposite face.



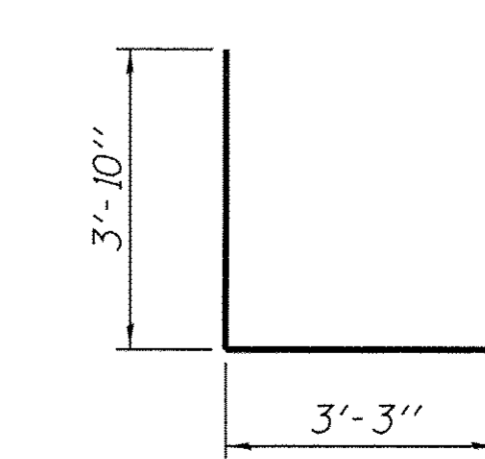
BAR h4(E)



BAR s2(E)



BAR s3(E)



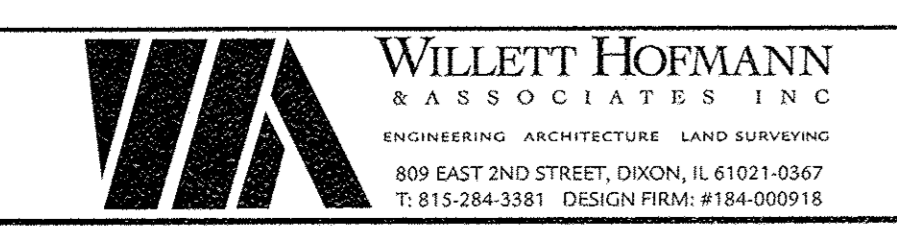
BAR u(E)

BILL OF MATERIAL

Bar No.	Size	Length	Shape
h(E)	24 #8	16'-7"	—
h3(E)	6 #6	18'-6"	—
h4(E)	4 #5	10'-4"	—
p(E)	14 #7	34'-10"	—
s2(E)	34 #5	14'-11"	□
s3(E)	28 #5	4'-3"	□
u(E)	10 #6	10'-11"	□
v1(E)	66 #8	5'-11"	—
v2(E)	18 #5	11'-11"	—
v3(E)	8 #5	8'-3"	—
Structure Excavation		Cu. Yd.	42
Concrete Structures		Cu. Yd.	24.1
Reinforcement Bars, Epoxy Coated		Pound	4,430
Furnishing Metal Shell Piles 12" x 0.25"		Foot	300
Driving Piles		Foot	300
Test Pile, Metal Shells		Each	1
Granular Backfill for Structures		Cu. Yd.	80

NOTES:
 *For drainage details, see Riprap & Pile Layout on Structural Sheet 2 of 20.
 Pour steps monolithically with cap.
 All exposed edges shall have standard 3/4" chamfers, except as noted.
 For details of reinforcement in Metal Shell Piles, See Structural Sheet 18 of 20.

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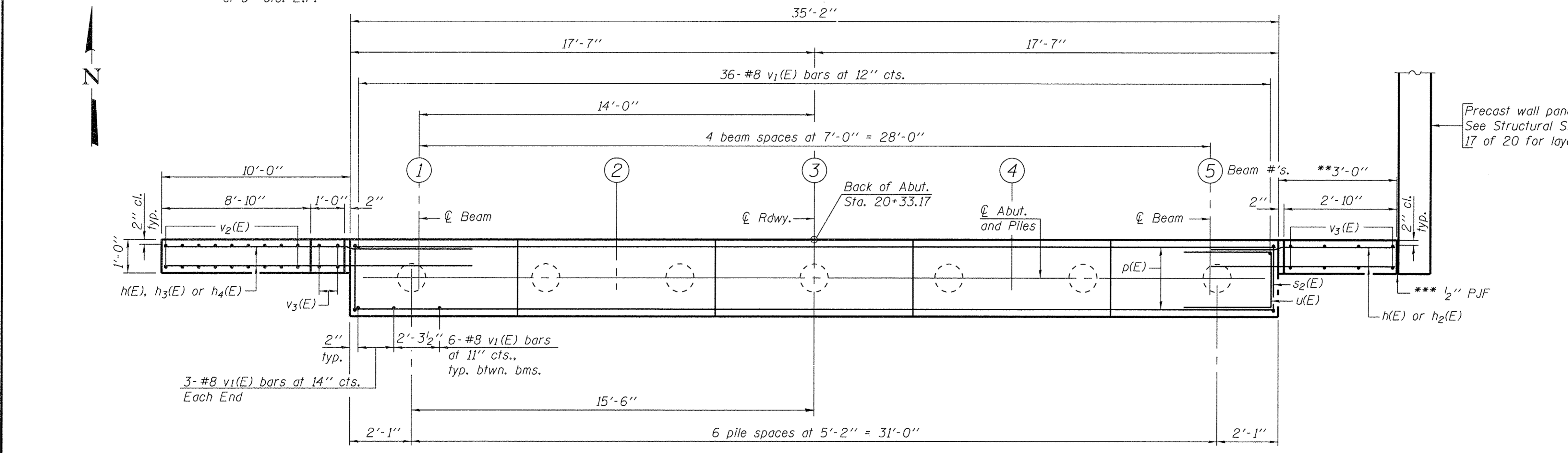
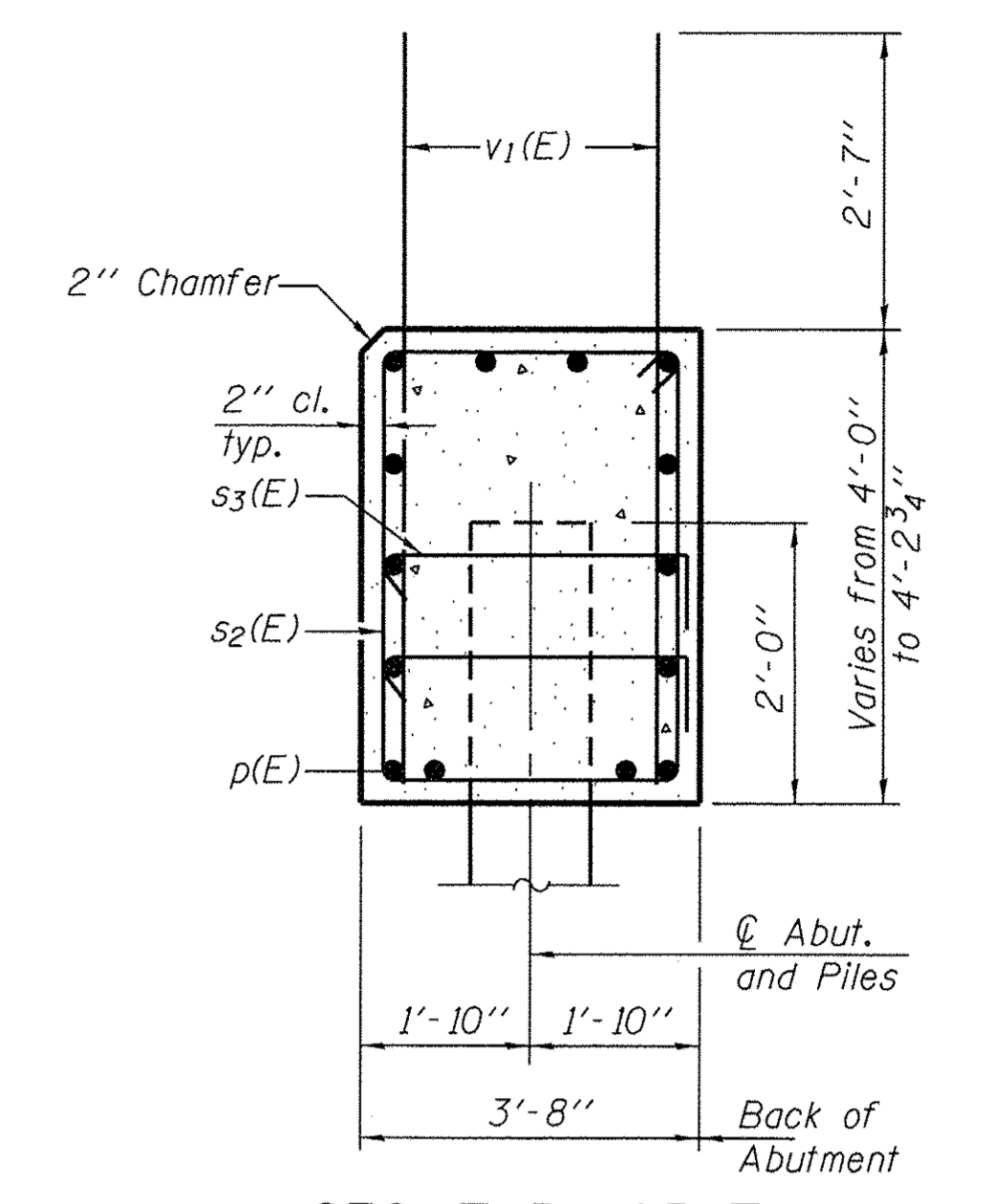
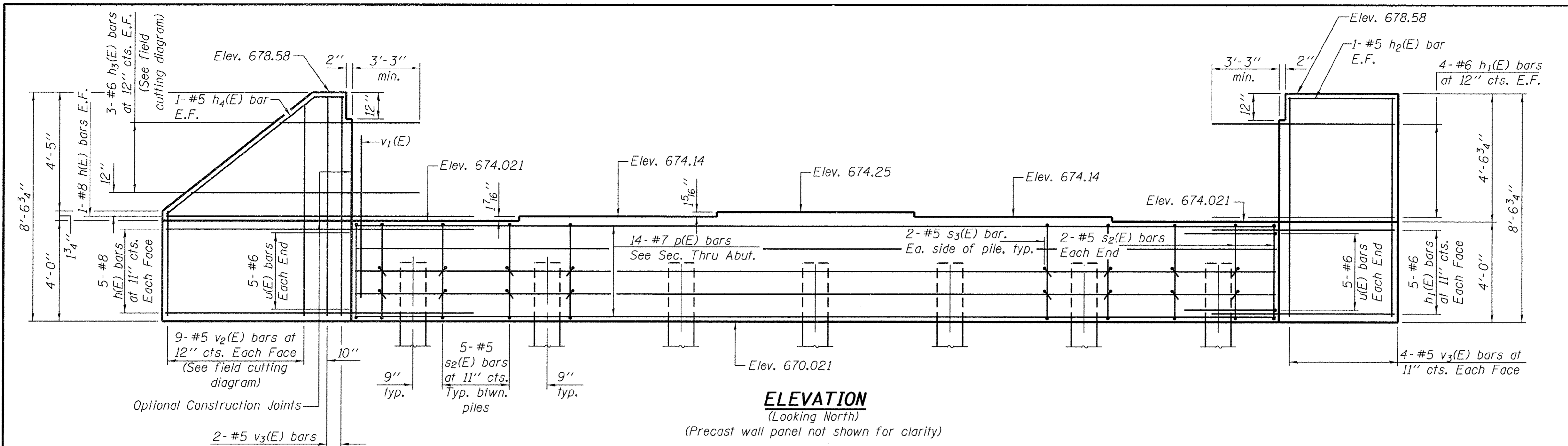


DESIGNED - BKC	REVISED -
CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT DETAILS
 STRUCTURE NO. 099-3289**
 STRUCTURAL SHEET NO. 15 OF 20 SHEETS

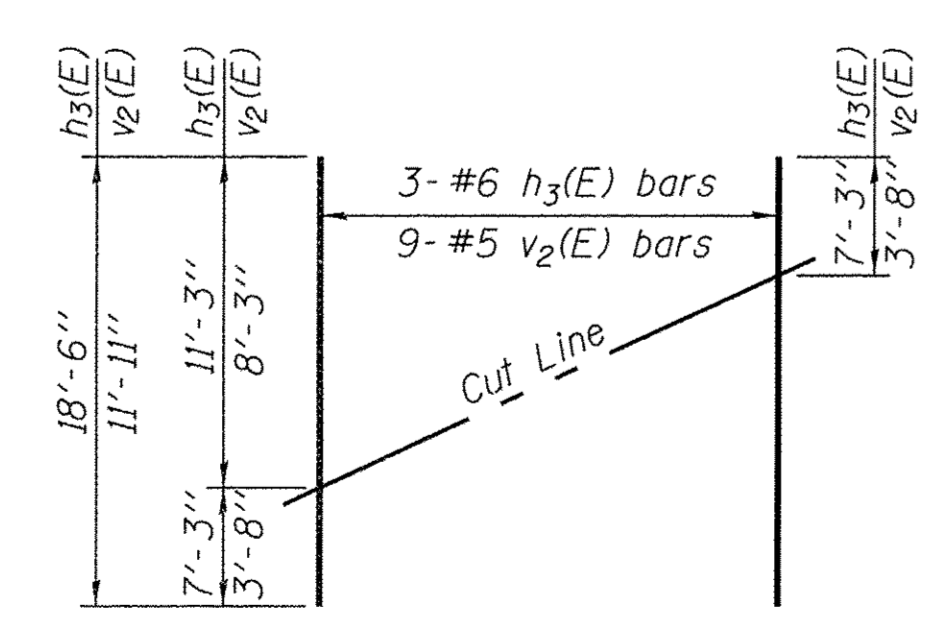
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	33
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BR05-01971281		



BILL OF MATERIAL

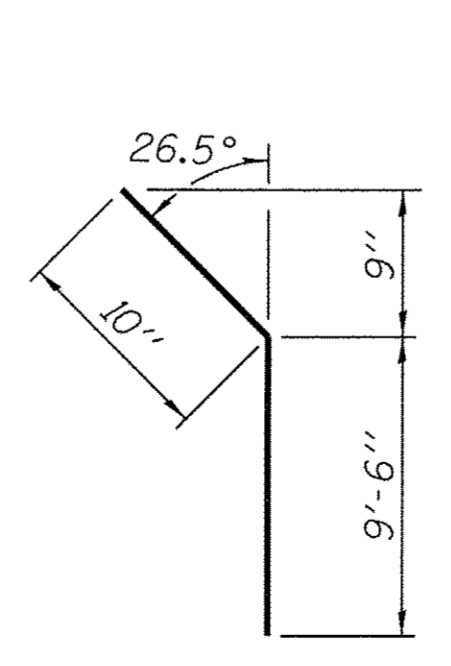
Bar	No.	Size	Length	Shape	
h(E)	12	#8	16'-1"	—	
h1(E)	18	#6	7'-2"	—	
h2(E)	2	#5	2'-8"	—	
h3(E)	3	#6	18'-6"	—	
h4(E)	2	#5	10'-4"	—	
p(E)	14	#7	34'-10"	—	
s2(E)	34	#5	14'-11"	⊠	
s3(E)	28	#5	4'-3"	⊠	
u(E)	10	#6	10'-11"	⊠	
v1(E)	66	#8	5'-11"	—	
v2(E)	9	#5	11'-11"	—	
v3(E)	12	#5	8'-3"	—	
Structure Excavation				Cu. Yd.	48
Concrete Structures				Cu. Yd.	22.5
Reinforcement Bars, Epoxy Coated				Pound	3,890
Furnishing Metal Shell Piles 12" x 0.25"				Foot	306
Driving Piles				Foot	306
Test Pile, Metal Shells				Each	1
Granular Backfill for Structures				Cu. Yd.	59

PILE DATA
 Type: Metal Shell Piles 12" x 0.25"
 Nominal Required Bearing: 308k
 Factored Resistance Available: 170k
 Est. Length: 51'
 No. Production Piles: 6
 No. Test Piles: 1

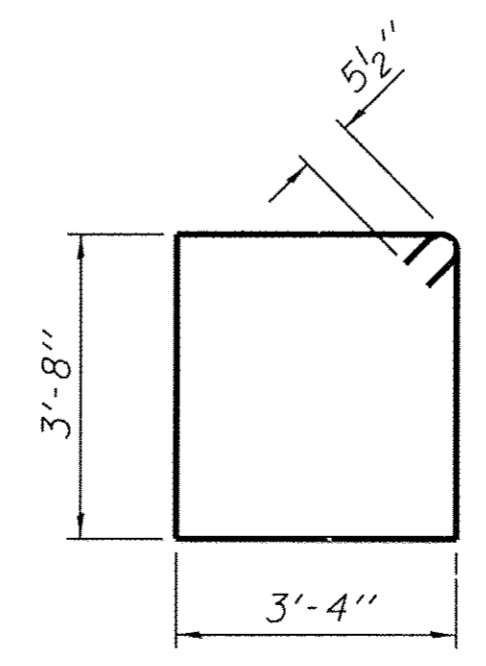


FIELD CUTTING DIAGRAM

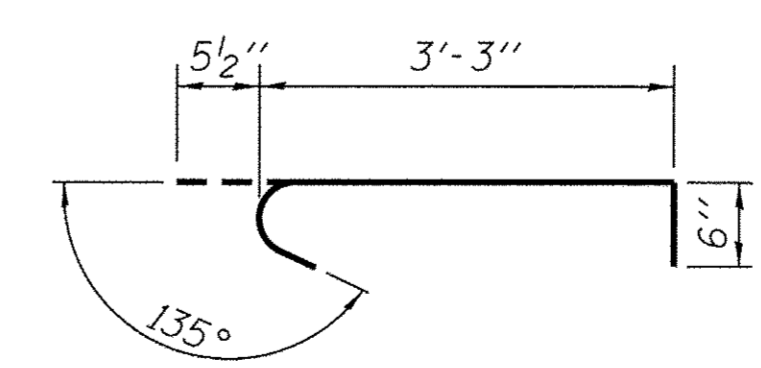
Order h3(E) and v2(E) full length. Cut as shown and use remainder of bars in opposite face.



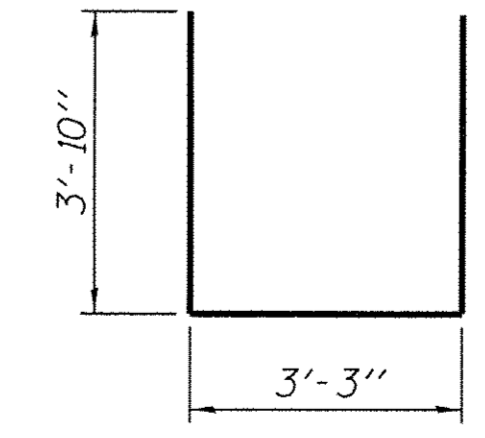
BAR h4(E)



BAR s2(E)



BAR s3(E)



BAR u(E)

NOTES:

- *For drainage details, see Riprap & Pile Layout on Structural Sheet 2 of 20.
- **Dimension based on 5 1/2" wall and adjust in field according to precast wall width.
- ***Cost included with Concrete Structures.
- Four steps monolithically with cap.
- All exposed edges shall have standard 3/4" chamfers, except as noted.
- For details of reinforcement in Metal Shell Piles, See Structural Sheet 18 of 20.

