STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

VARIOUS ROUTES SECTION D6 CABLE / GUARDRAIL 2015 SAFETY ITEM REPAIR **VARIOUS COUNTIES IN D6**

C-96-053-14

HANCOCK MASON SCHUYLER LOGAN **ADAMS** MENARD CASS BROWN SANGAMON MORGAN SCOTT L PIKE CHRISTIAN MACOUPIN MONTGOMERY

GENERAL NOTES 3-5 SUMMARY OF QUANTITIES 6-16 PRE-MGS HIGHWAY STANDARDS

INDEX OF SHEETS

COVERSHEET

CABLE GUARD MARKER DETAIL

FOR LIST OF STANDARDS, SEE SHEET NO. 2

NOTE:

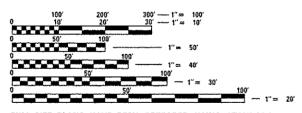
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SECTION D6 CABLE / GUARDRAIL 2015 CONSISTS OF REPAIR OF DAMAGED **GUARDRAIL AND OTHER ITEM AS** DIRECTED BY THE ENGINEER ON **VARIOUS ROUTES IN IDOT DISTRICT** SIX UNDER STATE JURISDICTION



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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT ENGINEER TEAM ENGINEER

VINCE MADONIA 217-785-9046 JAY EDWARDS 217-785-5321

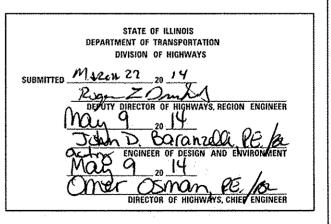
CONTRACT NO. 72G82

ILLINOIS CONTRACT NO. 72G82

• D6 CABLE/GUARDRAIL 2015

D-96-053-14





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

HIGHWAY STANDARDS

STANDARD NO.	TITLE
630001-10	STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-09	TRAFFIC BARRIER TERMINAL. TYPE 2
631026-05	TRAFFIC BARRIER TERMINAL. TYPE 5
631031-12	TRAFFIC BARRIER TERMINAL. TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
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' (4.5 M) AWAY
701006-05	OFF-ROAD OPERATIONS. 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701101-04	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-04	LANE CLOSURE, 21, 2W, SHORT TIME OPERATIONS
701400-07	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-08	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-08	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701421-06	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS > 45 MPH TO 55 MPH
701422-06	LANE CLOSURE, MULTILANE, FOR SPEEDS > 45 MPH TO 55 MPH
701426-06	LANE CLOSURE, MULTILANE. INTERMITTENT OR MOVING OPERATION, FOR SPEEDS 2 45 MPH
701427-02	LANE CLOSURE. MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS < 40 MPH
701456-03	PARTIAL EXIT RAMP CLOSURE FREEWAY/EXPRESSWAY
701501-06	URBAN LANE CLOSURE, 2L. 2W, UNDIVIDED
701502-06	URBAN LANE CLOSURE, 2L. 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701601-09	URBAN LANE CLOSURE. MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602-07	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-09	URBAN LANE CLOSURE. MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-09	URBAN LANE CLOSURE. MULTILANE INTERSECTION
701901-03	TRAFFIC CONTROL DEVICES
701428	

GENERAL NOTES

ALL DISTURBED AREAS CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE GRADED AND SEEDED WITH CLASS 2 ROADSIDE MIXTURE AND FERTILIZED AS STATED IN SECTION 250 OF THE STANDARD SPECIFICATIONS. COST SHALL BE CONSIDERED INCLUDED IN THE UNIT COST OF THE WORK BEING PERFORMED.

REMOVAL OF DAMAGED IMPACT ATTENUATORS SHALL BE INCLUDED IN THE COST OF THE IMPACT ATTENUATOR BEING INSTALLED.

REMOVAL AND DISPOSAL OF DAMAGED FENCE SHALL BE INCLUDED IN THE COST OF THE FENCE BEING INSTALLED.

	DISTRICT SIX	
EXAMINED O MML ALL OPERATIONS EN	3/19 H/ Gr- Roze-L.1	20 <u>14</u> Diokall
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PROGRAM DE	VELOPMENT ENGIN	NEER
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GENERAL NOTES				F.A.* RTÉ.	SECTION	***************************************	
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				1	100-10	
					CONSTRUCTIO	N CODE
				REGULAR PROGRAM	MCHD	STATEWIDE HIGH-TENSION CABLE RAIL REPAIR
				6-00664-0300	6-00664-9996	0-01845-6001
				ROADWAY	ROADWAY	ROADWAY
2005			TOTAL	<u></u>	ļ	<u> </u>
CODE	·		TOTAL	0021	0021	0021
				OTAOL, at	10, IOMCE	07405,02
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	350	200	150	
63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A. 9 FOOT POSTS	FOOT	200	150	50	
					77	
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1		and the state of t	
63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1		A CONTRACTOR OF THE CONTRACTOR	
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1		1	
63100167	TRAFFIC BARRIER TERMINAL. TYPE 1 (SPECIAL) TANGENT	EACH	14	7-6	7	
					TANDA	
63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	1		1	
63200310	GUARDRAIL REMOVAL	FOOT	900	750	150	
					The state of the s	
64300450	IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
64401300	HIGH TENSION CABLE MEDIAN BARRIER TERMINALS	EACH	1		***************************************	1
64401300	HIGH TENSION CABLE MEDIAN BARRIER TERMINALS	EACH	ı.			
66400105	CHAIN LINK FENCE, 4'	FOOT	300	200	100	
					The second secon	
66500105	WOVEN WIRE FENCE, 4'	FOOT	300	100	200	
67100100	MOBILIZATION	L SUM	1	0.3	0.4	0. 3
					1	
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	3	1	2	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

