

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

CASO DE ESTUDIO: CARRETERA CUMBE - OÑA

INEXTEC CIA. LTDA.

PERITAJE DE PERFIL TRANSVERSAL / DETERMINACION DE SURCO DE HUELLA

EQUIPO UTILIZADO		TRAMO I								SENTIDO				CARRIL			LONGITUD				FECHA	
Transverse Profile Logger		0+000 - 20+100								CUMBE - OÑA				DERECHO			20100				2007-12-10	
CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)
0+000	0	421.14	418.61	417.69	415.07	412.92	417.56	413.97	412.47	410.50	411.61	411.48	411.95	412.12	411.31	411.99	410.05	410.91	410.26	409.16	409.73	3.75
0+100	30	430.12	428.17	426.19	423.96	419.52	417.44	414.60	413.07	411.26	410.88	410.33	409.75	409.72	410.37	411.88	411.87	414.36	416.69	418.16	419.98	8.20
0+200	42	416.97	417.71	418.80	420.20	420.21	424.87	424.65	426.08	426.50	427.51	429.88	432.09	431.64	430.19	427.09	421.66	419.21	416.64	414.18	413.34	19.66
0+301	52	424.08	424.03	423.30	423.29	422.53	424.53	423.04	422.31	422.07	421.91	424.31	422.19	420.52	420.78	421.12	419.90	420.03	420.50	419.73	418.08	7.24
0+400	57	418.44	417.96	418.22	417.63	416.67	417.05	416.42	415.19	414.97	415.06	416.45	414.43	412.37	413.06	413.46	411.85	413.06	412.65	410.75	410.94	8.09
0+501	59	421.70	419.88	419.19	418.22	416.03	417.14	415.28	413.33	411.99	411.16	414.05	412.19	410.44	410.40	410.76	411.47	411.51	410.97	405.55	402.00	10.77
0+600	63	418.82	418.36	418.77	418.57	417.51	416.30	414.53	413.40	412.65	411.94	413.77	413.19	412.55	413.50	414.83	414.56	414.17	413.09	410.12	410.49	6.07
0+700	62	421.70	420.83	419.96	418.82	416.20	417.36	415.30	413.21	412.34	411.10	412.15	410.54	409.66	409.61	410.25	411.72	411.74	409.46	404.44	401.47	10.24
0+802	62	421.22	419.24	417.97	416.28	413.99	418.08	415.65	414.20	413.24	412.18	416.33	415.59	414.28	416.51	415.78	416.12	414.65	412.54	409.52	407.14	10.08
0+902	62	424.01	422.57	421.77	420.86	419.05	420.96	419.44	417.40	418.61	419.74	421.50	422.64	422.70	426.44	424.88	417.82	416.10	415.70	415.10	414.67	11.54
1+001	67	420.93	420.33	420.15	420.17	419.45	415.92	414.95	414.18	414.73	416.71	412.32	413.69	413.92	418.17	418.59	408.83	408.11	407.28	406.83	406.28	13.02
1+100	69	421.28	420.11	419.09	418.15	417.38	419.15	417.25	416.10	415.85	418.06	419.84	418.56	418.65	416.70	414.88	411.44	409.89	409.01	405.71	403.01	12.27
1+200	74	423.69	422.56	423.27	424.21	423.68	421.69	421.06	421.73	423.60	426.47	422.59	421.11	418.93	417.70	416.99	412.66	411.68	411.39	410.06	408.55	14.32
1+302	78	427.36	425.22	423.19	421.68	418.58	420.38	418.74	417.95	420.22	420.12	424.22	423.98	420.14	417.57	416.55	415.62	417.48	417.73	418.23	416.45	9.50
1+400	77	425.04	422.82	421.46	420.43	418.88	417.96	416.41	416.51	417.20	419.39	419.59	419.09	416.28	414.35	414.22	412.49	412.48	412.87	412.59	412.75	7.56
1+500	71	420.48	417.76	416.82	415.40	413.69	417.07	414.58	413.84	413.72	414.88	418.72	419.95	416.79	412.95	409.24	409.77	408.68	407.60	406.82	404.73	11.09
1+602	66	423.27	421.63	420.63	420.09	419.71	419.08	418.59	419.44	421.01	422.43	420.76	420.86	419.03	417.48	416.22	408.94	410.05	410.33	410.45	409.74	14.78
1+701	66	422.68	421.16	420.78	420.58	419.70	423.95	423.51	425.98	425.52	422.30	421.22	418.52	416.11	414.81	412.97	413.50	413.88	411.60	409.06	407.13	12.08
1+800	66	424.74	422.76	421.48	420.26	418.47	421.68	419.88	419.95	419.79	419.20	421.94	420.11	416.10	415.59	414.05	412.94	413.49	412.81	411.45	410.37	9.50
1+901	69	425.78	425.08	423.55	421.87	420.06	420.36	419.17	417.72	417.46	417.80	420.77	421.91	419.64	417.74	414.84	413.33	412.10	410.86	409.47	407.90	10.19
2+002	67	420.67	417.52	416.01	414.32	411.88	417.48	413.30	411.78	411.66	412.92	418.10	417.53	413.91	411.76	409.43	407.67	406.64	406.12	404.31	403.90	11.77
2+101	67	424.18	421.78	421.33	419.35	416.95	417.14	415.24	414.83	413.96	414.89	418.18	418.78	417.99	417.30	416.25	413.27	410.68	408.09	405.67	403.26	11.13