FILE = S:\PROJECTS\2814\1303014-Cross\DESIGN\STRUCT\2D\Drawings\1303014_Nor-Pl_Abument_Details.dgn

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DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

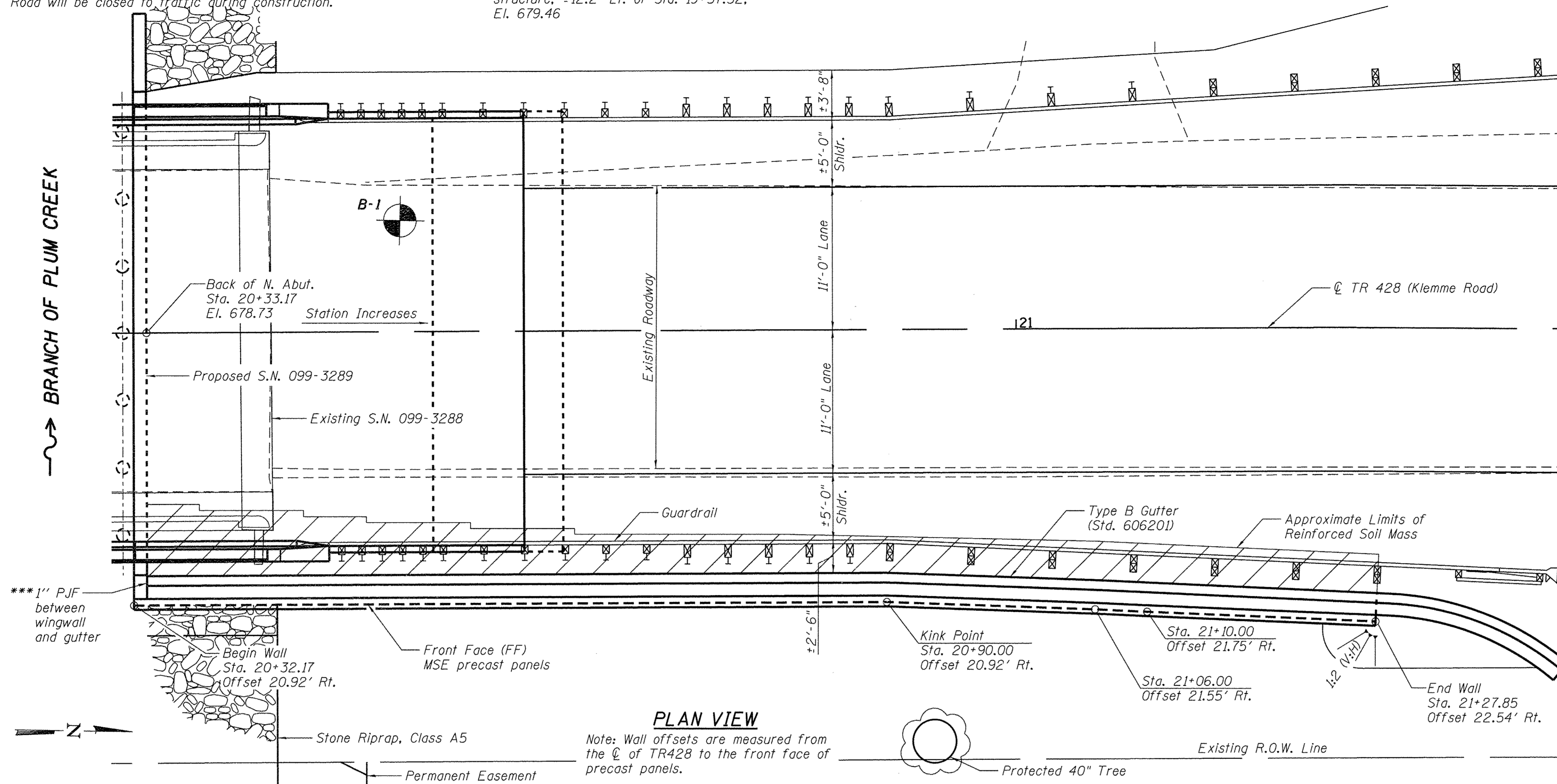
**NORTH ABUTMENT DETAILS
 STRUCTURE NO. 099-3289**

STRUCTURAL SHEET NO. 16 OF 20 SHEETS

TWP. RTE. 428	SECTION 12-02110-01-BR	COUNTY WILL	TOTAL SHEETS 50	SHEET NO. 34
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT BR05-0197(128)				

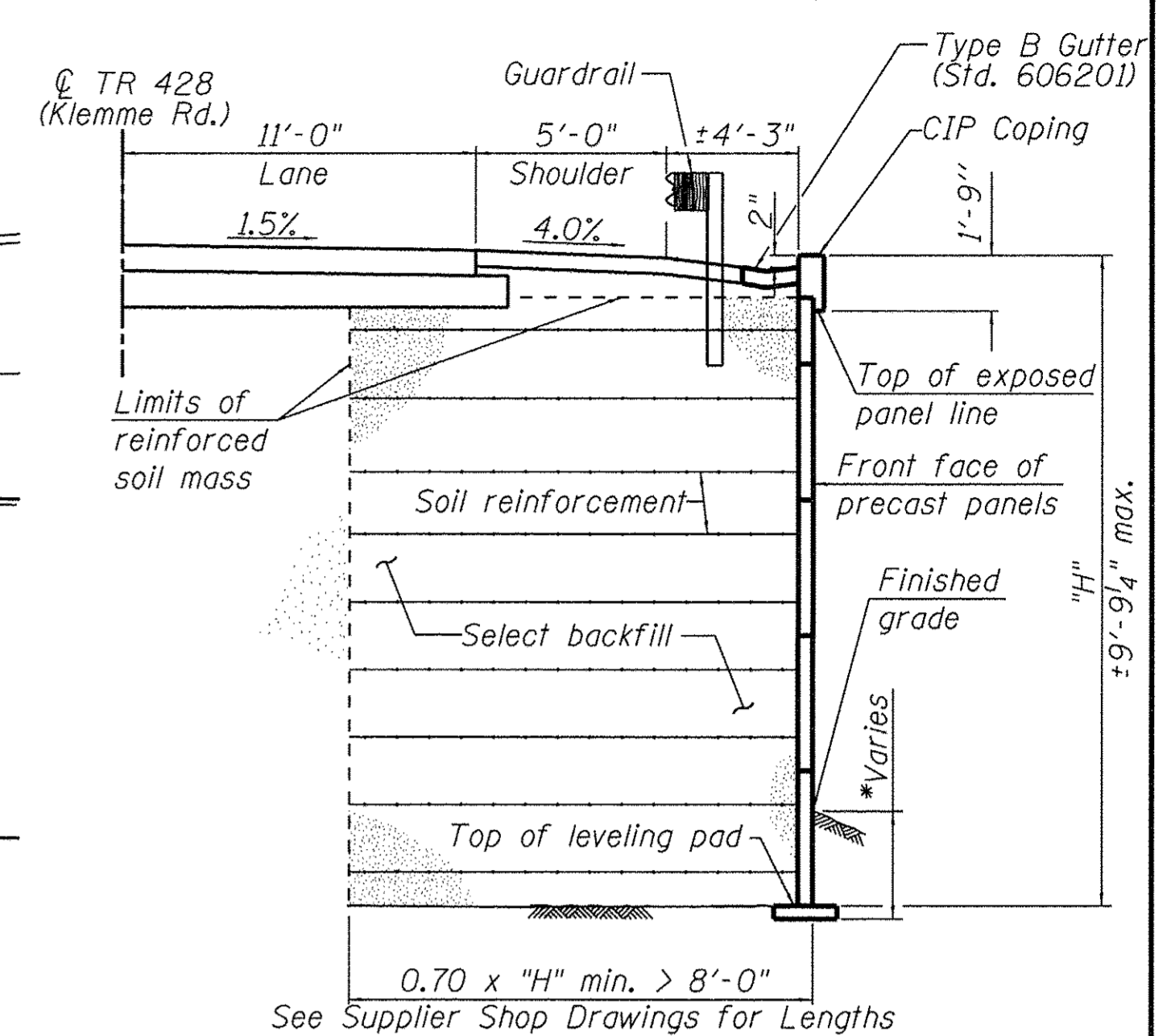
EXISTING STRUCTURE: None
Road will be closed to traffic during construction.

BENCHMARK #40: Chis. "□" on southwest hub guard of structure, ±12.2' Lt. of Sta. 19+57.32, El. 679.46



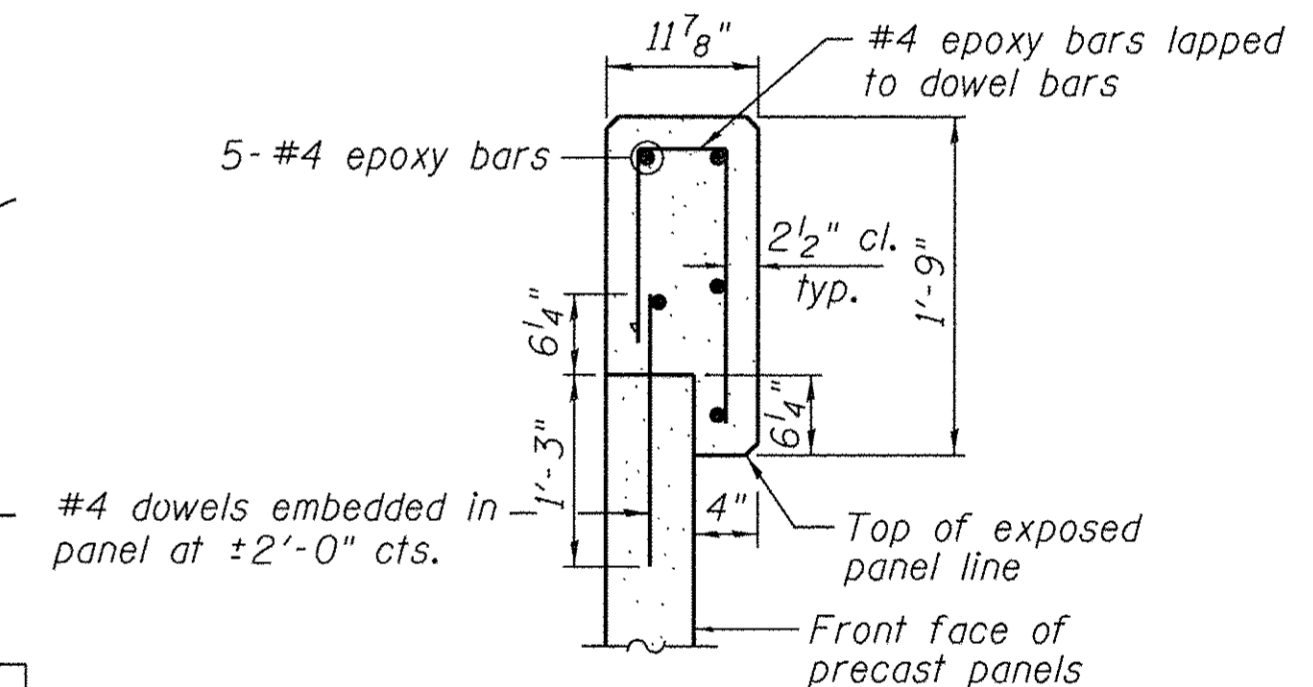
PLAN VIEW

Note: Wall offsets are measured from the C of TR428 to the front face of precast panels.



SECTION THRU MSE WALL

*Per commitment with Property Owner, 1'-6" outside limits of riprap.



COPING DETAIL**

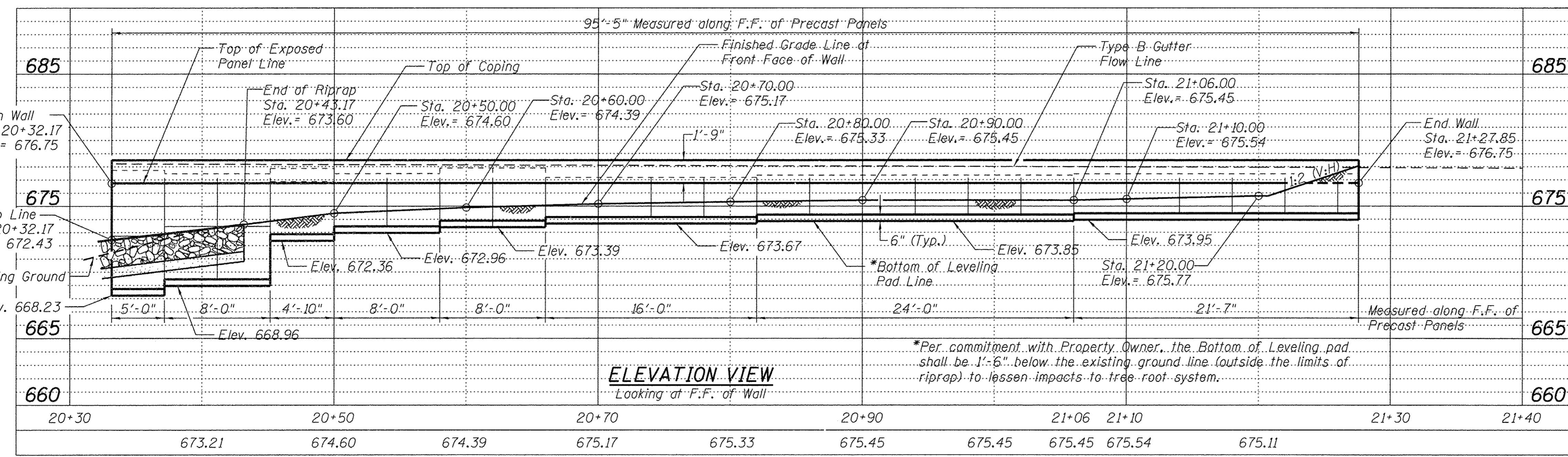
**See supplier shop drawings for final coping design and layout

BILL OF MATERIAL

Item	Unit	Quantity
Structure Excavation	Cu. Yd.	91
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	307

NOTES:

Contractor shall verify all elevations, dimensions and manufacturer's specifications prior to constructing wall.
The MSE wall, in combination and coordination with guardrail posts, shall accommodate AASHTO's Traffic Railing test-level forces. See Special Provisions.
***Cost included with Mechanically Stabilized Earth Retaining Wall.



ELEVATION VIEW

Looking at F.F. of Wall

FILE = S:\PROJECTS\2014\1303014_Cross\DESIGN\STRUCT\20.DP\enrgp\1303014_MSE Wall Details.dgn

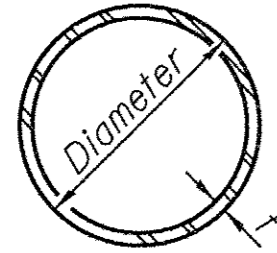
WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
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T: 815-284-3381 DESIGN FIRM: #184-000918

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CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

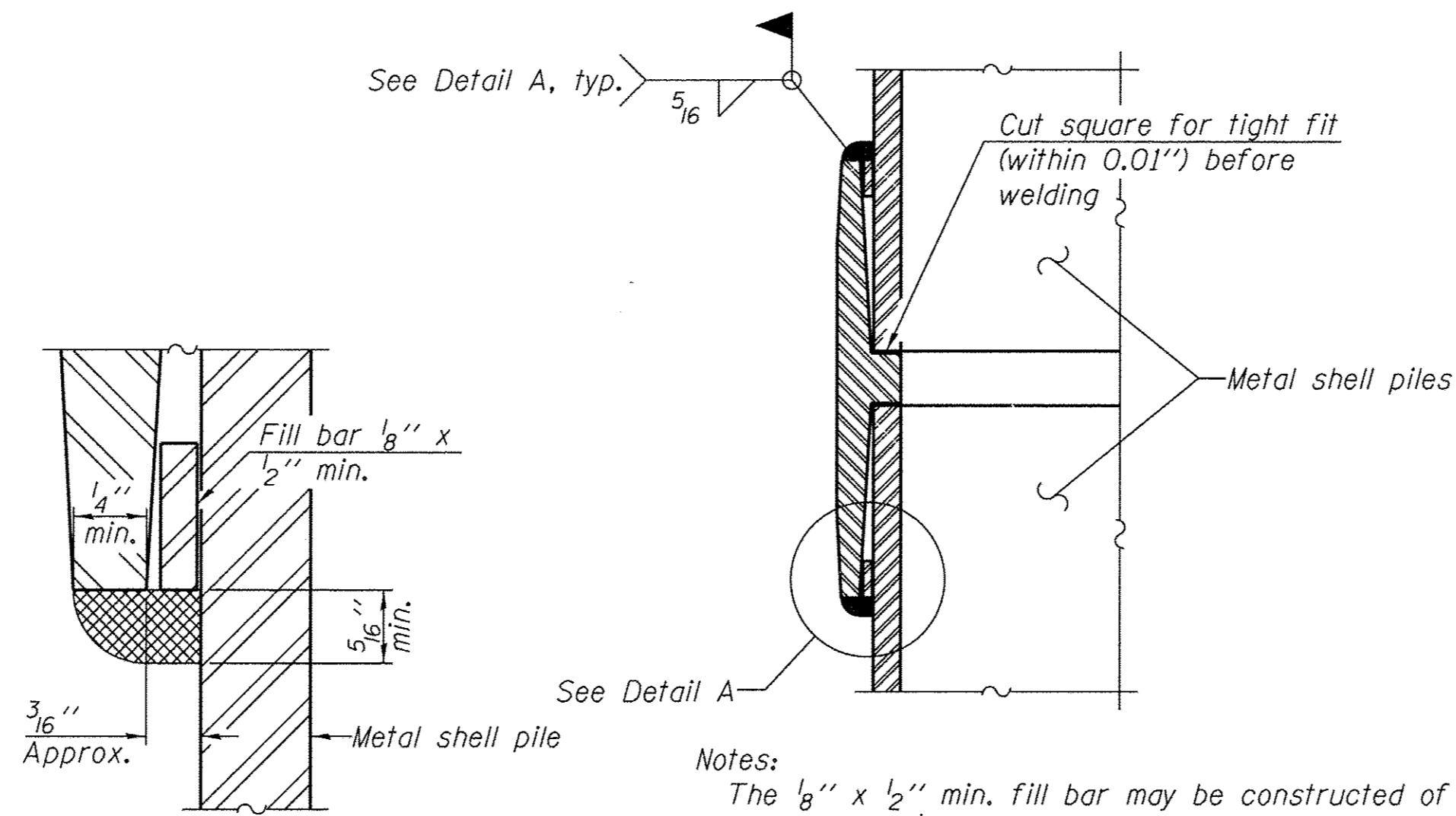
MSE WALL DETAILS
STRUCTURE NO. 099-3289
STRUCTURAL SHEET NO. 17 OF 20 SHEETS

TWP. RTE. 428	SECTION 12-02110-01-BR	COUNTY WILL	TOTAL SHEETS 50	SHEET NO. 35
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197(128)		



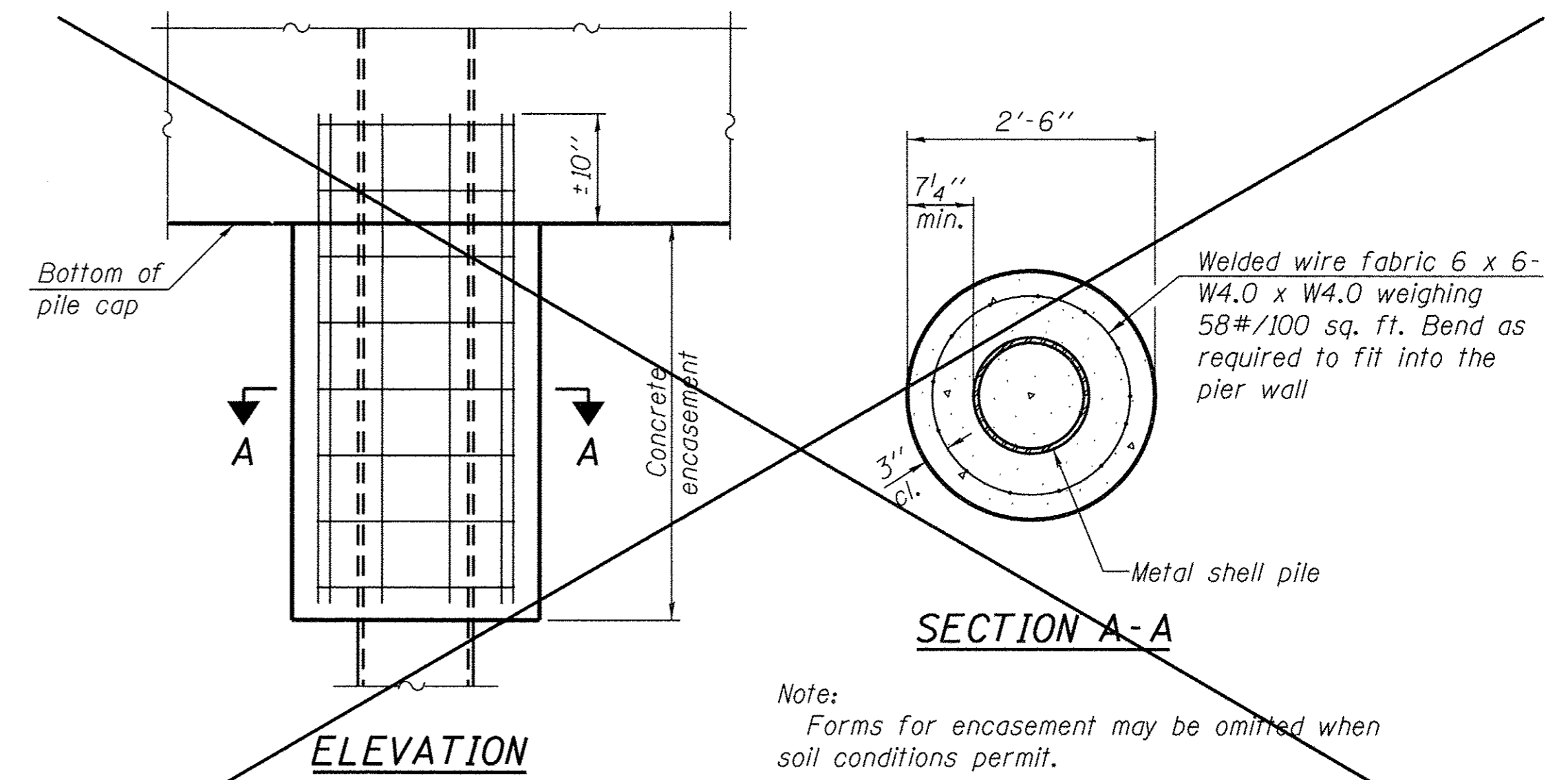
METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



