

# Asphalt 2020

STUDY RESULTS AND PROPOSED PRIORITIES



# 2018 Study Results

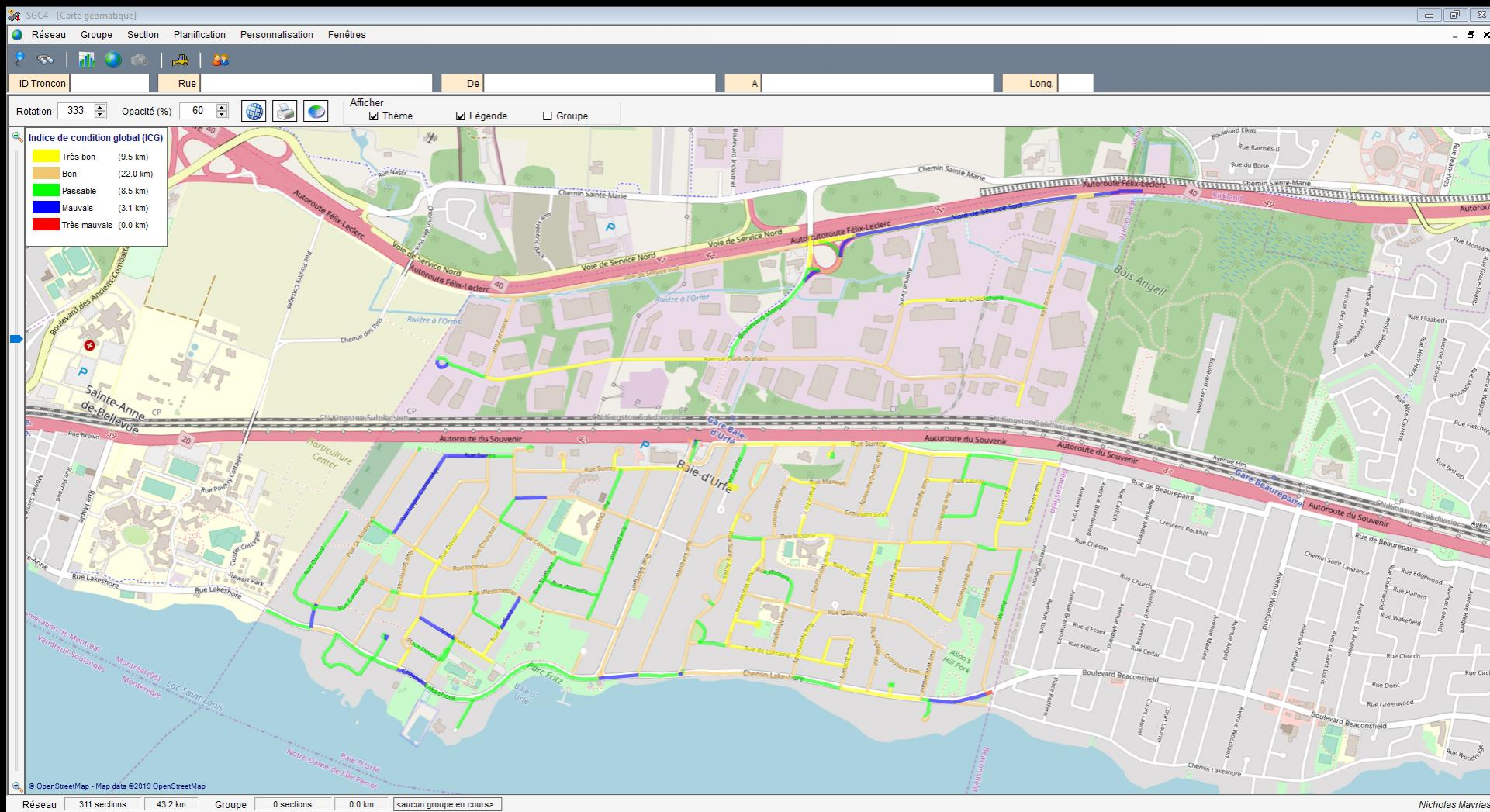
- ▶ In the fall of 2018 we mandated SNC Lavalin to do a study of road surface conditions in Baie-D'Urfé.
- ▶ We purchased SGC4, a software system created specifically for interpreting the data generated by such a study.
- ▶ In addition to its interpretive capabilities, it is able to make recommendations and suggest priorities based on user-defined multi-year plans.
- ▶ Any interventions done can be input into the software and it will generate new recommendations and priorities.

# Study Results 2018

- ▶ The reports generated from the study contained data results from different categories – three of which are indicative of road surface conditions:
- ▶ **Pavement Condition Index (PCI)** – A scale of 1-100
- ▶ **International Roughness Index (IRI)** – based on comfort of passengers in a vehicle
- ▶ **Rut dimensions (Ornières)** – depth of ruts generated by vehicles
- ▶ The software groups the above-mentioned categories into an “overview” category – **Indice de Condition Globale (ICG)**

