01-20-2017 LETTING ITEM 033

SEE SHEET 2 FOR INDEX OF SHEETS AND LIST OF ILLINOIS DOT HIGHWAY STANDARDS

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED HIGHWAY PLANS

FAS ROUTE 493 (CH 5) SECTION 25-B-NRS-BR-1 PROJECT ACRS-0493(104) **MCLEAN COUNTY** SUPERSTRUCTURE REPLACEMENT SANGAMON CREEK 1.4 MILES SOUTH OF IL 9 C-95-125-06





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

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 CHENEY'S GROVE TWP OR 811

PROJECT ENGINEER: JASON STULTS CONSULTANT LIAISON: RUSTIN KEYS DISTRICT 5 No.: (217) 465-4181 CONTRACT NO. 70611



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INDEX OF SHEETS

SHEET NO. TITLE

- COVER SHEET 1
- 2 INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES
- SUMMARY OF QUANTITIES 3-5
- **EXISTING TYPICAL SECTIONS** 6
- 7 **PROPOSED TYPICAL SECTIONS**
- 8 SCHEDULE OF QUANTITIES
- ALIGNMENT, BENCHMARKS AND CROSS TIES g
- PLAN AND PROFILE 10
- **GUARDRAIL AND SHOULDER WIDENING DETAILS** 11
- 12 BUTT JOINT DETAILS
- 13 ROAD CLOSURE DETAILS
- TRAFFIC CONTROL & PROTECTION DEVICES 14 (ROAD & SIDEROAD/STREET CLOSURES)
- 15 **PAVEMENT MARKING DETAILS**
- PROPOSED SN 057-0195 PLANS 16-21
- 22-23 CROSS SECTIONS

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

- STANDARD SYMBOLS ABBREVIATIONS AND PATTERNS AREAS OF REINFORCEMENT BARS DECIMAL OF AN INCH AND OF A FOOT TEMPORARY EROSION CONTROL SYSTEMS NAME PLATE FOR BRIDGE STEEL PLATE BEAM GUARDRAIL SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS TRAFFIC BARRIER TERMINAL, TYPE 6A PERMANENT SURVEY MARKERS OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY TRAFFIC CONTROL DEVICES OBJECT AND TERMINAL MARKERS TYPICAL PAVEMENT MARKINGS 000001-06 001001-02 001006 280001-07 515001-03 630001-11 630301-07 631032-09 667101-02 701006-05 701311-03 701901-06 725001-01 780001-05 782006 TYPICAL PAVEMENT MARKINGS GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

UTLILITY THE CON ADJUSTM INFORMAT

MIXTURE





J08 • 2399.1 DESIGNED - NAK REVISED Cummins INDEX OF SHEETS, HIGHWAY S FILE NAME + D578611-shs-gan.dgn SJS REVISED STATE OF ILLINOIS Engineering DRAWN ~ Corporation & GENERAL NOTES PLOT SCALE = 180.0000 '/ in. CHECKED - NAK REVISED -DEPARTMENT OF TRANSPORTATION Civil and Structural Engineering PLOT DATE + 10/17/2016 DATE 10/9/2015 REVISED SCALE SHEET NO. OF SHEETS STA. -

APPLICATION RATES USED IN QUANTITY CALCULATIONS

HOT-MIX ASPHALTII2 LBS/SO YD/INCH
BITUMINOUS MATERIALS (TACK COAT)0.05 LBS/S0 FT
AGGREGATE 2.05 TON/CU YD
TEMPORARY EROSION CONTROL SEEDING 100 LBS/ACRE

HOT-MIX ASPHALT	112 LBS/S0 YD/INCH
BITUMINOUS MATERIALS (TACK	COAT)0.05 LBS/SO FT
AGGREGATE	2.05 TON/CU YD
TEMPORARY EROSION CONTROL	SEEDING100 LBS/ACRE

