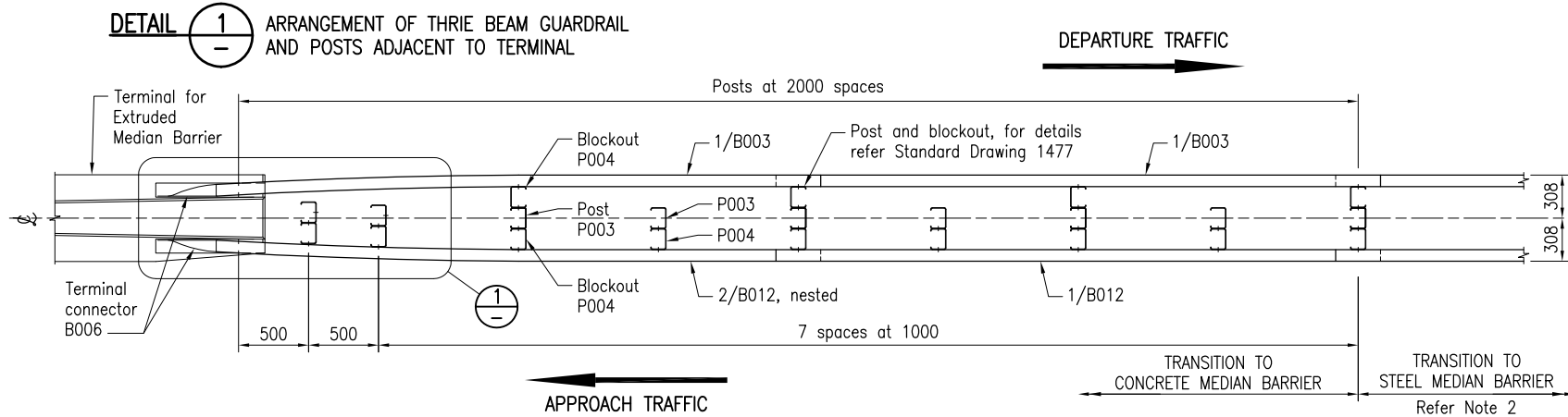
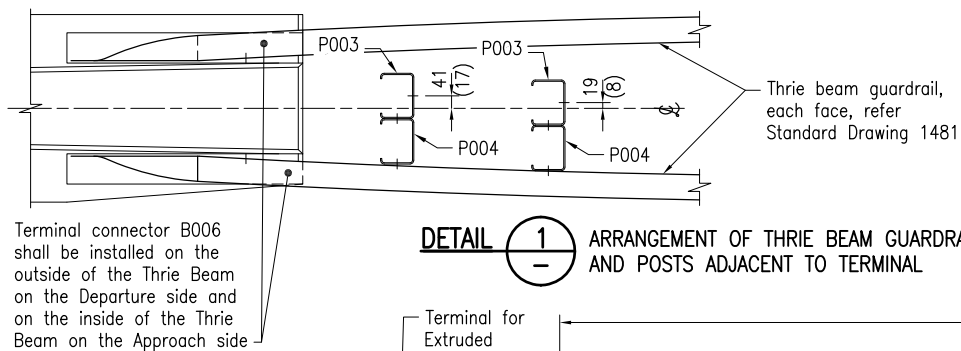
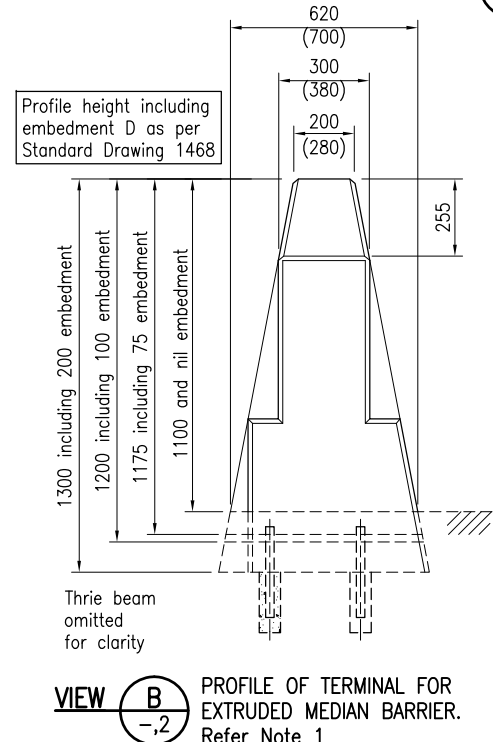
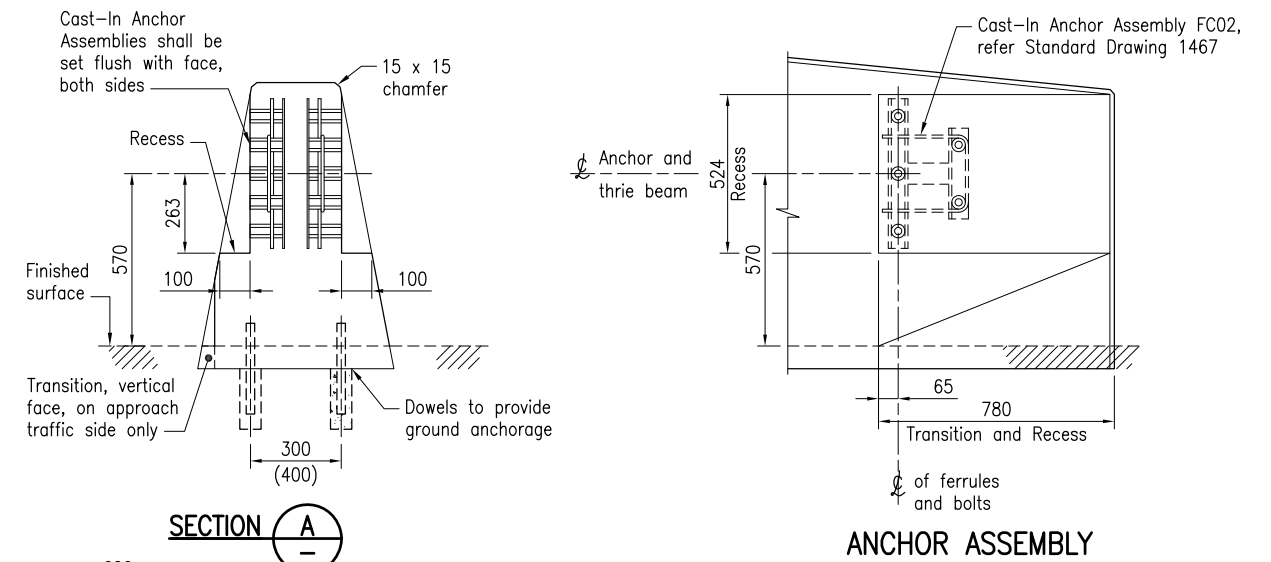