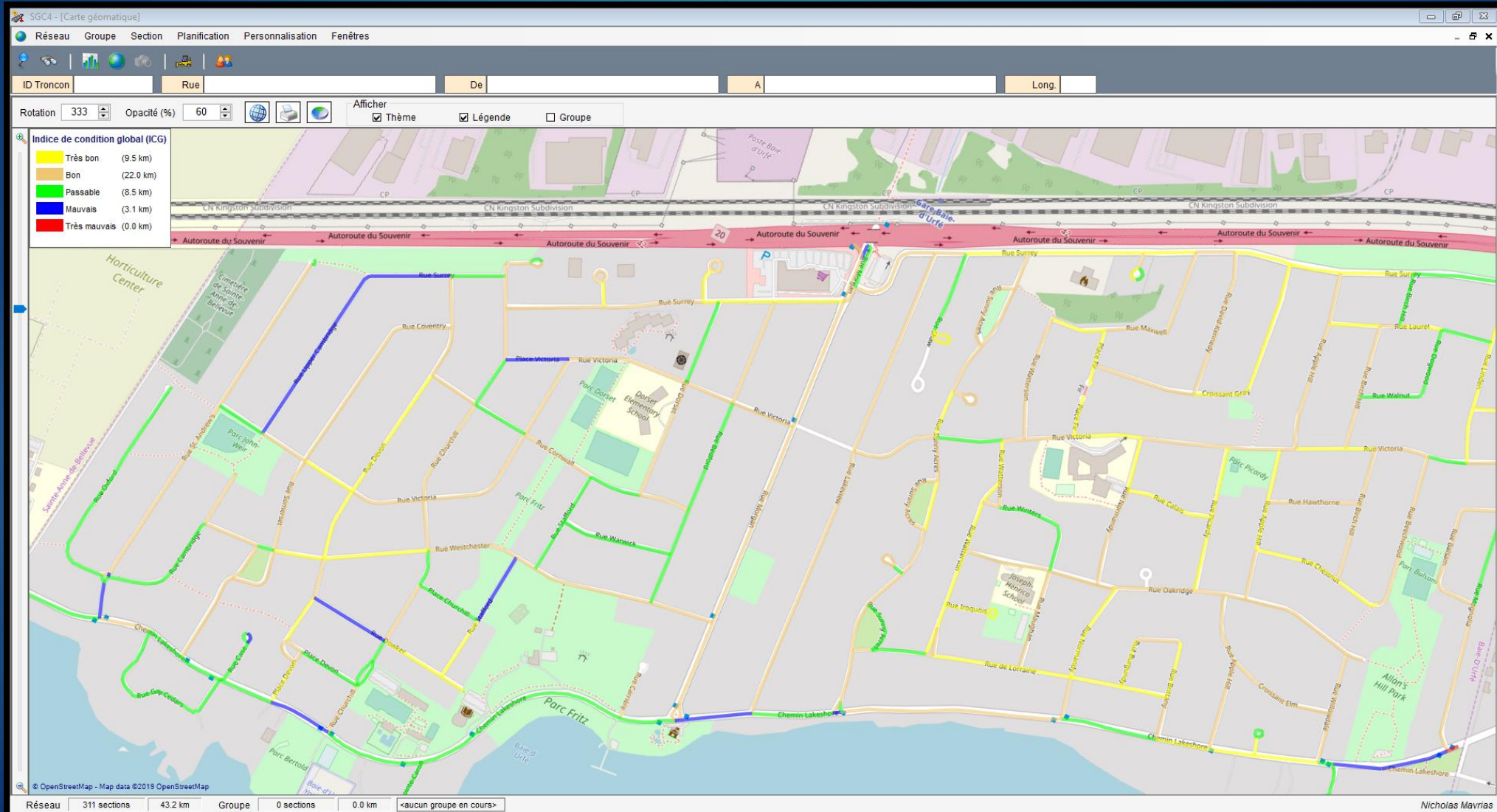


# ICG (Indice de Condition Globale)

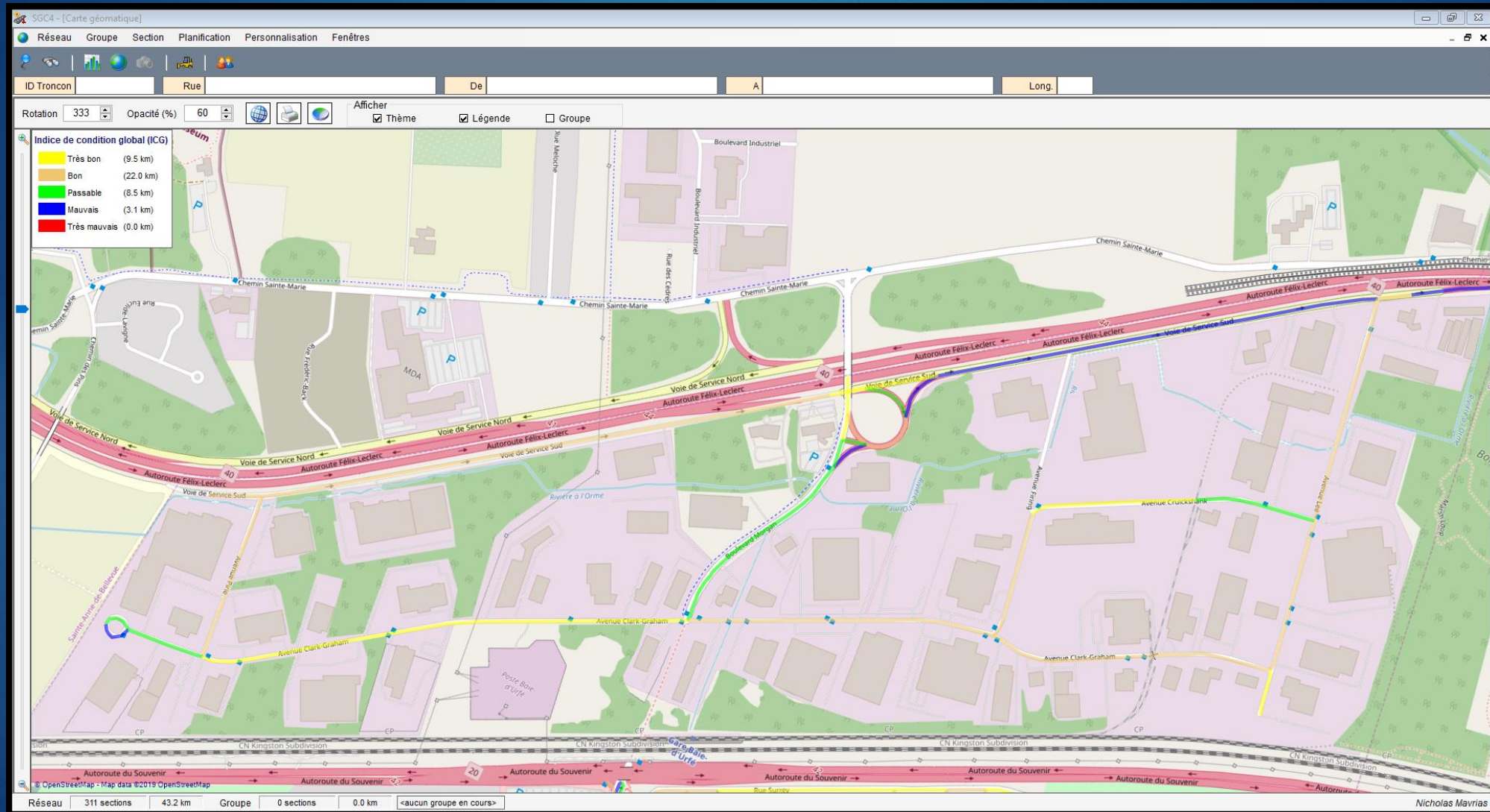




# ICG - Residential

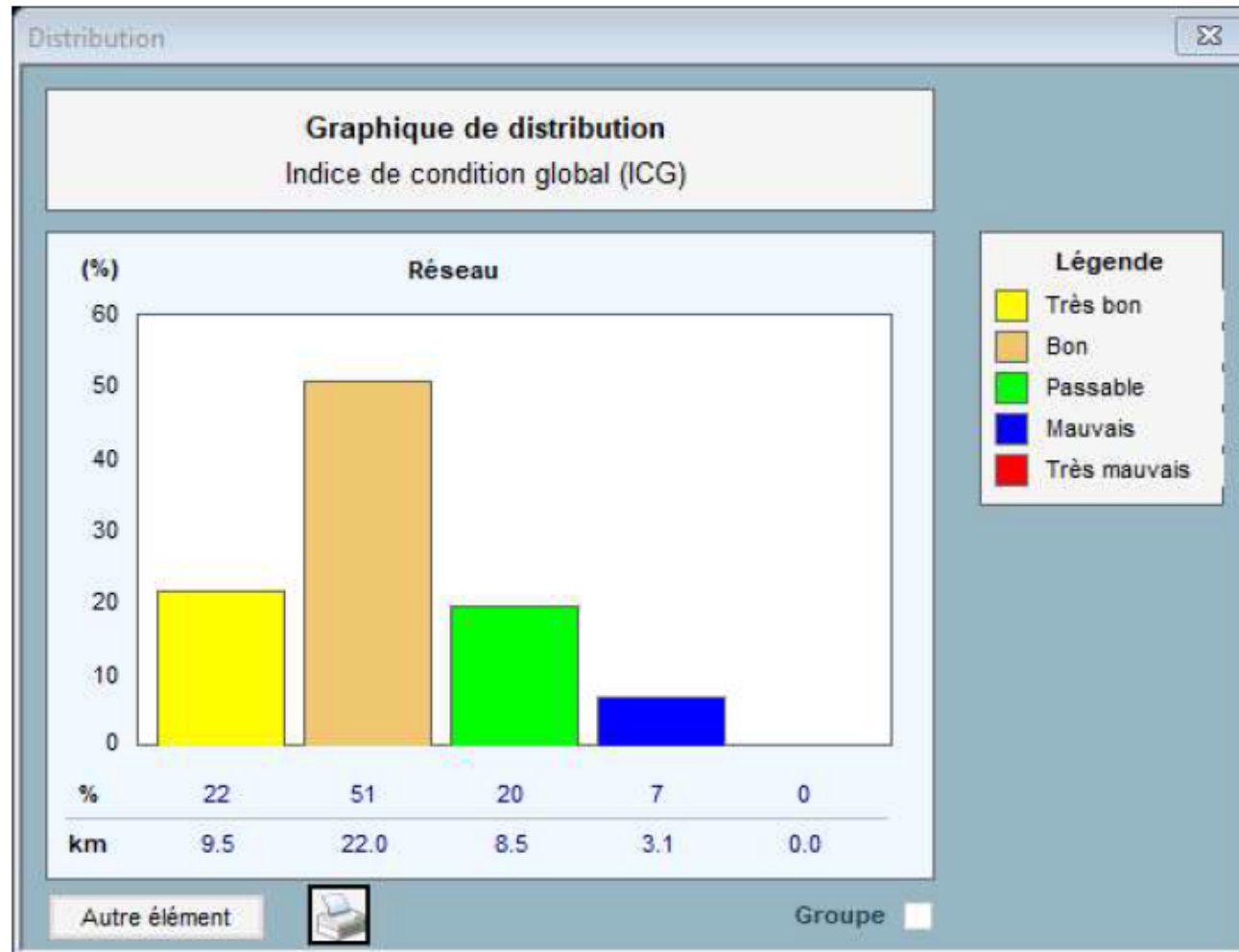


# ICG - Industrial





# ICG – Global view



# Priorities - Exclusions

- ▶ Industrial sector – due to upcoming interventions
- ▶ Lakeshore



# Priorities – generated by SGC4

SGC4 - [Tableau des sections]

Réseau Groupe Section Planification Personnalisation Fenêtres

ID Troncon Rue De A Long.

Réseau Groupe

ID Troncon	Rue	Long.	ICS	ICR	IRI	Om	ICG
4005712	CARRIERE	10	0	0	0.0	0	0
4005473	ST ANDREW'S	8	0	0	0.0	0	0
1618725	LAKESHORE	17	3	1	11.8	9	11
1618734	LAKESHORE	95	16	54	5.3	7	23
1618906	SURREY	160	23	8	8.2	6	23
1618956	DOWKER	157	24	33	6.7	8	24
1618886	VICTORIA	133	30	42	6.2	12	27
4005710	CASE	23	40	1	9.1	11	28
1618984	ST ANDREW'S	71	34	18	7.6	8	30
4008337	TRANSCANADIENNE	209	20	53	5.4	9	30
1618722	LAKESHORE	140	31	53	5.4	7	33
1619018	NON NOMMEE	87	35	30	6.9	7	33
4008639	ST ANDREW'S	10	43	38	6.4	5	33
1618939	STAFFORD	155	35	46	5.9	9	33
1619014	NON NOMMEE	132	32	40	6.3	8	34
