

IG parameters	
Calculation	21.04.2020 / m.zawisza
Last change	23.05.2025 / 48500
Calculation procedure	Polish guidelines (Parameterized calculation)
Clearance speed pedestrian	1.4 m/s
Clearance speed cyclist	4.2 m/s + 2.0 m/s > slowly <
Vehicle length for Tram	45 m
	No narrow turning radius!
Minimum intergreen	At least 0 seconds
Rounding threshold	0.01
	Entering time = 0 sec for pedestrians and bicyclists!

Clearing move- ment (C)	Lane code (C)	Entering move- ment (E)	Lane code (E)	Clearing dist (C) cd [m]	Veh- length [m]	V-max (C) [m/s]	tC [s]	Entering dist. (E) ed [m]	V-max (E) [m/s]	tE [s]	amber- time [s]	Plus/ Minus time [s]	Intergreen without addition, reduction [s] necessary	Required inter- green [s]	Result. inter- green [s]
1K1	T 1	24S3	R 1	25,9	10,00	11,1	3,23	25,0	8,3	4,00	3		2,23	2,23	
1K1	T 1	24S3	R 1	27,1	10,00	11,1	3,34	24,4	8,3	3,93	3		2,41	2,41	3
1K1	T 2	24S3	R 1	25,6	10,00	11,1	3,21	26,5	8,3	4,18	3		2,03	2,03	
2KR1	T 1	24S3	R 1	25,0	10,00	4,2	8,33	22,4	8,3	3,69	3		7,65	7,65	
2KR1	T 1	24S3	R 1	25,1	10,00	4,2	8,36	21,2	8,3	3,54	3		7,81	7,81	8
8K6	L 1	24S3	R 1	56,3	10,00	9,7	6,82	27,5	8,3	4,30	3		5,52	5,52	
8K6	L 1	24S3	R 1	58,9	10,00	9,7	7,09	25,8	8,3	4,10	3		5,99	5,99	
8K6	L 1	24S3	R 1	60,3	10,00	9,7	7,23	24,7	8,3	3,97	3		6,27	6,27	7
15P4	C 1	24S3	R 1	7,7		1,4	5,50	36,5	8,3	5,38	0		0,12	0,12	1
15P4	C 1	24S3	R 1	7,7		1,4	5,50	39,1	8,3	5,69	0		-0,19	-0,19	
24S3	R 1	1K1	T 1	24,4	10,00	8,3	4,13	27,1	13,9	2,95	0		1,18	1,18	
24S3	R 1	1K1	T 1	25,0	10,00	8,3	4,20	25,9	13,9	2,87	0		1,34	1,34	
24S3	R 1	1K1	T 2	26,5	10,00	8,3	4,38	25,6	13,9	2,84	0		1,54	1,54	2
24S3	R 1	2KR1	T 1	21,2	10,00	8,3	3,75	25,1	4,2	6,98	0		-3,23	-3,23	
24S3	R 1	2KR1	T 1	22,4	10,00	8,3	3,89	25,0	4,2	6,95	0		-3,06	-3,06	0
24S3	R 1	8K6	L 1	24,7	10,00	8,3	4,17	60,3	13,9	5,34	0		-1,18	-1,18	
24S3	R 1	8K6	L 1	25,8	10,00	8,3	4,30	58,9	13,9	5,24	0		-0,95	-0,95	
24S3	R 1	8K6	L 1	27,5	10,00	8,3	4,50	56,3	13,9	5,06	0		-0,55	-0,55	0
24S3	R 1	15P4	A 1	40,6	10,00	8,3	6,07				0		6,07	6,07	
24S3	R 1	15P4	A 1	43,2	10,00	8,3	6,39				0		6,39	6,39	7

	TB/TE	First SigGr	CO	TB/TE	Second SG	Value
1	Begin	1K1	>=	Begin	16P5	-3
2	Begin	7K5	>=	Begin	13P2	-4
3	Begin	7K5	>=	Begin	15P4	-2
4	Begin	8K6	>=	Begin	13P2	-1
5	Begin	8K6	>=	Begin	15P4	-3
6	Begin	21O1	=	Begin	13P2	-1
7	End	21O1	=	End	13P2	+6
8	Begin	19S1	>=	Begin	8K6	+6

