

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

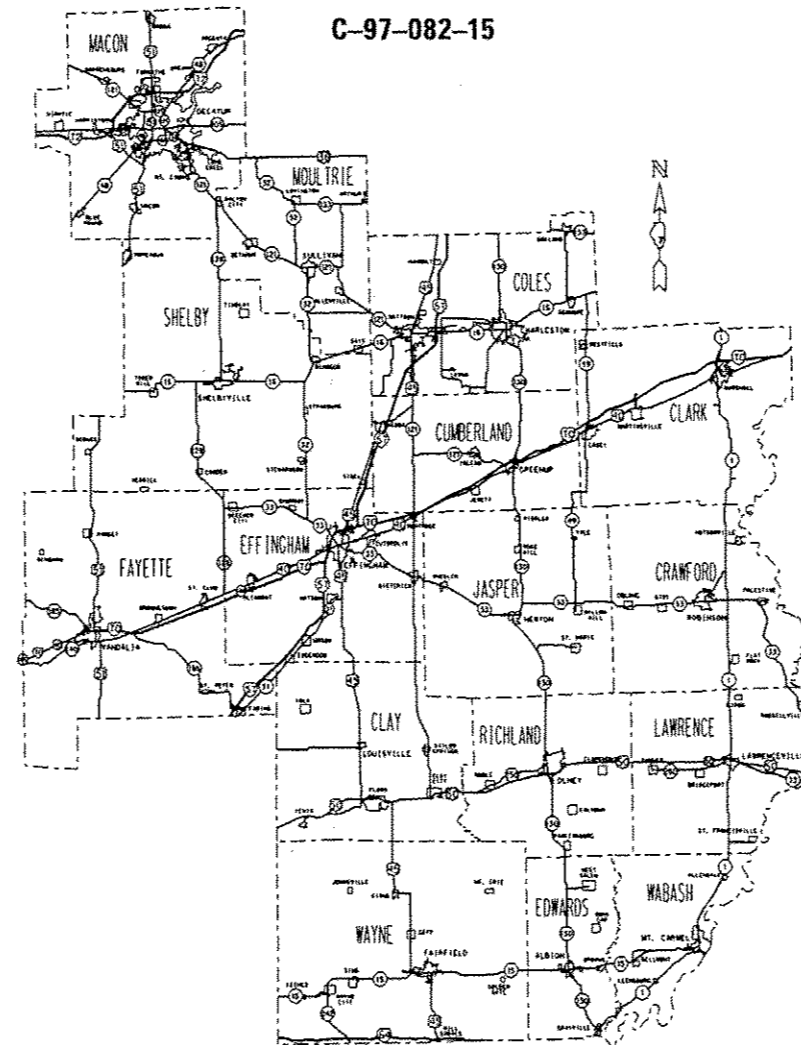
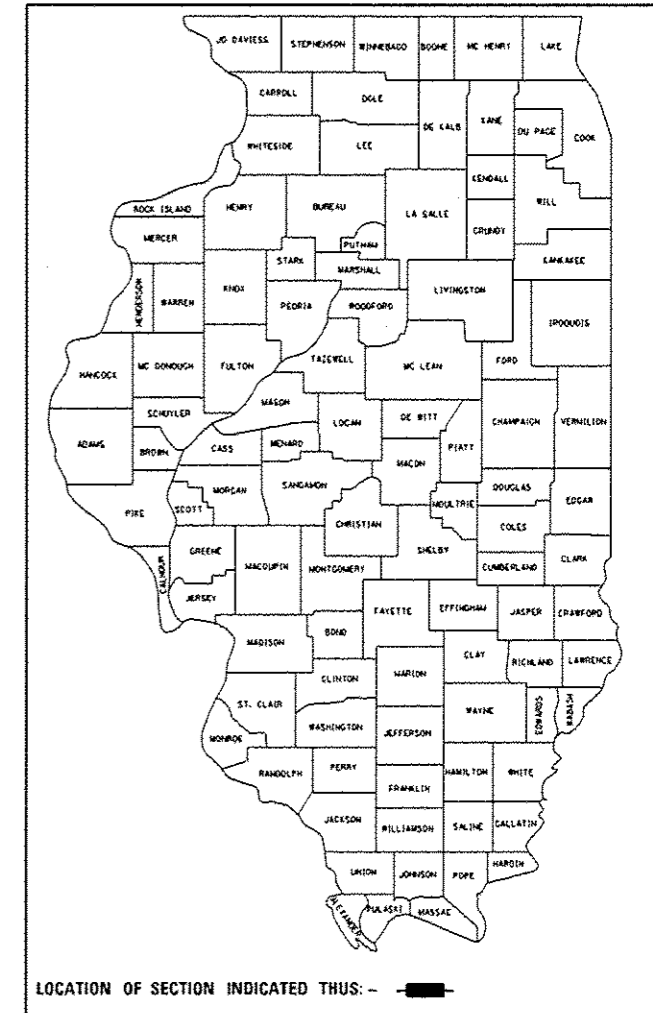
VARIOUS ROUTES
SECTION D7 GUARDRAIL 2016-1