1618909	UPPER CAMBRIDGE	403	40	20	7.5	9	35
1618959	LAKESHORE	131	49	21	7.4	16	36
1619011	TRANSCANADIENNE	944	26	46	5.9	10	36
1618865	LAKESHORE	17	43	59	5.0	14	37
1618932	LAKESHORE	165	38	52	5.5	9	37
4001702	MORGAN	29	39	66	4.4	10	37
4005705	CLARK GRAHAM	68	45	30	6.9	6	38
1618974	WESTCHESTER	30	44	1	9.7	3	40
1618965	LAKESHORE	84	51	40	6.3	12	42
1619015	NON NOMMEE	117	40	52	5.5	7	42
4012375	OXFORD	497	49	38	6.4	8	43
1623696	CASE	95	55	1	9.2	9	44
1618888	CORNWALL	115	45	52	5.5	5	44
1618978	LAKESHORE	211	48	49	5.7	10	44
1619033	MORGAN	456	35	81	3.1	5	44
4000513	POINTE CARON	126	59	1	8.6	12	44
1618839	WINTERS	141	50	37	6.5	6	45
1618981	OXFORD	15	59	17	7.7	4	46
1618870	WARWICK	225	51	42	6.1	8	46
1618950	CHURCHILL	63	45	66	4.4	7	47
4005706	CLARK GRAHAM	59	47	49	5.7	6	47
4005709	CASE	24	47	37	6.5	18	48
1618991	CRUICKSHANK	247	42	77	3.5	4	48
1623698	LAKESHORE	112	54	46	5.9	6	48
4008638	ST ANDREW'S	9	58	14	7.8	7	48
1618740	WILSON	52	54	40	6.3	7	48
1618944	CHURCHILL	40	53	58	5.1	4	49
1618726	MAGNOLIA	200	44	72	3.9	5	49
1618860	LORRAINE	108	61	24	7.3	7	50
1618848	SUNNY ACRES	13	63	1	14.7	2	50

