

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5200	12-00529-00-BR	WINNEBAGO	20	1
		ILLINOIS	CONTRACT NO. 85627	

INDEX OF SHEETS 01-15-2016 LETTING ITEM 117

1. TITLE SHEET
2. GENERAL NOTES, UTILITY CONTACTS, AND TYPICAL SECTION
3. SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES
4. ALIGNMENTS, TIES, BENCHMARKS, AND REMOVAL PLAN
5. PLAN AND PROFILE
6. EROSION CONTROL PLAN
7. DETOUR ROUTE
- 8-17. BRIDGE PLANS (INCLUDING BORING LOGS)
- 18-20. CROSS SECTIONS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

**PLANS FOR PROPOSED
HIGHWAY BRIDGE PROGRAM
FAU 5200 (CUNNINGHAM ROAD BRIDGE)
over S. BRANCH OF KENT CREEK**

**SECTION 12-00529-00-BR
PROJECT #BRM-5099(113)
WINNEBAGO COUNTY
JOB NUMBER C-92-045-14
CONTRACT#85627**



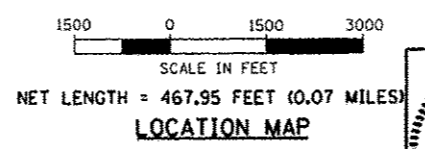
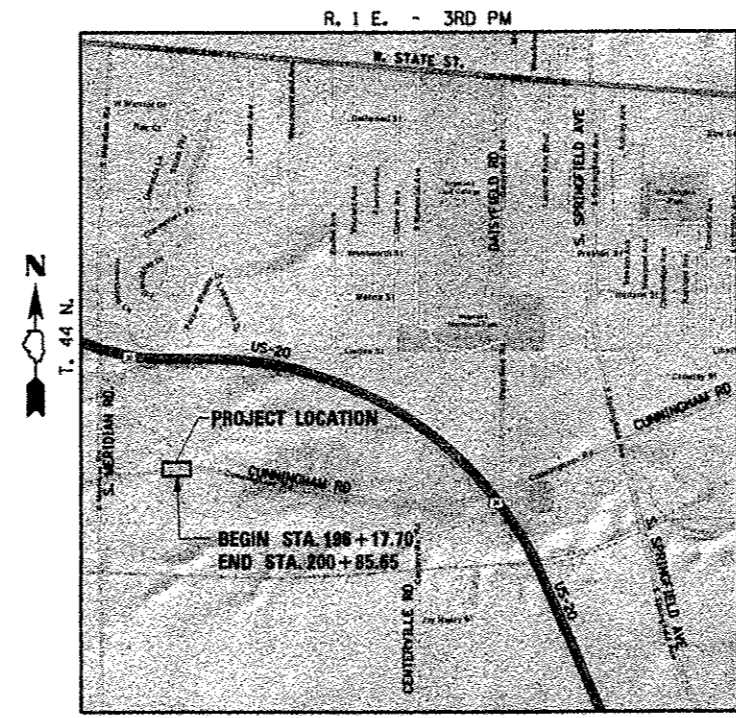
LIST OF HIGHWAY STANDARDS

- | | |
|-----------|---|
| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS |
| 515001-03 | NAME PLATE FOR BRIDGES |
| 601101-01 | CONCRETE HEADWALL FOR PIPE DRAIN |
| 630001-10 | STEEL PLATE BEAM GUARDRAIL |
| 630201-06 | PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL |
| 630301-06 | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS |
| 631032-08 | TRAFFIC BARRIER TERMINAL TYPE 6A |
| 635006-03 | REFLECTOR AND TERMINAL MARKER PLACEMENT |
| 635011-02 | REFLECTOR MARKER AND MOUNTING DETAILS |
| 667101-02 | PERMANENT SURVEY MARKERS |
| 701006-05 | OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE |
| 701201-04 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS = 45 MPH |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701901-04 | TRAFFIC CONTROL DEVICES |
| 720001-01 | SIGN PANEL MOUNTING DETAILS |
| 720006-04 | SIGN PANEL ERECTION DETAILS |
| 720011-01 | METAL POSTS FOR SIGN, MARKERS & DELINEATORS |
| 728001-01 | TELESCOPING STEEL SIGN SUPPORTS |
| 729001-01 | APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS AND MARKERS) |
| 731001-01 | BASE FOR TELESCOPING STEEL SIGN SUPPORT |
| 780001-05 | TYPICAL PAVEMENT MARKINGS |
| BLR 21-9 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS |
| BLR 22-7 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (2L, 2W, ROAD CLOSED TO THRU TRAFFIC) |

NOTE
SEE SHEET 2 FOR NAMES AND ADDRESSES OF UTILITY OWNERS.

UTILITY NOTE

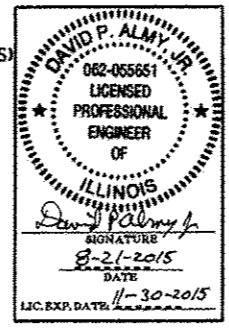
THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED AMONG THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS, ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.



PROPOSED IMPROVEMENTS:
REMOVAL AND REPLACEMENT OF THE EXISTING BRIDGE CARRYING FA URBAN ROUTE 5200 (CUNNINGHAM RD.) OVER BRANCH OF KENT CREEK AT STA. 198+55.5. NEW STRUCTURE CONSISTS OF A THREE SPAN CONCRETE SLAB SUPERSTRUCTURE ON PILE-BENT PIERS AND ABUTMENTS. SN 101-3104

TRAFFIC DATA:
FUNCTIONAL CLASSIFICATION: MINOR ARTERIAL (URBAN)
2015 ADT : 1850
DESIGN SPEED : 45 MPH

PLAN SHEET SCALES: HORIZ. = 20
 VERT. = 5
CROSS SECTION SHT. SCALES: HORIZ. = 10
 VERT. = 5



**ILLINOIS DESIGN FIRM
LICENSE NO: 184-001-084**

APPROVED *October 21, 2015*
[Signature]
WINNEBAGO COUNTY ENGINEER

PASSED *November 9, 2015*
[Signature]
DISTRICT 2 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW *November 9, 2015*
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

CONTRACT NO. 85627

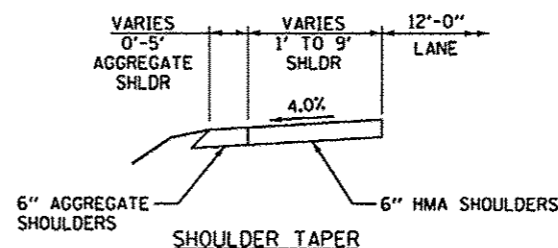
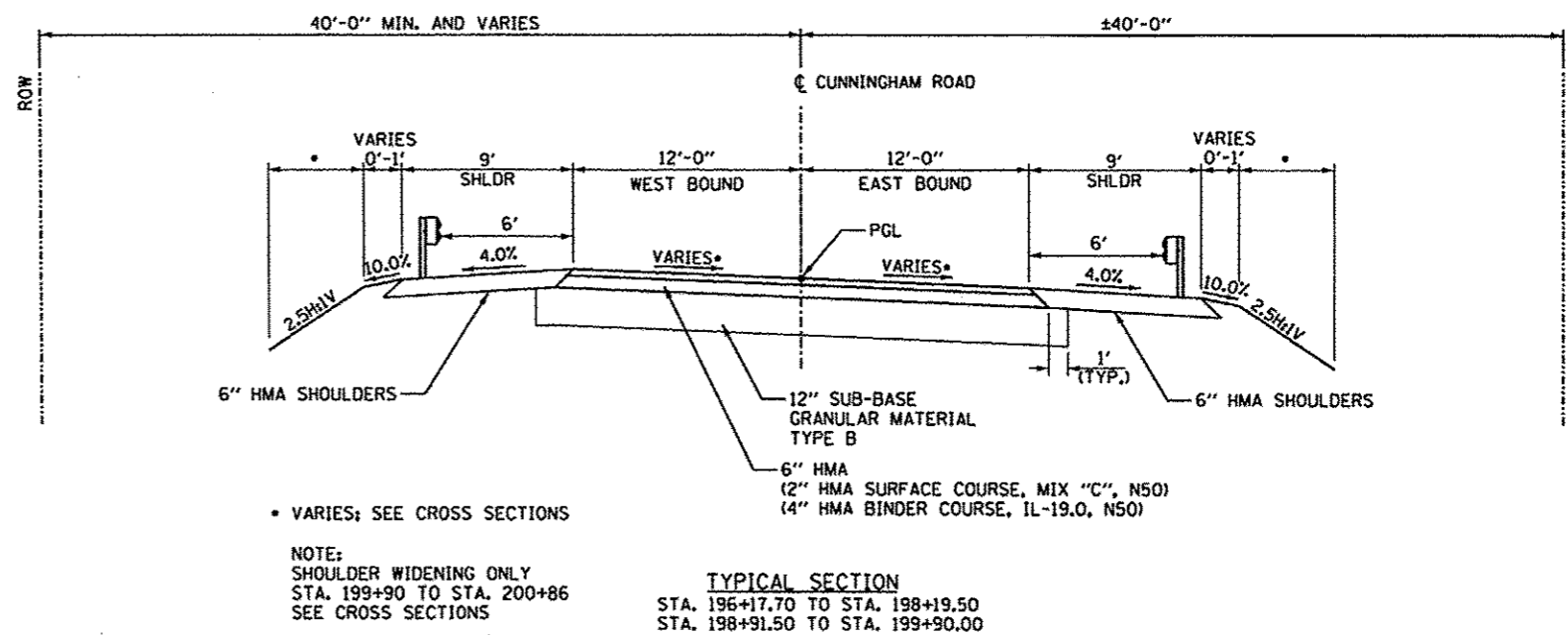
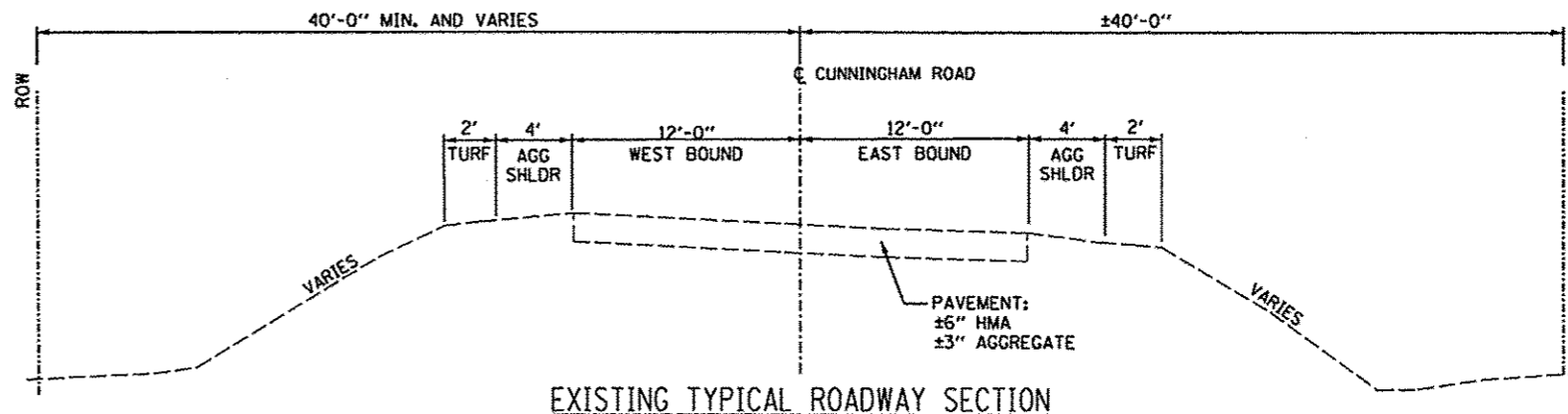
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GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH, AND SIZE OF EXISTING AND PROPOSED STORM SEWER LINES PRIOR TO ORDERING AND FABRICATION OF DRAINAGE STRUCTURES OR SEWERS.
2. WHERE SECTION, SUBSECTION, SUBDIVISION, OR PROPERTY MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE ALL PROPERTY MARKERS UNTIL AN OWNER OR AUTHORIZED SURVEYOR HAS WITNESSED OR REFERENCED THEIR LOCATION.
3. CONTRACTORS BIDDING THIS PROJECT SHALL VISIT THE SITE BEFORE BIDDING.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCY IMMEDIATELY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO ANY UTILITY LINES AND EXISTING IMPROVEMENTS TO REMAIN THAT ARE DAMAGED AS A RESULT OF THE WORK.
6. ALL SECTIONS, DETAILS, AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE, UNLESS OTHERWISE SHOWN.
7. ANY EXISTING ROADWAY SIGNS OR POSTS IN CONFLICT WITH CONSTRUCTION ACTIVITY OR LISTED AS BEING REMOVED AND/OR RELOCATED MUST BE CAREFULLY REMOVED AND/OR REINSTALLED BY THE CONTRACTOR. ANY SIGNS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SIGNS TO BE REINSTALLED SHALL BE ATTACHED TO NEW POSTS. THE REMOVAL AND DISPOSAL OF EXISTING POSTS IS CONSIDERED INCIDENTAL TO CONSTRUCTION. SIGNS TO BE REMOVED (BUT NOT REINSTALLED) SHALL BE SALVAGED AND REMAIN THE PROPERTY OF THE WINNEBAGO COUNTY HIGHWAY DEPARTMENT.
8. ADJUSTMENT OF PROPOSED GRADES TO MATCH EXISTING ENTRANCES OR OTHER FIELD CONDITIONS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
9. ANY DAMAGE TO THE EXISTING PAVEMENT TO REMAIN DURING ANY CONSTRUCTION ACTIVITY SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
10. ALL ELEVATIONS, STATIONS, AND OFFSETS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
11. THE CONSTRUCTION SHALL BE GOVERNED BY THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", CURRENT EDITION.
12. ALL REFERENCES TO THE "DEPARTMENT" OR "ENGINEER" IN THE I.D.O.T. STANDARD SPECIFICATIONS SHALL BE CONSTRUED TO MEAN THE OWNER OR HIS AGENT.
13. ALL PAVEMENT REMOVALS SHALL BE FULL DEPTH SAW CUT AT THE LIMITS TO BE REMOVED.
14. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
15. ACCESS SHALL BE MAINTAINED TO ALL PROPERTIES DURING ALL STAGES OF CONSTRUCTION.
16. EXCESS MATERIAL, IF NOT USED FOR OTHER ON-SITE PURPOSES, SHALL BE HAULED OFF-SITE AT CONTRACTOR'S EXPENSE.
17. THE WORK AREA SHALL BE POSITIVELY DRAINED DURING CONSTRUCTION. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.
18. THE CONTRACTOR SHALL USE ANY ON SITE MATERIAL DEEMED SUITABLE BY THE ENGINEER BEFORE ANY NEW FILL IS HAULED TO THE SITE.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
20. THERE IS ESTIMATED TO BE AN EXCESS OF EARTH EXCAVATION FROM THIS PROJECT. THE ESTIMATED AMOUNT OF EXCESS IS 302 CU. YD. TO BE DISPOSED OF OFFSITE AT CONTRACTOR'S EXPENSE.
21. THE FINAL TOP FOUR INCHES OF SOIL IN ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE CAPABLE OF SUPPORTING VEGETATION. THE SOIL MUST BE FROM A HORIZON (ZERO TO 2' DEEP) OF SOIL PROFILES OF LOCAL SOILS. THE COST OF THIS WORK SHALL BE INCLUDED IN EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
22. ORANGE CONSTRUCTION FENCE SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS TO DELINEATE THE LOCATION OF THE WETLAND AREA. THIS WORK WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION.

UTILITY CONTACTS

UTILITY NAME	TYPE	PHONE NUMBER
COMED 123 ENERGY AVENUE ROCKFORD, IL 61109	ELECTRIC	(815) 490-2320
NICOR 4651 LINDEN ROAD ROCKFORD, IL 61109	GAS	(815) 965-5416
COMCAST	CABLE	(224) 229-3035



MIXTURE REQUIREMENTS

	HMA SURFACE	HMA BINDER/SHOULDER
PG GRADE	PG58-28	PG58-28
DESIGN AIR VOIDS	4% AT N50	4% AT N50
MIXTURE COMPOSITION	IL-9.5	IL-19.0
FRICTION AGGREGATE	MIXTURE C	
MIXTURE WEIGHT	112 LB./S.Y./IN	112 LB./S.Y./IN



11/13/14 11/13/14
JDM JDM
05/01/15 05/01/15
DPA DPA
11/13/14 11/13/14
11/13/14 11/13/14
11/13/14 11/13/14

FILE NAME =	USER NAME = Mador-88377	DESIGNED - DPA	REVISED -
1112jbrn\131.0215\ACAD\Road\Sheet\02-GEN.dgn		DRAWN - JDM	REVISED -
		CHECKED - DPA	REVISED -
		DATE - 05/01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, UTILITY CONTACTS, AND TYPICAL SECTION
CUNNINGHAM ROAD BRIDGE REPLACEMENT
ROCKFORD, ILLINOIS

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5200	12-00529-00-BR	WINNEBAGO	20	2
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 85627	

SUMMARY OF QUANTITIES
CONSTRUCTION TYPE CODE: 0011

Table with columns: CODED PAY ITEM NUMBER, ITEM, UNIT, TOTAL QUANTITY. Lists various construction items like tree removal, seeding, fertilizers, erosion control, and structures.

Δ SPECIALTY ITEMS

SIGN SCHEDULE table with columns: STA., OFFSET, DIRECTION, REMOVE SIGN PANEL, RELOCATE SIGN PANEL, DESCRIPTION, TELESCOPIC SIGN SUPPORT.

SCHEDULE OF QUANTITIES

Table with columns: STA., WIDTH, AVG. WIDTH, LENGTH, AREA, AVG. WIDTH, THICKNESS, UNIT WT., TOT. WT., THICKNESS, UNIT WT., TOT. WT., SUB-BASE RATE, POUNDS, HMA BINDER RATE, POUNDS. Lists quantities for granular material, asphalt binder, and prime coat.

EARTHWORK QUANTITIES table with columns: STATION, END AREAS (CUT, FILL), DISTANCE, VOLUME (EARTH EXCAVATION, EMBANKMENT). Includes a note about shrinkage factor.

HMA SHOULDERS table with columns: STA., OFFSET, WIDTH, AVG WIDTH, LENGTH, AREA. Lists shoulder quantities for various stations.

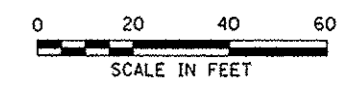
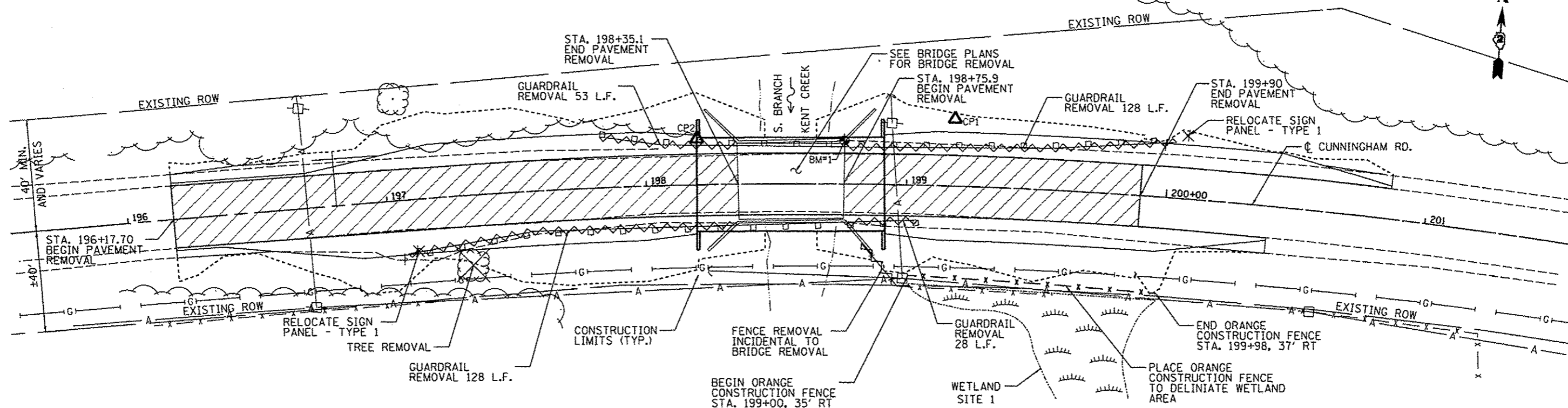
AGGREGATE SHOULDERS table with columns: STA., OFFSET, WIDTH, AVG WIDTH, LENGTH, AREA. Lists aggregate shoulder quantities.

PAVEMENT MARKING SCHEDULE table with columns: LOCATION, PAINT MARKING, GUARDRAIL MARKERS, TERMINAL MARKER, NOTE. Lists marking details for various stations.

PERIMETER EROSION BARRIER SCHEDULE table with columns: BEGIN STATION, END STATION, LT/RT, PERIMETER EROSION BARRIER, EROSION CONTROL BLANKET, TURF REINFORCEMENT MAT. Lists barrier and mat quantities.



Vertical text on the left margin containing project details and dates.