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

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PERITAJE DE PERFIL TRANSVERSAL / DETERMINACION DE SURCO DE HUELLA

EQUIPO UTILIZADO					TRAMO I				SENTIDO					CARRIL			LONGITUD			FECHA		
Transverse Profile Logger					0+000 - 20+100				CUMBE - OÑA					DERECHO			20100			2007-12-10		
CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)
2+201	64	421.26	420.54	420.74	420.80	420.74	418.46	417.31	416.96	417.57	419.08	418.20	420.35	417.86	416.14	414.66	408.49	408.66	409.87	409.96	410.61	10.93
2+301	64	426.10	424.64	422.99	422.25	420.19	421.62	419.49	418.34	419.00	420.82	422.23	419.80	416.50	414.15	412.33	412.97	412.85	412.05	411.33	411.16	9.27
2+400	65	423.72	421.43	419.77	418.54	416.44	420.44	418.41	417.34	416.83	416.59	420.33	418.40	415.61	414.27	411.31	410.90	410.03	409.43	407.97	406.74	11.73
2+502	67	426.42	424.60	423.72	421.80	420.06	422.66	420.72	419.67	419.35	420.38	420.66	418.28	414.15	413.49	413.35	412.19	412.90	412.19	412.71	411.01	7.69
2+602	69	422.38	420.51	419.87	419.29	418.33	416.34	414.69	415.18	415.92	416.73	415.49	415.60	413.69	414.23	413.51	410.97	412.11	411.27	411.08	411.16	7.18
2+702	68	421.40	420.02	420.72	420.45	418.95	420.52	419.55	420.52	420.26	420.38	420.18	418.59	416.20	414.80	413.30	412.11	412.13	412.25	409.86	408.74	11.21
2+802	67	419.57	418.70	418.32	418.75	418.07	423.14	421.51	423.14	424.50	423.57	423.98	421.01	417.22	415.30	413.73	413.11	412.39	411.42	410.10	408.47	15.03
2+900	64	417.23	415.64	415.57	415.30	414.52	415.26	413.98	415.80	418.26	417.94	417.69	416.12	413.42	412.97	411.26	409.27	407.65	407.11	405.48	405.93	12.46
3+000	64	424.57	423.10	422.42	421.76	419.69	421.33	420.71	420.45	422.80	424.45	423.93	421.32	417.99	415.24	413.72	411.33	410.31	408.78	406.87	405.42	12.55
3+101	65	432.53	429.36	427.57	426.12	424.73	428.53	425.65	425.04	425.30	424.20	424.94	421.92	419.23	416.46	414.34	413.35	411.97	411.16	409.67	407.58	12.23
3+201	67	419.63	419.47	420.39	421.11	421.34	419.03	418.82	420.45	422.88	425.85	421.90	421.86	420.28	420.72	420.34	412.06	411.89	411.49	411.21	411.92	15.55
3+301	65	421.66	420.03	419.79	418.18	416.77	419.03	417.54	416.96	417.25	418.20	420.86	422.00	421.24	419.04	416.15	414.44	413.11	412.28	410.62	408.75	11.66
3+401	69	421.60	419.83	418.47	418.07	416.96	418.04	416.88	416.06	417.07	420.27	420.98	422.22	418.51	418.50	417.28	415.00	415.23	415.48	415.09	413.68	8.73
3+501	68	426.28	424.70	423.56	423.04	421.41	423.05	421.86	421.04	423.15	424.91	425.90	424.69	421.02	419.92	418.26	415.67	415.21	414.19	412.43	411.93	12.35
3+602	69	425.63	423.11	421.48	420.52	418.17	421.30	419.55	418.60	419.29	419.96	423.96	422.58	418.44	415.55	414.27	411.66	411.69	412.01	411.06	410.05	11.94
3+700	70	426.09	424.05	423.44	422.30	420.48	421.45	418.63	417.04	416.28	416.15	419.12	416.81	415.93	415.75	415.43	413.13	411.87	410.97	410.32	408.83	8.05
3+801	72	423.91	423.23	423.19	421.88	417.72	417.68	415.23	414.17	414.53	413.85	412.17	414.34	413.84	415.91	416.84	413.20	413.14	412.72	412.13	412.46	8.98
3+902	73	422.58	419.33	416.99	415.11	412.54	414.08	409.84	406.81	404.96	404.16	407.28	404.96	404.53	405.45	407.32	409.28	409.55	411.17	411.90	409.88	5.80
4+001	71	420.51	419.38	418.78	416.99	415.16	414.11	412.29	411.77	411.39	411.69	413.18	412.57	413.28	414.96	415.92	411.71	411.36	412.44	411.64	410.79	12.56
4+101	67	421.20	419.49	418.11	417.15	414.32	412.61	410.52	409.33	409.01	409.00	408.42	407.51	407.56	410.57	412.52	410.85	411.07	411.86	411.42	410.47	6.67
4+200	68	416.74	416.17	415.82	415.30	413.77	414.39	412.35	411.29	411.17	411.09	412.50	409.78	409.46	411.25	413.53	411.33	413.11	414.99	416.70	419.45	3.86
4+302	71	421.85	420.79	420.53	419.70	417.74	416.90	414.55	413.83	412.73	412.18	412.42	410.44	409.52	410.89	411.87	410.49	411.97	413.43	415.76	417.19	7.01

