

GREAT NORTHERN RAILWAY

CASCADE DIVISION.

TIME TABLE No. 81.

**TO TAKE EFFECT AT TWELVE-ONE (12:01) O'CLOCK A. M.
PACIFIC TIME.**

SUNDAY, FEBRUARY 16, 1913.

Superseding Time Table No. 80 and all Supplements thereto.

THIS TIME TABLE IS FOR THE USE OF EMPLOYES ONLY.

J. H. O'NEILL, Superintendent.

W. D. SCOTT, General Superintendent.

GEO. H. EMERSON, General Manager.

F. S. ELLIOTT, Asst. General Superintendent.

W. C. WATROUS, General Supt. of Transportation.



FIRST DISTRICT—LEAVENWORTH TO EVERETT JUNCTION.

THIRD CLASS.			SECOND CLASS.			FIRST CLASS.					Capacity of Side Tracks		Distance from Leavenworth	STATIONS.	Treatment Cells			
	715			411	401	285	27	43	1	3	Passing Tracks	Other Tracks						
Midn. Pkch. Leave Dail. Ex. Sunday			Last Pkch. Leave Dail.			Passing Dail.	Passing Dail.	Passing Dail.	Passing Dail.	Passing Dail.								
			1 00Pa		8 00Am			11 00Pa	3 40Pa	1 35Pa	2 30Am	60	492	LEAVENWORTH	CH			
			1 53		8 45			11 58	3 55	1 53	2 45	75		DRURY	DY			
			2 37		9 15			12 08h	4 10	2 05	2 59	135	22	10 5	CHIWAUKUM	CY		
			3 00		9 30			12 13	4 18	2 13	3 06	74	10	14 0	WINTON			
			3 20		9 45			12 22	4 26	2 24	3 14	71	4	17 3	NASON CREEK			
			3 35		10 00			12 33	4 33	2 30	3 21	115	5	20 5	MERRITT	CK		
			4 20		10 50			12 44	4 50	2 45	3 38	78		24 5	GANNOR	GR		
			5 05		11 20			12 54	5 05	3 00	3 52	132	5	28 0	BERNE	BR		
			6 15		12 20Pa			1 05	5 25	3 20	4 10	175	37	32 5	CASCADE TUNNEL	CN		
			6 35		12 45			1 21	5 40	3 35	4 25	85	263	35 9	TYE	WN		
			6 55		1 18			1 31	5 51	3 46	4 37	70	8	39 5	ALVIN	NY		
			7 10		1 40			1 40	5 59	3 55	4 46	75	10	42 2	COREA			
			7 40		2 05			1 50	6 10	4 05	4 57	75	22	45 2	SCENIC	MA		
			7 55		2 20			2 00	6 20	4 15	5 07	76	9	48 3	NIPPON	NI		
			8 10		2 35			2 10	6 30	4 25	5 17	75	9	51 5	TONGA	O		
		9 00Am	8 30		3 00		5 45Am	2 25	6 45	4 40	5 30							
			9 00		3 30			2 30	6 55	4 45	5 35	63	230	57 0	SKYKOMISH	KY		
		9 15	9 20		3 45		5 55	2 40	7 00	4 55	5 45	72	7	61 1	ORFOTO			
		9 40	9 51		4 00		6 08	2 50	7 11	5 06	5 57	80	80	66 1	HALFORD	EA		
		10 15	10 05		4 20		6 22	3 01	7 23	5 18	6 10	71	21	71 2	INDEX	NX		
		10 35	10 20		4 40		6 31	3 10	7 35	5 29	6 20	78	17	76 3	REITER			
		11 13	10 30		4 55		6 40	3 15	7 45	5 35	6 29	85	330	80 0	GOLD BAR	GB		
		11 30					6 47	3 21	7 58	5 43	6 34		45	82 4	STARTUP	ML		
		11 55			10 45		6 58	3 27	8 04	5 51	6 41	45	33	85 8	SULTAN	SU		
		12 55Pa	11 05		11 20		7 16	3 41	8 20	6 10	6 59	105	35	92 3	MONROE	RO		
		1 55	11 29		6 40		7 32	3 55	8 39	6 28	7 15	74	116	100 2	SNODGRASS	S		
		2 35	11 50		7 00		7 44	4 05	8 49	6 40	7 25	103	30	105 0	LOWELL	W		
							7 47	4 08	8 52	6 43	7 29	43	154	107 6	PACIFIC AVENUE	D		
							7 57	4 17	9 03	6 53	7 42		8	105 7	EVERETT			
							8 00Am	4 20Am	9 05Pa	6 55Pa	7 45Am			109 5	EVERETT JUNCTION	JN		
		8 10Pa	12 30Am		8 00Pa									75	637	109 3	DELTA	PG
		Arrive Daily Ex. Sunday	715		411	401	285	27	43	1	3							
		6 10 8 0	11 20 9 5		12 0 9 3		2 15 25	4 40 24 1	5 25 20 3	5 20 20 6	5 15 21							

