Table 38: Bridge Object Forces, Part 1 of 3

BridgeObj	BridgeCut	Distance	LocType	OutputCase	CaseType	P	V2	V3
		m				Tonf	Tonf	Tonf
PUENTE 120m	32	42.115	Before	Peatonal	LinStatic	-4.164	-1.9387	8.784E-04
PUENTE 120m	33	42.115	After	Peatonal	LinStatic	-4.3012	-1.3848	8.784E-04
PUENTE 120m	34	45.	Before	Peatonal	LinStatic	-4.4207	-0.277	8.784E-04
PUENTE 120m	35	45.	After	Peatonal	LinStatic	-4.421	0.277	8.784E-04
PUENTE 120m	36	47.885	Before	Peatonal	LinStatic	-4.3018	1.3848	8.784E-04
PUENTE 120m	37	47.885	After	Peatonal	LinStatic	-4.1649	1.9387	8.784E-04
PUENTE 120m	38	50.77	Before	Peatonal	LinStatic	-3.8396	3.0466	8.784E-04
PUENTE 120m	39	50.77	After	Peatonal	LinStatic	-3.5431	3.6005	8.784E-04
PUENTE 120m	40	53.655	Before	Peatonal	LinStatic	-3.0557	4.7083	8.784E-04
PUENTE 120m	41	53.655	After	Peatonal	LinStatic	-1.6962	5.2622	8.784E-04
PUENTE 120m	42	56.54	Before	Peatonal	LinStatic	-1.016	6.3701	8.784E-04
PUENTE 120m	43	56.54	After	Peatonal	LinStatic	-0.6522	6.924	8.784E-04
PUENTE 120m	44	59.425	Before	Peatonal	LinStatic	-0.2429	8.0318	8.784E-04
PUENTE 120m	45	59.425	After	Peatonal	LinStatic	-0.08	-0.1656	6.574E-14
PUENTE 120m	46	60.	Before	Peatonal	LinStatic	-0.08	-0.1656	-3.743E-15
PUENTE 120m	47	60.	After	Peatonal	LinStatic	-0.0796	0.1656	-2.528E-14
PUENTE 120m	48	60.575	Before	Peatonal	LinStatic	-0.0796	0.1656	6.669E-14
PUENTE 120m	49	60.575	After	Peatonal	LinStatic	-0.2423	-8.0318	8.147E-04
PUENTE 120m	50	63.46	Before	Peatonal	LinStatic	-0.6515	-6.924	8.147E-04
PUENTE 120m	51	63.46	After	Peatonal	LinStatic	-1.0155	-6.3701	8.147E-04
PUENTE 120m	52	66.345	Before	Peatonal	LinStatic	-1.6957	-5.2622	8.147E-04
PUENTE 120m	53	66.345	After	Peatonal	LinStatic	-3.0546	-4.7083	8.147E-04
PUENTE 120m	54	69.23	Before	Peatonal	LinStatic	-3.5419	-3.6005	8.147E-04
PUENTE 120m	55	69.23	After	Peatonal	LinStatic	-3.8384	-3.0466	8.147E-04
PUENTE 120m	56	72.115	Before	Peatonal	LinStatic	-4.164	-1.9387	8.147E-04
PUENTE 120m	57	72.115	After	Peatonal	LinStatic	-4.3012	-1.3848	8.147E-04
PUENTE 120m	58	75.	Before	Peatonal	LinStatic	-4.4208	-0.277	8.147E-04
PUENTE 120m	59	75.	After	Peatonal	LinStatic	-4.421	0.277	8.147E-04
PUENTE 120m	60	77.885	Before	Peatonal	LinStatic	-4.3018	1.3848	8.147E-04
PUENTE 120m	61	77.885	After	Peatonal	LinStatic	-4.1649	1.9387	8.147E-04

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Perú MDPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

Table 38: Bridge Object Forces, Part 1 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	CaseType	P Tonf	V2 Tonf	V3 Tonf
PUENTE 120m	62	80.77	Before	Peatonal	LinStatic	-3.8396	3.0466	8.147E-04
PUENTE 120m	63	80.77	After	Peatonal	LinStatic	-3.5431	3.6005	8.147E-04
PUENTE 120m	64	83.655	Before	Peatonal	LinStatic	-3.0557	4.7083	8.147E-04
PUENTE 120m	65	83.655	After	Peatonal	LinStatic	-1.6962	5.2622	8.147E-04
PUENTE 120m	66	86.54	Before	Peatonal	LinStatic	-1.016	6.3701	8.147E-04
PUENTE 120m	67	86.54	After	Peatonal	LinStatic	-0.6522	6.924	8.147E-04
PUENTE 120m	68	89.425	Before	Peatonal	LinStatic	-0.2429	8.0318	8.147E-04
PUENTE 120m	69	89.425	After	Peatonal	LinStatic	-0.08	-0.1656	9.243E-14
PUENTE 120m	70	90.	Before	Peatonal	LinStatic	-0.08	-0.1656	-8.254E-16
PUENTE 120m	71	90.	After	Peatonal	LinStatic	-0.0827	0.1656	-5.783E-14
PUENTE 120m	72	90.575	Before	Peatonal	LinStatic	-0.0827	0.1656	-1.774E-13
PUENTE 120m	73	90.575	After	Peatonal	LinStatic	-0.2534	-8.1952	0.0019
PUENTE 120m	74	93.5175	Before	Peatonal	LinStatic	-0.6793	-7.0652	0.0019
PUENTE 120m	75	93.5175	After	Peatonal	LinStatic	-1.0622	-6.5003	0.0019
PUENTE 120m	76	96.46	Before	Peatonal	LinStatic	-1.8619	-5.3704	0.0019
PUENTE 120m	77	96.46	After	Peatonal	LinStatic	-3.1984	-4.8054	0.0019
PUENTE 120m	78	99.4025	Before	Peatonal	LinStatic	-3.6704	-3.6755	0.0019
PUENTE 120m	79	99.4025	After	Peatonal	LinStatic	-4.0118	-3.1105	0.0019
PUENTE 120m	80	102.345	Before	Peatonal	LinStatic	-4.3147	-1.9806	0.0019
PUENTE 120m	81	102.345	After	Peatonal	LinStatic	-4.4813	-1.4156	0.0019
PUENTE 120m	82	105.2875	Before	Peatonal	LinStatic	-4.5862	-0.2857	0.0019
PUENTE 120m	83	105.2875	After	Peatonal	LinStatic	-4.5894	0.2792	0.0019
PUENTE 120m	84	108.23	Before	Peatonal	LinStatic	-4.4842	1.4092	0.0019
PUENTE 120m	85	108.23	After	Peatonal	LinStatic	-4.337	1.9741	0.0019
PUENTE 120m	86	111.1725	Before	Peatonal	LinStatic	-4.0075	3.104	0.0019
PUENTE 120m	87	111.1725	After	Peatonal	LinStatic	-3.7252	3.669	0.0019
PUENTE 120m	88	114.115	Before	Peatonal	LinStatic	-3.0624	4.7989	0.0019
PUENTE 120m	89	114.115	After	Peatonal	LinStatic	-1.4798	5.3639	0.0019
PUENTE 120m	90	117.0575	Before	Peatonal	LinStatic	-1.0372	6.4938	0.0019
PUENTE 120m	91	117.0575	After	Peatonal	LinStatic	-0.7783	7.0588	0.0019

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

Table 38: Bridge Object Forces, Part 1 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	CaseType	P Tonf	V2 Tonf	V3 Tonf
PUENTE 120m	92	120.	Before	Peatonal	LinStatic	-0.1667	8.1887	0.0019
PUENTE 120m	1	0	After	Pretensado	LinStatic	-845.2014	-4.310E-09	0.0134
PUENTE 120m	2	2.9425	Before	Pretensado	LinStatic	-846.2546	-4.315E-09	0.0134
PUENTE 120m	3	2.9425	After	Pretensado	LinStatic	-847.8445	-4.309E-09	0.0134
PUENTE 120m	4	5.885	Before	Pretensado	LinStatic	-846.0778	-4.313E-09	0.0134
PUENTE 120m	5	5.885	After	Pretensado	LinStatic	-1546.5758	-4.300E-09	0.0134
PUENTE 120m	6	8.8275	Before	Pretensado	LinStatic	-1602.3766	-4.307E-09	0.0134
PUENTE 120m	7	8.8275	After	Pretensado	LinStatic	-1604.0818	-4.306E-09	0.0134
PUENTE 120m	8	11.77	Before	Pretensado	LinStatic	-1605.8906	-4.301E-09	0.0134
PUENTE 120m	9	11.77	After	Pretensado	LinStatic	-1607.6935	-4.309E-09	0.0134
PUENTE 120m	10	14.7125	Before	Pretensado	LinStatic	-1609.4631	-4.313E-09	0.0134
PUENTE 120m	11	14.7125	After	Pretensado	LinStatic	-1611.2446	-4.331E-09	0.0134
PUENTE 120m	12	17.655	Before	Pretensado	LinStatic	-1613.0104	-4.335E-09	0.0134
PUENTE 120m	13	17.655	After	Pretensado	LinStatic	-1614.7837	-4.360E-09	0.0134
PUENTE 120m	14	20.5975	Before	Pretensado	LinStatic	-1616.5193	-4.370E-09	0.0134
PUENTE 120m	15	20.5975	After	Pretensado	LinStatic	-1617.8447	-4.373E-09	0.0134
PUENTE 120m	16	23.54	Before	Pretensado	LinStatic	-1631.5622	-4.364E-09	0.0134
PUENTE 120m	17	23.54	After	Pretensado	LinStatic	-1097.4262	-4.374E-09	0.0134
PUENTE 120m	18	26.4825	Before	Pretensado	LinStatic	-859.0004	-4.383E-09	0.0134
PUENTE 120m	19	26.4825	After	Pretensado	LinStatic	-862.6469	-4.387E-09	0.0134
PUENTE 120m	20	29.425	Before	Pretensado	LinStatic	-862.977	-4.389E-09	0.0134
PUENTE 120m	21	29.425	After	Pretensado	LinStatic	-863.1301	3.258E-12	-7.843E-13
PUENTE 120m	22	30.	Before	Pretensado	LinStatic	-863.1301	3.289E-12	-7.523E-13
PUENTE 120m	23	30.	After	Pretensado	LinStatic	-845.0749	1.971E-13	-8.548E-13
PUENTE 120m	24	30.575	Before	Pretensado	LinStatic	-845.0749	-4.609E-13	-6.073E-14
PUENTE 120m	25	30.575	After	Pretensado	LinStatic	-845.6108	-2.230E-09	-3.407E-04
PUENTE 120m	26	33.46	Before	Pretensado	LinStatic	-847.0817	-2.229E-09	-3.407E-04
PUENTE 120m	27	33.46	After	Pretensado	LinStatic	-846.2538	-2.230E-09	-3.407E-04
PUENTE 120m	28	36.345	Before	Pretensado	LinStatic	-1026.1092	-2.224E-09	-3.407E-04
PUENTE 120m	29	36.345	After	Pretensado	LinStatic	-1611.6662	-2.209E-09	-3.407E-04