DETAIL A

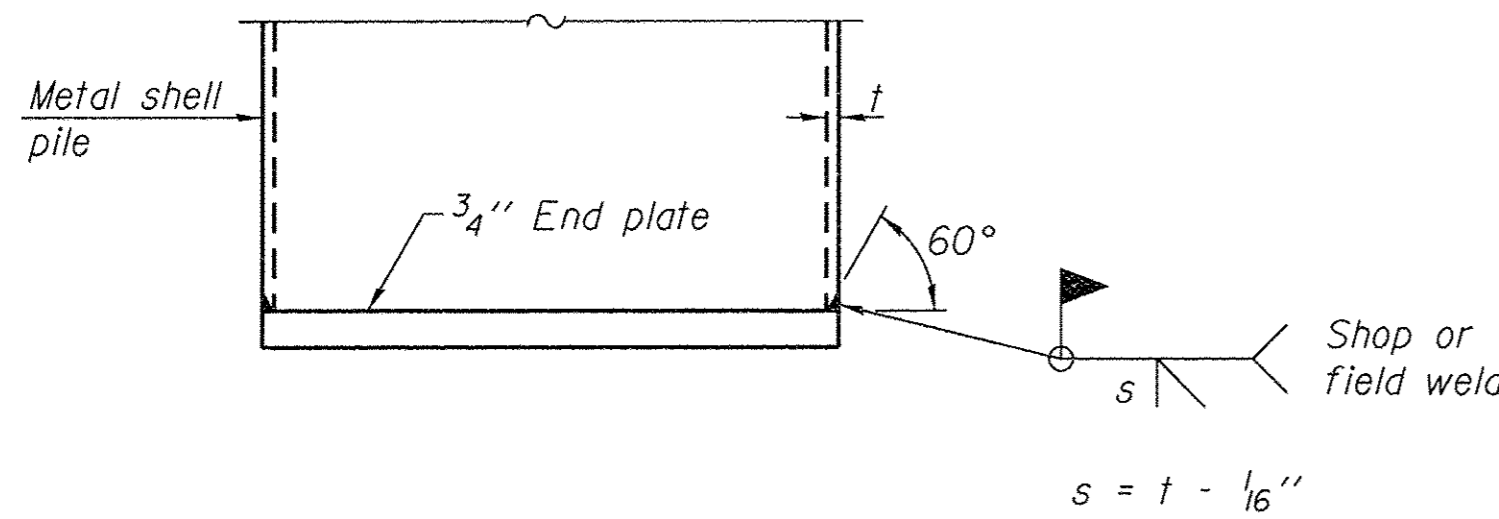
WELDED COMMERCIAL SPLICE



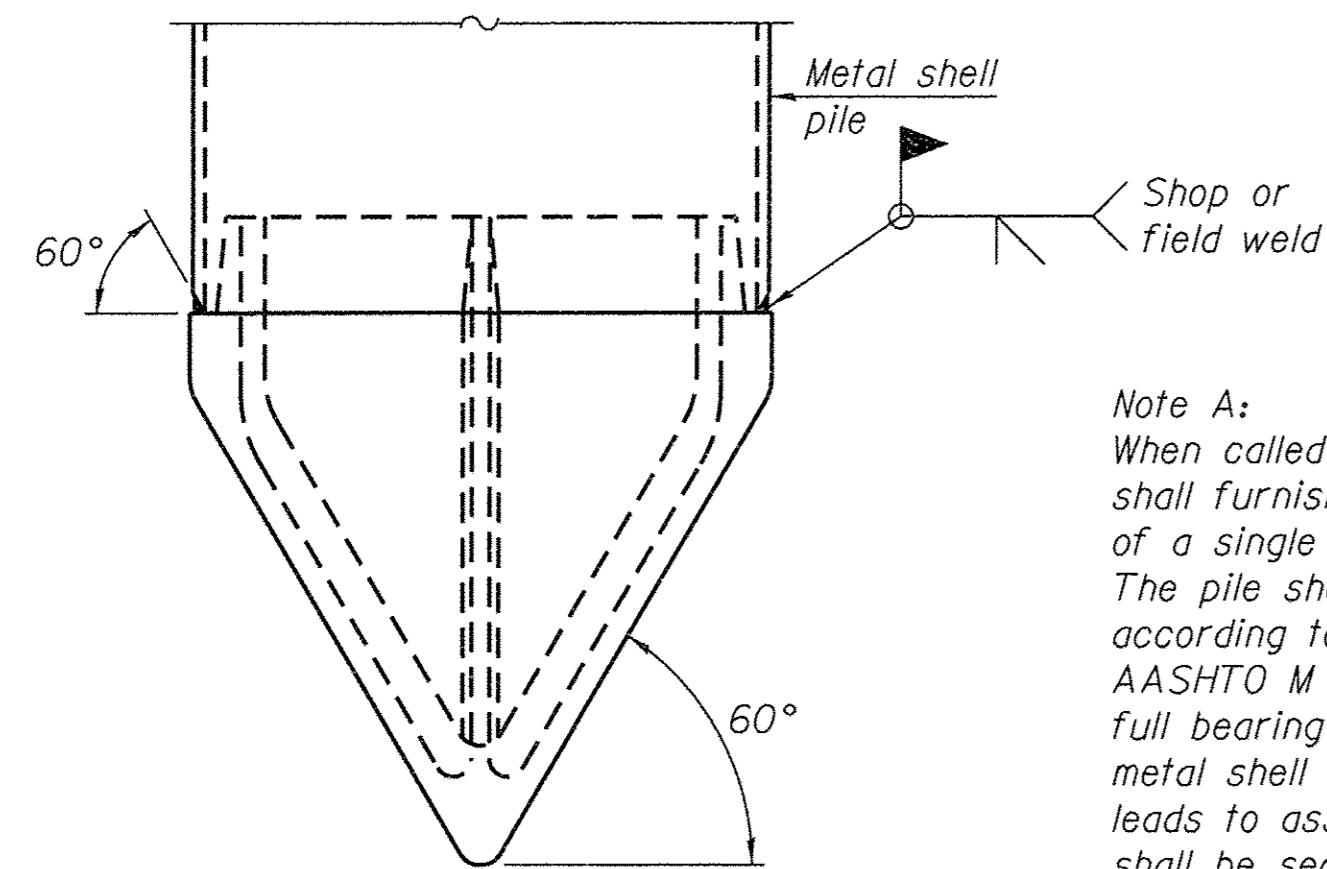
ELEVATION

SECTION A-A

CONCRETE ENCASEMENT AT PIERS



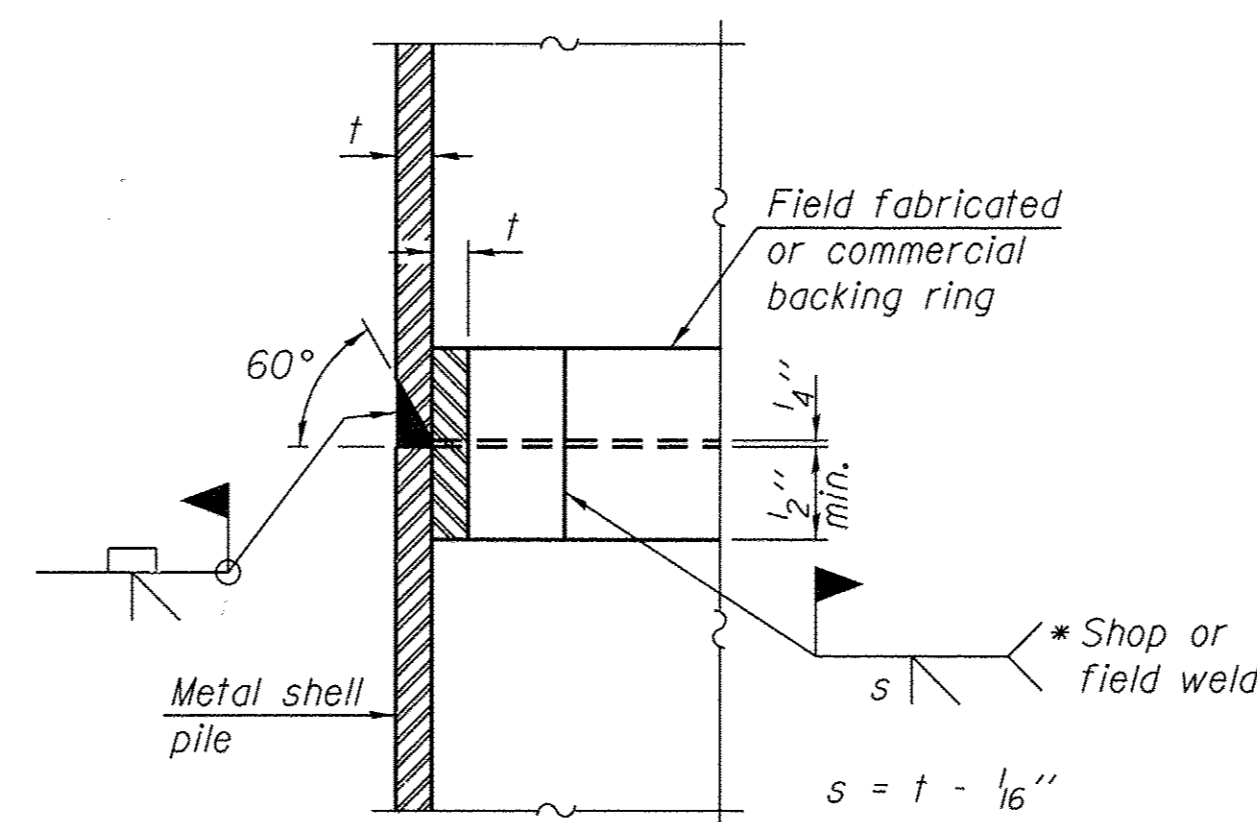
END PLATE ATTACHMENT



METAL SHELL PILE SHOE ATTACHMENT

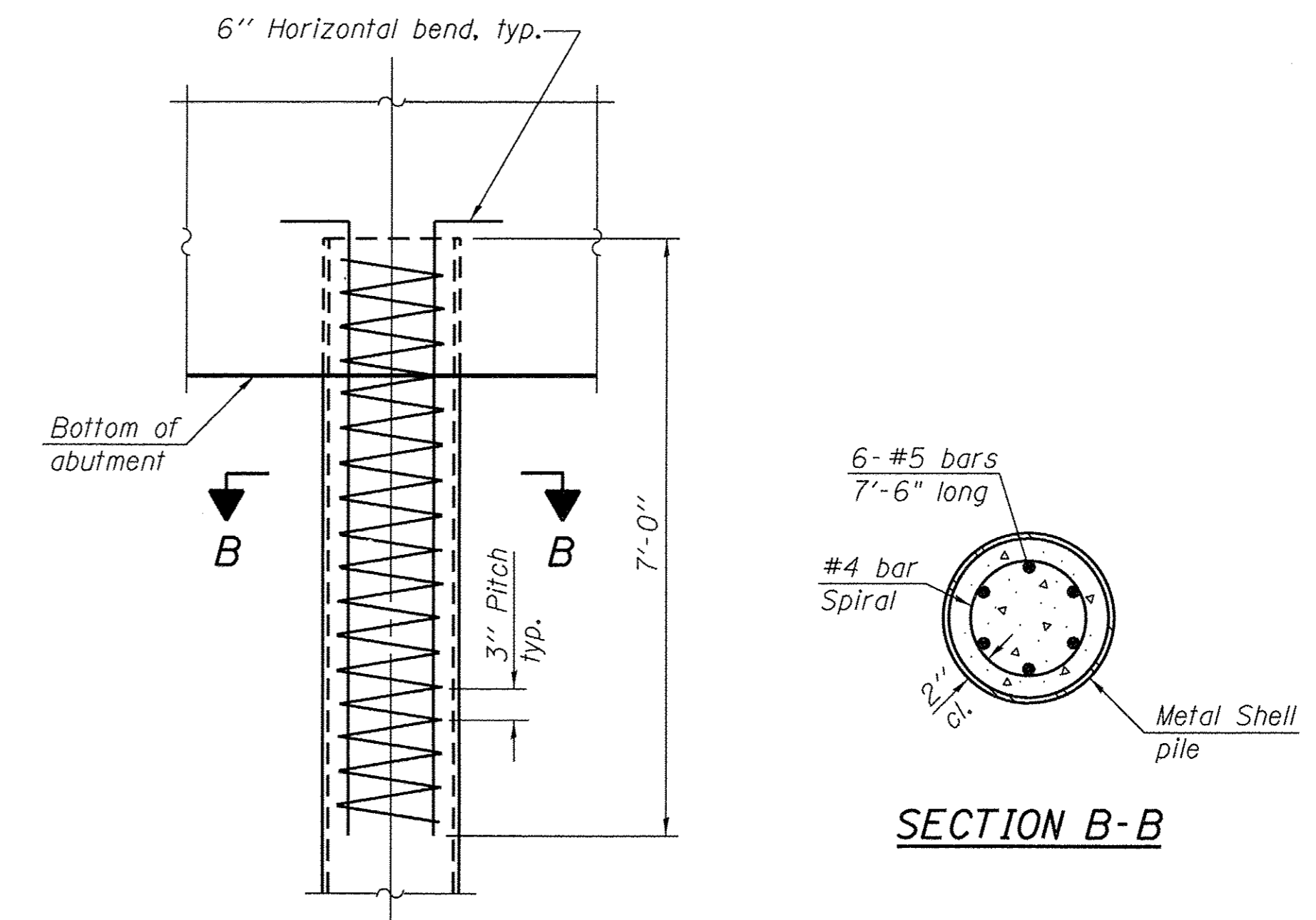
(See Note A)

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



COMPLETE PENETRATION WELD SPLICE

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



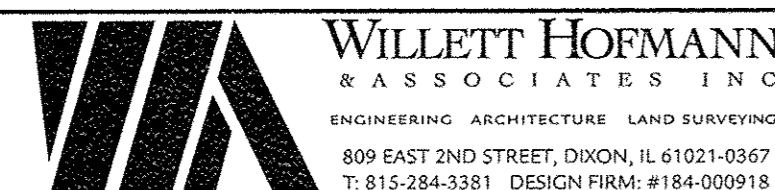
ELEVATION

SECTION B-B

METAL SHELL REINFORCEMENT AT ABUTMENTS

Note:
The metal shell piles shall be according to ASTM A 252 Grade 3.

FILE = S:\PROJECTS\2014\1303014-Crew\DESIGN\STRUCT\2D\Drawings\1303014_Metal Shell Pile Details.dgn



DESIGNED - BKC	REVISED -
CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**METAL SHELL PILE DETAILS
STRUCTURE NO. 099-3289**

STRUCTURAL SHEET NO. 18 OF 20 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	36
WHA* 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971281		

PROJECT **Replacement Bridge - S. Klemme Road over Plum Creek**

CLIENT **Willett, Hofmann and Associates**

BORING **1** DATE STARTED **12-16-13** DATE COMPLETED **12-16-13** JOB **L-79,576**

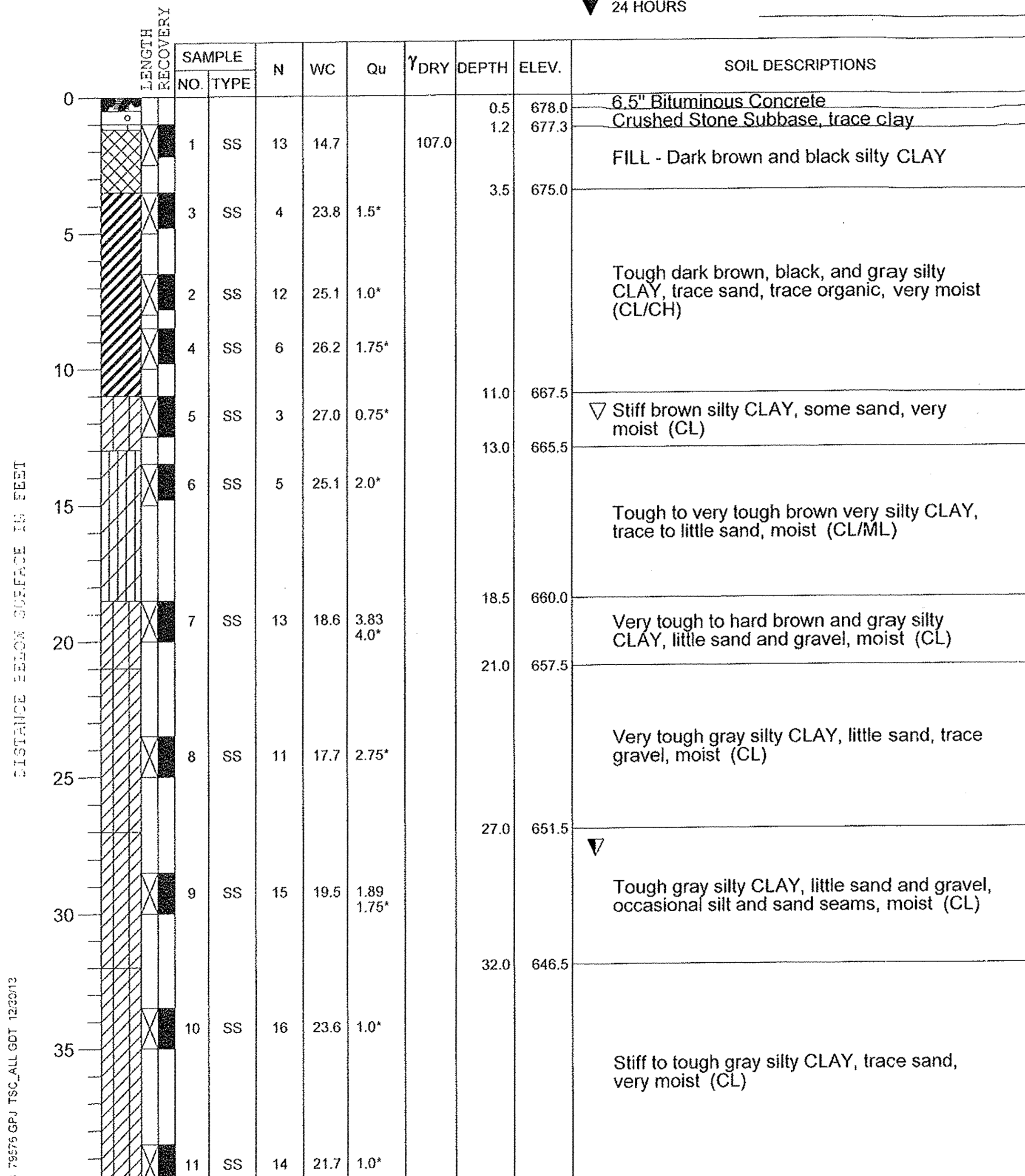


ELEVATIONS

GROUND SURFACE **678.5**
END OF BORING **613.5**

WATER LEVEL OBSERVATIONS

▽ WHILE DRILLING **28.0'**
▽ AT END OF BORING **12.0'**
▽ 24 HOURS



Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

End of Boring at 65.0'