		SUMM	ARY OF QUANTATIES	5	
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				CONSTRUCTION CODE			
				REGULAR PROGRAM 6-00664-0300	MCHD 6-00664-9996	STATEWIDE HIGH-TENSION CABLE RAIL REPAIR 0-01845-6001	
			1		ROADWAY	ROADWAY	
		ribush 444 va A		ROADWAY		0021	
CODE		#L1	TOTAL	0021	0021	0021	
3200410	GUARDRAIL MARKERS, TYPE A	EACH	300	150	150		
		an in the second					
8201000	TERMINAL MARKER - DIRECT APPLIED	EACH	32	15	17		
		EACH	26	16	10		
0008759	CALL OUT	EACH	20	10	10		
0008760	EMERGENCY WORK CALL OUT	EACH	25	4	8	13	
				To a part of the state of the s			
20052000	REPAIR STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	750	500	250		
10052410	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)	EACH	45	22	23		
	RELATE TRAIT TO DAINTEN TERMINAL TO DE CONTROL						
0052415	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (FLARED)	EACH	1	A district of the second of th	1		
20052600	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1		1		
	REPAIR TRAFFIC DANIEL TENANCE, THE C						
0053000	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1		1		
		and the state of t	ļ				
.0053200	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1		1		
(0325231	CABLE GUARD MARKER	EACH	300		50	250	
0325899	REPAIR HIGH TENSION CABLE (GIBRALTAR)	FOOT	850		200	650	
(0325900	REPAIR HIGH TENSION BARRIER TERMINAL (GIBRALTAR)	EACH	3		1	2	
-202000							
×0325901	REPAIR POSTS (GIBRALTAR)	EACH	140		40	100	
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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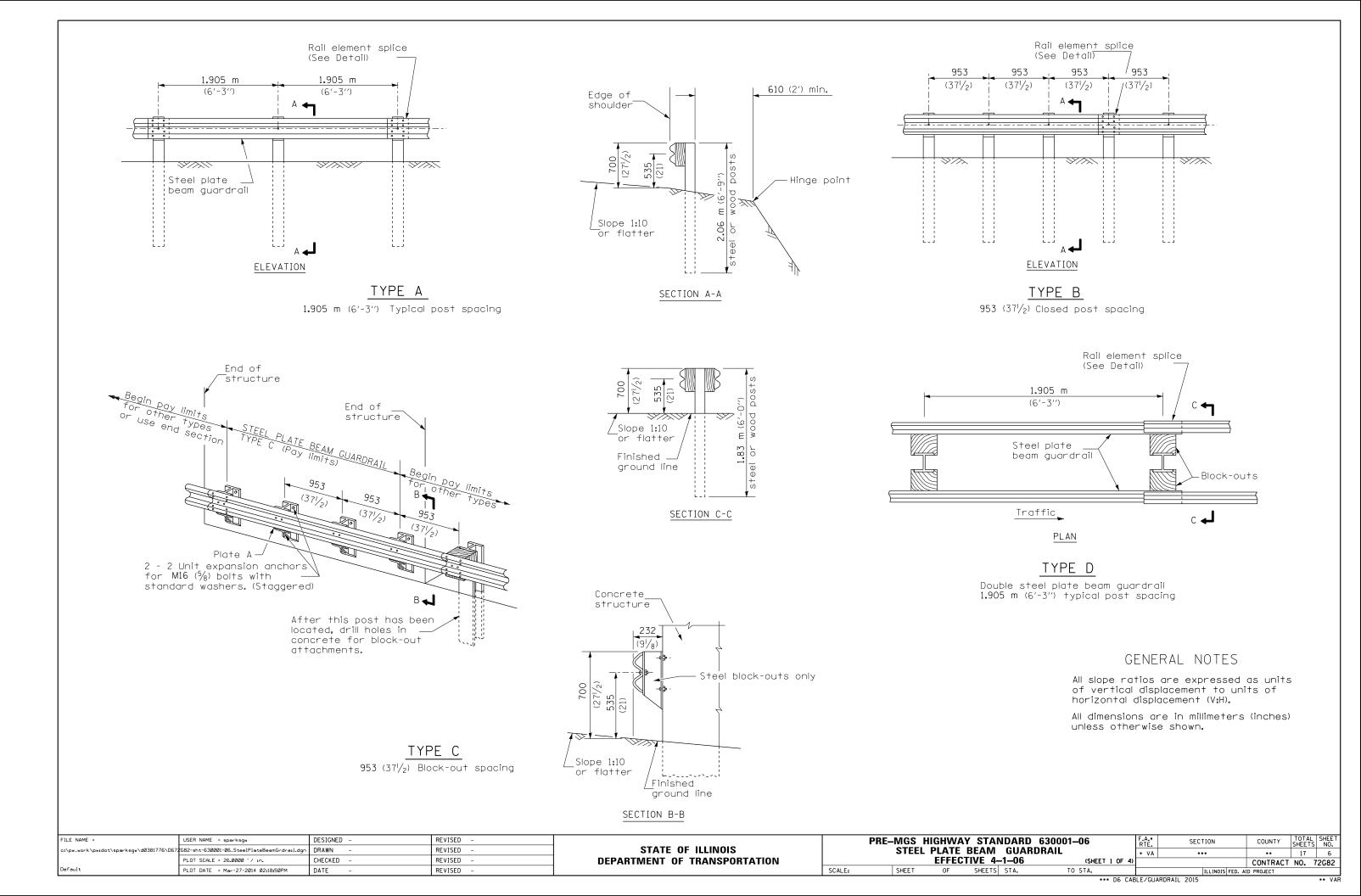
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			A top in the type of the top in the type of type of the type of type of the type of ty	REGULAR PROGRAM 6-00664-0300	MCHD 6-00664-9996	STATEWIDE HIGH-TENSION CABLE RAIL REPAIR 0-01845-6001
··		T	1	ROADWAY	ROADWAY	ROADWAY
CODE			TOTAL	0021	0021	0021
×0325902	REMOVE AND REPLACE POSTS (GIBRALTAR)	EACH	125		60	65
×0327490	REPAIR HIGH TENSION CABLE (NU-CABLE)	FOOT	150		50	100
x0327491	REPAIR POSTS (NU-CABLE)	EACH	57		15	42
x0327492	REMOVE AND REPLACE POSTS (NU-CABLE)	ЕАСН	80		30	50
×0327493	REPAIR HIGH TENSION BARRIER TERMINAL (NU-CABLE)	EACH	3		1	2
×6431220	REMOVE AND REPLACE IMPACT ATTENUATOR SAND MODULE	EACH	20	10	10	
X7011834	TRAFFIC CONTROL AND PROTECTION, CALL OUT WORK	EACH	18		9	9
X7011836	TRAFFIC CONTROL AND PROTECTION, FREEWAY/EXPRESSWAY, CALL OUT WORK	EACH	38	9	9	20

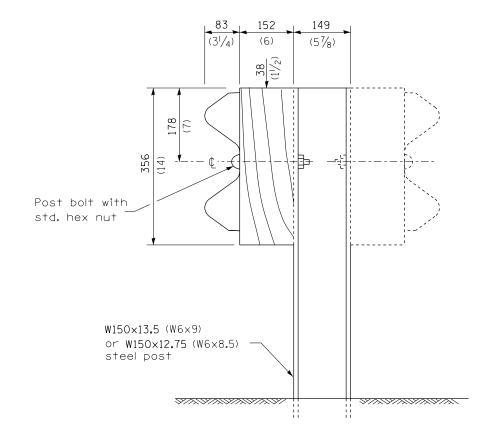
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