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

Table 38: Bridge Object Forces, Part 1 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	CaseType	P Tonf	V2 Tonf	V3 Tonf
PUENTE 120m	30	39.23	Before	Pretensado	LinStatic	-1602.3992	-2.205E-09	-3.407E-04
PUENTE 120m	31	39.23	After	Pretensado	LinStatic	-1604.5544	-2.202E-09	-3.407E-04
PUENTE 120m	32	42.115	Before	Pretensado	LinStatic	-1606.2992	-2.199E-09	-3.407E-04
PUENTE 120m	33	42.115	After	Pretensado	LinStatic	-1608.0616	-2.195E-09	-3.407E-04
PUENTE 120m	34	45.	Before	Pretensado	LinStatic	-1609.785	-2.183E-09	-3.407E-04
PUENTE 120m	35	45.	After	Pretensado	LinStatic	-1611.5964	-2.200E-09	-3.407E-04
PUENTE 120m	36	47.885	Before	Pretensado	LinStatic	-1613.3192	-2.193E-09	-3.407E-04
PUENTE 120m	37	47.885	After	Pretensado	LinStatic	-1615.0571	-2.194E-09	-3.407E-04
PUENTE 120m	38	50.77	Before	Pretensado	LinStatic	-1616.7668	-2.185E-09	-3.407E-04
PUENTE 120m	39	50.77	After	Pretensado	LinStatic	-1618.0975	-2.175E-09	-3.407E-04
PUENTE 120m	40	53.655	Before	Pretensado	LinStatic	-1630.9892	-2.173E-09	-3.407E-04
PUENTE 120m	41	53.655	After	Pretensado	LinStatic	-1040.2348	-2.175E-09	-3.407E-04
PUENTE 120m	42	56.54	Before	Pretensado	LinStatic	-859.9443	-2.174E-09	-3.407E-04
PUENTE 120m	43	56.54	After	Pretensado	LinStatic	-862.6179	-2.172E-09	-3.407E-04
PUENTE 120m	44	59.425	Before	Pretensado	LinStatic	-862.9743	-2.172E-09	-3.407E-04
PUENTE 120m	45	59.425	After	Pretensado	LinStatic	-863.1228	-1.069E-12	-9.079E-13
PUENTE 120m	46	60.	Before	Pretensado	LinStatic	-863.1228	-9.396E-13	-1.496E-12
PUENTE 120m	47	60.	After	Pretensado	LinStatic	-845.0749	2.446E-12	-1.929E-12
PUENTE 120m	48	60.575	Before	Pretensado	LinStatic	-845.0749	2.033E-12	-1.866E-12
PUENTE 120m	49	60.575	After	Pretensado	LinStatic	-845.6108	-1.597E-09	-3.217E-04
PUENTE 120m	50	63.46	Before	Pretensado	LinStatic	-847.0816	-1.596E-09	-3.217E-04
PUENTE 120m	51	63.46	After	Pretensado	LinStatic	-846.2538	-1.596E-09	-3.217E-04
PUENTE 120m	52	66.345	Before	Pretensado	LinStatic	-1026.1092	-1.608E-09	-3.217E-04
PUENTE 120m	53	66.345	After	Pretensado	LinStatic	-1611.6662	-1.599E-09	-3.217E-04
PUENTE 120m	54	69.23	Before	Pretensado	LinStatic	-1602.3992	-1.600E-09	-3.217E-04
PUENTE 120m	55	69.23	After	Pretensado	LinStatic	-1604.5544	-1.601E-09	-3.217E-04
PUENTE 120m	56	72.115	Before	Pretensado	LinStatic	-1606.2992	-1.605E-09	-3.217E-04
PUENTE 120m	57	72.115	After	Pretensado	LinStatic	-1608.0616	-1.603E-09	-3.217E-04
PUENTE 120m	58	75.	Before	Pretensado	LinStatic	-1609.785	-1.617E-09	-3.217E-04
PUENTE 120m	59	75.	After	Pretensado	LinStatic	-1611.5964	-1.594E-09	-3.217E-04

Ing. JORGE REGUEIRO
SOTEC S.A.
Ing. Antonio N. Pangrazio
Representante Legal

Ing. José María Molinas Rojas
Reg. MOPC 2831

Table 38: Bridge Object Forces, Part 1 of 3

BridgeObj	BridgeCut	Distance	LocType	OutputCase	CaseType	P	V2	V3
		m				Tonf	Tonf	Tonf
PUENTE 120m	60	77.885	Before	Pretensado	LinStatic	-1613.3192	-1.613E-09	-3.217E-04
PUENTE 120m	61	77.885	After	Pretensado	LinStatic	-1615.057	-1.607E-09	-3.217E-04
PUENTE 120m	62	80.77	Before	Pretensado	LinStatic	-1616.7668	-1.618E-09	-3.217E-04
PUENTE 120m	63	80.77	After	Pretensado	LinStatic	-1618.0975	-1.617E-09	-3.217E-04
PUENTE 120m	64	83.655	Before	Pretensado	LinStatic	-1630.9892	-1.614E-09	-3.217E-04
PUENTE 120m	65	83.655	After	Pretensado	LinStatic	-1040.2348	-1.619E-09	-3.217E-04
PUENTE 120m	66	86.54	Before	Pretensado	LinStatic	-859.9443	-1.624E-09	-3.217E-04
PUENTE 120m	67	86.54	After	Pretensado	LinStatic	-862.6179	-1.623E-09	-3.217E-04
PUENTE 120m	68	89.425	Before	Pretensado	LinStatic	-862.9743	-1.623E-09	-3.217E-04
PUENTE 120m	69	89.425	After	Pretensado	LinStatic	-863.1228	-1.048E-12	-5.679E-14
PUENTE 120m	70	90.	Before	Pretensado	LinStatic	-863.1228	-6.058E-13	-2.821E-13
PUENTE 120m	71	90.	After	Pretensado	LinStatic	-845.0812	1.438E-12	1.048E-12
PUENTE 120m	72	90.575	Before	Pretensado	LinStatic	-845.0812	1.467E-12	1.244E-12
PUENTE 120m	73	90.575	After	Pretensado	LinStatic	-845.6365	-1.247E-10	-6.257E-04
PUENTE 120m	74	93.5175	Before	Pretensado	LinStatic	-847.1713	-1.238E-10	-6.257E-04
PUENTE 120m	75	93.5175	After	Pretensado	LinStatic	-845.4204	-1.265E-10	-6.257E-04
PUENTE 120m	76	96.46	Before	Pretensado	LinStatic	-1082.7224	-1.245E-10	-6.257E-04
PUENTE 120m	77	96.46	After	Pretensado	LinStatic	-1612.5589	-1.251E-10	-6.257E-04
PUENTE 120m	78	99.4025	Before	Pretensado	LinStatic	-1602.5567	-1.372E-10	-6.257E-04
PUENTE 120m	79	99.4025	After	Pretensado	LinStatic	-1604.7802	-1.323E-10	-6.257E-04
PUENTE 120m	80	102.345	Before	Pretensado	LinStatic	-1606.583	-1.239E-10	-6.257E-04
PUENTE 120m	81	102.345	After	Pretensado	LinStatic	-1608.3682	-1.225E-10	-6.257E-04
PUENTE 120m	82	105.2875	Before	Pretensado	LinStatic	-1610.1383	-1.078E-10	-6.257E-04
PUENTE 120m	83	105.2875	After	Pretensado	LinStatic	-1611.9186	-1.466E-10	-6.257E-04
PUENTE 120m	84	108.23	Before	Pretensado	LinStatic	-1613.6815	-1.520E-10	-6.257E-04
PUENTE 120m	85	108.23	After	Pretensado	LinStatic	-1615.4438	-1.566E-10	-6.257E-04
PUENTE 120m	86	111.1725	Before	Pretensado	LinStatic	-1617.1632	-1.528E-10	-6.257E-04
PUENTE 120m	87	111.1725	After	Pretensado	LinStatic	-1619.0284	-1.673E-10	-6.257E-04
PUENTE 120m	88	114.115	Before	Pretensado	LinStatic	-1565.9472	-1.558E-10	-6.257E-04
PUENTE 120m	89	114.115	After	Pretensado	LinStatic	-858.5081	-1.604E-10	-6.257E-04

Ing. JORGE REGUEIRO
SOTEC S.A.
Ing. Antonio N. Pangrazio
Representante Legal

Ing. José María Molinas Rojas
Reg. MOPC 2831

Table 38: Bridge Object Forces, Part 1 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	CaseType	P Tonf	V2 Tonf	V3 Tonf
PUENTE 120m	90	117.0575	Before	Pretensado	LinStatic	-862.1626	-1.566E-10	-6.257E-04
PUENTE 120m	91	117.0575	After	Pretensado	LinStatic	-862.4314	-1.571E-10	-6.257E-04
PUENTE 120m	92	120.	Before	Pretensado	LinStatic	-863.2275	-1.567E-10	-6.257E-04

Table 38: Bridge Object Forces, Part 2 of 3

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	T Tonf-m	M2 Tonf-m	M3 Tonf-m	GlobalX m
PUENTE 120m	1	0.	After	DEAD	0.0321	0.46562	-3.0917	0.
PUENTE 120m	2	2.9425	Before	DEAD	0.0321	0.41989	357.72102	2.9425
PUENTE 120m	3	2.9425	After	DEAD	0.0321	0.4215	352.73753	2.9425
PUENTE 120m	4	5.885	Before	DEAD	0.0321	0.37482	634.15454	5.885
PUENTE 120m	5	5.885	After	DEAD	0.0321	0.35983	605.4282	5.885
PUENTE 120m	6	8.8275	Before	DEAD	0.0321	0.31313	800.34812	8.8275
PUENTE 120m	7	8.8275	After	DEAD	0.0321	0.31509	795.13482	8.8275
PUENTE 120m	8	11.77	Before	DEAD	0.0321	0.26905	913.26777	11.77
PUENTE 120m	9	11.77	After	DEAD	0.0321	0.27097	910.54587	11.77
PUENTE 120m	10	14.7125	Before	DEAD	0.0321	0.22446	949.91385	14.7125
PUENTE 120m	11	14.7125	After	DEAD	0.0321	0.22633	949.97119	14.7125
PUENTE 120m	12	17.655	Before	DEAD	0.0321	0.17947	910.30951	17.655
PUENTE 120m	13	17.655	After	DEAD	0.0321	0.1813	913.39227	17.655
PUENTE 120m	14	20.5975	Before	DEAD	0.0321	0.13416	794.47491	20.5975
PUENTE 120m	15	20.5975	After	DEAD	0.0321	0.13597	800.80235	20.5975
PUENTE 120m	16	23.54	Before	DEAD	0.0321	0.08861	602.10512	23.54
PUENTE 120m	17	23.54	After	DEAD	0.0321	0.09305	626.48873	23.54
PUENTE 120m	18	26.4825	Before	DEAD	0.0321	0.04619	351.05632	26.4825
PUENTE 120m	19	26.4825	After	DEAD	0.0321	0.04746	358.33164	26.4825
PUENTE 120m	20	29.425	Before	DEAD	0.0321	-0.00056	-6.24983	29.425
PUENTE 120m	21	29.425	After	DEAD	9.472E-13	3.112E-05	-3.00763	29.425
PUENTE 120m	22	30.	Before	DEAD	1.088E-12	3.112E-05	-1.41856	30.
PUENTE 120m	23	30.	After	DEAD	5.868E-13	-0.00103	-1.36167	30.

Ing. JORGE REGUEIRO
SOTEC S.A.
Ing. Antonio N. Pangrazio
Representante Legal

Ing. José María Molinas Rojas
Reg. MOPC 2831

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance	LocType	OutputCase	T	M2	M3	GlobalX
		m			Tonf-m	Tonf-m	Tonf-m	m
PUENTE 120m	24	30.575	Before	DEAD	7.100E-13	-0.00103	-2.95074	30.575
PUENTE 120m	25	30.575	After	DEAD	0.00223	0.025	-6.03878	30.575
PUENTE 120m	26	33.46	Before	DEAD	0.00223	0.02208	344.28928	33.46
PUENTE 120m	27	33.46	After	DEAD	0.00223	0.02222	337.3698	33.46
PUENTE 120m	28	36.345	Before	DEAD	0.00223	0.01948	603.58492	36.345
PUENTE 120m	29	36.345	After	DEAD	0.00223	0.01877	578.82467	36.345
PUENTE 120m	30	39.23	Before	DEAD	0.00223	0.01637	769.07478	39.23
PUENTE 120m	31	39.23	After	DEAD	0.00223	0.0165	763.58414	39.23
PUENTE 120m	32	42.115	Before	DEAD	0.00223	0.01407	877.12618	42.115
PUENTE 120m	33	42.115	After	DEAD	0.00223	0.01417	874.59144	42.115
PUENTE 120m	34	45.	Before	DEAD	0.00223	0.01174	912.24305	45.
PUENTE 120m	35	45.	After	DEAD	0.00223	0.01183	912.24273	45.
PUENTE 120m	36	47.885	Before	DEAD	0.00223	0.00939	874.5906	47.885
PUENTE 120m	37	47.885	After	DEAD	0.00223	0.00948	877.12489	47.885
PUENTE 120m	38	50.77	Before	DEAD	0.00223	0.00701	763.58249	50.77
PUENTE 120m	39	50.77	After	DEAD	0.00223	0.00711	769.07315	50.77
PUENTE 120m	40	53.655	Before	DEAD	0.00223	0.00462	578.82306	53.655
PUENTE 120m	41	53.655	After	DEAD	0.00223	0.0049	603.58418	53.655
PUENTE 120m	42	56.54	Before	DEAD	0.00223	0.00242	337.36916	56.54
PUENTE 120m	43	56.54	After	DEAD	0.00223	0.0025	344.28827	56.54
PUENTE 120m	44	59.425	Before	DEAD	0.00223	-3.580E-05	-6.03954	59.425
PUENTE 120m	45	59.425	After	DEAD	-5.139E-13	-5.648E-07	-2.95127	59.425
PUENTE 120m	46	60.	Before	DEAD	-4.069E-13	-5.648E-07	-1.3622	60.
PUENTE 120m	47	60.	After	DEAD	-4.107E-13	-0.00117	-1.36168	60.
PUENTE 120m	48	60.575	Before	DEAD	-6.477E-13	-0.00117	-2.95075	60.575
PUENTE 120m	49	60.575	After	DEAD	0.00194	0.02849	-6.0388	60.575
PUENTE 120m	50	63.46	Before	DEAD	0.00194	0.02516	344.28927	63.46
PUENTE 120m	51	63.46	After	DEAD	0.00194	0.02532	337.36979	63.46
PUENTE 120m	52	66.345	Before	DEAD	0.00194	0.0222	603.58491	66.345
PUENTE 120m	53	66.345	After	DEAD	0.00194	0.02142	578.82464	66.345