CELON			CONTRACT	NO.	70611
NAY STANDARDS	RTE. 493	SECTION 25-B-NRS-BR-1	COUNTY A	SHEETS 23	NO. 2
	F.A.S.	CEATION	COUNTY	TOTAL	SHEET
THERE ARE NO COMMITMENTS	ASSOCI	ATED WITH THIS PROJ	CT		
		-			
				- -	
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					-
ALITY MANAGEMENT PROGRAM	0C/0 N.A.	<u>.</u>	-		
ICTION AGGREGATE: XTURE WEIGHT	MIX "	<u> </u>			• • •
SIGN AIR VOIDS: 4.0 0 XTURE COMP (GRADATION)	NDES	ICN = 50 .5		:	
XTURE USE(S): C/PG:	SURFA PG 64	-22	-		
CATION(S):	CH	5		2 2 2	- - -
E FOLLOWING MIXTURE REQUIREMEN	TS ARE	APPLICABLE FOR THE	S PROJECT:	-	-
XTURE REQUIREMENTS				÷	
N406H				•	-
PARTMENT. THIS WORK WILL BE PARTMENT. THIS WORK WILL BE PARTMENT.	AID FO	R AT THE CONTRACT U	NIT		-
FALUMINUM FABLET OF THE TYPE S PLACED ON THE PROPOSED STRUCT F RENCH MARK FIFVATION WITH DE	TURE A	UN STANDARD 66 (101 S S DIRECTED BY THE EN	NGINEER.		-
NZ0038	711Aun	AN CTANDIDA COTOS	C [] & J 3		-
E 4 FEET PER 40 FEET (OR 10% PE	ER STA	TION).			
IVEMENT MARKINGS. SHORT TERM PA	VEMEN	T MARKING PLACED ON PAVEMENT STRIPING.	THE	- 	
N-7UJA IORT TERM PAVEMENT MARKING SHAL	L BE	APPLIED TO THE PAVE	MENT		
THE QUANTITIES INCLUDED IN THE	CONT	RACT.	-		
PICAL CROSS SECTIONS. IT IS NOT ICKNESS OF THE HOT-MIX ASPHALT	INTEN	IDED TO INCREASE THE	ALL		: - -
N406 IE QUANTITIES INCLUDED IN THE PL	ANS F	OR HOT-MIX ASPHALT	iF.		•
IEIR COMPLETION.					-
MPORARY EROSION CONTROL SEEDIN DSSIBLE TO PLACE PERMANENT SEED	IG WILL	. BE DELETED IF IT IS N EARTH AT THE TIME	OF .		
INTRACT TO SEED DISTURBED EARTH RMANENT SEEDING IS NOT ALLOWED	I DURI	NG TIME PERIODS WHEN	l		-
N280 MPORARY EROSION CONTROL SEEDIN	G IS I	NCLUDED IN THIS		- - 	** ** *
FORMATION FOR EXCAVATORS SYSTE	(800) M)) 892-0123 OR 811.	LUUM FIUN		
LILITY COMPANIES MAY BE ADJUST	ING TH	EIR FACILITIES DURING	CONSTRUCT	ION.	
CURACY SHOULD BE CONSIDERED AP	PROXI	AATE ONLY.			
ILITY LINES WERE PLOTTED FROM I ILITY COMPANIES INVOLVED (QUALI'	INFORM	ATION FURNISHED BY T	THE VARIOUS EVEL D) AND	THE	
IERICAN VERTICAL DATUM OF 1988.	(NAVD	88)	:	:	-
N105.09A L ELEVATIONS SHOWN IN THE PLAN	S ARE	BASED ON NORTH	:		
CLUDING CADD FILES WILL NOT BE INTRACTOR.	AVAIL	ABLE TO THE	-		
N.~100A ECTRONIC FILES AND/OR FLECTRONI	IC SUP	VEY INFORMATION			-
IY METRIC UNITS SHOWN IN THIS CO TRIC UNITS ARE FOR INFORMATION	ONTRAC	T. WHERE INCLUDED.			
N100	11 00		EDE		-
<u>CENERAL NOTE</u>	S				
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				[CONSTRUC	TION CODE				
				FAS 493 (CH 5)	RURA	L 2 LANE 80%	FEDERAL 20%	STATE			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	MCLEAN COUNTY STA 74+00 TO STA 76+46 SN 057-0195							
				0014				<u> </u>		-	
20200100	EARTH EXCAVATION	CU YD	10	10							
20300100	CHANNEL EXCAVATION	CU YD	75	75							
20400800	FURNISHED EXCAVATION	CU YD	155	155							
			-		*******						
25000210	SEEDING, CLASS 2A	ACRE	0.5	0.5							
						-					
25000400	NITROGEN FERTILIZER NUTRIENT	POIND	45	45						-	
			40	40							
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45	45							