GENERAL ARRANGEMENT OF TERMINAL FOR EXTRUDED MEDIAN BARRIER



INSTALLATION DIAGRAM FOR THRIE BEAM GUARDRAIL TO CONCRETE TERMINAL FOR EXTRUDED MEDIAN BARRIER



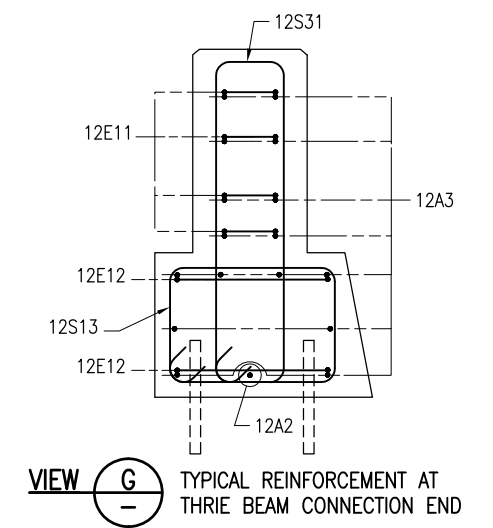
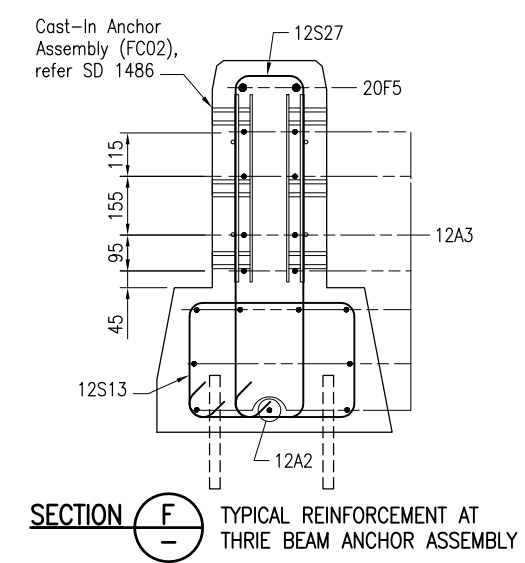
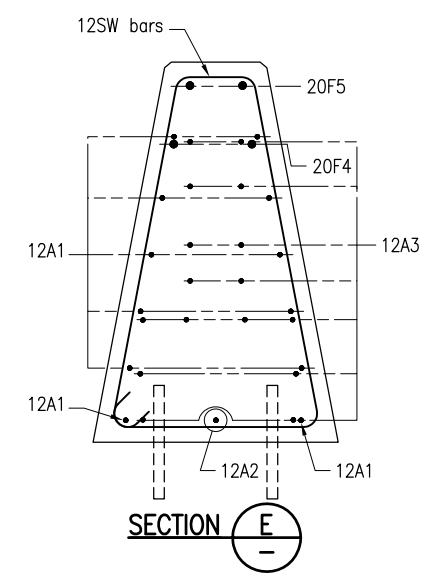
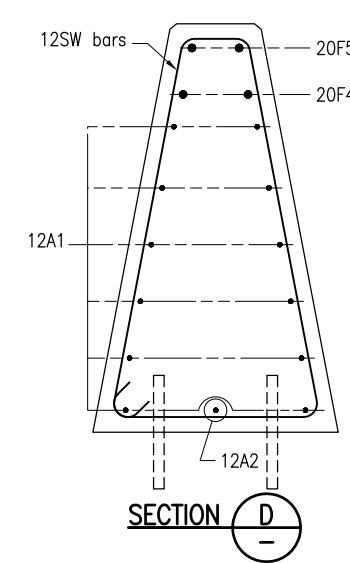
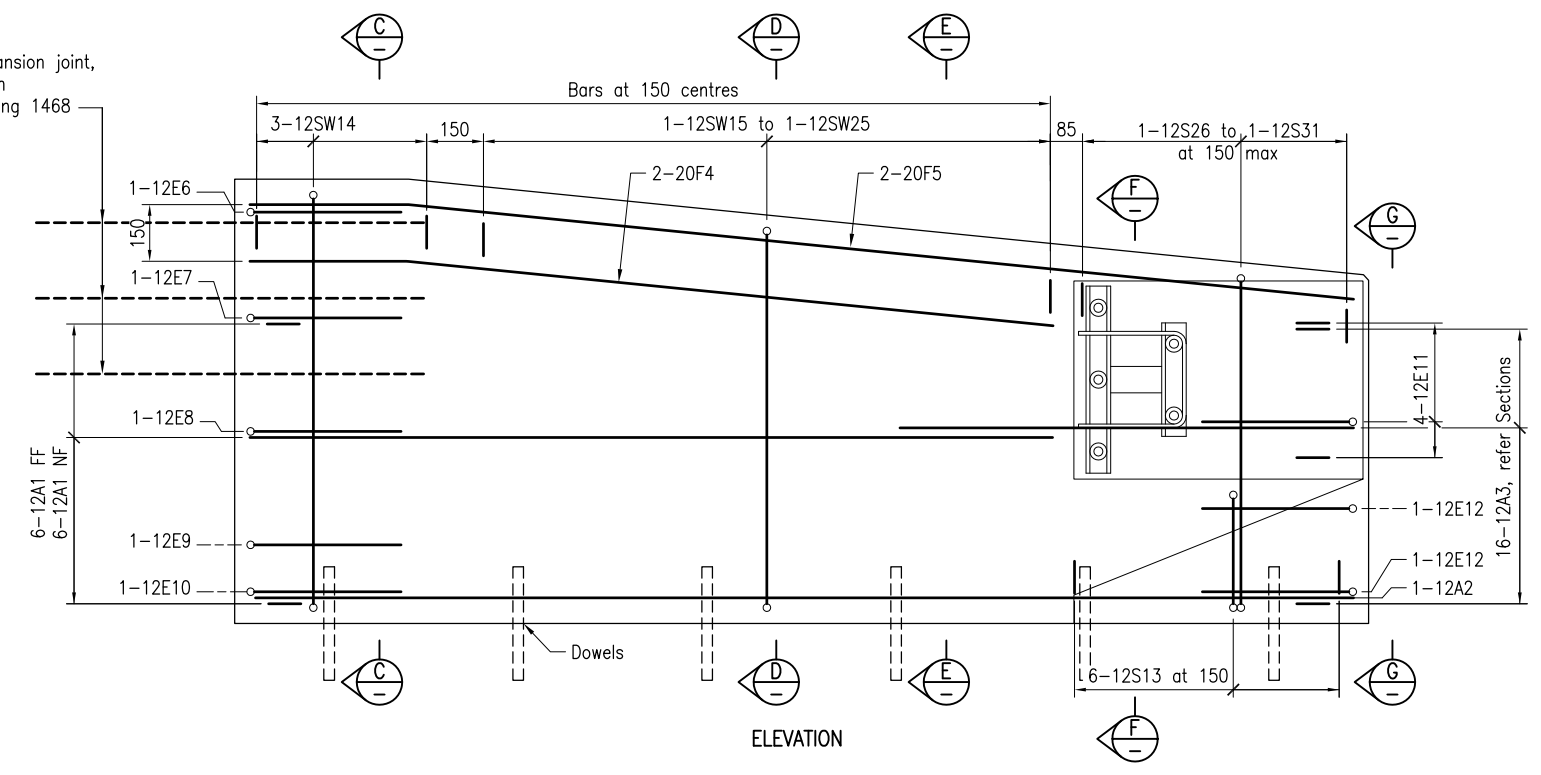
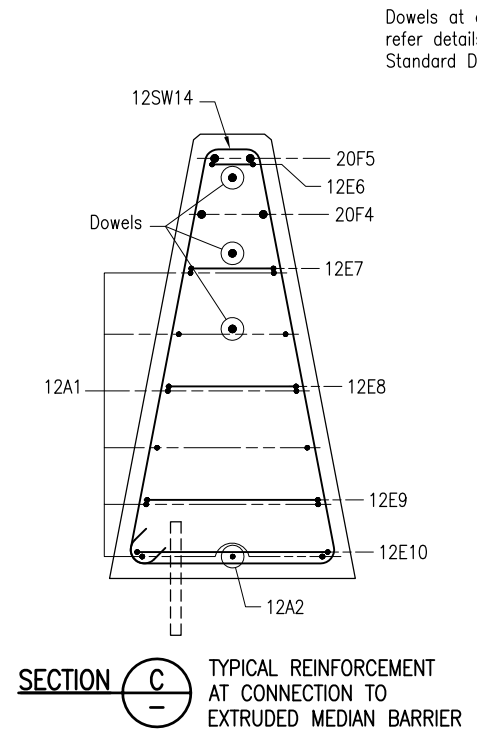
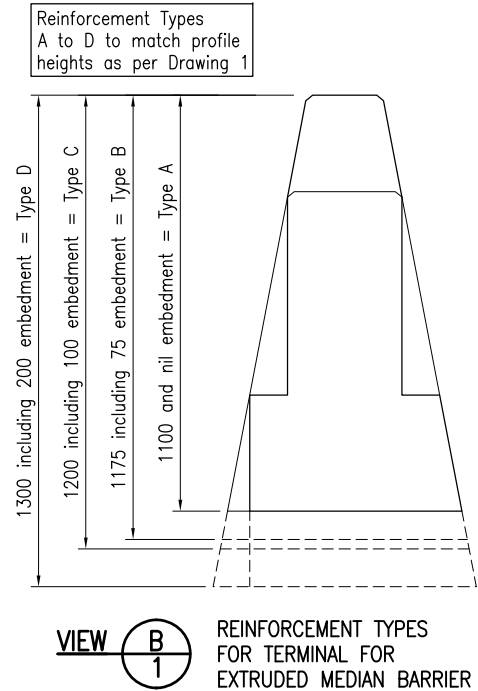
NOTES:

- SCOPE: This Standard Drawing provides concrete terminal details between Thrie beam guardrail and extruded median barrier. Lighting provision on the concrete terminal is not acceptable. If lighting is required in the extruded median barrier, the terminal width shall be increased by 80mm and the profile shall be in accordance with Standard Drawing 1468. Design decisions that lead to the provision of lighting in the extruded median barrier shall be fully documented. The dimensions within brackets () shall be used for the terminal when lighting is required in the extruded median barrier. The concrete terminal shown can be modified to suit other applications such as "Cushion" or "Terminal only". Project specific design shall be developed for this purpose. Project specific design of the concrete terminal shall be developed for alternative barrier heights. The transition height of the terminal shall not be steeper than 1 on 10. Refer Standard Drawing 1468 for all acceptable profiles for extruded median barrier. Refer Standard Drawing 1486 for concrete terminal details where the traffic is only on one side of the barrier.
- TRANSITIONS to Steel Beam Median Barrier could be:
 - Back-to-back using modified thrie beam to Standard Drawing 1483 or thrie beam or W beam.
 - Separated Longitudinal Barrier for wider medians using modified thrie beam or thrie beam or W beam.
 Flare rates shall be in accordance with Road Planning and Design Manual. Posts shall be at 2000 spaces, unless otherwise specified in the project drawings. Posts shall be staggered as required until 1.0m clearance between rear face of barrier posts is achieved. Project specific design shall be developed for this purpose.
- CONCRETE TERMINAL shall be constructed in accordance with MRTS14.
- CONCRETE shall be in accordance with MRTS70. Concrete S40/20. Exposure classification B2 to AS 3600. Minimum cover to reinforcement shall be 45. All exposed edges shall have 15 x 15 chamfers, unless shown otherwise.
- REINFORCING STEEL shall be read in conjunction with Standard Drawings 1043 and 1044. Reinforcing steel material shall be in accordance with MRTS71 and AS/NZS 4671. Deformed bars Grade D500N. TACK WELDING to reinforcement for location purposes to AS/NZS 1554.3. Welding consumables to be controlled hydrogen type: G49X to AS/NZS ISO 14341-B or T49X to AS/NZS ISO 17632-B.
- HEAVY DUTY PVC CONDUITS shall not be placed in the concrete terminal. Conduits are to exit extruded barriers into trenches, prior to terminal, and are to avoid guardrail posts both horizontally and vertically by 100mm minimum.
- DELINEATORS, where required, shall be fixed to the terminal in accordance with Standard Drawing 1468.
- DIMENSIONS are in millimetres unless shown otherwise.