ALIGNMENT REPORT			
	Station	Northing	Easting
Element: Linear			
POB	() 194+00.0000	2039220.448	2566293.695
PC	() 197+01.7210	2039266.15	2566591.935
Tangential Direction:		N 81°17'16" E	
Tangential Length:		301.721	
Element: Circular			
PC	() 197+01.7210	2039266.15	2566591.935
PI	() 200+82.5318	2039324.724	2566968.214
CC	()	2037388.76	2566884.179
PT	() 204+53.3832	2039233.766	2567338.002
Radius:		1900	
Delta:		22°40'01" Right	
Degree of Curvature (Arc):		3°00'56"	
Length:		751.6622	
Tangent:		380.8108	
Chord:		746.77	
Middle Ordinate:		37.0497	
External:		37.7866	
Tangent Direction:		N 81°09'07" E	
Radial Direction:		S 8°50'53" E	
Chord Direction:		S 87°30'52" E	
Radial Direction:		S 13°49'08" W	
Tangent Direction:		S 76°10'52" E	
Element: Linear			
PT	() 204+53.3832	2039233.766	2567338.002
POE	() 206+34.8781	2039190.416	2567514.244
Tangential Direction:		S 76°10'53" E	
Tangential Length:		181.4949	

- LEGEND**
- X SIGN PANEL AND POST
 - GUARDRAIL REMOVAL
 - /// PAVEMENT REMOVAL PAID FOR AS EARTH EXCAVATION (SPECIAL)

BENCHMARK				
BENCHMARK	STATION	OFFSET	DESCRIPTION	ELEVATION
BM#1	198+76.04	16.89' LT	BENCHMARK MARKER, NORTHEAST CORNER OF BRIDGE.	759.92

CONTROL POINTS			
POINT	NORTHING	EASTING	DESCRIPTION
CP1	2039313.28	2566805.98	FND 1/2" PIPE
CP2	2039298.53	2566707.54	WOOD HUB

LAYOUT: JDM 11/13/14 Mador00377
 DRAWN: JDM 05/01/15 10/29/2015
 REVIEWED: DPA 05/01/15 10/29/2015

FILE NAME *	USER NAME * Mador00377	DESIGNED - DPA	REVISED -
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		CHECKED - DPA	REVISED -
		DATE - 05/01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES, BENCHMARK, AND REMOVAL PLAN
CUNNINGHAM ROAD BRIDGE REPLACEMENT
ROCKFORD, ILLINOIS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5200	12-00529-00-BR	WINNEBAGO	20	4
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 85627	

85627

PROP. CURVE 1
 PI STA. = 200+82.53
 $\Delta = 22^\circ 40' 01''$ (RT)
 $D = 3^\circ 00' 56''$
 $R = 1,900.00'$
 $T = 380.81'$
 $L = 751.66'$
 $E = 37.79'$
 $\theta = 0.04$
 $T.R. = 31'$
 $S.E. RUN = 81'$
 $P.C. STA = 197+01.72$
 $P.T. STA = 204+53.38$

N.C. STA = 196+17.70 (MATCH EXISTING)
 0% LT, 1.5% RT STA = 196+48.70
 1.5% STA = 196+79.10
 4% STA = 197+29.70
 4% STA = 199+40
 $\pm 3\%$ STA = 199+90 (MATCH EXISTING)

STA. 198+19.84, 18.0' LT
 END TRAFFIC BARRIER
 TERMINAL, TYPE 6A

STA. 198+86.50, 18.0' LT
 BEGIN TRAFFIC BARRIER
 TERMINAL, TYPE 6A

STA. 199+34.51, 18.0' LT
 END TRAFFIC BARRIER TERMINAL,
 TYPE 6A AND BEGIN STEEL PLATE
 BEAM GUARDRAIL, TYPE A

STA. 199+84.04, 18.0' LT
 END STEEL PLATE BEAM GUARDRAIL,
 TYPE A AND BEGIN TRAFFIC BARRIER
 TERMINAL, TYPE 1 (SPECIAL) TANGENT

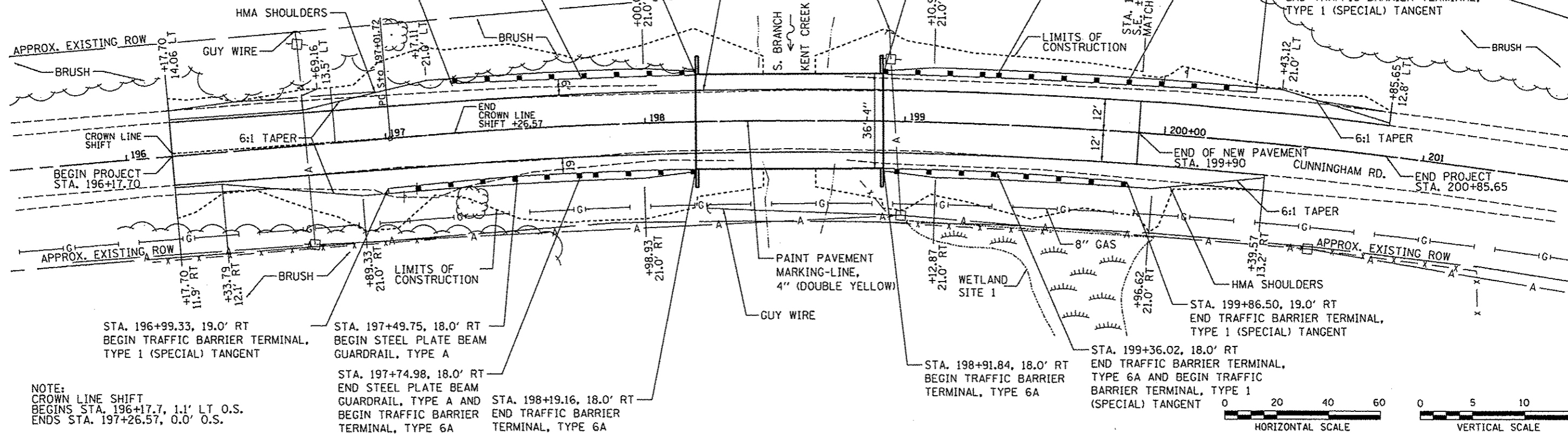
STA. 200+33.55, 19.0' LT
 END TRAFFIC BARRIER TERMINAL,
 TYPE 1 (SPECIAL) TANGENT

STA. 197+76.50, 18.0' LT
 END TRAFFIC BARRIER TERMINAL,
 TYPE 1 (SPECIAL) TANGENT AND
 BEGIN TRAFFIC BARRIER
 TERMINAL, TYPE 6A

STA. 197+26.99, 19.0' LT
 BEGIN TRAFFIC BARRIER TERMINAL,
 TYPE 1 (SPECIAL) TANGENT

PAINT PAVEMENT
 MARKING-LINE 4" (WHITE)
 (TYP.)

APPROX. EXISTING ROW



STA. 196+99.33, 19.0' RT
 BEGIN TRAFFIC BARRIER TERMINAL,
 TYPE 1 (SPECIAL) TANGENT

STA. 197+49.75, 18.0' RT
 BEGIN STEEL PLATE BEAM
 GUARDRAIL, TYPE A

STA. 197+74.98, 18.0' RT
 END STEEL PLATE BEAM
 GUARDRAIL, TYPE A AND
 BEGIN TRAFFIC BARRIER
 TERMINAL, TYPE 6A

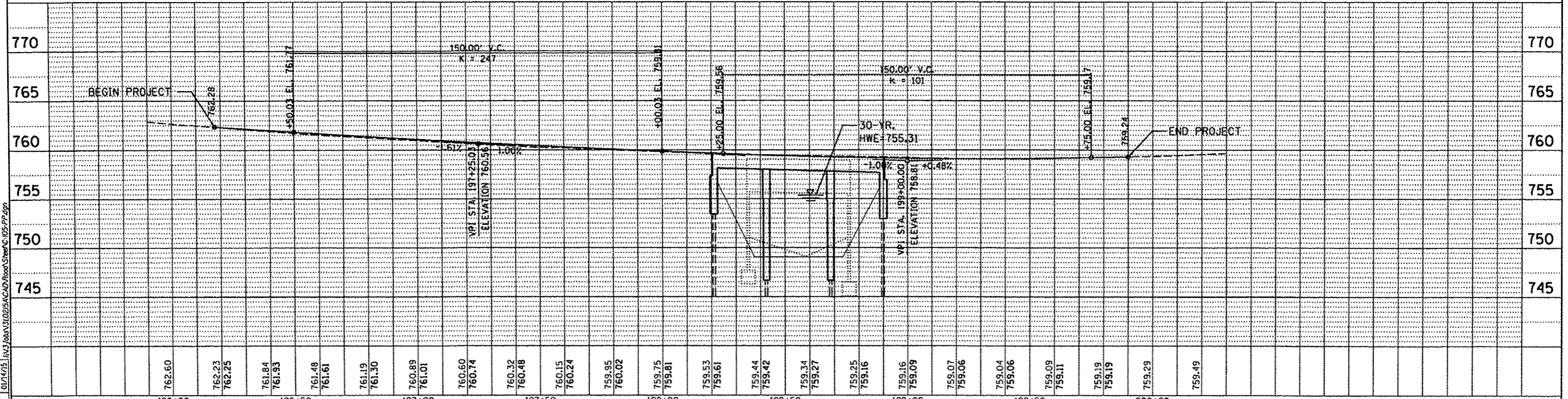
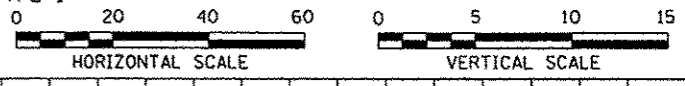
STA. 198+19.84, 18.0' RT
 END TRAFFIC BARRIER
 TERMINAL, TYPE 6A

STA. 198+91.84, 18.0' RT
 BEGIN TRAFFIC BARRIER
 TERMINAL, TYPE 6A

STA. 199+36.02, 18.0' RT
 END TRAFFIC BARRIER
 TERMINAL, TYPE 6A AND BEGIN TRAFFIC
 BARRIER TERMINAL, TYPE 1
 (SPECIAL) TANGENT

STA. 199+86.50, 19.0' RT
 END TRAFFIC BARRIER TERMINAL,
 TYPE 1 (SPECIAL) TANGENT

NOTE:
 CROWN LINE SHIFT
 BEGINS STA. 196+17.7, 1.1' LT O.S.
 ENDS STA. 197+26.57, 0.0' O.S.



1/13/14
 01/14/15
 01/14/15

FILE NAME -
 USER NAME = JDM
 DESIGNED DPA
 DRAWN JDM
 CHECKED DPA
 DATE 1/14/2015

DESIGNED DPA
 DRAWN JDM
 CHECKED DPA
 DATE 1/14/2015

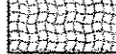
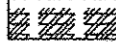
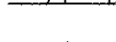
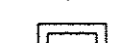
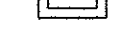
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

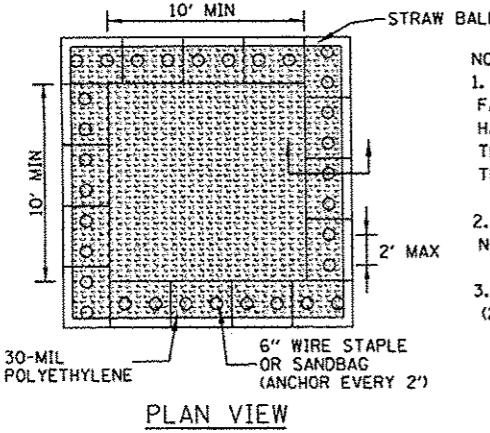
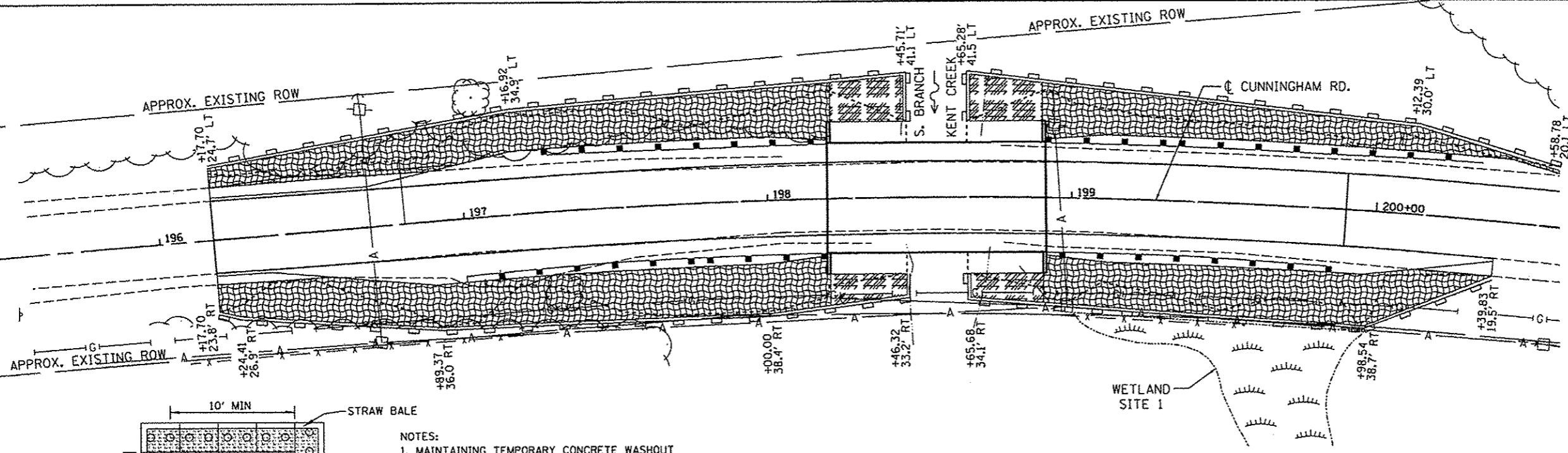
PLAN AND PROFILE
 CUNNINGHAM ROAD BRIDGE REPLACEMENT
 ROCKFORD, ILLINOIS
 SCALE: AS SHOWN SHEET NO. OF SHEETS STA. TO STA.

F.A.S. RTE. 39	SECTION 08-00083-00-BR	COUNTY BOONE	TOTAL SHEETS 20	SHEET NO. 5
CONTRACT NO. 85627			ILLINOIS FED. AID PROJECT	

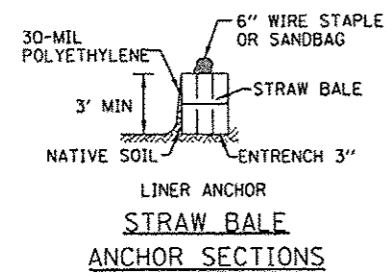
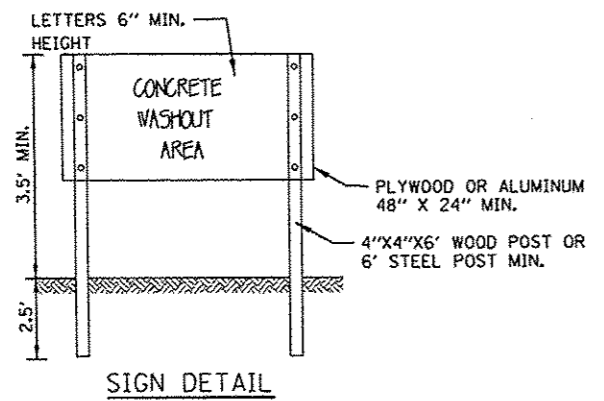
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LEGEND

- LIMITS OF CONSTRUCTION
-  EROSION CONTROL BLANKET
-  TURF REINFORCEMENT MAT
-  PERIMETER BARRIER
-  TEMPORARY DITCH CHECK
-  CONCRETE TRUCK WASH OUT



- NOTES:**
1. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND/OR SLURRY AND RETURNING THE AREA TO A FUNCTIONAL CONDITION AT THE END OF THE PROJECT.
 2. WASHOUT SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.
 3. EACH STRAW BALE IS TO BE STAKED IN PLACE USING (2) 2"X2"X4' WOODEN STAKES.



TEMPORARY CONCRETE WASHOUT FACILITY - STRAW BALE

GENERAL EROSION CONTROL NOTES

1. EROSION CONTROL DEVICES SHALL BE IN PLACE AND APPROVED BY THE RESIDENT ENGINEER AS TO PROPER PLACEMENT AND INSTALLATION PRIOR TO BEGINNING OTHER WORK.
2. THE RESIDENT ENGINEER WILL DETERMINE WHEN TEMPORARY EROSION CONTROL SYSTEMS SHOWN ON THE PLAN MAY BE MOVED TO A DIFFERENT LOCATION OR DELETED.
3. IN THE EVENT OF HIGH WATER AND/OR HIGH FLOW RATES THAT DAMAGE THE PERIMETER EROSION AND SEDIMENT CONTROLS, THE CONTRACTOR SHALL RETRIEVE ANY CONTROLS THAT HAVE BEEN WASHED DOWNSTREAM. CONTRACTOR SHALL REPAIR SAME.
4. STRAW BALES ARE NOT ALLOWED FOR ANY USE EXCEPT FOR CONCRETE TRUCK WASH OUT.
5. SILT FENCING IS NOT ALLOWED FOR USE IN DITCH CHECKS.
6. AFTER THE VEGETATION IS ESTABLISHED IN THE DISTURBED AREA, THE CONTRACTOR SHALL:
 - REMOVE THE REMAINING SEDIMENT CONTROL ITEMS AS DIRECTED BY THE RESIDENT ENGINEER.
 - RESTORE THE AREAS DISTURBED BY THE SEDIMENT CONTROL ITEMS BY PERMANENT SEEDING MEASURES.
7. DETAILS PROVIDED ON THIS SHEET ARE INTENDED TO REPLACE OR SUPPLEMENT APPROPRIATE PORTIONS OF HIGHWAY STANDARD 280001.

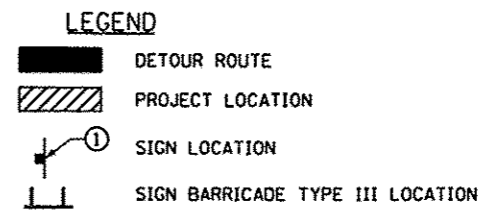
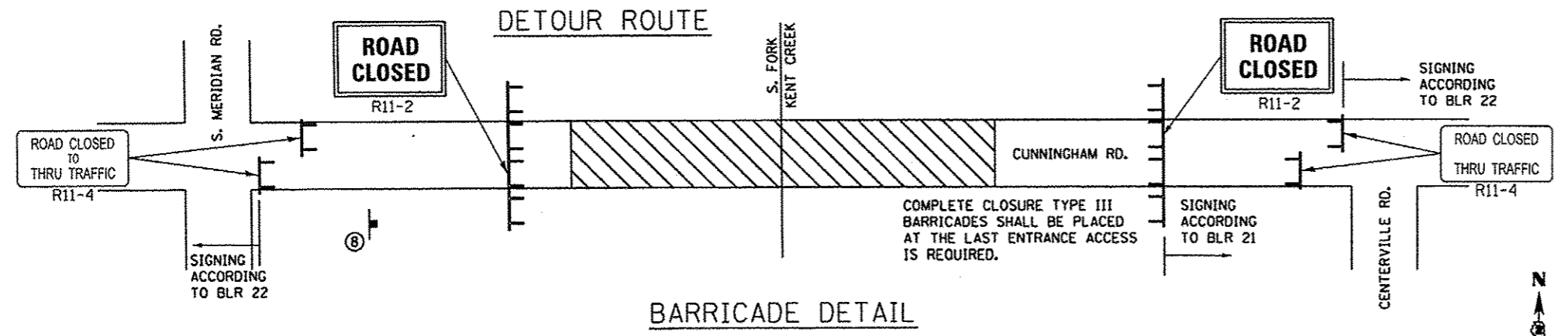
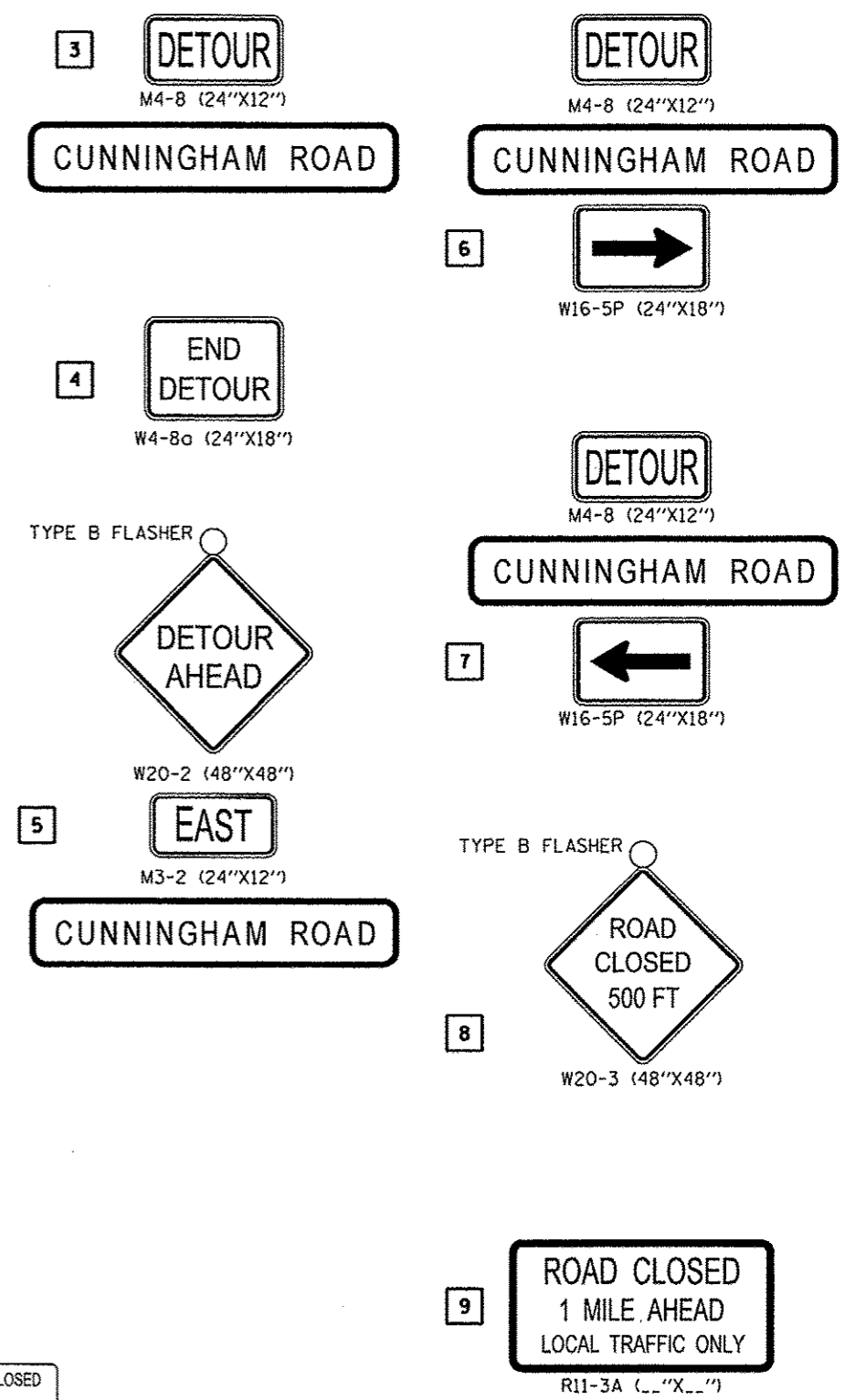
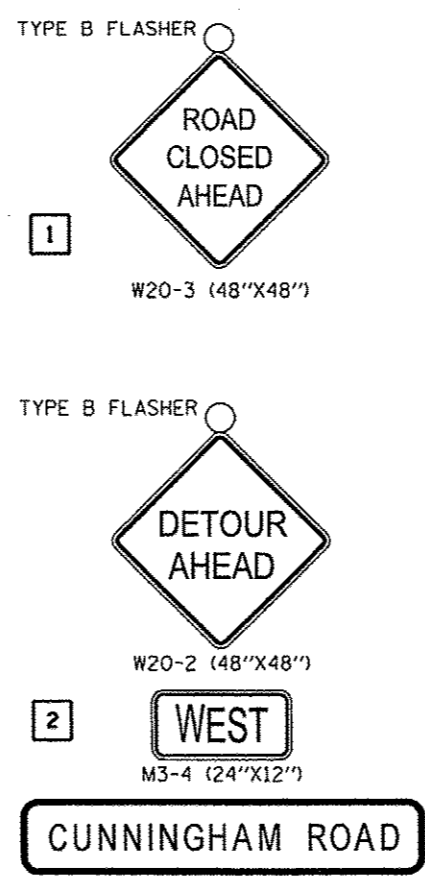
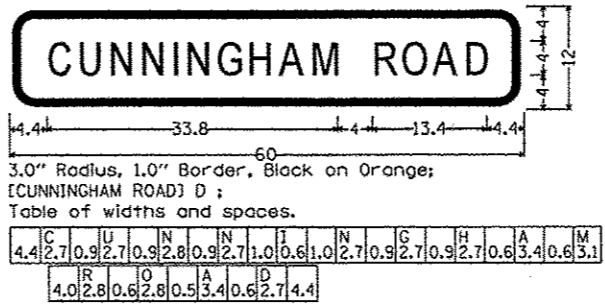
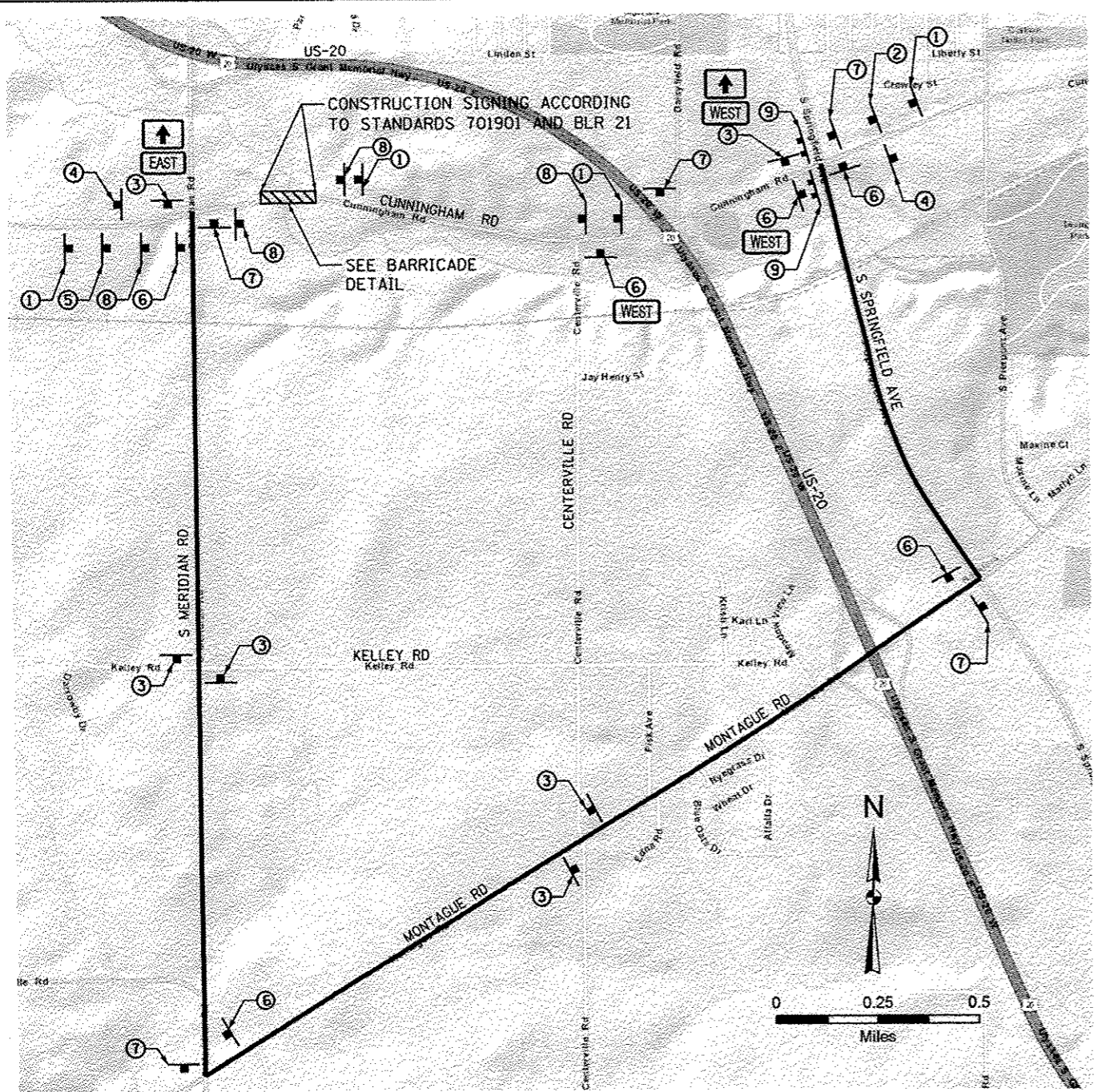
INTENDED SEQUENCE