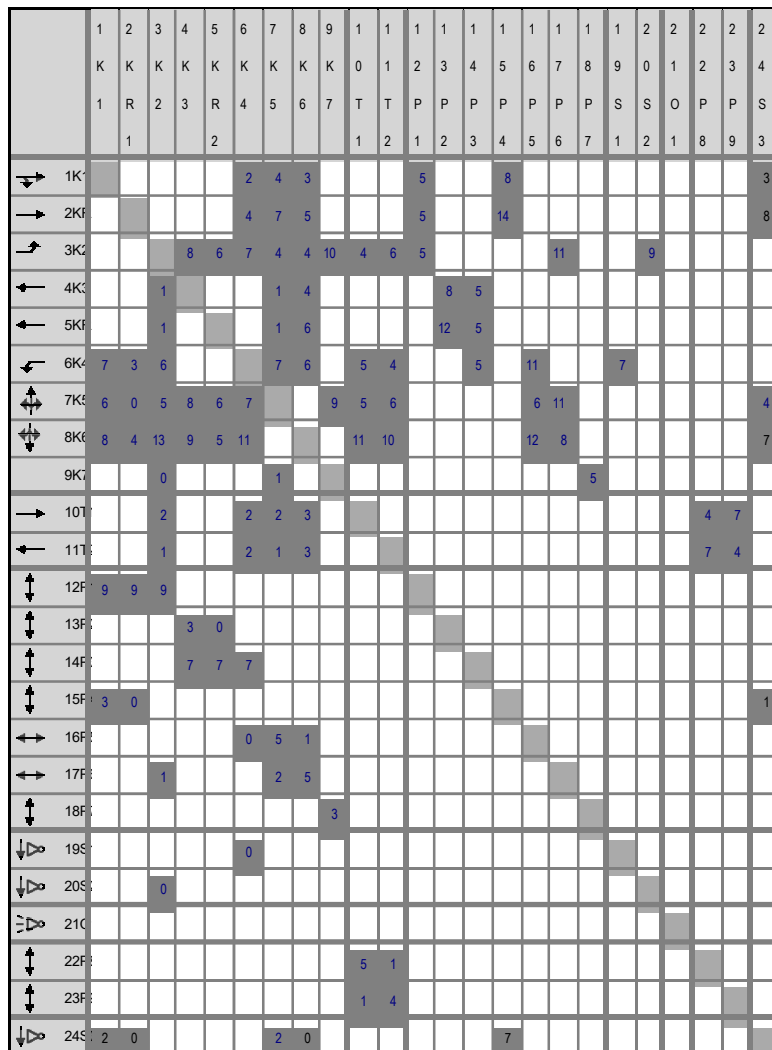
Horizontal: entering stream

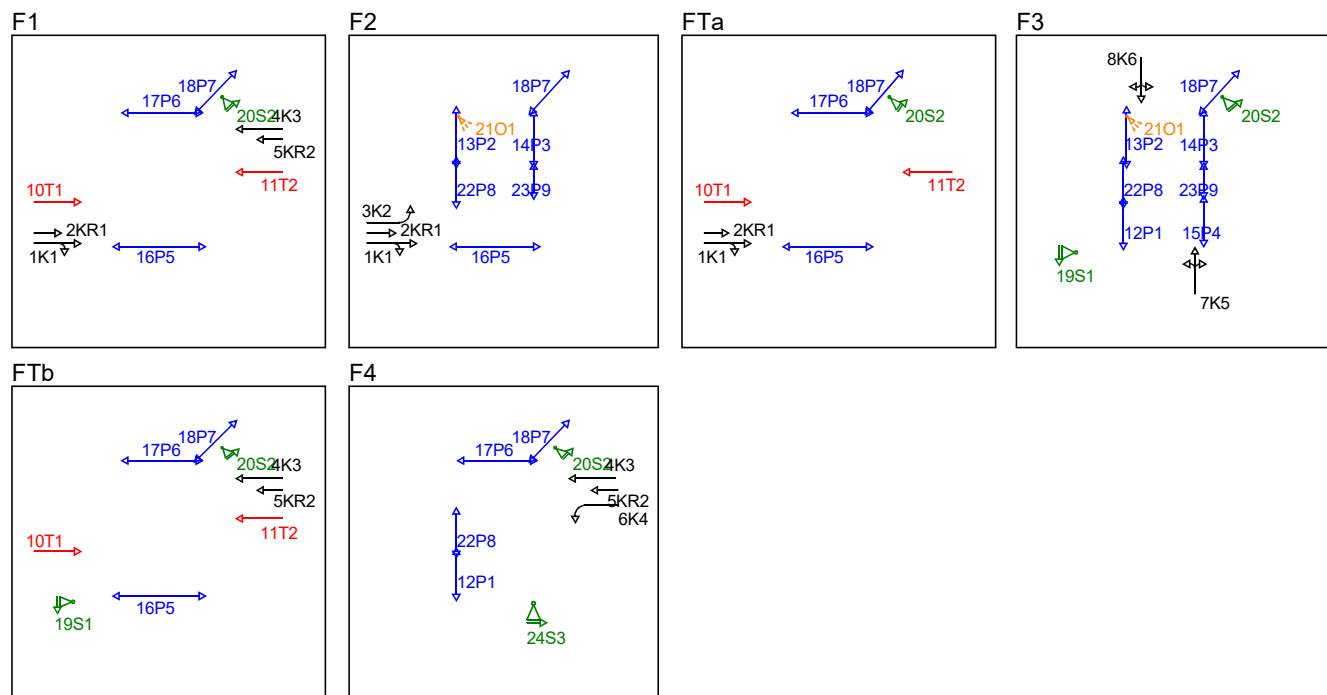
Vertical: clearing stream

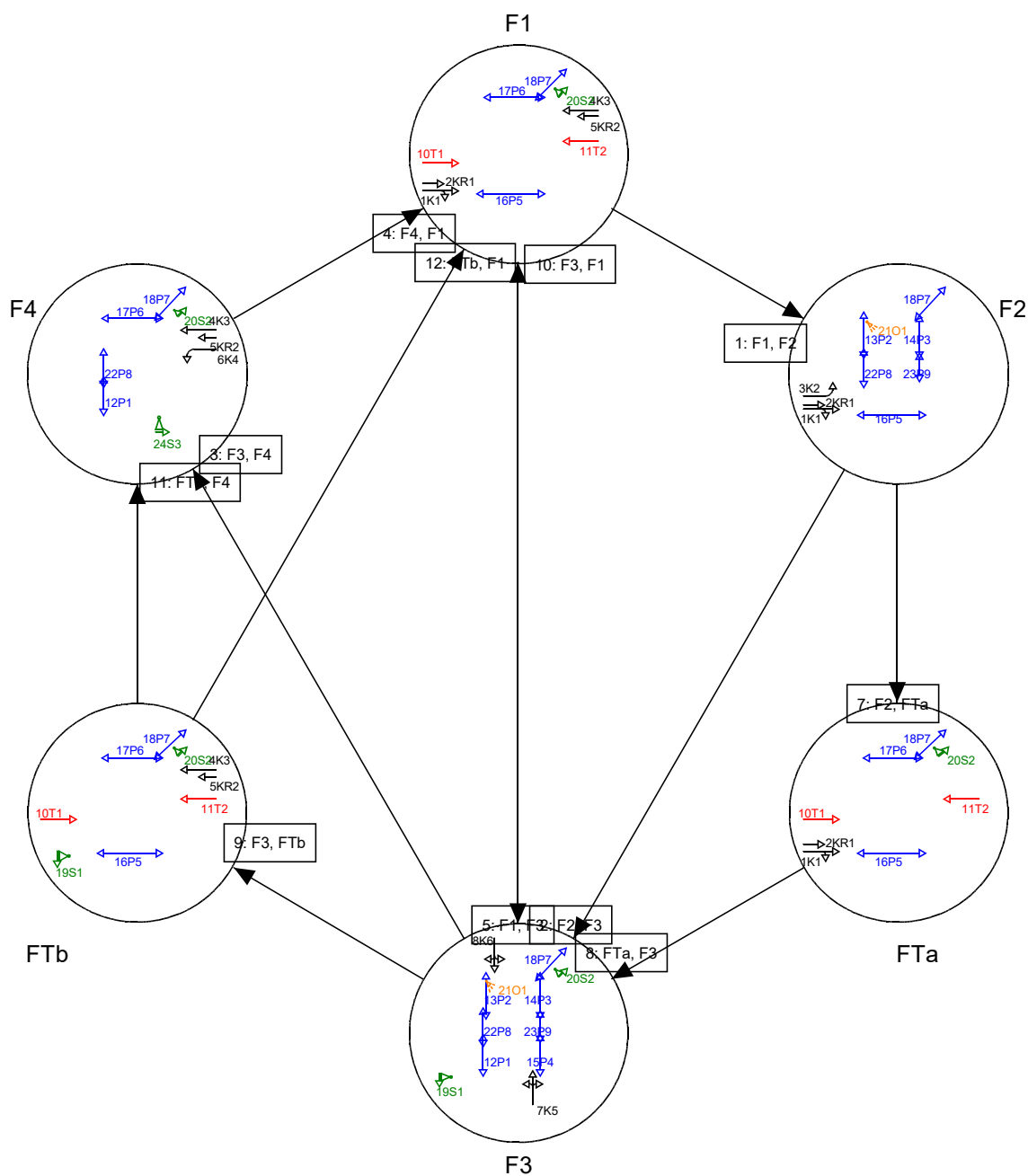
	1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
	K	K	K	K	K	K	K	K	K	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4
	1	R	2	3	R	4	5	6	7	T	T	P	P	P	P	P	P	S	S	O	P	P	S	
		1			2					1	2	1	2	3	4	5	6	7	1	2	1	8	9	3
→ 1K						XX	XX	XX				XX			XX									XX
→ 2K						XX	XX	XX				XX			XX									XX
↗ 3K				XX	XX	XX	XX	XX	XX	XX	XX	XX					XX			XX				
← 4K			XX				XX	XX					XX	XX										
← 5K			XX				XX	XX					XX	XX										
↖ 6K	XX	XX	XX				XX	XX		XX	XX			XX		XX			XX					
↕ 7K	XX	XX	XX	XX	XX	XX			XX	XX	XX					XX	XX							XX
↕ 8K	XX	XX	XX	XX	XX	XX				XX	XX					XX	XX							XX
9K			XX				XX											XX						
→ 10T			XX			XX	XX	XX													XX	XX		
← 11T			XX			XX	XX	XX													XX	XX		
↕ 12F	XX	XX	XX																					
↕ 13F				XX	XX																			
↕ 14F				XX	XX	XX																		
↕ 15F	XX	XX																						XX
↕ 16F						XX	XX	XX																
↕ 17F			XX				XX	XX																
↕ 18F									XX															
↕ 19S						XX																		
↕ 20S			XX																					
↕ 21C																								
↕ 22F										XX	XX													
↕ 23F										XX	XX													
↕ 24S	XX	XX					XX	XX							XX									