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EQUIPO UTILIZADO					TRAMO I				SENTIDO				CARRIL			LONGITUD			FECHA			
Transverse Profile Logger					0+000 - 20+100				CUMBE - OÑA				DERECHO			20100			2007-12-10			
CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)
4+401	73	426.26	424.78	424.21	423.80	422.78	421.89	419.37	418.17	418.56	419.13	416.97	416.33	416.68	417.48	419.49	415.50	419.21	421.04	422.99	422.85	6.12
4+502	75	422.90	421.23	420.73	420.65	418.56	419.11	416.14	415.33	415.41	415.86	416.90	416.06	416.17	415.75	416.02	412.44	412.10	411.56	409.04	406.92	9.48
4+602	72	423.94	422.14	420.16	419.04	415.96	415.78	411.82	410.03	408.94	407.88	408.22	406.23	405.30	405.39	403.97	401.88	400.81	400.11	396.84	394.43	9.63
4+701	67	434.02	430.60	429.06	426.64	422.36	421.48	417.39	414.43	411.89	409.67	407.57	405.64	403.11	402.14	401.56	399.74	400.33	400.49	398.39	395.72	7.60
4+801	66	420.07	418.96	418.18	417.84	415.99	415.97	414.40	413.18	413.30	413.30	412.25	412.33	412.68	413.96	414.90	411.22	410.62	410.67	410.19	409.98	7.15
4+901	70	417.34	415.83	415.18	415.68	414.71	412.33	410.66	409.35	409.97	410.73	410.04	408.91	407.16	407.92	409.29	402.61	403.76	404.53	403.37	404.18	9.61
5+001	69	416.53	416.18	415.50	416.45	415.13	414.94	413.95	414.58	415.71	415.22	416.27	418.91	416.80	416.18	413.61	409.87	410.79	409.91	409.19	408.75	10.24
5+100	64	426.27	425.11	425.83	424.91	423.93	424.82	422.79	424.04	424.00	424.92	427.76	424.00	422.13	420.80	418.91	416.18	414.42	413.21	411.24	410.38	15.79
5+201	62	425.42	423.63	423.13	422.02	421.01	422.81	420.71	420.92	421.24	422.54	424.58	424.51	422.37	420.25	418.80	418.80	417.82	416.36	414.95	413.08	11.29
5+301	62	423.14	422.40	420.95	420.72	418.52	421.06	419.39	419.25	419.20	421.41	423.60	422.73	421.06	418.25	416.74	414.80	413.43	411.96	409.60	408.17	14.42
5+400	59	419.16	419.04	418.93	421.03	422.87	420.95	419.11	417.76	416.93	416.63	412.27	410.64	409.70	409.66	409.67	404.67	405.83	406.08	405.13	405.71	13.89
5+501	57	412.88	413.24	414.10	415.72	415.85	419.91	420.41	421.28	418.80	414.62	413.53	412.01	410.51	409.54	408.47	405.66	406.77	406.87	406.65	405.96	13.92
																				PROMEDIO		10.45
																				PERCENTIL		13.67

5+601	61	420.03	419.45	419.04	419.27	418.11	423.33	421.21	422.00	423.83	425.43	424.37	420.15	415.93	415.13	414.30	411.10	411.38	412.00	411.35	410.80	14.81
5+701	64	417.17	418.37	419.80	420.49	421.00	422.15	420.48	420.75	419.86	418.95	416.48	415.56	413.73	415.18	414.28	411.38	412.16	412.46	412.92	411.51	10.29
5+801	65	431.81	429.84	428.55	426.93	424.89	420.64	419.32	418.37	417.70	417.29	414.39	413.71	413.23	414.06	414.82	410.08	411.41	412.96	414.46	415.90	5.99

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CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)
5+901	65	423.82	421.91	420.66	418.62	416.32	418.97	416.15	414.31	413.52	412.64	415.44	413.80	411.19	410.24	411.03	411.51	412.12	410.83	411.61	412.52	9.06
6+001	64	417.30	417.13	418.97	419.13	417.81	417.53	416.06	415.68	415.30	413.87	411.83	410.92	409.27	409.99	411.05	409.03	410.00	411.38	412.39	412.65	12.54
6+101	57	424.89	425.08	424.98	424.26	423.06	423.65	423.21	424.60	426.48	428.01	425.38	423.40	420.48	419.09	417.98	413.51	413.44	413.71	412.13	412.03	12.39
6+202	62	428.31	429.10	429.66	429.95	429.99	433.00	430.84	430.05	429.75	428.47	427.95	425.36	421.33	419.63	419.41	416.82	416.09	413.88	412.83	411.77	15.17
6+300	17	406.09	405.37	404.88	404.83	404.49	409.72	408.87	407.65	404.43	402.04	403.47	400.83	397.11	393.04	391.77	391.36	389.89	387.15	383.97	382.03	16.40
6+401	32	430.08	425.43	424.24	423.76	423.62	421.73	419.56	419.72	419.51	420.25	418.17	417.36	416.30	419.88	414.06	411.47	411.65	410.74	409.48	407.60	12.57
6+501	45	435.74	433.70	432.10	430.83	428.34	428.65	427.58	426.64	428.15	427.84	428.78	429.49	427.70	426.51	423.86	419.03	417.49	417.22	414.74	413.43	10.88
6+601	57	432.55	432.36	432.03	431.51	430.08	428.09	428.01	428.65	429.54	431.74	428.17	428.12	426.19	424.40	422.91	419.95	418.24	417.39	414.51	412.82	15.41
6+701	51	419.11	418.88	418.55	418.33	417.44	419.56	417.02	416.08	417.09	419.60	420.77	417.42	413.15	411.09	407.83	405.90	403.70	401.90	399.26	398.74	16.41
6+800	49	424.99	422.75	421.15	419.81	417.03	418.45	415.72	414.04	413.24	411.66	414.09	412.44	407.82	407.38	406.14	403.02	401.80	400.74	399.36	397.10	11.40
6+901	52	425.84	422.77	420.11	419.13	417.29	418.32	414.53	411.79	410.85	409.98	409.93	407.72	404.57	405.75	405.47	403.80	404.48	405.14	405.70	404.70	6.72
7+001	55	428.56	427.90	428.14	427.44	425.45	424.91	422.95	422.80	423.44	423.78	425.07	425.59	426.26	427.99	426.94	423.85	421.54	418.80	414.98	412.26	14.19
7+101	56	426.31	424.97	424.73	423.42	421.81	422.40	421.25	419.39	419.58	420.09	423.08	422.87	422.33	420.93	419.40	416.01	414.91	413.25	409.64	407.12	14.50
7+201	59	436.19	434.28	433.33	430.90	428.56	428.78	427.84	427.16	427.23	425.07	425.52	424.76	423.12	422.12	418.73	415.10	413.60	410.81	405.50	400.99	15.40
7+301	61	421.99	421.14	418.81	418.53	417.09	421.57	419.81	417.41	417.19	417.43	418.82	417.63	414.64	412.09	409.11	406.34	404.23	401.47	397.93	394.49	16.61
7+401	63	412.13	413.81	416.17	418.94	420.96	421.93	422.93	426.07	426.84	426.35	422.18	421.94	419.56	418.69	417.76	412.24	411.79	411.78	410.01	409.80	18.04
7+501	65	417.36	417.23	418.51	420.55	421.65	422.93	423.27	425.06	427.25	428.54	425.86	424.70	421.04	419.46	418.25	413.37	412.79	411.22	408.94	407.50	18.40
7+600	65	425.11	425.09	425.37	425.28	423.89	428.01	427.60	430.15	432.31	433.28	432.49	432.34	426.62	424.50	421.71	420.01	419.20	417.99	415.61	412.94	18.19
7+701	54	401.95	400.02	400.73	403.00	402.26	396.65	396.80	397.30	397.54	397.66	391.35	391.21	390.86	393.07	394.23	387.54	390.04	391.36	391.17	392.97	12.86
7+800	54	416.04	413.76	413.58	412.52	410.66	417.38	415.74	415.65	413.87	414.03	418.19	416.47	413.47	412.51	413.23	411.26	411.82	412.08	411.50	411.01	12.02
7+900	25	423.93	420.88	416.62	413.98	410.42	415.08	412.24	410.03	406.54	405.24	407.49	406.93	405.54	404.89	403.93	403.72	402.67	398.60	397.09	397.87	12.39
8+000	20	411.76	410.80	410.97	410.80	410.61	420.42	417.19	419.60	421.41	420.64	424.16	422.68	421.33	419.05	415.36	413.65	413.97	414.47	415.34	415.25	22.72