ELECTRIC TRAIN STAFF BLOCK SYSTEM.

Time Table No. 81.
In Effect February 16, 1911.

STATIONS.	Treatment Cells
LEAVENWORTH	CH
DRURY	DY
CHIWAUKUM	CY
WINTON	
NASON CREEK	
MERRITT	CK
GANNOR	GR
BERNE	BR
CASCADE TUNNEL	CN
TYE	WN
ALVIN	NY
COREA	
SCENIC	MA
NIPPON	NI
TONGA	O
SKYKOMISH	KY
ORFOTO	
HALFORD	EA
INDEX	NX
REITER	
GOLD BAR	GB
STARTUP	ML
SULTAN	SU
MONROE	RO
SNODGRASS	S
LOWELL	W
PACIFIC AVENUE	D
EVERETT	
EVERETT JUNCTION	JN
DELTA	PG

Read carefully Rules covering Operation Electric Train Staff Block, Pages 13 and 14.

Time from District
Average Speed Per Hour

EAST BOUND.

FIRST DISTRICT—LEAVENWORTH TO EVERETT JUNCTION.

Time Table No. 81.

In Effect February 16, 1912.

STATIONS.	Direction from Delta	SIGNS. See Rule 7, page 15.	FIRST CLASS.								
			28	4	2	44	286				
			Express Arrive Daily	Passenger Arrive Daily	Passenger Arrive Daily	Passenger Arrive Daily	Passenger Arrive Daily				
LEAVENWORTH	109.5	R	DN	WCTYOP	6:00am	3:00pm	1:25am	4:20am			
10 DELRY	109.2		DN	P	5:42	2:47	1:07	4:02			
12 CHIAWAKUM	99.0		DN	W	P	5:31	2:37	12:57	3:49		
25 WINTON	96.5		DN	P	5:25	2:31	12:51	3:41			
45 NAHON CREEK	92.0		DN	P	5:18	2:24	12:41	3:30			
10 MERRITT	89.0		DN	W	Y	P	5:12	2:17	12:33	3:21	
14 GAYNOR	84.6		DN	P	5:02	2:08	12:19	3:08			
21 BERNE	81.5		DN	W	P	4:54	2:00	12:09am	2:58		
2 CASCADE TUNNEL	77.2	R	DN	W	T	P	4:42	1:50	11:57	2:45	
36 TYE	73.6		DN	WC	P	4:25	1:35	11:40	2:27		
16 ALVIN	70.0		DN	W	P	4:00	1:12	11:22	2:11		
27 COREA	67.3		DN	P	3:45	1:09	11:13	2:01			
30 SCENIC	64.3		DN	W	P	3:40	1:02	11:02	1:50		
31 NIPPON	61.2		DN	W	P	3:10	12:42	10:45	1:24		
35 TONGA	57.7		DN	P	2:55	12:28	10:33	1:22			
SKYKOMISH	52.5	R	DN	WC	Y	P	2:35	12:15	10:15	1:05	
ORFED	45.1				P	2:20	12:01pm	10:01	12:01	7:55	
30 HALFORD	43.4		D	W	P	2:10	11:50	9:51	12:40	7:40	
INDEX	45.3		DN	P	1:55	11:35	9:37	12:27	7:25		
HEITER	31.2			W	P	1:44	11:20	9:25	12:15	7:00	
17 GOLD BAR	28.5	R	DN	Y	P	1:37	11:12	9:18	12:08	6:50	
24 STARTUP	27.1			P	1:32	11:08	9:14	12:04am	6:43		
34 SULTAN	24.7		D	P	1:28	11:02	9:08	11:58	6:38		
7 MONROE	19.2		DN	W	Y	P	1:18	10:49	8:54	11:44	6:10
2 SNOWBUSH	9.2		DN	P	12:55	10:22	8:29	11:29	5:55		
2 LOWELL	3.5	R	DN	P	12:43	10:20	8:27	11:17	5:37		
16 PACIFIC AVENUE	1.9		DN	Y	P	12:40	10:15	8:24	11:14	5:34	
11 EVERETT	0.5		K		12:35	10:10	8:20	11:10	5:30		
EVERETT JUNCTION	0.0	R	DN	P	12:30am	10:05am	8:15pm	11:05pm	5:20pm		
Via N. P. Ry. DELTA		R	DN	WCTYOP							
					Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		
					28	4	2	44	286		
					5:30	5:00	5:10	5:15	2:30		
					20 A	21.9	21.2	21.0	15.9		