Rue

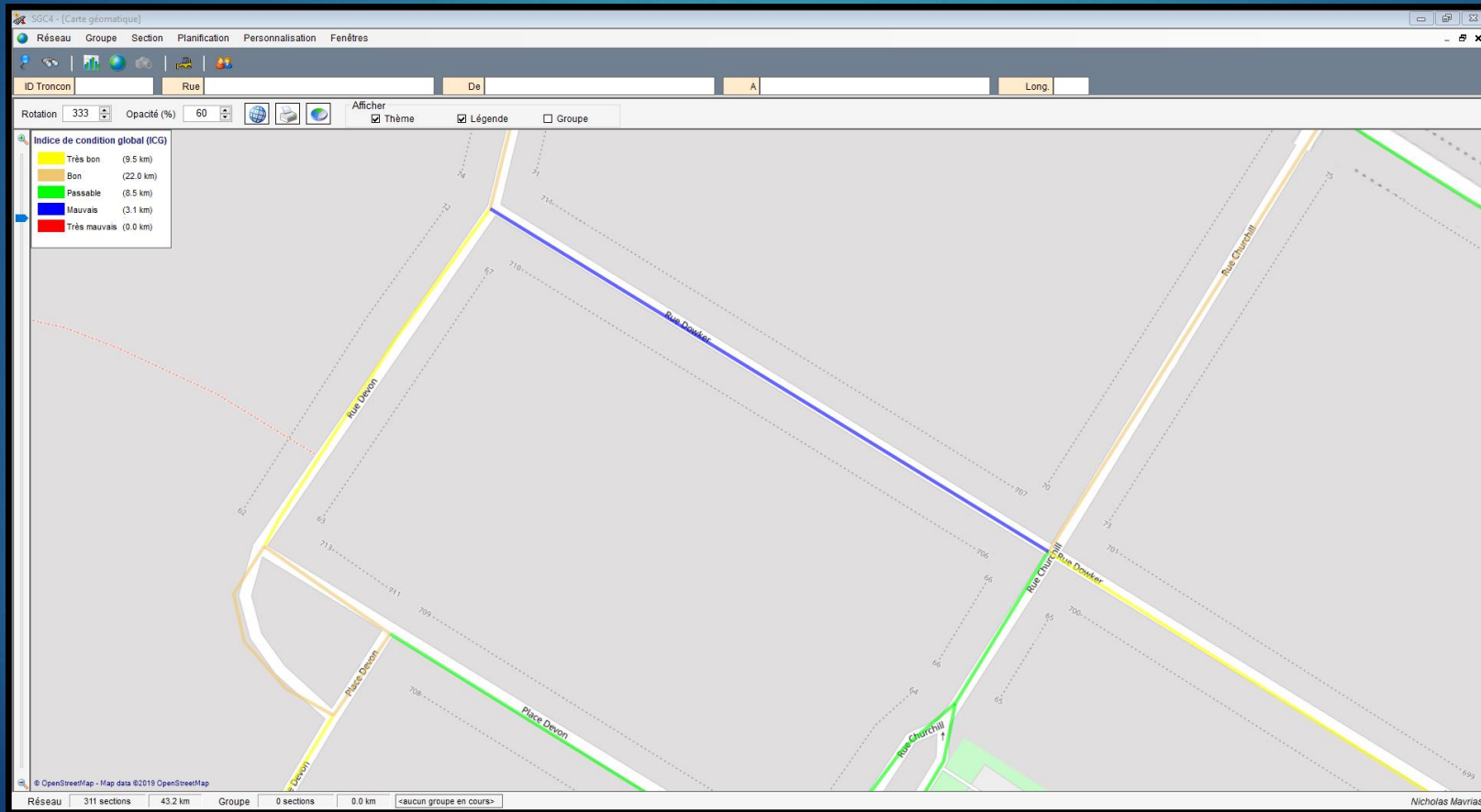
Réseau 311 sections 43.2 km Groupe 0 sections 0.0 km <aucun groupe en cours>