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

CASO DE ESTUDIO: CARRETERA CUMBE - OÑA

INEXTEC CIA. LTDA.

PERITAJE DE PERFIL TRANSVERSAL / DETERMINACION DE SURCO DE HUELLA

EQUIPO UTILIZADO				TRAMO I				SENTIDO				CARRIL				LONGITUD				FECHA			
Transverse Profile Logger				0+000 - 20+100				CUMBE - OÑA				DERECHO				20100				2007-12-10			
CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)	
	8+101	27	415.32	417.03	416.77	418.53	418.01	420.34	419.28	420.26	421.28	422.76	420.83	418.54	417.58	417.61	418.14	415.42	416.64	417.87	418.74	418.87	12.42
	8+200	44	433.74	432.15	431.37	430.07	428.25	430.92	428.90	427.56	426.39	426.12	429.05	427.22	425.41	425.42	423.51	423.53	423.16	422.81	419.78	418.20	8.46
	8+301	46	426.88	426.43	425.11	424.20	422.22	423.08	420.94	418.65	417.32	416.93	417.50	415.77	414.67	415.13	416.41	414.92	416.58	416.94	416.62	417.01	4.92
	8+401	52	421.29	420.66	420.52	420.39	418.96	416.91	415.65	415.07	415.89	415.92	413.04	413.01	413.51	415.59	417.35	413.26	416.08	416.67	416.42	413.40	9.29
	8+501	56	427.58	426.46	426.46	426.30	424.75	422.43	420.67	420.26	420.33	420.66	417.98	417.76	418.02	419.57	419.50	414.24	414.43	416.04	414.63	413.24	9.11
	8+601	58	420.55	418.44	417.37	415.76	413.66	413.88	412.43	410.93	410.47	410.85	411.46	411.66	411.41	413.13	413.49	409.00	409.70	408.58	405.20	402.72	9.63
	8+701	59	423.93	422.29	422.22	421.52	420.05	420.31	418.33	417.25	417.11	418.31	418.52	418.97	417.68	418.64	417.93	414.63	412.34	410.82	407.98	404.72	11.58
	8+801	58	421.07	419.59	419.06	418.06	416.19	420.02	416.55	415.69	415.38	414.58	417.72	417.24	415.37	415.03	415.01	414.92	411.99	409.71	405.92	401.93	12.57
																					PROMEDIO	12.83	
																					PERCENTIL	16.45	

8+901	54	431.35	430.09	428.64	427.23	425.20	426.95	423.92	421.22	419.82	419.58	420.64	418.65	416.46	415.69	415.54	414.89	415.45	415.72	415.94	415.60	4.85
9+001	53	434.99	432.63	430.46	427.87	424.02	423.57	421.28	418.43	415.64	414.36	413.51	411.67	410.10	409.04	408.74	406.68	406.70	406.34	405.58	403.26	4.92
9+100	58	417.54	417.04	417.22	417.74	417.49	418.13	417.27	416.80	418.38	419.69	420.06	420.63	418.51	417.46	416.30	411.99	411.29	410.67	410.07	408.81	13.07
9+201	58	422.26	420.79	420.58	420.40	419.11	422.27	419.59	419.12	420.79	422.04	424.66	422.40	416.91	414.05	412.41	410.48	408.15	405.86	403.67	401.28	16.13
9+300	36	416.37	414.82	414.24	414.14	412.90	410.77	409.43	408.46	409.32	409.47	411.09	411.05	410.70	409.11	408.08	402.50	402.87	402.53	400.85	398.60	13.61

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

CASO DE ESTUDIO: CARRETERA CUMBE - OÑA

INEXTEC CIA. LTDA.