ASSOCIATED DEPARTMENTAL DOCUMENTS:
 Road Planning and Design Manual (RPDM)
 Traffic and Road Use Manual (TRUM)

- REFERENCED DOCUMENTS:
 Departmental Standard Drawings:
 1043 Reinforcing Steel - Standard Bar Shapes
 1044 Reinforcing Steel - Standard Hook, Lap and Bend Details and General Steel Information
 1467 Concrete Barrier/Bridge Parapet - Cast-in Anchor Assembly for Guardrail Connection
 1468 Single Slope Concrete Barrier - Extruded Median Barrier - Barrier, Reinforcing and Expansion Joint Details
 1477 Steel Beam Guardrail - Posts and Blockouts, Soil and Bearing Plates, Slip Base Plate
 1481 Steel Beam Guardrail - Fabrication Details for Thrie Beam Rails and Rail Components
 1483 Steel Beam Guardrail - Thrie Beam Layouts
- Departmental Specifications:
 MRTS14 Road Furniture
 MRTS70 Concrete
 MRTS71 Reinforcing Steel

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SINGLE SLOPE CONCRETE BARRIER		
CONCRETE TERMINAL FOR MEDIAN BARRIER WITH THRIE BEAM GUARDRAIL CONNECTION - GENERAL ARRANGEMENT AND DETAILS		Standard Drawing No 1470 Date 4/16
A3	Not to Scale	DRAWING 1 OF 2
A	B	C
D	E	F



NOTE:
Steel schedules for terminal profile for extruded median barrier without lighting are provided on a separate sheet for use with this drawing and are published in Technical Standards Publications. Each Terminal Type is scheduled separately. Numbers of bars are for one terminal only. Steel schedules for terminal profile for extruded median barrier with lighting are not provided but shall be required to suit the corresponding terminal profile. Refer Note 1 on Drawing 1

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SINGLE SLOPE CONCRETE BARRIER			
CONCRETE TERMINAL FOR MEDIAN BARRIER WITH THRIE BEAM GUARDRAIL CONNECTION - REINFORCEMENT DETAILS		A3	Standard Drawing No
DRAWING 2 OF 2		Not to Scale	1470
			Date 4/16
		A	B
		C	D
		E	F



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type A - **without lighting**

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	110	400	400			48	1	860	0.8 kg
12	E	7	BARRIER END	215	400	400			48	1	965	0.9 kg
12	E	8	BARRIER END	335	400	400			48	1	1085	1.0 kg
12	E	9	BARRIER END	450	400	400			48	1	1200	1.1 kg
12	E	10	BARRIER END	470	400	400			48	1	1220	1.1 kg
12	E	11	THRIE BEAM END	150	400	400			48	4	965	3.5 kg
12	E	12	THRIE BEAM END	400	400	400			48	2	1150	2.1 kg
12	S	13	LOWER LIGATURE	425	215				48	6	1565	8.5 kg
12	SW	14	END LIGATURES	495	125	1005	185	185	48	4	2955	10.8 kg
12	SW	15	MID LIGATURE	495	130	990	183	182	48	1	2930	2.7 kg
12	SW	16	MID LIGATURE	495	135	975	180	180	48	1	2905	2.6 kg
12	SW	17	MID LIGATURE	495	142	960	177	176	48	1	2880	2.6 kg
12	SW	18	MID LIGATURE	495	147	945	174	174	48	1	2855	2.6 kg
12	SW	19	MID LIGATURE	495	155	930	170	170	48	1	2830	2.6 kg
12	SW	20	MID LIGATURE	495	160	915	168	167	48	1	2805	2.6 kg
12	SW	21	MID LIGATURE	495	165	900	165	165	48	1	2780	2.5 kg
12	SW	22	NOSING LIGATURE	495	172	885	162	161	48	1	2755	2.5 kg
12	SW	23	NOSING LIGATURE	495	177	870	159	159	48	1	2735	2.5 kg
12	SW	24	NOSING LIGATURE	495	185	855	155	155	48	1	2710	2.5 kg
12	SW	25	NOSING LIGATURE	495	190	840	153	152	48	1	2685	2.4 kg
12	S	26	NOSING LIGATURE	210	830				48	1	2365	2.2 kg
12	S	27	NOSING LIGATURE	210	815				48	1	2335	2.1 kg
12	S	28	NOSING LIGATURE	210	800				48	1	2310	2.1 kg
12	S	29	NOSING LIGATURE	210	785				48	1	2280	2.1 kg
12	S	30	NOSING LIGATURE	210	775				48	1	2250	2.0 kg
12	S	31	NOSING LIGATURE	210	760				48	1	2225	2.0 kg
											Total Mass	138.87 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type B - **without lighting**

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	110	400	400			48	1	860	0.8 kg
12	E	7	BARRIER END	215	400	400			48	1	965	0.9 kg
12	E	8	BARRIER END	335	400	400			48	1	1085	1.0 kg
12	E	9	BARRIER END	450	400	400			48	1	1200	1.1 kg
12	E	10	BARRIER END	500	400	400			48	1	1250	1.1 kg
12	E	11	THRIE BEAM END	150	400	400			48	4	965	3.5 kg
12	E	12	THRIE BEAM END	400	400	400			48	2	1150	2.1 kg
12	S	13	LOWER LIGATURE	425	290				48	6	1715	9.4 kg
12	SW	14	END LIGATURES	525	125	1080	200	200	48	4	3139	11.4 kg
12	SW	15	MID LIGATURE	525	130	1065	198	197	48	1	3113	2.8 kg
12	SW	16	MID LIGATURE	525	135	1050	195	195	48	1	3089	2.8 kg
12	SW	17	MID LIGATURE	525	142	1035	192	191	48	1	3064	2.8 kg
12	SW	18	MID LIGATURE	525	147	1020	189	189	48	1	3039	2.8 kg
12	SW	19	MID LIGATURE	525	155	1005	185	185	48	1	3015	2.7 kg
12	SW	20	MID LIGATURE	525	160	990	183	182	48	1	2990	2.7 kg
12	SW	21	MID LIGATURE	525	165	975	180	180	48	1	2966	2.7 kg
12	SW	22	NOSING LIGATURE	525	172	960	177	176	48	1	2941	2.7 kg
12	SW	23	NOSING LIGATURE	525	177	945	174	174	48	1	2916	2.7 kg
12	SW	24	NOSING LIGATURE	525	185	930	170	170	48	1	2892	2.6 kg
12	SW	25	NOSING LIGATURE	525	190	915	168	167	48	1	2867	2.6 kg
12	S	26	NOSING LIGATURE	210	905				48	1	2515	2.3 kg
12	S	27	NOSING LIGATURE	210	891				48	1	2487	2.3 kg
12	S	28	NOSING LIGATURE	210	877				48	1	2459	2.2 kg
12	S	29	NOSING LIGATURE	210	863				48	1	2431	2.2 kg
12	S	30	NOSING LIGATURE	210	849				48	1	2403	2.2 kg
12	S	31	NOSING LIGATURE	210	835				48	1	2375	2.2 kg
											Total Mass	143.05 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type C - **without lighting**