		SUMM	ARY OF QUANTATIES		
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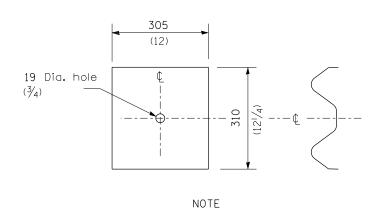
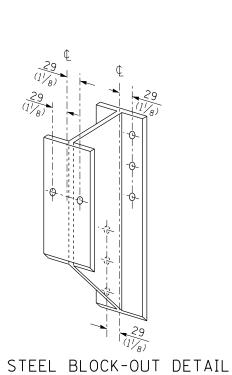
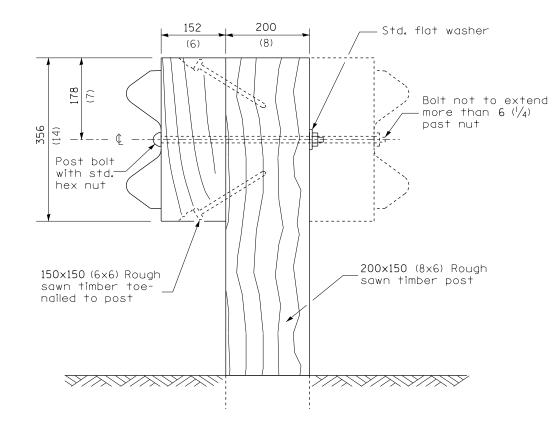


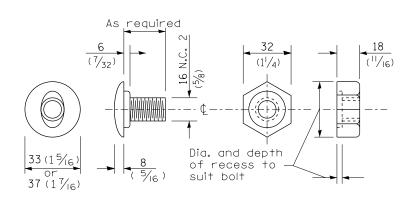
Plate A shall be placed between rail element and block-out at nonsplice mounting points only when steel block-outs are used.

PLATE A



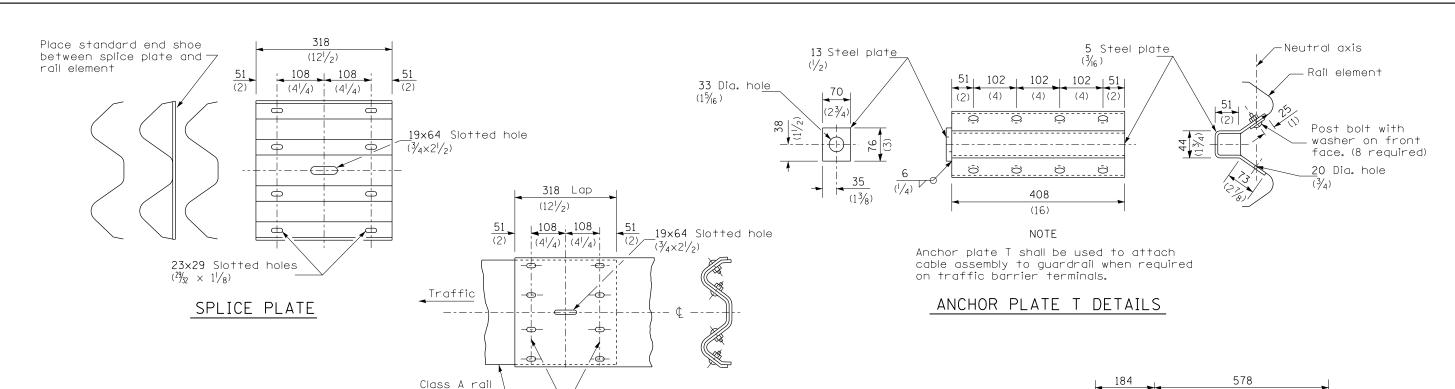


WOOD POST CONSTRUCTION



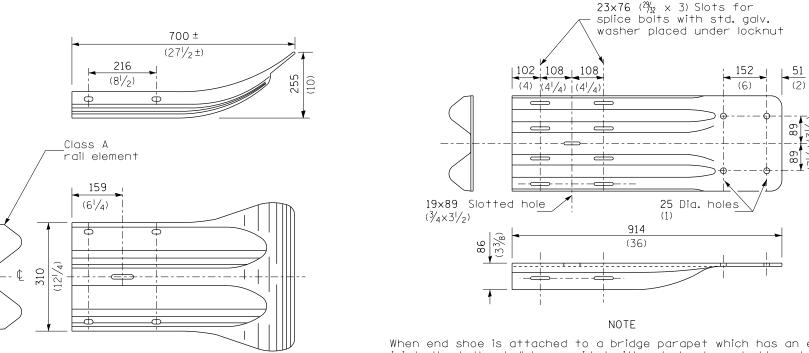
POST OR SPLICE BOLT & NUT

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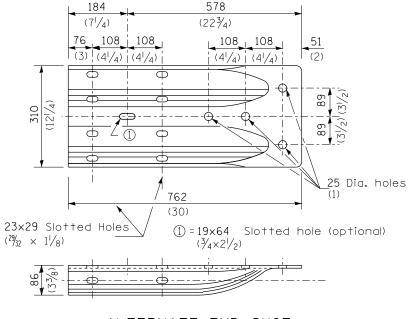
 23×29 ($^{29}\!\!/_{32}$ \times $1^{1}\!/_{8}$) Slotted holes for M16 ($^{5}\!\!/_{8}$) splice bolts

RAIL ELEMENT SPLICE



element

END SECTION



ALTERNATE END SHOE

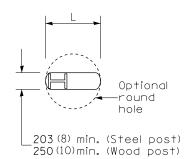
When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

The standard end shoe shall be attached to the concrete with pre-drilled or self-drilling anchor bolts. The anchor cone shall be set flush with the surface of the concrete.

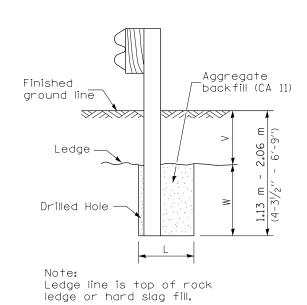
Externally threaded studs protruding from the surface of the concrete will not be permitted.