Horizontal: entering stream

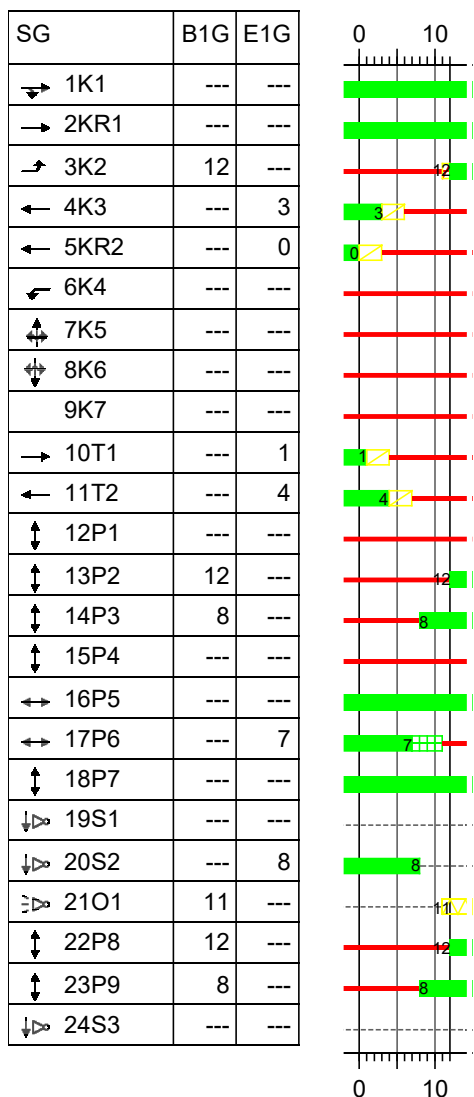
Vertical: clearing stream



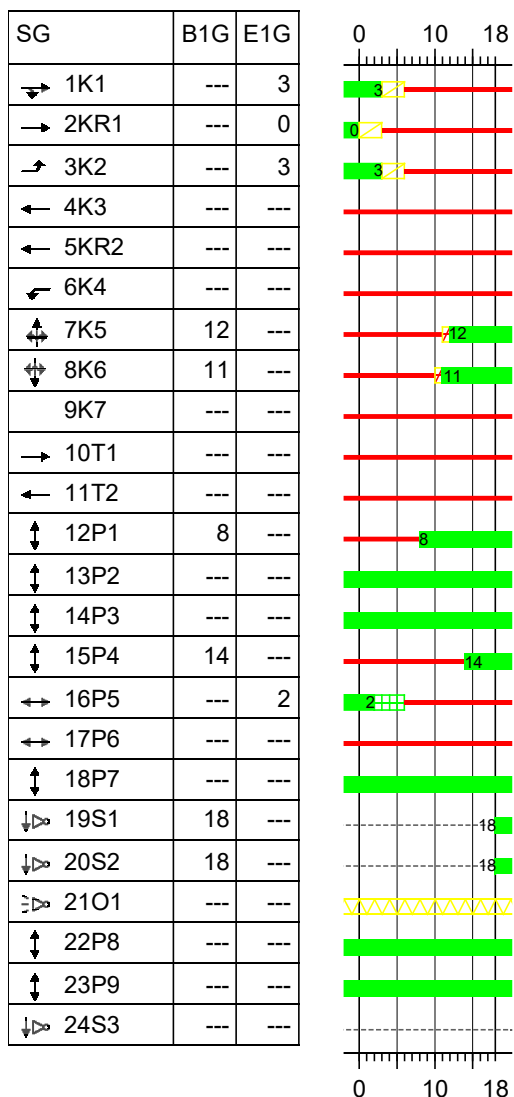




No. 1, Duration = 12 s  
from stage F1 to stage F2

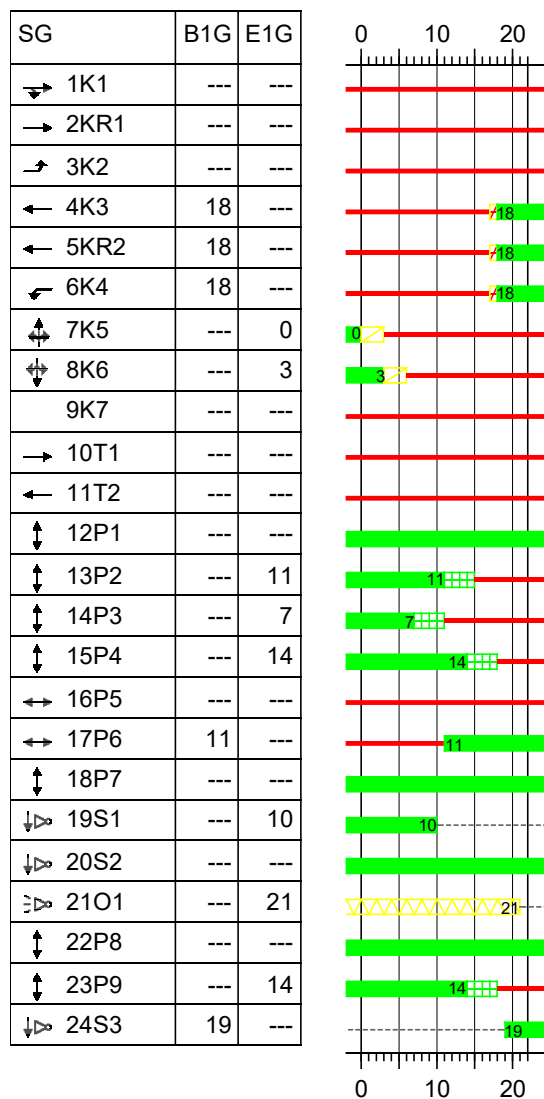


No. 2, Duration = 18 s  
from stage F2 to stage F3

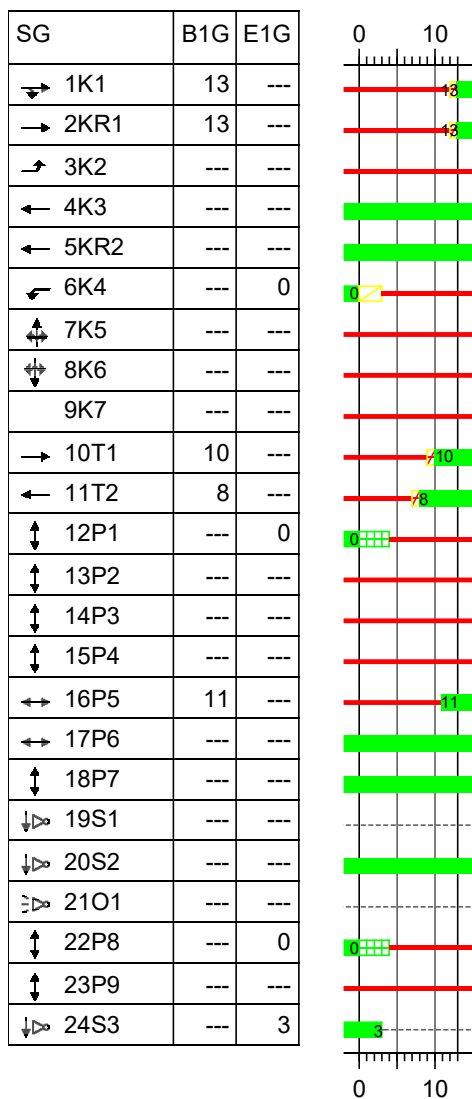




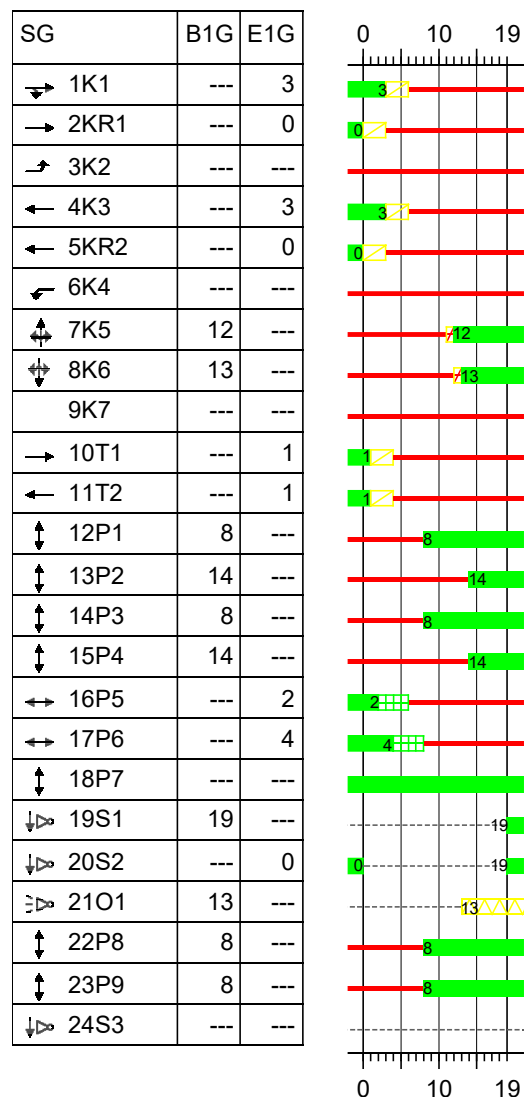