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	110	400	400			48	1	860	0.8 kg
12	E	7	BARRIER END	215	400	400			48	1	965	0.9 kg
12	E	8	BARRIER END	335	400	400			48	1	1085	1.0 kg
12	E	9	BARRIER END	450	400	400			48	1	1200	1.1 kg
12	E	10	BARRIER END	510	400	400			48	1	1260	1.1 kg
12	E	11	THRIE BEAM END	150	400	400			48	4	900	3.3 kg
12	E	12	THRIE BEAM END	400	400	400			48	2	1150	2.1 kg
12	S	13	LOWER LIGATURE	425	315				48	6	1765	9.6 kg
12	SW	14	END LIGATURES	530	125	1105	203	202	48	4	3195	11.6 kg
12	SW	15	MID LIGATURE	530	130	1090	200	200	48	1	3170	2.9 kg
12	SW	16	MID LIGATURE	530	135	1075	198	197	48	1	3145	2.9 kg
12	SW	17	MID LIGATURE	530	142	1060	194	194	48	1	3120	2.8 kg
12	SW	18	MID LIGATURE	530	147	1045	192	191	48	1	3095	2.8 kg
12	SW	19	MID LIGATURE	530	155	1030	188	187	48	1	3070	2.8 kg
12	SW	20	MID LIGATURE	530	160	1015	185	185	48	1	3045	2.8 kg
12	SW	21	MID LIGATURE	530	165	1000	183	182	48	1	3020	2.7 kg
12	SW	22	NOSING LIGATURE	530	170	985	180	180	48	1	2995	2.7 kg
12	SW	23	NOSING LIGATURE	530	177	970	177	176	48	1	2970	2.7 kg
12	SW	24	NOSING LIGATURE	530	185	955	173	172	48	1	2945	2.7 kg
12	SW	25	NOSING LIGATURE	530	190	940	170	170	48	1	2920	2.7 kg
12	S	26	NOSING LIGATURE	210	930				48	1	2565	2.3 kg
12	S	27	NOSING LIGATURE	210	915				48	1	2535	2.3 kg
12	S	28	NOSING LIGATURE	210	900				48	1	2510	2.3 kg
12	S	29	NOSING LIGATURE	210	885				48	1	2480	2.3 kg
12	S	30	NOSING LIGATURE	210	875				48	1	2455	2.2 kg
12	S	31	NOSING LIGATURE	210	860				48	1	2425	2.2 kg
											Total Mass	144.13 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type D - **without lighting**

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	110	400	400			48	1	860	0.8 kg
12	E	7	BARRIER END	215	400	400			48	1	965	0.9 kg
12	E	8	BARRIER END	335	400	400			48	1	1085	1.0 kg
12	E	9	BARRIER END	450	400	400			48	1	1200	1.1 kg
12	E	10	BARRIER END	545	400	400			48	1	1295	1.2 kg
12	E	11	THRIE BEAM END	150	400	400			48	4	900	3.3 kg
12	E	12	THRIE BEAM END	400	400	400			48	2	1150	2.1 kg
12	S	13	LOWER LIGATURE	425	415				48	6	1965	10.7 kg
12	SW	14	END LIGATURES	570	125	1205	223	222	48	4	3435	12.5 kg
12	SW	15	MID LIGATURE	570	130	1190	220	220	48	1	3410	3.1 kg
12	SW	16	MID LIGATURE	570	135	1175	218	217	48	1	3390	3.1 kg
12	SW	17	MID LIGATURE	570	142	1160	214	214	48	1	3365	3.1 kg
12	SW	18	MID LIGATURE	570	147	1145	212	211	48	1	3340	3.0 kg
12	SW	19	MID LIGATURE	570	155	1130	208	207	48	1	3315	3.0 kg
12	SW	20	MID LIGATURE	570	160	1115	205	205	48	1	3290	3.0 kg
12	SW	21	MID LIGATURE	570	165	1100	203	202	48	1	3265	3.0 kg
12	SW	22	NOSING LIGATURE	570	170	1085	200	200	48	1	3240	2.9 kg
12	SW	23	NOSING LIGATURE	570	177	1070	197	196	48	1	3215	2.9 kg
12	SW	24	NOSING LIGATURE	570	185	1055	193	192	48	1	3190	2.9 kg
12	SW	25	NOSING LIGATURE	570	190	1040	190	190	48	1	3165	2.9 kg
12	S	26	NOSING LIGATURE	210	1030				48	1	2765	2.5 kg
12	S	27	NOSING LIGATURE	210	1015				48	1	3735	3.4 kg
12	S	28	NOSING LIGATURE	210	1000				48	1	2710	2.5 kg
12	S	29	NOSING LIGATURE	210	985				48	1	2680	2.4 kg
12	S	30	NOSING LIGATURE	210	975				48	1	2655	2.4 kg
12	S	31	NOSING LIGATURE	210	960				48	1	2625	2.4 kg
											Total Mass	150.57 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type A - with Lighting