25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	45							
25100630	EROSION CONTROL BLANKET	SQ YD	1,281	1,281							
							·····				
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	100	100						-	
28000305	TENDODDV DITCH CHECKS	FOOT		20						-	
20000303			32	32							
					······						
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	294	294							
40600982	HOT-MIX ASPHALT SURFACE REMOVAL ~ BUTT JOINT	SQ YD	443	443							
										19 11 1	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	92	92							
				-						-	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	38	38							

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						DUDAL		ON CODE	TATE	
					FAS 493 (CH 5) MCLEAN COUNTY STA 74+00 TO	NONAL 2		DENAL 204 3		
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STA 76+46 SN 057-0195					
					0014					
	50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	1					
	50102400	CONCRETE DEMOVAL		0.6						
				0.0	0,0					
	50300225	CONCRETE STRUCTURES	CU YD	0.6	0.6					
******	50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1.808	1.808					
	50901050	STEEL RAILING, TYPE SM	FOOT	130	130					
	51500100	NAME DI.ATES	FACH	4						
					1					
	58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	201	201					
	58300100		FOOT	388	388					
	63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	150	150					
	63100097	TRAFFIC BARDIER TERMINAL TVDE CA	PACH							
k	03100007	TARFFIC DARLER IEMINAL, IIFE DA	EACH	4	4	an a				
	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4					
	63200310		POOR	400	400					
				408	408					
	67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4	4					
	67100100	MODILIGATION	L SUM	1	1			A () we		
	* SPE	ECIALTY ITEMS	L	L	<u> </u>			<u> </u>	<u></u>	
CE	ummins JOB Ingineering FILE	= 2399.1 DESIGNED - NAK REVISED - NAME = 0578611-aht-500.dgn DRAWN - SJS REVISED -	STATE	OF ILLINOIS			SUMM	ARY OF QUANTIT	IES	
il Engin	neering PL01	CATE + 10/17/2016 DATE - IO/9/2015 REVISED -	DEPARTMENT	UF TRANSPOR	HATION	SCALE	SHEET NO. 2 OF 3	SHEETS STA.	TO STA.	

TO STA.	FED. ROAD DIS	T. NO. ILLINOIS FED. A	D PROJECT	
nga	493	25-8-NRS-8R-1	MCLEAN CONTRACT	23 4 NO. 70611
TIFS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
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						CO	INSTRUCTION CODE	
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	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STA 76+46 SN 057-0195 0014			······································
CODE ITEM UNIT TOTAL Service 1000100 BBURT TEM ANZENT MANCINE ITEM UNIT TOTAL Service Servic								
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	9	9			
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4			
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	492	492	-		
*	78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	70	70			
¥.	78200005	CHARDRATI REFECTORS TYPE A	FACH	9	0			
ጥ					0			
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
	Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	15	15			
	20012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	206	206			
	Z0038700	PERMANENT BENCH MARKS	EACH	1	1			
								•••••••
6	* SP	ECIALTY ITEMS		I				
C	Cummins JO Engineering Fill Corporation PL	B = 2399.1 DESIGNED - NAK REVISED - LE NAME < 0578611-shs-S00.dgn	STAT	E OF ILLINOIS	ITATION		SUMMARY OF QUA	INTI
Structural Eng	ineering PL	DT DATE + 10/17/2016 DATE - 10/9/2015 REVISED -	10 m 1 5223 1 1936 19 1	The strate of	· · · · · · · · · · · · · · · · · · ·	SCALE: SHE	ET NO. 3 OF 3 SHEETS	STA.

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	F.A.S.	SECTION	COUNTY	TOTAL	SHEET
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S	493	25-B-NRS-8R-1	MCLEAN	23	5







Cummins JOB = 2399.1 DESIGNED - NAK REVISED -											F.A.S. RTE	SECTION	COUNTY	TOTAL	SHEET		
	Engineering	FILE NAME = D570611-sht-typical.dgn	DRAWN -	SJS	REVISED -	STATE OF ILLINOIS		E)	KITING	TYPICAL	SECTIONS		493	25-B-NRS-BR-1	MCLEAN	23	6
	Corporation	PLOT SCALE = 40.0000 ' / in.	CHECKED -	NAK	REVISED -	DEPARTMENT OF TRANSPORTATION									CONTRA	CT NO.	70611
	Civil and Structural Engineering	PLOT DATE = 10/17/2016	DATE -	10/9/2015	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROA	AD DIST. NO. ILLINOIS FED. A	ID PROJECT		