No. 3, Duration = 22 s  
from stage F3 to stage F4



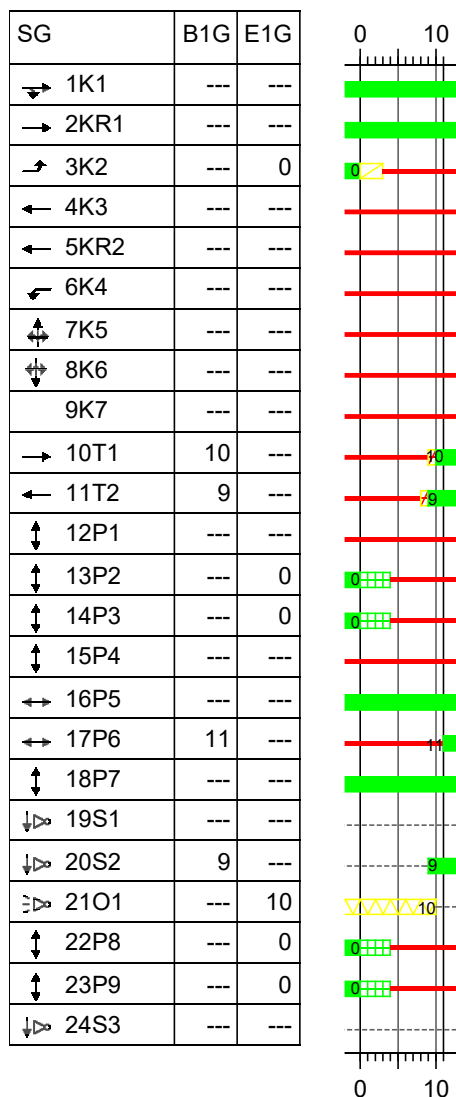
No. 4, Duration = 13 s  
from stage F4 to stage F1



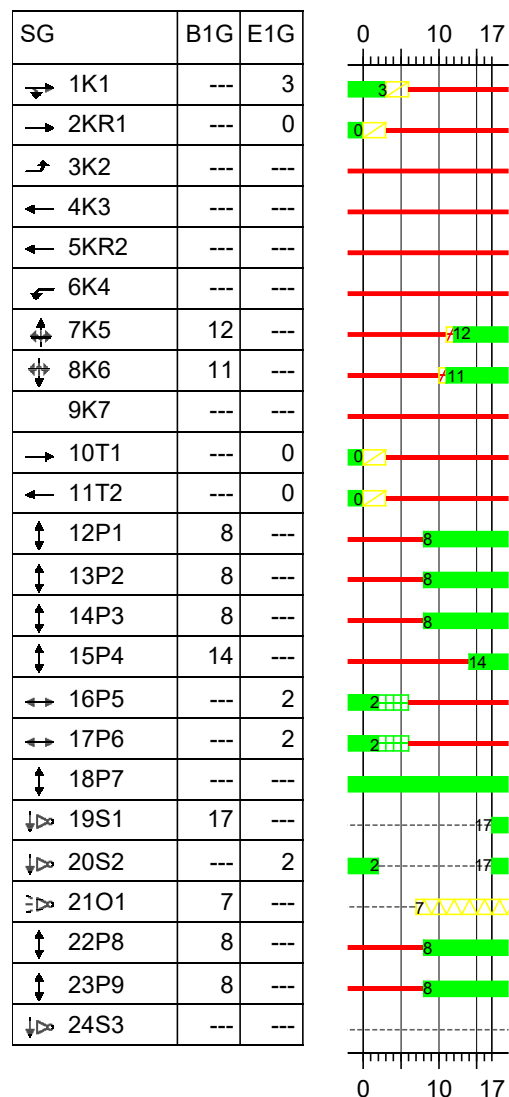
No. 5, Duration = 19 s  
from stage F1 to stage F3



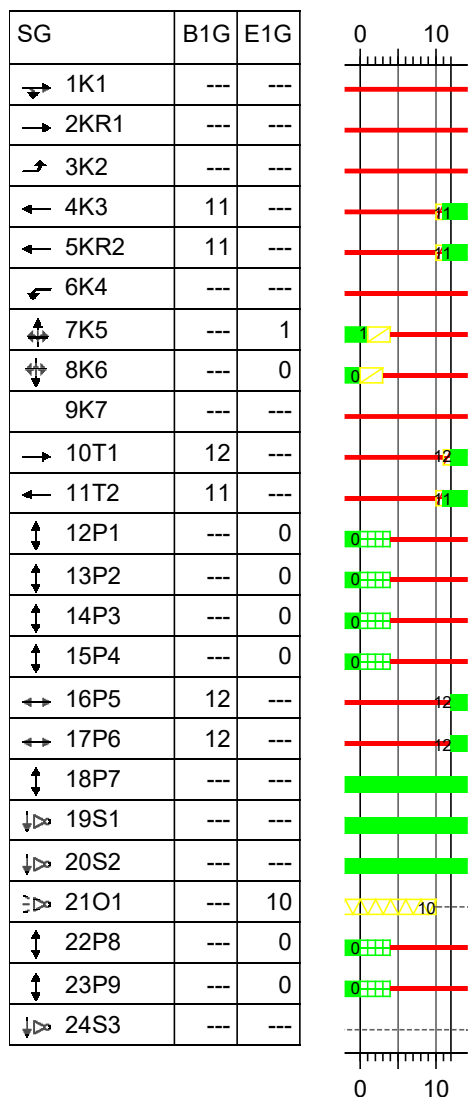
No. 7, Duration = 11 s  
from stage F2 to stage FTa