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. Jose Maria Molinas Rojas
MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance	LocType	OutputCase	T	M2	M3	GlobalX
		m			Tonf-m	Tonf-m	Tonf-m	m
PUENTE 120m	54	69.23	Before	DEAD	0.00194	0.01869	769.07476	69.23
PUENTE 120m	55	69.23	After	DEAD	0.00194	0.01883	763.58411	69.23
PUENTE 120m	56	72.115	Before	DEAD	0.00194	0.01608	877.12615	72.115
PUENTE 120m	57	72.115	After	DEAD	0.00194	0.01619	874.59141	72.115
PUENTE 120m	58	75.	Before	DEAD	0.00194	0.01344	912.24303	75.
PUENTE 120m	59	75.	After	DEAD	0.00194	0.01353	912.2427	75.
PUENTE 120m	60	77.885	Before	DEAD	0.00194	0.01076	874.59057	77.885
PUENTE 120m	61	77.885	After	DEAD	0.00194	0.01085	877.12486	77.885
PUENTE 120m	62	80.77	Before	DEAD	0.00194	0.00804	763.58246	80.77
PUENTE 120m	63	80.77	After	DEAD	0.00194	0.00814	769.07312	80.77
PUENTE 120m	64	83.655	Before	DEAD	0.00194	0.00531	578.82303	83.655
PUENTE 120m	65	83.655	After	DEAD	0.00194	0.00561	603.58415	83.655
PUENTE 120m	66	86.54	Before	DEAD	0.00194	0.00278	337.36914	86.54
PUENTE 120m	67	86.54	After	DEAD	0.00194	0.00286	344.28825	86.54
PUENTE 120m	68	89.425	Before	DEAD	0.00194	-3.547E-05	-6.03956	89.425
PUENTE 120m	69	89.425	After	DEAD	-2.499E-12	2.205E-06	-2.95129	89.425
PUENTE 120m	70	90.	Before	DEAD	-2.608E-12	2.205E-06	-1.36222	90.
PUENTE 120m	71	90.	After	DEAD	-7.973E-13	0.00334	-1.41873	90.
PUENTE 120m	72	90.575	Before	DEAD	-9.336E-13	0.00334	-3.0078	90.575
PUENTE 120m	73	90.575	After	DEAD	-0.00598	-0.08117	-6.24985	90.575
PUENTE 120m	74	93.5175	Before	DEAD	-0.00598	-0.07173	358.33164	93.5175
PUENTE 120m	75	93.5175	After	DEAD	-0.00598	-0.0722	351.05573	93.5175
PUENTE 120m	76	96.46	Before	DEAD	-0.00598	-0.06302	626.48757	96.46
PUENTE 120m	77	96.46	After	DEAD	-0.00598	-0.06105	602.10327	96.46
PUENTE 120m	78	99.4025	Before	DEAD	-0.00598	-0.05321	800.79989	99.4025
PUENTE 120m	79	99.4025	After	DEAD	-0.00598	-0.05368	794.47164	99.4025
PUENTE 120m	80	102.345	Before	DEAD	-0.00598	-0.04572	913.38793	102.345
PUENTE 120m	81	102.345	After	DEAD	-0.00598	-0.04612	910.30396	102.345
PUENTE 120m	82	105.2875	Before	DEAD	-0.00598	-0.03812	949.96445	105.2875
PUENTE 120m	83	105.2875	After	DEAD	-0.00598	-0.03846	949.90589	105.2875

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. Jorge María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance	LocType	OutputCase	T	M2	M3	GlobalX
		m			Tonf-m	Tonf-m	Tonf-m	m
PUENTE 120m	84	108.23	Before	DEAD	-0.00598	-0.03043	910.53694	108.23
PUENTE 120m	85	108.23	After	DEAD	-0.00598	-0.03073	913.25808	108.23
PUENTE 120m	86	111.1725	Before	DEAD	-0.00598	-0.02268	795.12478	111.1725
PUENTE 120m	87	111.1725	After	DEAD	-0.00598	-0.02293	800.33869	111.1725
PUENTE 120m	88	114.115	Before	DEAD	-0.00598	-0.01496	605.41955	114.115
PUENTE 120m	89	114.115	After	DEAD	-0.00598	-0.016	634.15129	114.115
PUENTE 120m	90	117.0575	Before	DEAD	-0.00598	-0.00779	352.73452	117.0575
PUENTE 120m	91	117.0575	After	DEAD	-0.00598	-0.00792	357.71661	117.0575
PUENTE 120m	92	120.	Before	DEAD	-0.00598	0.00012	-3.09508	120.
PUENTE 120m	1	0.	After		0.	0.	0.	0.
PUENTE 120m	2	2.9425	Before		0.	0.	0.	2.9425
PUENTE 120m	3	2.9425	After		0.	0.	0.	2.9425
PUENTE 120m	4	5.885	Before		0.	0.	0.	5.885
PUENTE 120m	5	5.885	After		0.	0.	0.	5.885
PUENTE 120m	6	8.8275	Before		0.	0.	0.	8.8275
PUENTE 120m	7	8.8275	After		0.	0.	0.	8.8275
PUENTE 120m	8	11.77	Before		0.	0.	0.	11.77
PUENTE 120m	9	11.77	After		0.	0.	0.	11.77
PUENTE 120m	10	14.7125	Before		0.	0.	0.	14.7125
PUENTE 120m	11	14.7125	After		0.	0.	0.	14.7125
PUENTE 120m	12	17.655	Before		0.	0.	0.	17.655
PUENTE 120m	13	17.655	After		0.	0.	0.	17.655
PUENTE 120m	14	20.5975	Before		0.	0.	0.	20.5975
PUENTE 120m	15	20.5975	After		0.	0.	0.	20.5975
PUENTE 120m	16	23.54	Before		0.	0.	0.	23.54
PUENTE 120m	17	23.54	After		0.	0.	0.	23.54
PUENTE 120m	18	26.4825	Before		0.	0.	0.	26.4825
PUENTE 120m	19	26.4825	After		0.	0.	0.	26.4825
PUENTE 120m	20	29.425	Before		0.	0.	0.	29.425
PUENTE 120m	21	29.425	After		0.	0.	0.	29.425

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	T Tonf-m	M2 Tonf-m	M3 Tonf-m	GlobalX m
PUENTE 120m	22	30.	Before		0.	0.	0.	30.
PUENTE 120m	23	30.	After		0.	0.	0.	30.
PUENTE 120m	24	30.575	Before		0.	0.	0.	30.575
PUENTE 120m	25	30.575	After		0.	0.	0.	30.575
PUENTE 120m	26	33.46	Before		0.	0.	0.	33.46
PUENTE 120m	27	33.46	After		0.	0.	0.	33.46
PUENTE 120m	28	36.345	Before		0.	0.	0.	36.345
PUENTE 120m	29	36.345	After		0.	0.	0.	36.345
PUENTE 120m	30	39.23	Before		0.	0.	0.	39.23
PUENTE 120m	31	39.23	After		0.	0.	0.	39.23
PUENTE 120m	32	42.115	Before		0.	0.	0.	42.115
PUENTE 120m	33	42.115	After		0.	0.	0.	42.115
PUENTE 120m	34	45.	Before		0.	0.	0.	45.
PUENTE 120m	35	45.	After		0.	0.	0.	45.
PUENTE 120m	36	47.885	Before		0.	0.	0.	47.885
PUENTE 120m	37	47.885	After		0.	0.	0.	47.885
PUENTE 120m	38	50.77	Before		0.	0.	0.	50.77
PUENTE 120m	39	50.77	After		0.	0.	0.	50.77
PUENTE 120m	40	53.655	Before		0.	0.	0.	53.655
PUENTE 120m	41	53.655	After		0.	0.	0.	53.655
PUENTE 120m	42	56.54	Before		0.	0.	0.	56.54
PUENTE 120m	43	56.54	After		0.	0.	0.	56.54
PUENTE 120m	44	59.425	Before		0.	0.	0.	59.425
PUENTE 120m	45	59.425	After		0.	0.	0.	59.425
PUENTE 120m	46	60.	Before		0.	0.	0.	60.
PUENTE 120m	47	60.	After		0.	0.	0.	60.
PUENTE 120m	48	60.575	Before		0.	0.	0.	60.575
PUENTE 120m	49	60.575	After		0.	0.	0.	60.575
PUENTE 120m	50	63.46	Before		0.	0.	0.	63.46
PUENTE 120m	51	63.46	After		0.	0.	0.	63.46

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

PUENTE 120 m ROTESMA
9. Bridge object forces

MEMORIA DE CÁLCULO
30 abril 2021

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance	LocType	OutputCase	T	M2	M3	GlobalX
		m			Tonf-m	Tonf-m	Tonf-m	m
PUENTE 120m	52	66.345	Before		0.	0.	0.	66.345
PUENTE 120m	53	66.345	After		0.	0.	0.	66.345
PUENTE 120m	54	69.23	Before		0.	0.	0.	69.23
PUENTE 120m	55	69.23	After		0.	0.	0.	69.23
PUENTE 120m	56	72.115	Before		0.	0.	0.	72.115
PUENTE 120m	57	72.115	After		0.	0.	0.	72.115
PUENTE 120m	58	75.	Before		0.	0.	0.	75.
PUENTE 120m	59	75.	After		0.	0.	0.	75.
PUENTE 120m	60	77.885	Before		0.	0.	0.	77.885
PUENTE 120m	61	77.885	After		0.	0.	0.	77.885
PUENTE 120m	62	80.77	Before		0.	0.	0.	80.77
PUENTE 120m	63	80.77	After		0.	0.	0.	80.77
PUENTE 120m	64	83.655	Before		0.	0.	0.	83.655
PUENTE 120m	65	83.655	After		0.	0.	0.	83.655
PUENTE 120m	66	86.54	Before		0.	0.	0.	86.54
PUENTE 120m	67	86.54	After		0.	0.	0.	86.54
PUENTE 120m	68	89.425	Before		0.	0.	0.	89.425
PUENTE 120m	69	89.425	After		0.	0.	0.	89.425
PUENTE 120m	70	90.	Before		0.	0.	0.	90.
PUENTE 120m	71	90.	After		0.	0.	0.	90.
PUENTE 120m	72	90.575	Before		0.	0.	0.	90.575
PUENTE 120m	73	90.575	After		0.	0.	0.	90.575
PUENTE 120m	74	93.5175	Before		0.	0.	0.	93.5175
PUENTE 120m	75	93.5175	After		0.	0.	0.	93.5175
PUENTE 120m	76	96.46	Before		0.	0.	0.	96.46
PUENTE 120m	77	96.46	After		0.	0.	0.	96.46
PUENTE 120m	78	99.4025	Before		0.	0.	0.	99.4025
PUENTE 120m	79	99.4025	After		0.	0.	0.	99.4025
PUENTE 120m	80	102.345	Before		0.	0.	0.	102.345
PUENTE 120m	81	102.345	After		0.	0.	0.	102.345