(1) <u>PROPOSED TYPICAL SECTION</u> STA 74+00 TO STA 74+89.58 (2) (2) STA 75+56.42 TO STA 76+46

	Cummins	JOB = 2399.1	DESIGNED -	NAK	REVISED -									SECTI	ION	COUNTY	TOTAL	SHEET
	Engineering	FILE NAME = D570611-sht-typical.dgn	DRAWN -	SJS	REVISED -	STATE OF ILLINOIS		PR	OPOSED) TYPICA	L SECTIONS		493	25-B-NR	S-BR-1	MCLEAN	23	7
	Corporation	PLOT SCALE = 40.0000 ' / in.	CHECKED -	NAK	REVISED -	DEPARTMENT OF TRANSPORTATION										CONTRAC	T NO.	70611
Civil and Structural Engi	gineering	PLOT DATE = 10/17/2016	DATE -	10/9/2015	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROA	AD DIST. NO. I	ILLINOIS FED. AID	PROJECT		

EARTHWORK

LOCATION	20200100 EARTH EXCAVATION	EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	20400800 FURNISHED EXCAVATION
	CU YD	CU YD	CUYD	CU Y D	CU Y D
EARTH EXCAVATION					
RT STA 73+11.50 TO STA 74+89.00	5	5	85	-80	80
RT STA 75+56.00 TO STA 77+37.16	5	5	80	-75	75
TOTAL	10	10	165	-155	155

SHRINKAGE = 25%

SEEDING

OLEDINO						
	25000210	25000400	25000500	25000600	25100630	28000250
	SEEDING,	NITROGEN	PHOSPHORUS	POTASSIUM	EROSION	TEMPORARY
	CLASS 2A	FERTILIZER	FERTILIZER	FERTILIZER	CONTROL	EROSION
LUCATION		NUTRIENT	NUTRIENT	NUTRIENT	BLANKET	CONTROL
						SEEDING
	ACRE	POUND	POUND	POUND	SQ YD	POUND
LT STA 73+33 TO STA 74+85	0.14	12.60	12.60	12.60	332.22	28
LT STA 75+37 TO STA 77+29	0.15	13.50	13.50	13.50	363.33	30
RT STA 73+17 TO STA 75+25	0.15	13.50	13.50	13.50	370.00	30
RT STA 75+58 TO STA 77+20	0.06	5.40	5.40	5.40	215.56	12
TOTAL	0.50	45.00	45.00	45.00	1,281.11	100
USE	0.5	45	45	45	1281	100

TEMPORARY DITCH CHECKS

	28000305			
LOCATION	FOOT			
LT STA 74+80	8			
LT STA 75+42	8			
RT STA 75+11	8			
RT STA 75+70	8			
TOTAL	32			

HMA RESURFACING

					40600290	40600982	40603310
						HOT-MIX	HOT-MIX
				RESURFACING	BITUMINOUS	ASPHALT	ASPHALT
LOC	CATION			THICKNESS	MATERIALS	SURFACE	SURFACE
					(TACK COAT)	REMOVAL -	COURSE,
						BUTT JOINT	MIX "C", N50
		FOOT	SQ YD	INCH	POUND	SQ YD	TON
STA 74+00.00	TO STA 74+60.00	22.00	146.67	1.500 TO 3.313	66.00	146.67	19.77
STA 74+60.00	TO STA 74+90.53	22.00	74.63	3.313 TO 3.313	33.58	74.63	13.85
STA 74+90.53	TO STA 75+55.47	28.00	SEE BRID	GE PLANS	95.20		24.40
STA 75+55.47	TO STA 75+86.00	22.00	74.63	3.313 TO 3.313	33.58	74.63	13.85
STA 75+86.00	TO STA 76+46.00	22.00	146.67	3.313 TO 1.500	66.00	146.67	19.77
TOTAL					294.36	442.60	91.64
USE					294	443	92

GUARDRAIL

			63000001	63100087	63100167
	LOCATION F		STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6A	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT
			FOOT	EACH	EACH
	LT STA 73+63	TO STA 74+82.46	25	1	1
	LT STA 75+47	TO STA 76+91.13	50	1	1
	RT STA 73+55	TO STA 74+98.36	50	1	1
	RT STA 75+64	TO STA 76+82.54	25	1	1
	TOTAL		150	4	4