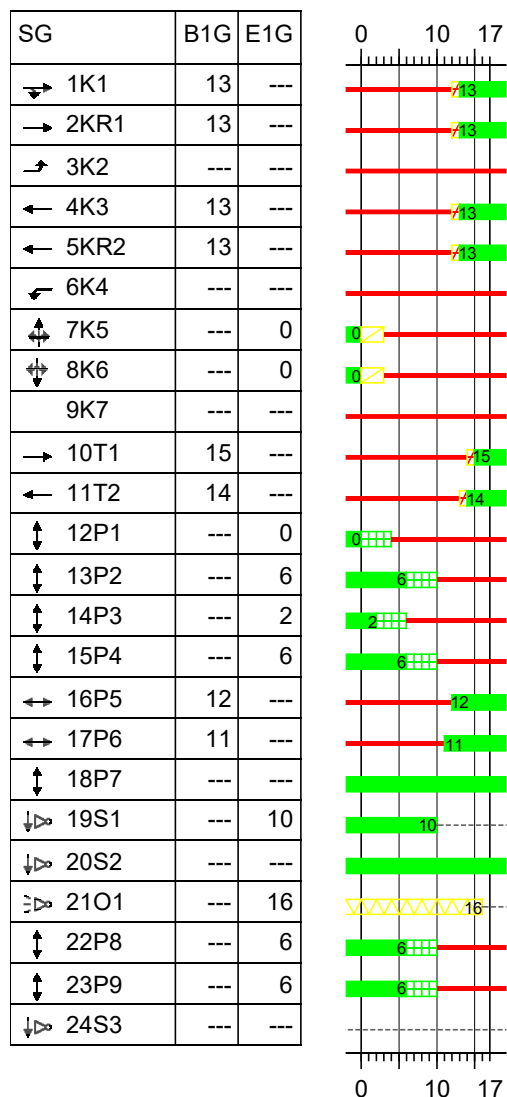
No. 8, Duration = 17 s  
from stage FTa to stage F3



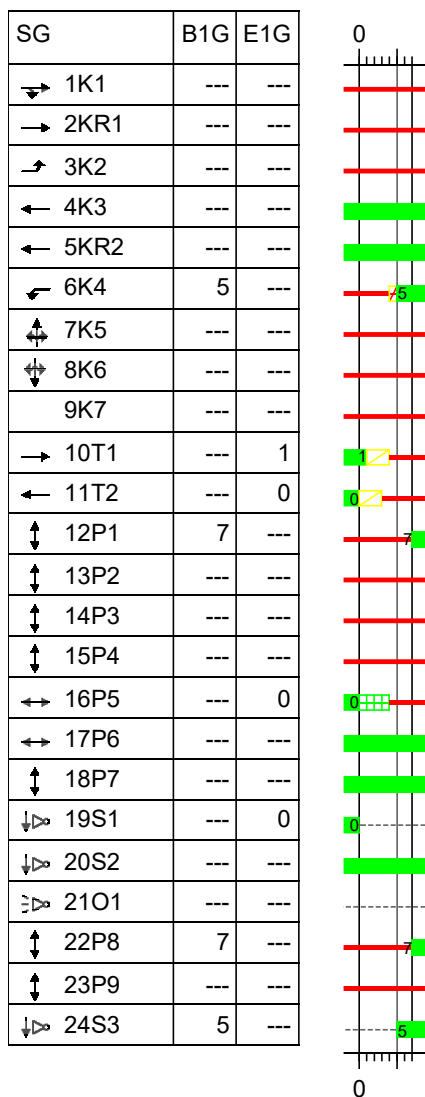
No. 9, Duration = 12 s  
from stage F3 to stage FTb



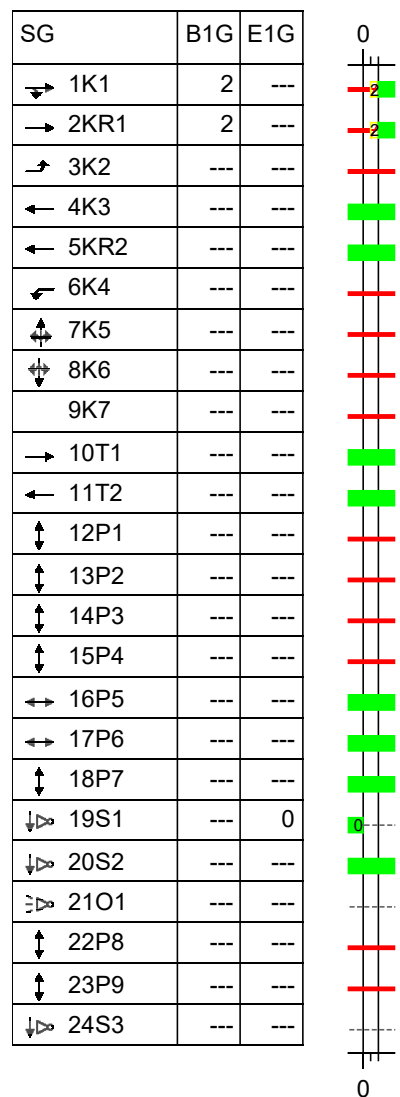
No. 10, Duration = 17 s  
from stage F3 to stage F1



No. 11, Duration = 7 s  
from stage FTb to stage F4



No. 12, Duration = 2 s  
from stage FTb to stage F1





Projektant:	mgr inż. Marcin Zawisza	Podpis:	
Projektant:	inż. Paweł Stefczyk	Podpis:	

14 / 20

Podwałe Przedmiejskie - Łąkowa

Numer skrzyżowania: 7161

Daily list: 1

	Mo	Tu	We	Th	Fr	Sat	SSa	Sun	Ho	SpD	Installation	Comment
valid	X	X	X	X	X	X		X			01.05.2020, 00:00	Roboczy