Ing. JORGE REGUEIRO
SOTEC S.A.
Ing. Antonio N. Pangrazio
Representante Legal

Ing. José María Molinas Rojas
Reg. MOPC 2831

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	T Tonf-m	M2 Tonf-m	M3 Tonf-m	GlobalX m
PUENTE 120m	82	105.2875	Before		0.	0.	0.	105.2875
PUENTE 120m	83	105.2875	After		0.	0.	0.	105.2875
PUENTE 120m	84	108.23	Before		0.	0.	0.	108.23
PUENTE 120m	85	108.23	After		0.	0.	0.	108.23
PUENTE 120m	86	111.1725	Before		0.	0.	0.	111.1725
PUENTE 120m	87	111.1725	After		0.	0.	0.	111.1725
PUENTE 120m	88	114.115	Before		0.	0.	0.	114.115
PUENTE 120m	89	114.115	After		0.	0.	0.	114.115
PUENTE 120m	90	117.0575	Before		0.	0.	0.	117.0575
PUENTE 120m	91	117.0575	After		0.	0.	0.	117.0575
PUENTE 120m	92	120.	Before		0.	0.	0.	120.
PUENTE 120m	1	0.	After	Barrier	-0.09619	-1.39999	-0.19831	0.
PUENTE 120m	2	2.9425	Before	Barrier	-0.09619	-1.26249	22.43679	2.9425
PUENTE 120m	3	2.9425	After	Barrier	-0.09619	-1.26732	22.12746	2.9425
PUENTE 120m	4	5.885	Before	Barrier	-0.09619	-1.12696	39.77135	5.885
PUENTE 120m	5	5.885	After	Barrier	-0.09619	-1.08189	37.95909	5.885
PUENTE 120m	6	8.8275	Before	Barrier	-0.09619	-0.94148	50.16464	8.8275
PUENTE 120m	7	8.8275	After	Barrier	-0.09619	-0.94737	49.83509	8.8275
PUENTE 120m	8	11.77	Before	Barrier	-0.09619	-0.80897	57.23162	11.77
PUENTE 120m	9	11.77	After	Barrier	-0.09619	-0.81472	57.05869	11.77
PUENTE 120m	10	14.7125	Before	Barrier	-0.09619	-0.67491	59.52214	14.7125
PUENTE 120m	11	14.7125	After	Barrier	-0.09619	-0.68053	59.52467	14.7125
PUENTE 120m	12	17.655	Before	Barrier	-0.09619	-0.53963	57.03887	17.655
PUENTE 120m	13	17.655	After	Barrier	-0.09619	-0.54512	57.23249	17.655
PUENTE 120m	14	20.5975	Before	Barrier	-0.09619	-0.40341	49.78337	20.5975
PUENTE 120m	15	20.5975	After	Barrier	-0.09619	-0.40885	50.18181	20.5975
PUENTE 120m	16	23.54	Before	Barrier	-0.09619	-0.26643	37.73589	23.54
PUENTE 120m	17	23.54	After	Barrier	-0.09619	-0.2798	39.27641	23.54
PUENTE 120m	18	26.4825	Before	Barrier	-0.09619	-0.13889	22.01541	26.4825
PUENTE 120m	19	26.4825	After	Barrier	-0.09619	-0.14271	22.47211	26.4825

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

Table 38: Bridge Object Forces, Part 1 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	CaseType	P Tonf	V2 Tonf	V3 Tonf
PUENTE 120m	30	39.23	Before	Pretensado	LinStatic	-1602.3992	-2.205E-09	-3.407E-04
PUENTE 120m	31	39.23	After	Pretensado	LinStatic	-1604.5544	-2.202E-09	-3.407E-04
PUENTE 120m	32	42.115	Before	Pretensado	LinStatic	-1606.2992	-2.199E-09	-3.407E-04
PUENTE 120m	33	42.115	After	Pretensado	LinStatic	-1608.0616	-2.195E-09	-3.407E-04
PUENTE 120m	34	45.	Before	Pretensado	LinStatic	-1609.785	-2.183E-09	-3.407E-04
PUENTE 120m	35	45.	After	Pretensado	LinStatic	-1611.5964	-2.200E-09	-3.407E-04
PUENTE 120m	36	47.885	Before	Pretensado	LinStatic	-1613.3192	-2.193E-09	-3.407E-04
PUENTE 120m	37	47.885	After	Pretensado	LinStatic	-1615.0571	-2.194E-09	-3.407E-04
PUENTE 120m	38	50.77	Before	Pretensado	LinStatic	-1616.7668	-2.185E-09	-3.407E-04
PUENTE 120m	39	50.77	After	Pretensado	LinStatic	-1618.0975	-2.175E-09	-3.407E-04
PUENTE 120m	40	53.655	Before	Pretensado	LinStatic	-1630.9892	-2.173E-09	-3.407E-04
PUENTE 120m	41	53.655	After	Pretensado	LinStatic	-1040.2348	-2.175E-09	-3.407E-04
PUENTE 120m	42	56.54	Before	Pretensado	LinStatic	-859.9443	-2.174E-09	-3.407E-04
PUENTE 120m	43	56.54	After	Pretensado	LinStatic	-862.6179	-2.172E-09	-3.407E-04
PUENTE 120m	44	59.425	Before	Pretensado	LinStatic	-862.9743	-2.172E-09	-3.407E-04
PUENTE 120m	45	59.425	After	Pretensado	LinStatic	-863.1228	-1.069E-12	-9.079E-13
PUENTE 120m	46	60.	Before	Pretensado	LinStatic	-863.1228	-9.396E-13	-1.496E-12
PUENTE 120m	47	60.	After	Pretensado	LinStatic	-845.0749	2.446E-12	-1.929E-12
PUENTE 120m	48	60.575	Before	Pretensado	LinStatic	-845.0749	2.033E-12	-1.866E-12
PUENTE 120m	49	60.575	After	Pretensado	LinStatic	-845.6108	-1.597E-09	-3.217E-04
PUENTE 120m	50	63.46	Before	Pretensado	LinStatic	-847.0816	-1.596E-09	-3.217E-04
PUENTE 120m	51	63.46	After	Pretensado	LinStatic	-846.2538	-1.596E-09	-3.217E-04
PUENTE 120m	52	66.345	Before	Pretensado	LinStatic	-1026.1092	-1.608E-09	-3.217E-04
PUENTE 120m	53	66.345	After	Pretensado	LinStatic	-1611.6662	-1.599E-09	-3.217E-04
PUENTE 120m	54	69.23	Before	Pretensado	LinStatic	-1602.3992	-1.600E-09	-3.217E-04
PUENTE 120m	55	69.23	After	Pretensado	LinStatic	-1604.5544	-1.601E-09	-3.217E-04
PUENTE 120m	56	72.115	Before	Pretensado	LinStatic	-1606.2992	-1.605E-09	-3.217E-04
PUENTE 120m	57	72.115	After	Pretensado	LinStatic	-1608.0616	-1.603E-09	-3.217E-04
PUENTE 120m	58	75.	Before	Pretensado	LinStatic	-1609.785	-1.617E-09	-3.217E-04
PUENTE 120m	59	75.	After	Pretensado	LinStatic	-1611.5964	-1.594E-09	-3.217E-04

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. Antonio N. Pangrazio
Representante Legal

Ing. José María Molinas Rojas
Reg. MOPC 2831

Table 38: Bridge Object Forces, Part 1 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	CaseType	P Tonf	V2 Tonf	V3 Tonf
PUENTE 120m	60	77.885	Before	Pretensado	LinStatic	-1613.3192	-1.613E-09	-3.217E-04
PUENTE 120m	61	77.885	After	Pretensado	LinStatic	-1615.057	-1.607E-09	-3.217E-04
PUENTE 120m	62	80.77	Before	Pretensado	LinStatic	-1616.7668	-1.618E-09	-3.217E-04
PUENTE 120m	63	80.77	After	Pretensado	LinStatic	-1618.0975	-1.617E-09	-3.217E-04
PUENTE 120m	64	83.655	Before	Pretensado	LinStatic	-1630.9892	-1.614E-09	-3.217E-04
PUENTE 120m	65	83.655	After	Pretensado	LinStatic	-1040.2348	-1.619E-09	-3.217E-04
PUENTE 120m	66	86.54	Before	Pretensado	LinStatic	-859.9443	-1.624E-09	-3.217E-04
PUENTE 120m	67	86.54	After	Pretensado	LinStatic	-862.6179	-1.623E-09	-3.217E-04
PUENTE 120m	68	89.425	Before	Pretensado	LinStatic	-862.9743	-1.623E-09	-3.217E-04
PUENTE 120m	69	89.425	After	Pretensado	LinStatic	-863.1228	-1.048E-12	-5.679E-14
PUENTE 120m	70	90.	Before	Pretensado	LinStatic	-863.1228	-6.058E-13	-2.821E-13
PUENTE 120m	71	90.	After	Pretensado	LinStatic	-845.0812	1.438E-12	1.048E-12
PUENTE 120m	72	90.575	Before	Pretensado	LinStatic	-845.0812	1.467E-12	1.244E-12
PUENTE 120m	73	90.575	After	Pretensado	LinStatic	-845.6365	-1.247E-10	-6.257E-04
PUENTE 120m	74	93.5175	Before	Pretensado	LinStatic	-847.1713	-1.238E-10	-6.257E-04
PUENTE 120m	75	93.5175	After	Pretensado	LinStatic	-845.4204	-1.265E-10	-6.257E-04
PUENTE 120m	76	96.46	Before	Pretensado	LinStatic	-1082.7224	-1.245E-10	-6.257E-04
PUENTE 120m	77	96.46	After	Pretensado	LinStatic	-1612.5589	-1.251E-10	-6.257E-04
PUENTE 120m	78	99.4025	Before	Pretensado	LinStatic	-1602.5567	-1.372E-10	-6.257E-04
PUENTE 120m	79	99.4025	After	Pretensado	LinStatic	-1604.7802	-1.323E-10	-6.257E-04
PUENTE 120m	80	102.345	Before	Pretensado	LinStatic	-1606.583	-1.239E-10	-6.257E-04
PUENTE 120m	81	102.345	After	Pretensado	LinStatic	-1608.3682	-1.225E-10	-6.257E-04
PUENTE 120m	82	105.2875	Before	Pretensado	LinStatic	-1610.1383	-1.078E-10	-6.257E-04
PUENTE 120m	83	105.2875	After	Pretensado	LinStatic	-1611.9186	-1.466E-10	-6.257E-04
PUENTE 120m	84	108.23	Before	Pretensado	LinStatic	-1613.6815	-1.520E-10	-6.257E-04
PUENTE 120m	85	108.23	After	Pretensado	LinStatic	-1615.4438	-1.566E-10	-6.257E-04
PUENTE 120m	86	111.1725	Before	Pretensado	LinStatic	-1617.1632	-1.528E-10	-6.257E-04
PUENTE 120m	87	111.1725	After	Pretensado	LinStatic	-1619.0284	-1.673E-10	-6.257E-04
PUENTE 120m	88	114.115	Before	Pretensado	LinStatic	-1565.9472	-1.558E-10	-6.257E-04
PUENTE 120m	89	114.115	After	Pretensado	LinStatic	-858.5081	-1.604E-10	-6.257E-04

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

Table 38: Bridge Object Forces, Part 1 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	CaseType	P Tonf	V2 Tonf	V3 Tonf
PUENTE 120m	90	117.0575	Before	Pretensado	LinStatic	-862.1626	-1.566E-10	-6.257E-04
PUENTE 120m	91	117.0575	After	Pretensado	LinStatic	-862.4314	-1.571E-10	-6.257E-04
PUENTE 120m	92	120.	Before	Pretensado	LinStatic	-863.2275	-1.567E-10	-6.257E-04

Table 38: Bridge Object Forces, Part 2 of 3

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance m	LocType	OutputCase	T Tonf-m	M2 Tonf-m	M3 Tonf-m	GlobalX m
PUENTE 120m	1	0.	After	DEAD	0.0321	0.46562	-3.0917	0.
PUENTE 120m	2	2.9425	Before	DEAD	0.0321	0.41989	357.72102	2.9425
PUENTE 120m	3	2.9425	After	DEAD	0.0321	0.4215	352.73753	2.9425
PUENTE 120m	4	5.885	Before	DEAD	0.0321	0.37482	634.15454	5.885
PUENTE 120m	5	5.885	After	DEAD	0.0321	0.35983	605.4282	5.885
PUENTE 120m	6	8.8275	Before	DEAD	0.0321	0.31313	800.34812	8.8275
PUENTE 120m	7	8.8275	After	DEAD	0.0321	0.31509	795.13482	8.8275
PUENTE 120m	8	11.77	Before	DEAD	0.0321	0.26905	913.26777	11.77
PUENTE 120m	9	11.77	After	DEAD	0.0321	0.27097	910.54587	11.77
PUENTE 120m	10	14.7125	Before	DEAD	0.0321	0.22446	949.91385	14.7125
PUENTE 120m	11	14.7125	After	DEAD	0.0321	0.22633	949.97119	14.7125
PUENTE 120m	12	17.655	Before	DEAD	0.0321	0.17947	910.30951	17.655
PUENTE 120m	13	17.655	After	DEAD	0.0321	0.1813	913.39227	17.655
PUENTE 120m	14	20.5975	Before	DEAD	0.0321	0.13416	794.47491	20.5975
PUENTE 120m	15	20.5975	After	DEAD	0.0321	0.13597	800.80235	20.5975
PUENTE 120m	16	23.54	Before	DEAD	0.0321	0.08861	602.10512	23.54
PUENTE 120m	17	23.54	After	DEAD	0.0321	0.09305	626.48873	23.54
PUENTE 120m	18	26.4825	Before	DEAD	0.0321	0.04619	351.05632	26.4825
PUENTE 120m	19	26.4825	After	DEAD	0.0321	0.04746	358.33164	26.4825
PUENTE 120m	20	29.425	Before	DEAD	0.0321	-0.00056	-6.24983	29.425
PUENTE 120m	21	29.425	After	DEAD	9.472E-13	3.112E-05	-3.00763	29.425
PUENTE 120m	22	30.	Before	DEAD	1.088E-12	3.112E-05	-1.41856	30.
PUENTE 120m	23	30.	After	DEAD	5.868E-13	-0.00103	-1.36167	30.