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# Suggested priorities

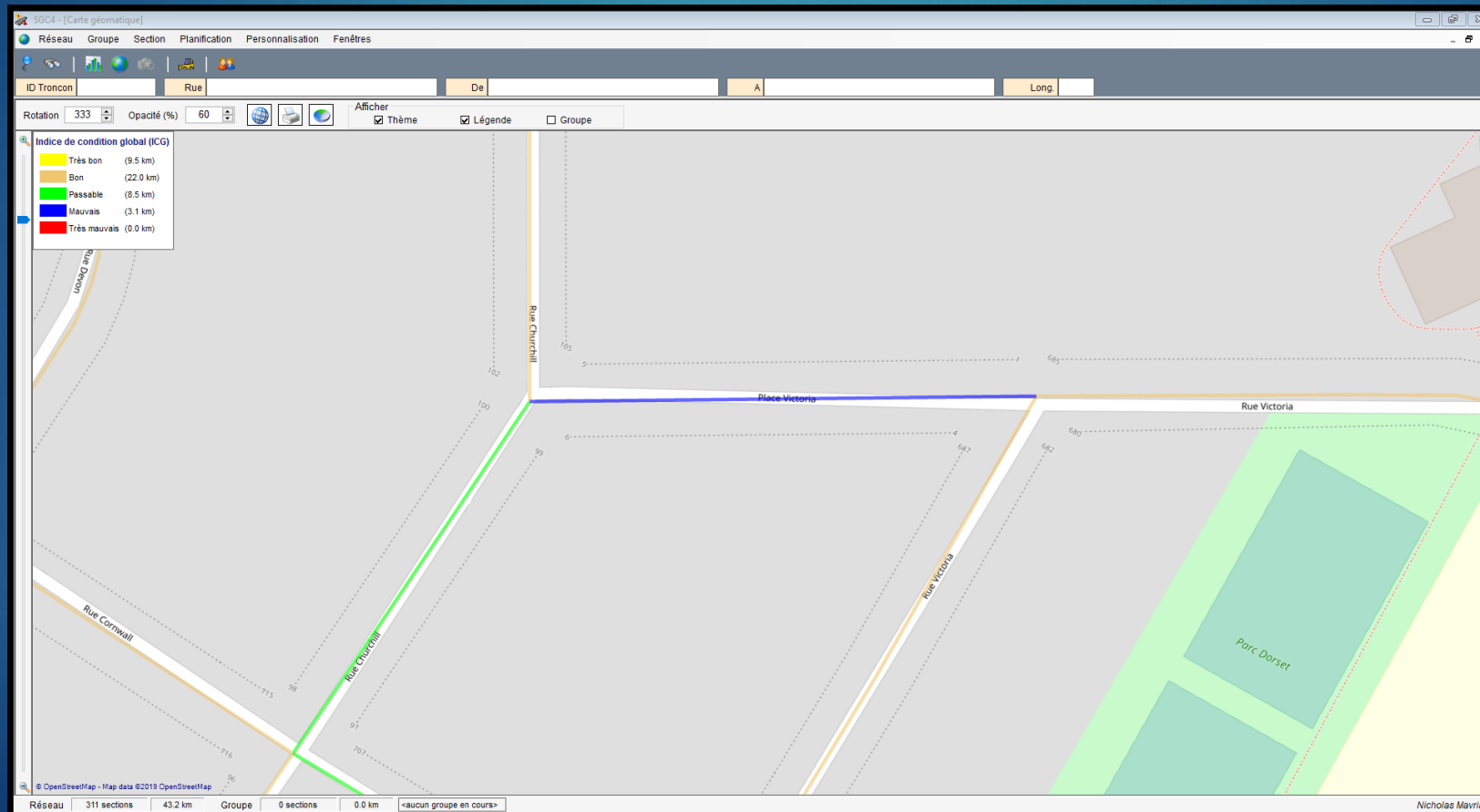
- ▶ 2 – Dowker between Churchill and Devon