1. PLACE PERIMETER EROSION CONTROL BARRIER PRIOR TO COMMENCEMENT OF ANY WORK. SEE STD. 280001
2. CONSTRUCT EARTHWORK.
3. PLACE AND MAINTAIN TEMPORARY AND PERMANENT EROSION CONTROLS AS WORK PROGRESSES. SEE ART. 280.
4. FINAL SHAPE, GRADE, AND PAVE ROADWAY.
5. PLACE REMAINING PERMANENT EROSION CONTROLS.

HANSON
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11/13/14
05/01/15
05/01/15
10/29/2015

FILE NAME *	USER NAME * Mador08377	DESIGNED - DPA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION CONTROL PLAN CUNNINGHAM ROAD BRIDGE REPLACEMENT ROCKFORD, ILLINOIS				F.A.U. RTE. 5200	SECTION 12-00529-00-BR	COUNTY WINNEBAGO	TOTAL SHEETS 20	SHEET NO. 6
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		CHECKED - DPA	REVISED -										
		DATE - 05/01/15	REVISED -										



FILE NAME: H:\12\job\12\8215\ACAD\Road\Sheet\85627-TRF.dwg
 USER: JDM
 DATE: 05/01/15
 PLOT DATE: 05/29/2015

DESIGNED - DPA	REVISIONS
DRAWN - JDM	1
CHECKED - DPA	2
DATE - 05/01/15	3

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR ROUTE
CUNNINGHAM ROAD BRIDGE REPLACEMENT
ROCKFORD, ILLINOIS

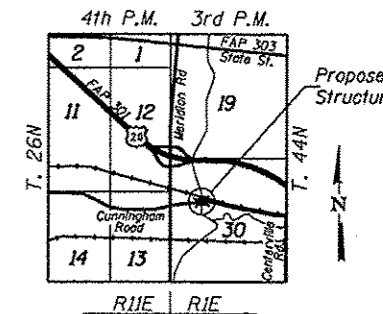
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S200	12-00529-00-BR	WINNEBAGO	20	7
CONTRACT NO. 85627				

Benchmark - Survey disk at Northeast corner on wingwall, Station 198+76.04, Offset, 16.89' Lt. Elevation 759.76

Existing Structure - Structure Number 101-3001. Original structure built in 1953 under Section 90B -1 MFT and is comprised of a steel beam and concrete deck superstructure supported by closed concrete abutments. The clear bridge width is 26 ft. face-to-face of curbs. The total deck width is 30 ft. out-to-out. The clear bridge length is 40 ft. face-to-face of abutments.

Salvage - Existing Bridge Name Plate.

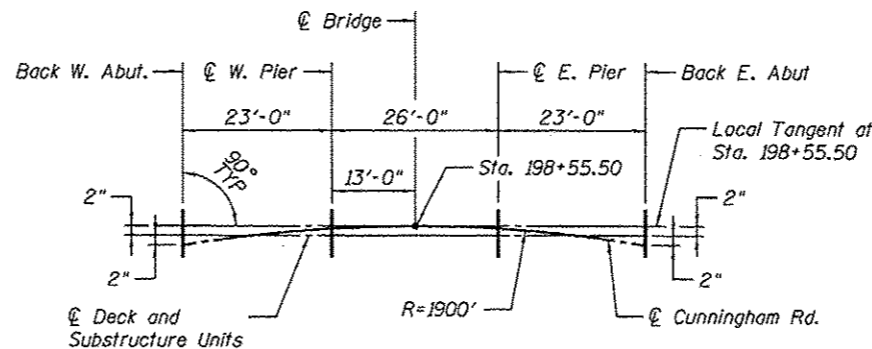
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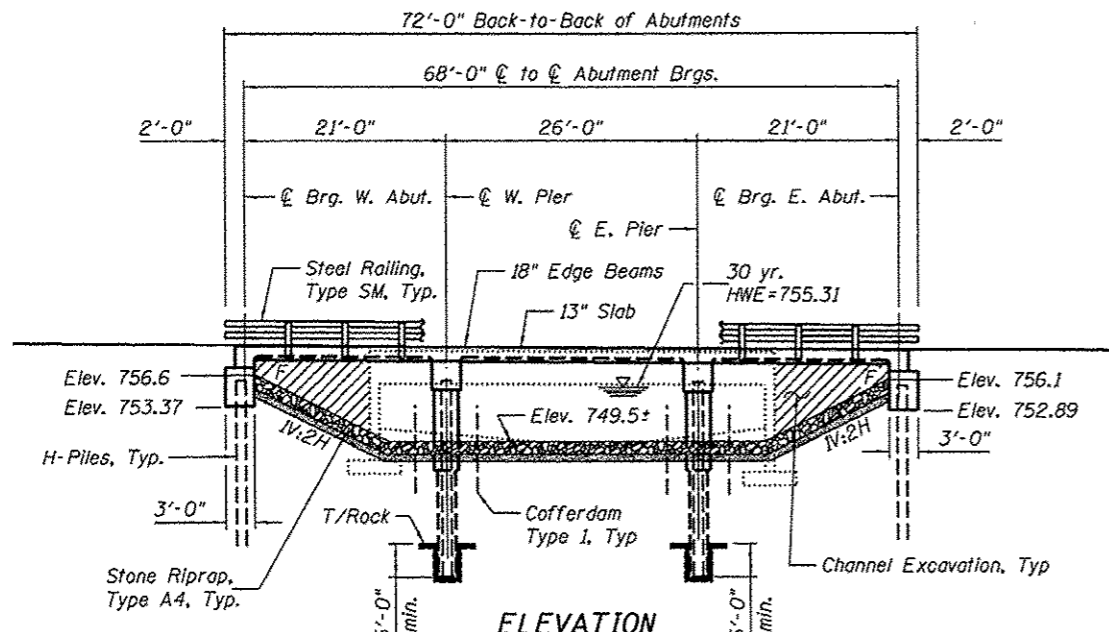
LOCATION SKETCH

CUNNINGHAM ROAD BRIDGE
 BUILT 20__ BY
 WINNEBAGO COUNTY
 SEC. 12-00529-00-BR
 F.A.U. RT. 5200 STA. 198+55.50
 STR. NO. 101-3104 LOADING HL-93

LETTERING FOR NAME PLATE
 Locate Name Plate at Southwest Corner
 of Bridge (See Std. 515001)



OFFSET SKETCH



ELEVATION

* Estimated Water Surface
 Elev. (EWSE) = 751.25

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design
 Specifications - 6th edition

LOADING HL-93

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

DESIGN STRESSES

$f'_c = 5,000$ p.s.i. (Superstructure)
 $f'_c = 3,500$ p.s.i. (All other units)
 $f_y = 60,000$ p.s.i. (Reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec (SD1) = 0.055
 Design Spectral Acceleration at 0.2 sec (SDs) = 0.098
 Soil Site Class = C

CURVE DATA

$D = 3^{\circ}00'56''$
 $R = 1900'$
 $T = 380.81'$
 $L = 751.66'$
 $E = 37.79'$
 $SE = 0.0401''$
 $P.C. Sta. = 197+01.72$
 $P.T. Sta. = 204+53.38$

INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes, Total Bill of Materials and Riprap Details
3. Superstructure
4. Superstructure Details
5. Steel Railing, Type SM
6. East Abutment
7. West Abutment
8. Piers
9. HP Pile Details
10. Boring Logs

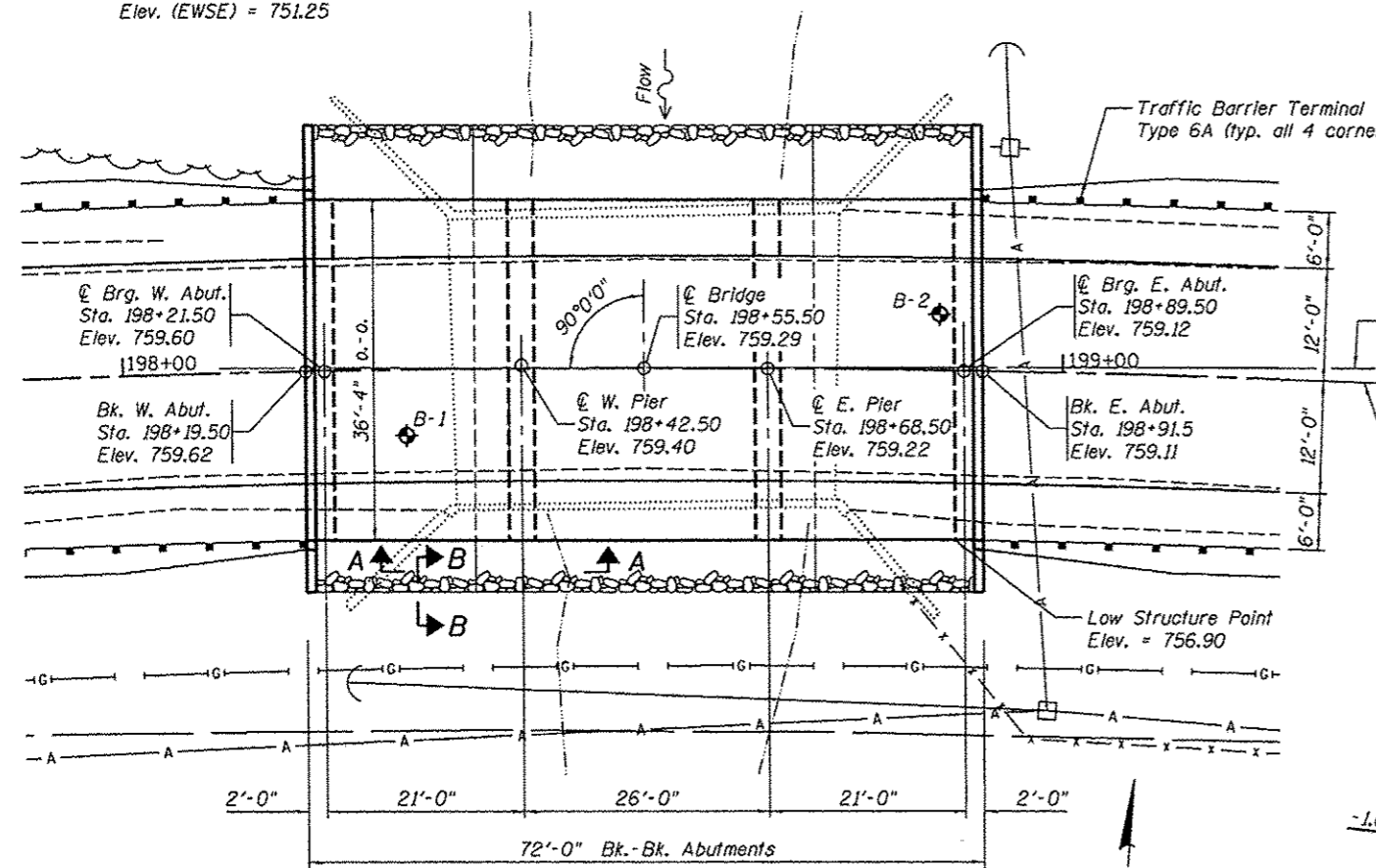
DESIGN SCOUR ELEVATION TABLE

Event/Limit State	Design Scour Elevation (ft.)				Item 113
	W. Abut.	Pier 1	Pier 2	E. Abut.	
Q100	753.4	742.0	742.0	752.9	5
O200	753.4	741.6	741.6	752.9	
Design	753.4	742.0	742.0	752.9	
Check	753.4	741.6	741.6	752.9	

WATERWAY INFORMATION

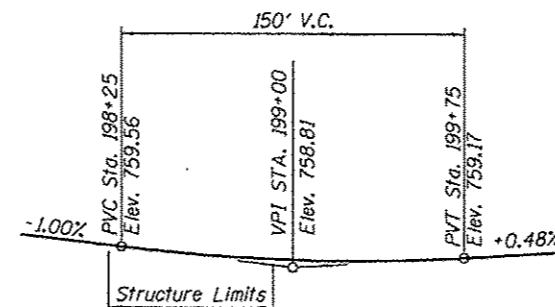
Flood		Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Not. H.W.E.	Head - Ft.	Headwater El.
Design	Base	30	1305	215	755.31	0.53	755.84
		100	1750	245	755.87	0.76	756.63

Drainage Area = 11.13 Sq. Mi. Low Grade Elev = 759.05 at Sta. 199+26.35



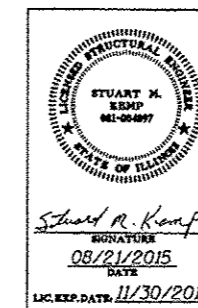
PLAN

For Sections A-A and B-B
 see sheet 2 of 10.



PROFILE GRADE

(Along \hat{C} Roadway)



"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 Standard Specifications for Highway Bridges.'"

GENERAL PLAN & ELEVATION
 CUNNINGHAM ROAD BRIDGE
 OVER S. BRANCH KENT CREEK
 FAU 5200
 SEC. 12-00529-00-BR
 WINNEBAGO COUNTY, ILLINOIS
 STATION 198+55.50
 STRUCTURE NO. 101-3104

DESIGNED	SMK	12/19/2014
DRAWN	MGM	05/02/2015
REVIEWED	JKR	05/20/2015

FILE NAME *	USER NAME *	DESIGNED - SMK	REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION STRUCTURE NO. 101-3104	F.A.U. RT. 5200	SECTION 12-00529-00-BR	COUNTY WINNEBAGO	TOTAL SHEETS 20	SHEET NO. 8	CONTRACT NO. 85627
		CHECKED -	REVISIONS								ILLINOIS FED. AID PROJECT
		DRAWN - MGM	REVISIONS								
		CHECKED - JKR	REVISIONS								

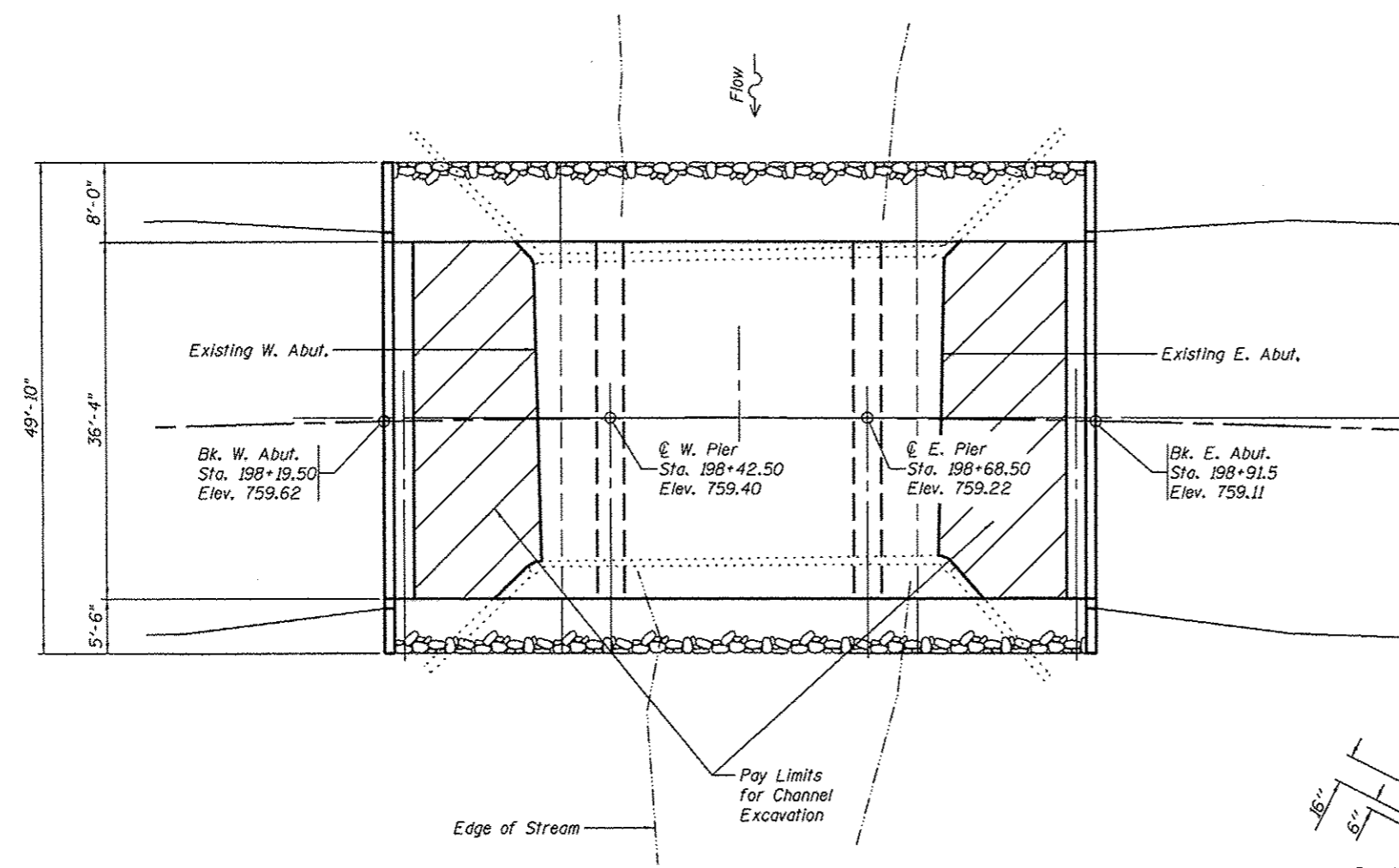
GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

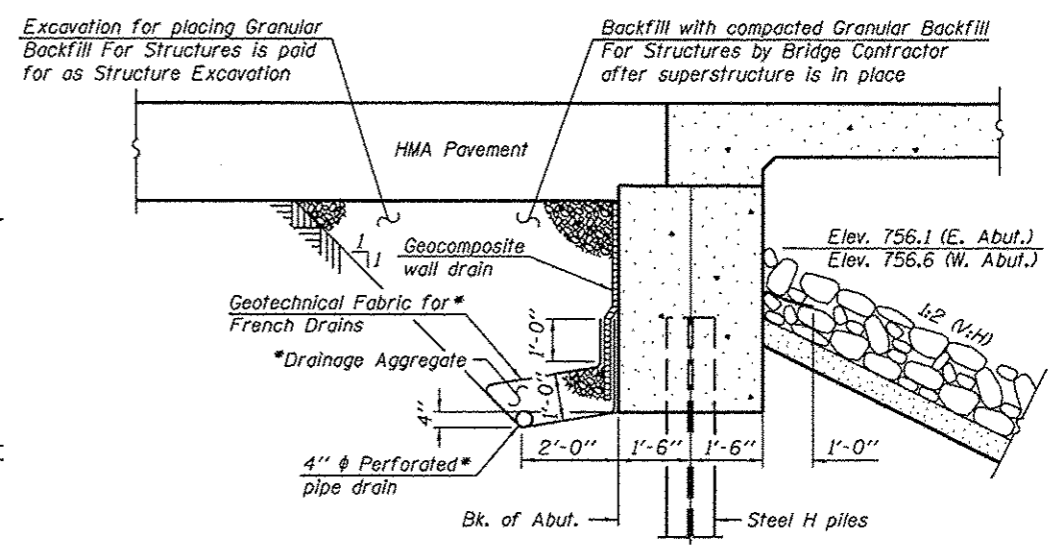
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.