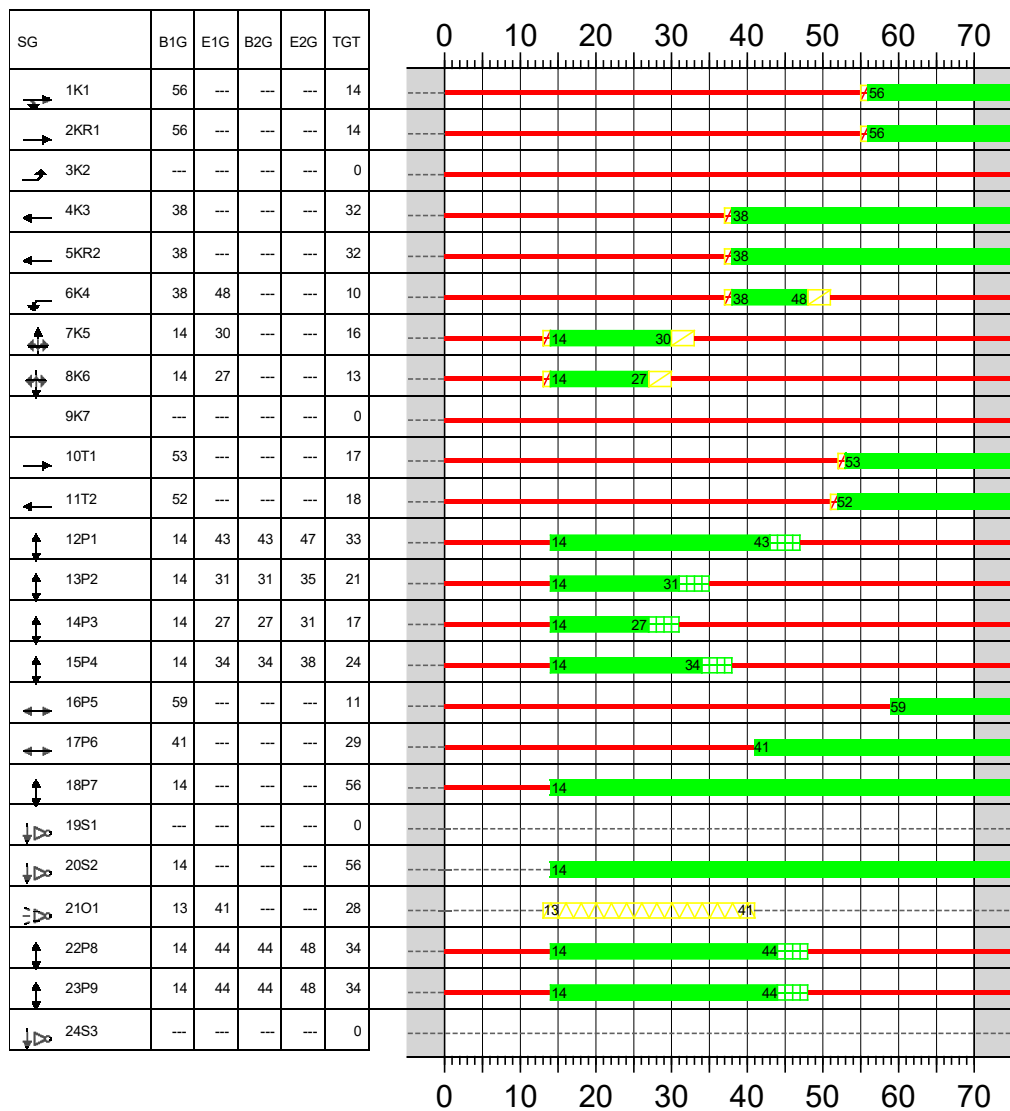
Signal program	from	until	VA	PT	IV	TK1	TK2	TK3	TK4	Comment
03: P3	00:00	14:00	On	On	On	Entering	OFF default	OFF default	OFF default	P3 120s
04: P4	14:00	17:00	On	On	On	Entering	OFF default	OFF default	OFF default	P4 120s
03: P3	17:00	24:00	On	On	On	Entering	OFF default	OFF default	OFF default	P3 120s

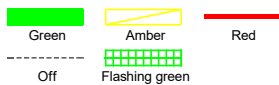
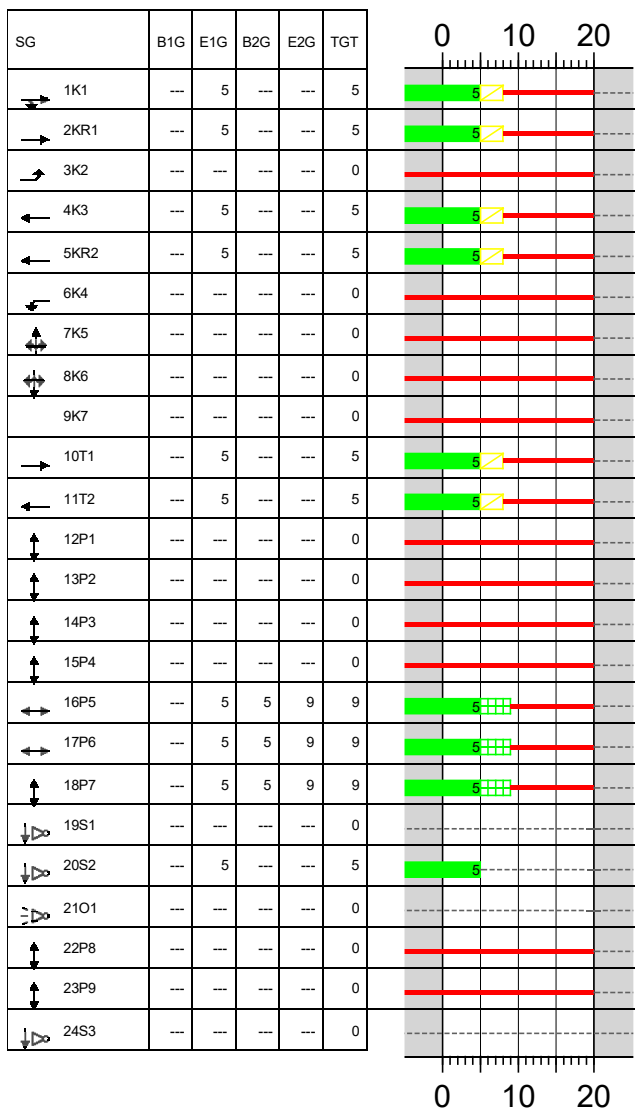
Tytuł:

Harmonogram pracy sygnalizacji

Data: 04.2025

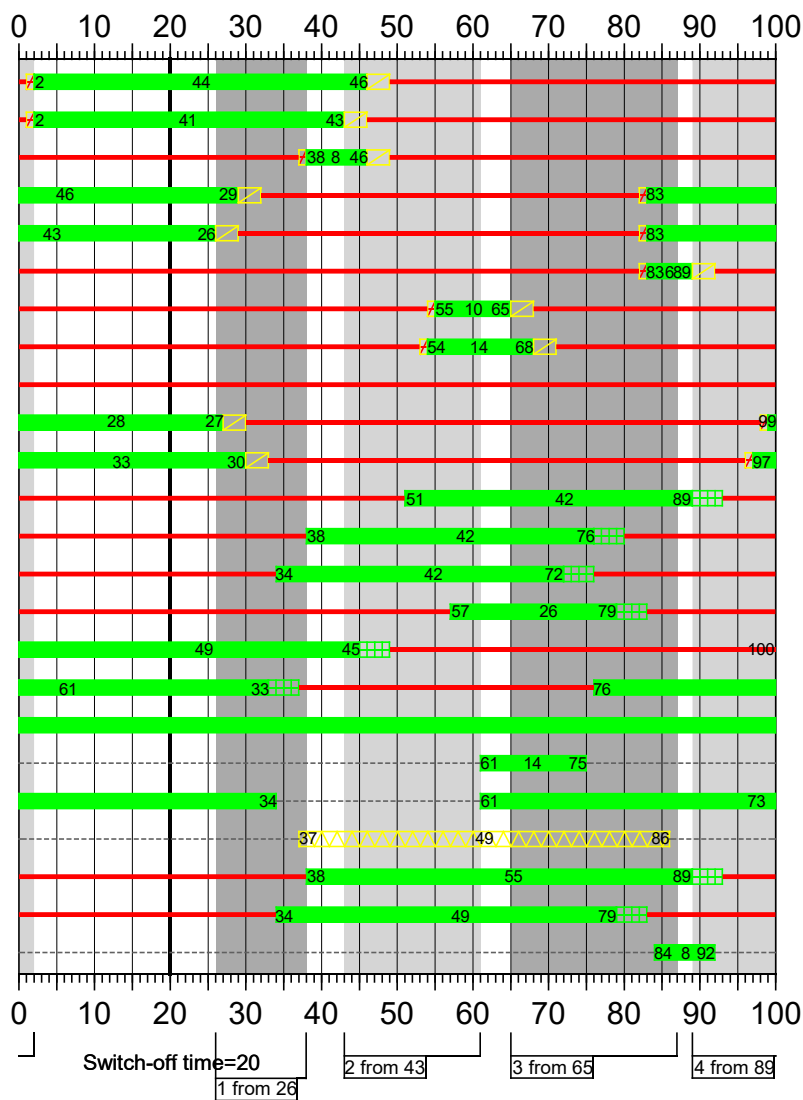






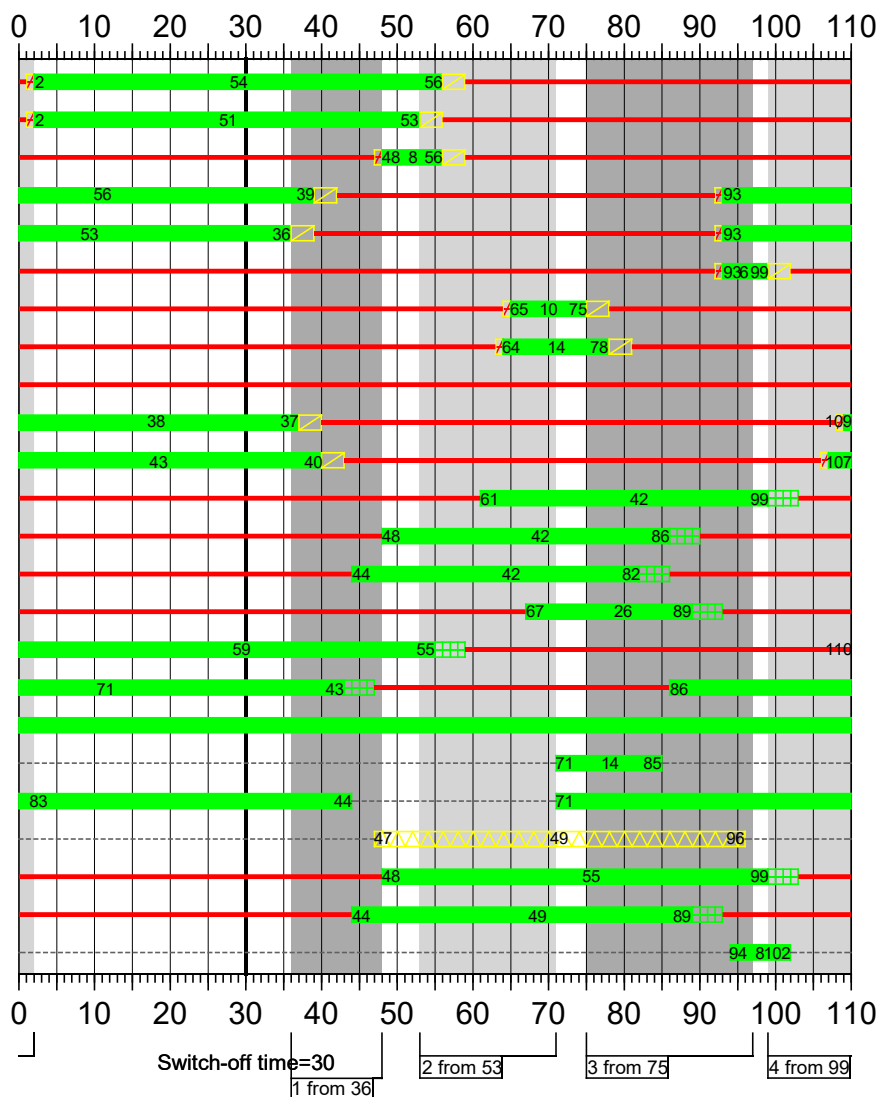


SG	ChNr	B1G	E1G	B2G	E2G	TGT
→ 1K1	1	2	46	---	---	44
→ 2KR1	2	2	43	---	---	41
↶ 3K2	3	38	46	---	---	8
← 4K3	4	83	29	---	---	46
← 5KR2	5	83	26	---	---	43
↶ 6K4	6	83	89	---	---	6
↕ 7K5	7	55	65	---	---	10
↕ 8K6	8	54	68	---	---	14
9K7	9	---	---	---	---	0
→ 10T1	10	99	27	---	---	28
← 11T2	11	97	30	---	---	33
↕ 12P1	12	51	89	89	93	42
↕ 13P2	13	38	76	76	80	42
↕ 14P3	14	34	72	72	76	42
↕ 15P4	15	57	79	79	83	26
↕ 16P5	16	100	45	45	49	49
↕ 17P6	17	76	33	33	37	61
↕ 18P7	18	---	---	---	---	100
↕ 19S1	19	61	75	---	---	14
↕ 20S2	20	61	34	---	---	73
↕ 21O1	21	37	86	---	---	49
↕ 22P8	22	38	89	89	93	55
↕ 23P9	23	34	79	79	83	49
↕ 24S3	24	84	92	---	---	8



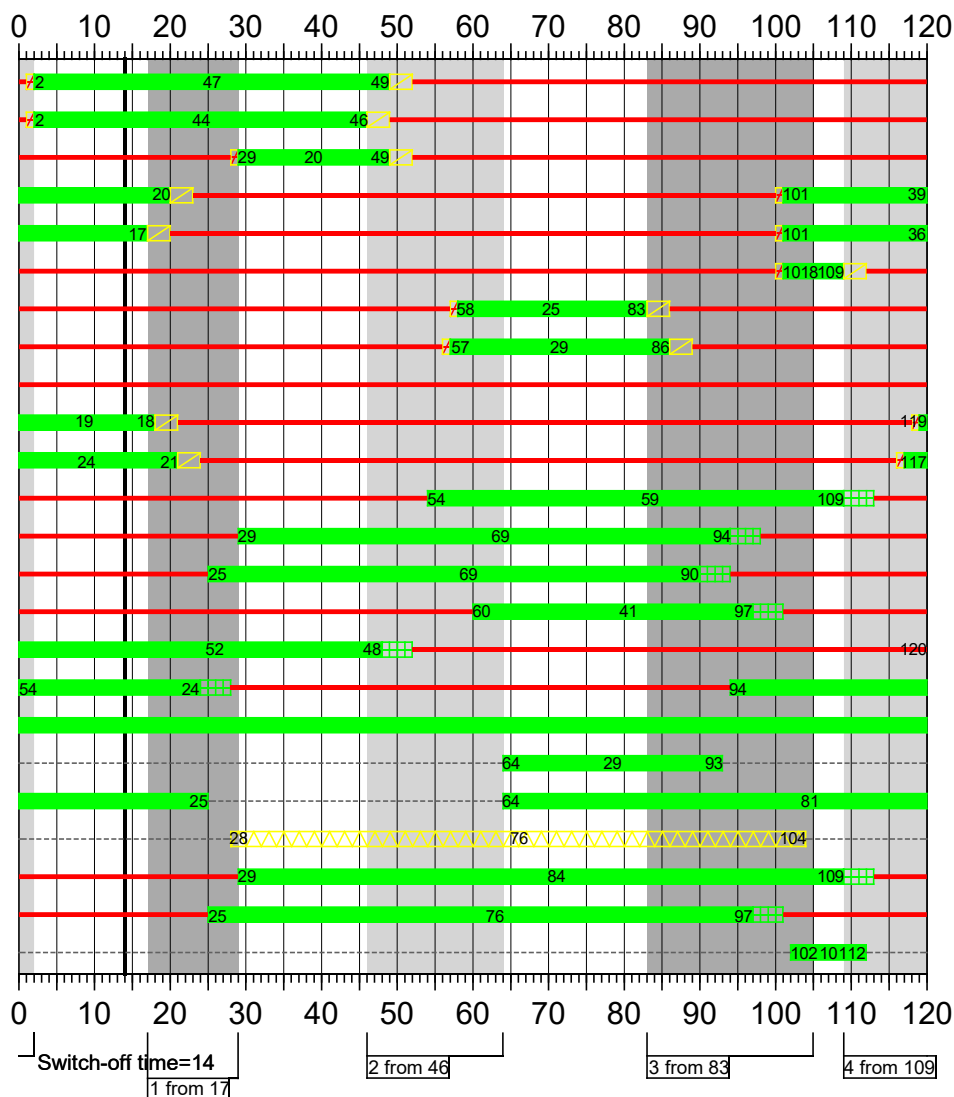
Switch time (instant to switch signal plans) =20