TYPE of IMPROVEMENT MAINTENANCE
VARIOUS COUNTIES

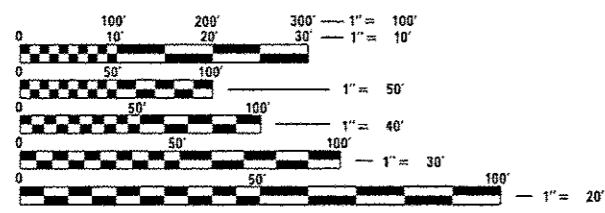
FOR INDEX OF SHEETS, SEE SHEET NO. 2

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D7 GUARDRAIL 2016-1	VARIOUS	6	1
		ILLINOIS	CONTRACT NO. 74728	

D-97-034-15



C-97-082-15



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

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

PROJECT ENGINEER ROB MACKLIN
PROJECT MANAGER LYNN McCLELLAN

CONTRACT NO. 74728

GROSS LENGTH = x.xx FT. = x.xxx MILE
NET LENGTH = x.xx FT. = x.xxx MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED February 8 20 16
Roy L. Driskell (P.E.)
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 18 20 16
Maureen M. Addis (P.E.)
ENGINEER OF DESIGN AND ENVIRONMENT

March 18 20 16
Omair Osman (P.E.)
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

GENERAL NOTES

THIS PROJECT IS LOCATED ON VARIOUS ROUTES IN VARIOUS COUNTIES ALL LOCATED WITHIN REGION 4-DISTRICT 7. THE WORK INCLUDED IN THIS SECTION CONSISTS OF VARIOUS TYPES OF GUARDRAIL REPAIR AND ALL OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

ALL WORK IS TO BE REPLACED IN KIND OR, AS INDICATED ON THE CONTRACT PLANS OR PROVISIONS.

THE LOCATIONS OF THE REPAIR AREAS WILL BE DETERMINED BY THE ENGINEER.

GUARDRAIL WORK SHALL INCLUDE ALIGNMENT AS NECESSARY TO RESTORE THE RAIL TO THE ORIGINAL CONDITIONS.

REMOVAL OF DAMAGED MATERIALS SHALL INCLUDE DISMANTLING, LOADING, HAULING AND DISPOSAL. THE WORK SITE SHALL BE LEFT IN A SAFE AND ORDERLY CONDITION.

NO MATERIAL SHALL BE LEFT ON OR NEAR THE ROADWAY DURING NON-WORKING HOURS.

ANY NECESSARY TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR; APPROPRIATE STANDARDS ARE LISTED ON SHEET NO. 2.

THE LIMITS OF THE DAMAGED GUARDRAIL WILL BE MARKED WITH PAINT. THE REPLACEMENT PARTS AND THE QUANTITIES INDICATED ARE WITHIN THESE LIMITS AS MARKED.

REMOVED GUARDRAIL THAT IS NOT REPLACED ON THE SAME DAY MUST BE DELINEATED WITH LIGHTED BARRICADES. NO LOCATIONS SHALL BE LEFT WITHOUT EITHER LIGHTED BARRICADES OR RESTORED GUARDRAIL AT ANY TIME.

GUARDRAIL MARKERS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS.

ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. (PH. 800-892-0123) OR FOR NON-MEMBER, THE UTILITY COMPANY DIRECTLY.