Item	Unit	Super	Sub.	Total
Channel Excavation	Cu. Yd.	—	194	194
Stone Riprap, Class A4	Sq. Yd.	—	366	366
Filter Fabric	Sq. Yd.	—	366	366
Removal of Existing Structures	Each	—	1	1
Structure Excavation	Cu. Yd.	—	214	214
Cofferdams (Type 1) (Location 1)	Each	—	2	2
Concrete Structures	Cu. Yd.	—	109.1	109.1
Concrete Superstructure	Cu. Yd.	114.8	—	114.8
Bridge Deck Grooving	Sq. Yd.	267	—	267
Protective Coat	Sq. Yd.	292	—	292
Reinforcement Bars, Epoxy Coated	Pound	29,340	10,840	40,180
Steel Railing, Type SM	Foot	144	—	144
Furnishing Steel Piles, HP10x42	Foot	—	230	230
Furnishing Steel Piles, HP12x53	Foot	—	276	276
Driving Piles	Foot	—	506	506
Test Piles, HP10x42	Each	—	2	2
Test Piles, HP12x53	Each	—	2	2
Pile Shoes	Each	—	26	26
Name Plates	Each	1	—	1
Geocomposite Wall Drain	Sq. Yd.	—	39	39
Granular Backfill for Structures	Cu. Yd.	—	50	50
Pipe Underdrains for Structures 4"	Foot	—	140	140



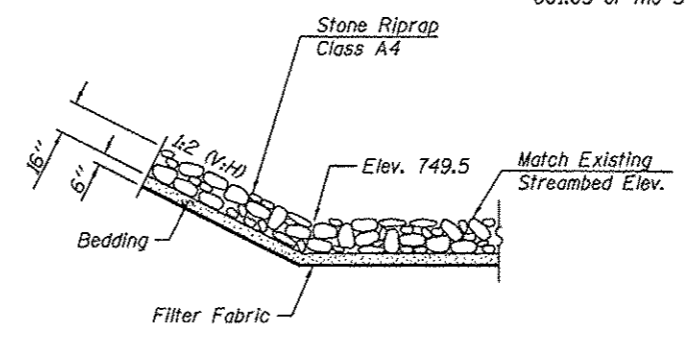
CHANNEL EXCAVATION PLAN



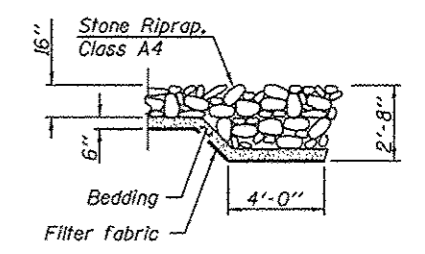
SECTION THRU ABUTMENT

* Included in the cost of Pipe Underdrains for Structures.

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



**SECTION A-A
STONE RIPRAP DETAIL**



**SECTION B-B
FLANK STONE RIPRAP DETAIL**

DESIGNED SMK 12/15/2014
DRAWN MCM 05/20/2015
REVIEWED JKR 05/20/2015

FILE NAME *	USER NAME *	DESIGNED - SMK	REVISIONS
		CHECKED -	REVISIONS
PLOT SCALE *		DRAWN - MCM	REVISIONS
PLOT DATE *		CHECKED - JKR	REVISIONS

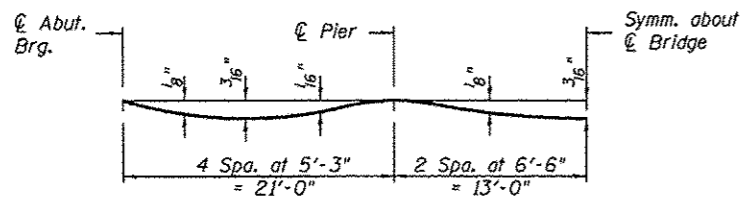
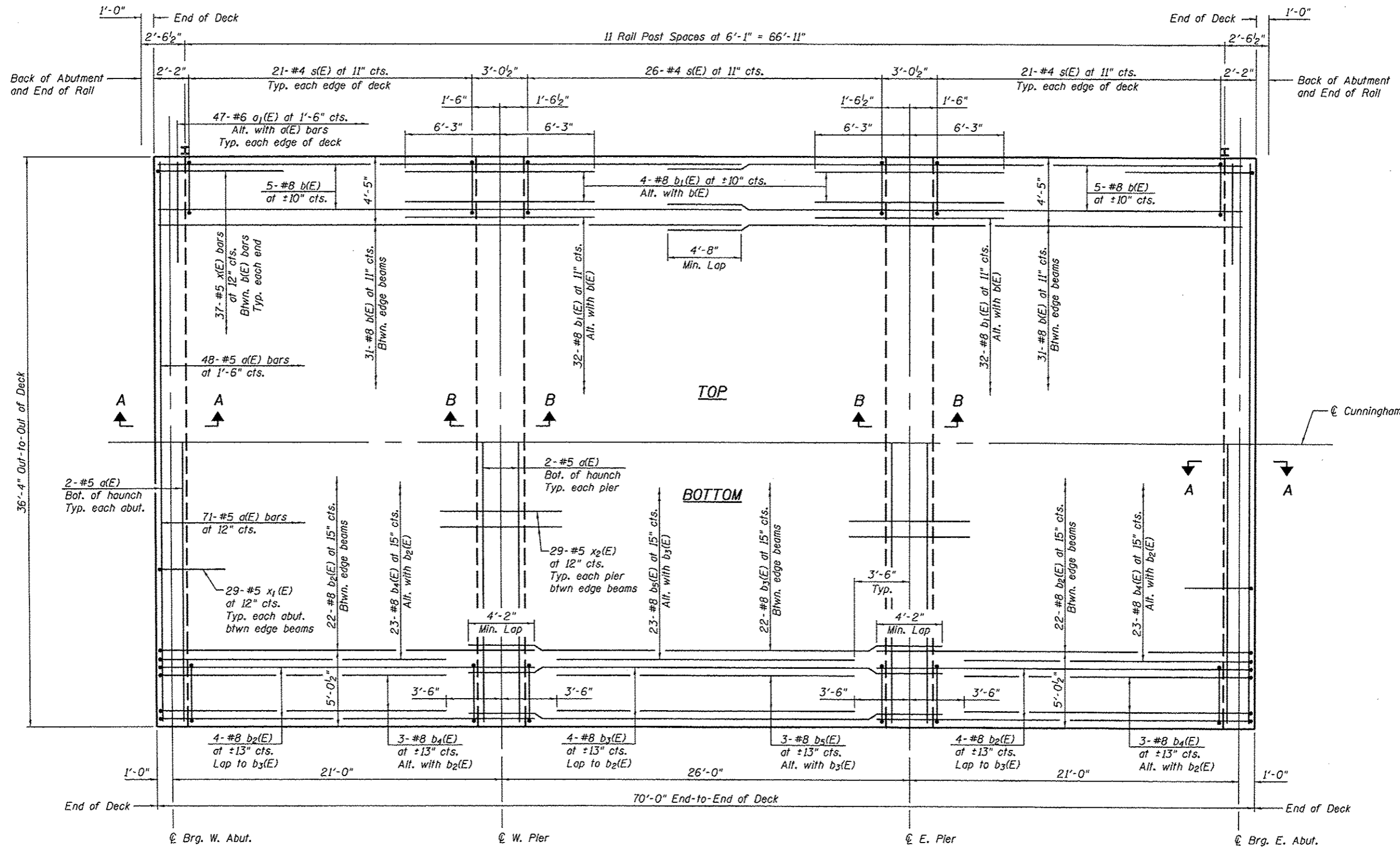
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, TOTAL BILL OF MATERIALS & RIPRAP DETAILS
STRUCTURE NO. 101-3104

SHEET NO. 2 OF 10 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5200	12-00529-00-BR	WINNEBAGO	20	9
CONTRACT NO. 85627				

ILLINOIS FED. AID PROJECT



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

DECK REINFORCEMENT PLAN

Bars indicated thus 25x2-#9 etc. indicates 25 line of bars with 2 lengths per line.

For Sections A and B see sheet 4 of 10.

DESIGNED	SMK	12/15/2014
DRAWN	MGM	05/20/2015
REVIEWED	JKR	05/20/2015

FILE NAME *	USER NAME *	DESIGNED - SMK	REVISED
		CHECKED -	REVISED
PLOT SCALE *	DRAWN - MGM	REVIEWED	REVISED
PLOT DATE *	CHECKED - JKR	REVISED	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

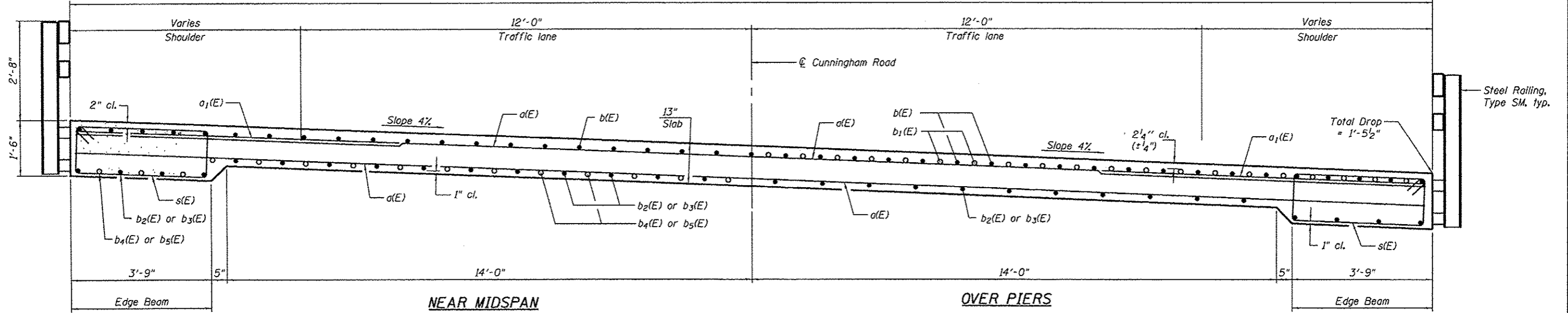
SUPERSTRUCTURE
STRUCTURE NO. 101-3104

SHEET NO. 3 OF 10 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5200	12-00529-00-BR	WINNEBAGO	20	10
CONTRACT NO. 85627				

ILLINOIS FED. AID PROJECT

36'-4" Out-to-Out of Deck

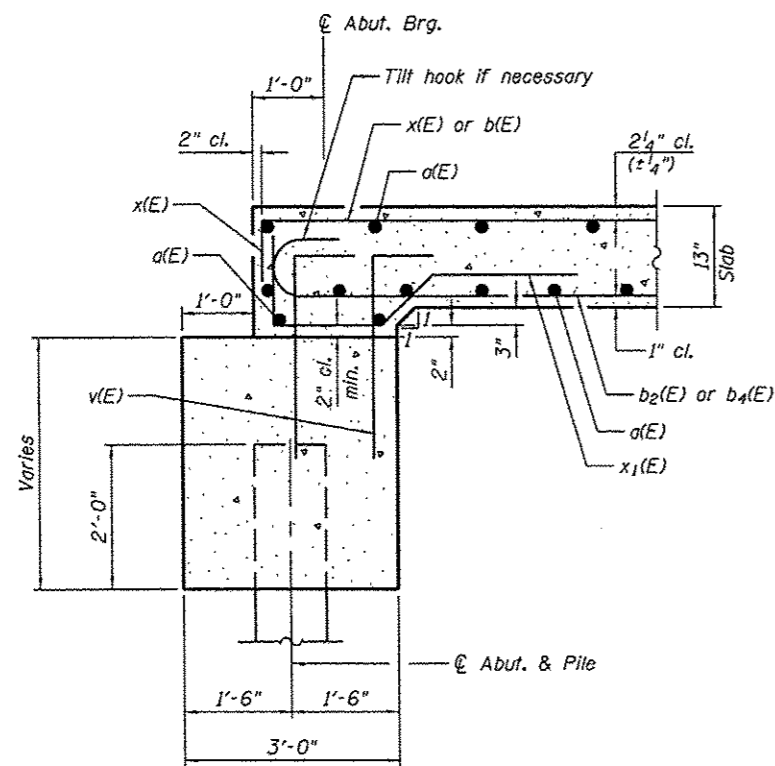


SECTION THRU DECK
(Looking East)

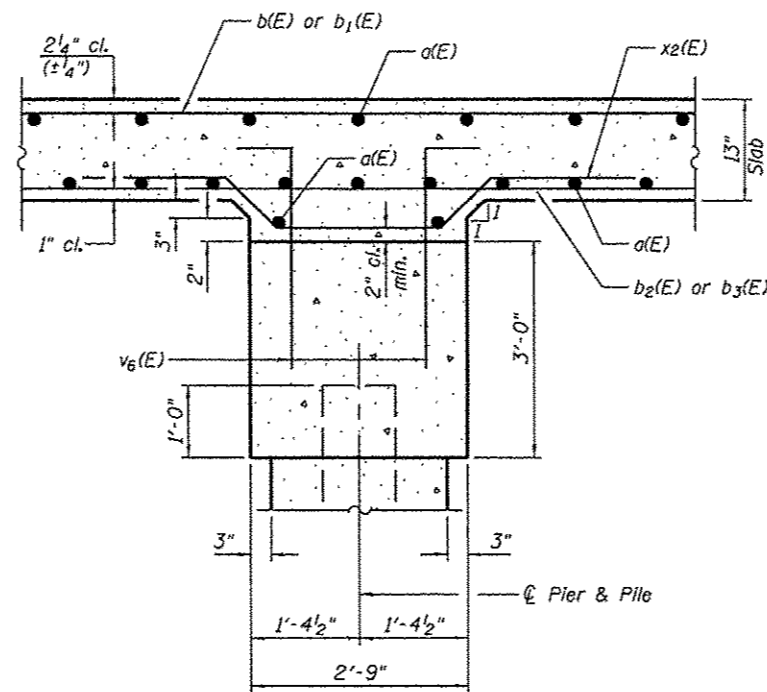
**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	127	#5	36'-0"	—
a ₁ (E)	94	#6	6'-6"	—
b(E)	82	#8	37'-3"	—
b ₁ (E)	80	#8	12'-6"	—
b ₂ (E)	60	#8	24'-10"	C
b ₃ (E)	30	#8	30'-3"	—
b ₄ (E)	58	#8	18'-11"	C
b ₅ (E)	29	#8	19'-0"	—
s(E)	136	#4	10'-3"	□
x(E)	74	#5	3'-3"	—
x ₁ (E)	58	#5	5'-7"	—
x ₂ (E)	58	#5	8'-4"	—
Concrete Superstructures		Cu. Yd.	114.8	
Reinforcement Bars, Epoxy Coated		Pound	29,340	

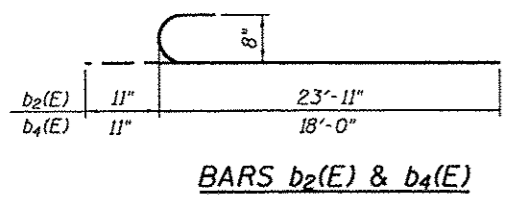
v(E) shown on sheet 6 & 7 of 10.
v₆(E) shown on sheet 8 of 10.



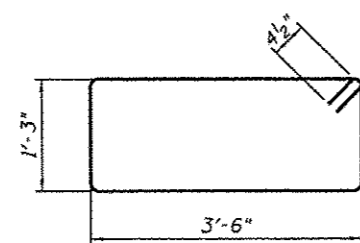
SECTION A-A



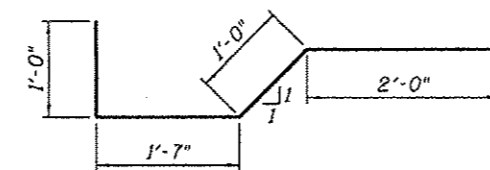
SECTION B-B



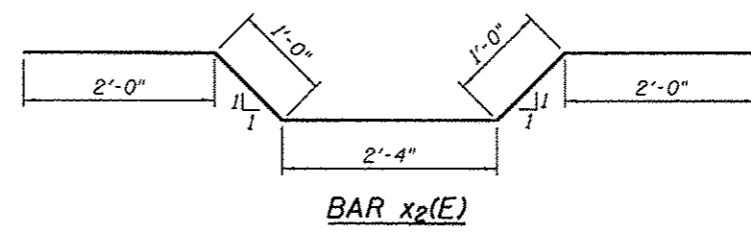
BARS b₂(E) & b₄(E)



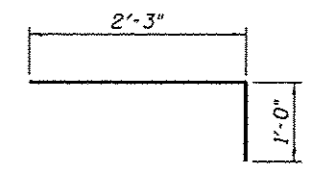
BAR s(E)



BAR x₁(E)



BAR x₂(E)



BAR x(E)