DRILL RIG NO. **334**

PROJECT **Replacement Bridge - S. Klemme Road over Plum Creek**

CLIENT **Willett, Hofmann and Associates**

BORING **1** DATE STARTED **12-16-13** DATE COMPLETED **12-16-13** JOB **L-79,576**

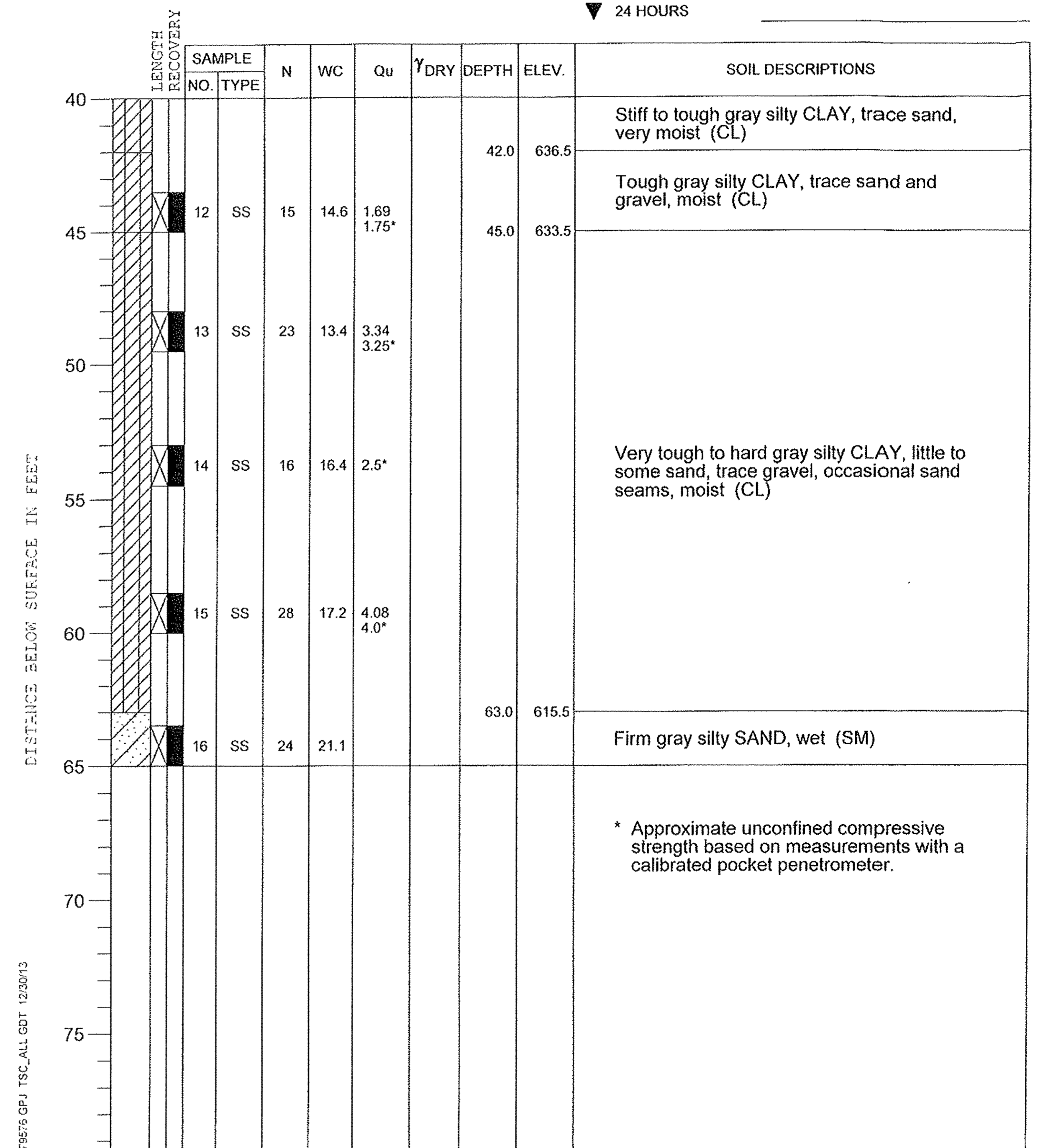


ELEVATIONS

GROUND SURFACE **678.5**
END OF BORING **613.5**

WATER LEVEL OBSERVATIONS

▽ WHILE DRILLING **28.0'**
▽ AT END OF BORING **12.0'**
▽ 24 HOURS



Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

End of Boring at 65.0'

DRILL RIG NO. **334**

FILE = S:\PROJECTS\2014\1303014\1303014-DESIGN\STRUCT\2D\Drawings\1303014_Boring_Logs.dgn



DESIGNED - BKC	REVISED -
CHECKED - PLP	REVISED -
DRAWN - FDL	REVISED -
CHECKED - BKC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 099-3289

STRUCTURAL SHEET NO. 19 OF 20 SHEETS

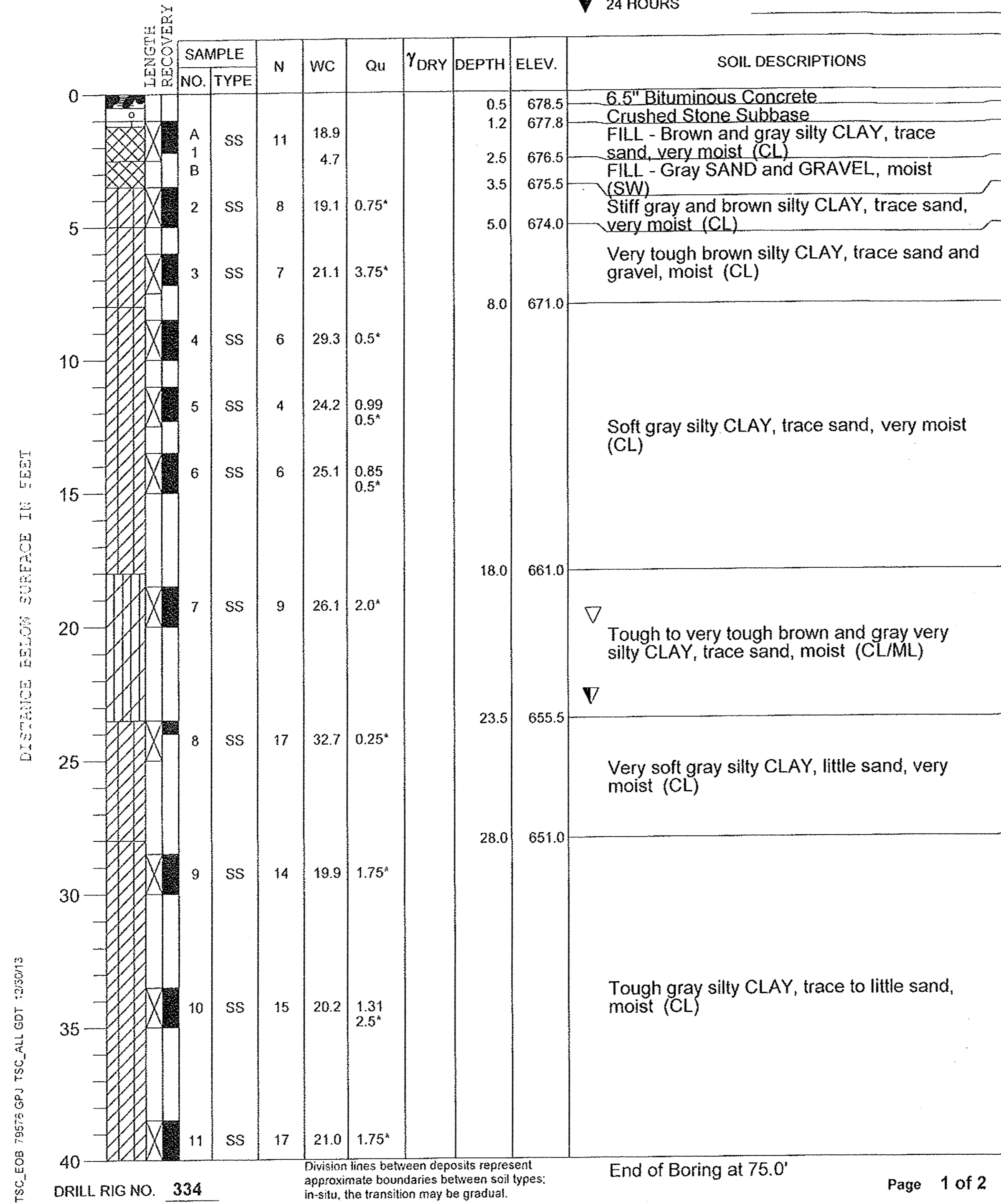
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	37
WHA* 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BR05-0197028		

PROJECT Replacement Bridge - S. Klemme Road over Plum Creek
 CLIENT Willett, Hofmann and Associates
 BORING 2 DATE STARTED 12-13-13 DATE COMPLETED 12-13-13 JOB L-79,576



ELEVATIONS
 GROUND SURFACE 679.0
 END OF BORING 604.0

WATER LEVEL OBSERVATIONS
 ▽ WHILE DRILLING 23.0'
 ▽ AT END OF BORING 20.0'
 ▽ 24 HOURS

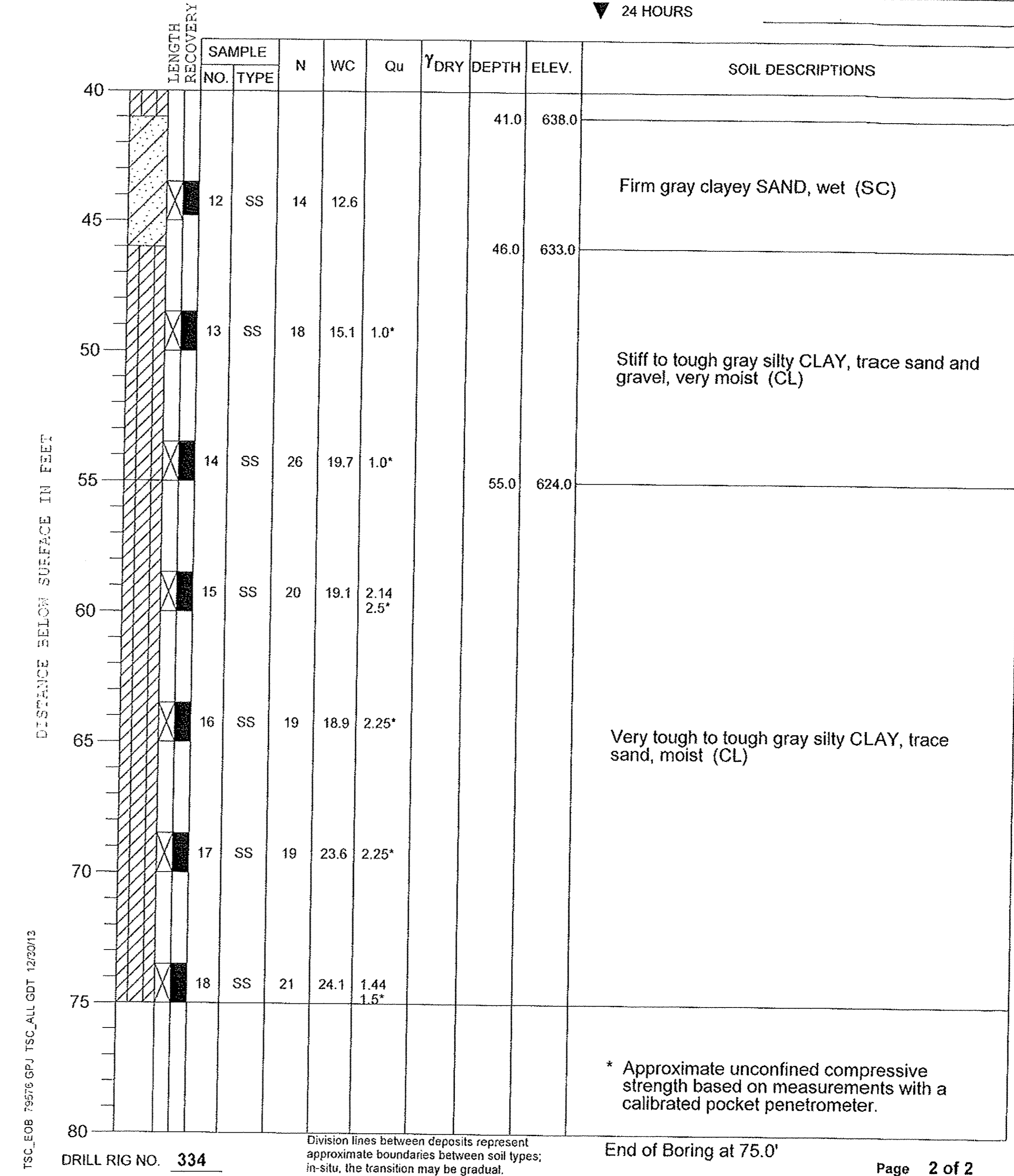


PROJECT Replacement Bridge - S. Klemme Road over Plum Creek
 CLIENT Willett, Hofmann and Associates
 BORING 2 DATE STARTED 12-13-13 DATE COMPLETED 12-13-13 JOB L-79,576

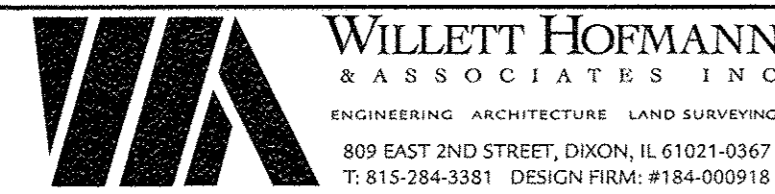


ELEVATIONS
 GROUND SURFACE 679.0
 END OF BORING 604.0

WATER LEVEL OBSERVATIONS
 ▽ WHILE DRILLING 23.0'
 ▽ AT END OF BORING 20.0'
 ▽ 24 HOURS



FILE = S:\PROJECTS\2814\1303D14_Crete\DESIGN\STRUCT\2D\Drawings\1303D14_Boring_Logs.dgn



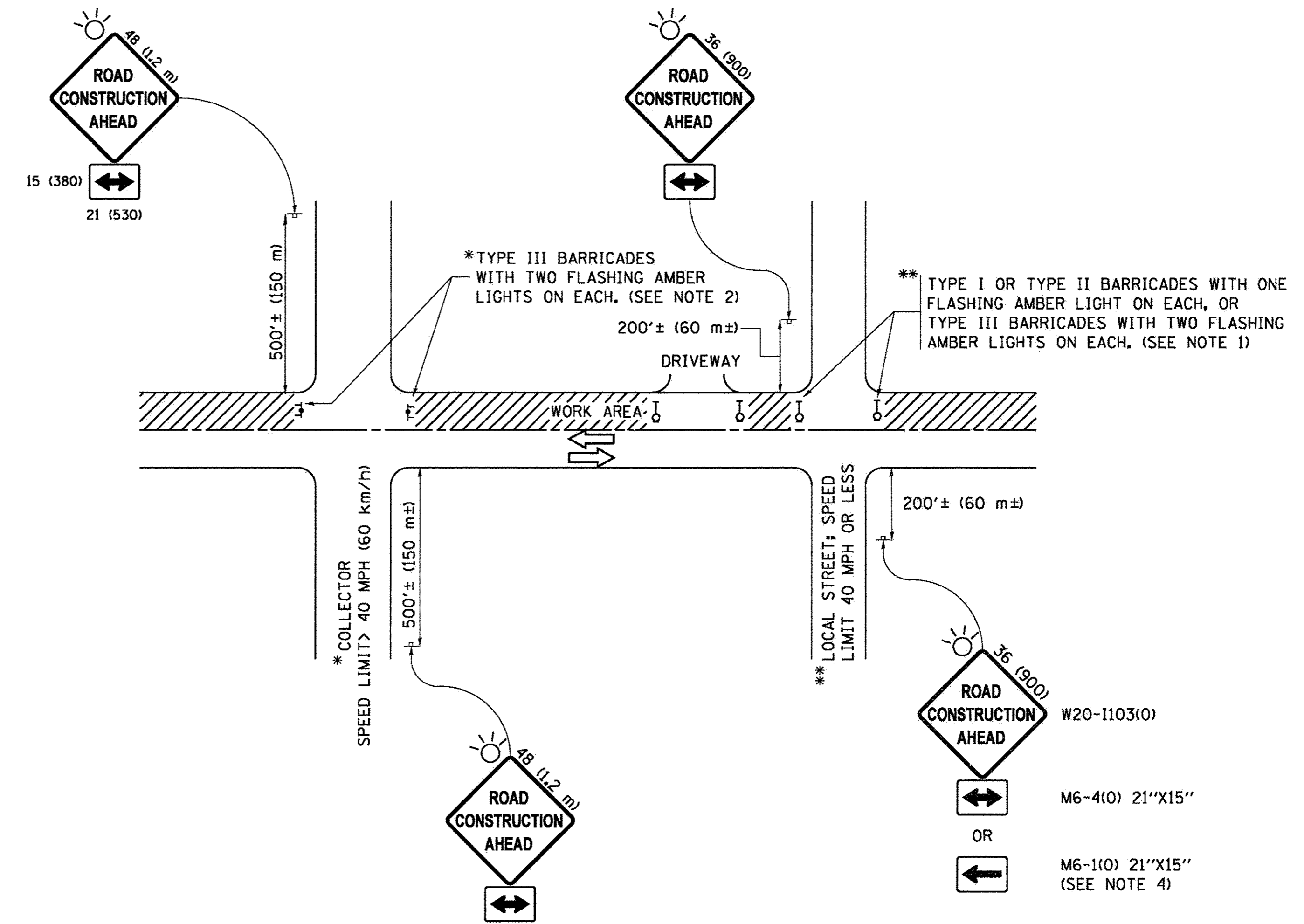
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 CHECKED - PLP
 DRAWN - FDL
 CHECKED - BKC

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BORING LOGS
 STRUCTURE NO. 099-3289
 STRUCTURAL SHEET NO. 20 OF 20 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	38
WHA* 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197128		



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE = S:\PROJECTS\2014\1303014\Creva\DESIGN\STRUCT\20.D\Drawings\1303014_Special_Details.dgn

WILLET HOFMANN & ASSOCIATES INC
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-294-3351 DESIGN FIRM: #184-000716

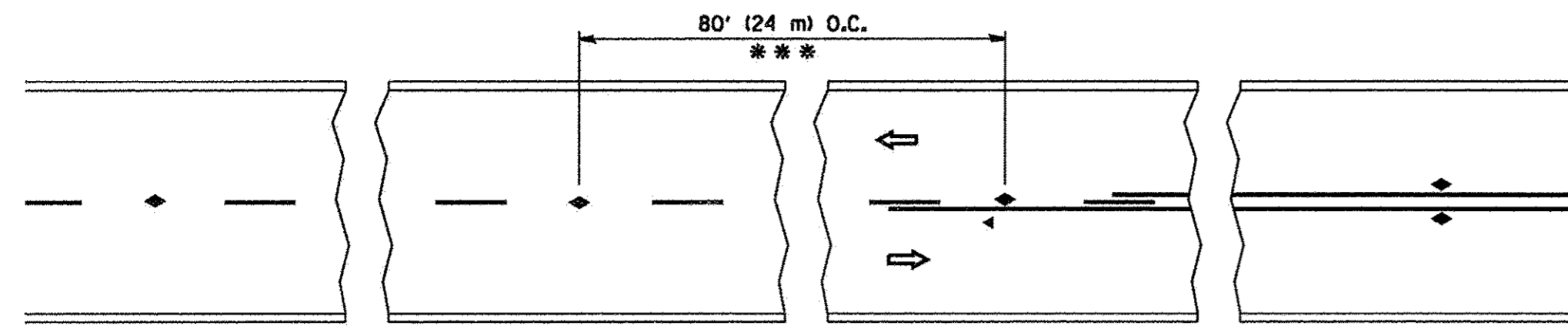
DESIGNED - DAN	REVISED - IDOT 9-15-2016
CHECKED - MAC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - MAC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE DETAIL TC-10
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK**