Ing. JORGE REGUEIRO
SOTEC S.A.
Ing. Antonio N. Pangrazio
Representante Legal

Ing. José María Molinas Rojas
Reg. MDPC 2831

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance	LocType	OutputCase	T	M2	M3	GlobalX
		m			Tonf-m	Tonf-m	Tonf-m	m
PUENTE 120m	24	30.575	Before	DEAD	7.100E-13	-0.00103	-2.95074	30.575
PUENTE 120m	25	30.575	After	DEAD	0.00223	0.025	-6.03878	30.575
PUENTE 120m	26	33.46	Before	DEAD	0.00223	0.02208	344.28928	33.46
PUENTE 120m	27	33.46	After	DEAD	0.00223	0.02222	337.3698	33.46
PUENTE 120m	28	36.345	Before	DEAD	0.00223	0.01948	603.58492	36.345
PUENTE 120m	29	36.345	After	DEAD	0.00223	0.01877	578.82467	36.345
PUENTE 120m	30	39.23	Before	DEAD	0.00223	0.01637	769.07478	39.23
PUENTE 120m	31	39.23	After	DEAD	0.00223	0.0165	763.58414	39.23
PUENTE 120m	32	42.115	Before	DEAD	0.00223	0.01407	877.12618	42.115
PUENTE 120m	33	42.115	After	DEAD	0.00223	0.01417	874.59144	42.115
PUENTE 120m	34	45.	Before	DEAD	0.00223	0.01174	912.24305	45.
PUENTE 120m	35	45.	After	DEAD	0.00223	0.01183	912.24273	45.
PUENTE 120m	36	47.885	Before	DEAD	0.00223	0.00939	874.5906	47.885
PUENTE 120m	37	47.885	After	DEAD	0.00223	0.00948	877.12489	47.885
PUENTE 120m	38	50.77	Before	DEAD	0.00223	0.00701	763.58249	50.77
PUENTE 120m	39	50.77	After	DEAD	0.00223	0.00711	769.07315	50.77
PUENTE 120m	40	53.655	Before	DEAD	0.00223	0.00462	578.82306	53.655
PUENTE 120m	41	53.655	After	DEAD	0.00223	0.0049	603.58418	53.655
PUENTE 120m	42	56.54	Before	DEAD	0.00223	0.00242	337.36916	56.54
PUENTE 120m	43	56.54	After	DEAD	0.00223	0.0025	344.28827	56.54
PUENTE 120m	44	59.425	Before	DEAD	0.00223	-3.580E-05	-6.03954	59.425
PUENTE 120m	45	59.425	After	DEAD	-5.139E-13	-5.648E-07	-2.95127	59.425
PUENTE 120m	46	60.	Before	DEAD	-4.069E-13	-5.648E-07	-1.3622	60.
PUENTE 120m	47	60.	After	DEAD	-4.107E-13	-0.00117	-1.36168	60.
PUENTE 120m	48	60.575	Before	DEAD	-6.477E-13	-0.00117	-2.95075	60.575
PUENTE 120m	49	60.575	After	DEAD	0.00194	0.02849	-6.0388	60.575
PUENTE 120m	50	63.46	Before	DEAD	0.00194	0.02516	344.28927	63.46
PUENTE 120m	51	63.46	After	DEAD	0.00194	0.02532	337.36979	63.46
PUENTE 120m	52	66.345	Before	DEAD	0.00194	0.0222	603.58491	66.345
PUENTE 120m	53	66.345	After	DEAD	0.00194	0.02142	578.82464	66.345

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. Antonio N. Pangrazio
Representante Legal

Ing. José María Molinas Rojas
Reg. MOPC 2831

Table 38: Bridge Object Forces, Part 2 of 3

BridgeObj	BridgeCut	Distance	LocType	OutputCase	T	M2	M3	GlobalX
		m			Tonf-m	Tonf-m	Tonf-m	m
PUENTE 120m	54	69.23	Before	DEAD	0.00194	0.01869	769.07476	69.23
PUENTE 120m	55	69.23	After	DEAD	0.00194	0.01883	763.58411	69.23
PUENTE 120m	56	72.115	Before	DEAD	0.00194	0.01608	877.12615	72.115
PUENTE 120m	57	72.115	After	DEAD	0.00194	0.01619	874.59141	72.115
PUENTE 120m	58	75.	Before	DEAD	0.00194	0.01344	912.24303	75.
PUENTE 120m	59	75.	After	DEAD	0.00194	0.01353	912.2427	75.
PUENTE 120m	60	77.885	Before	DEAD	0.00194	0.01076	874.59057	77.885
PUENTE 120m	61	77.885	After	DEAD	0.00194	0.01085	877.12486	77.885
PUENTE 120m	62	80.77	Before	DEAD	0.00194	0.00804	763.58246	80.77
PUENTE 120m	63	80.77	After	DEAD	0.00194	0.00814	769.07312	80.77
PUENTE 120m	64	83.655	Before	DEAD	0.00194	0.00531	578.82303	83.655
PUENTE 120m	65	83.655	After	DEAD	0.00194	0.00561	603.58415	83.655
PUENTE 120m	66	86.54	Before	DEAD	0.00194	0.00278	337.36914	86.54
PUENTE 120m	67	86.54	After	DEAD	0.00194	0.00286	344.28825	86.54
PUENTE 120m	68	89.425	Before	DEAD	0.00194	-3.547E-05	-6.03956	89.425
PUENTE 120m	69	89.425	After	DEAD	-2.499E-12	2.205E-06	-2.95129	89.425
PUENTE 120m	70	90.	Before	DEAD	-2.608E-12	2.205E-06	-1.36222	90.
PUENTE 120m	71	90.	After	DEAD	-7.973E-13	0.00334	-1.41873	90.
PUENTE 120m	72	90.575	Before	DEAD	-9.336E-13	0.00334	-3.0078	90.575
PUENTE 120m	73	90.575	After	DEAD	-0.00598	-0.08117	-6.24985	90.575
PUENTE 120m	74	93.5175	Before	DEAD	-0.00598	-0.07173	358.33164	93.5175
PUENTE 120m	75	93.5175	After	DEAD	-0.00598	-0.0722	351.05573	93.5175
PUENTE 120m	76	96.46	Before	DEAD	-0.00598	-0.06302	626.48757	96.46
PUENTE 120m	77	96.46	After	DEAD	-0.00598	-0.06105	602.10327	96.46
PUENTE 120m	78	99.4025	Before	DEAD	-0.00598	-0.05321	800.79989	99.4025
PUENTE 120m	79	99.4025	After	DEAD	-0.00598	-0.05368	794.47164	99.4025
PUENTE 120m	80	102.345	Before	DEAD	-0.00598	-0.04572	913.38793	102.345
PUENTE 120m	81	102.345	After	DEAD	-0.00598	-0.04612	910.30396	102.345
PUENTE 120m	82	105.2875	Before	DEAD	-0.00598	-0.03812	949.96445	105.2875
PUENTE 120m	83	105.2875	After	DEAD	-0.00598	-0.03846	949.90589	105.2875

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
Str-Deformation-V32		DW	0.65
EE-I1	Linear Add	Peso de Vigas	1.25
EE-I1		Vigas PreTension	1.25
EE-I1		Barandas	1.25
EE-I1		Veredas	1.25
EE-I1		DW	1.5
EE-I2	Linear Add	Peso de Vigas	1.25
EE-I2		Vigas PreTension	1.25
EE-I2		Barandas	1.25
EE-I2		Veredas	1.25
EE-I2		DW	0.65
EE-I3	Linear Add	Peso de Vigas	0.9
EE-I3		Vigas PreTension	0.9
EE-I3		Barandas	0.9
EE-I3		Veredas	0.9
EE-I3		DW	1.5
EE-I4	Linear Add	Peso de Vigas	0.9
EE-I4		Vigas PreTension	0.9
EE-I4		Barandas	0.9
EE-I4		Veredas	0.9
EE-I4		DW	0.65
EE-I5	Linear Add	Peso de Vigas	1.25
EE-I5		Vigas PreTension	1.25
EE-I5		Barandas	1.25
EE-I5		Veredas	1.25
EE-I5		Carga Móvil	1.
EE-I5		DW	1.5
EE-I6	Linear Add	Peso de Vigas	1.25
EE-I6		Vigas PreTension	1.25
EE-I6		Barandas	1.25
EE-I6		Veredas	1.25
EE-I6		Carga Móvil	1.
EE-I6		DW	0.65
EE-I7	Linear Add	Peso de Vigas	0.9
EE-I7		Vigas PreTension	0.9
EE-I7		Barandas	0.9
EE-I7		Veredas	0.9
EE-I7		Carga Móvil	1.
EE-I7		DW	1.5
EE-I8	Linear Add	Peso de Vigas	0.9
EE-I8		Vigas PreTension	0.9
EE-I8		Barandas	0.9
EE-I8		Veredas	0.9
EE-I8		Carga Móvil	1.
EE-I8		DW	0.65
EEIGroup32	Envelope	EE-I1	1.

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
EEIGroup32		EE-I2	1.
EEIGroup32		EE-I3	1.
EEIGroup32		EE-I4	1.
EEIGroup32		EE-I5	1.
EEIGroup32		EE-I6	1.
EEIGroup32		EE-I7	1.
EEIGroup32		EE-I8	1.
EE-II1	Linear Add	Peso de Vigas	1.25
EE-II1		Vigas PreTension	1.25
EE-II1		Barandas	1.25
EE-II1		Veredas	1.25
EE-II1		Carga Móvil	0.5
EE-II1		DW	1.5
EE-II2	Linear Add	Peso de Vigas	1.25
EE-II2		Vigas PreTension	1.25
EE-II2		Barandas	1.25
EE-II2		Veredas	1.25
EE-II2		Carga Móvil	0.5
EE-II2		DW	0.65
EE-II3	Linear Add	Peso de Vigas	0.9
EE-II3		Vigas PreTension	0.9
EE-II3		Barandas	0.9
EE-II3		Veredas	0.9
EE-II3		Carga Móvil	0.5
EE-II3		DW	1.5
EE-II4	Linear Add	Peso de Vigas	0.9
EE-II4		Vigas PreTension	0.9
EE-II4		Barandas	0.9
EE-II4		Veredas	0.9
EE-II4		Carga Móvil	0.5
EE-II4		DW	0.65
EEIIGroup8	Envelope	EE-II1	1.
EEIIGroup8		EE-II2	1.
EEIIGroup8		EE-II3	1.
EEIIGroup8		EE-II4	1.
Ser-I1	Linear Add	Peso de Vigas	1.
Ser-I1		Vigas PreTension	1.
Ser-I1		Barandas	1.
Ser-I1		Veredas	1.
Ser-I1		Viento_WS	1.
Ser-I1		Carga Móvil	1.
Ser-I1		Temperatura_Pos	1.
Ser-I1		Viento_WLL	1.
Ser-I1		DW	1.
Ser-I2	Linear Add	Peso de Vigas	1.
Ser-I2		Vigas PreTension	1.
Ser-I2		Barandas	1.
Ser-I2		Veredas	1.