PERITAJE DE PERFIL TRANSVERSAL / DETERMINACION DE SURCO DE HUELLA

EQUIPO UTILIZADO				TRAMO I				SENTIDO				CARRIL			LONGITUD			FECHA				
Transverse Profile Logger				0+000 - 20+100				CUMBE - OÑA				DERECHO			20100			2007-12-10				
CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)
9+401	50	428.11	427.22	428.08	428.15	427.48	428.79	428.04	429.89	432.37	432.63	432.34	431.02	429.02	426.68	425.46	419.89	419.69	419.43	417.67	416.42	17.53
9+500	47	440.61	439.65	439.03	437.93	435.14	432.63	430.77	429.34	427.82	426.58	425.15	422.69	421.97	421.40	420.43	418.54	417.99	416.81	414.09	413.01	8.56
9+601	39	428.88	425.60	423.43	422.10	419.41	417.81	414.78	412.64	411.74	410.68	409.97	408.78	407.12	408.18	408.08	405.25	405.94	408.17	408.61	407.63	7.89
9+700	18	439.21	436.57	434.83	433.33	429.61	430.08	425.17	423.14	424.04	420.69	423.15	421.16	420.30	419.11	419.59	420.55	420.94	421.75	421.78	423.62	7.80
9+801	23	420.25	420.35	420.74	422.91	420.34	425.35	422.12	421.21	421.62	425.27	426.66	427.37	420.11	413.67	410.30	405.56	402.35	400.40	396.61	394.19	30.47
9+901	36	428.15	429.15	430.25	432.34	432.51	434.34	432.52	432.62	433.14	433.59	431.71	430.40	429.56	430.36	430.72	428.28	427.59	427.68	427.30	427.06	10.86
10+001	46	424.57	426.11	428.48	430.35	430.93	433.32	430.87	430.59	428.95	427.67	427.88	426.16	424.92	426.01	426.89	425.85	427.81	428.49	428.35	427.80	11.76
10+100	46	421.26	425.61	428.07	429.52	427.41	426.73	425.43	423.59	422.57	422.93	421.08	420.27	418.27	418.36	418.51	415.53	415.68	416.38	416.25	417.18	12.82
10+201	48	417.02	418.88	420.96	423.29	423.94	426.42	426.04	426.23	428.08	429.81	427.37	425.63	422.88	421.58	420.57	416.16	416.09	415.86	413.64	413.12	16.95
10+301	49	420.56	421.14	421.86	425.17	424.83	426.83	424.19	423.70	423.54	422.68	423.16	420.66	418.76	418.62	419.11	417.86	418.32	418.16	417.97	417.99	13.20
10+400	51	429.91	428.39	429.07	429.44	428.37	430.32	427.29	426.40	426.70	426.62	427.78	425.77	422.97	421.63	420.16	417.06	416.55	416.83	415.12	414.82	10.51
10+501	50	422.76	423.82	425.51	426.25	426.06	429.94	429.75	430.82	431.97	432.51	433.05	432.93	430.69	428.42	426.32	422.81	422.32	422.03	419.97	416.85	17.73
10+600	50	423.09	425.84	427.86	429.77	430.06	432.65	430.68	428.51	428.16	427.08	428.15	426.28	424.12	423.71	422.09	421.66	421.84	421.68	420.89	419.29	13.62
10+701	48	429.59	427.48	426.89	425.60	423.51	423.90	422.53	421.38	420.82	419.65	420.85	419.35	419.29	420.60	421.60	420.61	422.59	424.11	424.82	425.06	4.07
10+800	45	432.57	432.12	429.73	429.03	427.29	429.27	427.02	424.68	423.60	423.99	424.33	422.00	420.13	419.86	419.75	418.90	419.11	419.01	418.44	417.74	6.77
10+901	44	426.86	427.26	426.84	427.06	426.62	429.86	428.29	427.68	426.71	427.61	427.66	426.14	423.92	423.08	422.08	421.58	421.78	421.68	420.42	419.40	11.74
11+001	40	428.82	428.22	428.96	428.89	427.74	429.91	427.36	425.70	425.00	424.65	424.84	423.06	420.59	419.63	418.84	416.25	415.25	414.26	412.10	409.76	10.84
11+101	45	432.89	432.21	432.56	432.41	430.76	430.45	428.66	426.47	424.92	423.62	422.23	421.97	420.25	419.42	418.44	418.20	420.91	419.52	418.02	416.25	8.11
11+201	47	435.78	434.04	432.39	430.95	428.76	433.47	431.64	430.17	428.68	428.29	429.94	427.77	425.05	424.12	421.81	420.21	419.38	418.40	415.72	413.39	13.88
11+300	46	420.28	421.55	422.81	424.24	424.01	427.73	425.41	426.08	425.93	424.86	423.20	420.80	418.27	417.86	416.66	414.30	412.39	411.85	410.91	410.67	16.80
11+401	45	430.07	430.35	430.34	431.00	431.51	434.69	434.54	434.86	433.79	431.95	430.13	428.01	425.47	425.14	424.47	421.52	421.49	421.80	422.53	421.76	12.06
11+502	42	424.16	423.42	423.98	426.42	426.46	428.21	427.81	428.34	427.63	426.95	427.30	426.60	424.81	424.85	424.14	417.66	417.46	416.88	416.77	415.36	15.33
11+601	40	440.42	437.06	435.19	433.72	431.32	435.46	432.23	430.49	429.69	428.81	429.96	427.19	424.45	423.78	422.27	421.90	421.85	419.73	417.21	416.00	9.56

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

CASO DE ESTUDIO: CARRETERA CUMBE - OÑA

INEXTEC CIA. LTDA.

PERITAJE DE PERFIL TRANSVERSAL / DETERMINACION DE SURCO DE HUELLA

[illegible]

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

CASO DE ESTUDIO: CARRETERA CUMBE - OÑA

INEXTEC CIA. LTDA.