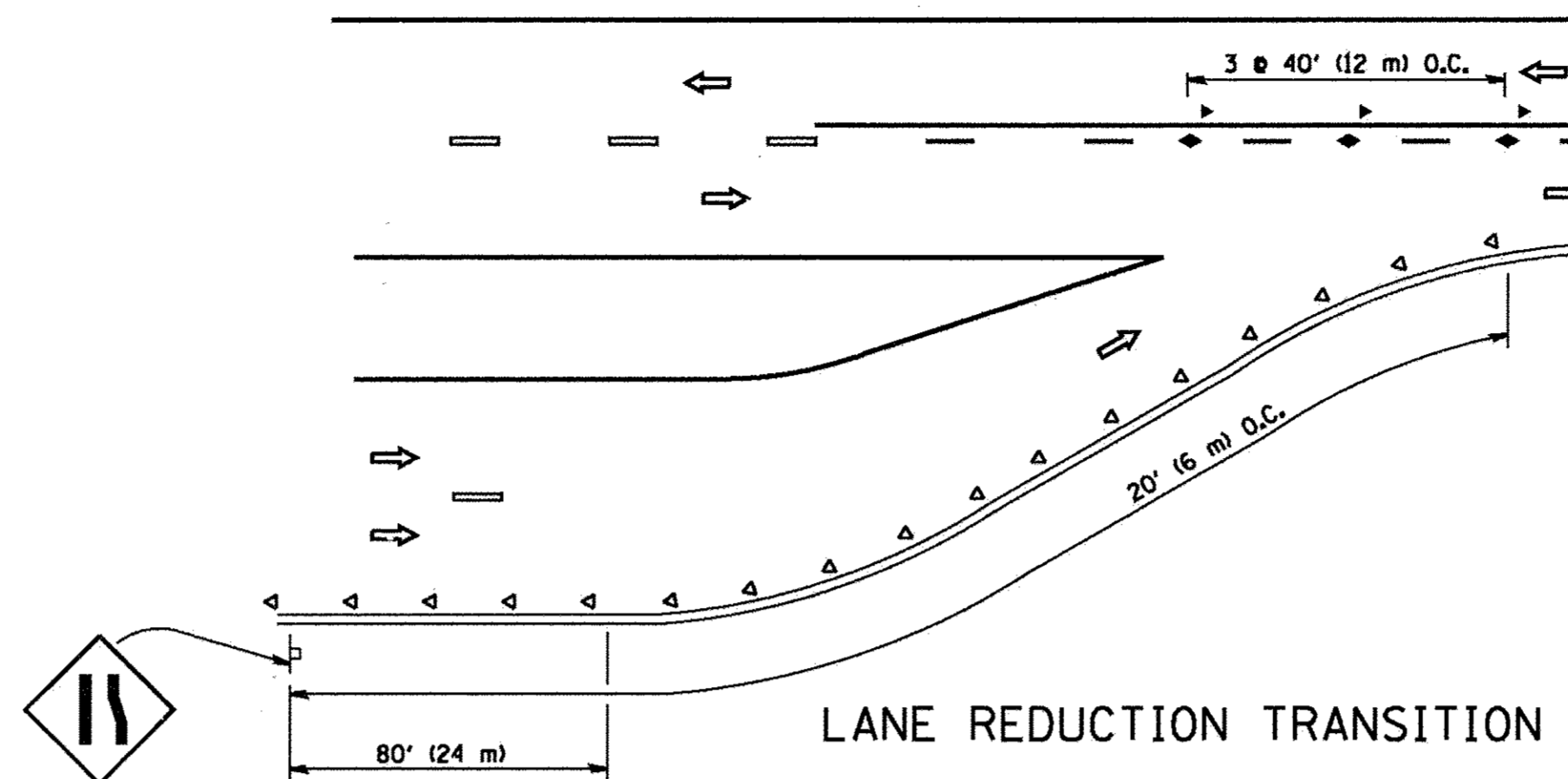
SHEET NO. 1 OF 1 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	39
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971281		

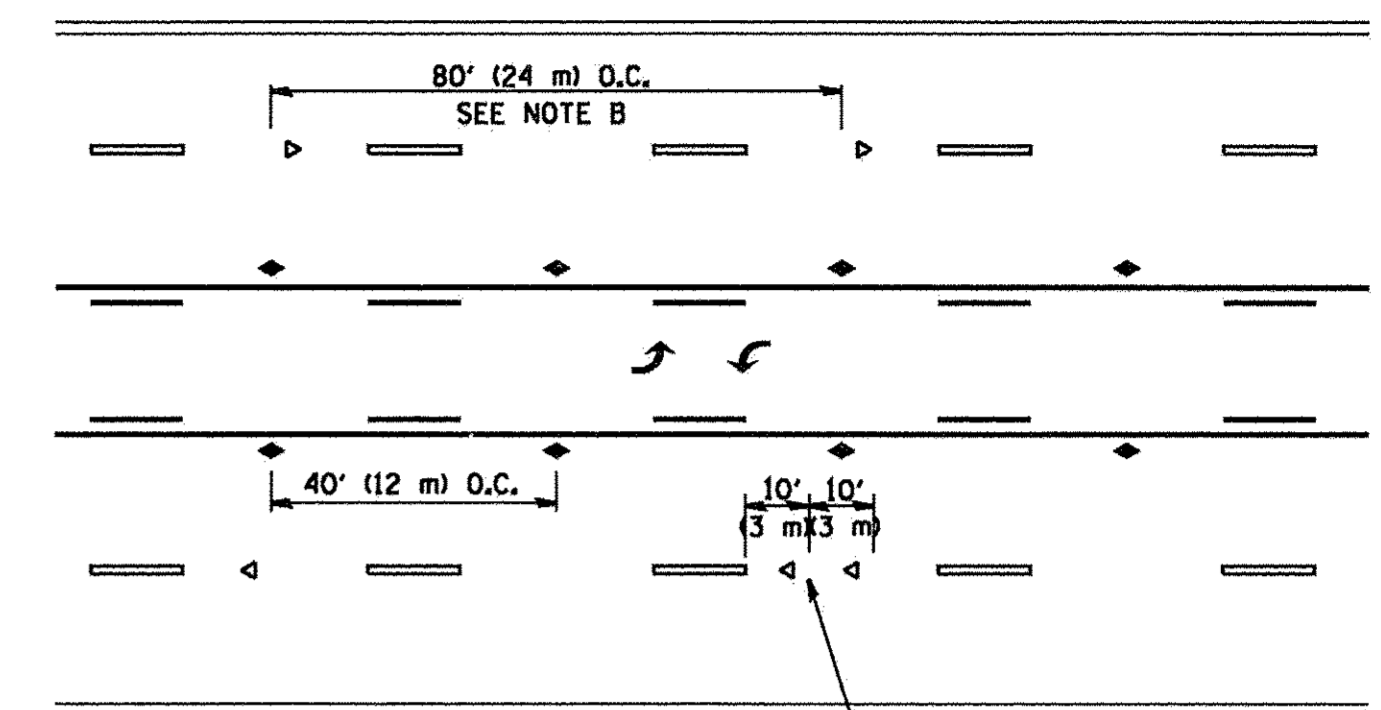


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

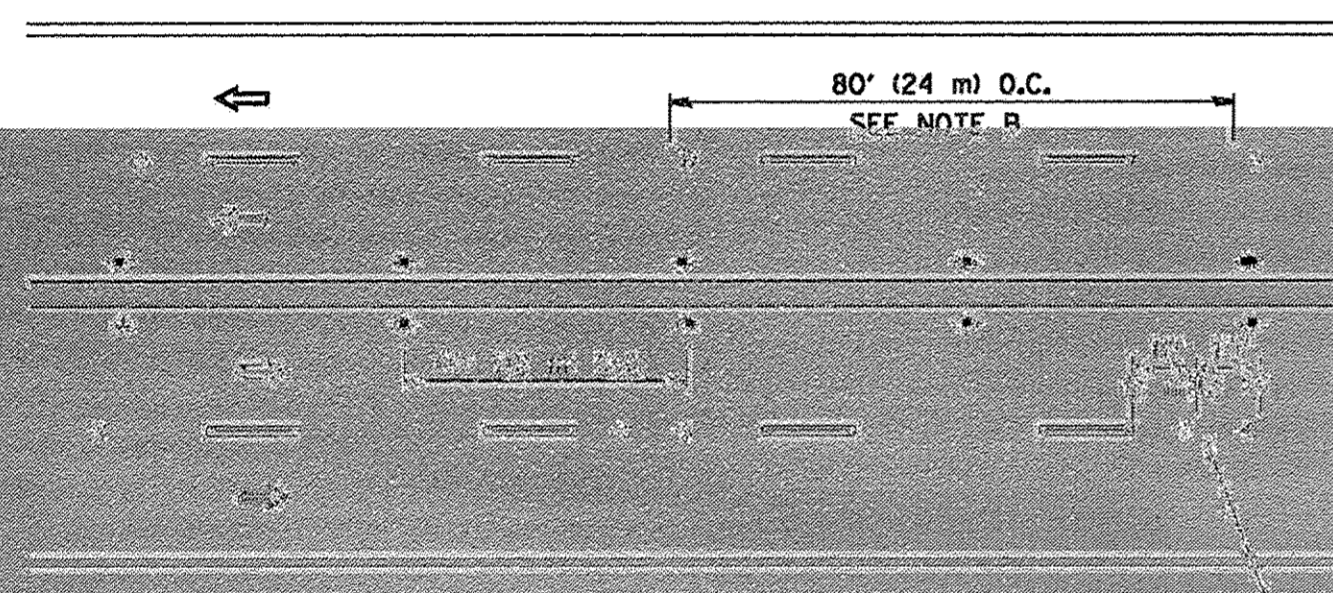
TWO-LANE/TWO-WAY



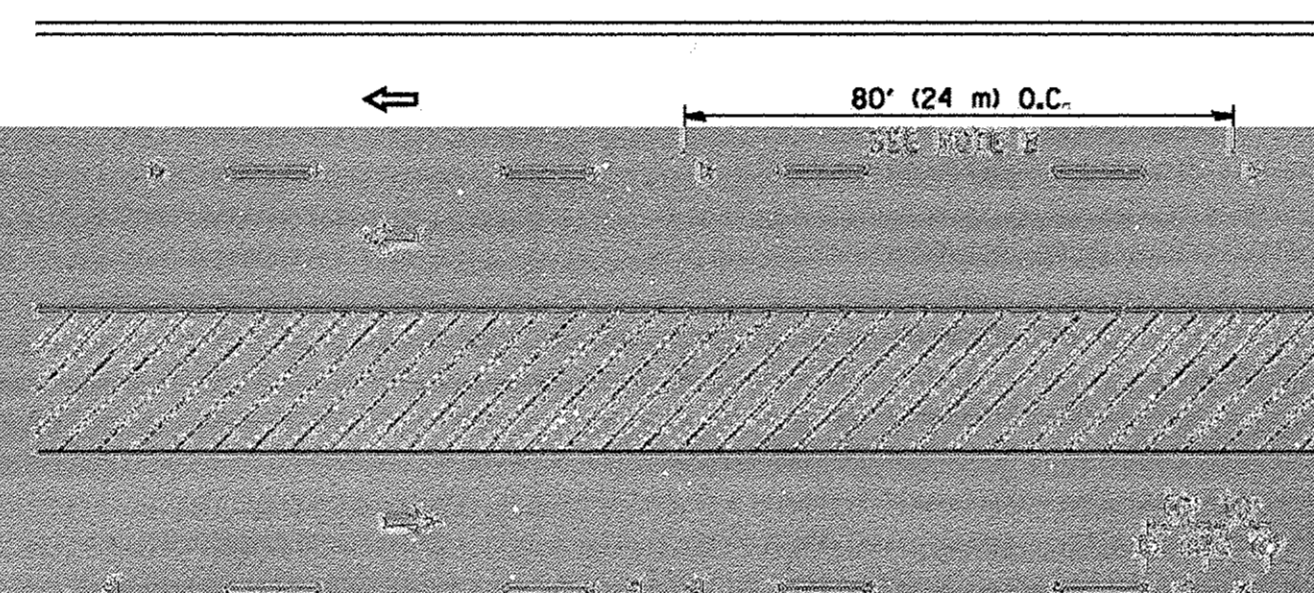
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED ON CURVES SHOULD BE SPACED AT THE END OF EACH SEGMENT.
2. MARKERS USED ON STRAIGHT SEGMENTS SHOULD BE SPACED AT THE END OF EACH SEGMENT.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

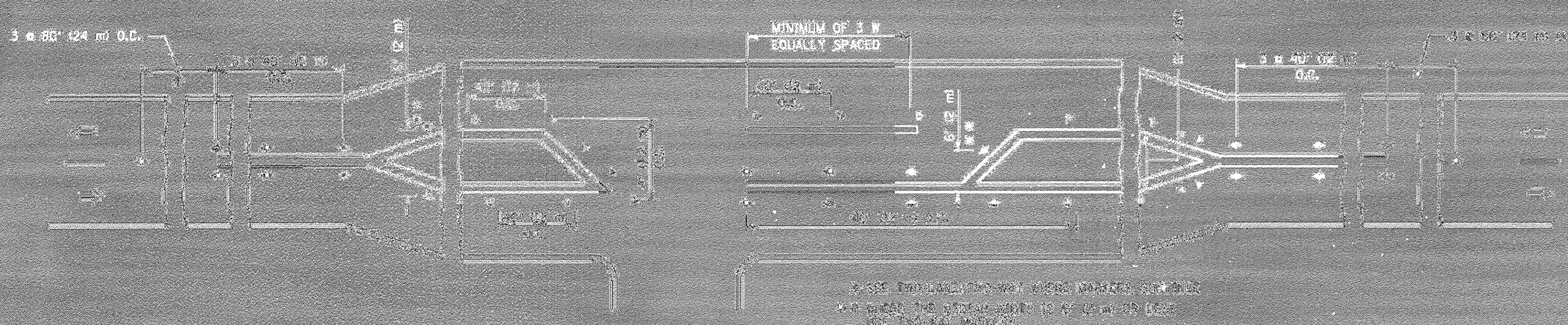
- SOLID LINE
- DASHED LINE
- ▲ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ➔ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (16 km/h) LOWER THAN POSTED SPEEDS.
- B. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

DESIGN NOTES

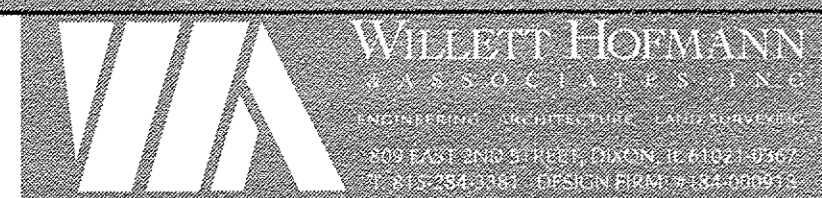
1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. LAYOUT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY RAMP DETAILS. MARKERS ARE NOT TO BE SPACED ON INLET PAVEMENT.
3. THE SPACING BETWEEN MARKERS AND COLOR SHOULD BE INCLUDED IN THE PLAN.
4. MARKERS SHOULD NOT BE USED ON CURVES UNLESS THE EXTREMELY SHARP CURVES ARE INDICATED ON THE PLAN AND THE MARKERS ARE EVALUATED.



LEFT TURN

All dimensions are in inches (millimeters) unless otherwise shown.

FILE = S:\PROJECTS\2014\1303014-C-eta\DESIGN\STRUCT\2D-D-ewr\1303014-Special_Details.dgn



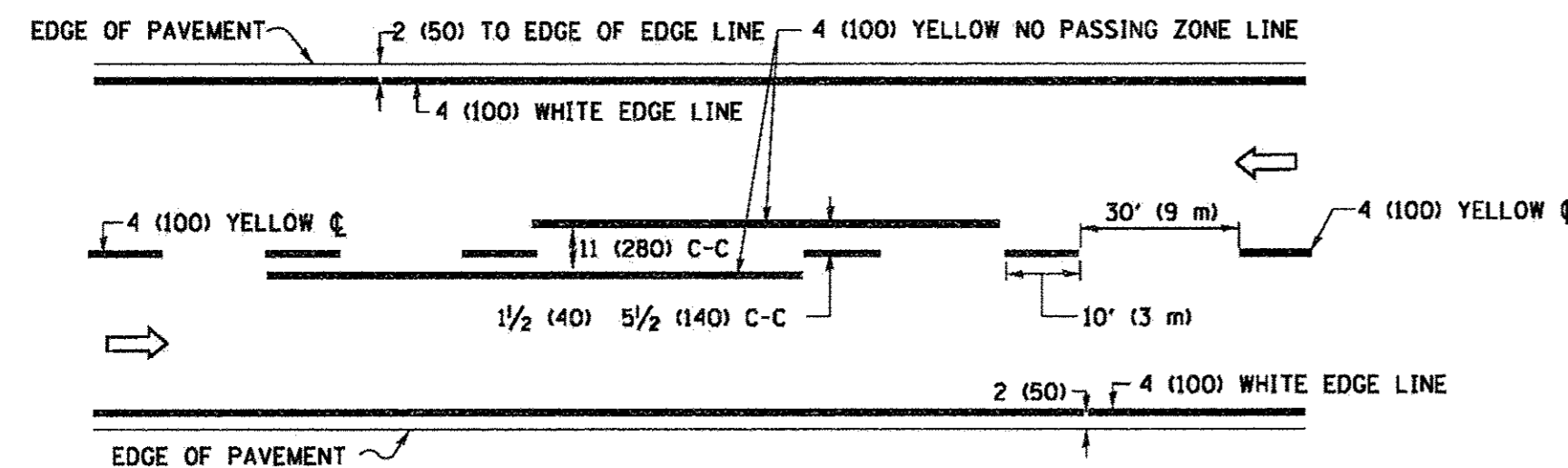
DESIGNED - DAN	REVISED - IDOT 9-9-2009
CHECKED - MAC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - MAC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