Time Over District
Average Speed Per Hour

Special Rules.

West bound trains are superior to east bound trains of the same class.
 No. 27 is superior to all other trains. Opposing first class trains will clear No. 27 five (5) minutes.
 Other opposing trains will clear No. 27 ten (10) minutes.
 All west bound trains must be clear at the time No. 27 is due to leave the next station in the rear where time is shown.
 Freight trains will use N. P. tracks between Lowell and Delta and will be governed by N. P. time table and rules between these points.
 All trains will reduce speed to eight miles per hour through Martin Creek Tunnel and over bridge at either end.
 Additional to other required tests of the air brakes, no train will leave Cascade Tunnel until the air brakes have been carefully tested, conductor will set the brakes and leave them set until trainmen examine each car, then release them, and trainmen will again examine and set the brakes and release before giving the signal to start the train. Conductors must inform engineers how many cars loaded and empty in the train and how many cars of "air" are working.
 All engines must be tested from Cascade Tunnel to Merritt, and from Chiawakum to Leavenworth, and from Cascade Tunnel to Skykomish.
 Trains are operated between a block post, 125 feet west of the east crossover switch Cascade Tunnel and the safety switch west of depot at Tye, by a train staff block system. No train or engine will be run in either direction between the limits mentioned unless train engine and the engine and helper engine each has in his possession a section of a staff which will be handed to them by operator and will be retained by them until entire train has cleared block, then sections of staff must be handed to operator. When no helper engine is used, or when any car behind helper, conductor or brakeman located on rear of train must be in possession of one-half of the staff.
 Only one train is permitted to enter or use the block at the same time.
 All east bound trains will approach the east end of the concrete shed at Tye under absolute control and will not pass the fouling point of the passing track unless signalled to do so by the Tunnel conductor.
 Bulletin boards are located at Leavenworth, Cascade Tunnel, Skykomish, Delta, Skamogah located 1200 feet east of which at Holmquist Spur half-mile east of Monroe, Berlin and Baring and B. B. & R. Spur two miles east of Index will be flag stop for Nos. 255 and 256.
 No. 43 stops at any station to let off passengers from east of Shelby.
 No. 44 stops at any station to pick up passengers for points south of Shelby.
 No. 2 will stop at Admin to let off passengers from points Everett and west.
 Yard limit boards placed each way from Skykomish, Cascade Tunnel and Leavenworth, and east from Pacific Avenue.
 Yard limits extend between Pacific Avenue and Northern Pacific R. R. connection at N. P. Freight Depot.

INITIAL STATIONS.
 Leavenworth for trains Nos. 3, 1, 43, 27, 401 and 411.
 Everett Jet. for trains Nos. 28, 4, 2, 44 and 256.
 Skykomish for trains Nos. 285 and 715.