PERITAJE DE PERFIL TRANSVERSAL / DETERMINACION DE SURCO DE HUELLA

EQUIPO UTILIZADO					TRAMO I				SENTIDO					CARRIL			LONGITUD			FECHA		
Transverse Profile Logger					0+000 - 20+100				CUMBE - OÑA					DERECHO			20100			2007-12-10		
CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)
13+700	47	445.32	443.68	442.13	440.47	436.93	436.57	434.43	431.87	430.16	429.61	430.64	428.24	425.07	423.70	421.35	420.27	418.22	415.14	411.97	409.48	9.73
13+801	48	435.73	436.44	435.81	435.22	433.35	435.22	434.31	432.91	432.75	432.00	432.07	430.78	429.65	429.49	428.74	426.60	423.62	420.57	418.61	417.18	10.82
13+901	48	423.67	423.93	424.47	424.91	424.04	428.43	426.30	427.87	426.93	426.48	430.58	428.60	427.70	429.51	428.34	426.72	426.70	427.42	426.61	422.55	12.92
14+001	46	423.05	423.56	424.67	425.64	424.69	427.41	426.05	426.78	427.62	429.20	431.95	432.86	433.17	434.37	432.11	428.80	427.31	424.37	420.77	417.86	17.96
14+101	44	426.87	427.64	427.37	427.05	425.94	431.14	429.85	428.54	430.83	429.65	431.40	430.68	428.87	427.85	426.08	424.29	424.06	424.95	423.26	421.20	12.86
14+201	44	427.03	426.34	426.82	428.04	427.96	428.96	426.95	427.72	428.62	429.31	431.03	431.70	430.54	429.79	428.57	425.84	424.72	424.46	422.76	420.70	10.78
14+300	45	422.48	421.84	422.23	423.38	423.88	426.30	425.52	425.68	426.86	428.75	429.32	429.72	429.59	429.46	428.91	423.58	423.45	423.60	423.34	422.59	14.43
14+400	47	419.46	419.62	420.47	420.97	421.36	422.59	421.36	421.50	422.13	423.13	422.79	421.88	420.52	422.33	423.57	420.25	423.26	424.97	426.21	426.53	6.37
14+500	50	424.01	424.07	425.38	425.96	423.85	425.04	423.96	423.62	423.16	423.43	424.82	424.68	421.11	419.23	418.95	416.85	415.30	412.71	411.64	411.30	11.88
14+601	46	421.75	422.24	423.23	423.74	422.64	423.56	422.79	422.15	423.46	423.87	424.32	424.71	422.88	422.15	421.89	420.96	420.01	418.78	416.95	416.04	10.41
14+700	43	429.97	428.95	429.15	427.62	425.00	431.53	429.98	430.00	428.77	427.54	432.77	432.06	429.85	429.34	428.46	428.62	428.62	427.81	426.86	425.46	12.21
14+801	44	420.46	419.69	420.19	420.84	421.42	423.51	422.64	421.91	423.24	424.04	424.79	423.06	421.73	421.95	421.91	417.77	418.56	418.65	417.50	416.87	11.36
14+901	51	431.29	431.77	432.17	432.15	430.68	432.24	430.73	430.89	431.42	430.76	432.61	432.94	431.41	430.36	428.96	427.83	426.49	425.26	423.96	422.54	12.36
15+000	48	437.88	435.82	434.91	433.93	431.80	431.25	427.74	426.28	425.59	425.08	423.21	421.70	419.85	419.12	418.16	414.18	412.55	411.42	407.75	405.86	6.99
15+100	51	434.38	434.01	433.62	433.10	431.72	435.04	432.68	432.00	431.92	431.28	434.15	433.05	430.17	428.42	425.47	424.11	423.07	421.00	417.35	415.06	12.29
15+200	47	437.04	435.54	435.08	434.54	432.39	432.74	431.26	430.58	429.67	429.65	427.30	426.04	424.65	425.77	425.34	420.17	420.98	421.96	423.37	423.93	7.29
15+301	46	433.85	431.82	430.55	429.76	428.72	433.87	430.94	433.89	430.37	430.92	434.96	433.62	433.18	433.89	433.74	430.62	428.96	429.15	428.40	428.54	15.81
15+401	52	438.74	437.29	437.30	437.44	435.95	437.34	436.01	435.82	435.91	436.19	435.06	434.51	432.83	432.63	430.85	425.12	423.71	421.75	418.63	415.57	14.62
15+501	52	445.51	442.96	442.15	440.13	438.22	437.72	435.32	433.06	430.86	428.88	426.14	423.47	420.35	418.40	415.71	410.60	408.51	406.53	403.37	398.95	10.23
15+602	53	429.86	429.10	429.50	430.03	429.67	428.85	427.15	427.15	427.98	428.45	429.16	428.72	426.72	425.25	422.47	422.09	420.33	418.30	415.55	414.18	11.80
15+701	54	426.77	426.09	425.42	425.70	424.08	427.06	424.08	422.89	422.46	421.81	424.46	422.11	421.53	423.25	421.73	420.23	418.33	416.44	411.87	408.98	14.44
15+800	51	428.62	429.21	430.86	431.39	430.34	428.63	428.02	428.86	429.61	429.89	428.40	428.46	428.79	429.70	430.54	423.62	423.00	422.34	421.75	421.50	11.60

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

CASO DE ESTUDIO: CARRETERA CUMBE - OÑA

INEXTEC CIA. LTDA.