GUARDRAIL REMOVAL

1.00	63200310	
	FOOT	
LT STA 73+80	TO STA 74+82.00	102
LT STA 75+47	TO STA 76+49.00	102
RT STA 73+97	TO STA 74+99.00	102
RT STA 75+64	TO STA 76+66.00	102
TOTAL		408

GUARDRAIL REFLECTORS, TYPE A

	78200005	
	EACH	
LT STA 74+13	TO STA 76+41.13	4
RT STA 75+97	TO STA 74+48.36	4
TOTAL		8

TERMINAL MARKER - DIRECT APPLIED

	72501000
LOOATION	EACH
LT STA 73+63	1
LT STA 76+91	1
RT STA 73+55	1
RT STA 76+83	1
TOTAL	4

AGGREGATE SHOULDERS, TYPE B

	48101200
LOCATION	TON
LT STA 73+33.00 TO STA 74+71.30	8.40
LT STA 75+60.23 TO STA 77+29.00	10.25
RT STA 75+74.73 TO STA 77+19.37	8.79
RT STA 73+17.00 TO STA 74+86.00	10.27
TOTAL	37.71
USE	38

	Cum	nmins	JOB = 2399.1	DESIGNED -	NAK	REVISED -						F.A.S.	SECTION	COUNTY	TOTAL	SHEET		
]	🗧 Engii	ineering	FILE NAME = D570611-sht-schedules.dgn	DRAWN -	SJS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES				493	25-B-NRS-BR-1	MCLEAN	23	8		
	Corp	poration	PLOT SCALE = 2.0000 ' / in.	CHECKED -	NAK	REVISED -										CONTRA	CT NO.	70611
Civil and Stru	ctural Engineeri	ring	PLOT DATE = 10/17/2016	DATE -	10/9/2015	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROA	AD DIST. NO. ILLINOIS FED. 4	ID PROJECT		

SHORT-TERM PAVEMENT MARKING

	70300100	70300150		
LOCATION	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL		
	FOOT	SQ FT		
SOLID WHITE EDGE LINE				
STA 74+00 TO STA 76+46.00				
YELLOW SKIP DASH				
STA 74+00 TO STA 76+46.00	28.00	9.33		
TOTAL	28.00	9.33		
USE	28	9		

PAVEMENT MARKING

	78001110	78001130	
	PAINT	PAINT	
LOCATION	PAVEMENT	PAVEMENT	
	MARKING -	MARKING -	
	LINE 4"	LINE 6"	
	FOOT	FOOT	
SOLID WHITE EDGE LINE			
STA 74+00 TO STA 76+46.00	492.00		
YELLOW SKIP DASH			
STA 74+00 TO STA 76+46.00		70.00	
TOTAL	492	70	



BM 4960-1 - CHISELED "□" ON TOP SE WINGWALL SN 057-0195 STA 75+47.38 LT 15.31' ELEV 811.028



FAS 493 (CH 5)								
CONTROL POINT		COORDINATES						
	STATION	NORTHING	EASTING					
P.O.T	58+64.65	1380264.80	930524.31					
P.O.T	87+40.72	1377388.74	930518.98					

GROUND COORDINATES

	JOB = 2399.1 FILE NAME = D570611-sht-alidgn	DESIGNED - NAK DRAWN - SJS		REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT, BENCHMARKS AN						
	PLOT SCALE = 200.0000 '/ in.	CHECKED - NAK		REVISED -								
Civil and Structural Engineering	PLOT DATE = 10/17/2016	DATE - 10/9/	9/2015	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	5		



STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT







LEGEND

- STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- ② TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT
- (3) TRAFFIC BARRIER TERMINAL, TYPE 6A (4) STEEL RAILING, TYPE SM
- (5) 25' TRANSITION 14' TO 15' (C TO FACE OF RAIL)



SECTION A-A

	Cummins	JOB = 2399.1	DESIGNED -	NAK	REVISED -									F.A.S. RTE	SECTION	COUNTY	T01 SHE	AL SHEET
	ngineering	FILE NAME = D570611-sht-rail.dgn	DRAWN -	SJS	REVISED -		G	JARDRAIL	AND	SHOU	ULDEK	WIDENIN	IG DETAILS	493	25-B-NRS-BR-	1 MCLEAN	2	3 11
	corporation	PLOT SCALE = 40.0000 '/ in.	CHECKED -	NAK	REVISED -	DEPARTMENT OF TRANSPORTATION								_		CONTR	ACT N	0. 70611
Civil and Structural Engir	ineering	PLOT DATE = 10/17/2016	DATE -	10/9/2015	REVISED -		SCALE:	SHEET NO.	. OF	F S	SHEETS	STA.	TO STA.	FED. ROA	D DIST. NO. ILLINO	S FED. AID PROJECT		