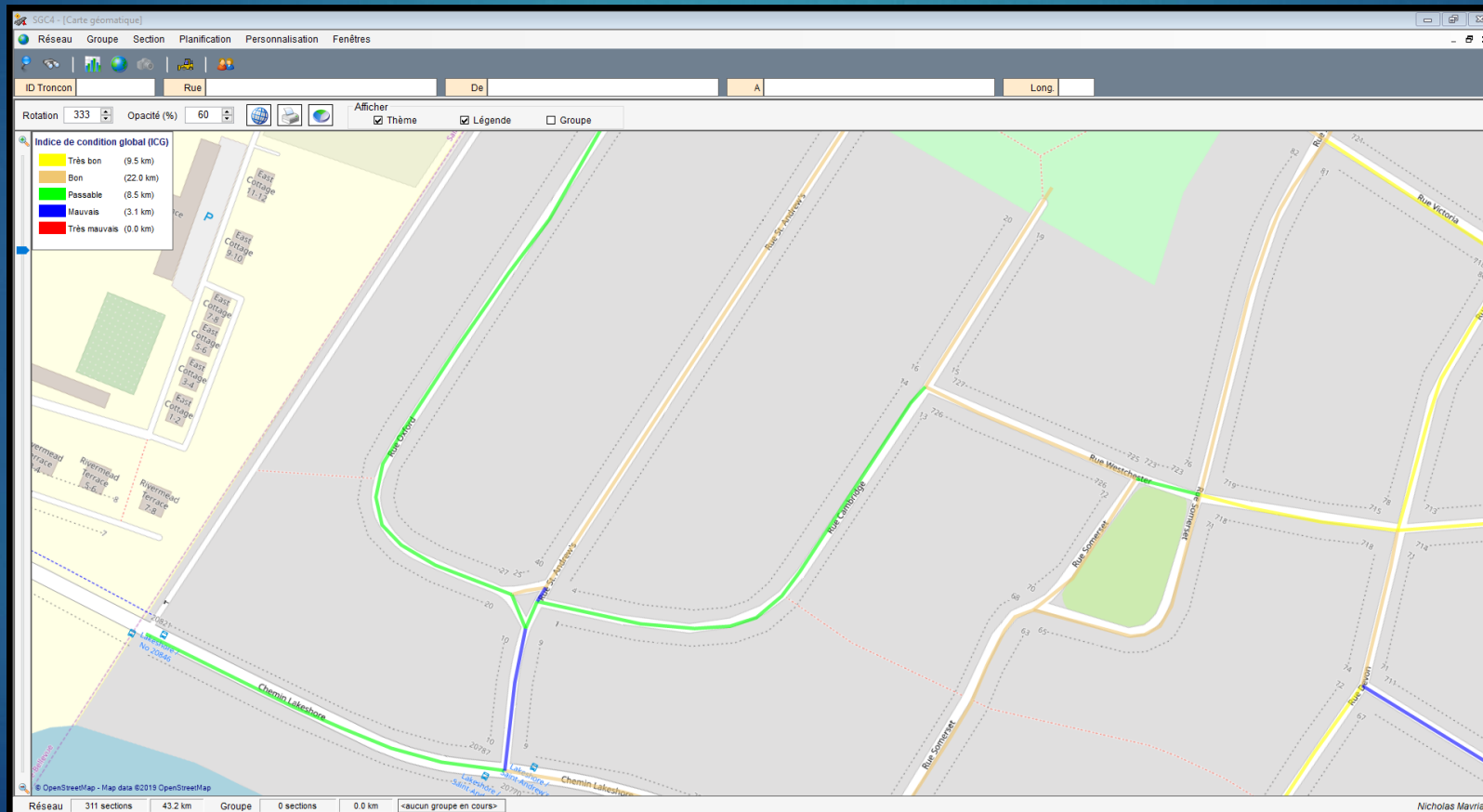
# Suggested priorities

- ▶ 3 – Victoria Place between Victoria and Churchill



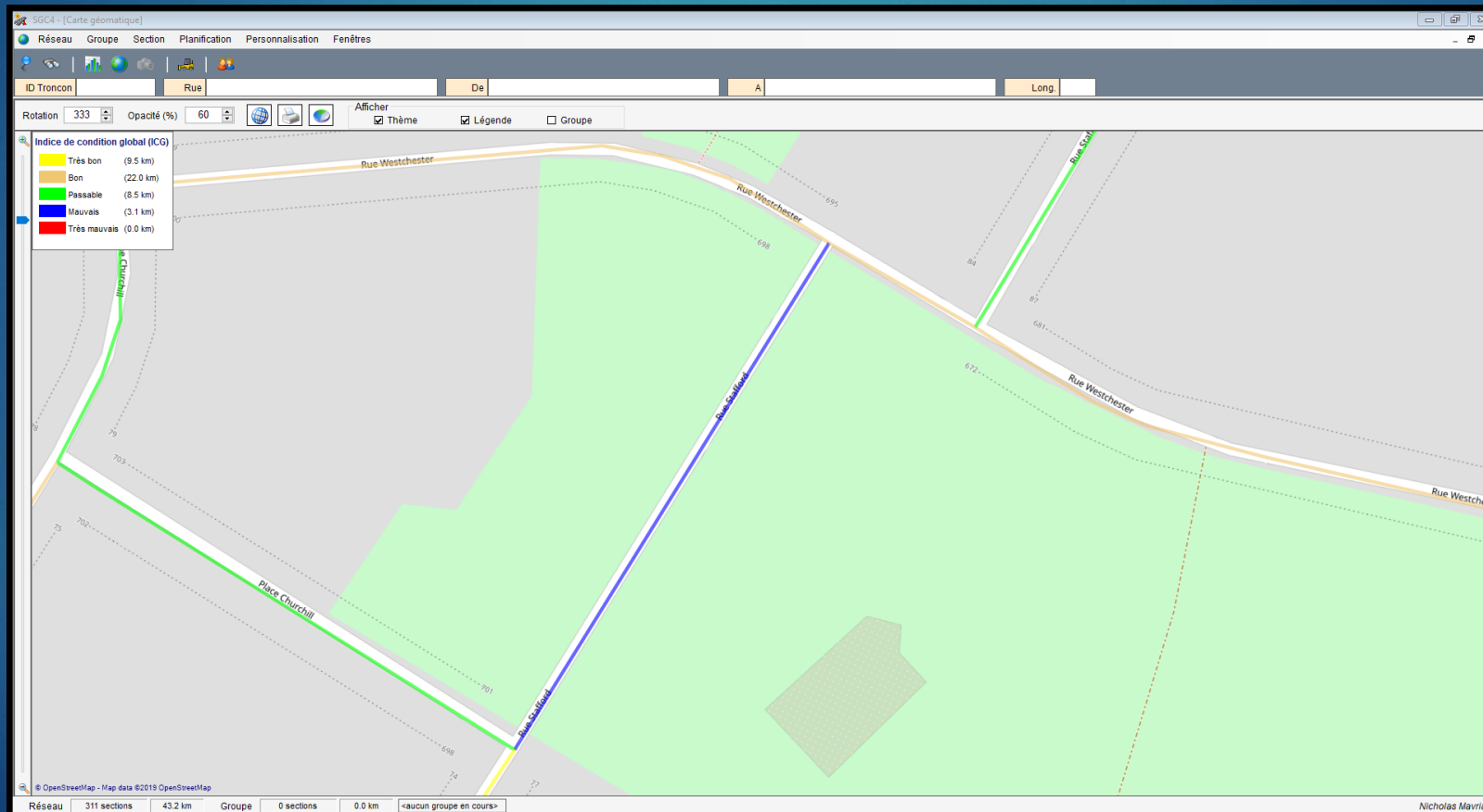
# Suggested priorities

## ► 4 – St. Andrews, Oxford and Cambridge



# Suggested priorities

- 5 – Stafford between Churchill Place and Westchester





# Comparisons – a study in perception

- ▶ David Kennedy vs. Victoria Place
- ▶ The road surface condition of David Kennedy is often the subject of complaints (residents, VCOPS, etc...)
- ▶ The condition of Victoria Place has never been brought forward as a complaint
- ▶ The ICG of David Kennedy is 72 (bon état)
- ▶ The ICG of Victoria Place is 27 (mauvaise état)
- ▶ Why?

# Worst vs. worst – David Kennedy

SGC4 - [Visionneuse]

Réseau Groupe Section Planification Personnalisation Fenêtres

ID Tronçon 1618799 Rue DAVID KENNEDY De - A - Long. 299

ID : 1618799 Image 14 de 60 2018-08-02

Distance	Section				
	79	68	4.3	6	72
	ICS	ICR	IRI	Orn	ICG
169	100	95	1.5	1	98
164	100	91	2.1	2	96
159	100	89	2.3	2	95
154	100	81	3.1	5	91
149	100	88	2.4	6	92
144	100	73	3.9	4	89
139	97	6	8.3	4	75
134	57	43	6.1	6	49
129	59	43	6.1	7	49
124	94	56	5.2	6	79
119	90	73	3.9	4	82
114	89	12	8.0	3	68
109	83	1	11.9	3	62
104	72	50	5.6	4	62
99	60	71	4.1	7	60
94	50	89	2.3	3	61
89	54	57	5.1	12	49
84	92	47	5.8	3	76
79	57	87	2.5	14	60
74	64	82	3.0	15	63
69	46	59	5.0	18	42
64	50	33	6.7	15	36
59	69	86	2.7	9	71
54	64	60	4.9	9	55
49	60	66	4.4	11	56
44	47	59	5.0	14	45
39	58	25	7.2	2	46
34	54	38	6.4	10	43
29	100	62	4.8	8	84
24	76	83	2.9	9	75
19	89	45	6.0	7	71
14	83	85	2.7	12	78
9	74	66	4.5	12	65
4	65	87	2.5	6	70
0	52	55	5.3	7	49

Réseau 311 sections 43.2 km Groupe 0 sections 0.0 km <aucun groupe en cours>

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# Worst vs. worst – Victoria Place

SGC4 - [Visionneuse]

