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### **IDOT DISTRICT 4 STANDARDS**

406101-D4	BUTT JOINT:	S		
530101-D4	GUARDRAIL	EROSION	CONTROL	TREATMENTS

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



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.

PROJECT ENGINEER: MATTHEW DAWSON, P.E. **PROJECT MANAGER: CINDY LOOS, P.E.** 

# **PLANS FOR PROPOSED BRIDGE REPLACEMENT**

**TOWNSHIP BRIDGE PROGRAM** TR 184 (EVANS MILL ROAD) **RADNOR TOWNSHIP PEORIA COUNTY** SECTION 17-16118-00-BR



GROSS LENGTH = 383.00 FT. = 0.07 MILE NET LENGTH = 312.64 FT. = 0.06 MILE

ADT (2017) = 200, ADT (2041) = 254, SU/MU=12% HIGHWAY CLASS: IV FUNCTIONAL CLASSIFICATION: LOCAL DESIGN SPEED: 55 MPH POSTED SPEED LIMIT: 55 MPH DESIGN POLICY: BLR MANUAL



### **GENERAL NOTES**

- 1. THE CONSTRUCTION SHALL BE GOVERNED BY THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", 2016 EDITION AND "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", 2020 EDITION.
- 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 AS APPROPRIATE.
- 3. WHERE SECTION, SUB-SECTION, 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.
- 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. ALL THE ELEVATIONS, STATIONS, AND OFFSETS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- 8. ALL PAVEMENT REMOVALS SHALL BE FULL DEPTH SAW CUT AT THE LIMITS TO BE REMOVED. THE COST OF THE SAW CUT IS INCLUDED IN PAVEMENT REMOVAL.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
- 10. EXCESS MATERIAL, IF NOT USED FOR OTHER ON-SITE PURPOSES, SHALL BE HAULED OFF-SITE AT CONTRACTOR'S EXPENSE.
- 11. THE WORK AREA SHALL BE POSITIVELY DRAINED DURING CONSTRUCTION. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.
- 12. APPLICATION RATES:

**HANSON** 

NUTRIENTS: 90 LB/ACRE (SEEDING) TEMPORARY SEEDING: 100 LB/ACRE BITUMINOUS MATERIALS (TACK COAT): 0.05 LB/SQ FT (MILLED SURFACE) 0.025 LB/SQ FT (NEW HMA SURFACE) BITUMINOUS MATERIALS (PRIME COAT): 0.25 LB / SQ FT

- 13. THE CONTRACTOR SHALL USE ANY ON SITE MATERIAL DEEMED SUITABLE BY THE ENGINEER BEFORE ANY NEW FILL IS HAULED TO THE SITE.
- 14. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
- 15. CONTRACTORS BIDDING THIS PROJECT SHALL VISIT THE SITE BEFORE BIDDING.
- 16. ENGINEERS FIELD OFFICE ADD THE FOLLOWING SENTENCE TO THE END OF PARAGRAPH 670.02 (I) AND 670.04 (E): ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.
- 17. COMPLETE ROAD CLOSURE SHALL BE USED FOR DURATION OF CONSTRUCTION IN ACCORDANCE WITH HIGHWAY STANDARDS B.L.R. 21-9 AND B.L.R. 22-7.

### UTILITIES

AMEREN (ELECTRIC)	FRONTIER COMMUNICATIONS
6 EXECUTIVE DR.	112 W. ELM STREET
COLLINSVILLE, IL 62234	SYCAMORE, IL 60178
ATTN: NATE HILL	ATTN: KALIN HINSHAW
618.301.5327	815.895.1515

### **IDOT DISTRICT 4 GENERAL NOTES**

### 107.00 COMMITMENTS

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.		CONTROL POINT	A A	OVERHEAD ELECTRIC
1. A 404 PERMIT WILL BE OBTAINED BEFORE THE PROJECT IS ADVERTISED FOR LETTING.				
<ol> <li>TREES THREE (3) INCHES OR GREATER IN DIAMETER AT BREAST HEIGHT WILL NOT BE CLEARED APRIL 1 THROUGH SEPTEMBER 30.</li> </ol>		EXISTING TELEPHONE PEDESTAL	F0 F0	FIBER OPTIC
3. A CLEAR BRIDGE ASSESSMENT FOR BATS MUST BE IN PLACE WITHIN 24 MONTHS OF CONSTRUCTION.	$\rightarrow$	EXISTING GUY		EXISTING R.O.W.
204.00 ENVIRONMENTAL REVIEWS				
PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FUE THE PEOLINEED ENVIRONMENTAL DESCUINCE PEOLICES SUBJECTS ACCORDING TO SECTION	-[]-	EXISTING POWER POLE		PROPOSED R.O.W.
107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.	Þ	EXISTING SIGN	11 11 11 11 11 11 11	TEMPORARY EASEMENT
THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:	$\odot$	EXISTING TREE	<u> </u>	EXISTING GUARDRAIL
- BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BORROW AREAS) - BDE FORM 2290 (WASTE/USE AREA REVIEW) - A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA - COLOR PHOTOGRAPHS DEPICTING THE USE AREA		EXISTING R.O.W. MARKER	·····	PROPOSED GUARDRAIL
- BORROW AREA ENTRY AGREEMENT FORM - D4 PI0101	þ	PROPOSED SIGN	- x x x x x x x	EXISTING FENCE

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

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES. THE COST ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE VARIOUS REMOVAL PAY ITEM.

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

### 606.14 TRANSITION PAYMENT METHOD - NEW/OLD CONSTRUCTION

TEN FEET (10 FT.) (3 M) TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.

USER NAME = ander00846	DESIGNED -	RDH	REVISED -				FVAN			TR BTE	SECTION	COUNTY	TOTAL S	SHEET
	DRAWN -	RLA	REVISED -	STATE OF ILLINOIS			OCNI OCNI	EDAL NOTES		184	17-16118-00-BR	PEORIA	42	2
PLOT SCALE = 10.0000 ' / in.	CHECKED -	MGD	REVISED -	DEPARTMENT OF TRANSPORTATION			GENI	CHAL NUIES				CONTRACT	NO.	
PLOT DATE = 9/15/2020	DATE -	9/16/2020	REVISED -		SCALE: NTS	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

### **LEGEND**

### 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.

	CODE NO.	ITEM	UNIT	QUANTITY
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	96
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	92
	20200100	EARTH EXCAVATION	CU YD	358
	20300100	CHANNEL EXCAVATION	CU YD	644
	20400800	FURNISHED EXCAVATION	CU YD	279
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2353
*	25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	2353
*	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	49
*	28000305	TEMPORARY DITCH CHECKS	FOOT	91
*	28000400	PERIMETER EROSION BARRIER	FOOT	460
	28100105	STONE RIPRAP, CLASS A3	SQ YD	124
	28100107	STONE RIPRAP, CLASS A4	SQ YD	663
	28200200	FILTER FABRIC	SQ YD	663
	31100100	SUBBASE GRANULAR MATERIAL, TYPE A	TON	477
;	SPECIALTY I			

IS	EVANS MILL RUAD SUMMARY OF QUANTITIES	RTE. 184 17-1	16118-00-BR	PEORIA	SHEETS NO 42 3
		TR	SECTION	COUNTY	TOTAL SHE
50300300	PROTECTIVE COAT	SQ YD	24	10	_
50300280	CONCRETE ENCASEMENT	CU YD	4	. 8	
50300260	BRIDGE DECK GROOVING	SQ YD	2	19	_
50300225	CONCRETE STRUCTURES	CU YD	46	. 6	_
					_
50200100	STRUCTURE EXCAVATION	CU YD	3	15	_
					_
52000025	PREFORMED JOINT SEAL 2"	FOOT	8	0	_
					_
50100100	REMOVAL OF EXISTING STRUCTURES	EACH		1	
					_
48100500	AGGREGATE SHOULDERS, TYPE A 6"	SQ YD	2	73	_
44000100		54 15			_
44000100	PAVEMENT REMOVAL		6	21	_
40604050	HUI-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50		8	2	_
					_
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	15	57	_
					_
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	4	1	_
					_
40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	1	75	
					_
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	15	72	_
NO.	ITEM	UNIT	QUA	NTITY	
CODE					
		1	1		_

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 9/16/2020

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 9/16/2020

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USER NAME = ander00846	DESIGNED - DRAWN -	RDH RLA	REVISED - REVISED -	STATE OF ILLINOIS			EVANS	MILL R	IOAD
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PLOT DATE = 9/15/2020	DATE -	9/16/2020	REVISED -		SCALE: NTS	SHEET	OF	SHEETS	STA.

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	CODE NO.	ITEM	UNIT	QUANTITY	
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	6310	*
_	50800515	BAR SPLICERS	EACH	64	×
	51201400	FURNISHING STEEL PILES HP10X42	FOOT	180	×
_	51202305	DRIVING PILES	FOOT	180	
	51203400	TEST PILE STEEL HP10X42	EACH	2	
_	51204650	PILE SHOES	EACH	14	
_	51500100	NAME PLATES	EACH	1	*
_	52100520	ANCHOR BOLTS, 1"	EACH	16	
_	58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	149	
_	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	73	*
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200	
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	
	67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	6	
	67100100	MOBILIZATION	L SUM	1	
* S	SPECIALTY I		 		

DRAWN RLA

CHECKED - MGD DATE - 9/16/2020

PLOT SCALE = 2.00 ' / in. PLOT DATE = 9/16/2020

REVISED -

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CODE	
NO.	ITEM
72501000	TERMINAL MARKER - DIRECT APPLIED
78200005	GUARDRAIL REFLECTORS, TYPE A
X6300155	STEEL PLATE BEAM GUARDRAIL, ATTACH
X6650202	WOVEN WIRE FENCE REMOVAL
X7010216	TRAFFIC CONTROL AND PROTECTION, (S
Z0001002	GUARDRAIL AGGREGATE EROSION CONTRO
Z0013798	CONSTRUCTION LAYOUT
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4
XX006343	SEEDING (COMPLETE)
	PRESS-BRAKE-FORMED STEEL TUB GIRDE
	ULTRA-HIGH PERFORMANCE CONCRETE (U
	1

SCALE: NTS

SHEET

OF SHEETS STA.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

 LAYOUT
 RDH
 8/10/2020

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 RLa
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 MGD
 9/16/2020

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ITEM	ι	JNIT	QUAN	ITITY	
RECT APPLIED	E	ACH	4	ļ	
TYDE A			1.	6	_
		ACH	1		
RDRAIL, ATTACHED TO STRUCTURES (SPECIAL	_) F	ООТ	15	6	_
DVAL	F	ΟΟΤ	6	0	_
PROTECTION, (SPECIAL)	L	SUM	1		_
ROSION CONTROL	т	ON	10	)5	_
	L	SUM	1		_
DGE SECTION)	s	Q YD	1	6	_
STRUCTURES 4"	F	00Т	13	8	_
	S	Q YD	23	53	
FEEL TUB GIRDER (PBFSTG) SYS.	S	Q FT	21	58	
CE CONCRETE (UHPC) JOINTS	C	CU FT	10	02	
					-
EVANS MILL ROAD	TR RTE.	S		COUNTY	TO
SUMMARY OF QUANTITIES	184	17-161	18-00-BR	PEORIA	4

	TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	184	17-16118-00-BR	PEORIA	42	4
5			CONTRACT	NO.	
TO STA.		ILLINOIS FEE	D. AID PROJECT		







USER NAME = ander00846	DESIGNED -	RDH	REVISED -				EVAN	S MILL F
	DRAWN -	RLA	REVISED -	STATE OF ILLINOIS		<b>E</b> .VI4		
PLOT SCALE = 10.00 ' / in.	CHECKED -	MGD	REVISED -	DEPARTMENT OF TRANSPORTATION		EXIS	STING	IYPICAL
PLOT DATE = 9/15/2020	DATE -	9/16/2020	REVISED -		SCALE: NTS	SHEET	OF	SHEETS

ROAD		TR RTE.		SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
SECTIONS		184	17	-1611	8-00-BR		PEORIA	42	5
S STA	το ετα				1		CONTRACT	<u>NO.</u>	
5 51A.	10 STA.				ILLINOIS	FED. AL	D PROJECT		