PERITAJE DE PERFIL TRANSVERSAL / DETERMINACION DE SURCO DE HUELLA

EQUIPO UTILIZADO				TRAMO I				SENTIDO				CARRIL				LONGITUD				FECHA			
Transverse Profile Logger				0+000 - 20+100				CUMBE - OÑA				DERECHO				20100				2007-12-10			
CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)	
	15+901	54	425.44	425.04	425.58	425.56	424.66	426.38	425.23	424.10	424.47	425.02	425.59	425.10	423.99	425.14	425.86	422.22	421.89	422.27	423.41	424.01	7.65
	16+001	54	431.27	430.45	430.69	431.02	429.97	426.98	426.92	428.28	430.48	430.50	427.79	428.03	426.10	425.67	427.22	421.68	423.88	426.45	426.65	427.52	9.89
	16+101	53	426.41	424.80	424.36	424.40	423.59	428.48	426.19	425.86	427.87	426.77	428.63	425.73	423.81	422.04	421.02	419.27	419.43	418.73	417.44	416.99	11.98
	16+200	54	430.82	430.23	430.87	430.88	430.05	435.54	434.34	388.60	433.28	433.15	436.59	435.89	431.84	428.71	426.08	426.60	425.20	423.64	419.50	416.98	14.87
	16+300	23	417.73	417.77	418.25	418.66	417.58	419.42	417.91	417.69	418.41	417.73	417.25	416.14	414.18	415.12	415.31	414.57	414.16	413.89	412.88	412.77	9.52
																				PROMEDIO	11.50		
																				PERCENTIL	14.43		

16+401	40	432.85	430.69	431.34	431.26	431.66	431.01	430.11	430.81	431.34	432.64	435.51	434.75	432.05	432.74	433.20	432.11	431.38	431.32	430.17	429.83	10.78
16+501	31	431.05	430.58	431.72	432.70	429.54	434.25	428.89	427.71	425.91	425.90	424.50	424.44	423.50	423.36	420.52	418.00	418.49	416.59	414.55	414.32	12.00
16+600	33	421.56	421.93	422.55	423.10	423.37	423.89	421.15	426.20	424.77	424.12	422.47	422.48	422.00	422.50	423.48	417.21	417.50	418.77	419.05	419.45	16.68
16+700	25	420.42	418.82	418.27	418.86	417.95	413.94	412.74	413.01	413.62	415.00	407.63	407.47	406.09	409.13	411.27	400.83	401.22	402.86	403.73	403.12	13.62
16+800	17	409.35	409.37	407.37	408.90	407.95	409.49	408.55	409.70	409.36	411.40	411.65	412.53	413.08	412.57	414.43	414.43	415.12	410.33	410.02	409.49	19.96
16+901	33	438.50	438.96	440.83	441.99	440.72	439.94	438.12	438.46	440.11	439.87	436.12	436.03	435.08	434.24	434.39	428.05	428.07	427.66	426.79	426.85	14.77
17+001	40	435.05	432.75	433.18	432.22	429.52	428.62	425.15	423.26	422.34	421.47	421.79	422.44	424.20	427.36	427.53	425.84	426.34	427.02	426.43	425.91	8.06
17+100	45	429.25	429.31	428.45	428.08	425.69	429.61	427.61	427.06	424.78	424.22	424.96	424.73	425.16	427.21	427.36	426.79	427.25	427.97	428.10	426.48	9.24

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

CASO DE ESTUDIO: CARRETERA CUMBE - OÑA

INEXTEC CIA. LTDA.