	Cummins	JOB = 2399.1	DESIGNED -	NAK	REVISED -								F.A.S.	SECTION	COUNTY	TOTAL	SHEET
	Engineering	FILE NAME = D570611-sht-butt_joint.dgn	DRAWN -	SJS	REVISED -	STATE OF ILLINOIS			BUTT	JOINT D	ETAILS		493	25-B-NRS-BR-1	MCLEAN	23	12
	Corporation	PLOT SCALE = 20.0000 ' / in.	CHECKED -	NAK	REVISED -	DEPARTMENT OF TRANSPORTATION									CONTRA	CT NO.	70611
Civil and S	Structural Engineering	PLOT DATE = 10/18/2016	DATE -	10/9/2015	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROAF	D DIST. NO. ILLINOIS FED.	ID PROJECT		



PLOT DATE = 10/17/2016

Civil and Structural Engineering

DATE

10/9/2015

REVISED

			F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I	DETAILS		493	25-B-NRS-BR-1	MCLEAN	23	13
-					CONTRAC	T NO.	70611
	STA.	TO STA.	FED. R	DAD DIST. NO. ILLINOIS FED. A	ID PROJECT		

ROAD CLOSURE





													_		• • • • • • • •			
	JOB = 2399.1		DESIGNED -	NAK	REVISED -			TRAFFIC	CONTR	801 & PI	ROTECTIO		F.A.S.	SECT	ION	COUNTY	TOTAL	SHEET
	eering FILE NAME = 70200	1000.dgn	DRAWN -	SJS	REVISED -	STATE OF ILLINOIS		(0040	0 017		TDEET O		493	25-B-NF	₹S-BR-1	MCLEAN	23	14
Corpo	ration PLOT SCALE = 40.00	100 ′ / in.	CHECKED -	NAK	REVISED -	DEPARTMENT OF TRANSPORTATION		(RUAD	& 211	JEKUAD/3	IKEEI U	LUSUKES)				CONTRAC	T NO.	70611
Civil and Structural Engineerin	PLOT DATE = 10/17	/2016	DATE -	10/9/2015	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROA	AD DIST. NO.	ILLINOIS FED. AID	ROJECT		

SIDEROAD / STREET CLOSURE

											DIS	STRICT 5	5 DETAIL	NO. 78	0000	CC
	Cummins	JOB = 2399.1	DESIGNED - NAK	REVISED -							F.A.S.	SECTIO	DN		TOTAL	SHEET
	Engineering	FILE NAME = 7800cccc.dgn	DRAWN - SJS	REVISED -	STATE OF ILLINOIS	PAVEMENT MA	ARKING (MC	LEAN COUN	ITY "SPO	T" IMPROVEMENTS ONLY)	493	25-B-NRS	S-BR-1	MCLEAN	23	15
	Corporation	PLOT SCALE = 40.000 ' / 10.	CHECKED - NAK	REVISED -	DEPARTMENT OF TRANSPORTATION									CONTRACT	NO. 7	0611
Civil and S	Structural Engineering	PLOT DATE = 10/17/2016	DATE - 10/9/2015	REVISED -		SCALE:	SHEET NO.	OF SHEE	TS STA.	TO STA.	FED. ROA	D DIST. NO. II	LLINOIS FED. AID P	ROJECT		

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

TYPICAL DETAIL FOR PAINTING HANDICAP MARKINGS

PAVEMENT MARKING

SHEET NO. 1 OF 6 SHEET

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary opproved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Removal of existing Wearing Surface and S-I Railing is included in the cost of Removal of Existing Superstructures.

See General Note Z0038 on Sheet 2 of 23 for Permanent Bench Mark.