ANY WORK ORDER MAY BE CANCELLED AT THE ENGINEER'S DISCRETION.

SELF WEATHERING STEEL ITEMS (CORTEN) WILL BE PAID FOR THE SAME AS REGULAR ITEMS.

NO OVERNIGHT LANE CLOSURES WILL BE ALLOWED.

THE CONTRACTOR IS ADVISED THAT THE GUARDRAIL PAY ITEMS INCLUDED IN THE PLANS MAY BE USED TO REPLACE/REPAIR SPBGR AND TRAFFIC BARRIER TERMINALS FOR THE NEW MIDWEST STANDARD AS SHOWN IN THE HIGHWAY STANDARDS AS WELL AS SPBGR AND TRAFFIC BARRIER TERMNAL INSTALLED PRIOR TO JAN. 1, 2007. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR UTILIZING THE CURRENT MIDWEST STANDARDS.

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS AND GENERAL NOTES
- 3-5 SUMMARY OF QUANTITIES
- 6 DETAIL OF IMPACT ATTENUATORS (NON-DIRECTIVE) TL 3

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 6:

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 630001-10 STEEL PLATE BEAM GUARDRAIL
- 630101-09 GUARDRAIL MOUNTED ON EXISTING CULVERTS
- 630106-01 LONG-SPAN GUARDRAIL OVER CULVERT
- 630201-06 PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 630301-06 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631006-08 TRAFFIC BARRIER TERMINAL, TYPE 1B
- 631011-09 TRAFFIC BARRIER TERMINAL, TYPE 2
- 631026-06 TRAFFIC BARRIER TERMINAL, TYPE 5
- 631031-14 TRAFFIC BARRIER TERMINAL, TYPE 6
- 631032-08 TRAFFIC BARRIER TERMINAL, TYPE 6A
- 631033-06 TRAFFIC BARRIER TERMINAL, TYPE 6B
- 636001-02 CABLE ROAD GUARD SINGLE STRAND
- 643001-02 SAND MODULE IMPACT ATTENUATORS
- 664001-02 CHAIN LINK FENCE
- 665001-02 WOVEN WIRE FENCE
- 701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
- 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701011-04 OFF-ROAD MOVING OPERATION, 2L, 2W, DAY ONLY
- 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
- 701201-04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701400-08 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701406-10 LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
- 701421-07 LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >=45 MPH TO 55 MPH
- 701501-06 URBAN LANE CLOSURE, 2L, 2W UNDIVIDED
- 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701606-10 URBAN SINGLE LANE CLOSURE MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701611-01 URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901-05 TRAFFIC CONTROL DEVICES
- 725001 OBJECT AND TERMINAL MARKERS
- 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

FILE NAME =	USER NAME = steffermk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS & GENERAL NOTES	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLLOT DATE = 2/8/2016	DATE -	REVISED -			CONTRACT NO. 74728		ILLINOIS FED. AID PROJECT		
						SCALE:	SHEET	OF	SHEETS	STA.

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SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		0021 MCHD	0021 CONT. MAINT.
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	75	50	25
63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	50	25	25
63000007	STEEL PLATE BEAM GUARDRAIL, TYPE B, 6 FOOT POSTS	FOOT	75	50	25
63000009	STEEL PLATE BEAM GUARDRAIL, TYPE B, 9 FOOT POSTS	FOOT	50	25	25
63000025	STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT	40	25	15
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1	
63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1	1	
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1	
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	1	1	
63100089	TRAFFIC BARRIER TERMINAL, TYPE 6B	EACH	2	1	1
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	17	16	1

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		0021 MCHD	0021 CONT. MAINT.
63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	2	1	1
63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	163	150	13
63301215	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE B	FOOT	38	25	13
63400105	GUARD POSTS	EACH	15	10	5
63600105	CABLE ROAD GUARD, SINGLE STRAND	FOOT	100	100	
64300260	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1	
66500105	WOVEN WIRE FENCE, 4'	FOOT	1550	1500	50
67100100	MOBILIZATION	LSUM	1	0.85	0.15
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	12	10	2
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	70	60	10
X0100002	GRADING AND SHAPING SPECIAL	SQ YD	2075	2000	75