DESIGNED: SMK 12/15/04
DRAWN: MGM 02/02/05
REVIEWED: JKR 05/02/05

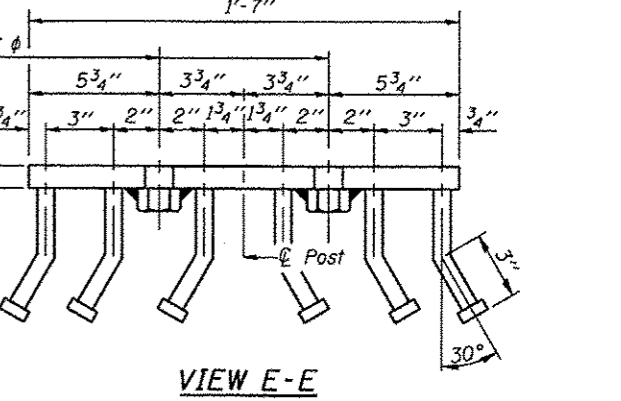
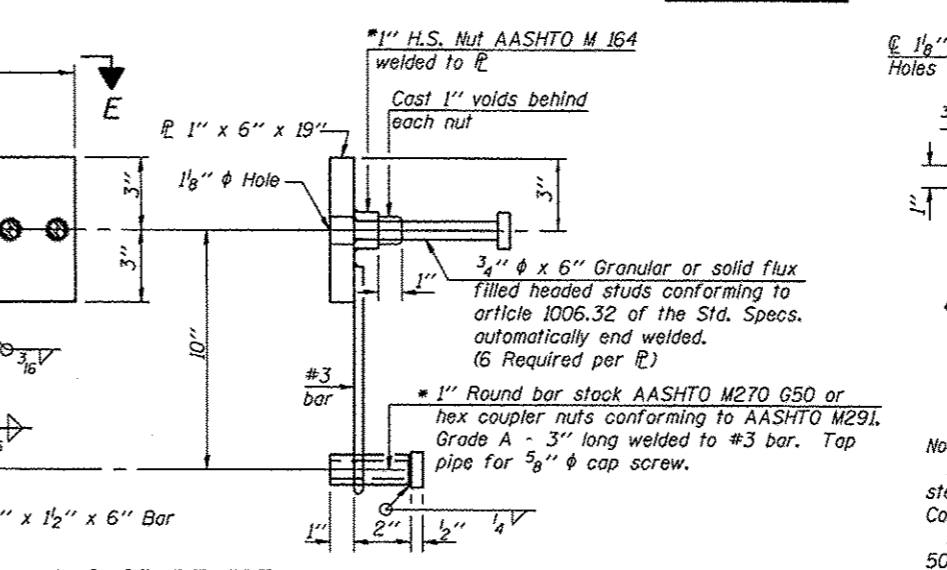
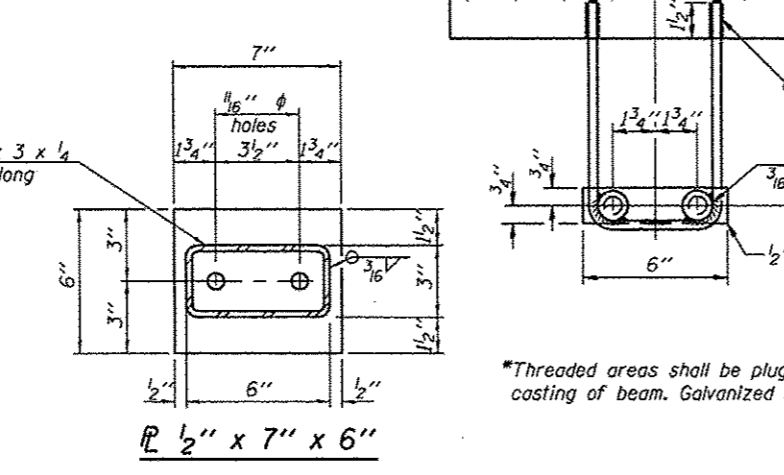
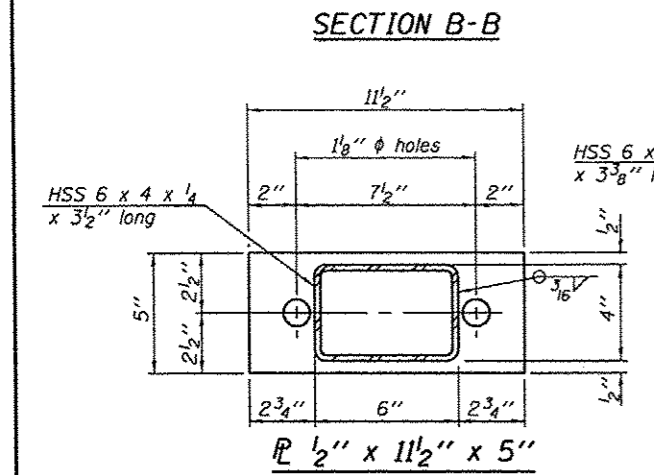
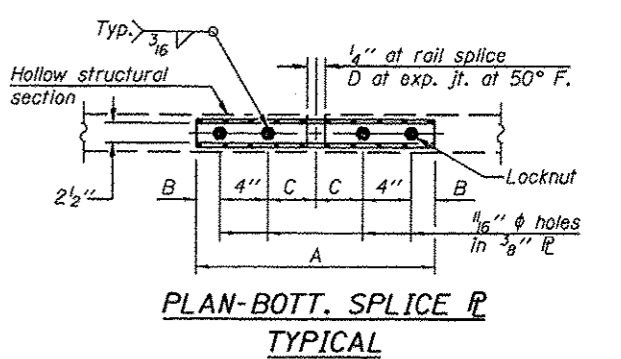
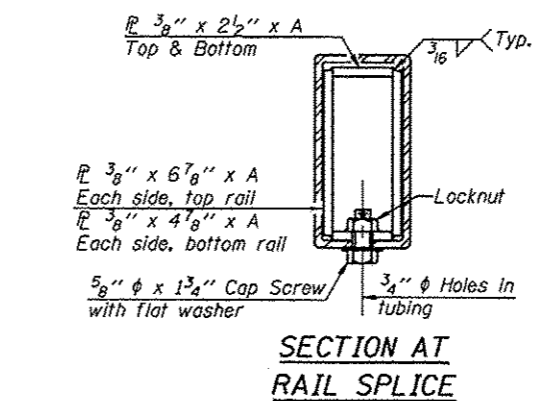
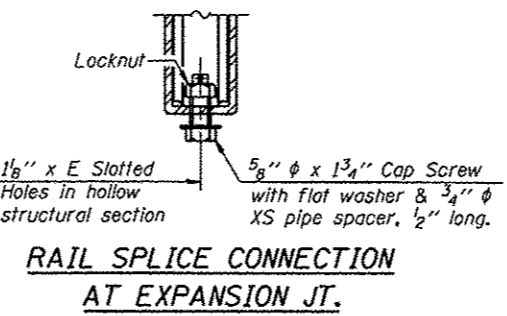
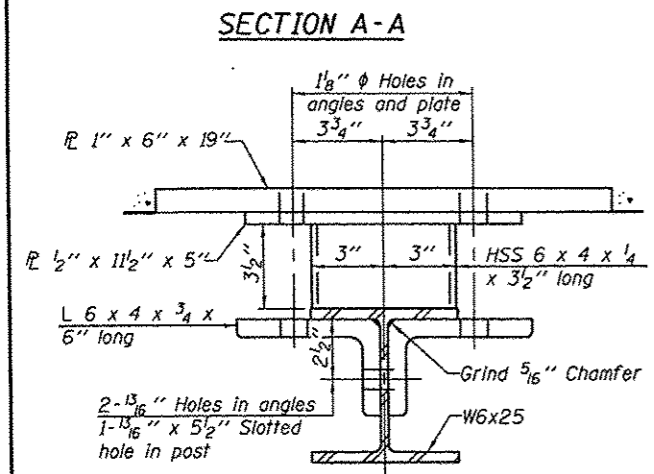
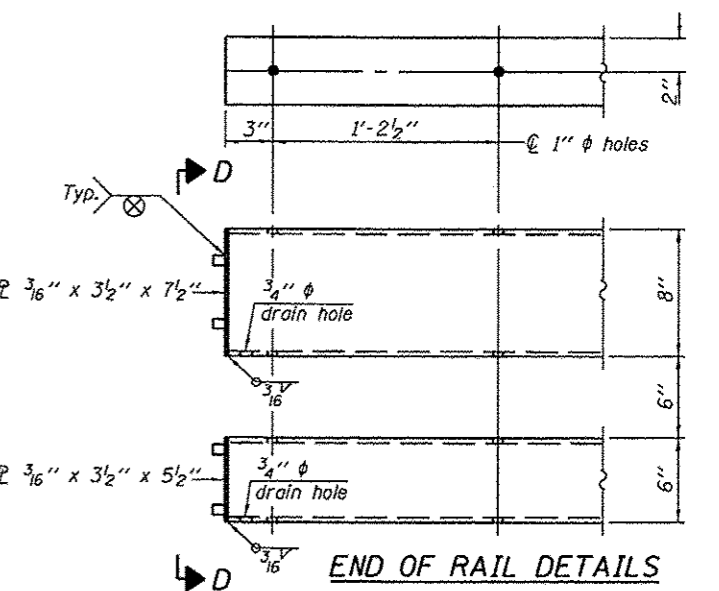
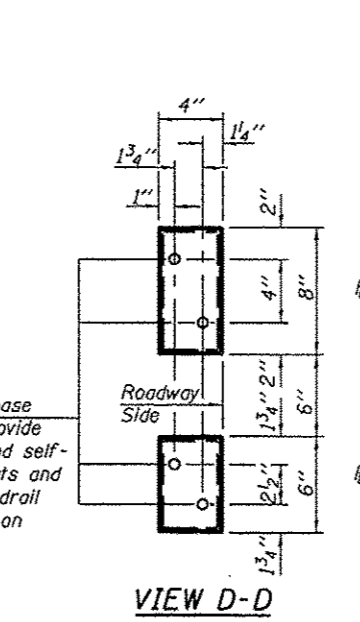
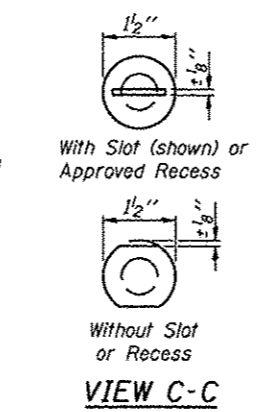
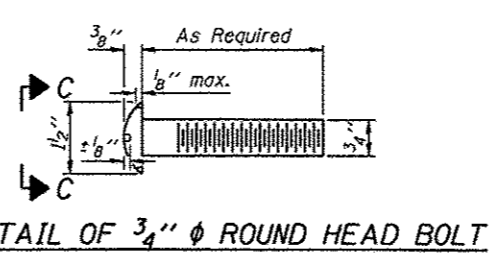
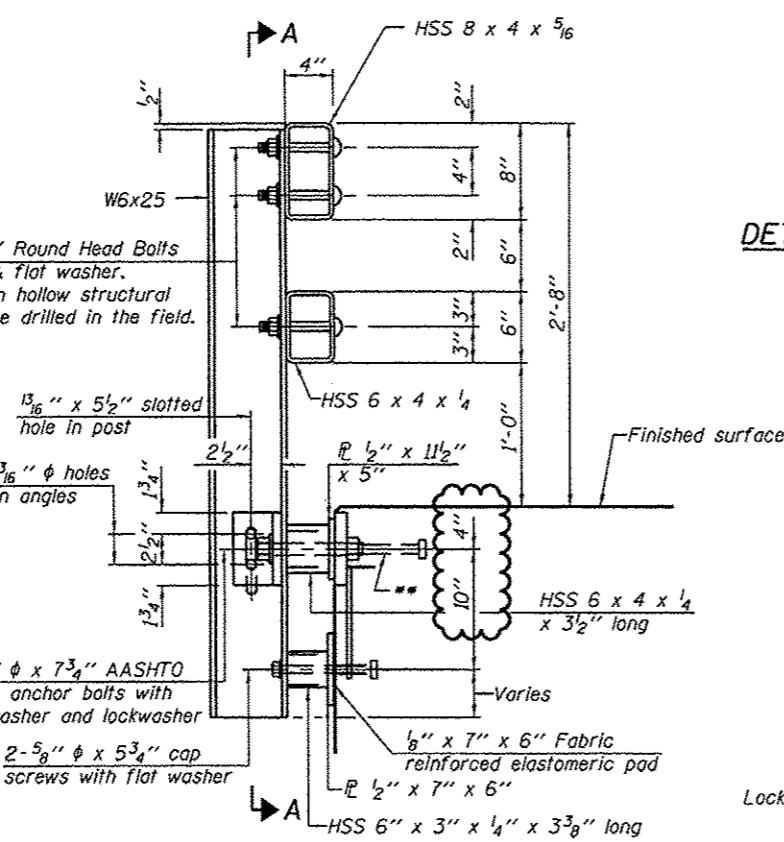
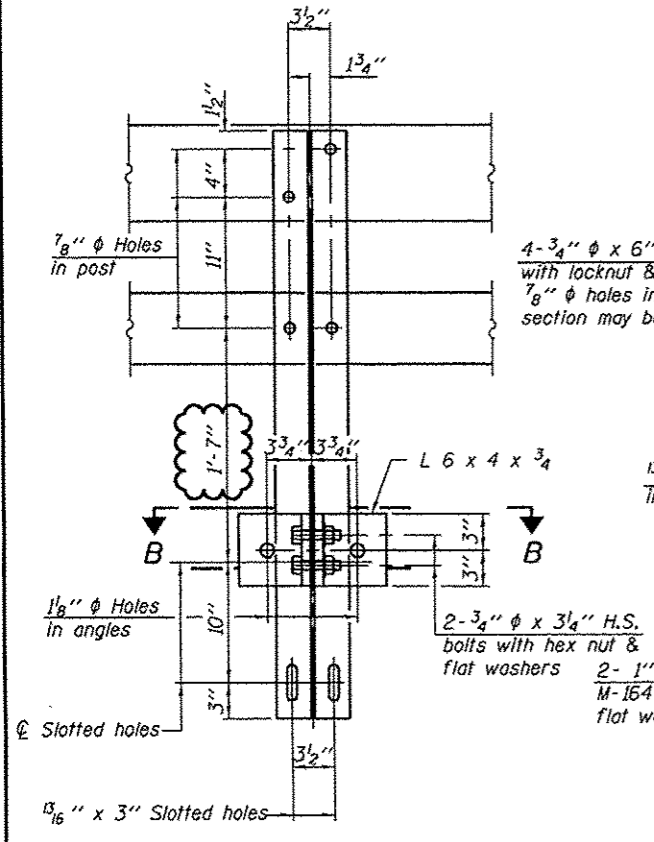
FILE NAME *	USER NAME *	DESIGNED - SMK	REVISED
		CHECKED -	REVISED
PLOT SCALE *	DRAWN - MGM	CHECKED - JKR	REVISED
PLOT DATE *			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 101-3104

SHEET NO. 4 OF 10 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5200	12-00529-00-BR	WINNEBAGO	20	11
CONTRACT NO. 85627				
ILLINOIS FED. AID PROJECT				



SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	

Notes:
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
 Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 ** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	144.0

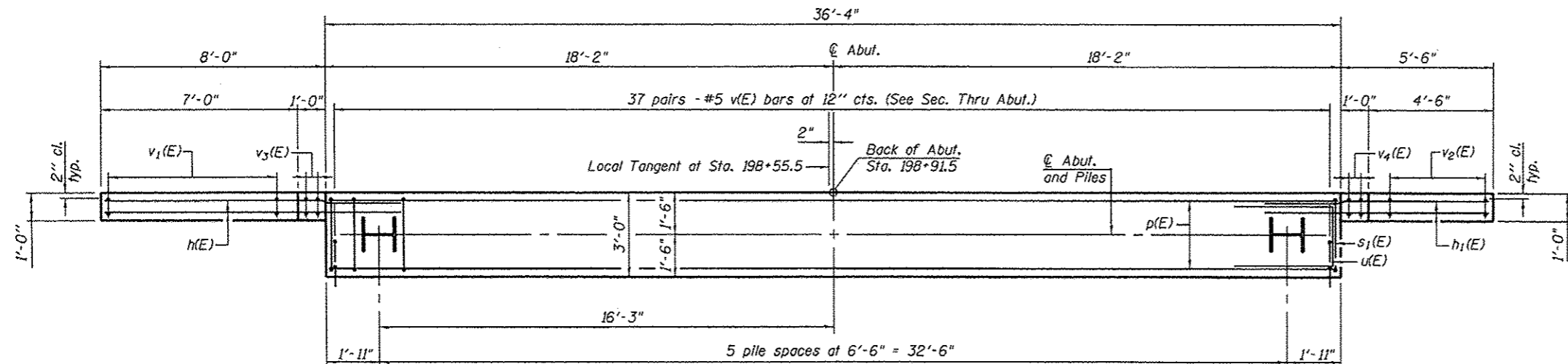
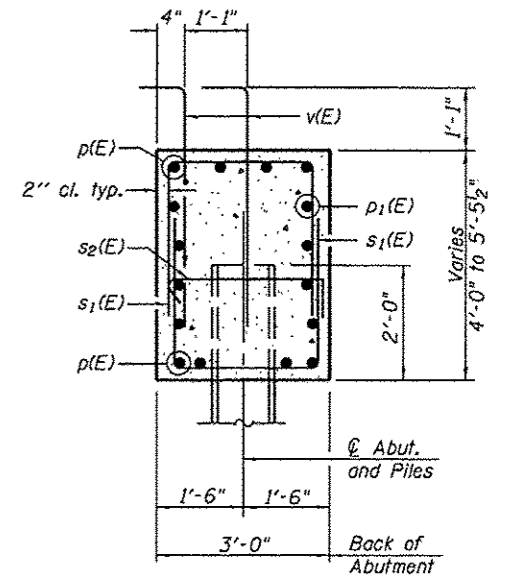
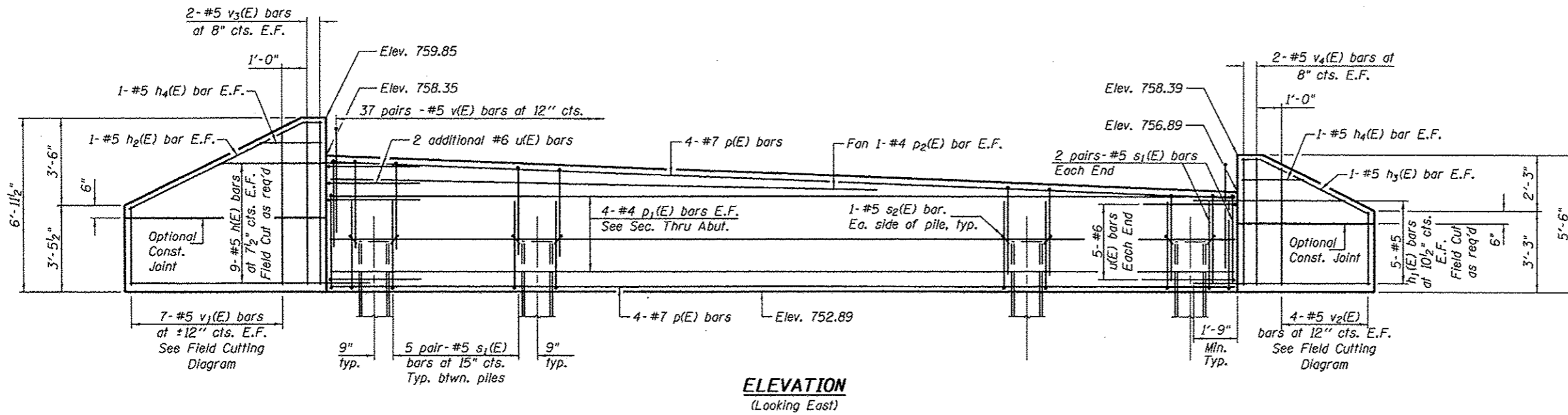
R-34CWS 1-12-15 (6'-3" Maximum Post Spacing)

DESIGNED - SMK	REVISIONS
CHECKED -	REVISIONS
DRAWN - MGM	REVISIONS
CHECKED - JKR	REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE SM
STRUCTURE NO. 101-310A

F.A.U. RTE. 5200	SECTION 12-00529-00-BR	COUNTY WINNEBAGO	TOTAL SHEETS 20	SHEET NO. 12
SHEET NO. 5 OF 10 SHEETS				CONTRACT NO. 85627
ILLINOIS FED. AID PROJECT				

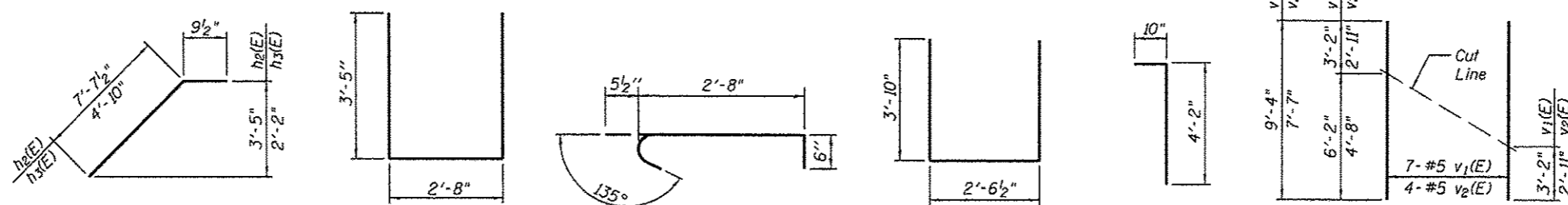


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	18	#5	9'-8"	—
h ₁ (E)	10	#5	7'-2"	—
h ₂ (E)	2	#5	8'-5"	—
h ₃ (E)	2	#5	5'-8"	—
h ₄ (E)	4	#5	2'-8"	—
p(E)	8	#7	36'-0"	—
p ₁ (E)	8	#4	36'-0"	—
p ₂ (E)	2	#4	18'-0"	—
s ₁ (E)	58	#5	9'-6"	U
s ₂ (E)	12	#5	3'-8"	U
u(E)	12	#6	10'-3"	U
v(E)	74	#5	5'-0"	—
v ₁ (E)	7	#5	9'-4"	—
v ₂ (E)	4	#5	7'-7"	—
v ₃ (E)	4	#5	6'-8"	—
v ₄ (E)	4	#5	5'-2"	—
Structure Excavation		Cu. Yd.	88.5	
Concrete Structures		Cu. Yd.	21.6	
Reinforcement Bars, Epoxy Coated		Pound	2440	
Furnishing Steel Piles, HP 10x42		Foot	130	
Driving Piles		Foot	130	
Test Pile, HP10x42		Each	1	
Pile Shoes		Each	6	

PILE DATA

Type: HP 10x42 with pile shoes
 Nominal Required Bearing: 300 k
 Factored Resistance Available: 165 k
 Est. Length: 26 ft.
 No. Production Piles: 5
 No. Test Piles: 1



For details of piles see sheet 9 of 10.

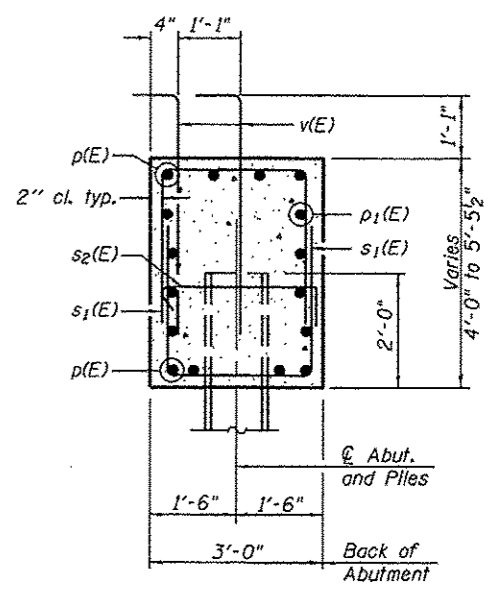
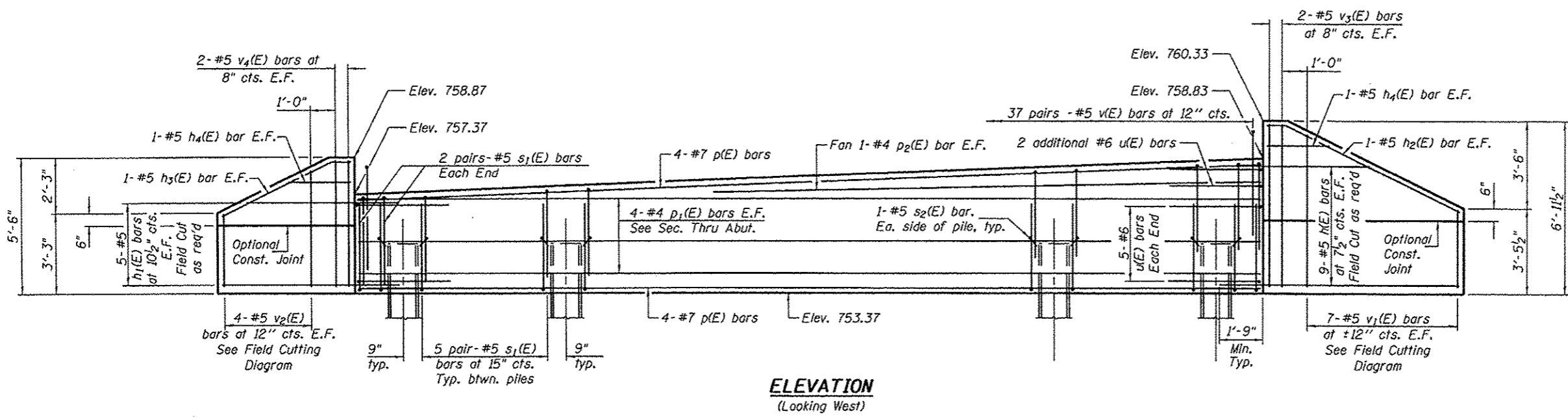
DESIGNED	SMK	12/15/2014
DRAWN	MGM	05/02/2015
CHECKED	JKR	05/02/2015

FILE NAME *	USER NAME *	DESIGNED - SMK	REVISED
		CHECKED -	REVISED
		DRAWN - MGM	REVISED
		CHECKED - JKR	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

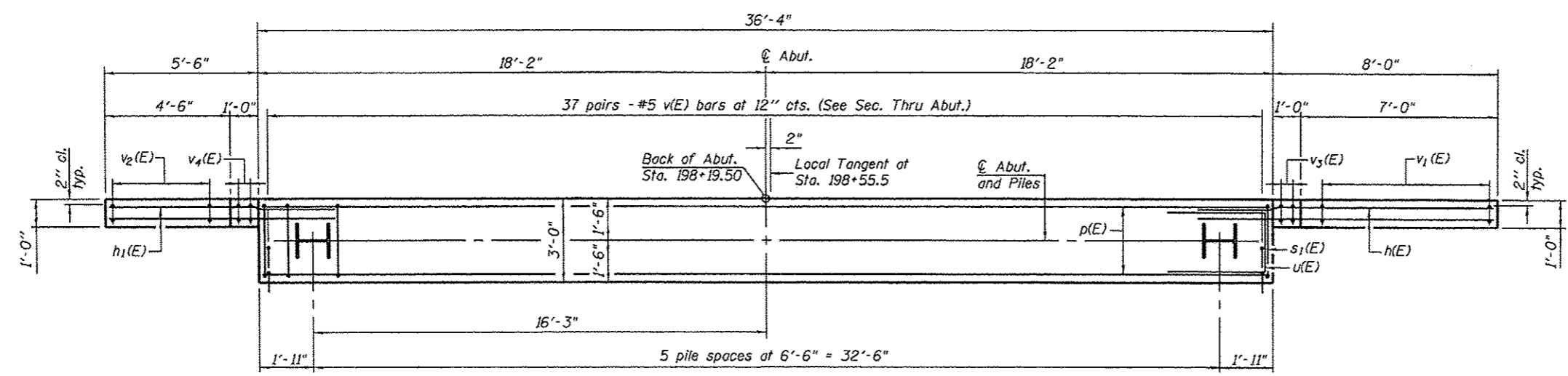
EAST ABUTMENT
STRUCTURE NO. 101-3104

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5200	12-00529-00-BR	WINNEBAGO	20	13
				CONTRACT NO. 85627



ELEVATION
(Looking West)

SEC. THRU ABUT.