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	190	400	400			48	1	940	0.9 kg
12	E	7	BARRIER END	295	400	400			48	1	1045	1.0 kg
12	E	8	BARRIER END	415	400	400			48	1	1165	1.1 kg
12	E	9	BARRIER END	530	400	400			48	1	1280	1.2 kg
12	E	10	BARRIER END	550	400	400			48	1	1300	1.2 kg
12	E	11	THRIE BEAM END	230	400	400			48	4	1045	3.8 kg
12	E	12	THRIE BEAM END	480	400	400			48	2	1230	2.2 kg
12	S	13	LOWER LIGATURE	505	215				48	6	1725	9.4 kg
12	SW	14	END LIGATURES	575	205	1005	185	185	48	4	3115	11.3 kg
12	SW	15	MID LIGATURE	575	210	990	183	182	48	1	3090	2.8 kg
12	SW	16	MID LIGATURE	575	215	975	180	180	48	1	3065	2.8 kg
12	SW	17	MID LIGATURE	575	222	960	177	176	48	1	3040	2.8 kg
12	SW	18	MID LIGATURE	575	227	945	174	174	48	1	3015	2.7 kg
12	SW	19	MID LIGATURE	575	235	930	170	170	48	1	2990	2.7 kg
12	SW	20	MID LIGATURE	575	240	915	168	167	48	1	2965	2.7 kg
12	SW	21	MID LIGATURE	575	245	900	165	165	48	1	2940	2.7 kg
12	SW	22	NOSING LIGATURE	575	252	885	162	161	48	1	2915	2.7 kg
12	SW	23	NOSING LIGATURE	575	257	870	159	159	48	1	2895	2.6 kg
12	SW	24	NOSING LIGATURE	575	265	855	155	155	48	1	2870	2.6 kg
12	SW	25	NOSING LIGATURE	575	270	840	153	152	48	1	2845	2.6 kg
12	S	26	NOSING LIGATURE	290	830				48	1	2525	2.3 kg
12	S	27	NOSING LIGATURE	290	815				48	1	2495	2.3 kg
12	S	28	NOSING LIGATURE	290	800				48	1	2470	2.2 kg
12	S	29	NOSING LIGATURE	290	785				48	1	2440	2.2 kg
12	S	30	NOSING LIGATURE	290	775				48	1	2410	2.2 kg
12	S	31	NOSING LIGATURE	290	760				48	1	2385	2.2 kg
											Total Mass	143.61 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type B - with Lighting

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	190	400	400			48	1	940	0.9 kg
12	E	7	BARRIER END	295	400	400			48	1	1045	1.0 kg
12	E	8	BARRIER END	415	400	400			48	1	1165	1.1 kg
12	E	9	BARRIER END	530	400	400			48	1	1280	1.2 kg
12	E	10	BARRIER END	580	400	400			48	1	1330	1.2 kg
12	E	11	THRIE BEAM END	230	400	400			48	4	1045	3.8 kg
12	E	12	THRIE BEAM END	480	400	400			48	2	1230	2.2 kg
12	S	13	LOWER LIGATURE	505	290				48	6	1875	10.2 kg
12	SW	14	END LIGATURES	605	205	1080	200	200	48	4	3299	12.0 kg
12	SW	15	MID LIGATURE	605	210	1065	198	197	48	1	3273	3.0 kg
12	SW	16	MID LIGATURE	605	215	1050	195	195	48	1	3249	3.0 kg
12	SW	17	MID LIGATURE	605	222	1035	192	191	48	1	3224	2.9 kg
12	SW	18	MID LIGATURE	605	227	1020	189	189	48	1	3199	2.9 kg
12	SW	19	MID LIGATURE	605	235	1005	185	185	48	1	3175	2.9 kg
12	SW	20	MID LIGATURE	605	240	990	183	182	48	1	3150	2.9 kg
12	SW	21	MID LIGATURE	605	245	975	180	180	48	1	3126	2.8 kg
12	SW	22	NOSING LIGATURE	605	252	960	177	176	48	1	3101	2.8 kg
12	SW	23	NOSING LIGATURE	605	257	945	174	174	48	1	3076	2.8 kg
12	SW	24	NOSING LIGATURE	605	265	930	170	170	48	1	3052	2.8 kg
12	SW	25	NOSING LIGATURE	605	270	915	168	167	48	1	3027	2.8 kg
12	S	26	NOSING LIGATURE	290	905				48	1	2675	2.4 kg
12	S	27	NOSING LIGATURE	290	891				48	1	2647	2.4 kg
12	S	28	NOSING LIGATURE	290	877				48	1	2619	2.4 kg
12	S	29	NOSING LIGATURE	290	863				48	1	2591	2.4 kg
12	S	30	NOSING LIGATURE	290	849				48	1	2563	2.3 kg
12	S	31	NOSING LIGATURE	290	835				48	1	2535	2.3 kg
											Total Mass	147.79 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type C - with Lighting

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	190	400	400			48	1	940	0.9 kg
12	E	7	BARRIER END	295	400	400			48	1	1045	1.0 kg
12	E	8	BARRIER END	415	400	400			48	1	1165	1.1 kg
12	E	9	BARRIER END	530	400	400			48	1	1280	1.2 kg
12	E	10	BARRIER END	590	400	400			48	1	1340	1.2 kg
12	E	11	THRIE BEAM END	230	400	400			48	4	980	3.6 kg
12	E	12	THRIE BEAM END	480	400	400			48	2	1230	2.2 kg
12	S	13	LOWER LIGATURE	425	315				48	6	1925	10.5 kg
12	SW	14	END LIGATURES	610	205	1105	203	202	48	4	3355	12.2 kg
12	SW	15	MID LIGATURE	610	210	1090	200	200	48	1	3330	3.0 kg
12	SW	16	MID LIGATURE	610	215	1075	198	197	48	1	3305	3.0 kg
12	SW	17	MID LIGATURE	610	222	1060	194	194	48	1	3280	3.0 kg
12	SW	18	MID LIGATURE	610	227	1045	192	191	48	1	3255	3.0 kg
12	SW	19	MID LIGATURE	610	235	1030	188	187	48	1	3230	2.9 kg
12	SW	20	MID LIGATURE	610	240	1015	185	185	48	1	3205	2.9 kg
12	SW	21	MID LIGATURE	610	245	1000	183	182	48	1	3180	2.9 kg
12	SW	22	NOSING LIGATURE	610	250	985	180	180	48	1	3155	2.9 kg
12	SW	23	NOSING LIGATURE	610	257	970	177	176	48	1	3130	2.8 kg
12	SW	24	NOSING LIGATURE	610	265	955	173	172	48	1	3105	2.8 kg
12	SW	25	NOSING LIGATURE	610	270	940	170	170	48	1	3080	2.8 kg
12	S	26	NOSING LIGATURE	290	930				48	1	2725	2.5 kg
12	S	27	NOSING LIGATURE	290	915				48	1	2695	2.5 kg
12	S	28	NOSING LIGATURE	290	900				48	1	2670	2.4 kg
12	S	29	NOSING LIGATURE	290	885				48	1	2640	2.4 kg
12	S	30	NOSING LIGATURE	290	875				48	1	2615	2.4 kg
12	S	31	NOSING LIGATURE	290	860				48	1	2585	2.4 kg
											Total Mass	148.86 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type D - with Lighting