8/10/2020 9/16/2020 9/16/2020 RLA MGD

LAYOUT DRAWN REVIEWED

**HANSON** 

SCALE: NTS SHEET OF SHEETS

THE FOLLOWIN	HMA MIXTURE REQUIREMENTS THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:									
I: EVANS MILL ROAD										
USE(S): HMA SURFACE COURSE HMA BINDER COURSE										
	PG 58-22 PG 58-22									
AIR VOIDS:	4.0% @ N-50	4.0% @ N-50								
COMPOSITION: ION MIXTURE)	IL 9.5	IL 19.0								
AGGREGATE:	MIXTURE C	N/A								
WEIGHT:	112 LB/SQ YD/IN	112 LB/SQ YD/IN								
YANAGEMENT QC/QA QC/QA										
SIZE:	N/A	N/A								

	-
PV = 88% $SU = 9%$ $MU = 3%$	
ROAD/STREET CLASSIFICATION: CLASS <u>IV</u>	
PERCENTAGE OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE	
P = 50% $S = 50%$ $M = 50%$	
TRAFFIC FACTOR: ACTUAL TF = $N/A$ AC TYPE = $N/A$	_
MINIMUM TF = $N/A$	
PG GRADE: Binder= $58-22$ Surface = $58-22$	
SUBGRADE SUPPORT RATING:	
SSR = <u>POOR</u> (STA. <u>11+80.00</u> TO <u>15+63.00</u>	)
SSR = (STA TO	_ )

)		TR BTE	SECTION		COUNTY	S	HEETS	SHE
8	LANE SLOPE - RIGHT STA. 11+80.00 TO STA. STA. 15+53.00 TO STA.	11+90.00 15+63.00	0 = -1.26% 0 = -1.95%					
7	LANE SLOPE - LEFT STA. 11+80.00 TO STA. STA. 15+53.00 TO STA.	11+90.00 15+63.00	0 = -4.53% 0 = -4.63%					
6	SHOULDER WIDTH - LEF STA. 11+64.08 TO STA. STA. 11+86.92 TO STA. STA. 15+53.00 TO STA.	T 11+86.92 11+90.00 15+83.92	2 = TRANSITION 0 = 4.00' 2 = 0.00'	FROM 0	0.00' TO 4	.00'		
5	GUARDRAIL AGGREGATE STA. 11+64.08 TO STA. STA. 11+86.92 TO STA. STA. 15+53.00 TO STA.	WIDTH 11+86.92 11+90.00 15+83.92	- LEFT 2 = 0.00' 0 = TRANSITION 2 = 0.00'	FROM 0	0.00' TO 0	.50'		
4	GUARDRAIL AGGREGATE STA. 11+64.00 TO STA. STA. 15+53.00 TO STA. STA. 15+66.31 TO STA.	WIDTH - 11+90.00 15+66.3 15+83.92	- RIGHT 0 = 0.00' 1 = TRANSITION 2 = 0.00'	FROM 3	8.02' TO 0	0.00'		
З	SHOULDER WIDTH - RIG STA. 11+64.08 TO STA. STA. 15+53.00 TO STA. STA. 15+66.31 TO STA.	HT 11+90.00 15+66.3 15+83.92	0 = 0.00' 1 = 4.00' 2 = TRANSITION	FROM 4	.00' TO 0	0.00'		
2	LANE WIDTH - RIGHT STA. 11+64.08 TO STA. STA. 15+53.00 TO STA.	11+90.00 15+83.92	0 = TRANSITION 2 = TRANSITION	FROM 7 FROM 8	7.62' TO 7 8.39' TO 8	.27' .92'		
1	LANE WIDTH - LEFT STA. 11+64.08 TO STA. STA. 15+53.00 TO STA.	11+90.00 15+83.92	0 = TRANSITION 2 = TRANSITION	FROM 9 FROM 1	76 TO 9 154 TO	94 11.4	3'	

F	ROAD		TR RTE.	SEC	FION		COUNTY	TOTAL SHEETS	SHEET NO.
ı.	SECTIONS		184	17-161	18-00-BP		PEORIA	42	6
-	320110113						CONTRACT	NO.	
S	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		



OUT RDH WN RLA IEWED MGD DEL: Default : NAME: 1:19jobs/19L01

**HANSON** 

USER NAME = ander00846	DESIGNED -	RDH	REVISED -				<b>EVAN</b>	s MILL	ROAD		TR	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	RLA	REVISED -	STATE OF ILLINOIS				TVDIOAL	OFOTIONO		184	17-16118-00-BR	PEORIA	42	7
PLOT SCALE = 10.00 ' / in.	CHECKED -	MGD	REVISED -	DEPARTMENT OF TRANSPORTATION		PK	UP02ED	TYPICAL	SECTIONS				CONTRACT	í NO.	
PLOT DATE = 9/15/2020	DATE -	9/16/2020	REVISED -		SCALE: NTS	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		
														-	-

L	E	G	E	Ν	С

Ð.	HOT-MIX	ASPHALT	SURFACE	COURSE,	IL-9.5,	MIX	"C",	N50,	2''
----	---------	---------	---------	---------	---------	-----	------	------	-----

- B HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 4"
- C SUBBASE GRANULAR MATERIAL, TYPE A, 12"
- (D) AGGREGATE SHOULDERS, 6"
- (E) GUARDRAIL AGGREGATE EROSION CONTROL, 8"
- (F) STEEL PLATE BEAM GUARDRAIL, TYPE A
- G TOPSOIL FURNISH AND PLACE, 4"
- (H) RIPRAP, CLASS A4
- I RIPRAP, CLASS A3

 LANE WIDTH - LEFT STA. 11+90.00 TO STA. 12+40.00 = TRANSITION FROM 9.94' TO 11.00' STA. 12+40.00 TO STA. 15+20.00 = 11.00' STA. 15+20.00 TO STA. 15+53.00 = TRANSITION FROM 11.00' TO 11.54'
 LANE WIDTH - RIGHT STA. 11+90.00 TO STA. 12+40.00 = TRANSITION FROM 7.27' TO 11.00' STA. 12+40.00 TO STA. 15+20.00 = 11.00' STA. 15+20.00 TO STA. 15+53.00 = TRANSITION FROM 11.00' TO 8.39'
 SHOULDER WIDTH - RIGHT STA. 11+90.00 TO STA. 12+00.05 = TRANSITION FROM 2.30' TO 4.00'

- STA. 11+90.00 TO STA. 12+00.05 = TRANSITION FROM 2.30' TO 4.00 STA. 12+00.05 TO STA. 15+53.00 = 4.00'
- GUARDRAIL AGGREGATE WIDTH RIGHT
   STA. 11+90.00 TO STA. 12+13.80 = 0.00'
   STA. 12+13.80 TO STA. 12+37.80 = TRANSITION FROM 0.00' TO 4.00'
   STA. 12+37.80 TO STA. 15+20.16 = 4.00'
   STA. 15+20.16 TO STA. 15+35.92 = TRANSITION FROM 4.00' TO 5.26'
   STA. 15+35.92 TO STA. 15+53.00 = TRANSITION FROM 5.26' TO 3.02'
- 5 GUARDRAIL AGGREGATE WIDTH LEFT STA. 11+90.00 TO STA. 12+12.08 = TRANSITION FROM 0.50' TO 4.00' STA. 12+12.08 TO STA. 15+10.20 = 4.00' STA. 15+10.20 TO STA. 15+34.20 = TRANSITION FROM 4.00' TO 0.00' STA. 15+34.20 TO STA. 15+53.00 = 0.00'
- 6 SHOULDER WIDTH LEFT STA. 11+90.00 TO STA. 15+42.66 = 4.00' STA. 15+42.66 TO STA. 15+53.00 = TRANSITION FROM 4.00' TO 0.00'
- TOPSOIL SLOPE LEFT
   STA. 11+90.00 TO STA. 12+91.46 = 2.5:1
   STA. 12+91.46 TO STA. 13+11.46 = TRANSITION FROM 2.5:1 TO 2:1
   STA. 13+11.46 TO STA. 13+01.27 = 2:1
   STA. 14+01.27 TO STA. 14+21.27 = TRANSITION FROM 2:1 TO 2.5:1
   STA. 14+21.27 TO STA. 15+53.00 92 = 2.5:1
- 8 TOPSOIL SLOPE RIGHT STA. 11+90.00 TO STA. 13+26.73 = 2.5:1 STA. 13+26.73 TO STA. 13+46.73 = TRANSITION FROM 2.5:1 TO 2:1 STA. 13+46.73 TO STA. 14+36.54 = 2:1 STA. 14+36.54 TO STA. 14+56.54 = TRANSITION FROM 2:1 TO 2.5:1 STA. 14+56.54 TO STA. 15+53.00 = 2.5:1
- LANE SLOPE LEFT
   STA. 11+90.00 TO STA. 12+50.00 = TRANSITION FROM -4.53% TO -2.00%
   STA. 12+50.00 TO STA. 14+88.00 = -2.00%
   STA. 14+88.00 TO STA. 15+53.00 = TRANSITION FROM -2.00% TO -4.63%

ID LANE SLOPE - RIGHT STA. 11+90.00 TO STA. 12+50.00 = TRANSITION FROM -1.26% TO -2.00% STA. 12+50.00 TO STA. 15+51.00 = -2.00% STA. 15+51.00 TO STA. 15+53.00 = TRANSITION FROM -2.00% TO -1.95%

SHOULDER SLOPE - LEFT
 STA. 11+90.00 TO STA. 13+08.24 = -4.00%
 STA. 13+08.24 TO STA. 13+26.24 = TRANSITION FROM -4.00% TO -2.00%
 STA. 13+26.24 TO STA. 13+9.95 = -2.00%
 STA. 13+99.95 TO STA. 14+17.95 = TRANSITION FROM -2.00% TO -4.00%
 STA. 14+17.95 TO STA. 15+53.00 = -4.00%

 12
 SHOULDER SLOPE - RIGHT

 STA. 11+90.00 TO STA. 13+30.05 = -4.00%

 STA. 13+30.05 TO STA. 13+48.05 = TRANSITION FROM -4.00% TO -2.00%

 STA. 13+48.05 TO STA. 14+21.76 = -2.00%

 STA. 14+21.76 TO STA. 14+39.76 = TRANSITION FROM -2.00% TO -4.00%

 STA. 14+39.76 TO STA. 15+53.00 = -4.00%

EARTHWORK SUMMARY										
		20200100	20300100				20400800			
LOCA	TION	EARTH EXCAVATION	CHANNEL EXCAVATION	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR 25% SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	FURNISHED EXCAVATION			
BEGIN STATION	END STATION	CU YD		CU YD	CU YD	CU YD	CU YD			
EVANS M	IILL ROAD									
11+80.00	13+54.77	148		111	271	-160	160			
13+93.23	15+63.00	210		158	244	-86	86			
0.00										
CREEK			044							
100+14.72	101+39.66		644		33	-33	33			
то	TAL	358	644	269	548	-279	279			

			GUARDRAIL SCHI	EDULE		
		63000001	63100167	72501000	78200005	Z0001002
LOCATION		STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS		TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE A	GUARDRAIL AGGREGATE EROSION CONTROL
<b>BEGIN STATION</b>	END STATION	FOOT	EACH	EACH	EACH	TON
EVAN	S MILL					
11+64.08	13+38.82	100	2	2	8	51
14+09.18 15+83.92		100	2	2	8	54
TO	TAL	200	4	4	16	105

	RE	MOVAL SCHEDULE		
		40600982	44000100	X6650202
1.000		HOT-MIX ASPHALT		WOVEN
LUCA	TION	SURFACE REMOVAL -		WIRE FENCE
		BUTT JOINT	REIVIOVAL	REMOVAL
BEGIN STATION END STATION		SQ YD	SQ YD	FOOT
EVAN	S MILL			
11+64.08	13+38.82	19	297	
14+09.18 15+83.92		22	324	60
TO	TAL	41	621	60

		TOPSOIL A	ND SEEDING SCH	HEDULE		
		21101615	25100635	28000250	28000400	XX006343
LOCA	TION	TOPSOIL FURNISH AND PLACE, 4"	HEAVY DUTY EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING	PERIMETER EROSION BARRIER	SEEDING (COMPLETE)
<b>BEGIN STATION</b>	END STATION	SQ YD	SQ YD	POUND	FOOT	SQ YD
EVANS MILL						
11+64.08	13+38.82	1,191	1,191	25	446	1,191
14+09.18	15+83.92	1,162	1,162	24	14	1,162
TOTAL		2,353	2,353	49	460	2,353