PLAN

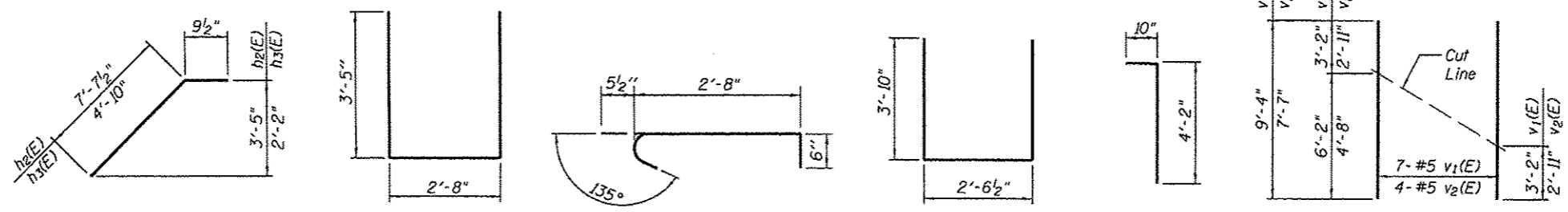
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	18	#5	9'-8"	—
h ₁ (E)	10	#5	7'-2"	—
h ₂ (E)	2	#5	8'-5"	—
h ₃ (E)	2	#5	5'-8"	—
h ₄ (E)	4	#5	2'-8"	—
p(E)	8	#7	36'-0"	—
p ₁ (E)	8	#4	36'-0"	—
p ₂ (E)	2	#4	18'-0"	—
s ₁ (E)	58	#5	9'-6"	U
s ₂ (E)	12	#5	3'-8"	U
u(E)	12	#6	10'-3"	U
v(E)	74	#5	5'-0"	U
v ₁ (E)	7	#5	9'-4"	—
v ₂ (E)	4	#5	7'-7"	—
v ₃ (E)	4	#5	6'-8"	—
v ₄ (E)	4	#5	5'-2"	—
Structure Excavation Cu. Yd. 88.5				
Concrete Structures Cu. Yd. 21.6				
Reinforcement Bars, Epoxy Coated Pound 2440				
Furnishing Steel Piles, HP 10x42 Foot 100				
Driving Piles Foot 100				
Test Pile, HP10x42 Each 1				
Pile Shoes Each 6				

For details of piles see sheet 9 of 10.

PILE DATA

Type: HP 10x42 with pile shoes
 Nominal Required Bearing: 300 k
 Factored Resistance Available: 165 k
 Est. Length: 20 ft.
 No. Production Piles: 5
 No. Test Piles: 1



BAR h₂(E) & h₃(E)

BAR s₁(E)

BAR s₂(E)

BAR u(E)

BAR v(E)

FIELD CUTTING DIAGRAM

Order v₁(E) and v₂(E) full length
 -Cut as shown and use remainder of bars in opposite face.

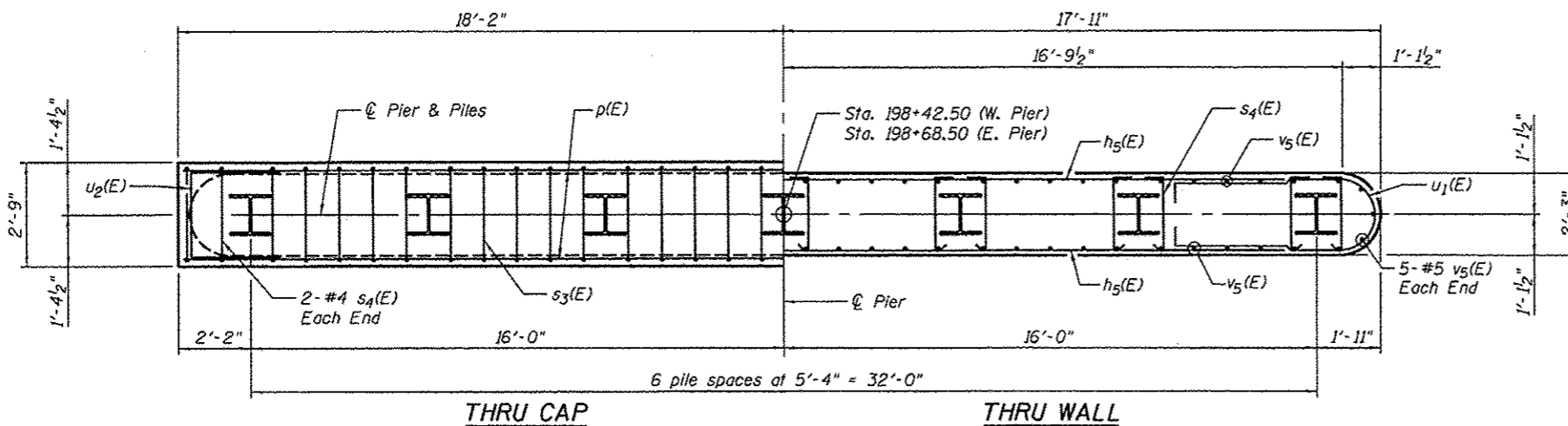
DESIGNED	SMK	12/16/2014
DRAWN	MGM	03/02/2015
REVIEWED	JKR	05/07/2015

BILL OF MATERIAL 85627
FOR TWO PIERS

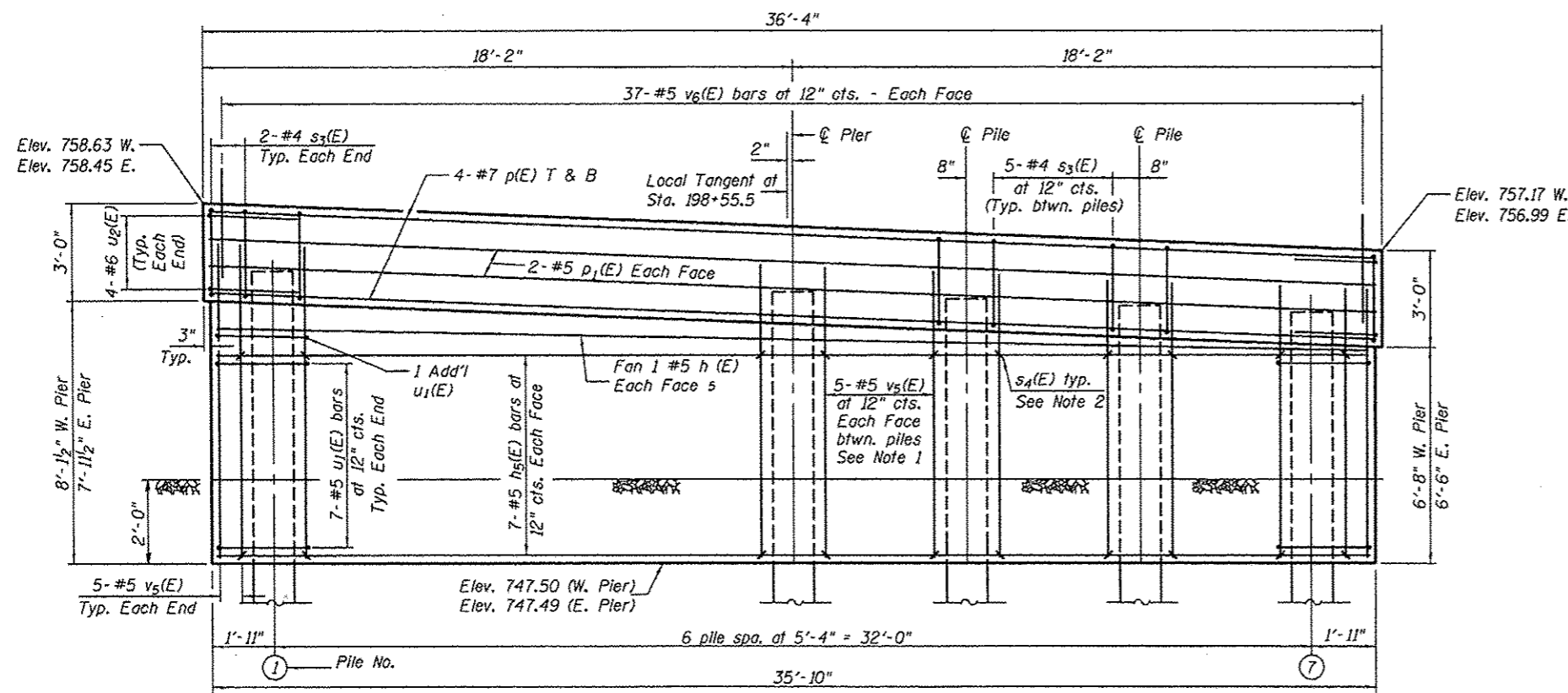
Bar	No.	Size	Length	Shape
$h_5(E)$	32	#5	33'-6"	—
$p(E)$	16	#7	36'-0"	—
$p_1(E)$	8	#5	36'-0"	—
$s_3(E)$	68	#4	10'-11"	□
$s_4(E)$	196	#4	3'-0"	□
$u_1(E)$	30	#5	10'-4"	□
$u_2(E)$	16	#6	7'-11"	□
$v_5(E)$	140	#5	9'-11"	—
$v_6(E)$	148	#5	3'-4"	—
Structure Excavation				Cu. Yd. 37
Concrete Structures				Cu. Yd. 65.9
Reinf. Bars, Epoxy Coated				Lbs. 5,960
Furn. Steel Piles, HP12x53				Foot 357
Cofferdam (Type 1) (Loc. 1)				Each 2
Setting Piles in Rock				Each 14

NOTES:
See Sheet 9 of 10 for Pile Details.

If a portion of the pier wall is underwater, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

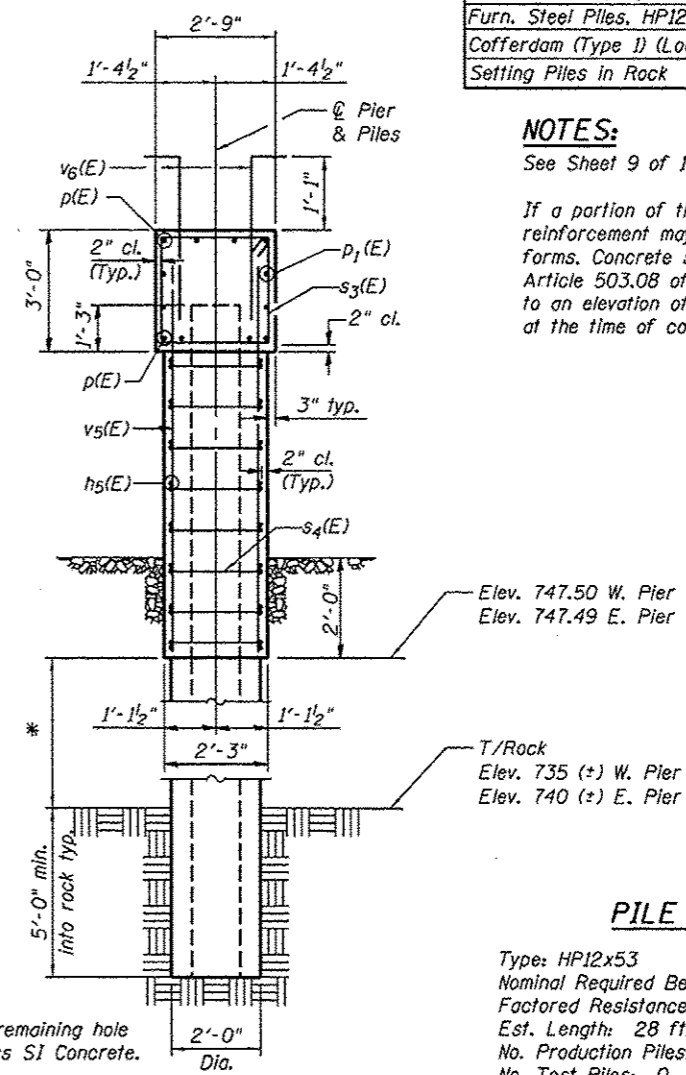


SECTION



ELEVATION
(Looking East)

- Note 1: Space $v_5(E)$ bars between piles to match $s_3(E)$ bars. Field cut $v_5(E)$ near low end as required to fit within cap. Minimum embedment into cap = 1'-11".
- Note 2: Place #4 $s_4(E)$ bars at 12" cts. at vertical $v_5(E)$ bars on each side on pile.



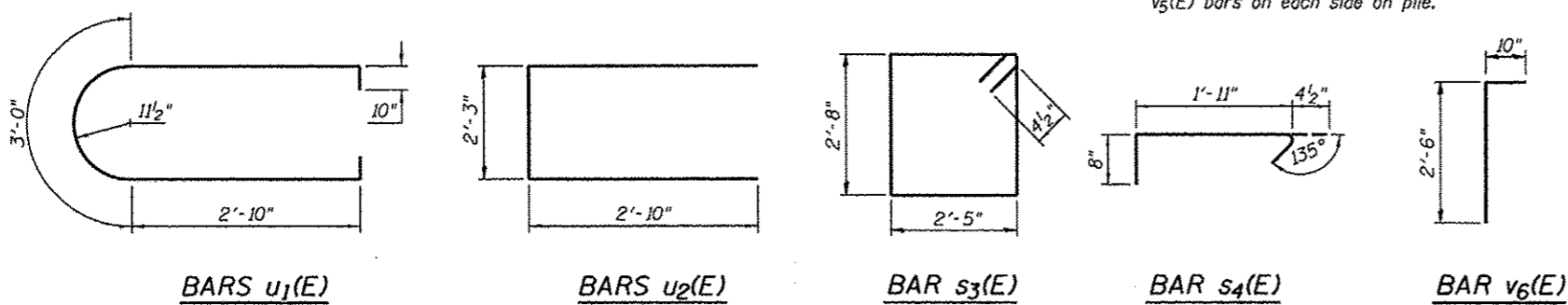
SECTION THRU PIER

PILE DATA

Type: HP12x53
Nominal Required Bearing: Set in Rock
Factored Resistance Available: 230 k (Both Piers)
Est. Length: 28 ft. (W. Pier) 23 ft. (E. Pier)
No. Production Piles: 14 (7 per pier)
No. Test Piles: 0

PILE CUT-OFF ELEVATION TABLE

Location	1	2	3	4	5	6	7
West Pier	756.78	756.57	756.36	756.14	755.93	755.72	755.50
East Pier	756.61	756.39	756.18	755.97	755.75	755.54	755.33



DESIGNED: SMK
DRAWN: MGM
CHECKED: JKR

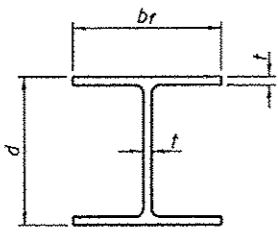
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		CHECKED -	REVISOR
		DRAWN - MGM	REVISOR
		CHECKED - JKR	REVISOR

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIERS
STRUCTURE NO. 101-3104
SHEET NO. 8 OF 10 SHEETS

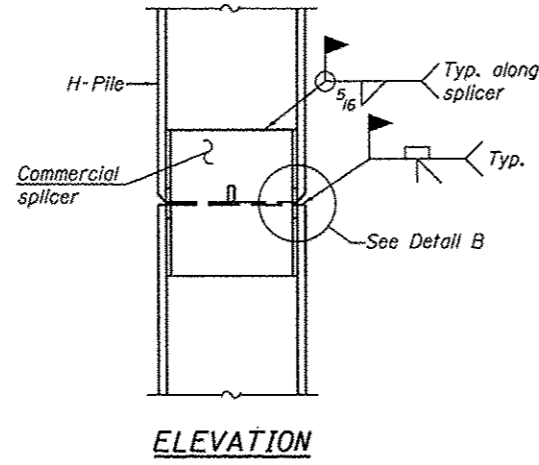
F.A.U. RTE. 5200	SECTION 12-00529-00-BR	COUNTY WINNEBAGO	TOTAL SHEETS 20	SHEET NO. 15
CONTRACT NO. 85627				

ILLINOIS FED. AID PROJECT

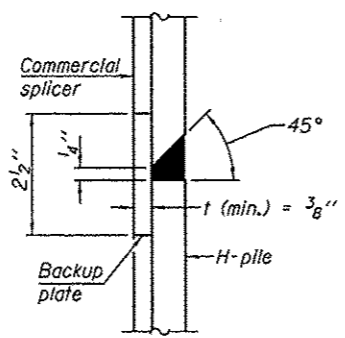


STEEL PILE TABLE

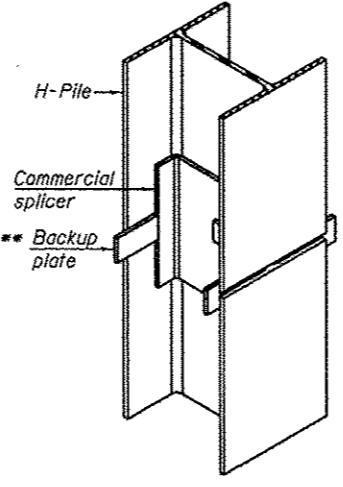
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 5/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11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



ELEVATION

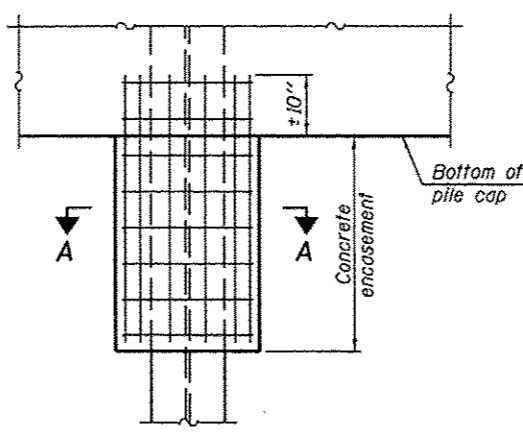


DETAIL "B"



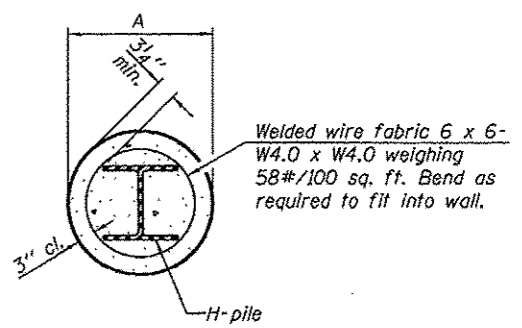
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



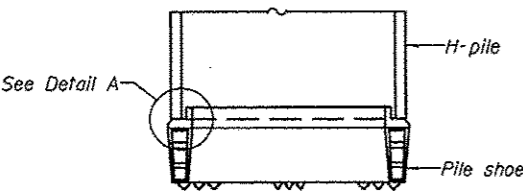
ELEVATION

PILE ENCASEMENT

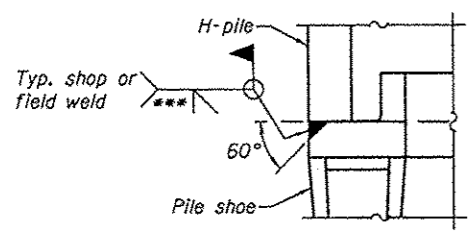


SECTION A-A

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

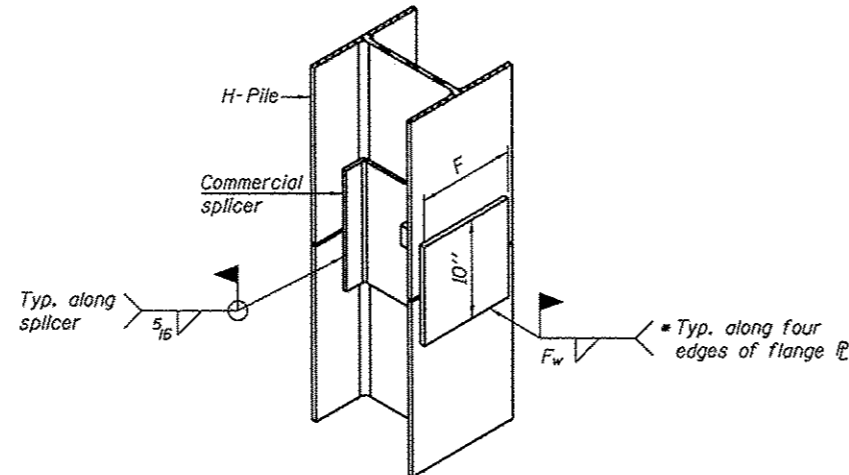


ELEVATION



DETAIL A

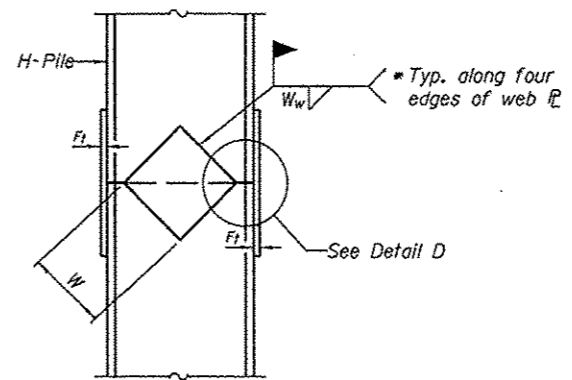
H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