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	190	400	400			48	1	940	0.9 kg
12	E	7	BARRIER END	295	400	400			48	1	1045	1.0 kg
12	E	8	BARRIER END	415	400	400			48	1	1165	1.1 kg
12	E	9	BARRIER END	530	400	400			48	1	1280	1.2 kg
12	E	10	BARRIER END	625	400	400			48	1	1375	1.3 kg
12	E	11	THRIE BEAM END	230	400	400			48	4	980	3.6 kg
12	E	12	THRIE BEAM END	480	400	400			48	2	1230	2.2 kg
12	S	13	LOWER LIGATURE	425	415				48	6	2125	11.6 kg
12	SW	14	END LIGATURES	650	205	1205	223	222	48	4	3595	13.1 kg
12	SW	15	MID LIGATURE	650	210	1190	220	220	48	1	3570	3.2 kg
12	SW	16	MID LIGATURE	650	215	1175	218	217	48	1	3550	3.2 kg
12	SW	17	MID LIGATURE	650	222	1160	214	214	48	1	3525	3.2 kg
12	SW	18	MID LIGATURE	650	227	1145	212	211	48	1	3500	3.2 kg
12	SW	19	MID LIGATURE	650	235	1130	208	207	48	1	3475	3.2 kg
12	SW	20	MID LIGATURE	650	240	1115	205	205	48	1	3450	3.1 kg
12	SW	21	MID LIGATURE	650	245	1100	203	202	48	1	3425	3.1 kg
12	SW	22	NOSING LIGATURE	650	250	1085	200	200	48	1	3400	3.1 kg
12	SW	23	NOSING LIGATURE	650	257	1070	197	196	48	1	3375	3.1 kg
12	SW	24	NOSING LIGATURE	650	265	1055	193	192	48	1	3350	3.0 kg
12	SW	25	NOSING LIGATURE	650	270	1040	190	190	48	1	3325	3.0 kg
12	S	26	NOSING LIGATURE	290	1030				48	1	2925	2.7 kg
12	S	27	NOSING LIGATURE	290	1015				48	1	3895	3.5 kg
12	S	28	NOSING LIGATURE	290	1000				48	1	2870	2.6 kg
12	S	29	NOSING LIGATURE	290	985				48	1	2840	2.6 kg
12	S	30	NOSING LIGATURE	290	975				48	1	2815	2.6 kg
12	S	31	NOSING LIGATURE	290	960				48	1	2785	2.5 kg
											Total Mass	155.30 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type A - **without lighting**

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	110	400	400			48	1	860	0.8 kg
12	E	7	BARRIER END	215	400	400			48	1	965	0.9 kg
12	E	8	BARRIER END	335	400	400			48	1	1085	1.0 kg
12	E	9	BARRIER END	450	400	400			48	1	1200	1.1 kg
12	E	10	BARRIER END	470	400	400			48	1	1220	1.1 kg
12	E	11	THRIE BEAM END	150	400	400			48	4	965	3.5 kg
12	E	12	THRIE BEAM END	400	400	400			48	2	1150	2.1 kg
12	S	13	LOWER LIGATURE	425	215				48	6	1565	8.5 kg
12	SW	14	END LIGATURES	495	125	1005	185	185	48	4	2955	10.8 kg
12	SW	15	MID LIGATURE	495	130	990	183	182	48	1	2930	2.7 kg
12	SW	16	MID LIGATURE	495	135	975	180	180	48	1	2905	2.6 kg
12	SW	17	MID LIGATURE	495	142	960	177	176	48	1	2880	2.6 kg
12	SW	18	MID LIGATURE	495	147	945	174	174	48	1	2855	2.6 kg
12	SW	19	MID LIGATURE	495	155	930	170	170	48	1	2830	2.6 kg
12	SW	20	MID LIGATURE	495	160	915	168	167	48	1	2805	2.6 kg
12	SW	21	MID LIGATURE	495	165	900	165	165	48	1	2780	2.5 kg
12	SW	22	NOSING LIGATURE	495	172	885	162	161	48	1	2755	2.5 kg
12	SW	23	NOSING LIGATURE	495	177	870	159	159	48	1	2735	2.5 kg
12	SW	24	NOSING LIGATURE	495	185	855	155	155	48	1	2710	2.5 kg
12	SW	25	NOSING LIGATURE	495	190	840	153	152	48	1	2685	2.4 kg
12	S	26	NOSING LIGATURE	210	830				48	1	2365	2.2 kg
12	S	27	NOSING LIGATURE	210	815				48	1	2335	2.1 kg
12	S	28	NOSING LIGATURE	210	800				48	1	2310	2.1 kg
12	S	29	NOSING LIGATURE	210	785				48	1	2280	2.1 kg
12	S	30	NOSING LIGATURE	210	775				48	1	2250	2.0 kg
12	S	31	NOSING LIGATURE	210	760				48	1	2225	2.0 kg
											Total Mass	138.87 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type B - **without lighting**

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	110	400	400			48	1	860	0.8 kg
12	E	7	BARRIER END	215	400	400			48	1	965	0.9 kg
12	E	8	BARRIER END	335	400	400			48	1	1085	1.0 kg
12	E	9	BARRIER END	450	400	400			48	1	1200	1.1 kg
12	E	10	BARRIER END	500	400	400			48	1	1250	1.1 kg
12	E	11	THRIE BEAM END	150	400	400			48	4	965	3.5 kg
12	E	12	THRIE BEAM END	400	400	400			48	2	1150	2.1 kg
12	S	13	LOWER LIGATURE	425	290				48	6	1715	9.4 kg
12	SW	14	END LIGATURES	525	125	1080	200	200	48	4	3139	11.4 kg
12	SW	15	MID LIGATURE	525	130	1065	198	197	48	1	3113	2.8 kg
12	SW	16	MID LIGATURE	525	135	1050	195	195	48	1	3089	2.8 kg
12	SW	17	MID LIGATURE	525	142	1035	192	191	48	1	3064	2.8 kg
12	SW	18	MID LIGATURE	525	147	1020	189	189	48	1	3039	2.8 kg
12	SW	19	MID LIGATURE	525	155	1005	185	185	48	1	3015	2.7 kg
12	SW	20	MID LIGATURE	525	160	990	183	182	48	1	2990	2.7 kg
12	SW	21	MID LIGATURE	525	165	975	180	180	48	1	2966	2.7 kg
12	SW	22	NOSING LIGATURE	525	172	960	177	176	48	1	2941	2.7 kg
12	SW	23	NOSING LIGATURE	525	177	945	174	174	48	1	2916	2.7 kg
12	SW	24	NOSING LIGATURE	525	185	930	170	170	48	1	2892	2.6 kg
12	SW	25	NOSING LIGATURE	525	190	915	168	167	48	1	2867	2.6 kg
12	S	26	NOSING LIGATURE	210	905				48	1	2515	2.3 kg
12	S	27	NOSING LIGATURE	210	891				48	1	2487	2.3 kg
12	S	28	NOSING LIGATURE	210	877				48	1	2459	2.2 kg
12	S	29	NOSING LIGATURE	210	863				48	1	2431	2.2 kg
12	S	30	NOSING LIGATURE	210	849				48	1	2403	2.2 kg
12	S	31	NOSING LIGATURE	210	835				48	1	2375	2.2 kg
											Total Mass	143.05 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type C - **without lighting**