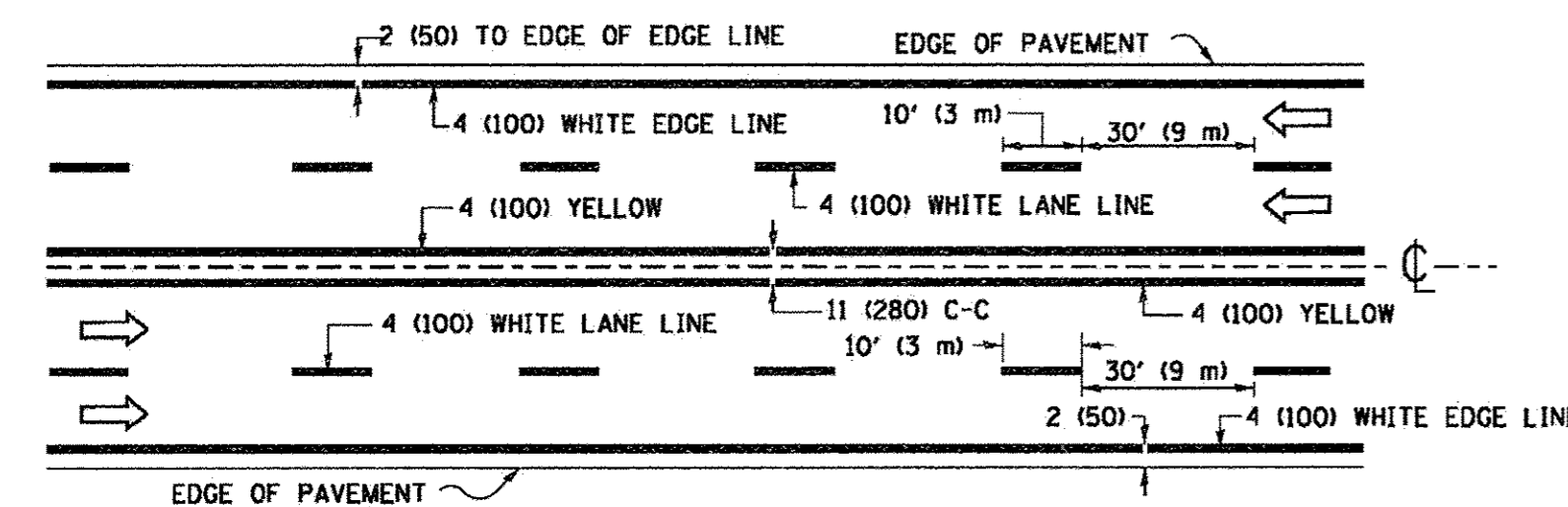
DISTRICT ONE DETAIL TC-11
T.R. 428 (KLEMME ROAD) OVER BRANCH OF PLUM CREEK

SHEET NO. 1 OF 1 SHEETS

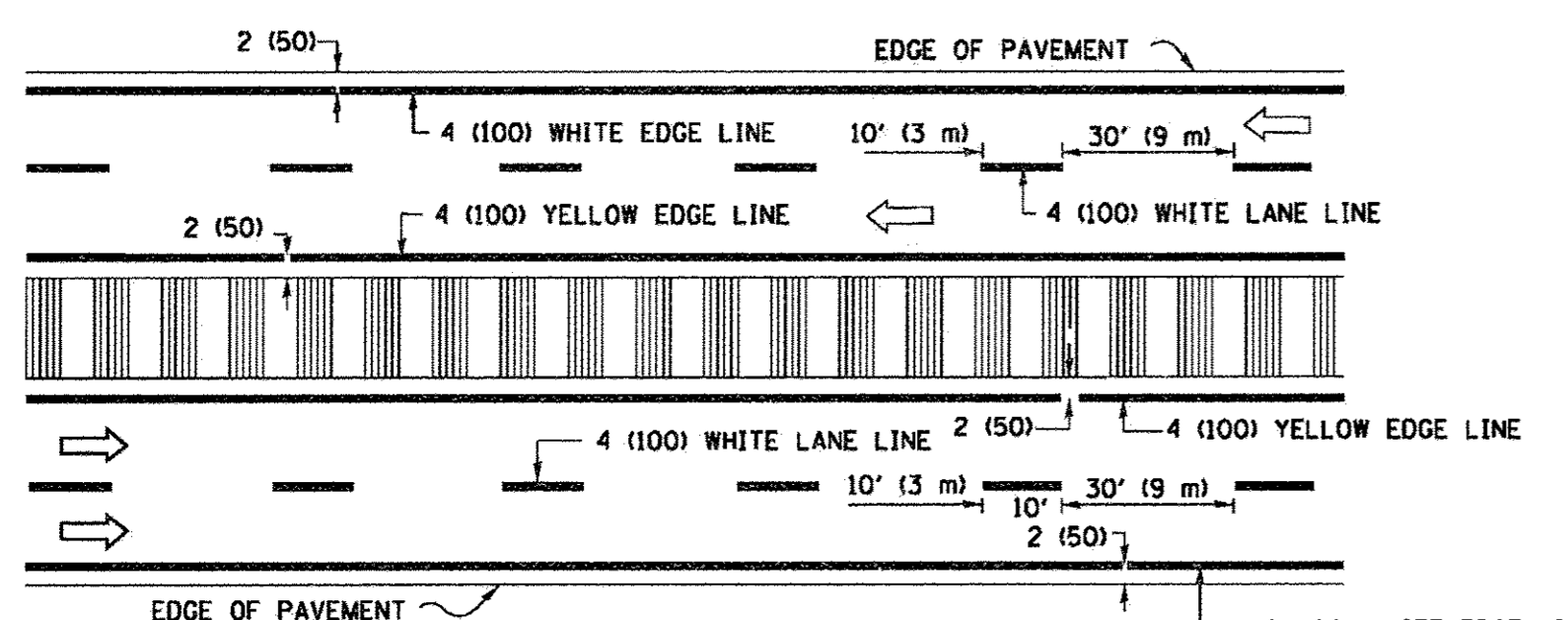
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	40
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971128		



2-LANE ROADWAY

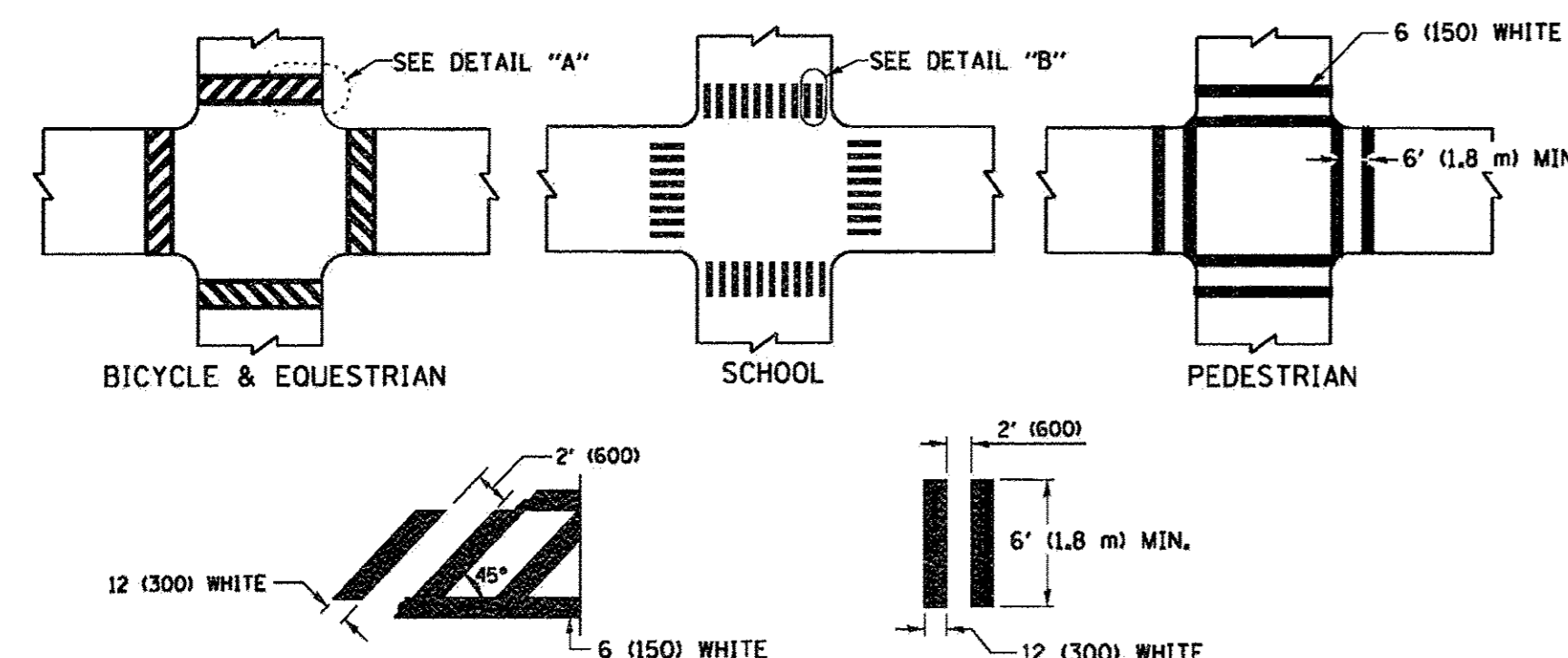


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

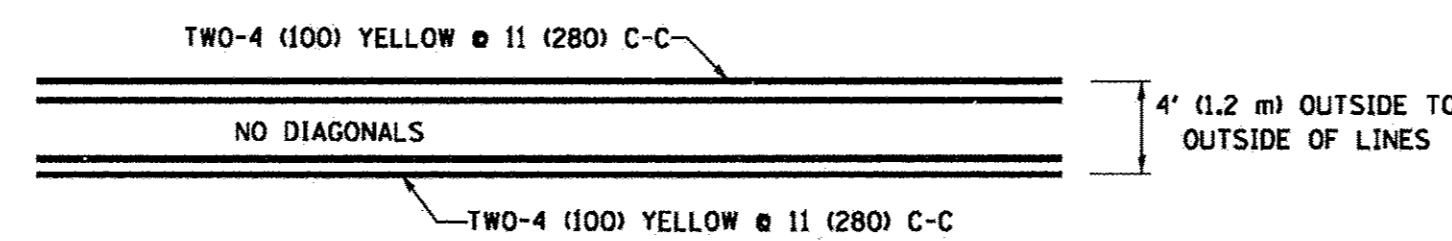


DETAIL "A"

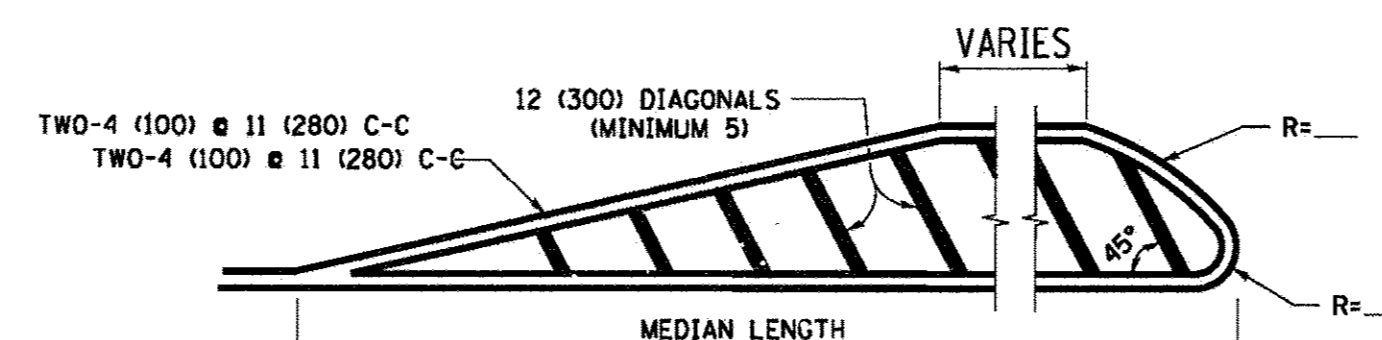
DETAIL "B"

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



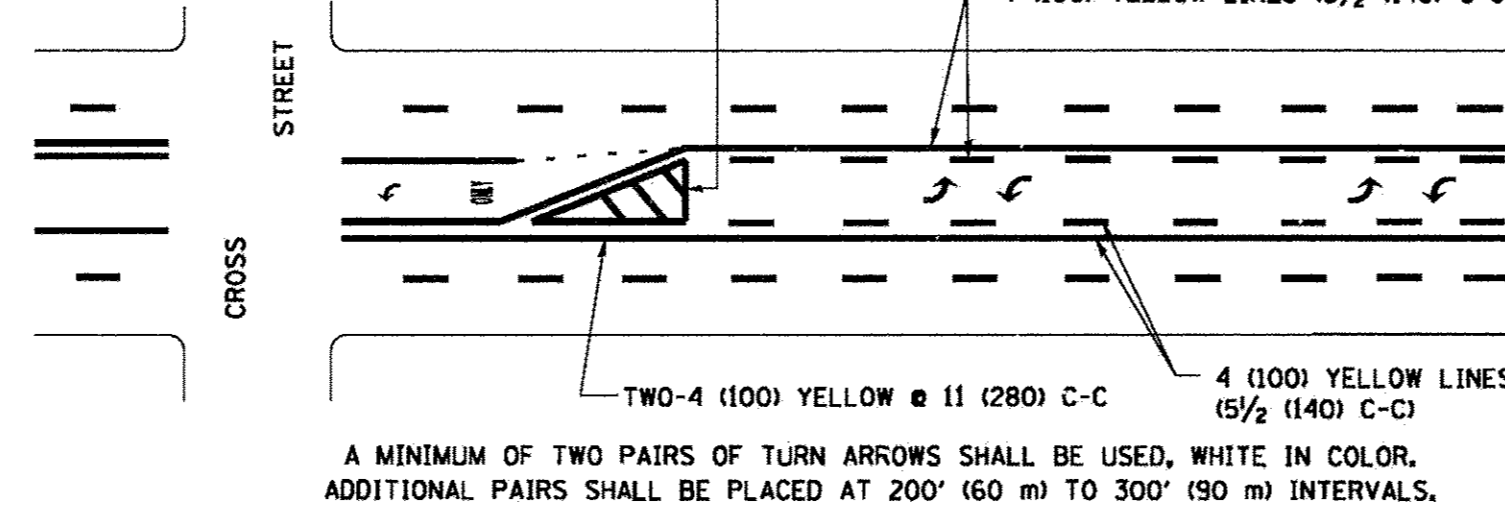
4' (1.2 m) WIDE MEDIANS ONLY



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

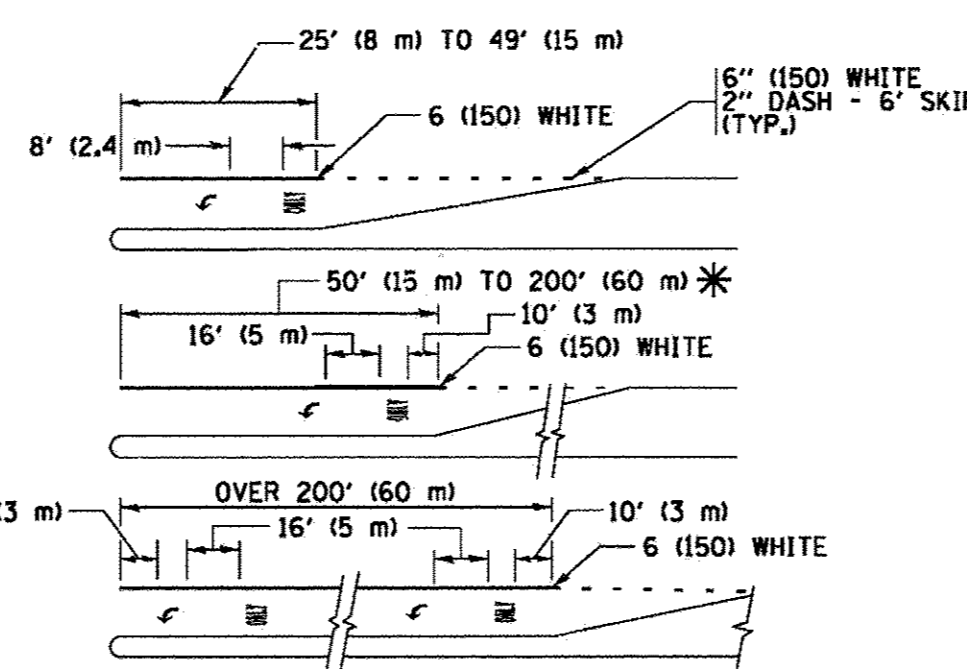
MEDIANS OVER 4' (1.2 m) WIDE



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

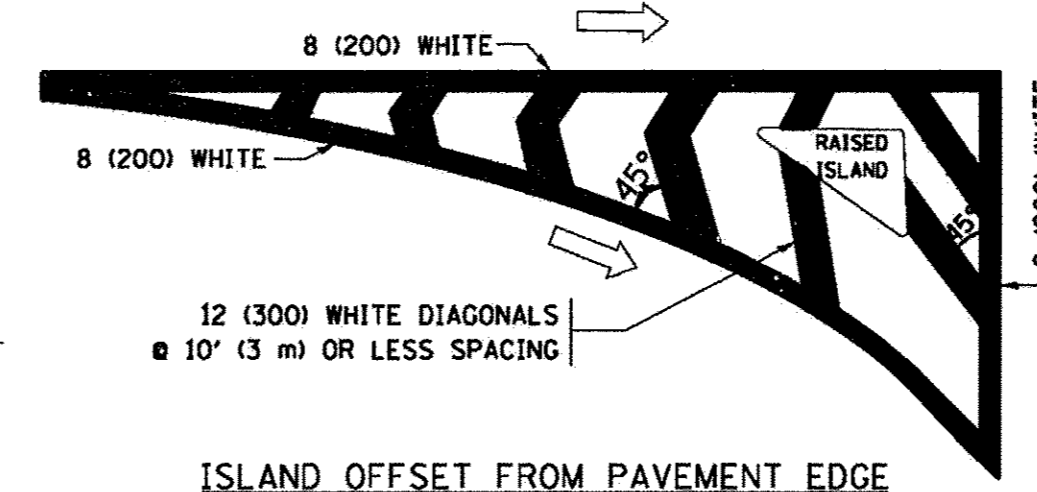


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

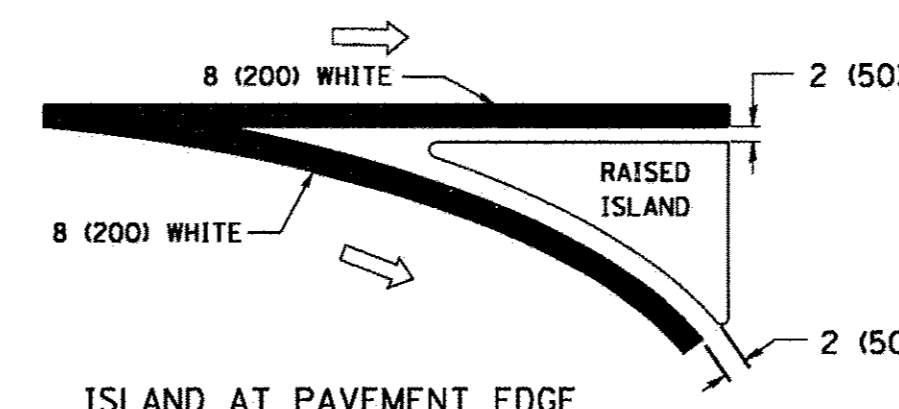
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

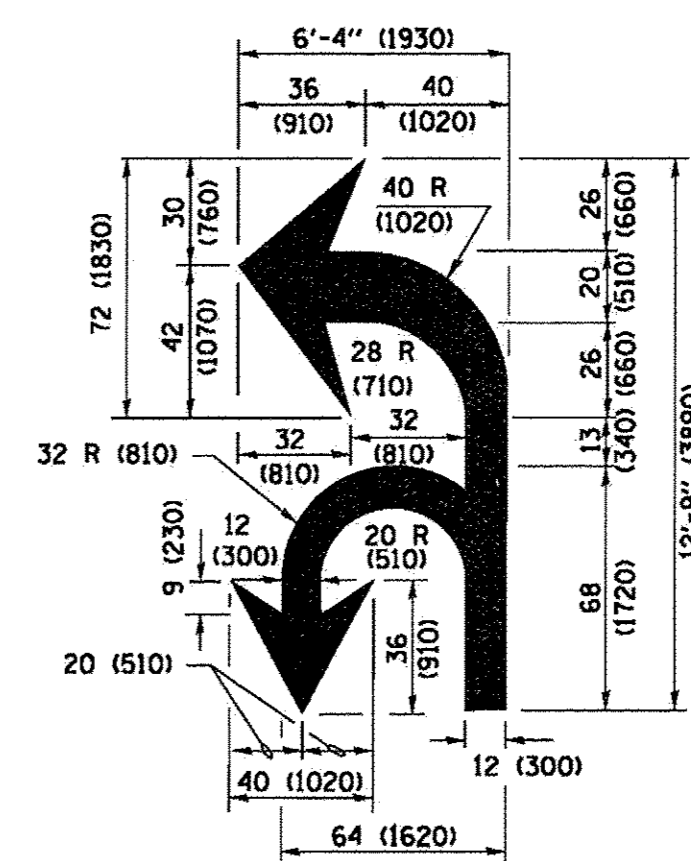


ISLAND OFFSET FROM PAVEMENT EDGE

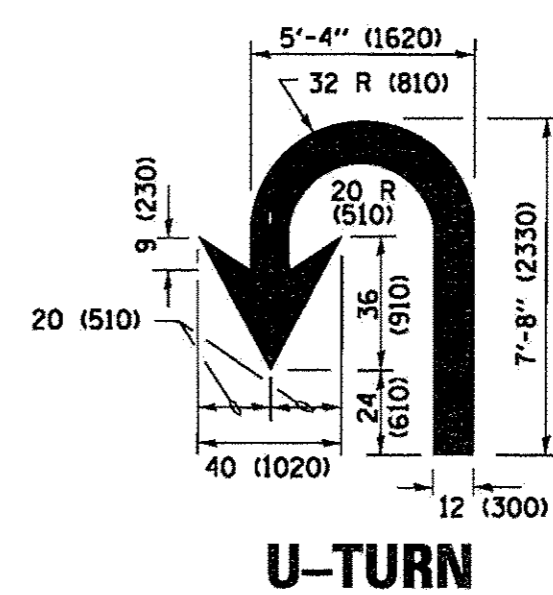


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

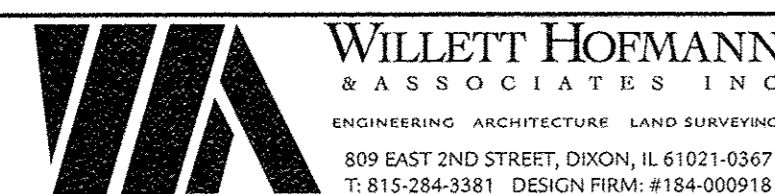
LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 # 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 # 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 # 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 # 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 # 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30 MPH (50 km/h) TO 45MPH (70 km/h) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.