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SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		0021 MCHD	0021 CONT. MAINT.
X0325264	REPAIR IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1	
X6300210	GUARDRAIL BLOCKS	EACH	250	200	50
X6300215	RAIL ELEMENT PLATES	EACH	160	150	10
X6300217	RAIL ELEMENT PLATES (RADIUS)	EACH	9	8	1
X6300220	EXTRUDER HEAD	EACH	6	5	1
X6300225	SINGLE END SECTION	EACH	26	25	1
X6300231	STEEL POST, ATTACHED TO STRUCTURES	EACH	7	6	1
X6300235	WOOD POSTS	EACH	8	7	1
X6300236	STEEL POSTS 6'	EACH	125	100	25
X6300239	STEEL POSTS 9'	EACH	13	10	3
X6330310	REMOVE AND REINSTALL EXTRUDER HEAD	EACH	3	2	1
X6331110	STEEL POSTS, SPECIAL	EACH	3	2	1
X6431220	REMOVE AND REPLACE IMPACT ATTENUATOR SAND MODULE	EACH	14	10	4

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SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		0021 MCHD	0021 CONT. MAINT.
X6640298	CHAIN LINK FENCE (SPECIAL)	FOOT	130	100	30
X6640308	CHAIN LINK GATES (SPECIAL)	EACH	1	1	
X6640502	CHAIN LINK FENCE POST	EACH	20	20	
Z0012752	CONCRETE STRUCTURE REPAIR	CU FT	4	4	
Z0020210	PULL POST ARRANGEMENT	EACH	2	2	
Z0029658	REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - POST	EACH	13	10	3
Z0051400	REMOVING AND RESETTNG POSTS	EACH	11	8	3
Z0052410	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)	EACH	21	20	1
Z0052415	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (FLARED)	EACH	1	1	
Z0052600	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	3	2	1
Z0052900	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 4	EACH	1	1	
Z0053000	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1	1	
Z0053100	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	1	1	

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SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		0021 MCHD	0021 CONT. MAINT.
Z0053200	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	1	1
Z0053210	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	1	1	
Z0053220	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6B	EACH	1	1	
Z0059660	REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - RAIL ELEMENT PLATE	EACH	6	5	1
Z0076480	TRAFFIC BARRIER TERMINAL CONNECTOR	EACH	2	2	

SUMMARY OF QUANTITIES				TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT	0021 MCHD		0021 CONT. MAINT.	

FILE NAME =	USER NAME = steffennh	DESIGNED -	REVISED -
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	PLOT DATE = 2/9/2016	DATE -	REVISED -