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
Ser-I2		Viento_WS	1.
Ser-I2		Carga Móvil	1.
Ser-I2		Temperatura_Pos	1.
Ser-I2		Viento_WLL	-1.
Ser-I2		DW	1.
Ser-I3	Linear Add	Peso de Vigas	1.
Ser-I3		Vigas PreTension	1.
Ser-I3		Barandas	1.
Ser-I3		Veredas	1.
Ser-I3		Viento_WS	1.
Ser-I3		Carga Móvil	1.
Ser-I3		Temperatura_Neg	1.
Ser-I3		Viento_WLL	1.
Ser-I3		DW	1.
Ser-I4	Linear Add	Peso de Vigas	1.
Ser-I4		Vigas PreTension	1.
Ser-I4		Barandas	1.
Ser-I4		Veredas	1.
Ser-I4		Viento_WS	1.
Ser-I4		Carga Móvil	1.
Ser-I4		Temperatura_Neg	1.
Ser-I4		Viento_WLL	-1.
Ser-I4		DW	1.
Ser-I5	Linear Add	Peso de Vigas	1.
Ser-I5		Vigas PreTension	1.
Ser-I5		Barandas	1.
Ser-I5		Veredas	1.
Ser-I5		Viento_WS	-1.
Ser-I5		Carga Móvil	1.
Ser-I5		Temperatura_Pos	1.
Ser-I5		Viento_WLL	1.
Ser-I5		DW	1.
Ser-I6	Linear Add	Peso de Vigas	1.
Ser-I6		Vigas PreTension	1.
Ser-I6		Barandas	1.
Ser-I6		Veredas	1.
Ser-I6		Viento_WS	-1.
Ser-I6		Carga Móvil	1.
Ser-I6		Temperatura_Pos	1.
Ser-I6		Viento_WLL	-1.
Ser-I6		DW	1.
Ser-I7	Linear Add	Peso de Vigas	1.
Ser-I7		Vigas PreTension	1.
Ser-I7		Barandas	1.
Ser-I7		Veredas	1.

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
Ser-I7		Viento_WS	-1.
Ser-I7		Carga Móvil	1.
Ser-I7		Temperatura_Neg	1.
Ser-I7		Viento_WLL	1.
Ser-I7		DW	1.
Ser-I8	Linear Add	Peso de Vigas	1.
Ser-I8		Vigas PreTension	1.
Ser-I8		Barandas	1.
Ser-I8		Veredas	1.
Ser-I8		Viento_WS	-1.
Ser-I8		Carga Móvil	1.
Ser-I8		Temperatura_Neg	1.
Ser-I8		Viento_WLL	-1.
Ser-I8		DW	1.
SerIGroup4	Envelope	Ser-I1	1.
SerIGroup4		Ser-I2	1.
SerIGroup4		Ser-I3	1.
SerIGroup4		Ser-I4	1.
SerIGroup4		Ser-I5	1.
SerIGroup4		Ser-I6	1.
SerIGroup4		Ser-I7	1.
SerIGroup4		Ser-I8	1.
Ser-Deformation-I1	Linear Add	Peso de Vigas	1.
Ser-Deformation-I1		Vigas PreTension	1.
Ser-Deformation-I1		Barandas	1.
Ser-Deformation-I1		Veredas	1.
Ser-Deformation-I1		Viento_WS	1.
Ser-Deformation-I1		Carga Móvil	1.
Ser-Deformation-I1		Temperatura_Pos	1.2
Ser-Deformation-I1		Viento_WLL	1.
Ser-Deformation-I1		DW	1.
Ser-Deformation-I2	Linear Add	Peso de Vigas	1.
Ser-Deformation-I2		Vigas PreTension	1.
Ser-Deformation-I2		Barandas	1.
Ser-Deformation-I2		Veredas	1.
Ser-Deformation-I2		Viento_WS	1.
Ser-Deformation-I2		Carga Móvil	1.
Ser-Deformation-I2		Temperatura_Pos	1.2

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José Ma. Molinas Robles
MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
Ser-Deformation-I2		Viento_WLL	-1.
Ser-Deformation-I2		DW	1.
Ser-Deformation-I3	Linear Add	Peso de Vigas	1.
Ser-Deformation-I3		Vigas PreTension	1.
Ser-Deformation-I3		Barandas	1.
Ser-Deformation-I3		Veredas	1.
Ser-Deformation-I3		Viento_WS	1.
Ser-Deformation-I3		Carga Móvil	1.
Ser-Deformation-I3		Temperatura_Neg	1.2
Ser-Deformation-I3		Viento_WLL	1.
Ser-Deformation-I3		DW	1.
Ser-Deformation-I4	Linear Add	Peso de Vigas	1.
Ser-Deformation-I4		Vigas PreTension	1.
Ser-Deformation-I4		Barandas	1.
Ser-Deformation-I4		Veredas	1.
Ser-Deformation-I4		Viento_WS	1.
Ser-Deformation-I4		Carga Móvil	1.
Ser-Deformation-I4		Temperatura_Neg	1.2
Ser-Deformation-I4		Viento_WLL	-1.
Ser-Deformation-I4		DW	1.
Ser-Deformation-I5	Linear Add	Peso de Vigas	1.
Ser-Deformation-I5		Vigas PreTension	1.
Ser-Deformation-I5		Barandas	1.
Ser-Deformation-I5		Veredas	1.
Ser-Deformation-I5		Viento_WS	-1.
Ser-Deformation-I5		Carga Móvil	1.
Ser-Deformation-I5		Temperatura_Pos	1.2
Ser-Deformation-I5		Viento_WLL	1.
Ser-Deformation-I5		DW	1.

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Ropas
MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
Ser-Deformation-I6	Linear Add	Peso de Vigas	1.
Ser-Deformation-I6		Vigas PreTension	1.
Ser-Deformation-I6		Barandas	1.
Ser-Deformation-I6		Veredas	1.
Ser-Deformation-I6		Viento_WS	-1.
Ser-Deformation-I6		Carga Móvil	1.
Ser-Deformation-I6		Temperatura_Pos	1.2
Ser-Deformation-I6		Viento_WLL	-1.
Ser-Deformation-I6		DW	1.
Ser-Deformation-I7	Linear Add	Peso de Vigas	1.
Ser-Deformation-I7		Vigas PreTension	1.
Ser-Deformation-I7		Barandas	1.
Ser-Deformation-I7		Veredas	1.
Ser-Deformation-I7		Viento_WS	-1.
Ser-Deformation-I7		Carga Móvil	1.
Ser-Deformation-I7		Temperatura_Neg	1.2
Ser-Deformation-I7		Viento_WLL	1.
Ser-Deformation-I7		DW	1.
Ser-Deformation-I8	Linear Add	Peso de Vigas	1.
Ser-Deformation-I8		Vigas PreTension	1.
Ser-Deformation-I8		Barandas	1.
Ser-Deformation-I8		Veredas	1.
Ser-Deformation-I8		Viento_WS	-1.
Ser-Deformation-I8		Carga Móvil	1.
Ser-Deformation-I8		Temperatura_Neg	1.2
Ser-Deformation-I8		Viento_WLL	-1.
Ser-Deformation-I8		DW	1.
Ser-II1	Linear Add	Peso de Vigas	1.
Ser-II1		Vigas PreTension	1.
Ser-II1		Barandas	1.

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
Ser-II1		Veredas	1.
Ser-II1		Carga Móvil	1.3
Ser-II1		Temperatura_Pos	1.
Ser-II1		DW	1.
Ser-II2	Linear Add	Peso de Vigas	1.
Ser-II2		Vigas PreTension	1.
Ser-II2		Barandas	1.
Ser-II2		Veredas	1.
Ser-II2		Carga Móvil	1.3
Ser-II2		Temperatura_Neg	1.
Ser-II2		DW	1.
SerIIGroup8	Envelope	Ser-II1	1.
SerIIGroup8		Ser-II2	1.
Ser-Deformation-II1	Linear Add	Peso de Vigas	1.
Ser-Deformation-II1		Vigas PreTension	1.
Ser-Deformation-II1		Barandas	1.
Ser-Deformation-II1		Veredas	1.
Ser-Deformation-II1		Carga Móvil	1.3
Ser-Deformation-II1		Temperatura_Pos	1.2
Ser-Deformation-II1		DW	1.
Ser-Deformation-II2	Linear Add	Peso de Vigas	1.
Ser-Deformation-II2		Vigas PreTension	1.
Ser-Deformation-II2		Barandas	1.
Ser-Deformation-II2		Veredas	1.
Ser-Deformation-II2		Carga Móvil	1.3
Ser-Deformation-II2		Temperatura_Neg	1.2
Ser-Deformation-II2		DW	1.
Ser-III1	Linear Add	Peso de Vigas	1.
Ser-III1		Vigas PreTension	1.
Ser-III1		Barandas	1.
Ser-III1		Veredas	1.
Ser-III1		Carga Móvil	0.8
Ser-III1		Temperatura_Pos	1.
Ser-III1		DW	1.
Ser-III2	Linear Add	Peso de Vigas	1.
Ser-III2		Vigas PreTension	1.
Ser-III2		Barandas	1.

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
Ser-III2		Veredas	1.
Ser-III2		Carga Móvil	0.8
Ser-III2		Temperatura_Neg	1.
Ser-III2		DW	1.
SerIIIGroup2	Envelope	Ser-III1	1.
SerIIIGroup2		Ser-III2	1.
Ser-Deformation-III1	Linear Add	Peso de Vigas	1.
Ser-Deformation-III1		Vigas PreTension	1.
Ser-Deformation-III1		Barandas	1.
Ser-Deformation-III1		Veredas	1.
Ser-Deformation-III1		Carga Móvil	0.8
Ser-Deformation-III1		Temperatura_Pos	1.2
Ser-Deformation-III1		DW	1.
Ser-Deformation-III2	Linear Add	Peso de Vigas	1.
Ser-Deformation-III2		Vigas PreTension	1.
Ser-Deformation-III2		Barandas	1.
Ser-Deformation-III2		Veredas	1.
Ser-Deformation-III2		Carga Móvil	0.8
Ser-Deformation-III2		Temperatura_Neg	1.2
Ser-Deformation-III2		DW	1.
Ser-IV1	Linear Add	Peso de Vigas	1.
Ser-IV1		Vigas PreTension	1.
Ser-IV1		Barandas	1.
Ser-IV1		Veredas	1.
Ser-IV1		Viento_WS	1.
Ser-IV1		Temperatura_Pos	1.
Ser-IV1		DW	1.
Ser-IV2	Linear Add	Peso de Vigas	1.
Ser-IV2		Vigas PreTension	1.
Ser-IV2		Barandas	1.
Ser-IV2		Veredas	1.
Ser-IV2		Viento_WS	1.
Ser-IV2		Temperatura_Neg	1.
Ser-IV2		DW	1.
Ser-IV3	Linear Add	Peso de Vigas	1.
Ser-IV3		Vigas PreTension	1.
Ser-IV3		Barandas	1.