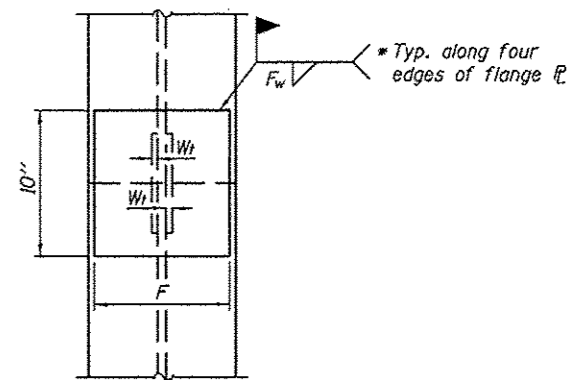
WELDED COMMERCIAL SPLICE ALTERNATE

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



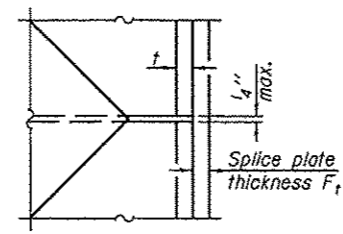
ELEVATION

WELDED PLATE FIELD SPLICE



END VIEW

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



DETAIL D

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

DESIGNED: SMK 12/16/01
DRAWN: MCM 05/20/01
REVIEWED: JKR 09/20/01

F-HP 1-27-12

FILE NAME *	USER NAME *	DESIGNED - SMK	REVISED
		CHECKED -	REVISED
		DRAWN - MCM	REVISED
		CHECKED - JKR	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 101-3104

SHEET NO. 9 OF 10 SHEETS

F.A.U. RTE. 5200	SECTION 12-00529-00-BR	COUNTY WINNEBAGO	TOTAL SHEETS 20	SHEET NO. 16
CONTRACT NO. 85627			ILLINOIS FED. AID PROJECT	



SOIL BORING LOG

Date 3/6/15

ROUTE County Highway 49 DESCRIPTION Cunningham Road Bridge LOGGED BY JACK

SECTION 12-00529-00-BR LOCATION Hwy 49, SEC. 3, TWP. T44N, RNG. 1E,

COUNTY Winnebago DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO.	DEPT	BLOW	UCS	MOIST	Surface Water Elev.	DEPT	BLOW	UCS	MOIST
Station	H	S	Qu	T	ft	H	S	Qu	T
101-3104									
1									
198+30									
7.0 ft LT									
759.20									
ASPHALT, Approx 7"					758.60				
FILL: CRUSHED STONE BASE (CA-6 TYPE), Approx. 3"		23			758.35		5		
FILL: CRUSHED STONE BASE (CA-6 TYPE)		50/5"		15			7		
							9		
					755.70				
FILL: CLAY, trace organics, black and dark brown		11					15		
		24		10	735.20		50/1"		
		32							
		3							
		4	2.0	17			50/3"		
		4	P						
		5			730.50		50/2"		
		3	1.0	25					
		5	P						
		2							
		3	0.5	47					
		5	P						
		5			745.20				
SAND, gray, very loose to medium dense		6		11					
		7							
		1							
		1		18					
		1							
		3							
		3		15					
		3							
		-20							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

Date 3/6/15

ROUTE County Highway 49 DESCRIPTION Cunningham Road Bridge LOGGED BY JACK

SECTION 12-00529-00-BR LOCATION Hwy 49, SEC. 3, TWP. T44N, RNG. 1E,

COUNTY Winnebago DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO.	DEPT	BLOW	UCS	MOIST	Surface Water Elev.	DEPT	BLOW	UCS	MOIST
Station	H	S	Qu	T	ft	H	S	Qu	T
101-3104									
2									
198+87									
6.0 ft RT									
759.00									
ASPHALT, Approx. 6"					758.50				
FILL: CRUSHED STONE BASE (CA-6 TYPE), Approx. 3"		21			758.20				
FILL: CLAY TRACE ORGANICS, black and dark brown		50/4"		15					
		7							
		8	1.5	10					
		11	P						
		-5							
		2							
		3	1.0	17					
		3	P						
					751.00				
FILL: SILTY CLAY TRACE ORGANICS, black and dark gray		4							
		5	1.0	7					
		12	P						
		-10							
		2							
		2	0.5	47					
		2	P						
					746.00				
CLAY, brown and gray, very stiff		5							
		8		11					
		10							
		-15							
					743.00				
SAND, with rock fragments, medium dense		10							
		13		18					
		14							
		12							
					740.00		50/2"		15
***HIGHLY WEATHERED DOLOMITE, light brown									
					739.00				
		-20							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

DESIGNED: SMK 12/15/2014
DRAWN: MGM 09/20/2015
REVIEWED: JKR 09/20/2015

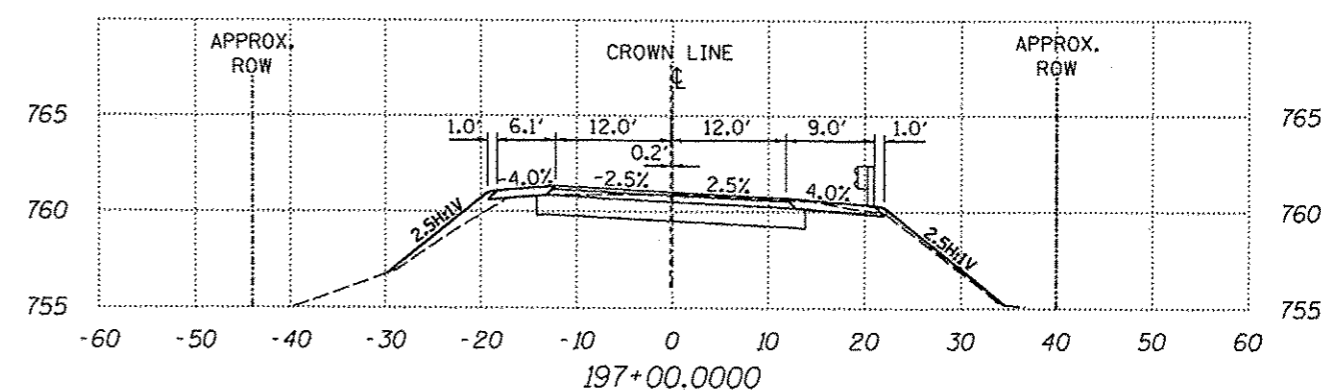
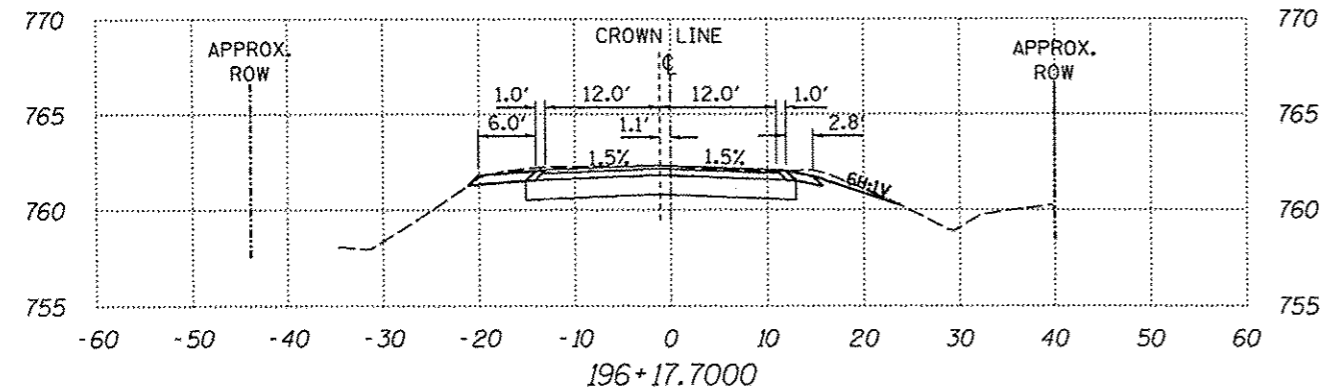
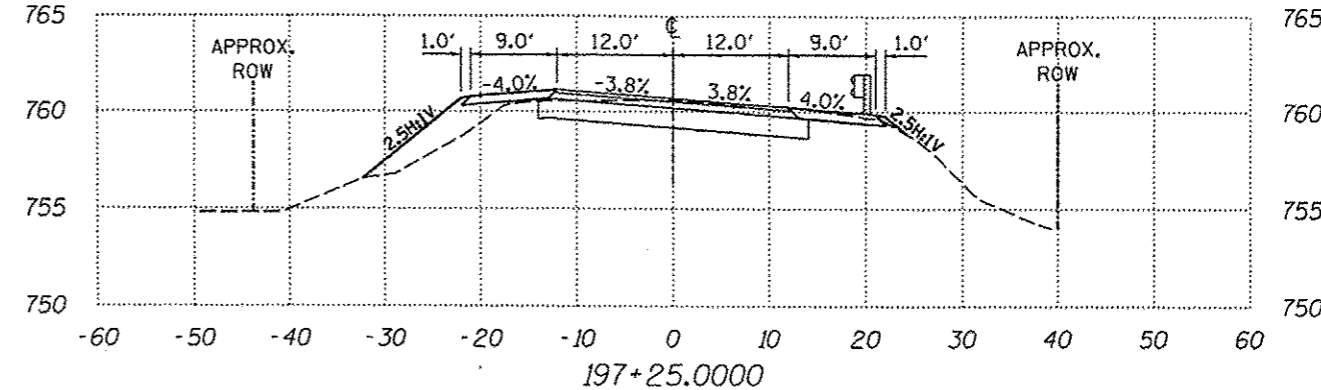
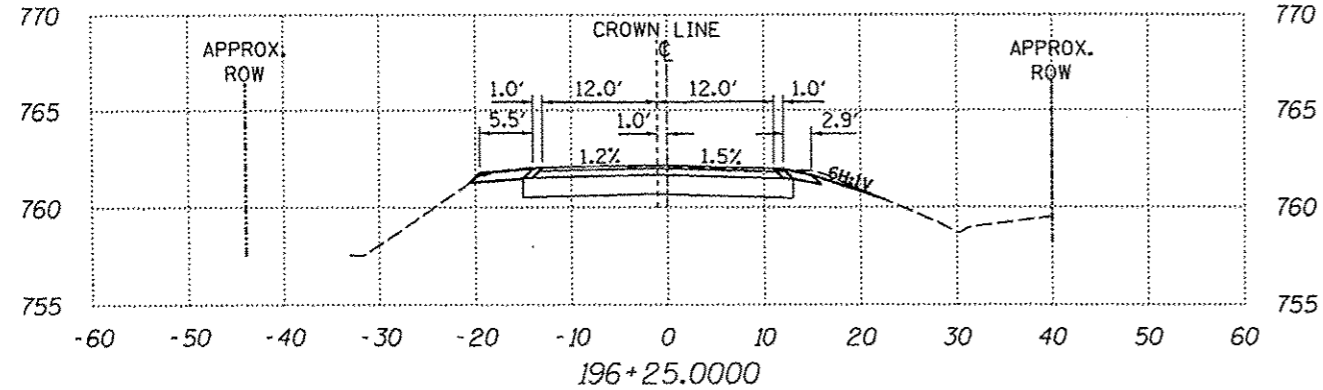
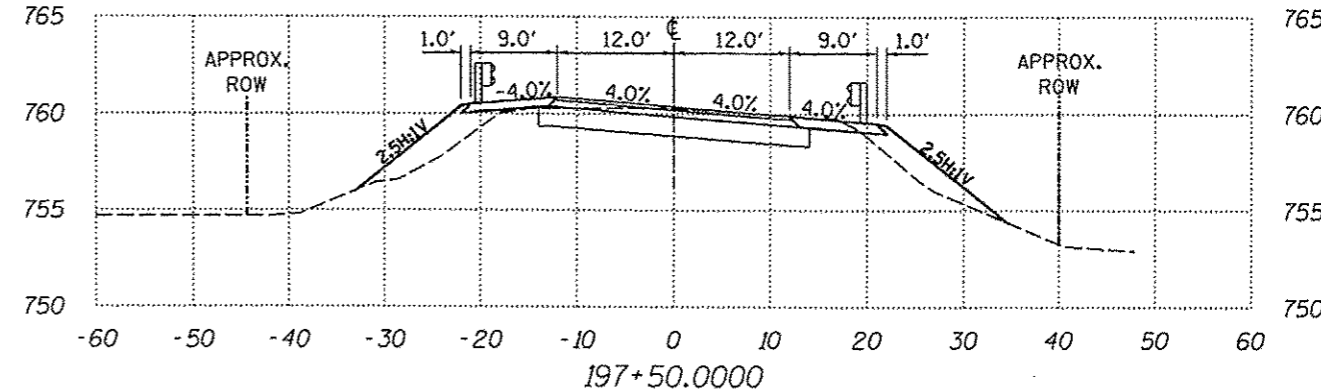
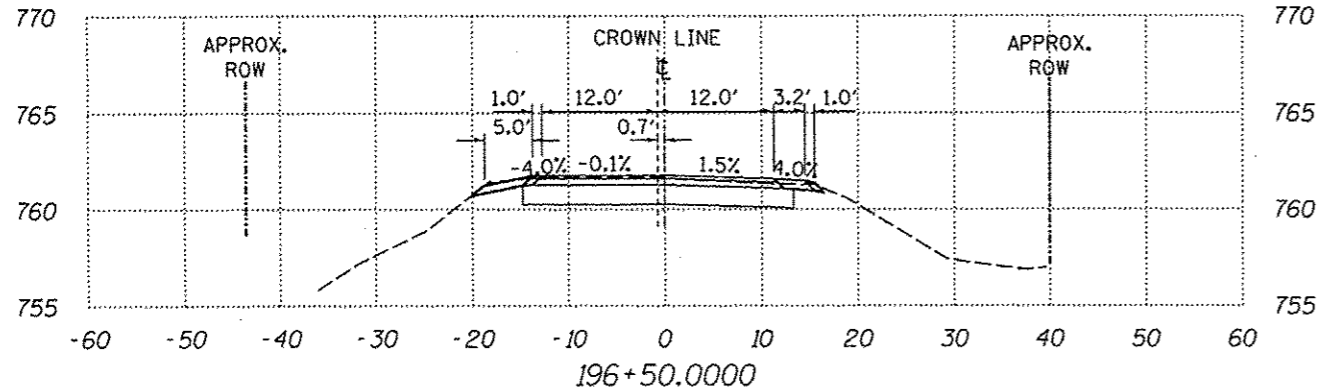
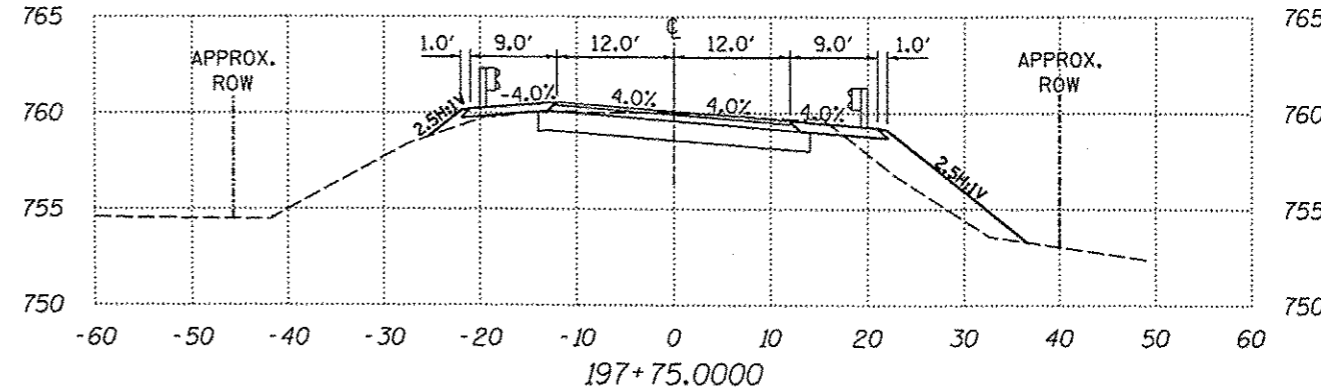
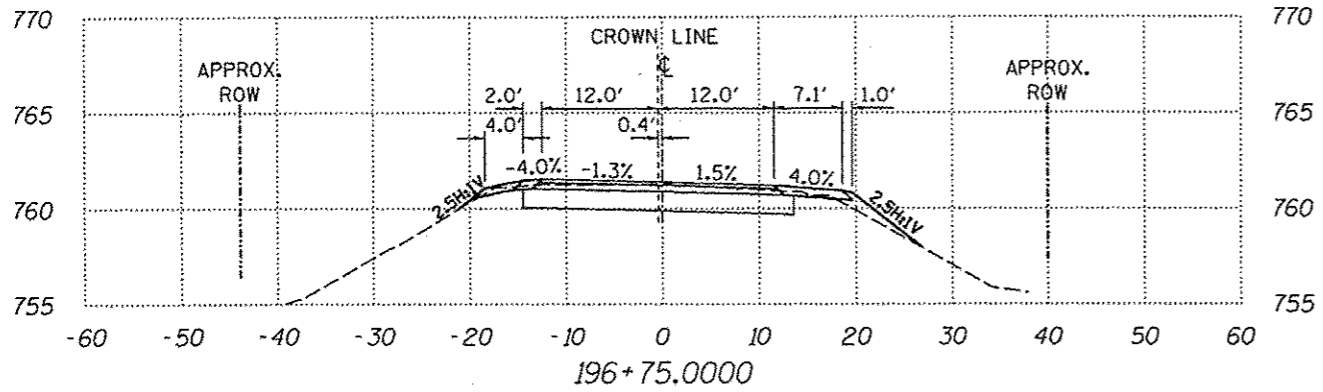
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		CHECKED -	REVISIONS
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PLOT DATE *		CHECKED - JKR	REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 101-3104

SHEET NO. 10 OF 10 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5200	12-00529-00-BR	WINNEBAGO	20	17
CONTRACT NO. 85627			ILLINOIS FED. AID PROJECT	



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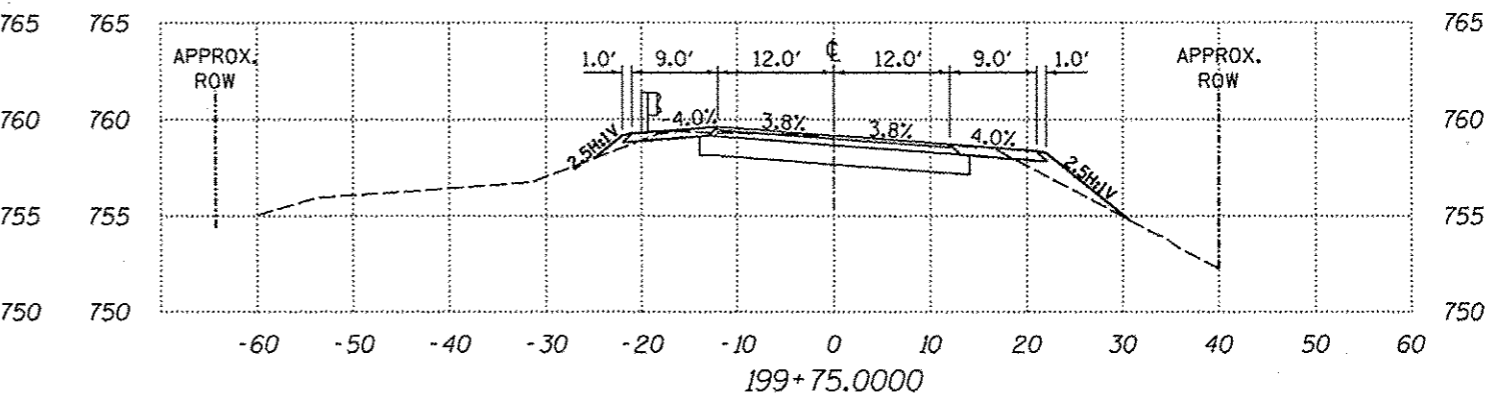
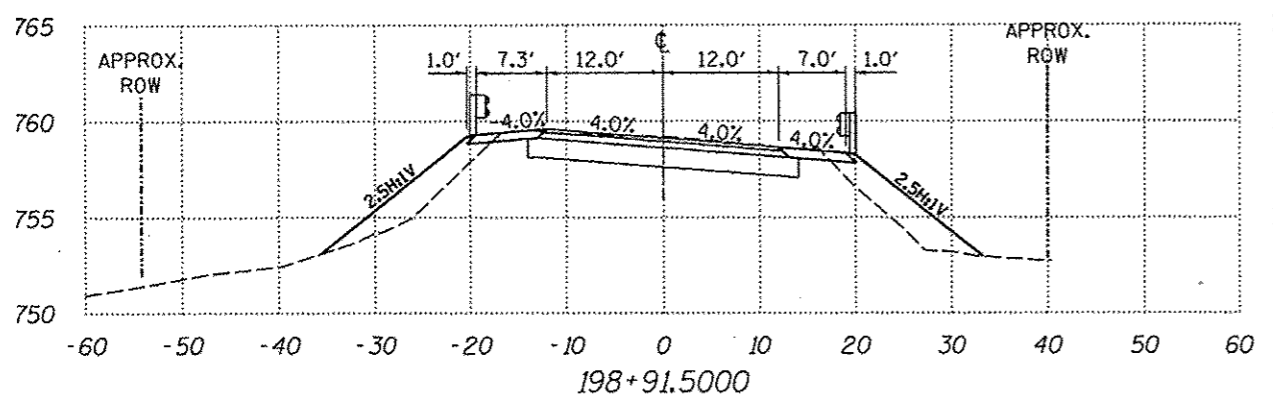
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REVIEWED: DPA 05/01/15 IN: 13 Jobs\120215\ACAD\Road\Sheet\18-180-XS.dgn

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PLOT DATE * 10/30/2015	DATE - 05/01/15	REVISED -	REVISED -