END SHOE

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c:\pw_work\pwidot\sparksgw\d0381776\D672	082-sht-630001-06_SteelPlateBeamGrdrail.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS		STEEL				RAIL	• VA	•••	••	17 8
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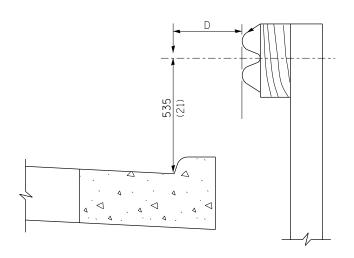


PLAN



FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED

ELEVATION



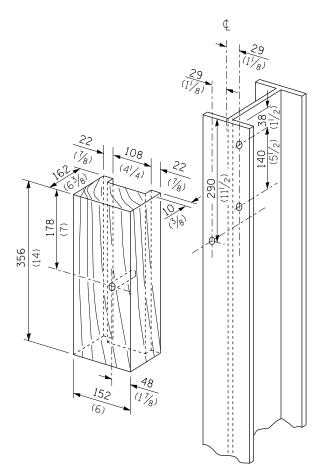
Note:

If it is necessary for D to be more than 300 (12) and less than 3.0 m (10'-0") type M-5 (M-2) curb and gutter (Std. 606001) shall be used in front of and in advance of the guardrail.

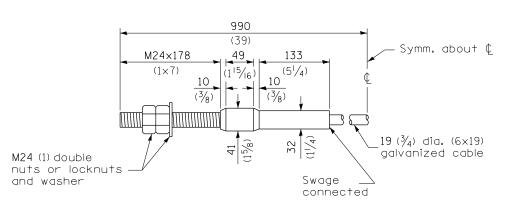
GUARDRAIL PLACED BEHIND CURB

(D = 0 desirable to 300 (12) maximum)

V	W	L								
V	Stee		Wood Post							
0 - 460	610	530	580							
(0 - 18)	(24)	(21)	(23)							
>460 - 825	305	203	250							
(>18 - 41.5)	(12)	(8)	(10)							
>825 - 1.13 m	305 - 0	203	250							
(>41.5 - 53.5)	(12 - 0)		(10)							