<u></u>				
ITEM	UNIT	SUPER	SUB	TOTAL
-Mix Asphalt Surface Course, "C", N50	Ton	24.4		24.4
moval of Existing Superstructures	Each	1		1
ncrele Removal	Cu. Yd.		0.6	0.6
ncrete Structures	Cu. Yd.		0.6	0.6
ocast Prestressed Concrete ck Beams (27" depth)	Sq. Ft.	1808		1808
el Railing, Type SM	Foot	130	-	- 130
ne Plates	Each	1		1
erproofing Membrane System	Sq. Yd.	201	-	201
tland Cement Mortor Fairing Course	Foot	388		388
proach Slab Repair (Partial Depth)	Sq. Yd.	15		15
uctural Repair of Concrete (Depth ual to or Less Than 5 IN.)	Sq. Ft.		206	206
manent Bench Mark	Each		1	1
			a second s	

TOTAL BILL OF MATERIAL

LOADING HL-93

(NEW CONSTRUCTION) Allow 25#/sa. ft. for future wearing surface.

DESIGN SPECIFICATIONS

(NEW CONSTRUCTION) 2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 & 2016 Interims 1995 Seismic Retrofit Manual

DESIGN STRESSES

FIELD & EXISTING UNITS f'c = 3,500 psi fy = 60,000 psi (Reinforcement) PRECAST PRESTRESSED UNITS

f'c = 6,000 pst f'cl = 5,000 psl $fpu = 270,00 \text{ psl } (l_2^* \text{ low relax strands})$ $fpbl = 201,960 \text{ psl } (l_2^* \text{ low relax strands})$

SEISMIC DATA

Seismic Performance Category (SPC) = A Harizontal Bedrock Acceleration Coefficient (A) = 0.045g Site Coefficient (S) = 1.5

	<u>GENERA</u> CH 5	L PLAN AND OVER SANGA	ELEVATION MON CREEK
		F.A.S. ROUTE	493
	<u>SEC</u>	TION 25-B-N	IRS-BR-1
12710		MCLEAN COL	INTY
meno 22 m		STA 75+23	.00
8)	<u>STR</u>	UCTURE NO.	057-0195
	F.A.S. RTE.	SECTION	COUNTY TOTAL SHEET NO.
•	493	25-8-NRS-8R-1	MCLEAN 23 16
·····			CONTRACT NO. 70611
s		ILLINOIS FED.	AID PROJECT

			-		
E DETAILS	F.A.S. RTE	SECTION	COUNTY	TOTAL	SHEET NO.
057_0105	493	25-B-NRS-BR-1	MCLEAN	23	17
037-0135			CONTRAC	T NO.	70611
SHEETS		ILLINOIS FED. AI	D PROJECT		

For multi-span bridges, sufficient $l_4'' \times 6'' \times 1'-2''$ galvanized steel shims shall be provided to align rail between adjacent spans.

All steel rail members shall be galvanized according to Article

reinforcement bars and the outermost longitudinal reinforcement

	3 ¹ 2" 9"	BILL OF I	MATER	IAL
		Item	Unit	Quantity
1		Steel Railing, Type SM	Foot	130

G, TYPE SM WITH	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VCE STRUCTURE NO 057_0195	493	25-B-NRS-BR-1	MCLEAN	23	18
ACE STRUCTURE NO. 057-0155			CONTRAC	T NO.	70611
SHEETS		ILLINOIS FED. A	ID PROJECT		

CHECKED - MDC REVISED - SJS REVISED **DEPARTMENT OF TRANSPORTATION** CHECKED - MDC REVISED -

DATE

Civil and Structural Engineering

= 10/17/2016

DRAWN

B	BAR	LIS	<u>ST</u>	
ONE	BE	AM	ONL	<u> </u>

	(1-01	111 01 1101	ion only)	
Bar	No.	Size	Length	Shape
A(E)	19	#4	3′-7′′	—
$A_I(E)$	38	#4	3′-10′′	{
B(E)	10	#5	33′-5″	—
$B_I(E)$	8	#4	33'-2''	—
S(E)	84	#4	8'-5''	
$S_I(E)$	8	#4	6′-11′′	
$S_2(E)$	76	#4	7'-2''	7
S3(E)	12	#4	5′-6″	
S4(E)	12	#4	5′-3″	
U(E)	12	#5	4'-6''	
$U_I(E)$	4	#4	8'-7''	

ECK BEAM	F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
057–0195	493	25-B-NRS-BR-1	MCLEAN	23	19	
			CONTRAC	T NO.	70611	
SHEETS	ILLINOIS FED. AID PROJECT					

R DETAILS	F.A.S. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.			
057–0195	493	25-B-NRS-BR-1	MCLEAN	23	21			
			CONTRAC	T NO.	70611			
SHEETS	ILLINOIS FED. AID PROJECT							