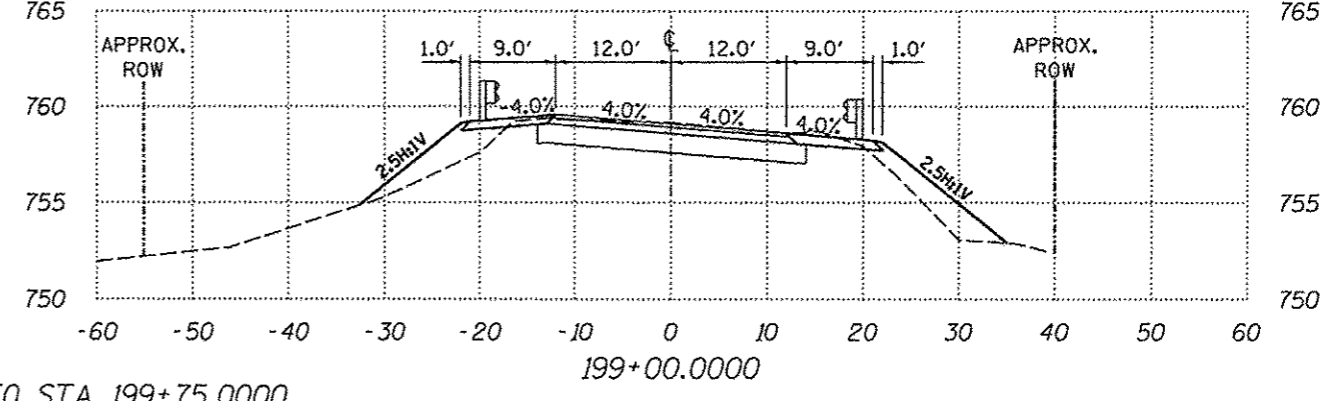
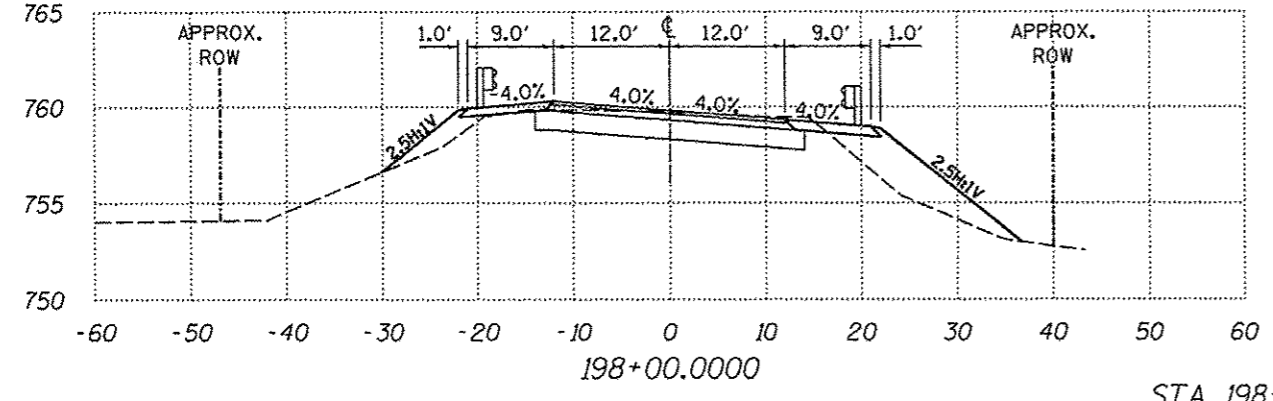
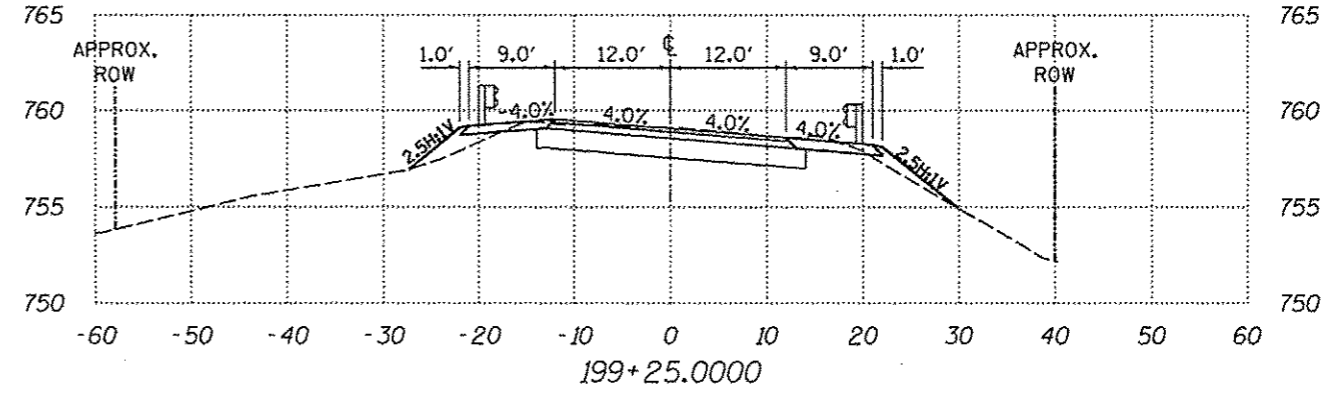
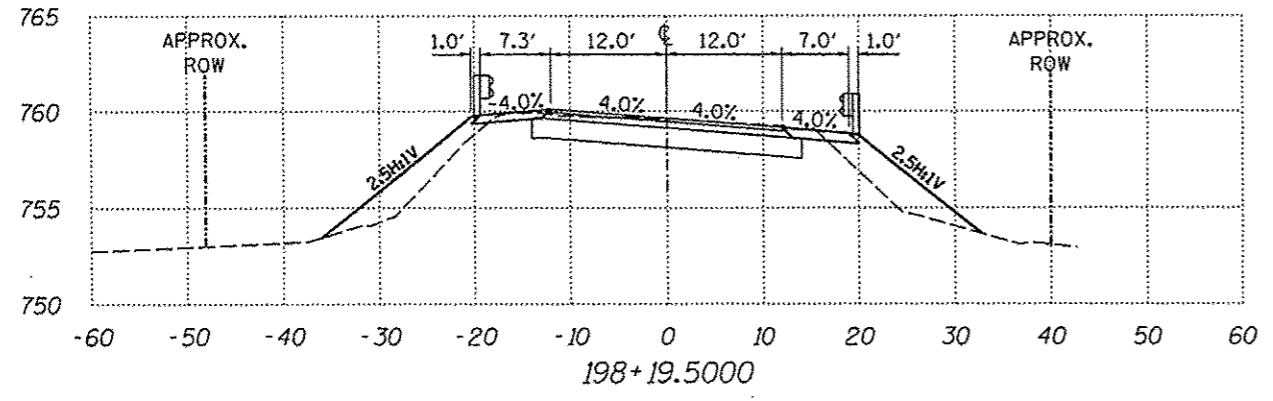
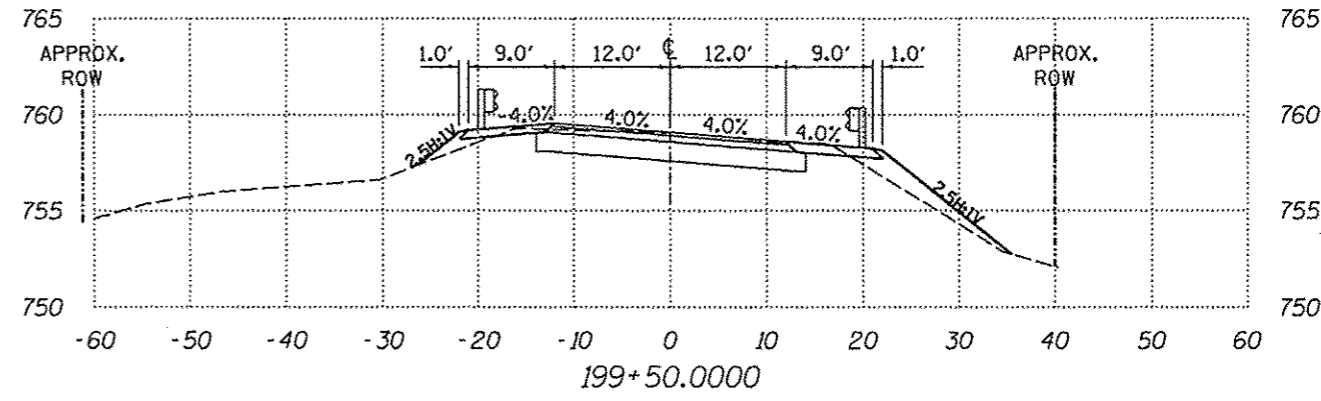
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS	
CUNNINGHAM ROAD BRIDGE REPLACEMENT	
ROCKFORD, ILLINOIS	
SHEET NO. OF	SHEETS
STA. 196+85.45 TO STA. 197+75.00	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5200	12-00529-00-BR	WINNEBAGO	20	18
CONTRACT NO. 85627				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



BRIDGE OMISSION STA. 198+19.50 TO 198+91.50

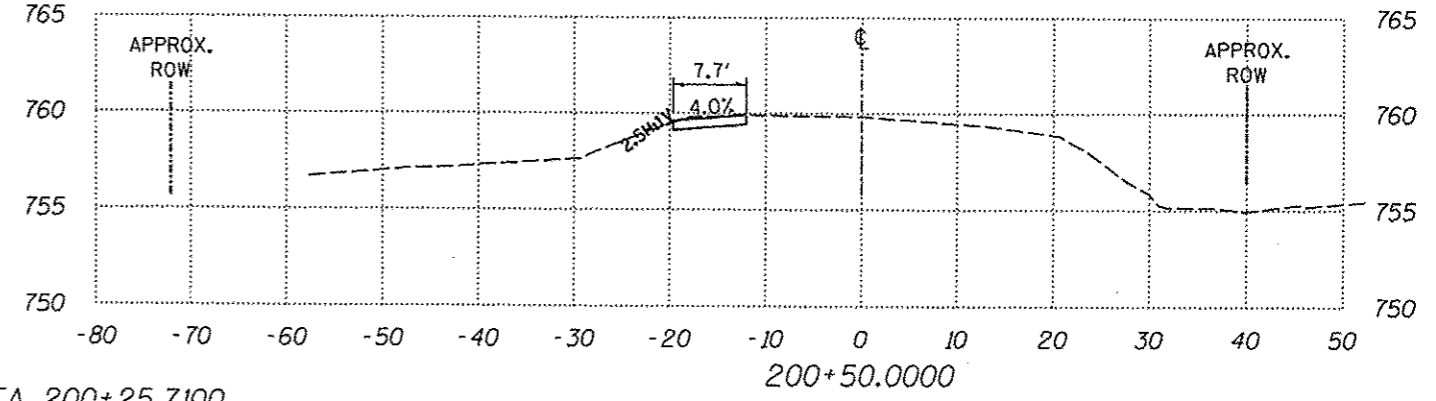
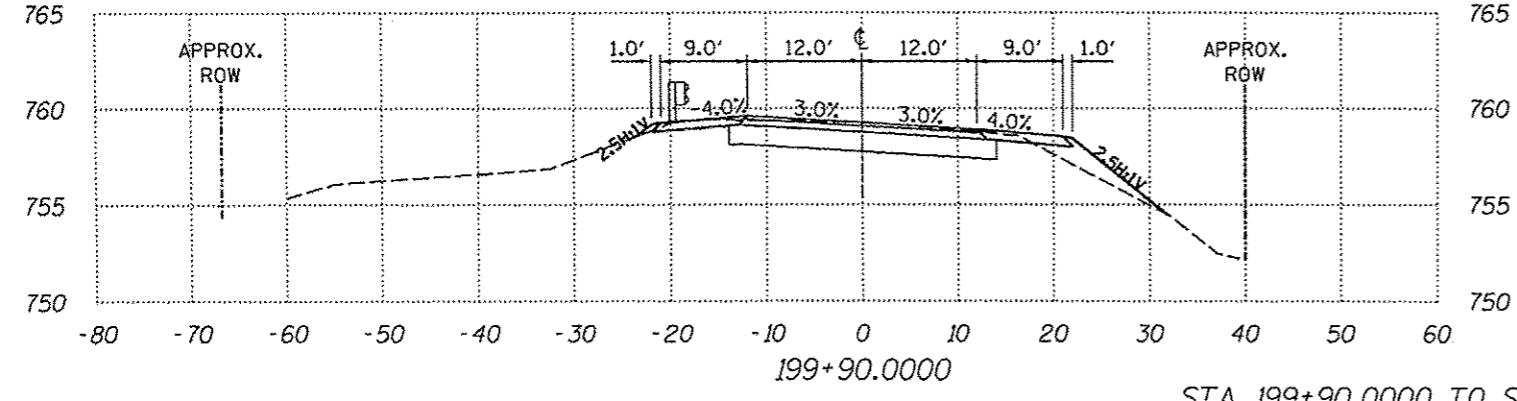
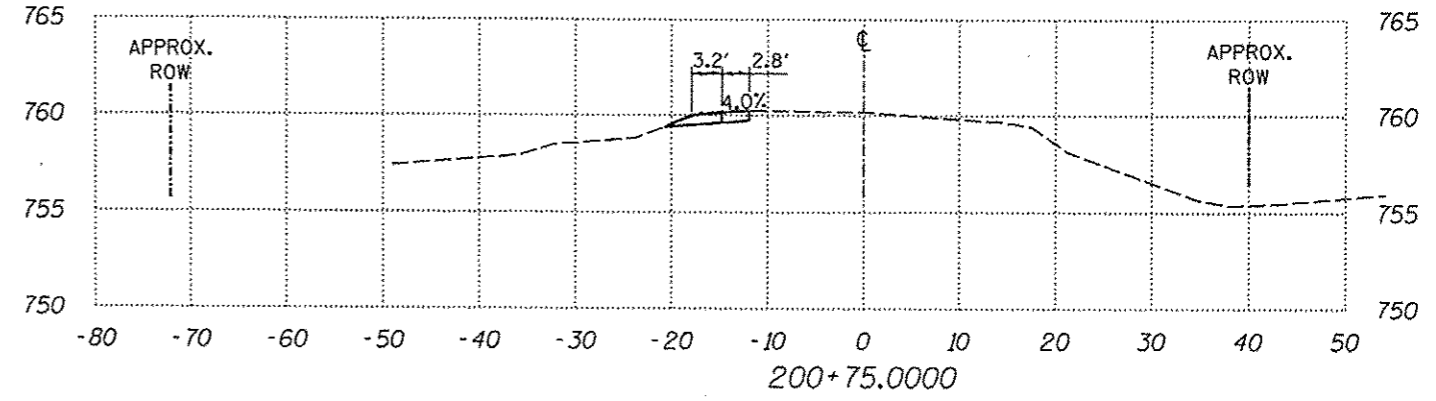
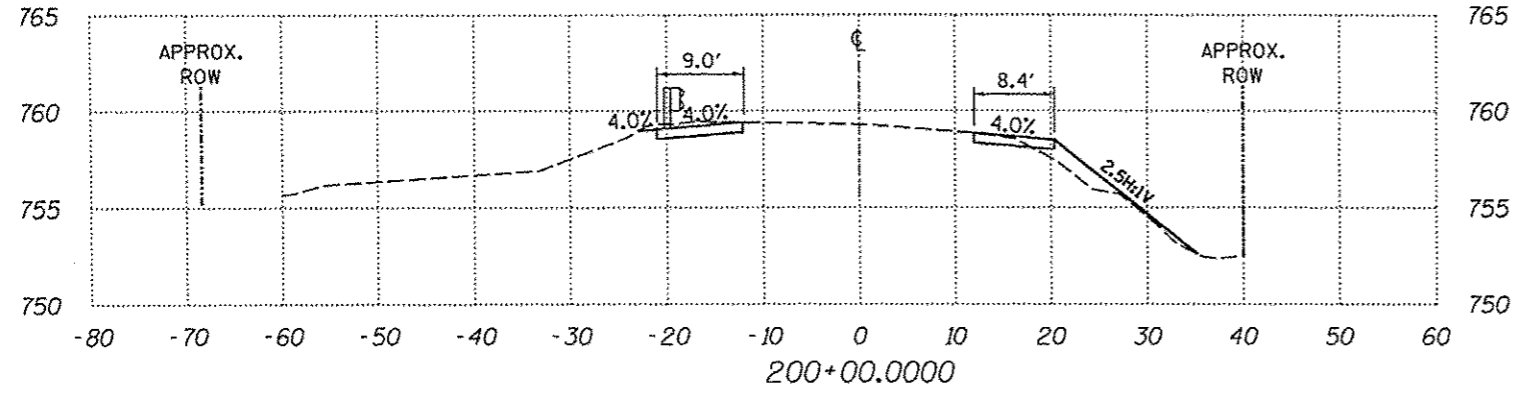
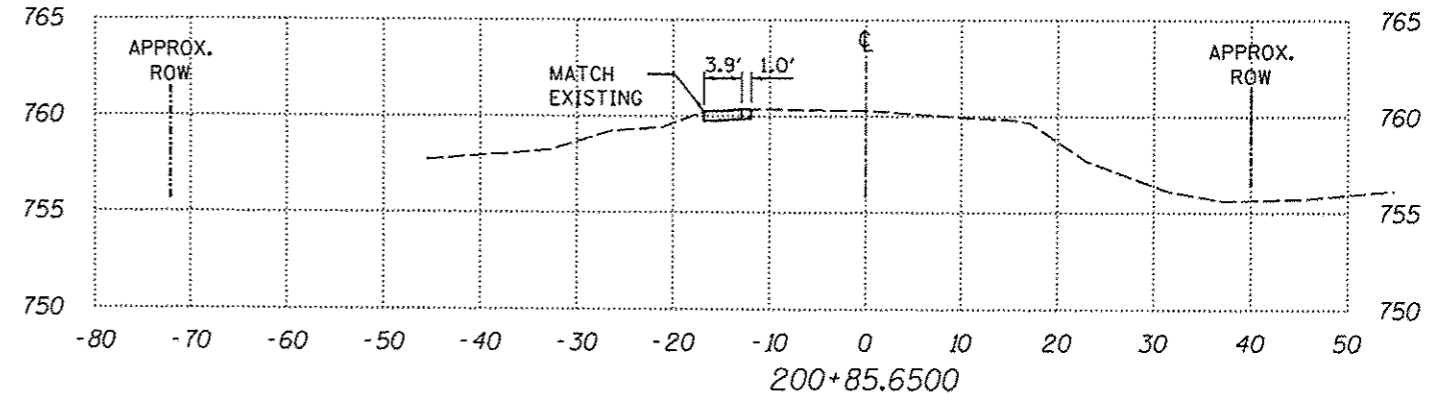
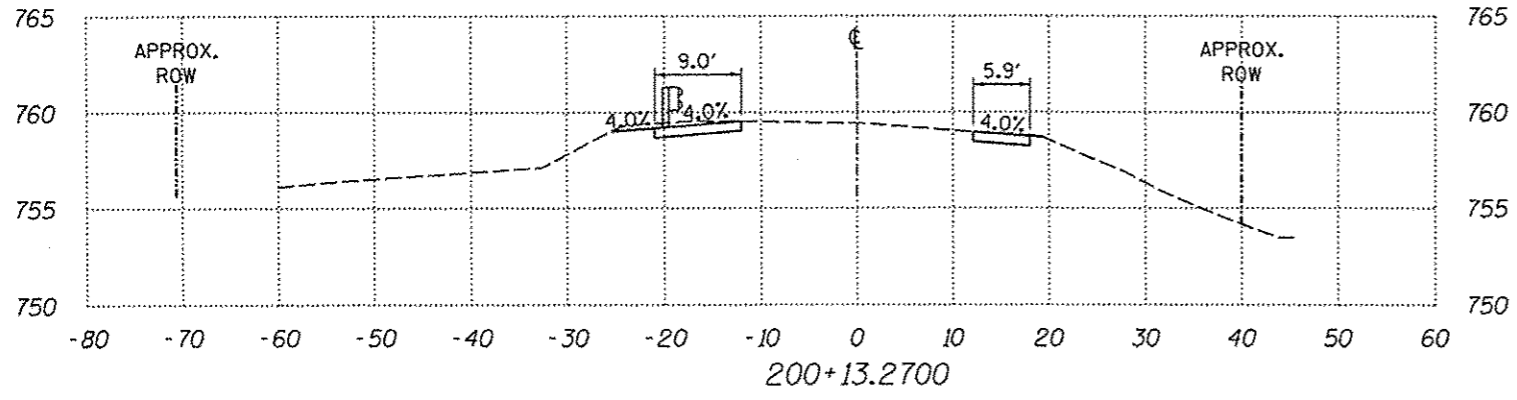
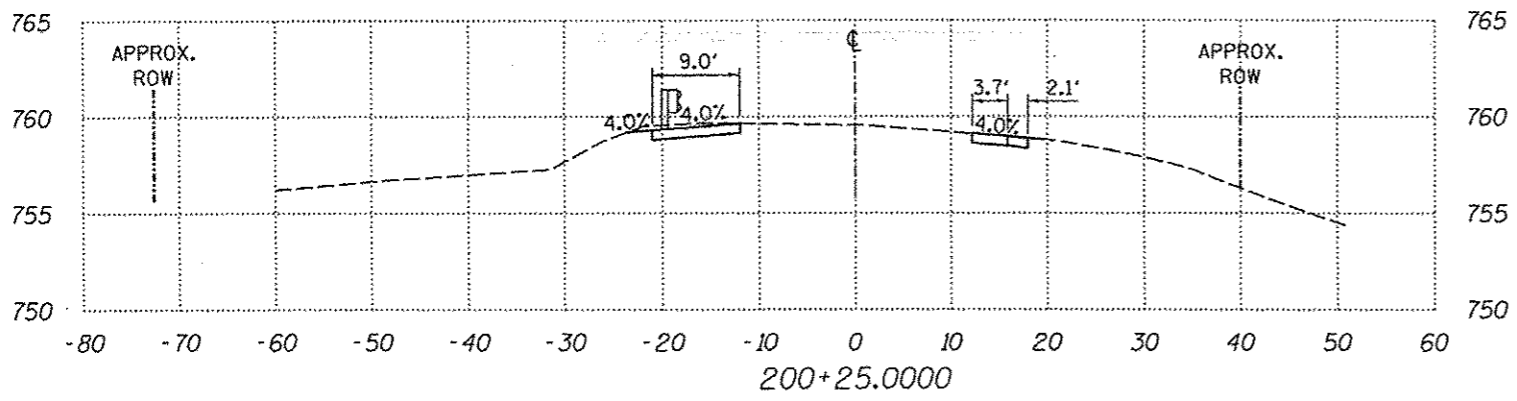


STA 198+00.0000 TO STA 199+75.0000

HANSON
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11/13/14 11/13/14 10/29/2015
JDM JDM 05/01/15 10/29/2015
REVIEWED DPA 05/01/15 10/29/2015
LAYOUT
DRAWN
CHECKED
REVIEWED

FILE NAME *	USER NAME * Mde00377	DESIGNED - DPA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS CUNNINGHAM ROAD BRIDGE REPLACEMENT ROCKFORD, ILLINOIS			F.A.U. RTE. 5200	SECTION 12-00529-00-BR	COUNTY WINNEBAGO	TOTAL SHEETS 20	SHEET NO. 19
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	PLOT DATE * 10/29/2015	CHECKED - DPA	REVISED -									
		DATE - 05/01/15	REVISED -									



STA 199+90.0000 TO STA 200+25.7100



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LAYOUT JUN 11/15/14 Mador00377
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REVISED DPA 05/01/15 1/13 jobs\13L0215\CAD\Road\Sheet\108-KS.dgn

FILE NAME =	USER NAME = Mador00377	DESIGNED - DPA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS CUNNINGHAM ROAD BRIDGE REPLACEMENT ROCKFORD, ILLINOIS		F.A.U. RTE. 5200	SECTION 12-00529-00-BR	COUNTY WINNEBAGO	TOTAL SHEETS 20	SHEET NO. 20
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PLOT DATE = 10/30/2015	DATE = 05/01/15	REVISED -	REVISED -		STA. 196+85.45 TO STA. 197+75.00		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
					STA. 196+85.45 TO STA. 197+75.00		ILLINOIS FED. AID PROJECT				