

**Disclaimer**

- The Department of Transport and Main Roads (TMR) currently use this spreadsheet to assist in categorising SPVs.
- The results from the spreadsheet should be used as a guide only, noting the final decision regarding access and IAP category will be made by TMR.
- It should also be noted that TMR is working towards a modified access regime based on different parameters.
- As a result, future commercial decisions should not be made based on the information in this spreadsheet.

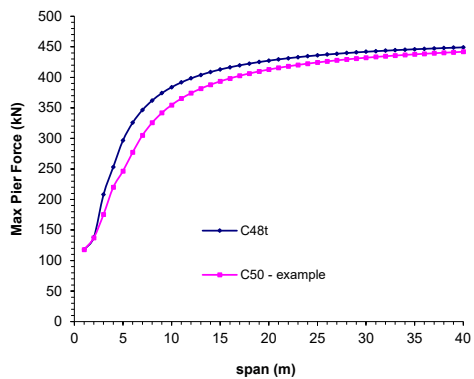
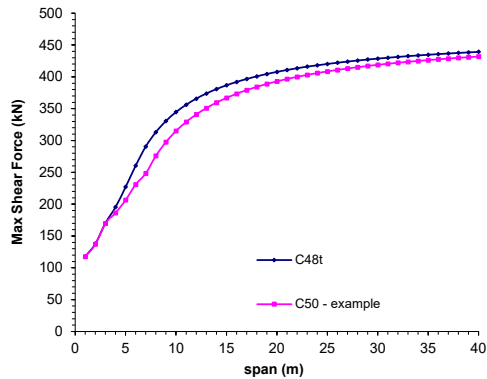
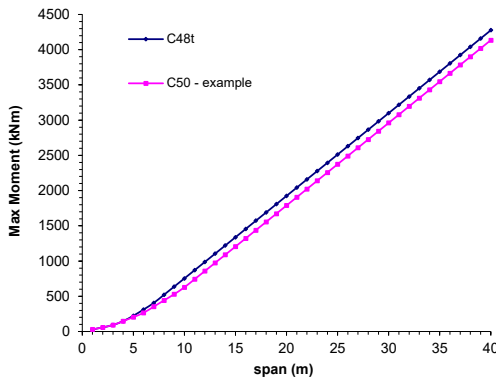


Date and time: 18/05/2021 16:21  
 Vehicle: 164 ('695/12-(1.67)-12-(2.86)-12-(2.48)-12-->)

Step size (m): 0.01  
 Span length (m): 1  
 Pier load gap length (m): 0

	maximum shear (kN)	relative position (back wheel)	maximum bending mom	relative position (back wheel)	maximum pier load (relative position (back wheel)	of maximum pier load (m)
1	117.72	-7.01	29.43	-1.17	117.72	-6.01
2	137.14	0.33	58.86	-0.67	137.14	0.34
3	169.91	1.33	91.96	0.25	175.40	1.33
4	186.29	2.33	147.40	0.75	219.84	2.33
5	206.48	0.01	204.21	2.08	246.51	3.33
6	230.93	0.01	265.42	1.13	277.23	1.48
7	248.39	0.01	353.38	1.63	304.89	2.48
8	275.91	0.01	441.42	2.13	325.64	3.48
9	297.57	0.01	529.52	2.63	341.78	4.72
10	314.90	0.01	627.62	2.51	354.69	5.48
11	329.08	0.01	742.49	3.01	365.25	6.48
12	340.90	0.01	857.84	3.51	374.06	7.71
13	350.90	0.01	973.54	4.01	381.50	8.61
14	359.47	0.01	1089.54	4.51	387.89	11.83
15	366.89	0.01	1205.77	5.01	393.42	10.48
16	373.39	0.01	1322.18	5.51	398.26	11.48
17	379.13	0.01	1438.75	6.01	402.53	12.48
18	384.23	0.01	1555.44	6.51	406.33	13.51
19	388.79	0.01	1672.24	7.01	409.73	14.53
20	392.89	0.01	1789.14	7.51	412.79	16.64
21	396.60	0.01	1906.11	8.01	415.55	16.48
22	399.98	0.01	2023.15	8.51	418.07	17.48
23	403.06	0.01	2140.25	9.01	420.36	18.48
24	405.89	0.01	2257.40	9.51	422.47	19.48
25	408.49	0.01	2374.60	10.01	424.40	20.90
26	410.89	0.01	2491.84	10.51	426.19	21.53
27	413.11	0.01	2609.11	11.01	427.85	22.48
28	415.17	0.01	2726.42	11.51	429.38	23.49
29	417.09	0.01	2843.75	12.01	430.81	24.68
30	418.89	0.01	2961.11	12.51	432.15	25.48
31	420.56	0.01	3078.49	13.01	433.40	26.51
32	422.14	0.01	3195.90	13.51	434.57	27.48
33	423.61	0.01	3313.32	14.01	435.67	28.49
34	425.00	0.01	3430.76	14.51	436.71	29.51
35	426.31	0.01	3548.22	15.01	437.68	30.66
36	427.55	0.01	3665.69	15.51	438.61	31.48
37	428.72	0.01	3783.17	16.01	439.48	33.00
38	429.83	0.01	3900.67	16.51	440.30	33.59
39	430.89	0.01	4018.18	17.01	441.09	34.52
40	431.89	0.01	4135.69	17.51	441.83	35.48