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
Ser-IV3		Veredas	1.
Ser-IV3		Viento_WS	-1.
Ser-IV3		Temperatura_Pos	1.
Ser-IV3		DW	1.
Ser-IV4	Linear Add	Peso de Vigas	1.
Ser-IV4		Vigas PreTension	1.
Ser-IV4		Barandas	1.
Ser-IV4		Veredas	1.
Ser-IV4		Viento_WS	-1.
Ser-IV4		Temperatura_Neg	1.
Ser-IV4		DW	1.
SerIVGroup2	Envelope	Ser-IV1	1.
SerIVGroup2		Ser-IV2	1.
SerIVGroup2		Ser-IV3	1.
SerIVGroup2		Ser-IV4	1.
Ser-Deformation-IV1	Linear Add	Peso de Vigas	1.
Ser-Deformation-IV1		Vigas PreTension	1.
Ser-Deformation-IV1		Barandas	1.
Ser-Deformation-IV1		Veredas	1.
Ser-Deformation-IV1		Viento_WS	1.
Ser-Deformation-IV1		Temperatura_Pos	1.2
Ser-Deformation-IV1		DW	1.
Ser-Deformation-IV2	Linear Add	Peso de Vigas	1.
Ser-Deformation-IV2		Vigas PreTension	1.
Ser-Deformation-IV2		Barandas	1.
Ser-Deformation-IV2		Veredas	1.
Ser-Deformation-IV2		Viento_WS	1.
Ser-Deformation-IV2		Temperatura_Neg	1.2
Ser-Deformation-IV2		DW	1.
Ser-Deformation-IV3	Linear Add	Peso de Vigas	1.
Ser-Deformation-IV3		Vigas PreTension	1.
Ser-Deformation-IV3		Barandas	1.
Ser-Deformation-IV3		Veredas	1.
Ser-Deformation-IV3		Viento_WS	-1.
Ser-Deformation-IV3		Temperatura_Pos	1.2

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

6. Load combinations

Table 29: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
Ser-Deformation-IV3		DW	1.
Ser-Deformation-IV4	Linear Add	Peso de Vigas	1.
Ser-Deformation-IV4		Vigas PreTension	1.
Ser-Deformation-IV4		Barandas	1.
Ser-Deformation-IV4		Veredas	1.
Ser-Deformation-IV4		Viento_WS	-1.
Ser-Deformation-IV4		Temperatura_Neg	1.2
Ser-Deformation-IV4		DW	1.
FatlGroup4	Envelope		

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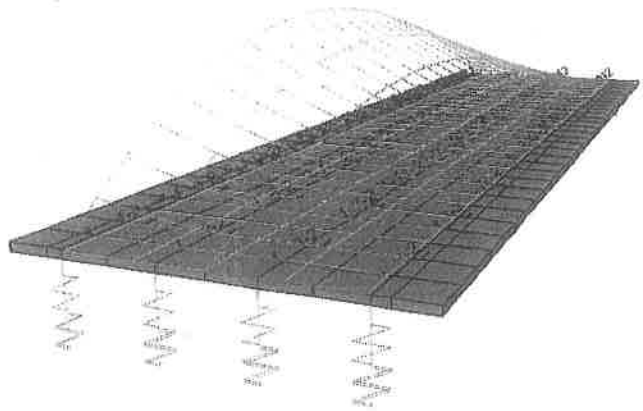
SOTEC S.A.

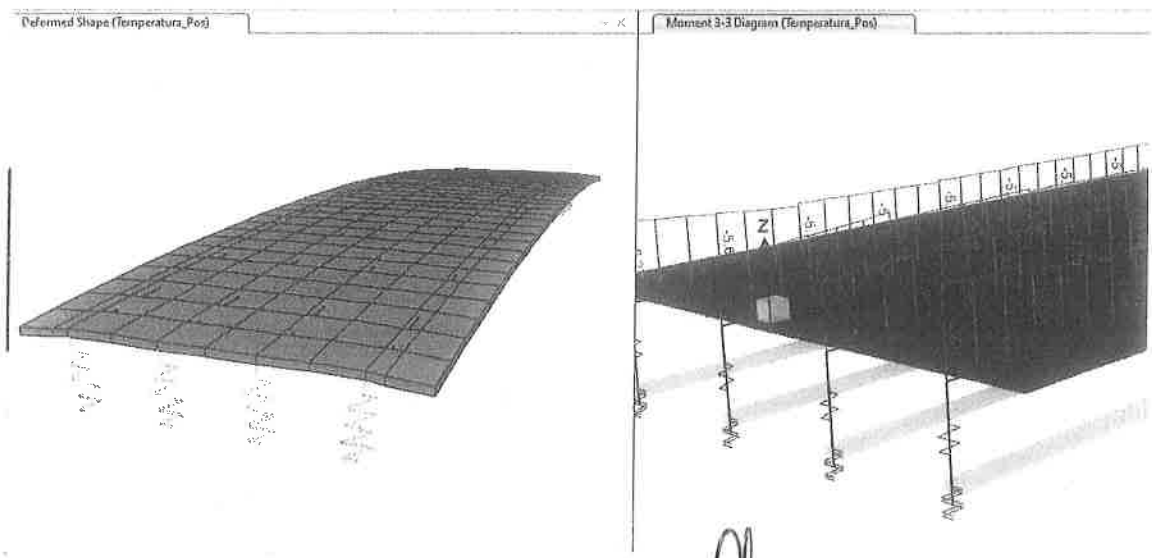
Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

7. Resultados Estructurales



Vista 3D – Salida Estructural Linea de Influencia para el descenso nodal U3 (vertical) del tablero para cargas móviles.



Salidas - Efecto de las cargas térmicas positivas: gradiente positivo variable +30°

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

7.1. REACCIONES BASALES:

Table 30: REACCIONES BASALES

Table 30: Reacciones basales

OutputCase	GlobalFX	GlobalFY	GlobalFZ	GlobalMX	GlobalMY	GlobalMZ
	Tonf	Tonf	Tonf	Tonf-m	Tonf-m	Tonf-m
DEAD	-7.701E-09	2.730E-11	278.7912	1.501E-10	-4181.868	8.918E-08
Barandas	-8.089E-10	-9.995E-11	31.2514	4.088E-12	-468.77167	1.039E-08
Veredas	-4.057E-10	-4.326E-11	15.	-5.170E-12	-225.	4.076E-09
DW	-8.262E-10	1.080E-11	41.571	2.570E-11	-623.565	1.492E-08
Temperatura_Pos	-1.638E-08	-1.885E-09	5.048E-12	-3.893E-10	-3.877E-09	1.491E-08
Temperatura_Neg	2.175E-08	2.671E-09	-6.718E-12	7.936E-10	5.329E-09	-5.433E-09
Carga Peatonal	-2.650E-10	-5.179E-11	21.96	1.260E-11	-329.4	9.391E-09

8. RESULTADOS DE APOYOS:

Las reacciones obtenidos fueros las siguientes:

Table 31: Reacciones en los apoyos:

Table 31: Joint Reactions

Joint	OutputCase	F1	F2	F3	M1	M2	M3
		Tonf	Tonf	Tonf	Tonf-m	Tonf-m	Tonf-m
31	DEAD	37.3956	-0.5895	7.799	-3.610E-18	-0.7799	-0.05895
31	Barandas	10.1694	-1.2776	18.3722	-7.823E-18	-1.83722	-0.12776
31	Veredas	4.4061	-0.467	7.3757	-2.859E-18	-0.73757	-0.0467
31	DW	5.2352	-0.0447	0.1899	-2.734E-19	-0.01899	-0.00447
31	Temperatura_Pos	0.8426	0.9203	0.9311	5.636E-18	-0.09311	0.09203
31	Temperatura_Neg	-1.1235	-1.2271	-1.2415	-7.514E-18	0.12415	-0.12271
31	Carga Peatonal	6.4506	-0.6837	10.798	-4.186E-18	-1.0798	-0.06837
32	DEAD	32.3022	0.0029	-7.799	1.746E-20	0.7799	0.00029
32	Barandas	-2.3565	-0.0385	-18.3722	-2.359E-19	1.83722	-0.00385
32	Veredas	-0.6561	-0.029	-7.3757	-1.778E-19	0.73757	-0.0029
32	DW	5.1575	0.0085	-0.1899	5.178E-20	0.01899	0.00085
32	Temperatura_Pos	-0.8426	0.4211	-0.9311	2.579E-18	0.09311	0.04211
32	Temperatura_Neg	1.1235	-0.5615	1.2415	-3.438E-18	-0.12415	-0.05615
32	Carga Peatonal	-0.9606	-0.0425	-10.798	-2.603E-19	1.0798	-0.00425
33	DEAD	32.3022	-0.0029	-7.799	-1.746E-20	0.7799	-0.00029
33	Barandas	-2.3565	0.0385	-18.3722	2.359E-19	1.83722	0.00385
33	Veredas	-0.6561	0.029	-7.3757	1.778E-19	0.73757	0.0029
33	DW	5.1575	-0.0085	-0.1899	-5.178E-20	0.01899	-0.00085
33	Temperatura_Pos	-0.8426	-0.4211	-0.9311	-2.579E-18	0.09311	-0.04211
33	Temperatura_Neg	1.1235	0.5615	1.2415	3.438E-18	-0.12415	0.05615
33	Carga Peatonal	-0.9606	0.0425	-10.798	2.603E-19	1.0798	0.00425

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. Antonio N. Pangrazio
Representante Legal

8. RESULTADOS DE APOYOS:

Table 31: Joint Reactions

Joint	OutputCase	F1 Tonf	F2 Tonf	F3 Tonf	M1 Tonf-m	M2 Tonf-m	M3 Tonf-m
34	DEAD	37.3956	0.5895	7.799	3.610E-18	-0.7799	0.05895
34	Barandas	10.1694	1.2776	18.3722	7.823E-18	-1.83722	0.12776
34	Veredas	4.4061	0.467	7.3757	2.859E-18	-0.73757	0.0467
34	DW	5.2352	0.0447	0.1899	2.734E-19	-0.01899	0.00447
34	Temperatura_Pos	0.8426	-0.9203	0.9311	-5.636E-18	-0.09311	-0.09203
34	Temperatura_Neg	-1.1235	1.2271	-1.2415	7.514E-18	0.12415	0.12271
34	Carga Peatonal	6.4506	0.6837	10.798	4.186E-18	-1.0798	0.06837
174	DEAD	36.2287	-0.7391	-2.128E-15	-4.525E-18	-9.051E-18	-0.07391
174	Barandas	7.4206	-1.6299	-2.548E-16	-9.980E-18	-1.996E-17	-0.16299
174	Veredas	3.3026	-0.6084	-1.277E-16	-3.726E-18	-7.451E-18	-0.06084
174	DW	5.2068	-0.0483	-3.129E-16	-2.957E-19	-5.914E-19	-0.00483
174	Temperatura_Pos	0.7033	0.9025	-1.536E-16	5.526E-18	1.105E-17	0.09025
174	Temperatura_Neg	-0.9377	-1.2033	2.048E-16	-7.368E-18	-1.474E-17	-0.12033
174	Carga Peatonal	4.835	-0.8907	-1.870E-16	-5.454E-18	-1.091E-17	-0.08907
175	DEAD	33.4691	-0.0768	-2.040E-15	-4.705E-19	-9.409E-19	-0.00768
175	Barandas	0.3923	-0.2262	3.689E-18	-1.385E-18	-2.771E-18	-0.02262
175	Veredas	0.4474	-0.1044	-1.461E-17	-6.392E-19	-1.278E-18	-0.01044
175	DW	5.1859	0.0065	-3.183E-16	3.990E-20	7.980E-20	0.00065
175	Temperatura_Pos	-0.7033	0.4116	-7.343E-18	2.520E-18	5.041E-18	0.04116
175	Temperatura_Neg	0.9377	-0.5488	9.790E-18	-3.360E-18	-6.721E-18	-0.05488
175	Carga Peatonal	0.655	-0.1528	-2.139E-17	-9.358E-19	-1.872E-18	-0.01528
176	DEAD	33.4691	0.0768	-2.059E-15	4.705E-19	9.409E-19	0.00768
176	Barandas	0.3923	0.2262	-5.173E-17	1.385E-18	2.771E-18	0.02262
176	Veredas	0.4474	0.1044	-4.018E-17	6.392E-19	1.278E-18	0.01044
176	DW	5.1859	-0.0065	-3.167E-16	-3.990E-20	-7.980E-20	-0.00065
176	Temperatura_Pos	-0.7033	-0.4116	9.347E-17	-2.520E-18	-5.041E-18	-0.04116
176	Temperatura_Neg	0.9377	0.5488	-1.246E-16	3.360E-18	6.721E-18	0.05488
176	Carga Peatonal	0.655	0.1528	-5.883E-17	9.358E-19	1.872E-18	0.01528
177	DEAD	36.2287	0.7391	-2.309E-15	4.525E-18	9.051E-18	0.07391
177	Barandas	7.4206	1.6299	-6.540E-16	9.980E-18	1.996E-17	0.16299
177	Veredas	3.3026	0.6084	-2.767E-16	3.726E-18	7.451E-18	0.06084
177	DW	5.2068	0.0483	-3.247E-16	2.957E-19	5.914E-19	0.00483
177	Temperatura_Pos	0.7033	-0.9025	6.746E-17	-5.526E-18	-1.105E-17	-0.09025
177	Temperatura_Neg	-0.9377	1.2033	-8.995E-17	7.368E-18	1.474E-17	0.12033
177	Carga Peatonal	4.835	0.8907	-4.051E-16	5.454E-18	1.091E-17	0.08907