SG	ChNr	B1G	E1G	B2G	E2G	TGT
→ 1K1	1	2	56	---	---	54
→ 2KR1	2	2	53	---	---	51
↪ 3K2	3	48	56	---	---	8
← 4K3	4	93	39	---	---	56
← 5KR2	5	93	36	---	---	53
↶ 6K4	6	93	99	---	---	6
↕ 7K5	7	65	75	---	---	10
↕ 8K6	8	64	78	---	---	14
9K7	9	---	---	---	---	0
→ 10T1	10	109	37	---	---	38
← 11T2	11	107	40	---	---	43
↑ 12P1	12	61	99	99	103	42
↑ 13P2	13	48	86	86	90	42
↑ 14P3	14	44	82	82	86	42
↑ 15P4	15	67	89	89	93	26
↕ 16P5	16	110	55	55	59	59
↕ 17P6	17	86	43	43	47	71
↑ 18P7	18	---	---	---	---	110
↘ 19S1	19	71	85	---	---	14
↘ 20S2	20	71	44	---	---	83
↘ 21O1	21	47	96	---	---	49
↑ 22P8	22	48	99	99	103	55
↑ 23P9	23	44	89	89	93	49
↘ 24S3	24	94	102	---	---	8



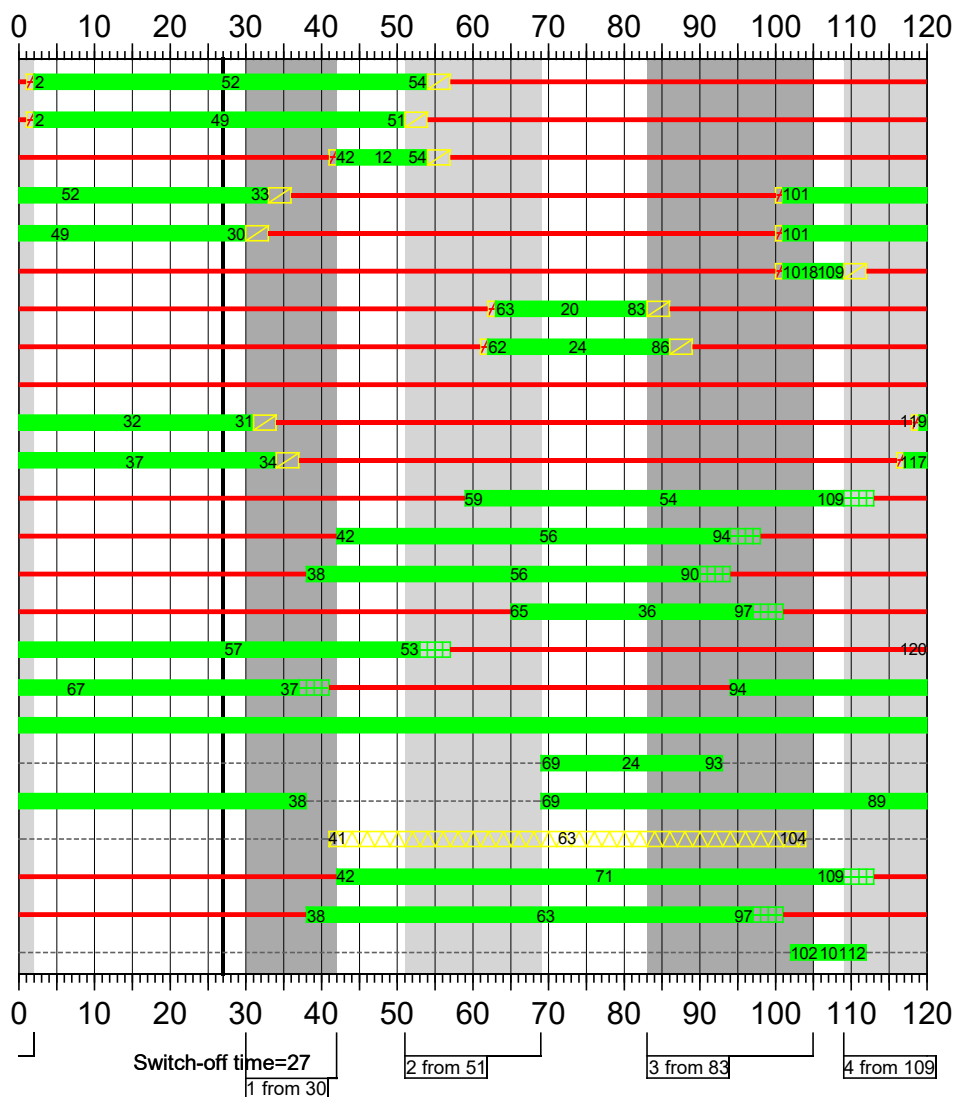
Switch time (instant to switch signal plans) =30

SG	ChNr	B1G	E1G	B2G	E2G	TGT
→ 1K1	1	2	49	---	---	47
→ 2KR1	2	2	46	---	---	44
↪ 3K2	3	29	49	---	---	20
← 4K3	4	101	20	---	---	39
← 5KR2	5	101	17	---	---	36
↶ 6K4	6	101	109	---	---	8
↕ 7K5	7	58	83	---	---	25
↕ 8K6	8	57	86	---	---	29
9K7	9	---	---	---	---	0
→ 10T1	10	119	18	---	---	19
← 11T2	11	117	21	---	---	24
↑ 12P1	12	54	109	109	113	59
↑ 13P2	13	29	94	94	98	69
↑ 14P3	14	25	90	90	94	69
↑ 15P4	15	60	97	97	101	41
↕ 16P5	16	120	48	48	52	52
↕ 17P6	17	94	24	24	28	54
↑ 18P7	18	---	---	---	---	120
↘ 19S1	19	64	93	---	---	29
↘ 20S2	20	64	25	---	---	81
↘ 21O1	21	28	104	---	---	76
↑ 22P8	22	29	109	109	113	84
↑ 23P9	23	25	97	97	101	76
↘ 24S3	24	102	112	---	---	10



Switch time (instant to switch signal plans) =14

SG	ChNr	B1G	E1G	B2G	E2G	TGT
→ 1K1	1	2	54	---	---	52
→ 2KR1	2	2	51	---	---	49
↶ 3K2	3	42	54	---	---	12
← 4K3	4	101	33	---	---	52
← 5KR2	5	101	30	---	---	49
↶ 6K4	6	101	109	---	---	8
↕ 7K5	7	63	83	---	---	20
↕ 8K6	8	62	86	---	---	24
9K7	9	---	---	---	---	0
→ 10T1	10	119	31	---	---	32
← 11T2	11	117	34	---	---	37
↕ 12P1	12	59	109	109	113	54
↕ 13P2	13	42	94	94	98	56
↕ 14P3	14	38	90	90	94	56
↕ 15P4	15	65	97	97	101	36
↕ 16P5	16	120	53	53	57	57
↕ 17P6	17	94	37	37	41	67
↕ 18P7	18	---	---	---	---	120
↕ 19S1	19	69	93	---	---	24
↕ 20S2	20	69	38	---	---	89
↕ 21O1	21	41	104	---	---	63
↕ 22P8	22	42	109	109	113	71
↕ 23P9	23	38	97	97	101	63
↕ 24S3	24	102	112	---	---	10



Switch time (instant to switch signal plans) = 27