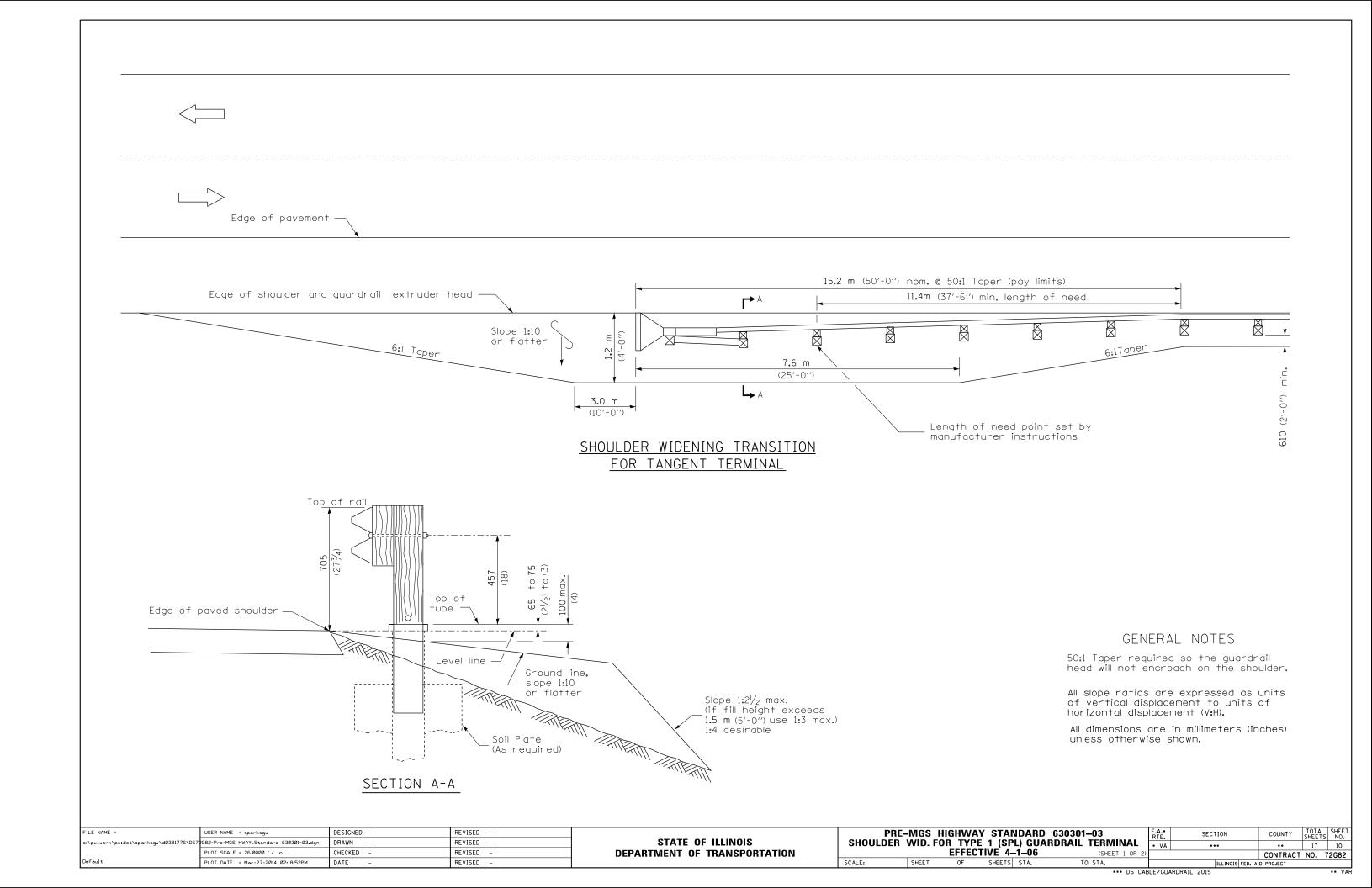
WOOD BLOCK-OUT AND STEEL POST DETAILS

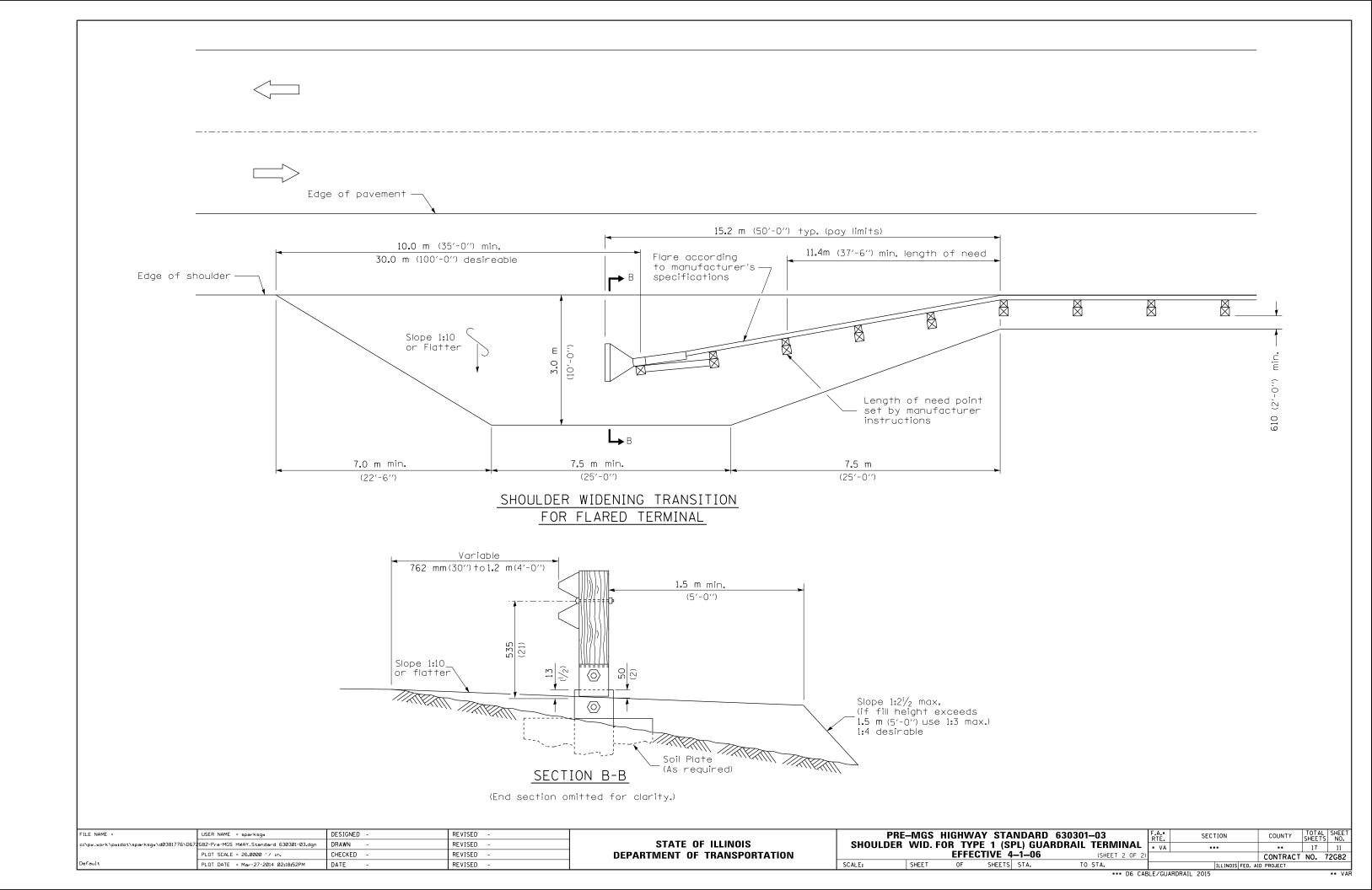


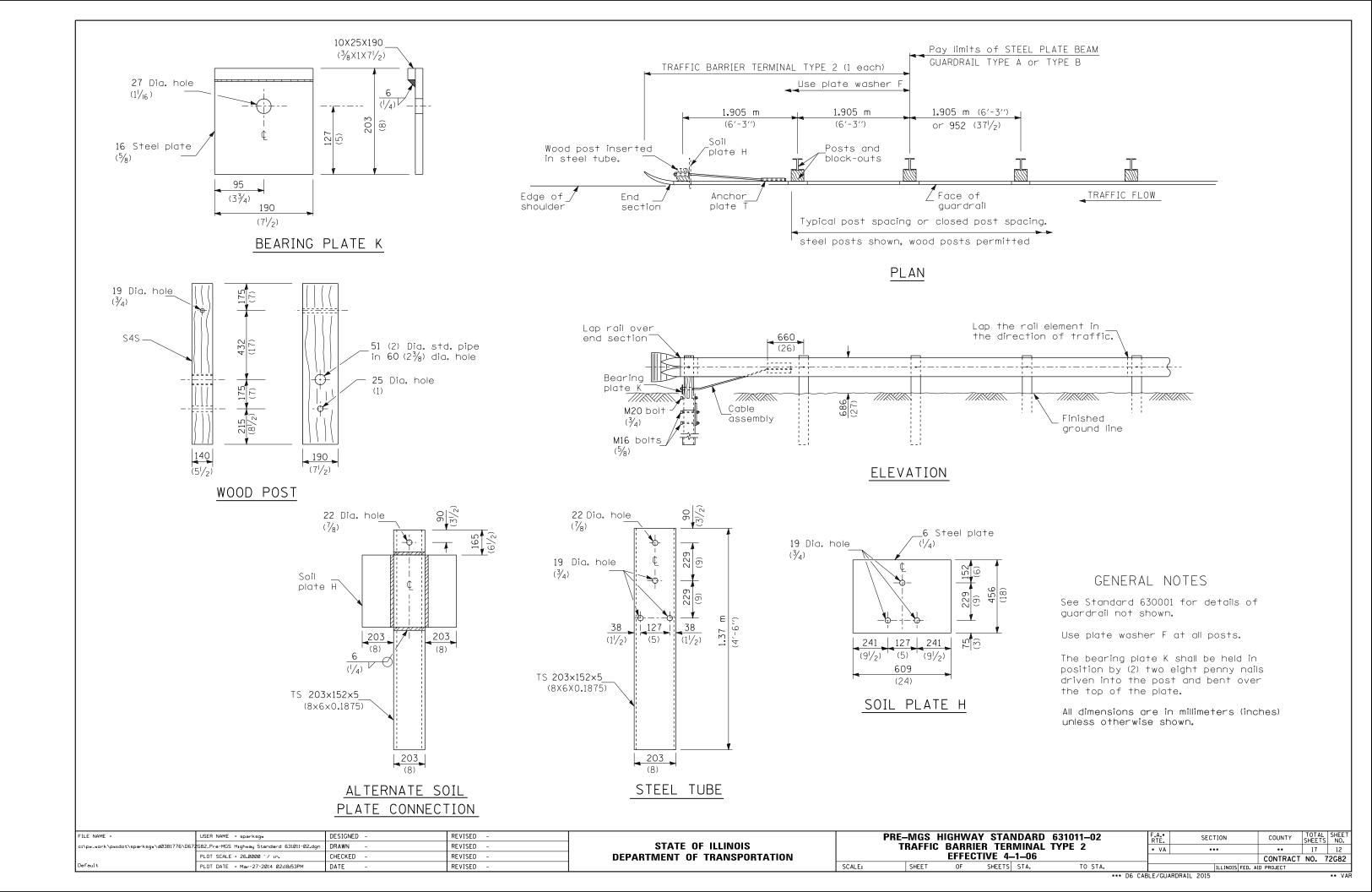