TERMINAL STATIONS.
 Leavenworth for Nos. 28, 4, 2 and 44.
 Skykomish for train No. 286.
 Everett Jet. for trains 3, 1, 43, 27 and 255.
 Delta, 401, 411 and 715.

DERAIL SWITCHES.
 Derail switches must always be set for derail except when in actual use, whether there are any cars on the tracks or not.
 Cascade Tunnel east passing track lead, 30 feet from main line.
 Tye, west end Industry track.
 Tye Safety Switch, 70 feet west of station, on main line.
 Scenic Industry track.
 Grotto, 150 feet east of west head block Industry track.
 Halford passing track 150 feet east of west head block.
 Index Industry track 120 feet from west head block.
 Monroe Mill Spur, 200 feet from head block.
 Derail Brewery Spur, Pacific Avenue, 210 feet from head block.
 Frye-Brubbs Spur, 120 feet from Crossing Agnew Hardware Co. Spur.
 Power House Spur, 105 feet from head block.

LAP SIDINGS.
 Chiawakum and Merritt.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Nippon Lumber Co.'s Spur	At Nippon	West	.....	4
Skykomish Mill Co.'s Spur	0.3 Miles west of Skykomish	East	.....	30
Great Republic Mining Co., Berlin	1.5 Miles west of Skykomish	West	.....	14
Bella Spur, Miller River Co.	1.5 Miles west of Skykomish	West	.....	4
Grotto Lumber Co.	0.3 Miles east of Grotto	East	1200 feet	25
G. N. Shingle Co.'s Siding	3.5 Miles west of Grotto	Both ends	.....	24
Baring Cedar Co. Spur	Off of G. N. Siding	East	.....	18
Baring Granite Spur		West	450 feet	.....
B. B. & R. Spur	2.0 Miles east of Index	West	.....	5
Hebrook Spur	1.5 Miles east of Index	East	.....	2
Smith Lumber Co.	0.5 Miles east of Index	East	.....	12
Soderburg Spur	0.7 Miles west of Index	West	.....	10
Robinson's Spur	0.5 Miles west of Gold Bar	East	.....	26
Casby's Spur	0.1 Miles east of Sultan	East	.....	5
Owen's Spur	1.7 Miles east of Monroe	East	.....	3
Holmquist Spur	0.5 Miles east of Monroe	East	.....	4
Monroe Mill Spur	0.3 Miles east of Monroe	East	.....	15
Monroe Gravel Pit	0.0 Miles west of Monroe	West	.....	10
Woodruff	0.5 Miles west of Monroe	West	.....	25
Cascade Lumber Co. Spur	2.0 Miles west of Monroe	Both ends	.....	21
Cresote Spur	0.1 Miles east of Snohomish	East	.....	27
House Track	0.5 Miles east of Lowell	West	.....	25
State Mill Co.	0.0 Miles east of Everett	East	.....	25
		East	.....	12

EAST BOUND.

SECOND DISTRICT—EVERETT JUNCTION TO SEATTLE.