		HM	IA PAVEMENT AN	D SHOULDER SCH	HEDULE		
		31100100	40600275	40600295	40603080	40604050	48100500
LOCA	ATION	SUBBASE GRANULAR MATERIAL, TYPE A	BITUMINOUS MATERIALS (PRIME COAT)	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, IL- 9.5,MIX "C", N50	AGGREGATE SHOULDERS, TYPE A 6"
<b>BEGIN STATION</b>	END STATION	TON	POUND	POUND	TON	TON	SQ YD
EVANS	S MILL						
11+64.08	13+38.82	239	789	87	79	41	138
14+09.18	15+83.92	238	783	88	78	41	135
TO	TAL	477	1,572	175	157	82	273

TEMPORA	SCHEDULE	
		28000305
LOCA	ATION	TEMPORARY
		DITCH CHECKS
STATION	OFFSET	FOOT
EVAN		
13+91.89	7	
14+13.76	7	
14+37.10	45.12' LT	7
14+43.57	42.46' LT	7
14+50.15	39.75' LT	7
14+56.66	37.07' LT	7
14+63.03	34.45' LT	7
14+69.66	31.72' LT	7
14+76.18	29.04' LT	7
14+82.69	26.36' LT	7
14+89.19	23.69' LT	7
14+97.87 22.30' LT		7
15+24.45	7	
TO	91	

	IREE REI	MOVAL SCHEDULE	
		20100110	
1.00		TREE REMOVAL	٦T
200/		(6 TO 15 UNITS	(0
		DIAMETER)	
STATION	OFFSET	UNIT	
EVAN	S MILL		
13+04.19	25.27' RT		
13+53.96	28.86' RT	8	
13+76.00	32.21' RT	12	
13+79.16	29.74' RT		
14+45.09	15.54' RT	12	
14+56.43	19.42' RT		
14+67.80	21.34' RT	12	
14+83.47	22.36' RT	12	
15+06.64	28.96' RT		
15+24.62	16.20' RT	8	
15+25.40	20.29' RT	8	
15+33.21	19.87' RT	12	
15+37.85	25.46' RT	12	
TO	TAL	96	

F	E	
		28100105
LOCA	STONE RIPRAP,	
	CLASS A3	
BEGIN STATION	SQ YD	
EVAN		
11+64.08	13+38.82	
14+09.18	124	
TO	TAL	124

		TOPSOIL A	ND SEEDING SCI	HEDULE		
		21101615	25100635	28000250	28000400	
LOCATION BEGIN STATION END STATION EVANS MILL 11+64.08 13+38.82 14+09.18 15+83.92		LOCATION TOPSOIL FURNISH AND PLACE, 4"		TEMPORARY EROSION CONTROL SEEDING	PERIMETER EROSION BARRIER	; (C
		SQ YD	SQ YD	POUND	FOOT	
		11+64.08 13+38.82 1,191		25	446	
		1,162	1,162	24	14	
	<b>T</b> A1	0.050	0.050	40	460	

LAYOUT	RDH	8/10/2020
DRAWN	RLA	9/16/2020
REVIEWED	MGD	9/16/2020
MODEL: De	efault	
FILE NAME:	I:\19jobs\19L0	194\CAD\Road\S

USER NAME = ander00846	DESIGNED -	RDH	REVISED -				EVA	IS MILL	ROAD	TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET
	DRAWN -	RLA	REVISED -	STATE OF ILLINOIS			CONCOUR		ANTITICO	184	17-16118-00-BR	PEORIA	42	8
PLOT SCALE = 2.00 ' / in.	CHECKED -	MGD	REVISED -	DEPARTMENT OF TRANSPORTATION		_	30UEDO	.c	ANTITES			CONTRAC	T NO.	
PLOT DATE = 9/15/2020	DATE -	9/16/2020	REVISED -		SCALE: NTS	SHEET	OF	SHEETS	MILL ROAD OF QUANTITIES         TR. RTE.         SECTION         COUNT           184         17-16118-00-BR         PEORIA CONTRA           SHEETS         STA.         ILLINOIS         FED. AID PROJECT	ED. AID PROJECT				

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HANSON

8/10/2020 9/16/2020 9/16/2020 RDH RLA MGD LAYOUT DRAWN REVIEWED

			ĕ→Z	
		0 50	100	150
Y WAGENBACH WAGENBACH		SCALE IN FEET		
-N = 1525851.08				
E = 2415603.13				
	EXI	STING_R_O.W		
VIIII EVANS MILL ROA	D			
- 	FXI			
ILL ROAD	Em	511110 11.0.1		
STEVEN MAXWELL				
		11.00 11.01		
BENCHMARK #1	ST/ CO ±1	4. 14+96.11, 31.83' LT., TTON SPINDLE IN EAST F 00' NORTH OF BRIDGE.	ELEV. = 676 ACE OF POV	VER POLE
ROAD	TR RTE. 184	SECTION 17-16118-00-BR	COUNTY PEORIA	TOTAL SHEE SHEETS NO. 42 9

Δ	RKS AND	TIES	184	17-161	PEORIA	42	9		
		TIE8					CONTRACT	NO.	
٢S	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		

TIMOTHY WAGENBACH TRICIA WAGENBACH TODD COULTER KIMBERLY COULTER – STA. 11+90.00, 9.94' LT. END HOT-MIX ASPHALT SURFACE REMOVAL -STA. 15+53.00, 11.54' LT.– END PAVEMENT REMOVAL BEGIN HOT-MIX ASPHALT SURFACE REMOVAL -BUTT JOINT BEGIN PAVEMENT REMOVAL STA. 13+56.35, 10.07 LT BUTT JOINT END PAVEMENT REMOVAL STA. 11+80.00, 9.79' LT. — BEGIN HOT-MIX ASPHALT 0 PROPOSED R.O. PROPOSED R.O.W. SURFACE REMOVAL -- STA 13+80-25, 9.07 LT. BEGIN PAVEMENT REMOVAL E BUTT JOINT ¥ EXISTING R.O.W. SIGN AND POST REMOVAL SIGN AND POST REMOVAL SIGN AND POST REMOVAL SIGN AND POST REMOVAL <sup>3″</sup>∕∕∕~~∕×<sup>12.</sup>"\_. X12 ×<sup>36</sup> ×<sup>12</sup> ×<sup>12"</sup>  $\Join^{16"}$ ×<sup>22"</sup>  $\boxtimes^8$ \*-STA. 13+56.16, 5.93' RT. -END PAVEMENT REMOVAL  $\times^{10}_{12"}$ EXISTING R.O.W. STA 11+90.00, 7.27 RT. END HOT-MIX ASPHALT SURFACE REMOVAL -STA. 11+80.00, 7.40' RT.— BEGIN HOT-MIX ASPHALT SURFACE REMOVAL -F PROPOSED R.O.W. PROPOSED R.O.W. 
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 BUTT JOINT BUTT JOINT BEGIN PAVEMENT REMOVAL TEMPORARY EASEMENT SEE STRUCTURAL PLANS FOR RETAINING WAL REMOVAL TRUST NO. FB 2376-07 MGD RDH JSER NAME = ander00846 DESIGNED -RDH REVISED EVANS MILL ROAD STATE OF ILLINOIS LAYOUT DRAWN REVIEWED DRAWN -RLA REVISED **REMOVAL PLAN** LOT SCALE = 40.00 ' / in. CHECKED · MGD REVISED **DEPARTMENT OF TRANSPORTATION** 

**HANSON** 

LOT DATE = 9/15/2020

DATE

9/16/2020

REVISED



JVAL PL	JVAL FLAN					CONTRACT	NO.
SHEETS	STA.	TO STA.		ILLINOIS	FED. A	D PROJECT	

SCALE: 1"=20' SHEET

OF





BRANCH HICKORV RUN TIMOTHY WAGENBACH TRICIA WAGENBACH TODD COULTER KIMBERLY COULTER PERIMETER EROSION BARRIER, 14 LF STA. 13+38.24 -STA 13+91.89 53.00 LT. 46.96 LT. STA 14+13.76 48.47' LT. PERIMETER EROSION BARRIER, 156 LF-STA. 13+38.24-51.64 LT 9 @ 7' SPACING - STA. 14+89.19 23.69' LT. STA. 13+21.39-STA. 13+44.06 50.00' LT. STA. 11+80.87-50.00' LT. 40.38' LT. TEMPORARY EASEMENT TEMPORARY EASEMEN TO TO TO TA EXISTING R.O.W BEGIN IMPROVEMENTS -STA F01+80.00F0 STA. 13+21.39 **HANSON EVANS MILL ROAD** 34.90 LT. 15+00 HITHIT EXISTING R.O.W. STA. 13+01.51 37.00 RT. STA. 11+90.00 37.00' RT. TEMPORARY EASEMENT TEMPORARY EASEMENT STA. 13+01.65 57.00' RT. STA. 14+20.02-STA. 13+88.51 PERIMETER EROSION BARRIER, 291 LF 57.00 RT 31.07 RT TRUST NO. FB 2376-07 STONE RIPRAP, CLASS A3 SECTION A-A RDH MGD JSER NAME = ander00846 DESIGNED -RDH REVISED EVANS MILL ROAD LAYOUT DRAWN REVIEWED STATE OF ILLINOIS DRAWN RLA REVISED **EROSION CONTROL PLAN** LOT SCALE = 40.00 ' / in. CHECKED · MGD REVISED **DEPARTMENT OF TRANSPORTATION** SCALE: 1"=20' SHEET OF LOT DATE = 9/15/2020 DATE REVISED 9/16/2020









DESIGN SPECIFICATIONS 2017 AASHTO LRFD Bridge Design

Specifications, 8th Edition

LOADING HL-93

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

### SEISMIC DATA

Seismic Performance Zone (SPZ) =1 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.077 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.132 Soil Site Class = C

### DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi fy = 60,000 psi (Reinforcement)

### PREFABRICATED UNITS

f'c = 6.500 psify = 60,000 psi (Reinforcement)

fy = 65,000 psi (A572 Grade 65) (Primary Members) fy = 50,000 psi (M270 Grade 50) (Secondary Members)

Drainag = 0.76	e Area Sq. Miles	5	Existi Propose	ng Low ( ed Low (	Grade E Grade E	lev. 674 lev. 674	4.46 @ 4.62 @	Sta. 13 Sta. 13	8+55.05 +27.55
nd	Freq.	Q	Openi	ng Ft²	Nat.	Head	- Ft.	Headwa	ater El.
54	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
	10	465	118	147	666.6	0.4	0.3	667.0	666.9
ign	20	595	128	165	667.1	0.6	0.5	667.7	667.6
	50	774	138	184	667.6	0.9	0.8	668.5	668.4
е	100	920	147	199	668.0	1.3	1.0	669.3	669.0

WATERWAY INFORMATION

### DESIGN SCOUR ELEVATION TABLE

Event/Limit	Design Sco	Item	
State	N. Abut.	S. Abut.	113
Q100	667.44	667.16	
Q200	667.44	667.16	0
Design	667.44	667.16	8
Check	667.44	667.16	

I certify that to the best of knowledge, information and belief, this substructure 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 Specifications



LIC. EXP. DATE :\_\_\_\_\_11/30/20

GENERAL PLAN EVANS MILL ROAD OVER BR. HICKORY RUN SECTION 17-16118-00-BR PEORIA COUNTY STATION 13+74.00 STRUCTURE NO. 072-4715

PLAN	T.R. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
072-4715	184	17-16118-00-BR	PEORIA	42	16
, 0/2 4/15	19L0914 CONTRACT NO.				
15 SHEETS		ILLINOIS FEE	, AID PROJECT		

### GENERAL NOTES

Fasteners shall be ASTM F3125, Grade 325, Type 1, hot-dipped galvanized bolts. 7/8" Ø, unless otherwise noted.

Calculated weight of structural steel = \_\_\_\_\_ lbs. (M270 Grade 50)\* lbs. (A572 Grade 65)\*

All structural steel shall be AASHTO M 270 Grade 50 except primary members which shall be ASTM A572 Grade 65.

No Field welding is permitted except as specified in the contract documents. Reinforcement bars designated (E) shall be epoxy coated.

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

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Plans are for a Press-Brake-Formed Steel Tub Girder (PBFSTG) superstructure. The provided details and layout are for the general design and layout and may be modified as required for the actual prefabricated bridge system that is used. All adjustments shall be submitted to the Engineer for review & approval and will not be cause for additional compensation for a change in scope of the work. However, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

\* Information to be provided by PBFSTG manufacturer, see Special Provisions.







(Dim



Specifications.

\*\*\*\*Include in the cost of Preformed Joint Seal 2".