CABLE ASSEMBLY

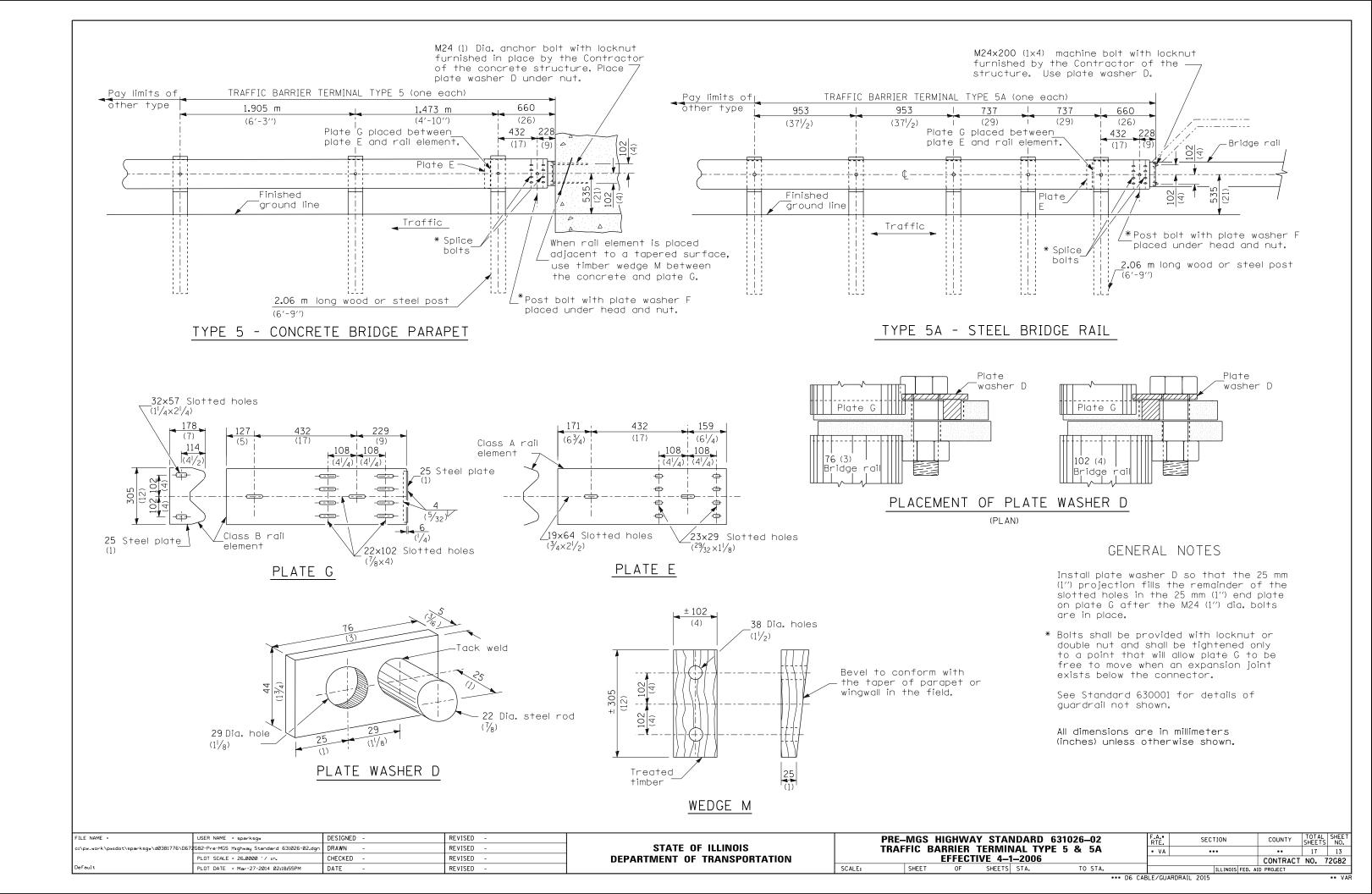
(18,100 kg (40,000 lbs.) min. breaking strength)
Tighten to taut tension.