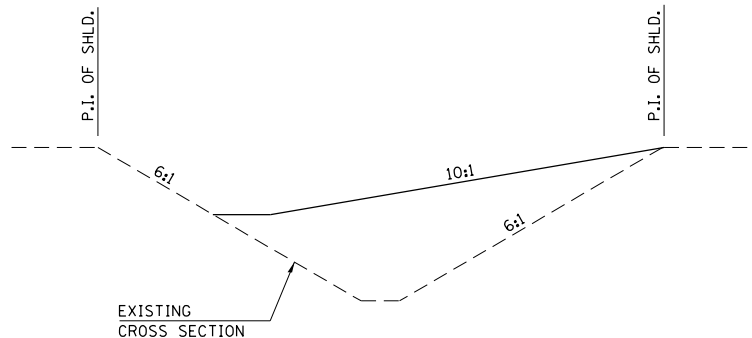
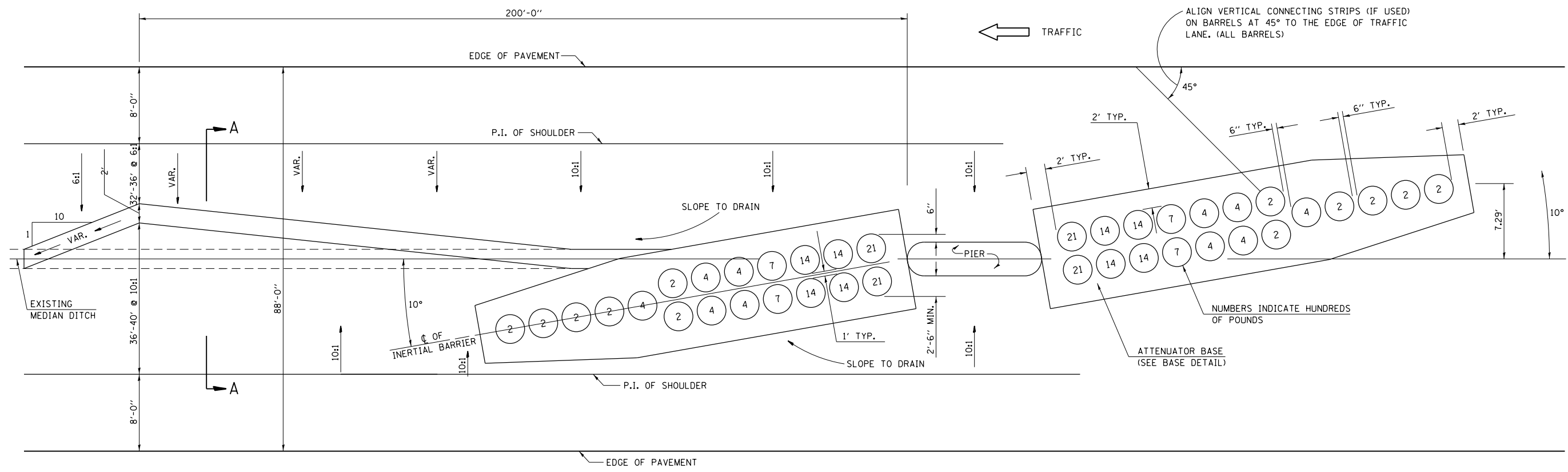
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE:		SHEET 3 OF 3 SHEETS	STA. TO STA.
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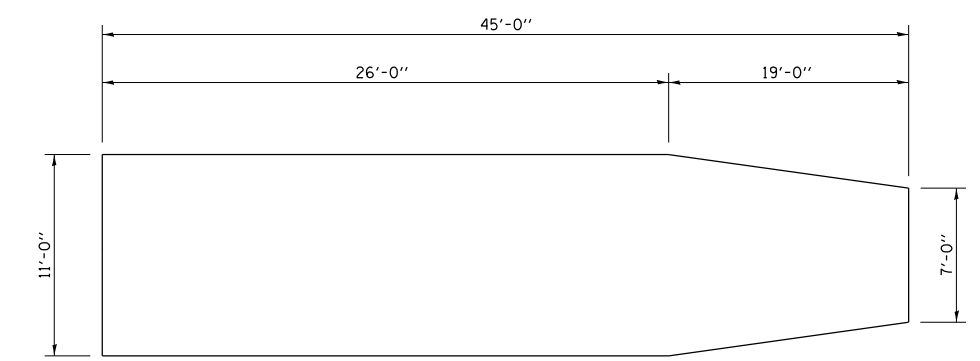
SUMMARY OF QUANTITIES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D7 GUARDRAIL 2016-1	VARIOUS	6	5
ILLINOIS FED. AID PROJECT				

CONTRACT NO. 74728



SECTION A-A
GRADING AND SHAPING DETAIL



BASE DETAIL

GENERAL NOTES

1. ALL 10:1 SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 10:1 OR FLATTER.
2. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
3. THE LENGTH X WIDTH OF MODULE LAYOUT IS 41.0' X 7.0' : 19 MODULES - 14,400 LBS.
4. IN AREAS OF 10:1 SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR OR MORE WOOD POSTS SHALL BE PLACED AT 5' INTERVALS IN THE MEDIAN \bar{c} . SEE SPECIAL PROVISIONS AND SCHEDULES.

NOT TO SCALE
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 7 DETAIL NO. Z0030150

FILE NAME =	USER NAME = steffenmk	DESIGNED -	REVISED -
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	PLOT SCALE = 60.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/8/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF IMPACT ATTENUATORS (NON-REDIRECTIVE) TEST LEVEL 3			
88' MEDIAN			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D7 GUARDRAIL 2016-1	VARIOUS	6	6
			CONTRACT NO. 74728	
ILLINOIS FED. AID PROJECT				