5

Time Table No. 81. In Effect February 15, 1913.		Distance from Seattle.	SIGNS. See Rule 7, page 15.	FIRST CLASS.								SECOND CLASS.			THIRD CLASS.			
				360	4	270	286	358	278	2	44	28	356	712		718		
				Passenger Arrive Daily	Express Arrive Daily	Passenger Arrive Daily	Fast Freight Arrive Daily		Passenger Arrive Daily	Fast Freight Arrive Daily								
DOUBLE TRACK.	EVERETT JUNCTION	32.7	R DN	P	9 25am	10 00am	1 15pm	5 20pm	5 40pm	6 50pm	8 15pm	11 05pm	12 30am	1 10am	11 50pm			1 30pm
	3 3 MUKILTEO	25.3		D	P	9 19	9 58	1 07	5 11	5 33	6 40	8 09	10 59	12 23	12 58	11 50		1 12
	4 1 MOHNER	24.8			P	9 10	9 51	12 59	5 01	5 26	6 31	8 09	10 59	12 16	12 48	11 35		12 35
	5 6 MEADOWDALE	21.5		D		9 08	9 46	12 54	4 55	5 21	6 24	7 57	10 47	12 11	12 40	11 26		12 20
	3 5 EDMONDS	17.9		D W	P	8 55	9 40	12 48	4 47	5 15	6 16	7 50	10 40	12 06am	12 32	11 16		12 01pm
	3 0 RICHMOND BEACH	11.9		D	P	8 44	9 34	12 41	4 38	5 09	6 09	7 45	10 35	11 59	12 24	11 00		11 05
	5 2 METUM	6.7		DN		8 32	9 25	12 31	4 28	5 00	6 57	7 34	10 25	11 50	12 11	10 45		10 26
	2 9 BALLARD	5.8		D		8 23	9 19	12 24	4 19	4 54	6 50	7 29	10 19	11 44	12 05	10 35		10 10
	1 1 INTERBAY	4.7		R DN WCTOPK		8 15	9 15	12 20	4 15	4 50	6 45	7 25	10 15	11 40	12 01am	10 30am		10 00am
	DOUBLE TRACK. VIA N. P. RY.	1 3 G. N. DOCK	3.4		DN	P	8 10	9 10	12 15	4 10	4 45	6 40	7 20	10 10	11 35	11 55		
1 4 SEATTLE		0		R DN I PK		8 00am	9 00am	12 05pm	4 00pm	4 35pm	6 30pm	7 10pm	10 00pm	11 25pm	11 45pm			
SEATTLE		184.1				7 30am				4 15pm		6 50pm		11 10pm	11 15pm			
40 TACOMA		142.4				8 05am				8 00pm		5 25pm		10 00pm	10 05pm			
130 PORTLAND	9				12 15am				10 00am				5 00pm					
					Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		Leave Daily							
					360	4	270	286	358	278	2	44	28	356	712		718	
					1 20	1 05	1 10	1 20	1 05	1 20	1 05	1 05	1 05	1 25	1 29		1 40	
					24.6	30.1	28.2	24.6	30.1	21.6	30.1	30.1	30.1	23.0	30.6		31	

Automatic Block Interlocking Signals and Semaphores

Everett Junction interlocking, westbound home signal (high line), is located 200 feet from westbound crossover switch, and has three arms; the top arm is for main line trains through crossover; the second arm fixed; bottom arm for diverging movements.

Westbound Home Signal, Coast Line, is located fifty-five feet from east end of eastbound crossover switch and has three arms; top arm is for main line; second arm fixed; bottom arm crossover movements.

Distant signals, westbound high line and Coast line, are located 3500 feet from home signal, and work from zero to 45.

First automatic signal westbound is 2500 feet west of Everett Junction. From first automatic signal to Metum, they are located about 7500 feet apart.

G. N. Dock to Seattle first automatic signal westbound is located 500 feet from G. N. Dock; second 3000 feet; third signal is distant signal for North Portal Interlocking Plant.

First automatic signal eastbound is located 3000 feet from eastbound home signal, North Portal; second 3000 feet from first one; next signal is Manual Controlled Block for G. N. Dock.

First automatic signal at Metum is located 3000 feet west of end of double track, and works from zero to 45. Signal at 45 shows clear track to second automatic signal located on double track. From Metum to Everett Junction, signals are about 7500 feet apart, to Home signal for interlocking plant at Everett Junction.

Eastbound home signal, Everett Junction Interlocking is located 200 feet from west end of eastbound crossover switch, and has two arms; top arm is for main line to St. Paul, lower arm for crossover up the Coast line.

Semaphores at Pacific Avenue and Metum for westbound trains, and at G. N. Dock and Everett Junction for eastbound trains, will be used for manual controlled block.

For Further Instructions and Diagrams see page 15.

THIRD DISTRICT—EVERETT JUNCTION TO BELLINGHAM.

SOUTH BOUND.