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

ANEXO 03 – LOSETA PREFABRICADA – SECTOR VOLADIZO TABLERO

1.- DATOS DE OBRA 2
- **1.1.- Normas consideradas** 3
- **1.2.- Estados límite** 3
  - 1.2.1.- Situaciones de proyecto 3
  - 1.2.2.- Combinaciones 5

2.- ESTRUCTURA 6
- **2.1.- Geometría** 6
  - 2.1.1.- Nudos 6
  - 2.1.2.- Barras 6
  - 2.1.3.- Láminas 8
- **2.2.- Cargas** 13
  - 2.2.1.- Láminas 14
- **2.3.- Resultados** 14
  - 2.3.1.- Barras 14

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. Antonio N. Pangrazio
Representante Legal

Ing. José María Molinas Rojas
Prof. MOPC 2831

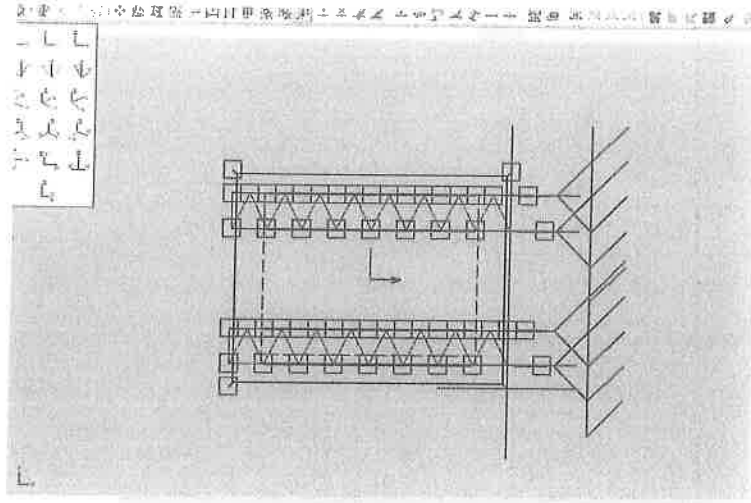
MEMORIA LOSETAS PREFABRICADAS VOLADIZOS

VOLADIZOS PUENTES - LOSETA PREFABRICADA

Fecha: 27/07/21

1.- DATOS DE OBRA

Se ha modelado mediante malas y trélicas de varillas las losetas en voladizo para controlar posibles deformaciones excesivas durante el hormigonado del tablero sobre el mismo.



Modelo analítico de nodos, barras y mallas.

La PRESENTE Propuesta de refuerzo a Loseta padrón MOPC es para evitar los refuerzos puntales de encofrados durante el hormigonado de los voladizos sobre las losetas prefabricadas.

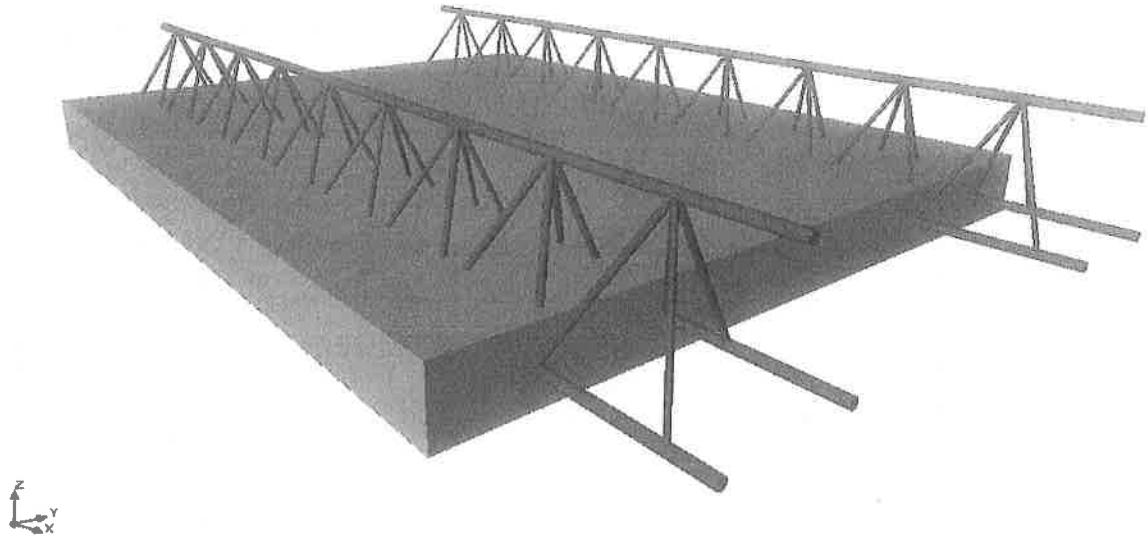
Se respeta:

- ARMADOS INFERIORES PROPUESTOS MANUAL MOPC DE PUENTES
- ARMADOS SUPERIORES PROPUESTOS MANUAL MOPC DE PUENTES

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. Antonio N. Pangrazio
Representante Legal

Ing. José María Molinas Rojas
Reg. MOPC 2831



Vista 3D – MODELO DE CALCULO

1.1.- Normas consideradas

Aceros laminados y armados: ANSI/AISC 360-05 (LRFD)

Hormigón: ACI 318M-08

Categoría de uso: General

1.2.- Estados límite

E.L.U. de rotura. Hormigón	ACI 318M-08 ASCE 7
E.L.U. de rotura. Acero laminado	AISC 360-05 (LRFD) ASCE 7
Desplazamientos	Acciones características

1.2.1.- Situaciones de proyecto

Para las distintas situaciones de proyecto, las combinaciones de acciones se definirán de acuerdo con los siguientes criterios:

$$\sum_{j\geq 1}\gamma_{Gj}G_{kj} + \gamma_P P_k + \sum_{i\geq 1}\gamma_{Qi}Q_{ki}$$

- Donde:

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G_k Acción permanente

P_k Acción de pretensado

Q_k Acción variable

γ_G Coeficiente parcial de seguridad de las acciones permanentes

γ_P Coeficiente parcial de seguridad de la acción de pretensado

$\gamma_{Q,1}$ Coeficiente parcial de seguridad de la acción variable principal

$\gamma_{Q,i}$ Coeficiente parcial de seguridad de las acciones variables de acompañamiento

Ing. José María Molinas Rojas RAS MOPC 2831

Para cada situación de proyecto y estado límite los coeficientes a utilizar serán:

E.L.U. de rotura. Hormigón: ACI 318M-08

E.L.U. de rotura. Acero laminado: ANSI/AISC 360-05 (LRFD)

(9-1)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.400	1.400
Sobrecarga (Q)		

(9-2 Lr)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.200	1.200
Sobrecarga (Q)	0.000	1.600

(9-2 S)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.200	1.200
Sobrecarga (Q)	0.000	1.600

(9-3 Lr, L)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.200	1.200
Sobrecarga (Q)	0.000	0.500

(9-3 S, L)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.200	1.200
Sobrecarga (Q)	0.000	0.500

(9-3 Lr, W)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.200	1.200
Sobrecarga (Q)		

Ing. JORGE REGUERO
SOTEC S.A.

Ing. José María Molinas Rojas
Rég. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

(9-3 S, W)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.200	1.200
Sobrecarga (Q)		

(9-4 Lr)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.200	1.200
Sobrecarga (Q)	0.000	0.500

(9-4 S)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.200	1.200
Sobrecarga (Q)	0.000	0.500

(9-6)		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	0.900	0.900
Sobrecarga (Q)		

Desplazamientos

Acciones variables sin sismo		
	Coeficientes parciales de seguridad (γ)	
	Favorable	Desfavorable
Carga permanente (G)	1.000	1.000
Sobrecarga (Q)	0.000	1.000

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Reg. MOPC 2831

1.2.2.- Combinaciones

- **Nombres de las hipótesis**

PP Peso propio - Loseta 8,0cm de espesor. + Varillas AP 420 Soldables en trélica.

Q SOBRECARGA DE 400 kg/m2 - H° Fresco + Impacto de cargado y esfuerzos de sobrecarga personal de 1 vibrado y colado de hormigón.

- **E.L.U. de rotura. Hormigón**
- **E.L.U. de rotura. Acero laminado**

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. Antonio N. Pangrazio
Representante Legal

Comb.	PP	Q 1
1	1.400	
2	1.200	1.600
3	1.200	0.500
4	0.900	

- **Desplazamientos**

Comb.	PP	Q 1
1	1.000	
2	1.000	1.000

2.- ESTRUCTURA

2.1.- Geometría

2.1.1.- Nudos

Referencias:

Δ_x, Δ_y, Δ_z: Desplazamientos prescritos en ejes globales.

θ_x, θ_y, θ_z: Giros prescritos en ejes globales.

Ux, Uy, Uz: Vector director de la recta o vector normal al plano de dependencia

Cada grado de libertad se marca con 'X' si está coaccionado y, en caso contrario, con '-'.

Nudos

Referencia	Coordenadas			Vinculación exterior										Vinculación interior
	X (m)	Y (m)	Z (m)	Δ_x	Δ_y	Δ_z	θ_x	θ_y	θ_z	Dependencias	Ux	Uy	Uz	
N1	0.000	0.000	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N2	1.200	0.000	0.000	-	-	X	-	-	-	Plano	0.000	0.000	1.000	Empotrado
N3	1.400	0.000	0.000	X	X	X	-	-	-	-	-	-	-	Empotrado
N4	0.000	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N5	1.200	0.150	0.000	-	-	X	-	-	-	Plano	0.000	0.000	1.000	Empotrado
N6	1.400	0.150	0.000	X	X	X	-	-	-	-	-	-	-	Empotrado
N7	0.000	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N8	1.200	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N9	1.400	0.075	0.150	X	X	X	-	-	-	-	-	-	-	Empotrado
N10	0.075	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N11	0.150	0.000	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N12	0.300	0.000	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N13	0.225	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N14	0.450	0.000	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N15	0.375	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N16	0.600	0.000	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N17	0.525	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2831

Ing. Antonio N. Pangrazio
Representante Legal

MEMORIA LOSETAS PREFABRICADAS VOLADIZOS

VOLADIZOS PUENTES – LOSETA PREFABRICADA

Fecha: 27/07/21

Nudos

Referencia	Coordenadas			Vinculación exterior										Vinculación interior
	X (m)	Y (m)	Z (m)	Δ_x	Δ_y	Δ_z	θ_x	θ_y	θ_z	Dependencias	Ux	Uy	Uz	
N18	0.750	0.000	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N19	0.675	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N20	0.900	0.000	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N21	0.825	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N22	1.050	0.000	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N23	0.975	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N24	1.125	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N25	0.075	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N26	0.225	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N27	0.150	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N28	0.375	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N29	0.300	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N30	0.525	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N31	0.450	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N32	0.675	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N33	0.600	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N34	0.825	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N35	0.750	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N36	0.975	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N37	0.900	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N38	1.125	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N39	1.050	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N40	1.275	0.075	0.150	-	-	-	-	-	-	-	-	-	-	Empotrado
N41	1.350	0.000	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N42	1.275	0.150	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N43	0.000	-0.575	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N44	0.150	-0.575	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N45	0.300	-0.575	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N46	0.450	-0.575	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N47	0.600	-0.575	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N48	0.750	-0.575	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N49	0.900	-0.575	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N50	1.050	-0.575	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N51	1.200	-0.575	0.000	-	-	X	-	-	-	Plano	0.000	0.000	1.000	Empotrado
N52	1.350	-0.575	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N53	1.400	-0.575	0.000	X	X	X	-	-	-	-	-	-	-	Empotrado
N54	0.000	-0.425	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N55	0.075	-0.425	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N56	0.150	-0.425	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N57	0.225	-0.425	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N58	0.300	-0.425	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N59	0.375	-0.425	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N60	0.450	-0.425	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N61	0.525	-0.425	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado
N62	0.600	-0.425	0.000	-	-	-	-	-	-	-	-	-	-	Empotrado

Ing. JORGE REGUEIRO
SOTEC S.A.

Ing. José María Molinas Rojas
Reg. MOPC 2834

Ing. Antonio N. Pangrazio
Representante Legal