	1'-8	3"	⊢⊸	— (	Ê	Brg	ŋ.
$\setminus$	1'-0''				-	-	
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"-0"	1'-8	3''_	1	''-8			
t.——							
ON T	ГНР	RU	F	4 <i>B</i>	U	T٨	1
ensio	ns ai	re	at	Rt	. 1	Ľs)	-
- C.	PUZEY					RE۱	/1
– M.	MENDE	ENH,	٩LĹ			RE\	/1
- R	R. JOHNSON						/

Stone Ripr

HANSON	USER NAME = Johns00944	DESIGNED - C. PUZEY	REVISED _		GENERAL DATA	T.R. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED _ M. MENDENHALL	REVISED _			184	17-16118-00-BR	PEORIA	42	17
	PLOT SCALE = 13:4.0000 : / in.	DRAWN - R. JOHNSON	REVISED _	DEPARTMENT OF TRANSPORTATION	31RUCTURE NO 072-4713		19L0914	CONTRACT	NO.	
Copyright Hanson Professional Services Inc. 2020	PLOT DATE = 9/15/2020	CHECKED _ CGP, MNM	REVISED _		SHEET 2 OF 15 SHEETS		ILLINOIS FED. ALC	PROJECT		
020 12 E0 20 PM										

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## INDEX OF SHEETS

- General Plan 1.
- General Data 2.
- Top of Slab Elevations З.
- Superstructure 4. Superstructure Details 5.
- 6.
- Guardrail Attached to Structure (Sheet 1 of 3) Guardrail Attached to Structure (Sheet 2 of 3) 7.
- Guardrail Attached to Structure (Sheet 3 of 3) 8.
- 9. Structural Steel
- 10. Structural Steel Details
- 11. South Abutment
- 12. North Abutment
- 13. HP Pile Details
- 14. Bar Splicer Detail
- 15. Soil Borings



NAME PLATE See Std. 51500

ITEM	UNIT	SUPER	SUB	TOTAL
ap, Class A4	Sq. Yd.		663	663
ic	Sq. Yd.		663	663
Existing Structures	Each			1
Joint Seal 2"	Foot		80	80
Excavation	Cu.Yd.		315	315
tructures	Cu.Yd.		46.6	46.6
k Grooving	Sq. Yd.	219		219
ncasement	Cu.Yd.		4.8	4.8
Coat	Sq. Yd.	240		240
ent Bars, Epoxy Coated	Pound		6310	6310
5	Each		64	64
Steel Piles HP10x42	Foot		180	180
es	Foot		180	180
iteel HP 10x42	Each		2	2
	Each		14	14
5	Each		1	1
ts, 1"	Each	16		16
ackfill for Structures	Cu.Yd.		149	149
te Wall Drain	Sq. Yd.		73	73
inding (Bridge Section)	Sq. Yd.	16		16
drains for Structures 4"	Foot		138	138
Beam Guardrail, Attached to Structures	Foot	156		156
e-Formed Steel Tub Girder (PBFSTG) Sys.	Sq. Ft.	2158		2158
Performance Concrete (UHPC) Joints	Cu. Ft.	102		102

### TOTAL BILL OF MATERIAL



MOI 9/15/2020 12:59:22 PM

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<u> </u>									
ion	Station	Offset	Theoretical Grade Elevations	*Theoretical Grade Elevations Adjusted For Dead Load Deflection					
ıt.	13+38.82	0.00	674.63						
. Abut. . Abut.	13+41.00 13+51.00 13+61.00 13+71.00 13+81.00 13+91.00 14+01.00 14+07.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	674.64 674.66 674.70 674.75 674.81 674.88 674.97 675.03						
ıt.	14+09.18	0.00	675.05						

				*Theoretical Grade
	Station	Offset	Theoretical Grade Elevations	Elevations Adjusted For Dead Load Deflection
	13+48.47	11.50	674.42	
out.	13+50.65	11.50	674.43	
	13+60.65	11.50	674.47	
	13+70.65	11.50	674.52	
	13+80.65	11.50	674.58	
	13+90.65	11.50	674.65	
	14+00.65	11.50	674.74	
	14+10.65	11.50	674.84	
out.	14+16.65	11.50	674.90	
	14+18.83	11.50	674.93	

EVATIONS	T R RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO	
072-4715	184	17-16118-00-BR		PEORIA	42	18	
0/2-4/13		19L091	4		CONTRACT	NO.	
5 SHEETS			ILLINOIS	FED. AID	PROJECT		





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PLOT DATE = 9/15/2020

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REVISED

See Sheet 5 of 15 for superstructure details, Bill of Material, Section A-A and Section B-B.

CTURE	T.R. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
072-4715	184	17-16118-00-BR	PEORIA	42	19	
072-4715		19L0914	CONTRACT	NO.		
5 SHEETS	ILLINOIS FED. AID PROJECT					

SHEET 4 OF 1



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PLOT DATE = 9/15/2020

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REVISED -

PRECAST DECK REINFORCEMENT BAR LIST

(For Information only.)

Bar	No.	Size	Length	Shape
a(E)	-	#5	-	
a1(E)	-	#5	-	
b(E)	-	#5	-	
g1(E)	88	#3	0'-10''	
g2(E)	44	#4	3'-8''	
g3(E)	44	#6	7'-6"	$\prod$

Notes:

All Reinforcement bars in Precast Concrete Deck are included in PBFSTG System and shall be designed per PBFSTG manufacturer (except bars designated with "g" shall be detailed as shown and included in PBFSTG System.

Bars shown in precast panels are minimum required.

It and	11	Our at the
Item	Unit	Quantity
Bridge Deck Grooving	Sq. Yd.	219
Protective Coat	Sq. Yd.	240
Reinforcement Bars, Epoxy Coated	Pound	
Diamond Grinding (Bridge Section)	Sq. Yd.	16
Press-Brake- Formed Steel Tub Girder (PBFSTG) System	Sq. Ft.	2158
Ultra-High Performance Concrete (UHPC) Joints	Cu. Ft.	102

RE DETAILS 072-4715	T.R. RTE	SECTIO	ON		COUNTY	TOTAL SHEETS	SHEET NO.
	184	184 17-16118-00-BR			PEORIA	42	20
		19L0914	L .		CONTRACT	NO.	
15 SHEETS		1	LLINOIS	FED. ALC	PROJECT		



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USER NAME = Johns00944 DESI	Johns00944 DESIGNED _ C. PUZEY REVISED _ GUAE		GUARDRAIL ATTACHED TO STRUCTURE (SHEET 2 OF 3)	T.R. RTE	SECTION	COUNTY	TOTAL SHEETS	HEET NO			
AME -			CHECKED _ M. MENDENHALL	REVISED _	STATE OF ILLINOIS	STATE OF ILLINOIS				42	22
DEL		PLOT SCALE = 0:2.0000 :" / in. DRAWN _ R. JOHNSON REVISED _	DEPARTMENT OF TRANSPORTATION	STRUCTURE NU 072-4715		19L0914	CONTRAC	T NO.			
MOI	Copyright Hanson Professional Services Inc. 2020	PLOT DATE = 9/15/2020	CHECKED _ CGP, MNM	REVISED _		SHEET 7 OF 15 SHEETS		ILLINOIS FED. A	D PROJECT		
	9/15/2020 12:59:33 PM										



## **TOP VIEW**



## **SIDE VIEW**

## **VERTICAL BOLT SLEEVE** (CAST INTO CONCRETE)



DRAWN

PLOT DATE = 9/15/2020

- R. JOHNSON

CHECKED \_ CGP, MNM

REVISED

REVISED \_

EL Rail

<sup>™</sup> / <sub>2</sub> <sup>™</sup> /2	<u><u> </u></u>	
7" 70 xx 5% d 5/16 Gusset A BRACKET B		
STRUCTURE (SHEET 3 OF 3) NO 072-4715 OF 15 SHEETS	T.R. RTE.         SECTION           184         17-16118-00-BR           19L0914	COUNTY         TOTAL SHEETS         SHEET NO.           PEORIA         42         23           CONTRACT NO.         ED. AD PROJECT





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ILLINOIS FED AID PROJECT



## ESTIMATED STEEL SECTION

\* Bearing plate width is based on plate layout along the Q

of bearing. Abutment width allows for bearing plate aligned

\*\* Hanson Professional Services Inc. design includes substructure

typical reactions and dimensions. Contractor shall verify that

prior to construction. The contractor shall employ a Structural

designs as required at no additional cost to the contract.

elements only. Abutment design and details are based on assumed

final design and details are compatible with the selected superstructure

Engineer licensed in the State of Illinois to provide alternate abutment

perpendicular to girder. Adjustment is allowed if needed

for design of PBFSTG.

Notes:

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

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

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications. The structural steel plates of the fixed bearings, including pintles (if applicable), shall conform to the

requirements of AASHTO M270 Grade 50. Anchor bolts at all supports shall be installed as each member is erected unless an equivalent temporary means

of lateral restraint is used. "CVN" denotes Charpy-V-Notch impact energy requirements, Zone 2.

All primary members shall be A572 Grade 65. All secondary members shall be M270 Grade 50. All structural steel and H.S. bolts shall be galvanized

according to the Special Provisions.

***INTERIOR GIR	DER M	OMENT T	ABLE	
		0.5	Sp. 1	
Is	(in⁴)			
Ic(n)	(in4)			i
Ic(3n)	(in4)			
Ss	(in³)			
Sc(n)	(in³)			
Sc(3n)	(in³)			Ic(.
DC1	(k/')			
MDC1	('k)			
DC2	(k/')			
MDC2	('k)			
DW	(k/')			
MDW	('k)			
LLDF				
M4 + IM	('k)			
Mu (Strength I)	('k)			
Øf Mn	('k)			
fs DC1	(ksi)			
fs DC2	(ksi)			
fs DW	(ksi)			
fs (4+IM)	(ksi)			
fs (Service II)	(ksi)			
0.95Rh Fyf	(ksi)			
fs (Total)(Strength	I)(ksi)			Mu (S
Øf Fn	(ksi)			
Vf	(k)			

\*ESTIMATED GIRDER REACTION TABLE Abutment Interior / Exterior RDC1 (k)35 RDC2 (k) RDW 20 (k)R٤ (k) 41.5 (k) 10.2 RIM RTotal (k)1077

🧯 Girder

***INTERIOR GIRDER REACTION TABLE											
		Abut	ment								
		Interior	Exterior								
LLDF											
OCF											
RDC1	(k)										
RDC2	(k)										
RDW	(k)										
R Ł	(k)										
<i>R</i> ім	(k)										
RTotal	(k)										

\*\*\* Information to be provided by PBFSTG manufacturer, See Special Provisions

All bearing plates, anchor bolts, nuts, washers and pintles (if applicable) shall be galvanized according to AASHTO M111 or M232 as applicable.