THIRD CLASS.				SECOND CLASS.				FIRST CLASS.						Capacity of Side Tracks			Time Table No. 81. In Effect February 16, 1913.		Tele. Calls				
717		713		711		401		279		355		273		359		277		357		Stations from Bellingham	Tele. Calls		
Mdn. Freight	Mdn. Freight	Fast Freight	Fast Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger				Passenger	
Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily								
		6.30am				5.35pm				5.10pm	6.06pm	2.45pm	11.40am	7.10am	3.00pm			40	110	0.0	BELLINGHAM	HM	
		7.00				6.00			5.20	6.15	7.11	2.55	11.52	7.20	3.15			40	109	2.9	SOUTH BELLINGHAM	FN	
		7.15				6.22			5.30	6.22	7.18	3.08	12.01pm	7.30	3.30			51	16	9.9	4.0	SOCKEYE	
		7.40				6.45			5.49	6.32	7.28	3.20	12.12	7.40	3.50			64	8	12.5	5.0	SABISH	
									5.48		6.34			7.48					8	13.2	6.0	BLANCHARD	
		8.40				7.09			5.58	6.39	7.31	3.31	12.18	7.50	4.05			92	16	16.6	7.0	BOW	BO
		9.05				7.25			6.10	6.46	7.38	3.40	12.25	7.58	4.14			6	21.2		8.0	BELLEVILLE	BV
		10.30	7.14			8.10			6.20pm	6.55	7.40	3.50	12.34	8.10	4.30			63	39	23.8	9.0	BURLINGTON	BL
		11.10				8.35			7.05	7.40	7.42	4.04	12.44	8.22	4.45			37	63	25.9	10.0	MT. VERNON	NR
		11.35				8.55				7.13		4.14	12.55	8.33	5.02			51	13	33.1	11.0	FIR	FR
												4.18		8.38					6	35.0	12.0	MILLTOWN	
		12.55pm				9.20				7.25		4.28	1.10	8.47	5.20			61	18	50.4	13.0	STANWOOD	B
		1.20				9.50				7.34		4.40	1.20	9.05	5.35			24	13	45.9	14.0	SILVANA	NA
		1.55				10.20				7.42		4.50	1.29	9.17	5.47			42	12	50.0	15.0	ENGLISH	
		2.50				10.50				7.52		5.05	1.40	9.33	6.05			50	13	55.0	16.0	MARYSVILLE	MS
		3.35pm	3.30pm			11.10pm	9.05am			7.58	8.12	1.45		9.41	6.15					55.7	17.0	DELTA WYE	
		3.40				2.10				8.01	8.15	1.49		9.45	6.20			41		59.7	18.0	LONG SIDING	
		3.50				2.20				8.15	8.28	2.00		10.02	6.37			110	143	61.3	19.0	EVERETT	
		4.00pm				2.30pm				8.20pm	8.35pm	2.02pm	10.09am	6.40am						64.1	20.0	EVERETT JUNCTION	JN
		Arrive Daily	Arrive Daily			Arrive Daily	Arrive Daily			Arrive Daily	Arrive Daily												
		7.17	7.13			7.11	4.01			2.79	3.55	2.73	3.59	2.77	3.57								
		9.25	9.00			5.35	2.25			1.10	2.15	2.50	2.22	2.55	2.10								
		10.5	6.6			11.6	0.5			20.4	25.5	22.3	27.4	22.9	17.3								

Special Rules.

South bound trains are superior to north bound trains of the same class.

INITIAL STATIONS.

Blaine for train No. 277.
 Bellingham for trains Nos. 279, 713 and 720.
 Burlington for train No. 280.
 Delta Wye, for trains Nos. 712, 714, 717, 401
 Everett Jet., for trains Nos. 270, 358, 360, 356, 275, 718, 712 and 401.
 Fraser River Jet., for trains Nos. 359, 355, 273, 357 and 398.
 New Westminster, for train No. 385.
 Vancouver, for trains Nos. 359, 355, 273, 357, 397, 711 and 719.

TERMINAL STATIONS.

Blaine for train No. 278.
 Bellingham, for trains Nos. 280, 714 and 719.
 Burlington, for train No. 276.
 Delta Wye, for trains Nos. 711, 713, 714.
 Everett Jet., for trains Nos. 359, 355, 273, 357 and 277.
 Fraser River Jet., for trains Nos. 385 and 397.
 New Westminster, for train No. 386.
 Vancouver, for trains Nos. 270, 358, 360, 356, 395, 712 and 720.

DERAIL SWITCHES.