PERITAJE DE PERFIL TRANSVERSAL / DETERMINACION DE SURCO DE HUELLA

EQUIPO UTILIZADO					TRAMO I				SENTIDO					CARRIL			LONGITUD			FECHA		
Transverse Profile Logger					0+000 - 20+100				CUMBE - OÑA					DERECHO			20100			2007-12-10		
CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)
17+201	36	428.73	429.26	428.15	427.89	425.25	428.97	426.81	424.31	421.50	420.18	421.67	419.88	418.54	418.00	417.18	418.11	417.84	414.68	413.58	412.13	11.62
17+300	31	435.88	434.91	434.87	434.79	433.47	431.90	428.66	427.21	428.64	427.78	424.77	424.14	424.52	422.95	424.78	419.90	421.10	419.66	418.26	419.43	13.43
17+401	26	433.34	429.70	425.10	422.42	418.70	423.57	421.86	418.24	422.03	421.36	425.83	425.48	423.70	418.10	415.59	415.67	415.13	414.56	414.63	409.95	20.74
17+500	35	433.94	431.74	430.78	431.02	428.19	429.05	424.98	425.35	423.69	420.62	421.38	418.15	420.69	422.42	422.28	419.36	423.72	425.71	429.28	427.40	9.55
17+601	41	432.77	433.05	430.79	430.90	429.11	423.33	422.41	421.74	421.94	424.12	419.25	419.91	420.26	423.31	423.50	416.90	418.48	418.40	418.88	419.40	9.59
17+700	50	426.65	427.97	428.37	428.40	428.53	429.12	426.88	426.76	426.49	425.34	426.30	426.62	425.78	426.63	427.54	425.03	424.06	421.82	420.46	419.07	11.34
17+800	51	429.68	428.50	427.97	426.63	425.10	428.34	426.76	426.59	429.03	428.79	432.10	432.03	429.72	429.01	427.36	425.37	424.11	424.12	421.23	418.78	13.95
17+901	53	429.25	427.27	425.22	422.95	420.88	424.23	422.48	421.22	421.24	420.72	422.81	423.84	421.85	423.79	422.77	423.71	424.28	423.12	420.51	420.06	6.87
18+001	48	408.52	409.16	409.81	410.79	410.34	412.93	413.72	414.93	416.29	417.84	420.21	421.63	420.80	422.60	424.88	425.99	428.76	430.49	431.01	430.32	7.75
18+100	43	436.66	433.91	432.31	431.54	429.78	430.13	428.26	426.96	425.11	424.89	424.42	422.03	421.54	420.08	418.82	416.84	416.87	415.56	413.86	412.33	8.60
18+201	37	429.62	430.99	432.49	433.93	435.57	432.44	430.48	431.46	432.21	432.62	428.95	428.45	428.96	429.20	428.71	424.68	424.29	423.70	423.82	421.43	14.56
18+301	34	437.48	435.92	435.07	435.16	433.35	432.94	431.47	430.81	430.64	430.70	432.30	429.71	429.09	427.90	426.78	424.02	423.12	421.77	420.92	419.74	11.46
18+400	39	436.76	434.83	434.07	434.86	432.38	432.35	428.97	427.98	428.30	427.80	424.56	424.33	423.28	423.05	424.57	418.04	416.97	417.73	417.21	416.87	12.91
18+500	46	435.71	435.34	434.17	433.63	432.37	434.05	431.35	432.08	432.18	430.80	440.78	431.43	429.76	430.08	427.88	426.56	427.43	425.79	423.79	421.90	19.08
18+600	51	418.43	418.44	418.86	421.63	420.52	424.93	424.21	426.01	425.78	425.12	426.84	427.00	425.47	426.09	426.37	424.36	425.79	427.46	429.19	428.32	10.05
18+701	51	419.88	418.88	417.90	418.26	417.70	420.04	419.35	419.70	420.72	420.78	421.77	422.26	419.96	421.48	422.51	419.60	420.99	419.99	419.57	419.46	9.45
18+801	45	422.68	422.52	421.61	421.56	421.01	423.42	420.35	416.20	420.12	420.66	421.45	418.33	416.79	419.19	420.08	419.69	421.28	420.93	422.42	421.23	12.98
18+901	47	422.75	421.76	423.27	424.28	423.61	423.03	422.53	421.77	421.72	424.85	423.87	423.62	423.29	423.43	424.96	422.12	421.02	419.71	419.40	418.07	11.54
19+001	53	438.35	435.90	433.94	432.26	430.24	431.35	428.96	426.60	425.36	424.18	424.48	422.11	419.15	415.80	415.19	412.25	410.44	409.52	407.35	405.77	9.10
19+101	26	419.10	417.66	416.78	414.11	412.01	415.24	413.37	411.52	411.24	410.02	410.77	410.36	408.84	409.37	409.34	408.52	408.56	408.15	407.43	406.25	6.14
19+201	47	443.02	440.00	437.67	435.55	432.12	434.16	430.86	428.50	426.76	426.07	428.46	427.04	425.34	424.98	424.44	425.74	426.22	425.74	424.37	423.51	5.53
19+300	55	438.37	435.04	432.19	428.59	425.70	422.03	420.21	418.23	416.50	415.76	414.82	413.90	413.79	414.49	414.58	411.99	413.79	415.57	416.80	415.62	4.67

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

CASO DE ESTUDIO: CARRETERA CUMBE - OÑA

INEXTEC CIA. LTDA.

PERITAJE DE PERFIL TRANSVERSAL / DETERMINACION DE SURCO DE HUELLA

EQUIPO UTILIZADO					TRAMO I				SENTIDO					CARRIL			LONGITUD			FECHA		
Transverse Profile Logger					0+000 - 20+100				CUMBE - OÑA					DERECHO			20100			2007-12-10		
CHAINAGE	SPEED (Km/h)	ELEV 1	ELEV 2	ELEV 3	ELEV 4	ELEV 5	ELEV 6	ELEV 7	ELEV 8	ELEV 9	ELEV 10	ELEV 11	ELEV 12	ELEV 13	ELEV 14	ELEV 15	ELEV 16	ELEV 17	ELEV 18	ELEV 19	ELEV 20	RUT PS (mm)
19+400	53	421.53	422.15	423.71	425.36	425.69	422.57	422.60	423.13	425.13	426.46	423.06	423.45	423.62	426.25	427.13	420.90	423.28	426.14	427.41	428.52	9.33
19+500	51	428.93	425.53	422.82	419.96	416.36	416.76	414.31	412.01	410.92	410.01	410.08	409.49	407.71	407.27	407.55	407.21	407.92	408.93	409.25	408.62	4.89
19+600	22	416.31	413.77	413.53	413.07	411.66	413.85	413.48	415.52	414.28	413.22	414.30	411.36	409.82	409.11	407.95	406.20	405.48	404.45	403.81	403.18	11.99
19+701	44	436.31	434.92	433.43	433.41	431.68	433.60	430.99	429.23	427.94	426.34	426.57	423.48	422.21	420.49	419.82	417.24	417.10	416.36	415.17	414.87	8.17
19+801	48	430.36	428.56	427.00	426.24	425.26	426.65	422.22	420.54	420.19	418.70	419.04	417.49	414.23	412.47	409.43	405.64	403.35	400.19	398.06	395.70	11.03
19+900	42	421.43	420.60	419.50	418.18	416.85	418.22	415.11	412.88	411.09	410.42	411.00	411.41	410.21	407.35	403.45	399.56	399.18	398.70	397.84	396.77	9.38
20+000	20	417.89	416.47	415.74	414.10	411.55	412.78	409.58	408.26	406.87	406.85	406.61	404.93	402.45	402.77	401.95	402.56	403.22	404.69	405.60	406.99	4.82
20+100	8	425.59	423.69	422.95	421.79	418.62	418.92	416.85	417.07	416.05	416.17	413.60	413.20	410.76	411.50	410.42	408.53	407.28	408.39	408.93	408.12	5.60
																					PROMEDIO	10.82
																					PERCENTIL	14.22

ESCUELA SUPERIOR POLITECNICA DEL LITORAL

CASO DE ESTUDIO: CARRETERA CUMBE - OÑA

TRAMO: 0+000 - 20+100 / SENTIDO: CUMBE - OÑA

INEXTEC CIA. LTDA.

ESTUDIO DE PERFIL TRANSVERSAL (SURCO DE HUELLA)

Surco de Huella vs Distancia