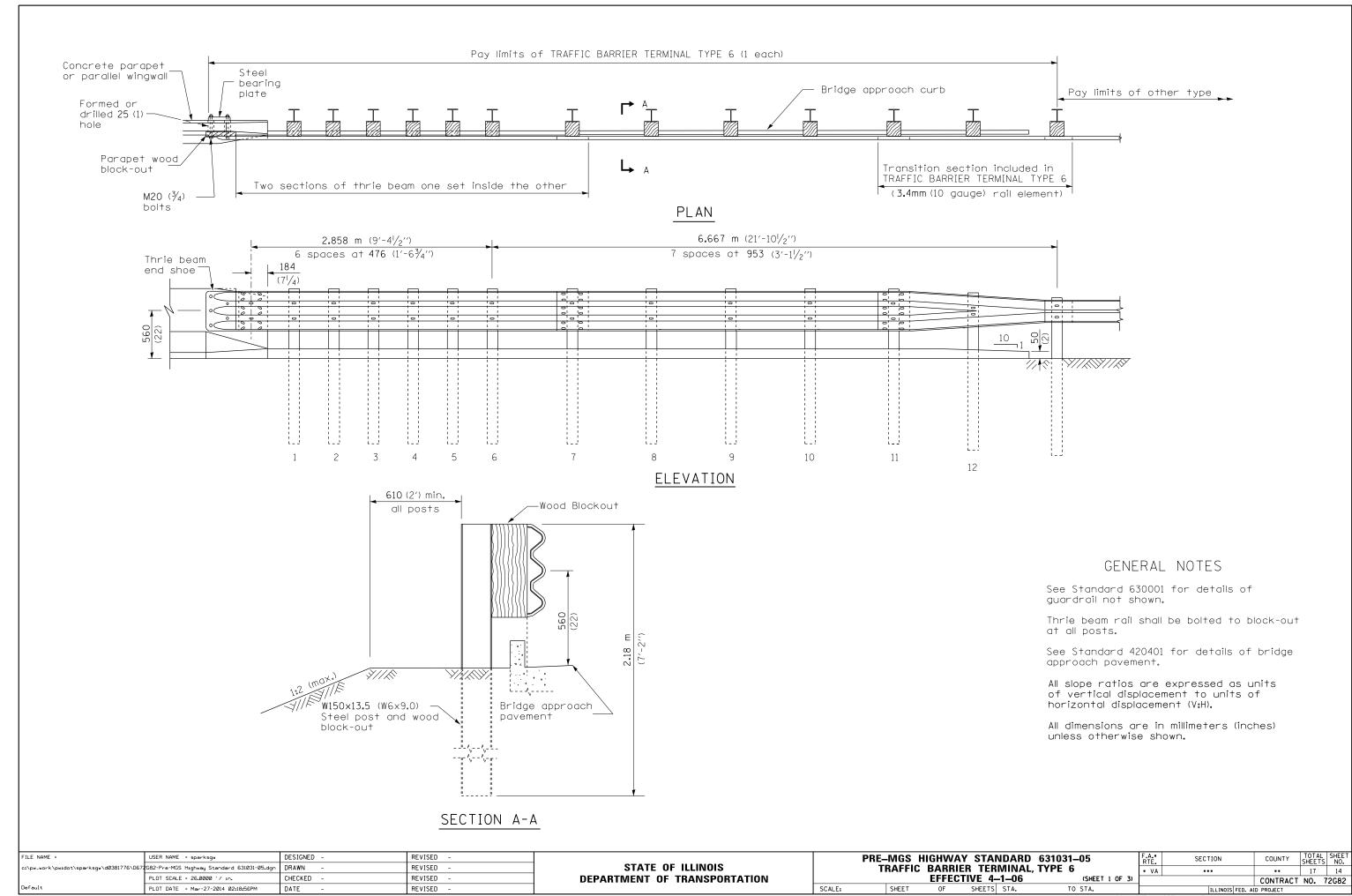
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c:\pw_work\pwidot\sparksgw\d0381776\D672	G82-sht-630001-06_SteelPlateBeamGrdrail.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS	STEEL PLATE BEAM GUARDRAIL					STEEL PLATE BEAM GUARDRAIL			• VA	•••	••	17 9
	PLOT SCALE = 26.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			EFFEC	TIVE 4-	-1–06	(SHEET 4 OF 4)			CONTRACT	NO. 72G82		
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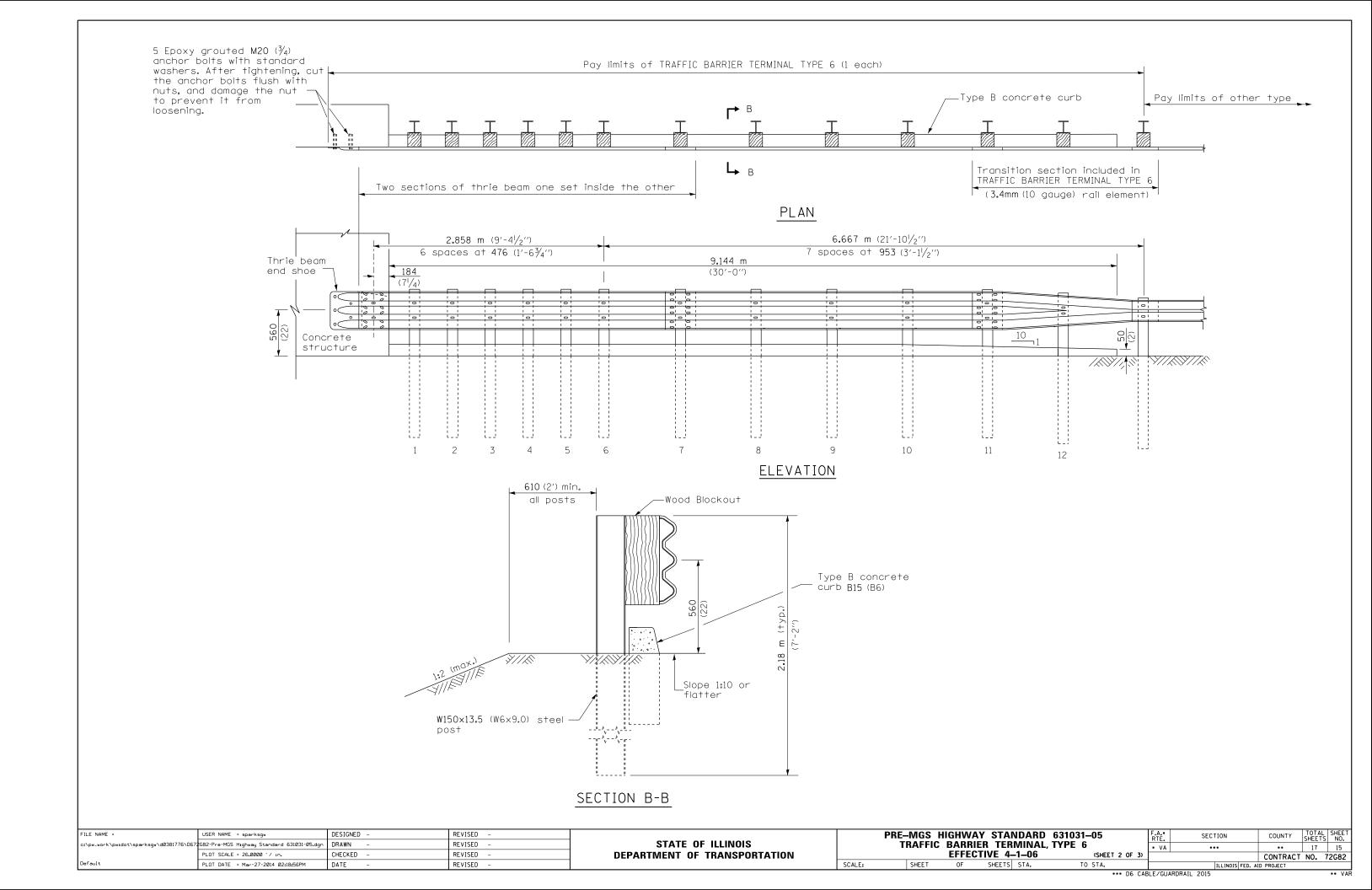