Réseau Groupe Section Planification Personnalisation Fenêtres

ID Tronçon: 1618886 Rue: VICTORIA De: A Long: 133

ID: 1618886 Image 4 de 27 2018-08-02

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Section	30	42	6.2	12	27
	ICS	ICR	IRI	Orn	ICG
Distance					
128	38	0	0.0	9	34
123	1	0	0.0	18	1
118	1	0	0.0	23	1
113	1	49	5.7	15	8
108	32	27	7.1	13	24
103	27	33	6.7	9	25
98	58	47	5.9	10	49
93	62	15	7.8	16	40
88	19	70	4.1	19	24
83	65	26	7.2	19	42
78	39	33	6.7	17	29
73	31	9	8.1	6	20
68	1	71	4.1	13	13
63	37	84	4.6	16	38
58	33	56	5.2	11	35
53	48	66	4.4	10	59
48	13	21	7.5	8	12
43	23	19	7.5	7	17
38	13	61	4.8	2	27
33	55	80	3.2	6	61
28	33	66	4.5	25	32
23	10	7	8.2	9	5
18	34	5	8.3	10	19
13	9	1	11.3	21	1
8	1	61	4.8	9	14
3	72	76	3.6	4	72
0	58	34	6.7	4	0

Réseau 311 sections 43.2 km Groupe 0 sections 0.0 km <aucun groupe en cours>

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# Best vs. best – David Kennedy

SGC4 - [Visionneuse]

Réseau Groupe Section Planification Personnalisation Fenêtres

ID Tronçon: 1618799 Rue: DAVID KENNEDY De: A Long: 299

ID: 1618799 Image 35 de 60 2018-08-02

Section	79	68	4.3	6	72
	ICS	ICR	IRI	Orn	ICG
Distance					
169	100	95	1.5	1	98
164	100	91	2.1	2	96
159	100	89	2.3	2	95
154	100	81	3.1	5	91
149	100	88	2.4	6	92
144	100	73	3.9	4	89
139	97	6	8.3	4	75
134	57	43	6.1	6	49
129	59	43	6.1	7	49
124	94	56	5.2	6	79
119	90	73	3.9	4	82
114	89	12	8.0	3	68
109	83	1	11.9	3	62
104	72	50	5.6	4	62
99	60	71	4.1	7	60
94	50	89	2.3	3	61
89	54	57	5.1	12	49
84	92	47	5.8	3	76
79	57	87	2.5	14	60
74	64	82	3.0	15	63
69	46	59	5.0	18	42
64	50	33	6.7	15	36
59	69	86	2.7	9	71
54	64	60	4.9	9	58
49	60	66	4.4	11	56
44	47	59	5.0	14	45
39	58	25	7.2	2	46
34	54	38	6.4	10	43
29	100	62	4.8	8	84
24	76	83	2.9	9	75
19	89	45	6.0	7	71
14	83	85	2.7	12	78
9	74	66	4.5	12	65
4	65	87	2.5	6	70
0	52	55	5.3	7	49

Réseau 311 sections 43.2 km Groupe 0 sections 0.0 km <aucun groupe en cours>

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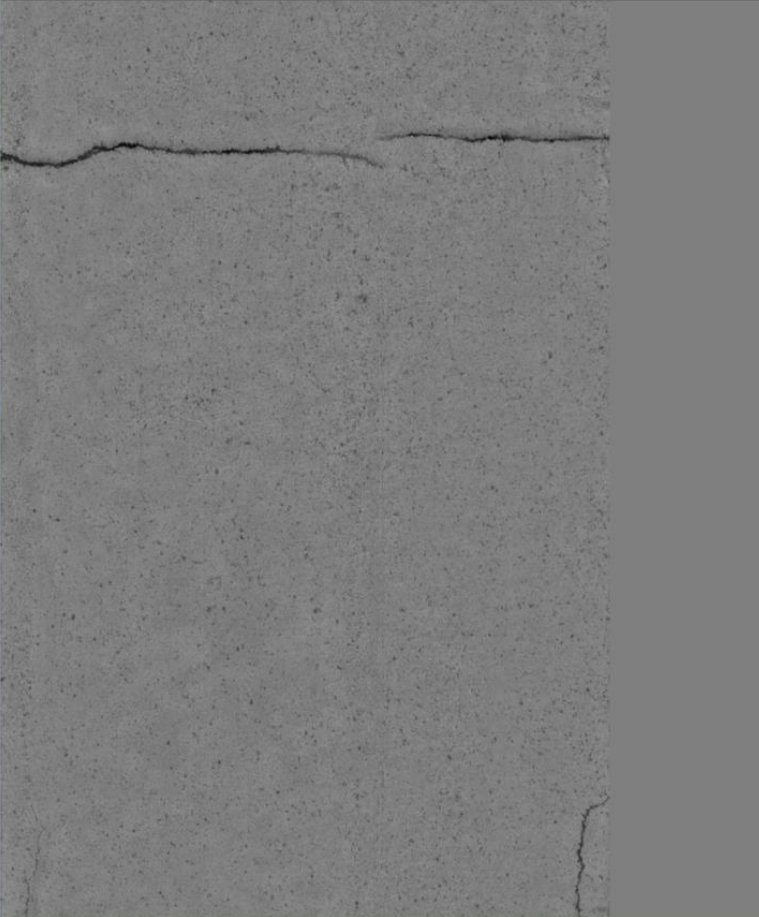

# Best vs. best – Victoria Place

SGC4 - [Visionneuse]

Réseau Groupe Section Planification Personnalisation Fenêtres

ID Tronçon: 1618886 Rue: VICTORIA De: A Long: 133

ID: 1618886 Image 2 de 27 2018-08-02

Section	30	42	6.2	12	27
	ICS	ICR	IRI	Orn	ICG
Distance					
128	38	0	0.0	9	34
123	1	0	0.0	18	1
118	1	0	0.0	23	1
113	1	49	5.7	15	8
108	32	27	7.1	13	24
103	27	33	6.7	9	25
98	58	47	5.9	10	49
93	62	15	7.8	16	40
88	19	70	4.1	19	24
83	65	26	7.2	19	42
78	39	33	6.7	17	29
73	31	9	8.1	6	20
68	1	71	4.1	13	13
63	37	64	4.6	16	38
58	33	56	5.2	11	35
53	48	66	4.4	10	50
48	13	21	7.5	8	12
43	23	19	7.5	7	17
38	13	61	4.8	2	27
33	55	80	3.2	6	61
28	33	66	4.5	25	32
23	10	7	8.2	9	8
18	34	5	8.3	10	19
13	9	1	11.3	21	1
8	1	61	4.8	9	14
3	72	76	3.6	4	72
0	58	34	6.7	4	0

Réseau 311 sections 43.2 km Groupe 0 sections 0.0 km <aucun groupe en cours>

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# Comparisons – a study in perception