9/15/2020 12:59:41 PM

Non-composite moment of inertia and section modulus of the Is, Ss: steel section used for computing fs(Total-Strength I, and

- Service II) due to non-composite dead loads (in.4 and in.3). Composite moment of inertia and section modulus of the steel c(n), Sc(n): and deck based upon the modular ratio, "n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.4 and in.3).
- Composite moment of inertia and section modulus of the steel Bn), Sc(3n): and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total-Strength I. and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.<sup>4</sup> and in.<sup>3</sup>).
  - Un-factored non-composite dead load (kips/ft.).
  - DC1:Un-factored moment due to non-composite dead load (kip-ft.). MDC1: Un-factored long-term composite (superimposed excluding future DC2: wearing surface) dead load (kips/ft.).
  - Un-factored moment due to long-term composite (superimposed MDC2: excluding future wearing surface) dead load (kip-ft.).
  - Un-factored long-term composite (superimposed future wearing DW: surface only) dead load (kips/ft.).
  - Un-factored moment due to long-term composite (superimposed MDW: future wearing surface only) dead load (kip-ft.).
- Un-factored live load moment plus dynamic load allowance (impact) M4 + IM: (kip-ft.).
- Factored design moment (kip-ft.).
- trength I): 1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 M
- Compact composite positive moment capa@ity/ncomputed according Øf Mn: to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).
- Un-factored stress at edge of flange for controlling steel fs DC1: flange due to vertical non-composite dead loads as calculated below (ksi). MDC1/ Snc
- Un-factored stress at edge of flange for controlling steel fs DC2: flange due to vertical composite dead loads as calculated below (ksi).
- MDC2/ Sc(3n) or MDC2/ Sc(cr) as applicable. Un-factored stress at edge of flange for controlling steel fs DW: flange due to vertical composite future wearing surface loads as calculated below (ksi).
- MDW/ Sc(3n) or MDW/ Sc(cr) as applicable. Un-factored stress at edge of flange for controlling steel
- fs (½+IM): flange due to vertical composite live load plus impact loads as calculated below (ksi). M / Sc(n) or M / Sc(cr) as applicable.
  - Symin inf stresses ast €omputed below (ksi).
- fs (Service II): fsDC1 + fsDC2 + fsDW + 1.3 fs( )
  - Composite stress capacity for Servine II loading according 0.95RhFyf: to Article 6.10.4.2 (ksi).
- Sum of stresses as computed below on non-compact fs (Total)(Strength I): section (ksi).
  - 1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 fs()Non-Compact composite positive or negative <code>istrmss</code> capacity for
  - Øf Fn: Strength I loading according to Article 6.10.7 or 6.10.8 (ksi). Maximum factored shear range in span computed according
  - Vf: to Article 6.10.10.
  - LLDF: Live Load Distribution Factor
  - OCF: Obtuse correction Factor

EL DETAILS 072-4715	T.R. RTE	SECTIO	N		COUNTY	TOTAL SHEETS	SHEET NO.
	184	17-16118-	00-BR		PEORIA	42	25
		19L0914			CONTRACT	NO.	
5 SHEETS		ILI	LINOIS	FED. AID	PROJECT		



MENT		SECT	ON		COUNTY	TOTAL SHEETS	SHEET NO.
072-4715	184	17-1611	8-00-BR		PEORIA	42	26
		19L091	4		CONTRACT	NO.	
SHEETS			ILLINOIS	FED. AID	PROJECT		

![](_page_26_Figure_0.jpeg)

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TMENT	T.R. RTE	T.R. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	
072-4715	184	184 17-16118-00-BR			PEORIA	42	27
		19L0914	4		CONTRACT	NO.	
5 SHEETS			ILLINOIS	FED. AID	PROJECT		

![](_page_27_Figure_0.jpeg)

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Designation	F	Ft	Fw	w	Wt	Ww
HP 14x117	12½"	1"	<sup>7</sup> /8"	7 <i>³</i> / <sub>4</sub> "	5/8''	1 <sub>/2</sub> "
x102	12½"	<sup>7</sup> /8"	3/4"	7 <i>3</i> / <sub>4</sub> ''	5⁄8"	<sup>1</sup> /2"
x89	12½"	3/4"	11/ <sub>16</sub> "	7 <i>¾</i> "	5/8''	<sup>1</sup> /2"
x73	12½"	5⁄8"	%16"	7 <i>³</i> / <sub>4</sub> ''	5/8''	1 <sub>/2</sub> "
HP 12x84	10"	7/8"	<sup>1</sup> ¼ <sub>16</sub> "	6½"	5⁄8"	1 <sub>/2</sub> "
x74	10"	<sup>7</sup> /8"	11/ <sub>16</sub> "	6½"	5/8''	1 <sub>/2</sub> "
x63	10"	5⁄8"	1 <sub>/2</sub> "	6½"	1 <sub>/2</sub> "	3/8''
x53	10"	<sup>5</sup> ⁄8"	1/2"	6½"	1/2"	3/8''
HP 10x57	8"	3/4"	%16"	5¼″	1 <sub>/2</sub> "	3/8''
x42	8"	5/8"	%16"	5¼″	1 <sub>/2</sub> "	<i>3</i> /8''
HP 8x36	7"	<sup>5</sup> /8"	7⁄ <sub>16</sub> "	4¼″	<sup>1</sup> /2"	3/8"

TAILS		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
072-4715	184	17-16118-00-BR	PEORIA	42	28
		NO.			
5 SHEETS	ILLINOIS FED. AID PROJECT				

![](_page_28_Figure_0.jpeg)

![](_page_28_Figure_1.jpeg)

### INSTALLATION AND SETTING METHODS

- "A" : Set bar splicer assembly by means of a template bolt.
- "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.

\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Threaded splicer bar length = min. lap length +  $1\frac{1}{2}$ " + thread length

(All components shall be provided from one supplier)

Location	Bar size	No. assemblies required	Minimum Iap length
S. Abut.	6	32	3'-7"
N. Abut.	6	32	3'-7"

1-1-2020

~	USER NAME = Johns00944	DESIGNED _ C. PUZEY	REVISED _		BAR SPLICER DETAILS			COUNTY	TOTAL SHEETS	HEET NO.
		CHECKED - M. MENDENHALL	REVISED _	STATE OF ILLINOIS	STRUCTURE NO 072 4715	184	17-16118-00-BR	PEORIA	42	29
	PLOT SCALE = 0:2.0000 ':" / in.	DRAWN - R. JOHNSON	REVISED _	DEPARTMENT OF TRANSPORTATION	STRUCTURE NO 072-4715		19L0914	CONTRAC	T NO.	
Copyright Hanson Professional Services Inc. 2020	PLOT DATE = 9/15/2020	CHECKED _ CGP, MNM	REVISED _		SHEET 14 OF 15 SHEETS		ILLINOIS FED.	D PROJECT		-
0/45/0000 40 50 50 844										

BSD-1

![](_page_28_Figure_12.jpeg)

## STANDARD MECHANICAL SPLICER

Location	Bar	No. assemblies
Location	size	required

Notes:

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

![](_page_29_Figure_0.jpeg)

B Sta. 13+ 02/21	-1 98, 6' R1 ⁄2020			
674 3_	N	<u>Qu</u>	<u>w%</u>	
673.1-	11	1 0 2 8	16	Dark brown SILTY CLAY, with a (Roadway Shoulder)
671.3-		T.92D	то	
	7	1.25P	33	Dark brown SILTY CLAY LOAM
	5	0.45B	24	
666.3-	7	1.58B	21	Brown-gray SILTY CLAY LOAM
	16			Sample 5 - Poor recovery, roc
	21	4.5+P	16	
050 F	1655	м		
000.0-				Auger Refusal at 17.8' - Appa

## **LEGEND**

- Ν Standard Penetration Test N (blows/ft)
- Qu Unconfined Strength (tsf)
- w% Natural Molsture Content (%)
- Water Surface Elevation Encountered in Boring DD = during drilling Oh = at completion 24h = 24 hours after completion

  - 240M Modified SPT N (blows/ft)

oring	~	USER NAME = Johns00944	DESIGNED _ C. PUZEY	REVISED _		SOU BORINGS	T R RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
AME B			CHECKED _ M. MENDENHALL	REVISED _	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		184	17-16118-00-BR	PEORIA	42	30
DEL		PLOT SCALE = 2:0.0000 ':" / in.	DRAWN _ R. JOHNSON	REVISED _		STRUCTURE NU U72-4715	19L0914		CONTRACT NO		·
Copyright Hanson Professional Services Inc. 2020	PLOT DATE = 9/15/2020	CHECKED _ CGP, MNM	REVISED _		SHEET 15 OF 15 SHEETS		ILLINOIS FED. AL	PROJECT	· · · · · · · · · · · · · · · · · · ·	·	
9/1	5/2020 12:59:54 PM										

aggreagate

ck in spilt-spoon.

arent Bedrock

![](_page_30_Figure_0.jpeg)

## CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

	I	ALLN NATES		
SPECIAL NOTE	ELEMENT	MAINLINE INTERSTATES &	ALL	
NUMBER		4-LANE EXPRESSWAYS	OTHERS	
(1)	BUTT JOINT	1:480	1:240	
<u> </u>	TAPER RATE			
(2)	TEMPORARY RAMP	1:80	1:40	
<u> </u>	TAPER RATE			

TABL	E	А	
TAPER	R٨	TES	

![](_page_30_Figure_4.jpeg)

### CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

USER NAME = ander00846	DESIGNED -	REVISED -		BUTT JOINTS					TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	DRAWN -	REVISED -	STATE OF ILLINUIS		CADD STD 406101-D4		184	17-16118-00-BR	PEORIA	42	31			
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	GADD 31D. 400101-D4				CONTRACT	NO.					
PLOT DATE = 9/15/2020	DATE - 9/16/2020	REVISED -		SCALE: NTS	SHEET	OF	SHEET	S STA.	TO STA.		ILLINOIS F	D. AID PROJECT		-

![](_page_30_Picture_7.jpeg)

### GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.

2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.

3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.

4. The length of butt joint is based on the taper rate times change in cold milling depth within the butt joint pay limits, unless otherwise indicated.

5. Temporary ramps are paid for separately and not included in the cost of the butt joints.

## All dimensions are in inches (millimeters) unless otherwise noted.

![](_page_31_Figure_0.jpeg)

## CASE 3 : HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER

![](_page_31_Figure_2.jpeg)

L	USER NAME = ander00846	DESIGNED -	REVISED -		BUTT JOINTS CADD STD 406101-D4			BUTT JOINTS					TR BTE	SECTION	COUNTY	TOTAL	SHEET NO
		DRAWN -	REVISED -	STATE OF ILLINOIS					184	17-16118-00-BR	PEORIA	42	32				
F	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	GADD STD. 400101-D4				CONTRACT	NO.							
	PLOT DATE = 9/15/2020	DATE - 9/16/2020	REVISED -	S	SCALE: NTS	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT					

![](_page_31_Picture_4.jpeg)

## All dimensions are in inches (millimeters) unless otherwise noted.

![](_page_32_Figure_0.jpeg)

## CASE 4 : SINGLE LIFT OVERLAY WITH EQUIVALENT DEPTH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER

USER NAME = ander00846	DESIGNED -	REVISED -			BUTT JOINTS					SECTION	COUNTY	TOTAL	SHEET					
	DRAWN -	REVISED -	STATE OF ILLINOIS		STATE OF ILLINOIS										17-16118-00-BR	PEORIA	42	33
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	GADD STD. 406101-D4						CONTRACT	NO.							
PLOT DATE = 9/15/2020	DATE - 9/16/2020	REVISED -		SCALE: NTS	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT							

![](_page_32_Picture_3.jpeg)

Prop. Hot Mix Asphalt surf. removal (cold milling) per plans.

\_\_\_\_\_

## All dimensions are in inches (millimeters) unless otherwise noted.

![](_page_33_Figure_0.jpeg)

## TYPICAL SECTION WITH COMBINATION CONCRETE CURB & GUTTER

## GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

- 2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
- 3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.
- 4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
- 5. The Contractor shall have the option of placing the guardrail before or filled and the aggregate returned to line and grade.
- 6. Materials shall meet the following requirements:
- A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.
- B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

![](_page_33_Figure_11.jpeg)

USER NAME = ander00846	DESIGNED -	REVISED -		GUARDRAU FROSION CONTROL TREATMENTS					MENTS	TR	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS	CADD STD. 630101–D4						184	17-16118-00-BR	PEORIA	42 34
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION								CONTRACT	NO.	
PLOT DATE = 9/15/2020	DATE - 9/16/2020	REVISED -		SCALE: NTS SHEET OF SHEETS ST			STA.	TO STA.		ILLINOIS FED. A	D PROJECT		

![](_page_33_Picture_13.jpeg)

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be

50'-0'' (15.2m) typ.