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	110	400	400			48	1	860	0.8 kg
12	E	7	BARRIER END	215	400	400			48	1	965	0.9 kg
12	E	8	BARRIER END	335	400	400			48	1	1085	1.0 kg
12	E	9	BARRIER END	450	400	400			48	1	1200	1.1 kg
12	E	10	BARRIER END	510	400	400			48	1	1260	1.1 kg
12	E	11	THRIE BEAM END	150	400	400			48	4	900	3.3 kg
12	E	12	THRIE BEAM END	400	400	400			48	2	1150	2.1 kg
12	S	13	LOWER LIGATURE	425	315				48	6	1765	9.6 kg
12	SW	14	END LIGATURES	530	125	1105	203	202	48	4	3195	11.6 kg
12	SW	15	MID LIGATURE	530	130	1090	200	200	48	1	3170	2.9 kg
12	SW	16	MID LIGATURE	530	135	1075	198	197	48	1	3145	2.9 kg
12	SW	17	MID LIGATURE	530	142	1060	194	194	48	1	3120	2.8 kg
12	SW	18	MID LIGATURE	530	147	1045	192	191	48	1	3095	2.8 kg
12	SW	19	MID LIGATURE	530	155	1030	188	187	48	1	3070	2.8 kg
12	SW	20	MID LIGATURE	530	160	1015	185	185	48	1	3045	2.8 kg
12	SW	21	MID LIGATURE	530	165	1000	183	182	48	1	3020	2.7 kg
12	SW	22	NOSING LIGATURE	530	170	985	180	180	48	1	2995	2.7 kg
12	SW	23	NOSING LIGATURE	530	177	970	177	176	48	1	2970	2.7 kg
12	SW	24	NOSING LIGATURE	530	185	955	173	172	48	1	2945	2.7 kg
12	SW	25	NOSING LIGATURE	530	190	940	170	170	48	1	2920	2.7 kg
12	S	26	NOSING LIGATURE	210	930				48	1	2565	2.3 kg
12	S	27	NOSING LIGATURE	210	915				48	1	2535	2.3 kg
12	S	28	NOSING LIGATURE	210	900				48	1	2510	2.3 kg
12	S	29	NOSING LIGATURE	210	885				48	1	2480	2.3 kg
12	S	30	NOSING LIGATURE	210	875				48	1	2455	2.2 kg
12	S	31	NOSING LIGATURE	210	860				48	1	2425	2.2 kg
											Total Mass	144.13 kg



Standard Drawing 1470

Single Slope Concrete Barrier - Concrete Terminal for Median Barrier with Thrie Beam Guardrail Connection - Reinforcement Details (Drawing 2 of 2)

Steel Schedule - Terminal Type D - **without lighting**

Reinforcing steel shall be read in conjunction with standard drawings 1043 and 1044
Deformed bars Grade D500N

Bar Mark			Location	Dim A	Dim B	Dim C	Dim E	Dim F	Pin Dia	No Off	Cutting Length	Mass
Bar Dia	Shape	Seq No										
12	A	1	LONGITUDINAL	2100						12	2100	22.9 kg
12	A	2	LOWER LONGITUDINAL	2900						1	2900	2.6 kg
12	A	3	NOSING LONGITUDINAL	1200						16	1200	17.5 kg
20	F	4	TOP LONGITUDINAL	2505	410	60			100	2	2915	14.7 kg
20	F	5	TOP LONGITUDINAL	1710	410	60			100	2	2120	10.7 kg
12	E	6	BARRIER END	110	400	400			48	1	860	0.8 kg
12	E	7	BARRIER END	215	400	400			48	1	965	0.9 kg
12	E	8	BARRIER END	335	400	400			48	1	1085	1.0 kg
12	E	9	BARRIER END	450	400	400			48	1	1200	1.1 kg
12	E	10	BARRIER END	545	400	400			48	1	1295	1.2 kg
12	E	11	THRIE BEAM END	150	400	400			48	4	900	3.3 kg
12	E	12	THRIE BEAM END	400	400	400			48	2	1150	2.1 kg
12	S	13	LOWER LIGATURE	425	415				48	6	1965	10.7 kg
12	SW	14	END LIGATURES	570	125	1205	223	222	48	4	3435	12.5 kg
12	SW	15	MID LIGATURE	570	130	1190	220	220	48	1	3410	3.1 kg
12	SW	16	MID LIGATURE	570	135	1175	218	217	48	1	3390	3.1 kg
12	SW	17	MID LIGATURE	570	142	1160	214	214	48	1	3365	3.1 kg
12	SW	18	MID LIGATURE	570	147	1145	212	211	48	1	3340	3.0 kg
12	SW	19	MID LIGATURE	570	155	1130	208	207	48	1	3315	3.0 kg
12	SW	20	MID LIGATURE	570	160	1115	205	205	48	1	3290	3.0 kg
12	SW	21	MID LIGATURE	570	165	1100	203	202	48	1	3265	3.0 kg
12	SW	22	NOSING LIGATURE	570	170	1085	200	200	48	1	3240	2.9 kg
12	SW	23	NOSING LIGATURE	570	177	1070	197	196	48	1	3215	2.9 kg
12	SW	24	NOSING LIGATURE	570	185	1055	193	192	48	1	3190	2.9 kg
12	SW	25	NOSING LIGATURE	570	190	1040	190	190	48	1	3165	2.9 kg
12	S	26	NOSING LIGATURE	210	1030				48	1	2765	2.5 kg
12	S	27	NOSING LIGATURE	210	1015				48	1	3735	3.4 kg
12	S	28	NOSING LIGATURE	210	1000				48	1	2710	2.5 kg
12	S	29	NOSING LIGATURE	210	985				48	1	2680	2.4 kg
12	S	30	NOSING LIGATURE	210	975				48	1	2655	2.4 kg
12	S	31	NOSING LIGATURE	210	960				48	1	2625	2.4 kg
											Total Mass	150.57 kg