Span (m)	C48t			C50 - example			Comparison		
	Max Moment (kNm)	Max Shear Force (kN)	Max Pier Force (kN)	Max Moment (kNm)	Max Shear Force (kN)	Max Pier Force (kN)	Moment Difference (M2-M1)/M1	Shear Difference (V2-V1)/V1	Pier Force Difference (P2-P1)/P1
	M1	V1	P1	M2	V2	P2			
1	29.43	117.72	117.72	29.43	117.72	117.72	0.0%	0.0%	0.0%
2	58.86	137.73	137.73	58.86	137.14	137.14	0.0%	-0.4%	-0.4%
3	92.39	170.30	207.97	91.96	169.91	175.40	-0.5%	-0.2%	-15.7%
4	147.87	195.42	253.10	147.40	186.29	219.84	-0.3%	-4.7%	-13.1%
5	223.95	226.96	296.65	204.21	206.48	246.51	-8.8%	-9.0%	-16.9%
6	312.19	260.55	325.69	265.42	230.93	277.23	-15.0%	-11.4%	-14.9%
7	405.97	290.60	346.43	353.38	248.39	304.89	-13.0%	-14.5%	-12.0%
8	521.51	313.14	361.99	441.42	275.91	325.64	-15.4%	-11.9%	-10.0%
9	637.52	330.66	374.09	529.52	297.57	341.78	-16.9%	-10.0%	-8.6%
10	753.88	344.68	383.77	627.62	314.90	354.69	-16.7%	-8.6%	-7.6%
11	870.49	356.16	391.69	742.49	329.08	365.25	-14.7%	-7.6%	-6.7%
12	987.28	365.72	398.29	857.84	340.90	374.06	-13.1%	-6.8%	-6.1%
13	1104.22	373.81	403.87	973.54	350.90	381.50	-11.8%	-6.1%	-5.5%
14	1221.26	380.74	408.66	1089.54	359.47	387.89	-10.8%	-5.6%	-5.1%
15	1338.40	386.75	412.80	1205.77	366.89	393.42	-9.9%	-5.1%	-4.7%
16	1455.61	392.01	416.43	1322.18	373.39	398.26	-9.2%	-4.7%	-4.4%
17	1572.88	396.65	419.64	1438.75	379.13	402.53	-8.5%	-4.4%	-4.1%
18	1690.20	400.77	422.48	1555.44	384.23	406.33	-8.0%	-4.1%	-3.8%
19	1807.56	404.46	425.03	1672.24	388.79	409.73	-7.5%	-3.9%	-3.6%
20	1924.96	407.78	427.32	1789.14	392.89	412.79	-7.1%	-3.7%	-3.4%
21	2042.39	410.79	429.40	1906.11	396.60	415.55	-6.7%	-3.5%	-3.2%
22	2159.84	413.52	431.28	2023.15	399.98	418.07	-6.3%	-3.3%	-3.1%
23	2277.32	416.01	433.00	2140.25	403.06	420.36	-6.0%	-3.1%	-2.9%
24	2394.82	418.10	434.58	2257.40	405.89	422.47	-5.7%	-2.9%	-2.8%
25	2512.34	420.21	436.03	2374.60	408.49	424.40	-5.5%	-2.8%	-2.7%
26	2629.87	422.16	437.38	2491.84	410.89	426.19	-5.2%	-2.7%	-2.6%
27	2747.41	423.97	438.62	2609.11	413.11	427.85	-5.0%	-2.6%	-2.5%
28	2864.97	425.64	439.77	2726.42	415.17	429.38	-4.8%	-2.5%	-2.4%
29	2982.54	427.20	440.84	2843.75	417.09	430.81	-4.7%	-2.4%	-2.3%
30	3100.12	428.66	441.84	2961.11	418.89	432.15	-4.5%	-2.3%	-2.2%
31	3217.71	430.02	442.78	3078.49	420.56	433.40	-4.3%	-2.2%	-2.1%
32	3335.30	431.30	443.66	3195.90	422.14	434.57	-4.2%	-2.1%	-2.0%
33	3452.91	432.50	444.48	3313.32	423.61	435.67	-4.0%	-2.1%	-2.0%
34	3570.52	433.63	445.26	3430.76	425.00	436.71	-3.9%	-2.0%	-1.9%
35	3688.14	434.69	445.99	3548.22	426.31	437.68	-3.8%	-1.9%	-1.9%
36	3805.76	435.69	446.68	3665.69	427.55	438.61	-3.7%	-1.9%	-1.8%
37	3923.39	436.65	447.34	3783.17	428.72	439.48	-3.6%	-1.8%	-1.8%
38	4041.02	437.55	447.96	3900.67	429.83	440.30	-3.5%	-1.8%	-1.7%
39	4158.66	438.40	448.54	4018.18	430.89	441.09	-3.4%	-1.7%	-1.7%
40	4276.30	439.21	449.10	4135.69	431.89	441.83	-3.3%	-1.7%	-1.6%



**Vehicle Configurations:**

**C48t**  
12-(1.66)-12-(2.04)-12-(1.66)-12-->-

**C50 - example**  
10-(1.6)-10-(2.4)-10-(1.6)-10-(2.4)-10-->-