Match proposed shoulder material (HMA or Aggregate) `₩∕ ∕/∦∕ ∕₿⁄

Guardrail Aggregate Erosion Control

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

![](_page_34_Figure_0.jpeg)

USER NAME = ander00846	DESIGNED -	REVISED -		C C		FROSIO	
	DRAWN -	REVISED -	STATE OF ILLINOIS	i u			
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	1		CADD S	ID. 630
PLOT DATE = 9/15/2020	DATE - 9/16/2020	REVISED -		SCALE: NTS	SHEET	OF	SHEETS

![](_page_35_Figure_0.jpeg)

![](_page_36_Figure_0.jpeg)

![](_page_37_Figure_0.jpeg)

![](_page_38_Figure_0.jpeg)

![](_page_39_Figure_0.jpeg)

![](_page_40_Figure_0.jpeg)

LAYOUT DRAWN REVIEWED	RDH 8/10/2020 RLA 9/16/2020 MGD 9/16/2020	ORIGINAL SURVEY NOTE BOOK	SURVEYED SURVEYED PLOTTED K TEMPLATE	BY	DATE		H Hanson Professional Services Inc. 2	8	FINAL SURVEY SURVEY PLOTTE NOTE BOOK	ED	BY	DATE			
MODEL: Defau FILE NAME: IN	Jt .19jobs/19L0194\CAD\Road\Sheet	t/sht-xs_Creek.dgn	AREAS CHECKED			Hanson	ofessional Services		NO. AREAS	CHECKED	C L		ç	ç	ſ
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PI PI															
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.6 n.															
DESIGN DRAWN CHECKE															
IED - I - ED -															
RDH RLA MGD															
REVIS REVIS REVIS															
ED - ED - ED -															
C															
EPAI															
RTIN															
STAT /IENT															
E O															
F ILL TRA															
.INO															
DIS Por															
ΤΑΤΙ															
ON															
EV Crei															
ANS I Ek Cr															
MIL															

![](_page_41_Figure_1.jpeg)

ABV	ABOVE
A/C	ACCESS CONTROL
AC	ACRE
ADJ	ADJUST
AS	AERIAL SURVEYS
AGG	AGGREGATE
AH	AHEAD
APT	APARTMENT
ASPH	ASPHALT
AUX	AUXILIARY
AGS	AUXILIARY GAS VALVE (SERVICE)
AVE	AVENUE
AX	AXIS OF ROTATION
BK	BACK
B-B	ВАСК ТО ВАСК
BKPL	BACKPLATE
В	BARN
BARR	BARRICADE
BL	BASELINE
BGN	BEGIN
ВМ	BENCHMARK
BIND	BINDER
BIT	BITUMINOUS
BTM	BOTTOM
BLVD	BOULEVARD
BRK	BRICK
BROX	BUFFALO BOX
BLDG	BUILDING
CATV	CABLE CASE ID ON DIDE
CIP	CAST IRON PIPE
CB	CATCH BASIN
	CENTER TO CENTER
	CENTERLINE OR CLEARANCE
	CENTERLINE TO EDGE
	CENTERLINE TO TACE
CEDT	
CS	
CP	
СТ	COAT OR COURT
COMB	COMBINATION
C	
CF	COMMERCIAL ENTRANCE
CONC	CONCRETE
CONST	CONSTRUCT
CONTD	CONTINUED
CONT	CONTINUOUS
COR	CORNER
CORR	CORRUGATED
CMP	CORRUGATED METAL PIPE
CNTY	COUNTY
СН	COUNTY HIGHWAY
CSE	COURSE
XSECT	CROSS SECTION
m <sup>3</sup>	CUBIC METER
mm <sup>3</sup>	CUBIC MILLIMETER

CU YD	CUBIC YARD
CULV	CULVERT
C&G	CURB & GUTTER
D	DEGREE OF CURVE
DC	
DET	DETECTOR
DIST	DISTRICT
DOM	DOMESTIC
DBL	DOUBLE
DSEL	DOWNSTREAM ELEVATION
DSFL	DOWNSTREAM FLOWLINE
DR	DRAINAGE OR DRIVE
DI	DRAINAGE INLET OR DROP INLET
DRV	DRIVEWAY
DCT	DUCT
EA	EACH
EB	EASTBOUND
EOP	EDGE OF PAVEMENT
E-CL	EDGE TO CENTERLINE
E-E	EDGE TO EDGE
FLEC	FLECRICAL
FI	FLEVATION
ENTR	ENTRANCE
EXC	EXCAVATION
EX	EXISTING
EAPWAI	EXPRESSIVAL
E	EXTERNAL DISTANCE OF HORIZONTAL CURVE
E	OFFSET DISTANCE TO VERTICAL CURVE
F-F	FACE TO FACE
FA	FEDERAL AID
FAI	FEDERAL AID INTERSTATE
FAP	FEDERAL AID PRIMARY
FAS	FEDERAL AID SECONDARY
FAUS	FEDERAL AID URBAN SECONDARY
FP	FENCE POST
OPT	FIBER OPTIC
FE	FIELD ENTRANCE
FH	FIRE HYDRANT
FL	FLOW LINE
FB	FOOT BRIDGE
FDN	FOUNDATION
FR	FRAME
F&G	FRAME & GRATE
FRWAY	FREEWAY
GAL	GALLON
GALV	GALVANIZED
G	GABAGE
GM	GAS METER
GV	GAS VALVE
CIS	CEOCRAPHICAL INFORMATION SYSTEM
	CRANULAR
GRAN	GRANULAR
GK CDV//	GRATE
GKVL	GRAVEL
GND	GROUND
GUI	GUTTER
GP	GUY POLE
GW	GUY WIRE
НН	HANDHOLE

HATCH	HATCHING
HD	HEAD
HDW	HEADWALL
HDUTY	HEAVY DUTY
ha	HECTARE
НМА	HOT MIX ASPHALT
HWY	HIGHWAY
HOBIZ	HOBIZONTAL
	HOUSE
IN DIA	
INL	INLEI
INST	INSTALLATION
IDS	INTERSECTION DESIGN STUDY
INV	INVERT
IP	IRON PIPE
IR	IRON ROD
JT	JOINT
kg	KILOGRAM
km	KILOMETER
LS	LANDSCAPING
LN	LANE
IT	LEFT
	LIGHT DETECTION AND BANGING
	LINEAL FEET OR LINEAR FEET
L	LITER OR CORVE LENGTH
LC	LONG CHORD
LNG	LONGITUDINAL
L SUM	LUMP SUM
MACH	MACHINE
MB	MAIL BOX
MH	MANHOLE
MATL	MATERIAL
MED	MEDIAN
m	METER
METH	METHOD
М	MID-ORDINATE
mm	MILLIMETER
mm DIA	MILLIMETER DIAMETER
MIX	MIXTURE
MBH	MOBILE HOME
MOD	
MET	
	MOTOR FUEL TAX
NABC	NAIL & BUTTLE CAP
N&C	
N&W	NAIL & WASHER
NC	NORMAL CROWN
NB	NORTHBOUND
NE	NORTHEAST
NW	NORTHWEST
O/S	OFFSET
0&C	OIL AND CHIP
OLID	OPEN LID
PAT	PATTERN
PVD	PAVED
PVMT	PAVEMENT

РМ	PAVEMENT MARKING	STD	STANDARD
PED	PEDESTAL	SBI	STATE BOND ISSUE
PNT	POINT	SR	STATE ROUTE
PC	POINT OF CURVATURE	STA	STATION
p	POINT OF INTERSECTION OF HORIZONTAL	SPBGR	STEEL PLATE BEAM GUARDRAIL
-	CURVE	55	STORM SEWER
PRC	POINT OF REVERSE CURVE	STY	STORY
рт		ST	STREET
		стр	
		511	
	POLILINILLINE PODTLAND CEMENT CONCRETE		
	PORTLAND CEMENT CONCRETE	S.E. NUN.	SUPERCEVATION KUNOFF LENGTH
	POWER POLE OR PRINCIPAL POINT	SURF	
PRM	PRIME	SMK	SURVET MARKER
2E	PRIVATE ENTRANCE		TANGENT DISTANCE
PROF	PROFILE	T.R.	TANGENT RUNOUT DISTANCE
PGL	PROFILE GRADELINE	IEL	TELEPHONE
PROJ	PROJECT	IΒ	TELEPHONE BOX
P.C.	PROPERTY CORNER	TP	TELEPHONE POLE
PL	PROPERTY LINE	TEMP	TEMPORARY
PR	PROPOSED	твм	TEMPORARY BENCH MARK
۲	RADIUS or RESIDENTUAL	TD	TILE DRAIN
R	RAILROAD	TBE	TO BE EXTENDED
RRS	RAILROAD SPIKE	TBR	TO BE REMOVED
RPS	REFERENCE POINT STAKE	TBS	TO BE SAVED
REF	REFLECTIVE	TWP	TOWNSHIP
RCCP	REINFORCED CONCRETE CULVERT PIPE	TR	TOWNSHIP ROAD
REINF	REINFORCEMENT	TS	TRAFFIC SIGNAL
REM	REMOVAL	TSCB	TRAFFIC SIGNAL CONTROL BOX
30	REMOVE CROWN	TSC	TRAFFIC SYSTEMS CENTER
REP	REPLACEMENT	TRVS	TRANSVERSE
REST	RESTALIBANT	TRVI	TRAVEL
RESURE	RESURFACING	TRN	TUBN
DET	PETAINING	TY	TYPE
	PIGHT	Τ_Λ	
	ROADWAT		UST BEAM ELEVATION
	ROUTE	USEL	
SAN	SANITARY CANITARY CENTER	USFL	
SANS	SANITARY SEWER	UTIL	
SEC	SECTION	VBOX	VALVE BOX
SEED	SEEDING	VV	VALVE VAULT
SHAP	SHAPING	VLI	VAULI
5	SHED	VEH	VEHICLE
5H	SHEET	VP	VENT PIPE
SHLD	SHOULDER	VERT	VERTICAL
5W	SIDEWALK OR SOUTHWEST	VC	VERTICAL CURVE
SIG	SIGNAL	VPC	VERTICAL POINT OF CURVATURE
SOD	SODDING	VPI	VERTICAL POINT OF INTERSECTION
SM	SOLID MEDIAN	VPT	VERTICAL POINT OF TANGENCY
5B	SOUTHBOUND	WM	WATER METER
SE	SOUTHEAST	WV	WATER VALVE
SPL	SPECIAL	WMAIN	WATER MAIN
SD	SPECIAL DITCH	WB	WESTBOUND
50 FT	SOUARE FEET	WILDFL	WILDFLOWERS
m <sup>2</sup>	SOUARE METER	W	WITH
mm <sup>2</sup>	SOUARE MILLIMETER	WO	WITHOUT
50 YD	SOUARE YARD		
STR	STABILIZED		

	DATE	REVISIO
(W) Illinois Department of Transportation	1-1-21	Updated fonts, abbre
December 1 2021 7		and symbols.
$\mathcal{M}_{\mathcal{A}} = \mathcal{M}_{\mathcal{A}} = $		
ENGINEER OF POLICY AND PROCEDURES	1-1-19	Added new symbols
APPROVED January 1, 2021		
ENGINEER OF DESIGN AND ENVIRONMENT		

iIONS bbreviations ols.

![](_page_42_Picture_6.jpeg)

## STANDARD 000001-08

ADJUSTMENT ITEMS EX	PR	ALIGNMENT ITEMS	EX	PR	DRAINAG
Structure To Be Adjusted	ADJ	Baseline -			Channel or Stream
		Centerline -			Culvert Line
Structure To Be Cleaned	С	Centerline Break Circle	0	$\odot$	Grading & Shaping
Main Structure To Be Filled	FM	Baseline Symbol	Æ	Æ	Drainage Boundary
		Centerline Symbol		Ę	Paved Ditch
Structure To Be Filled	F	PI Indicator	Δ	Δ	Aggregate Ditch
Structure To Be Filled Special	FSP	Point Indicator	0	0	Pipe Underdrain
Structure To Be Removed	R	Horizontal Curve Data	EX. CURVE P.I. STA=	CURVE P.I. STA=	Storm Sewer
			D= R= T=	D= R= T=	Flowline
Structure To Be Reconstructed	REC		L= E= e= T R =	L= E= e= T R =	Ditch Check
Structure To Be Reconstructed Special	RSP		S.E. RUN= P.C. STA= P.T. STA=	S.E. RUN= P.C. STA= P.T. STA=	Headwall
		BOUNDARIES ITEMS	EX	PR	Inlet
Frame and Grate To Be Adjusted	A	Dashed Property Line –			Manhole
Frame and Lid To Be Adjusted	A	Solid Property/Lot Line –			Summit
		Section/Grant Line -			Roadway Ditch Flow
Domestic Service Box To Be Adjusted	A	Quarter Section Line -			Swale
Valve Vault To Be Adjusted	A	Quarter/Quarter Section Line –			Catch Basin
Special Adjustment	SP	County/Township Line -			Culvert End Section
		State Line -			Water Surface Indic
Item To Be Abandoned	AB	Chiseled Square Found			Riprap
Item To Be Moved	M	Iron Pipe Found	0		HYDRAUL
		Iron Pipe Set	•		Overflow
Item To Be Relocated	REL	Survey Marker	Ð		Shoot Flow
Pavement Removal and Replacement		Property Line Symbol	۳. ۲		Sheet How
		Same Ownership Symbol (Half Size)			Hydrant Outlet
		Northwest Quarter Corner (Half Size)	RA		
Illinois Department of Transportation			(STR)		
PASSED January 1, 2021		Section Corner (Half Size)	The second secon		
APPROVED January 1, 2021		Southeast Quarter Corner (Half Size)			

![](_page_43_Picture_1.jpeg)