DESIGNED - DAN	REVISED - IDOT 4-12-2016
CHECKED - MAC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - MAC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

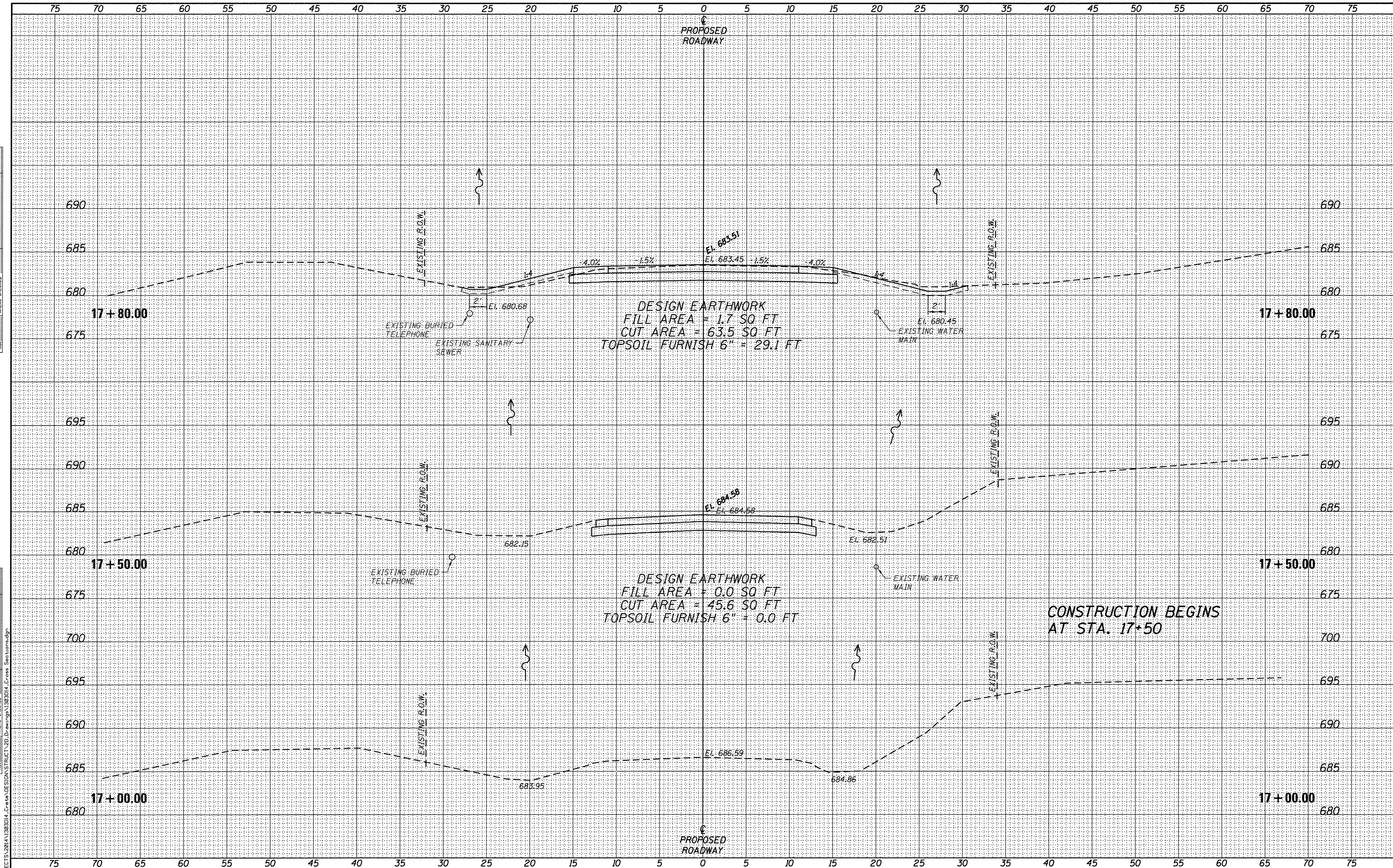
**DISTRICT ONE DETAIL TC-13
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK**

SHEET NO. 1 OF 1 SHEETS

TWP. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	41
WHA* 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197(28)		

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	



FILE = S:\PROJECTS\2014\1303D14_Cross\DESIGN\STRUCT\2D\Drawings\1303D14_Cross_Section.dgn



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CHECKED - MAC	REVISED -
DRAWN - DAN	REVISED -
CHECKED - MAC	REVISED -

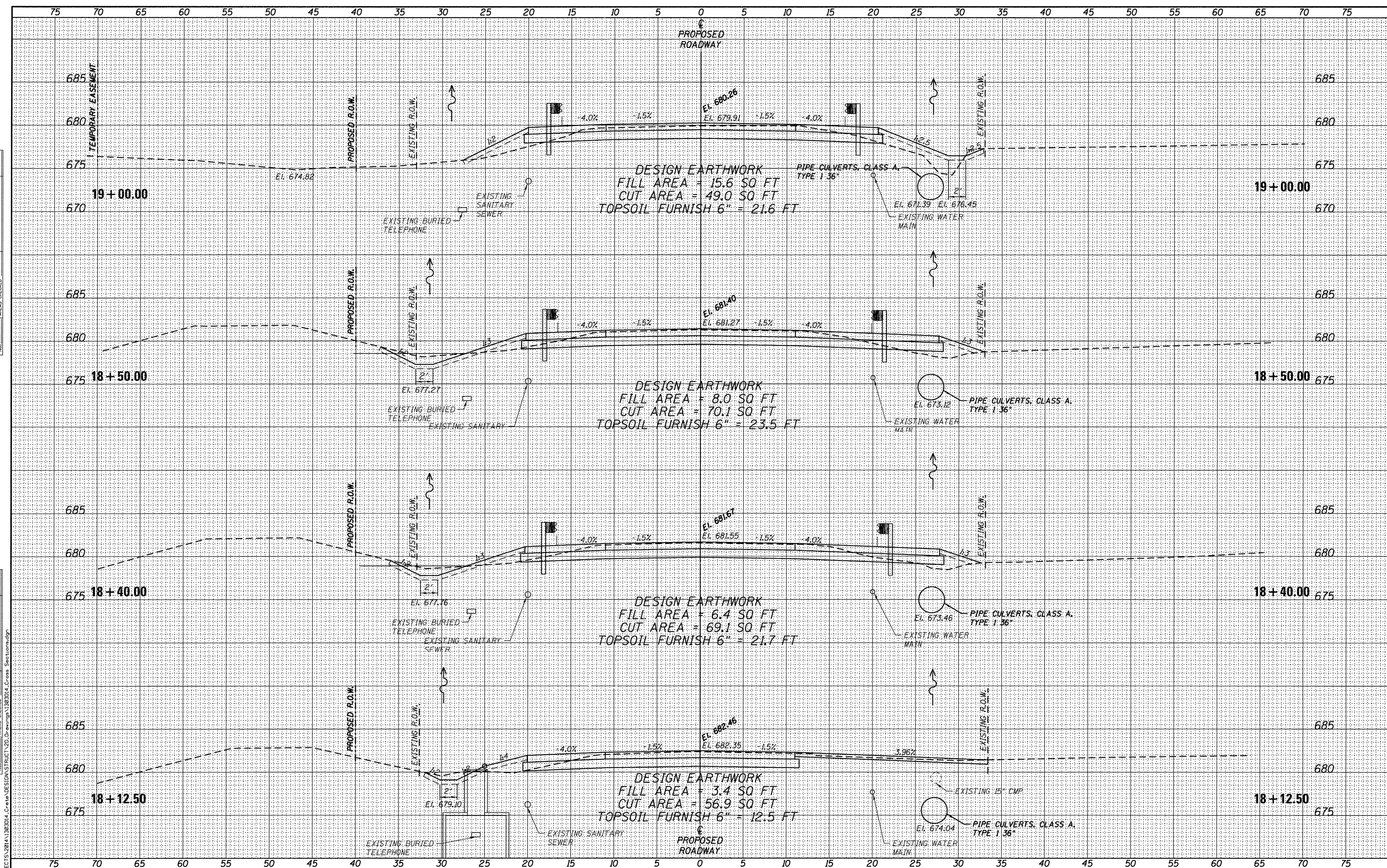
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
 T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK
 SCALE: 1" = 5' V: 5' H SHEET NO. 1 OF 9 SHEETS STA. 17+00.00 TO STA. 17+80.00

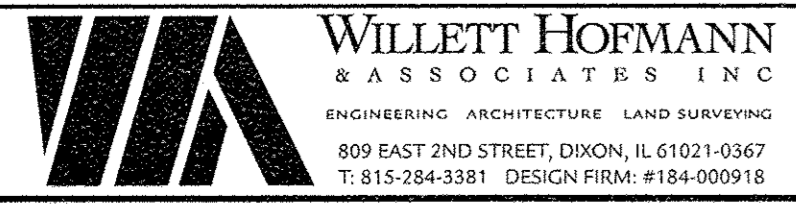
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	42
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197U28		

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

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



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

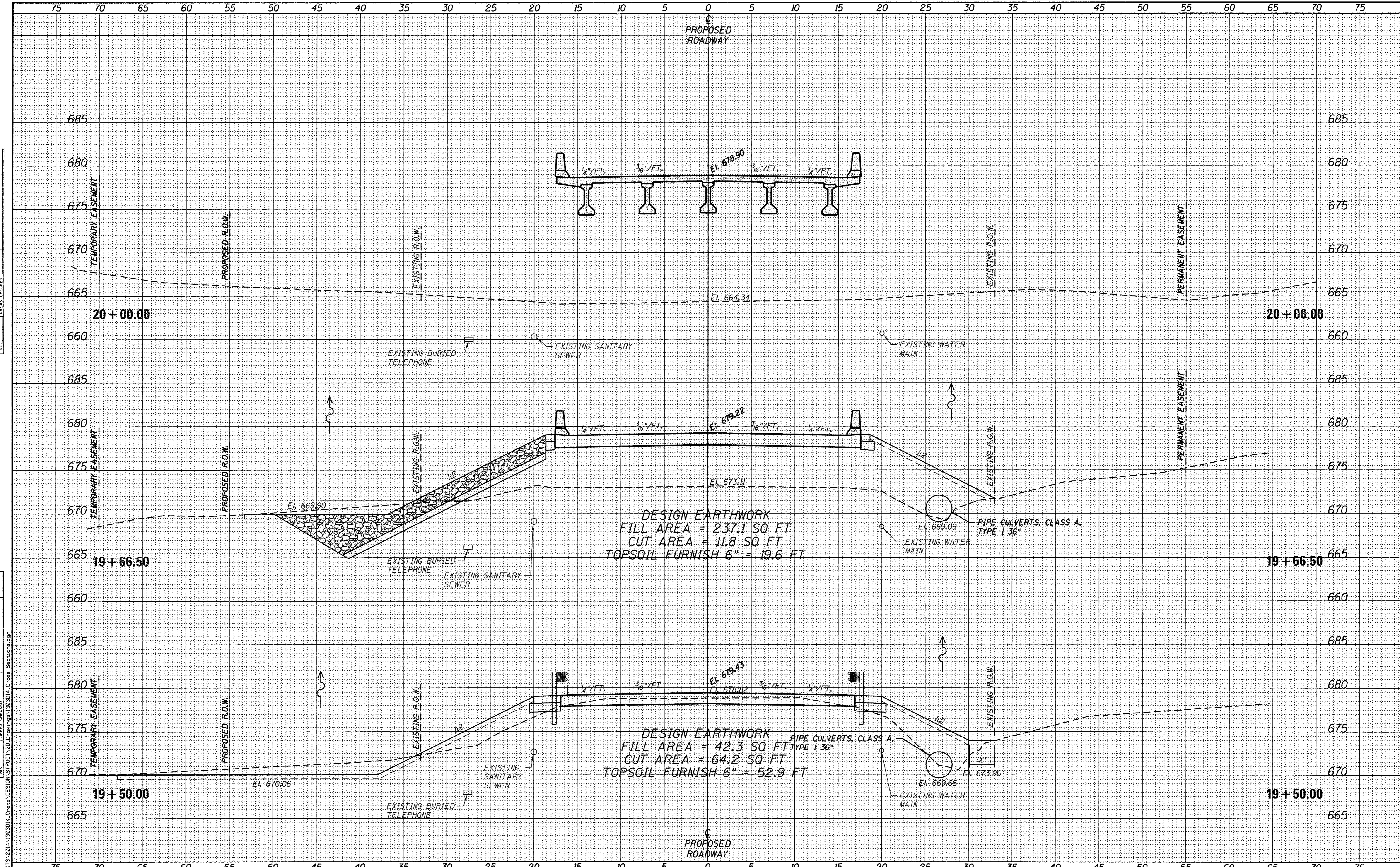
CROSS SECTIONS
T.R. 428 (KLEMM ROAD) OVER BRANCH OF PLUM CREEK

SCALE: 1" = 5'V:5'H SHEET NO. 2 OF 9 SHEETS STA. 18+12.50 TO STA. 19+00.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	43
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971128		

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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: #184-00918

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

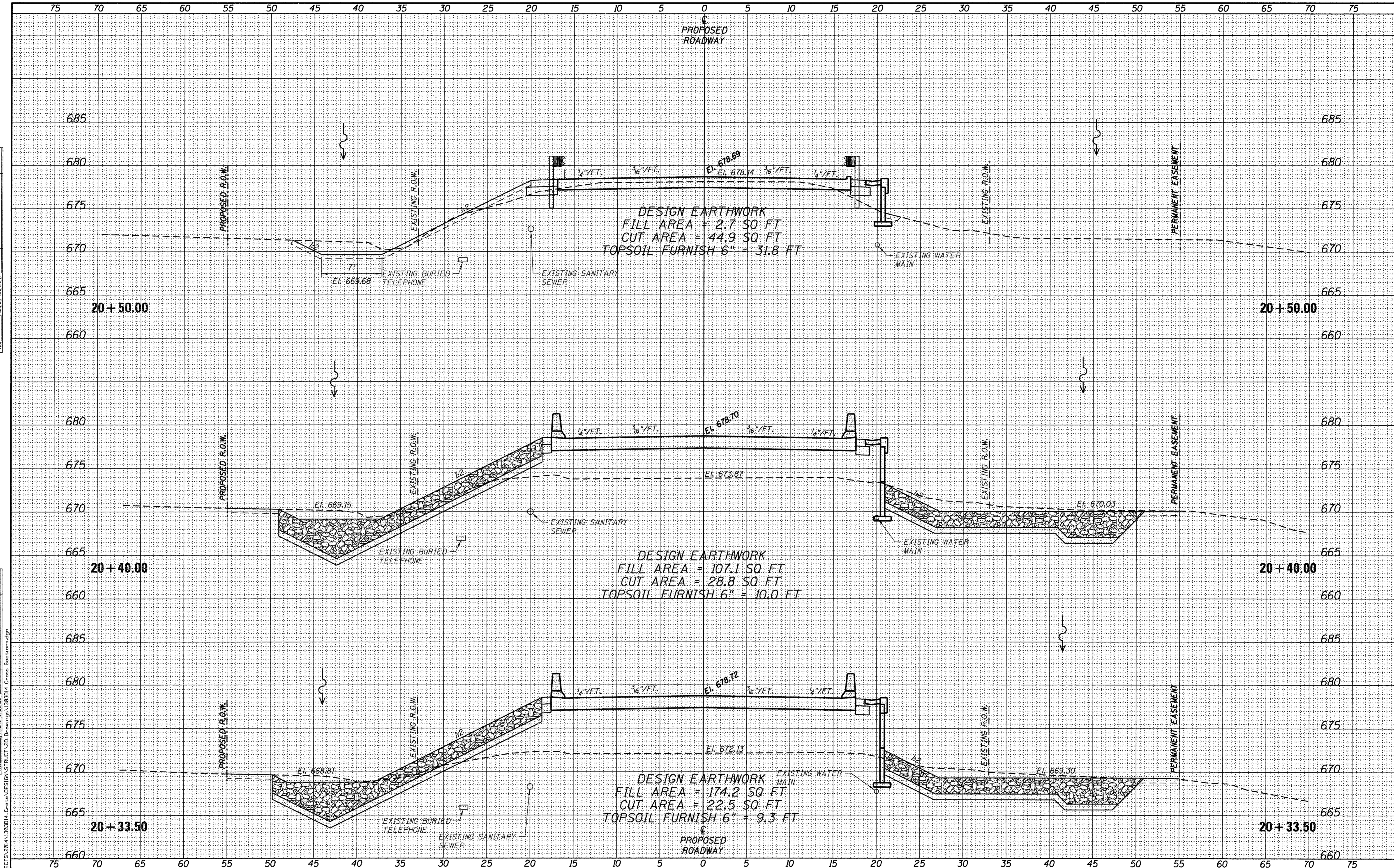
**CROSS SECTIONS
 T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK**

SCALE: 1" = 5' V: 15' H SHEET NO. 3 OF 9 SHEETS STA. 19+50.00 TO STA. 20+00.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	44
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-01971281		