- ▶ 2 – Lorraine vs. Dowker
- ▶ Same situation as David Kennedy vs. Victoria Place (the exception being that 1 complaint was received with regards to Dowker)
- ▶ Previous PW administration had Lorraine a priority over Dowker
- ▶ The ICG of Lorraine is 50 (passable)
- ▶ The ICG of Dowker is 24 (mauvaise état)



# Worst vs. worst - Lorraine

SGC4 - [Visionneuse]

Réseau Groupe Section Planification Personnalisation Fenêtres

ID Tronçon: 1618860 Rue: LORRAINE De: A - Long: 108

ID: 1618860 Image 2 de 23 2018-08-02

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Section	61	24	7.3	7	50
	ICS	ICR	IRI	Orn	ICG
Distance					
107	32	67	4.4	8	0
102	55	42	6.1	15	42
97	45	32	6.8	17	32
92	33	55	5.3	0	47
87	76	57	5.1	0	69
82	49	1	9.0	16	26
77	94	1	8.9	7	70
72	58	1	9.1	6	39
67	86	43	6.1	2	71
62	80	4	8.4	2	60
57	48	1	9.6	4	32
52	78	44	6.0	6	64
47	66	1	10.8	11	42
42	19	55	5.3	9	27
37	89	21	7.4	6	68
32	92	63	4.7	6	79
27	88	1	11.2	2	67
22	72	43	6.1	2	61
17	69	1	9.2	5	49
12	49	41	6.3	8	42
7	55	30	6.9	10	41
2	7	50	5.6	5	19
0	24	65	4.5	4	0

Réseau 311 sections 43.2 km Groupe 0 sections 0.0 km <aucun groupe en cours>

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# Worst vs. worst - Dowker


SGC4 - [Visionneuse]

Réseau Groupe Section Planification Personnalisation Fenêtres

ID Tronçon: 1618956 Rue: DOWKER De: - A: - Long: 157

ID: 1618956 Image 6 de 32 2018-08-02





Section	24	33	6.7	8	24
	ICS	ICR	IRI	Orn	ICG
Distance					
152	47	0	0.0	5	45
147	26	0	0.0	5	24
142	4	41	6.2	7	12
137	4	9	8.1	5	4
132	4	29	7.0	3	11
127	10	77	3.5	4	26
122	1	29	7.0	4	8
117	11	56	5.2	8	21
112	35	70	4.1	9	43
107	28	55	5.3	9	33
102	26	76	3.6	10	36
97	38	78	3.4	10	46
92	7	69	4.2	5	22
87	61	1	10.9	3	42
82	23	89	2.3	5	39
77	38	74	3.7	2	45
72	19	65	4.5	4	31
67	34	1	10.7	5	21
62	42	1	15.3	5	27
57	25	13	7.9	8	16
52	15	1	10.4	11	4
47	16	7	8.2	8	9
42	10	29	7.0	11	11
37	1	60	4.9	14	11
32	38	44	6.0	13	34
27	44	32	6.8	12	33
22	1	29	7.0	22	1
17	24	30	7.0	17	18
12	7	1	9.4	11	1
7	52	33	6.7	9	41
2	50	1	8.5	10	30
0	1	35	6.6	5	0

Réseau 311 sections 43.2 km Groupe 0 sections 0.0 km <aucun groupe en cours>

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# Best vs. best - Lorraine

SGC4 - [Visionneuse]

Réseau Groupe Section Planification Personnalisation Fenêtres

ID Troncon: 1618860 Rue: LORRAINE De: - A: - Long.: 108

ID: 1618860 Image 8 de 23 2018-08-02

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Section	61	24	7.3	7	50
	ICS	ICR	IRI	Orn	ICG
Distance					
107	32	67	4.4	8	0
102	55	42	6.1	15	42
97	45	32	6.8	17	32
92	33	55	5.3	0	41
87	76	57	5.1	0	69
82	49	1	9.0	16	26
77	94	1	8.9	7	70
72	58	1	9.1	6	39
67	86	43	6.1	2	71
62	80	4	8.4	2	60
57	48	1	9.6	4	32
52	78	44	6.0	6	64
47	66	1	10.8	11	42
42	19	55	5.3	9	27
37	89	21	7.4	6	68
32	92	63	4.7	6	79
27	88	1	11.2	2	67
22	72	43	6.1	2	61
17	69	1	9.2	5	49
12	49	41	6.3	8	42
7	55	30	6.9	10	41
2	7	50	5.6	5	39
0	24	65	4.5	4	0

Réseau 311 sections 43.2 km Groupe 0 sections 0.0 km <aucun groupe en cours>

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# Best vs. best - Dowker

SGC4 - [Visionneuse]

Réseau Groupe Section Planification Personnalisation Fenêtres

ID Tronçon: 1618956 Rue: DOWKER De: - A: - Long.: 157

ID: 1618956 Image 17 de 32 2018-08-02

Section	24	33	6.7	8	24
	ICS	ICR	IRI	Orn	ICG
Distance					
152	47	0	0.0	5	45
147	26	0	0.0	5	24
142	4	41	6.2	7	12
137	4	9	8.1	5	4
132	4	29	7.0	3	11
127	10	77	3.5	4	26
122	1	29	7.0	4	9
117	11	56	5.2	8	21
112	35	70	4.1	9	43
107	28	55	5.3	9	33
102	26	76	3.6	10	36
97	38	78	3.4	10	46
92	7	69	4.2	5	22
87	61	1	10.9	3	42
82	23	89	2.3	5	39
77	38	74	3.7	2	49
72	19	65	4.5	4	31
67	34	1	10.7	5	21
62	42	1	15.3	5	27
57	25	13	7.9	8	18
52	15	1	10.4	11	4
47	16	7	8.2	8	9
42	10	29	7.0	11	11
37	1	60	4.9	14	11
32	38	44	6.0	13	34
27	44	32	6.8	12	33
22	1	29	7.0	22	1
17	24	30	7.0	17	18
12	7	1	9.4	11	1
7	52	33	6.7	9	41
2	50	1	8.5	10	30
0	1	35	6.6	5	0

Réseau 311 sections 43.2 km Groupe 0 sections 0.0 km <aucun groupe en cours>

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# Summary - recommendations

- ▶ Priorities suggested by SGC4 are backed by data.
- ▶ Further use and study of the software will help develop a 10 year plan
- ▶ Updating information into the software will continuously yield data to justify future interventions and limit perception-based complaints.