EROSION & SEDIMENT CONTROL ITEMS	<u>EX</u>	<u>PR</u>	<u>NON-HIGHWAY</u> IMPROVEMENT ITEMS	EX	PR	EX LANDSCA
Cleaning & Grading Limits Dike			Noise Attn./Levee			
Erosion Control Fence		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Field Line	F		Seeding Class 5
Perimeter Erosion Barrier				` <b></b>		Seeding Class 7
remporary rence		- xxx - xxx - xxx - xxx - xxx -	Fence	— x — x — x — x — x —		
Ditch Check Temporary		—< <u> </u>	Base of Levee			Seedlings Type 1
Ditch Check Permanent			Mailbox	$\triangleright$		Seedlings Type 2
Inlet & Pipe Protection		$\Leftrightarrow$	Multiple Mailboxes	${}^{\triangleright}{}^{\triangleright}$		Sodding
Sediment Basin		$\bigcirc$	Pay Telephone			Mowstake w/Sign
Erosion Control Blanket			Advertising Sign	þ		Tree Trunk Protec
Fabric Formed Concrete Revetment Mat			ITS <sup>*</sup> Camera	Ó		Evergreen Tree
Turf Reinforcement Mat			Wind Turbine	\$		
Mulch Temporary			Cellular Tower	(0) A		Shade Tree
Mulch Method 1		+ × + × +	LANDSCAPING ITEMS	<u>EX</u>	<u>PR</u>	
Mulch Method 2 Stabilized		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Fence		- x x x x	Duct
Mulch Method 3 Hydraulic			Shrubs			Conduit
	EV		Mowline		OO	Electrical Aerial Ca
Approx. Index Line -	<u>EX</u> 	<u> </u>	Perennial Plants			Electrical Buried C
Approx. Intermediate Line -			Seeding Class 2			Controller
Index Contour -					• • • • • •	
Intermediate Contour –			Seeding Class 2A			Power Pole
PASSED 4 January 1. 2021			Seeding Class 4			
APPROVED January 1, 2021			Seeding Class 4 & 5 Combined			

## <u>(ISTING</u> APING ITEMS <u>EX</u> <u>PR</u> contd.) ction = E ß E) +**IGHTING** <u>EX</u> <u>PR</u> able Cable $\bowtie$ 2727 aire -D---STANDARD SYMBOLS, **ABBREVIATIONS** AND PATTERNS (Sheet 3 of 9) STANDARD 000001-08

LIGHTING (contd.)	<u>EX</u>	PR	PAVEMENT MARKINGS	<u>EX</u>
Pull Point	P	®	Handicap Symbol	
Handhole			RR Crossing	
Heavy Duty Handhole	H	Η		
Junction Box	$\bigcirc$	D	Raised Marker Amber 1 Way	
Light Unit Comb.	0		Raised Marker Amber 2 Way	
Electrical Ground	Ļ	Ļ	Raised Marker Crystal 1 Way	$\triangleleft$
Traffic Flow Arrow			Two Way Turn Left	
(Half Size) Light Unit-1		••••	Shoulder Diag. Pattern	
PAVEMENT (MISC.)	<u>EX</u>	PR	Skip-Dash White	
Keyed Long. Joint		_^^	Skip-Dash Yellow	
Keyed Long. Joint w/Tie Bars		+ $+$ $+$ $+$ $+$ $ +$ $ +$ $-$	Stop Line	
Sawed Long. Joint w/Tie Bars				
Bituminous Shoulder			Solid Line	
Bituminous Taper			Double Centerline	
Stabilized Driveway			Dotted Lines	
Widening				
PASSED       January 1,       2021         PASSED       January 1,       2021         ENGINEER OF POLICY AND PROCEDURES       1,       2021         APPROVED       January 1,       2021         ENGINEER OF POLICY AND PROCEDURES       1,       2021         ENGINEER OF DESIGN AND ENVIRONMENT       2021       1,				

![](_page_45_Figure_1.jpeg)

PAVEMENT MARKINGS		<u>EX</u>		P	R	RAILROAD ITEMS	<u>EX</u>	PR
<u>(</u> )						Abandoned Railroad	===	
CL 2Ln 2Way RRPM 12.2 m (40') o.c.			-	• <del>-</del>	- •	Railroad		
CL 2Ln 2Way RRPM 80' (24.4 m) o.c.			•		<b>—</b> •	Railroad Point	0	
CL Multilane Div						Control Box	$\boxtimes$	×
RRPM 40' (12.2 m) o.c.			4			Crossing Gate	<u>ו×</u> >	X <del>o</del> X—
CL Multilane Div.			٩			Flashing Signal	XoX	XoX
NNFM 80 (24.4 III) 0.C.						Railroad Cant. Mast Arm	X <del>CZ X</del> X	Xez X
CL Multilane Div. Dbl. RRPM 80' (24.4 m) o.c.			4			Crossbuck	æ	æ
						REMOVAL ITEMS	EX	PR
CL Multilane Undiv.			<u>+</u>		<u> </u>	Removal Tic		<u> </u>
Two Way Turn Left Line			*		* *	Bituminous Removal		
Urban Combination Left		alog gin. ministratif japa		1		Hatch Pattern		
Urban Combination Right				Ţ	>	Tree Removal Single		∞
Urban Left Turn Arrow		alaya www.		٦		RIGHT OF WAY ITEMS	EX	PR
Urban Right Turn Arrow						Future ROW Corner Monument		
				V		ROW Marker	$\boxtimes$	•
Urban Left Turn Only					<b>1</b>	ROW Line		
Urban Right Turn Only		1111) 			J	Easement	777777777777777	<del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>
Urban Thru Only		······;			$\rightarrow$	Temporary Easement		- 77 77 77 77
PASSED January 1. 2021 PASSED January 1. 2021 See Sec Sec Sec Sec Sec Sec Sec Sec Sec	Urban LT & RT Turn Arrow			₹			STANDARI ABBRE AND PA	) SYMBOLS, VIATIONS ATTERNS
APPROVED January 1, 2021	urban Thru Arrow	an a		$\rightarrow$			STANDA	RD 000001-08

![](_page_47_Figure_0.jpeg)

## STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS (Sheet 6 of 9)

STANDARD 000001-08

RIGHT OF WAY ITEMS (contd.)	EX	PR	ROADWAY PROFILES	EX	PR	<u>SIGNII</u> (c
Access Control Line ——	·	— AC —	P.I. Indicator	۵	<u>م</u>	Reverse Left W (Half Size)
Access Control Line & ROW — –	——————————————————————————————————————	— — — — — — — — — — — — — — — — — — —		Ĵ		
ROW with Fence	——————————————————————————————————————	x-AC-x	Earthworks Balance Point			Reverse Right V (Half Size)
	-	— XS — — —	Begin Point		$\Box$	
ITEMS	<u>EX</u>	<u>PR</u>	Vert. Curve Data	VPI =	VPI =	Two Way Traffic (Half Size)
Cable Barrier	<u> </u>					
Concrete Barrier			Ditch Profile Left Side -			Detour Ahead W (Half Size)
Bit Shoulders, Medians and C&G Line			Roadway Profile Line –			Left Lane Closed
Aggregate Shoulder			Storm Sewer Profile Right Side –			(Half Size)
Sidewalks, Driveways			SIGNING ITEMS	EX	PR	Right Lane Close
Guardrail		· · · · ·				(Half Size)
Guardrail Post			Cone, Drum or Barricade		0	Dood Closed Abo
Traffic Sign	þ	ŀ	Barricade Type II			(Half Size)
Corrugated Median					1 1	Road Constructio
Impact Attenuator		388800	Barricade Type III		TT	(naii size)
North Arrow with District Office (Half Size)	N €		Barricade With Edge Line		0 0 0	Single Lane Ahe (Half Size)
			Flashing Light Sign		0	
Match Line			Panels I			Transition Left W (Half Size)
Slope Limit Line					Т	
Typical Cross-Section Line			Panels II			Transition Right (Half Size)
(W) Illinois Department of Transportation	n		Direction of Traffic			
PASSED January 1, 2021 PASSED January 1, 2021 ENGINEER OF POLICY AND PROCEDURES APPROVED January 1, 2021	ISSUED 1-1-97		Sign Flag (Half Size)		$\Diamond$	

## IING ITEMS contd.)

<u>EX</u>

W1-4L

W1-4R

fic Sign W6-3

W20-2(O)

ed Ahead W20-5L(O)

osed Ahead W20-5R(O)

head W20-3(O)

tion Ahead W20-1-(O)

nead

W4-2L

nt W4**-**2R

![](_page_48_Picture_13.jpeg)

## STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS (Sheet 7 of 9)

## STANDARD 000001-08

<u>SIGNING ITEMS</u> (contd.)	<u>EX</u>	PR	STRUCTURES ITEMS	<u>EX</u>	<u>PR</u>	TRAFFIC SHEET ITEMS	<u>EX</u>	<u>PR</u>
One Way Arrow Lrg. W1-6-(O) (Half Size)			Box Culvert Barrel			Cable Number		Ø
Two Way Arrow Large W1-7-(O) (Half Size)			Box Culvert Headwall Bridge Pier			Left Turn Green	<u>-</u> G	<del>&lt;</del> G
Detour M4-10L-(O) (Half Size)		DETOUR	Bridge			Left Turn Yellow		<b>←</b> Y
Detour M4-10R-(O) (Half Size)		DETOUR	Retaining Wall			Signal Backplate		
One Way Left R6-1L (Half Size)		ONE WAY	Temporary Sheet Piling		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		الہ بار ار ار اجے جے	
One Way Right R6-1R (Half Size)		ONE WAY				Signal Section 8" (200 mm)		
Left Turn Lane R3-I100L (Half Size)		LEFT TURN LANE				Signal Section 12" (300 mm)		
Keep Left R4-7AL (Half Size)		KEEP				Walk/Don't Walk Letters		DW W
Keep Left R4-7BL (Half Size)		KEEP LEFT				Walk/Don't Walk Symbols		₩ *
Keep Right R4-7AR (Half Size)		KEEP RIGHT				TRAFFIC SIGNAL ITEMS	<u>EX</u>	<u>PR</u>
Keep Right R4-7BR (Half Size)		KEEP RIGHT				Galv. Steel Conduit		
Stop Here On Red R10-6-AL (Half Size)		STOP HERE				Underground Cable		
Stop Here On Red R10-6-AR		STOP HERE				Detector Loop Line		
(Half Size)		ON RED				Detector Loop Large	· · · · · · · · · · · · · · · · · · ·	
No Left Turn R3-2 (Half Size)		$\bigcirc$				Detector Loop Small		
No Right Turn R3-1 (Half Size)						Detector Loop Quadrapole	ιφ φφ βλ	
Road Closed R11-2 (Half Size)		ROAD CLOSED						
Road Closed Thru Traffic R11-2 (Half Size)		ROAD CLOSED TO THRU TRAFFIC						
PASSED , January 1 2021 07							ABBREVI	ATIONS
Multiple     Set     Set       ENGINEER OF POLICY AND PROCEDURES     APPROVED     January 1, 2021							AND PAT	IERNS (Sheet 8 of 9)
ENGINEER OF DESIGN AND ENVIRONMENT							STANDARI	000001-08