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

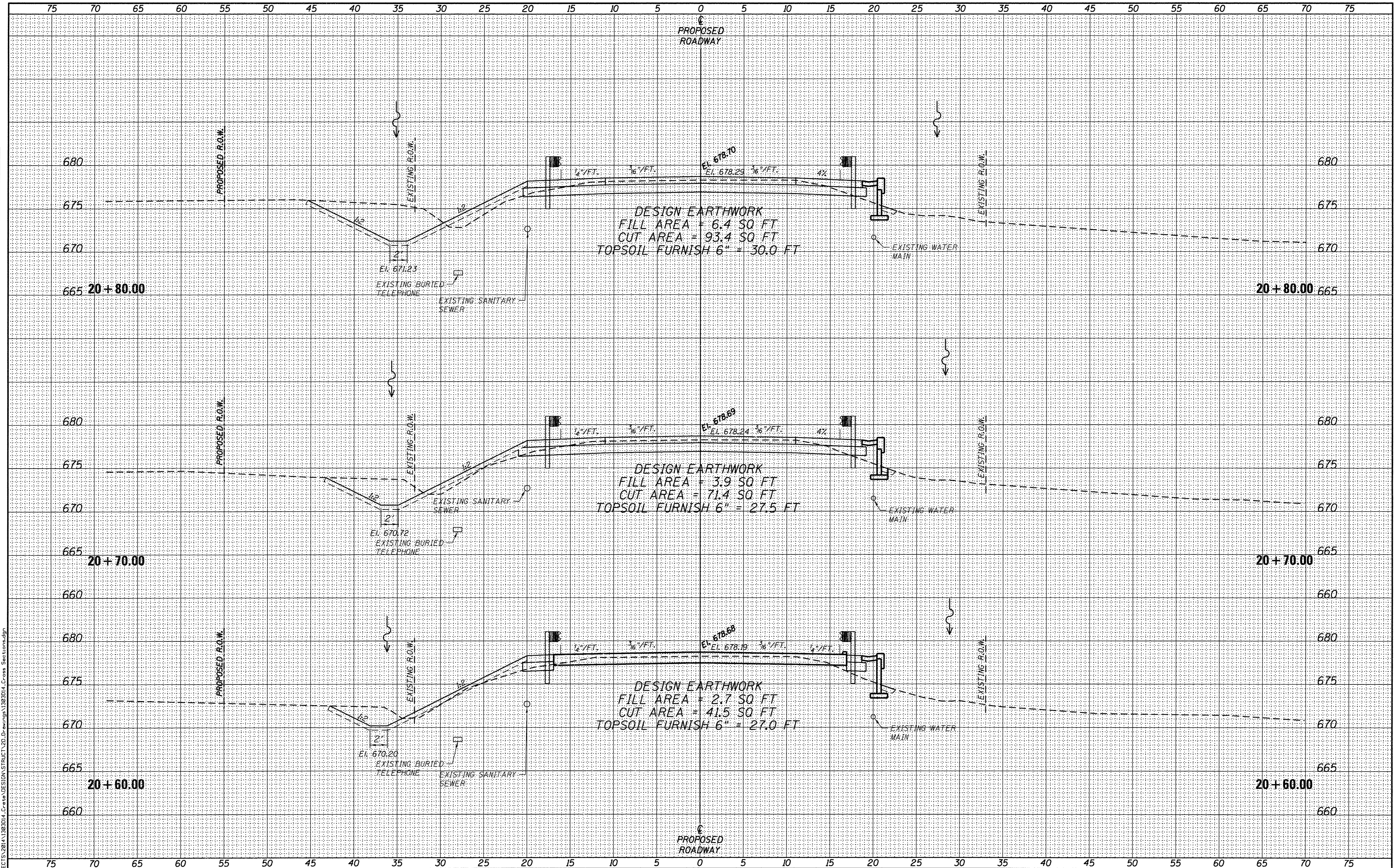
CROSS SECTIONS
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK
 SCALE: 1" = 5' V: 5' H SHEET NO. 4 OF 9 SHEETS STA. 20+33.50 TO STA. 20+50.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	45
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BR05-0197(128)		

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 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FIRM: #184-00919

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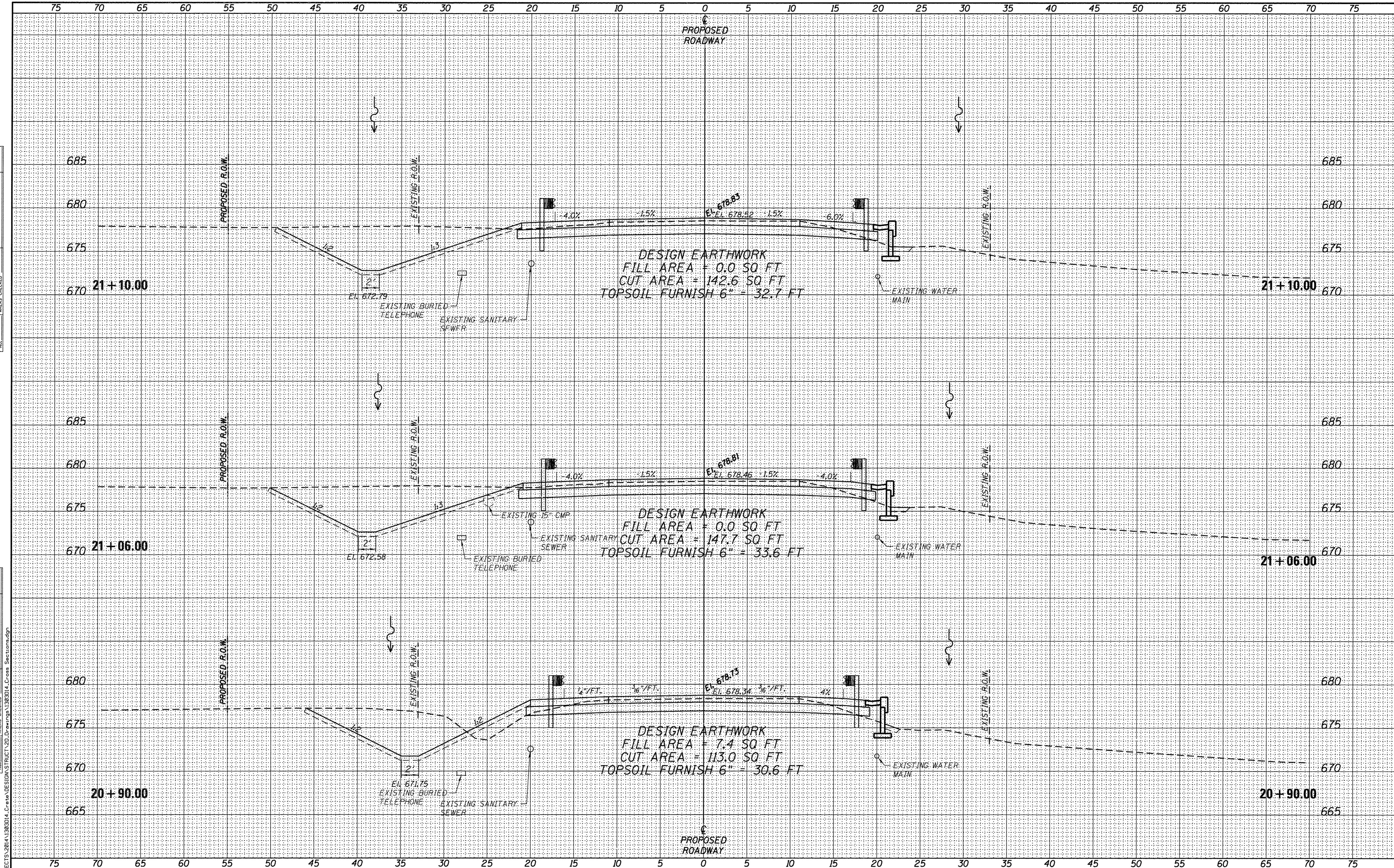
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
T.R. 428 (KLEMM ROAD) OVER BRANCH OF PLUM CREEK
 SCALE: 1" = 5'V:5'H SHEET NO. 5 OF 9 SHEETS STA. 20+60.00 TO STA. 20+80.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	46
WHA# 1303014		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-019710281		

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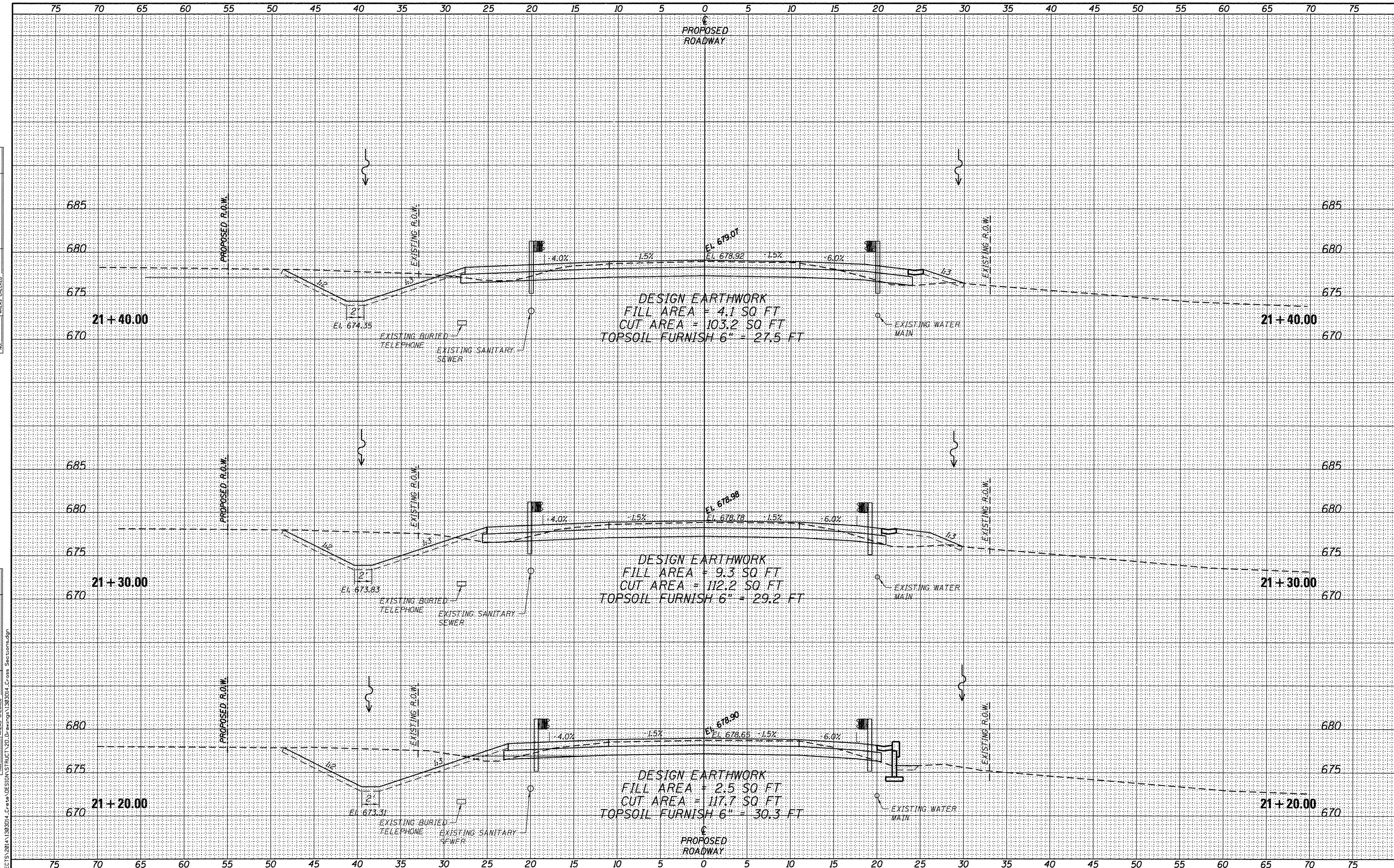
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
 T.R. 428 (KLEMM ROAD) OVER BRANCH OF PLUM CREEK
 SCALE: 1" = 5' V: 5' H SHEET NO. 6 OF 9 SHEETS STA. 20+90.00 TO STA. 21+10.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	47
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-019710281		

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK**

SCALE: 1" = 5'V:5'H SHEET NO. 7 OF 9 SHEETS STA. 21+20.00 TO STA. 21+40.00

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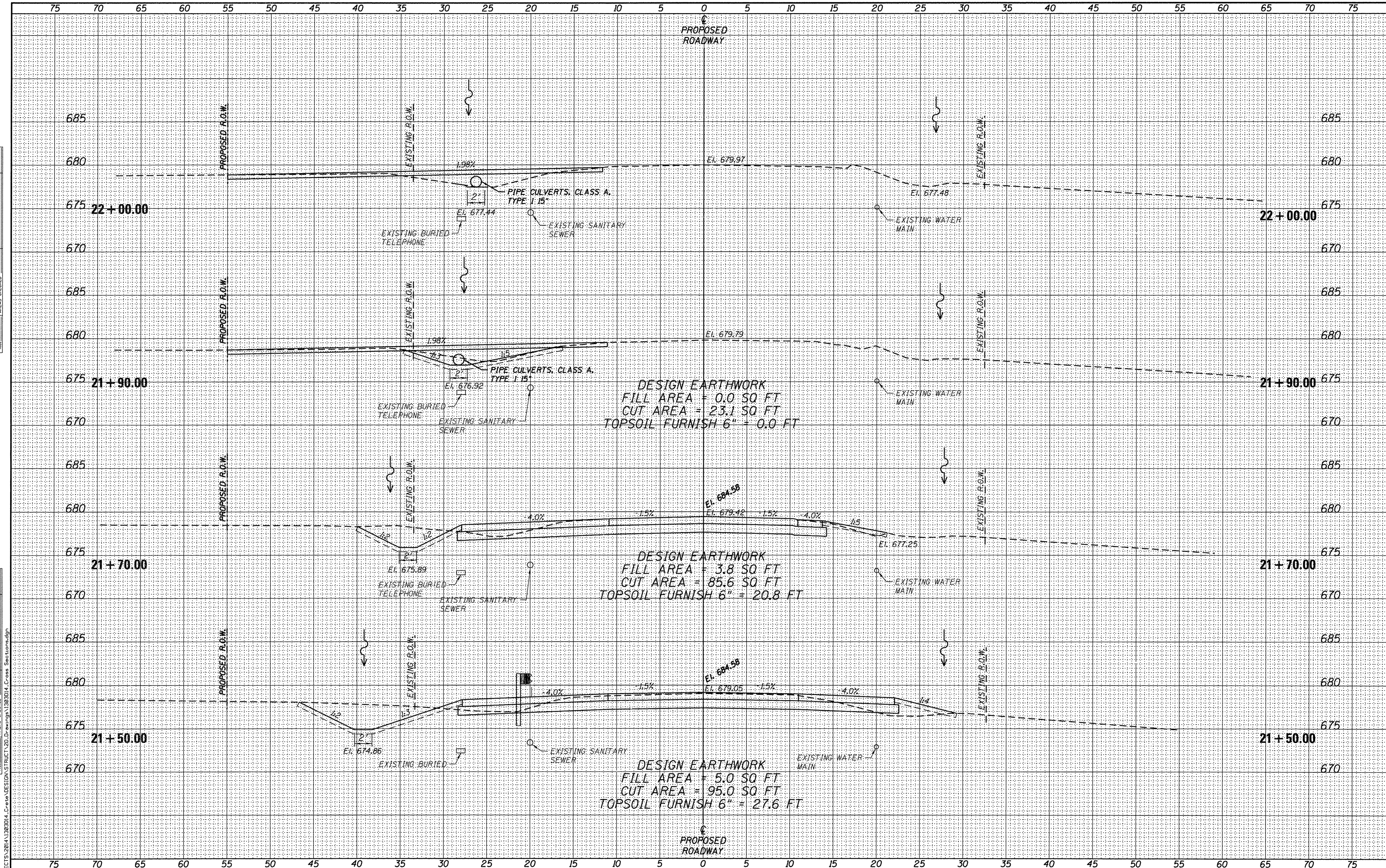
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	48
WHA# 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BROS-0197(128)		

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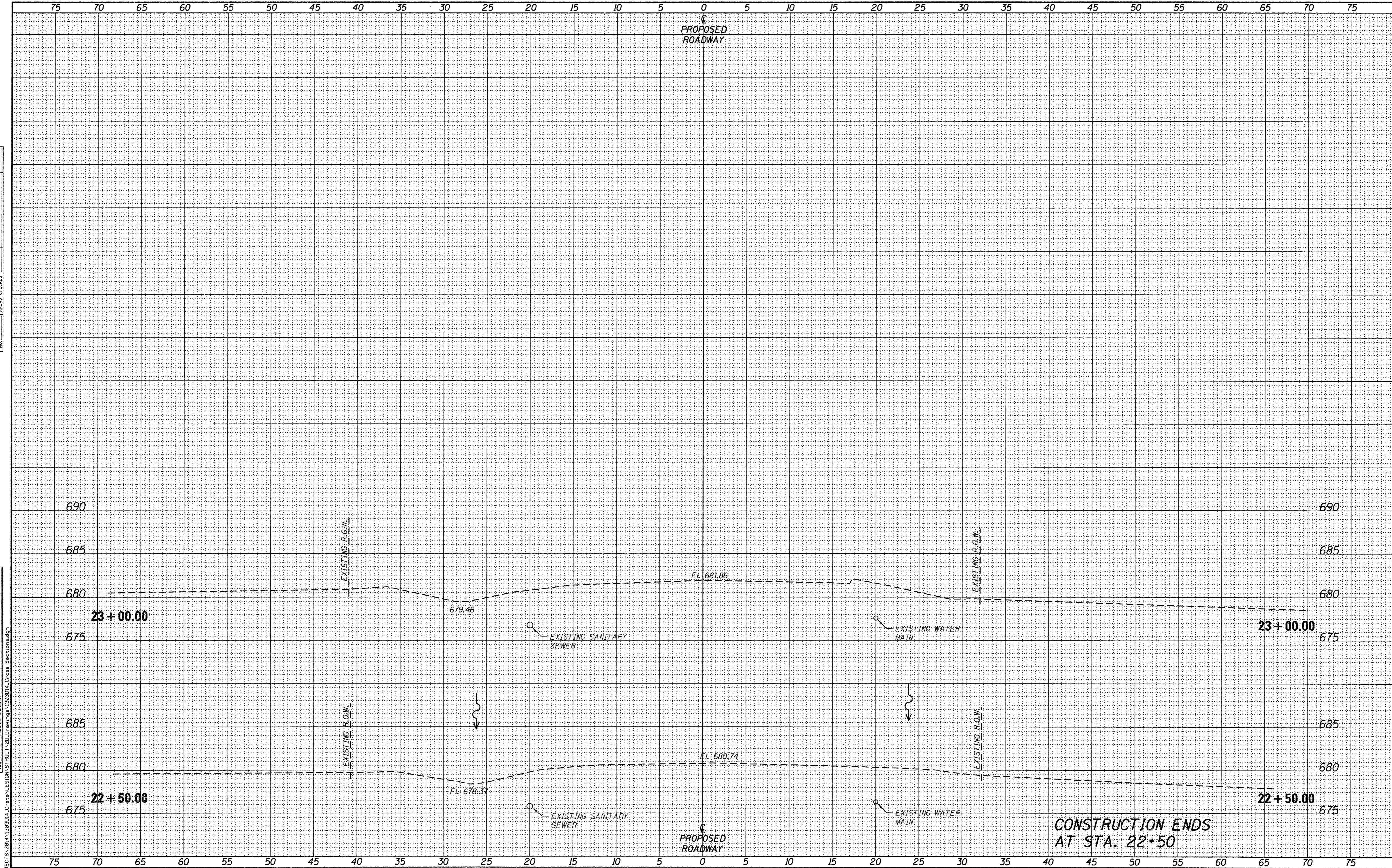
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
T.R. 428 (KLEMMER ROAD) OVER BRANCH OF PLUM CREEK
 SCALE: 1" = 5'V:5'H SHEET NO. 8 OF 9 SHEETS STA. 21+50.00 TO STA. 22+00.00

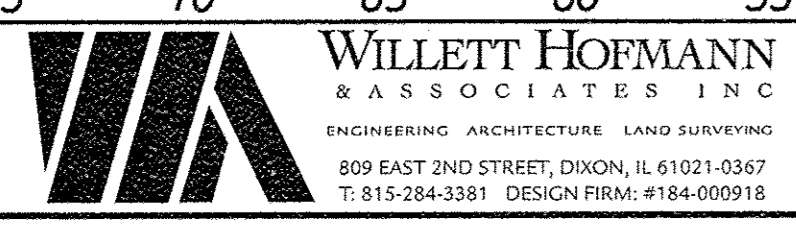
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	49
WHA* 1303014			CONTRACT NO. 61D68	
ILLINOIS FED. AID PROJECT BR05-0197028				

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CROSS SECTIONS
T.R. 428 (KLEMM ROAD) OVER BRANCH OF PLUM CREEK
SCALE: 1" = 5'V:5'H SHEET NO. 9 OF 9 SHEETS STA. 22+50.00 TO STA. 23+00.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	12-02110-01-BR	WILL	50	50
WHA* 1303D14		CONTRACT NO. 61D68		
ILLINOIS FED. AID PROJECT		BR05-019T1128		