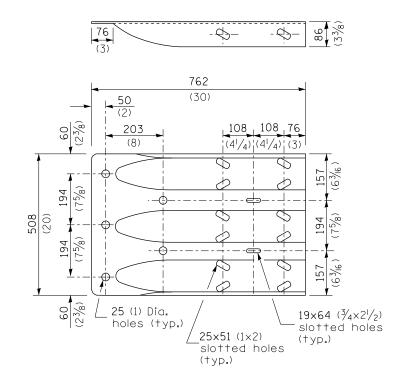




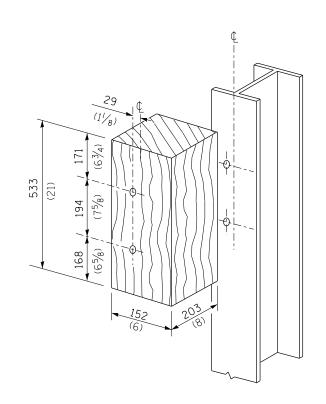




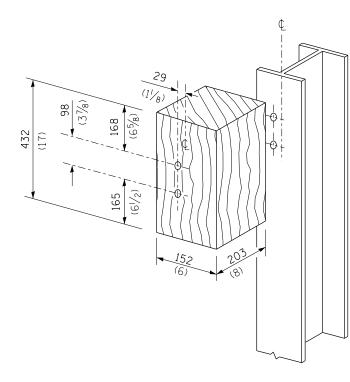




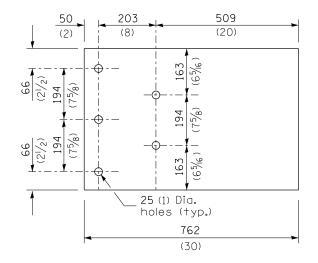
THRIE BEAM END SHOE DETAIL

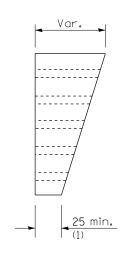


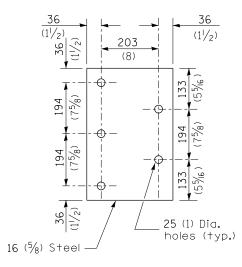
POSTS 1-11 WOOD BLOCKOUT DETAIL



POST 12 WOOD BLOCKOUT DETAIL







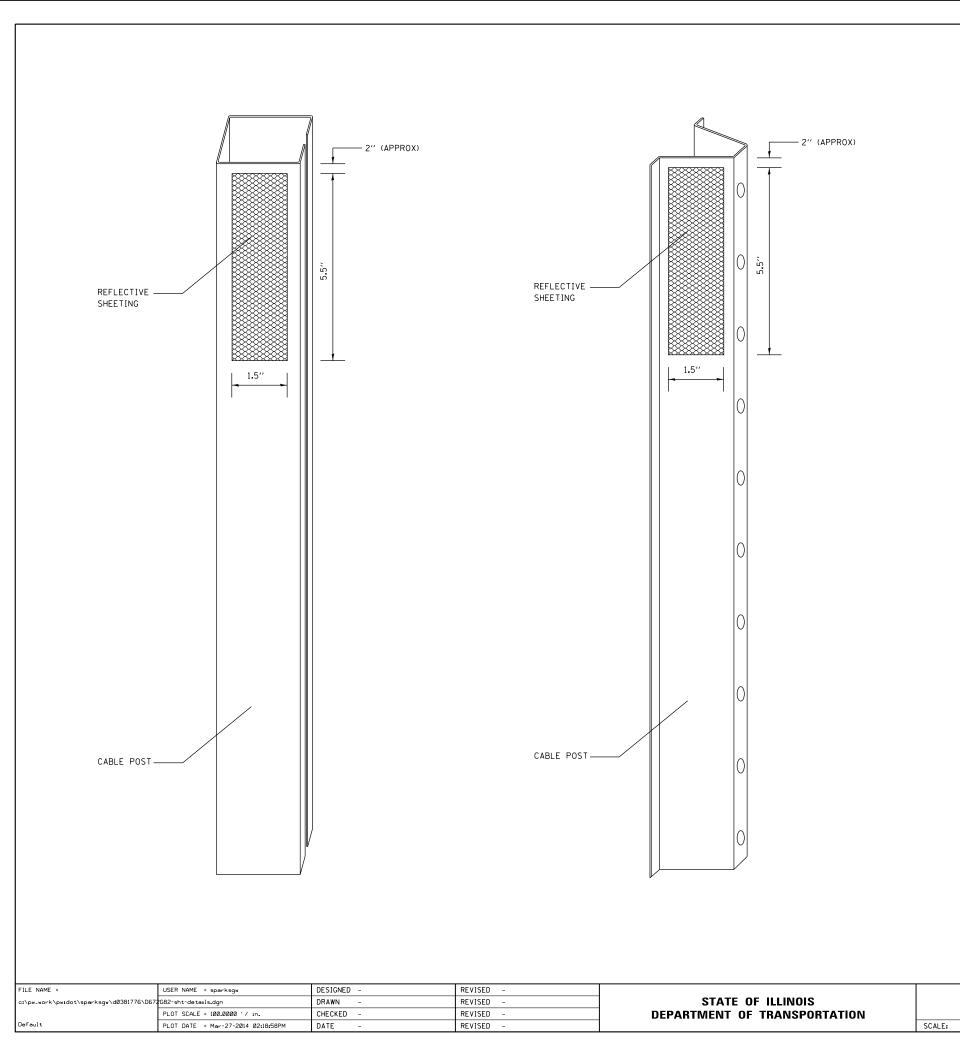
PARAPET WOOD BLOCK-OUT DETAIL

PARAPET STEEL BEARING PLATE DETAIL

(5 each individual $125 \times 125 \times 16$ ($5 \times 5 \times 5\%$) steel plates with centered 25 (1) holes may be substituted for the plate shown.)

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c:\pw_work\pwidot\sparksgw\d0381776\D67	2G82-Pre-MGS Highway Standard 631031-05.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS		TRAFFIC		ER TERMINAL,	TYPE 6	• VA	•••	••	17 16
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••• D6 CABLE/GUARDRAIL 2015



NOTES:

MATERIAL: THE MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 1090 AND 1091 OF THE STANDARD SPECIFICATIONS.

CONSTRUCTION REQUIREMENTS: THE REFLECTIVE SHEETING SHALL BE INSTALLED DIRECTLY ON THE CABLE POSTS. THE REFLECTIVE SHEETING SHALL BE INSTALLED AS SHOWN IN THE PLANS, ON EVERY OTHER POST (IN ORDER TO PROVIDE A SPACING OF 40"). THE SURFACE OF THE POST SHALL BE CLEANED OF ALL CONTAMINANTS PRIOR TO THE INSTALLATION OF THE REFLECTIVE SHEETING. THE SURFACE SHALL BE CLEANED USING A 5-8 PERCENT PHOSPHORIC ACID SOLUTION AND RINSED WITH CLEAN WATER OR AS RECOMMENDED BY THE MANUFACTURER OF THE REFLECTIVE SHEETING AND AS APPROVED BY THE ENGINEER.

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR CABLE GUARD MARKER.