TRAFFIC SIGNAL ITEMS (contd.)	<u>EX</u>	PR	UNDERGROUND UTILITY ITEMS	PR	ABANDONED	UTILITY ITEMS (contd.)
Detector Raceway	"E" [		Cable TV CTV	CTV	<u> </u>	Traffic Signal
,			Electric Cable — E — E — E	— — E — —	— — — E — — / —	Traffic Signal Control Box
Aluminum Mast Arm	0		Fiber Optic — FO — FO —	F0	— — FO — / —	Water Meter
Steel Mast Arm	0	•	Gas Pipe ────────────────────────────────────	— — G — — — — — — — — — — — — — — — — —	— —/ — I G I — / —	Water Meter Valve Box
			Oil Pipe Oil	0	<b>-</b> -/+0  /	Profile Line —
Veh. Detector Magnetic			Sanitary Sewer — ) )	->- <b>-&gt;&gt;-)</b> )	<b>-</b>	Aerial Power Line —
Conduit Splice	•	•	Telephone Cable ————————————————————————————————————	T	— — T — — —	
Controller	$\boxtimes$	×	Water Pipe → W →	W	— — / W I — / —	VEGETATION TIEMS
Gulfbox Junction	0	0				Deciduous Tree
Wood Pole	$\otimes$	٢	UTILITIES ITEMS	<u>EX</u>	<u>PR</u>	Bush or Shrub
Temp Signal Head		->	Controller	$\boxtimes$		Evergreen Tree
Handhole			Double Handhole			Stump
Double Handhole			Fire Hydrant	Ŭ	¥	Orchard/Nursery Line — -
Heavy Duty Handhole	Ħ		GuyWire or Deadman Anchor	$\rightarrow$		Vegetation Line
Junction Box	$\bigcirc$	O	Handhole			Woods & Bush Line
Ped. Pushbutton Detector	۲	۲	Heavy Duty Handhole	H	E	<u>WATER FEATURE</u> ITEMS
Ped. Signal Head	-0	4	Junction Box	Ø	٥	Stream or Drainage Ditch
Power Pole Service	-D-	•	Light Pole	¤	×	Waters Edge
Priority Veh. Detector	$\sim$	•◄	Manhole	Ø	$\odot$	Water Surface Indicator
Signal Head	->	+	Monitoring Well (Gasoline)			Water Point
Signal Head w/Backplate	+1>	+►-	Pipeline Warning Sign	þ		Disappearing Ditch
Signal Post	0	•	Power Pole	-D-	-	Marsh
Closed Circuit TV	[C]	C.	Power Pole with Light	<b>\$</b>		March/Swamp Boundary
Video Detector System			Sanitary Sewer Cleanout	٥		Barsh, Swamp Boandary
	_		Splice Box Above Ground		-	ST
Illinois Department of Transportation			   Telephone Splice Box   Above Ground	$\blacksquare$		
PASSED January I, 2021 M.J. J. J. 2021 ENGINEER OF POLICY AND PROCEDURES APPROVED January 1, 2021			Telephone Pole	-0-	-•-	

ED	<u>UTILITY ITEMS</u> (contd.)	<u>EX</u>	PR
_/	Traffic Signal	¢	•
_/	Traffic Signal Control Box	×	
_/	Water Meter	Ч	
_/	Water Meter Valve Box	0	•
/	Profile Line		
	Aerial Power Line	ΔΑ	—— A ——— A
	VEGETATION ITEMS	EX	<u>PR</u>
	Deciduous Tree	$\odot$	
	Bush or Shrub	Q	
	Evergreen Tree	Ŷ	
	Stump	<u>م</u>	
	Orchard/Nursery Line -		
	Vegetation Line		
	Woods & Bush Line		
	<u>WATER FEATURE</u> <u>ITEMS</u>	<u>EX</u>	<u>PR</u>
	Stream or Drainage Ditch -		
	Waters Edge -		
	Water Surface Indicator		
	Water Point	0	
	Disappearing Ditch	<	
	Marsh	يتللس	
	Marsh/Swamp Boundary -		
	S	TANDARD S ABBREVIA AND PAT	SYMBOLS, TIONS TERNS (Sheet 9 of 9)
		STANDARD	000001-08

						RE	INFORCEM	ENT BARS	- ENGLISI	H (METRIC	2)						
Bar Size	Dia.	Dia. Cross-	Weight							SPACING,	in.(mm)						
5.20	in.	Area	lbs./ft.	4 (100)	4½ (115)	5 (125)	5½ (140)	6 (150)	6½ (165)	7 (175)	7½ (190)	8 (200)	8½ (215)	9 (225)	10 (250)	11 (275)	12 (300)
English (metric)	mm	(sq. mm)	kg/m		AREA OF STEEL PER FOOT (METER), sq. in. (sq. mm)												
3	0.375	0.110	0.376	0.330	0.293	0.264	0.240	0.220	0.203	0.189	0.176	0.165	0.155	0.147	0.132	0.120	0.110
(10)	(9.5)	(71)	(0.560)	(710)	(617)	(568)	(507)	(473)	(430)	(406)	(374)	(355)	(330)	(316)	(284)	(258)	(237)
4	0.500	0.196	0.668	0.588	0.523	0.470	0.428	0.392	0.362	0.336	0.314	0.294	0.277	0.261	0.235	0.214	0.196
(13)	(12.7)	(129)	(0.944)	(1290)	(1122)	(1032)	(921)	(860)	(782)	(737)	(679)	(645)	(600)	(573)	(516)	(469)	(430)
5	0.625	0.307	1.043	0.921	0.819	0.737	0.670	0.614	0.567	0.526	0.491	0.461	0.433	0.409	0.368	0.335	0.307
(16)	(15.9)	(199)	(1.552)	(1990)	(1730)	(1592)	(1421)	(1327)	(1206)	(1137)	(1047)	(995)	(926)	(884)	(796)	(724)	(663)
6	0.750	0.442	1.502	1.326	1.179	1.061	0.964	0.884	0.816	0.758	0.707	0.663	0.624	0.589	0.530	0.482	0.442
(19)	(19.1)	(284)	(2.235)	(2840)	(2470)	(2272)	(2029)	(1893)	(1721)	(1623)	(1495)	(1420)	(1321)	(1262)	(1136)	(1033)	(947)
7	0.875	0.601	2.044	1.803	1.603	1.442	1.311	1.202	1.110	1.030	0.962	0.902	0.848	0.801	0.721	0.656	0.601
(22)	(22.2)	(387)	(3.042)	(3870)	(3365)	(3096)	(2764)	(2580)	(2345)	(2211)	(2037)	(1935)	(1800)	(1720)	(1548)	(1407)	(1290)
8	1.000	0.785	2.670	2.355	2.093	1.884	1.713	1.570	1.449	1.346	1.256	1.178	1.108	1.047	0.942	0.856	0.785
(25)	(25.4)	(510)	(3.973)	(5100)	(4435)	(4080)	(3543)	(3400)	(3091)	(2914)	(2684)	(2550)	(2372)	(2267)	(2040)	(1855)	(1700)
9	1.128	1.000	3.400	3.000	2.667	2.400	2.182	2.000	1.846	1.714	1.600	1.500	1.412	1.333	1.200	1.091	1.000
(29)	(28.7)	(645)	(5.060)	(6450)	(5609)	(5160)	(4607)	(4300)	(3909)	(3686)	(3395)	(3225)	(3000)	(2867)	(2580)	(2345)	(2150)
10	1.270	1.267	4.303	3.801	3.379	3.041	2.764	2.534	2.339	2.172	2.027	1.901	1.789	1.689	1.520	1.382	1.267
(32)	(32.3)	(819)	(6.404)	(8190)	(7122)	(6552)	(5850)	(5460)	(4964)	(4680)	(4311)	(4095)	(3809)	(3640)	(3276)	(2978)	(2730)
11	1.410	1.561	5.313	4.683	4.163	3.746	3.406	3.122	2.882	2.676	2.498	2.342	2.204	2.081	1.873	1.703	1.561
(36)	(35.8)	(1006)	(7.907)	(10060)	(8748)	(8048)	(7186)	(6707)	(6097)	(5749)	(5295)	(5030)	(4679)	(4471)	(4024)	(3658)	(3353)

Illinois Department of Transportat	ion
PASSED January 1, 2009 Staff 25.0 X ENGINEER OF POLICY AND PROCEDURES	ISSUED
APPROVED January 1, 2009	1-1-97

DATE	REVIS
1-1-09	Switched units to
	English (metric).
1-1-07	Deleted metric ta
	Soft converted Er
	table.

SIONS	
)	
able.	
nglish	

## AREAS OF REINFORCEMENT BARS

## STANDARD 001001-02

![](_page_52_Figure_0.jpeg)

![](_page_52_Figure_1.jpeg)

## **GENERAL NOTES**

The installation details and dimensions shown for perimeter erosion barriers shall also apply for inlet and pipe protection.

All dimensions are in inches (millimeters) unless otherwise shown

## **TEMPORARY EROSION CONTROL SYSTEMS** (Sheet 1 of 2)

STANDARD 280001-07

![](_page_53_Figure_0.jpeg)

![](_page_54_Figure_0.jpeg)

![](_page_55_Figure_0.jpeg)

Lettering for

![](_page_55_Figure_2.jpeg)

![](_page_55_Picture_3.jpeg)

5⁄16 (8)

<u>716</u> (11)

STANDARD 515001-04

![](_page_56_Figure_0.jpeg)

![](_page_56_Figure_1.jpeg)

ELEVATION

TYPE A 6'-3" (1.905 m) Typical post spacing

![](_page_56_Figure_4.jpeg)

![](_page_56_Figure_5.jpeg)

## **SECTION B-B**

\*\* When connecting Type D guardrail to an impact attenuator, adjust this dimension to match over a distance of 25'-0" (7.62 m) from point of connection if necessary.

![](_page_56_Figure_8.jpeg)

![](_page_56_Figure_9.jpeg)

REVISIONS
Revised steel post to hav
four holes in each flange.
Added detail for leave-out
Rev. 'D' to less than 6 (1
for guardrail behind curb.

![](_page_57_Figure_0.jpeg)

![](_page_58_Figure_0.jpeg)

![](_page_59_Figure_0.jpeg)

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED, but do

## **STEEL PLATE BEAM GUARDRAIL**

(Sheet 4 of 4)

STANDARD 630001-12

![](_page_60_Figure_0.jpeg)

SIONS			
its. Revised			
he taper/flare			
ed point.			
om 'Pay			
pe'.			

![](_page_61_Figure_0.jpeg)

![](_page_62_Figure_0.jpeg)

IONS
ge and
" (900 m) height.
RK ZONE
from
ackground.

![](_page_63_Figure_0.jpeg)

![](_page_63_Picture_2.jpeg)

![](_page_63_Picture_3.jpeg)

G20-I104(0)-6036

G20-I105(0)-6024

This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.

END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multilane highways.

## WORK LIMIT SIGNING

![](_page_63_Picture_11.jpeg)

Sign assembly as shown on Standards or as allowed by District Operations.

![](_page_63_Picture_13.jpeg)

G20-I103-6036

This sign shall be used when the above sign assembly is used.

### **HIGHWAY CONSTRUCTION SPEED ZONE SIGNS**

\*\*\*\* R10-I108p shall only be used along roadways under the juristiction of the State.

## **TRAFFIC CONTROL DEVICES**

(Sheet 2 of 3)

## STANDARD 701901-08

![](_page_64_Figure_0.jpeg)

![](_page_65_Figure_0.jpeg)

![](_page_65_Figure_1.jpeg)

TYPE 2

![](_page_65_Figure_3.jpeg)

<u> TYPE 3</u>

## **GENERAL NOTES**

See detail on Standard 729001 for mounting markers to posts.

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

## **OBJECT AND TERMINAL MARKERS**

STANDARD 725001-01

![](_page_66_Figure_0.jpeg)

![](_page_67_Figure_0.jpeg)

![](_page_68_Figure_0.jpeg)

Illinois Department of Transportat	ion
PASSED January 1, 2020	ISSUED
APPROVED January 1, 2020	1-1-2000

## GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

(Sheet 3 of 3)

STANDARD 782006-01

![](_page_69_Figure_0.jpeg)

## **GENERAL NOTES**

Type III Barricades and R11-2-4830 signs shall be positioned as shown in "Road Closed To All Traffic" detail on Highway Standard 701901.

Two Type A Low Intensity Flashing Lights shall be used on each approach in advance of the work area during hours of darkness. One light shall be installed above the barricades and the other above the first advance warning sign.

All warning signs shall have minimum dimensions of  $36 \times 36$  (900  $\times$  900) and have a black legend on an orange reflectorized background.

When fluorescent signs are used, orange flags are not required.

Longitudinal dimensions may be adjusted to fit field conditions.

When the distance between the barricade and the intersection is between 1500' (450 m) and 2000' (600 m), the advance sign shall be placed at the intersection. When the distance between the barricade and the intersection is over 2000' (600 m), an additional sign shall be placed at the intersection. The additional sign shall give the distance to the barricade in miles or fractions of a mile.

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

ISIONS	TYPICAL APPLICATION OF
tes from	TRAFFIC CONTROL DEVICES
S.	FOR CONSTRUCTION ON
	RURAL LOCAL HIGHWAYS
to	
	STANDARD B.L.R. 21-9

![](_page_70_Figure_0.jpeg)

SIONS	TYPICAL APPLICATION OF TRAFFIC
es from	CONTROL DEVICES FOR CONSTRUCTION
	ON RURAL LOCAL HIGHWAYS
	(TWO-LANE TWO WAY RURAL TRAFFIC)
Notes	(ROAD CLOSED TO THRU TRAFFIC)
ts to	
	SIANDAND DILINI 22-1