Sockeye, east end siding.
 B. B. & E. Transfer Track east end.

INTERLOCKING SYSTEM.—Governing movement of trains N. P. crossing and Bridge 10 just north of Delta Wye.

All trains will reduce speed to 8 miles per hour passing through town limits of Marysville, Mount Vernon, Burlington and over Bond Street and Hewitt Ave., Everett.

Side clearance Tunnel 20, one-quarter mile south of Sockeye, not good. Clearance four feet, standard six feet.

Register for Delta Wye is located on ground floor interlocking plant.

Bulletin boards are located at Burlington and Bellingham.

Norman, one mile north of Silvana is flag stop for Nos. 277 and 278.

Steam whistle signals for tracks with switches controlled from Interlocking Towers.

Main Line—One Long.

Delta Yard from North—One Long, One Short.

Delta Yard from South—Two Long, One Short.

Delta Yard North—Two Long.

Delta Yard South—Three Long, One Short.

Semaphore located 1200 feet south of south switch South Bellingham.

Yard limit extends from yard limit board north of roundhouse Bellingham to yard limit board south of South Bellingham.

Yard limit boards placed each direction Burlington.

All trains will reduce speed to 8 miles per hour over all draw bridges.

Everett yard limits includes Delta yard and from North end of Draw Bridge 11 to yard limit board south of Everett Junction.

All south bound trains from Vancouver will be governed by a two arm home signal located 700 feet north of draw span. Top arm at 90 degrees up proceed to two arm home signal located 20 feet north of N. P. crossing, top arm at 90 degrees up proceed to Bayside, lower arm 90 degrees up proceed to Delta yard. A caution fixed signal is located 2500 feet north of two arm home signal.

Train movements from Bayside to Vancouver will be governed by top arm on two arm home signal located 90 feet south of wye switch and by two arm home signal located on the 3001 ft. south of draw span. A caution fixed signal is located 2000 feet south of wye switch.

Train movements from Delta to Vancouver will be governed by top arm on two arm home signal located 60 feet south of wye switch, and by two arm home signal located on trestle 500 feet south of draw span.

Trains between Delta and Bayside will be governed by bottom blade on two blade semaphore located 60 feet south of wye switch.

Interlocking system in use bridge 10, 11 and 12 between Delta and Marysville and at Skagit R. R. Crossing one mile south of Fir.

Interlocker at Drawbridge No. 36 one mile north of Mt. Vernon. Derails are located 500 ft. from end of draw span. Distant signals are located 2,000 ft. from home signals. Home semaphore, standard indications. Distant signal, fixed caution indications.

NORTH BOUND.

THIRD DISTRICT—EVERETT JUNCTION TO BELLINGHAM.

Time Table No. 81.
In Effect February 15, 1913.

STATIONS.	Distance from Everett Junction	SIGNS. <small>See Rule 7, page 14</small>	FIRST CLASS.						SECOND CLASS.		THIRD CLASS.	
			356	360	270	358	278	280	712		714	718
			Passenger Arrive Daily	Fast Freight Arrive Daily		Miles Freight Arrive Daily Ex. Sunday	Miles Freight Arrive Daily					
BELLINGHAM	64.1	R DN CWTK	4.20am	12.25pm	8.55pm	7.45pm	9.40pm	9.80am				
SOUTH BELLINGHAM	61.2	D OW	4.12	12.10	8.48	7.38	9.32	9.15	8.30am		8.30pm	
SOCKEYE	57.2		4.02	12.01pm	8.32	7.25	9.20	9.04	8.15		278 2.55	
SAMISH	51.6	W	3.57	11.49	8.27	7.15	9.10	8.51	8.00		2.25	
BLANCHARD	50.9			11.46			9.08	8.49	7.40		1.50	
BOW	47.5	D	3.38	11.40	8.18	7.09	9.02	8.40	7.25		1.10	
BELLEVILLE	42.9	D	3.28	11.31	8.04	7.00	8.58	8.27	7.10		268 12.25	
BURLINGTON	40.3	R DN COWYX	3.20	11.25	7.58	6.55	8.47	8.20am	7.00		12.00pm-360 10.30 713	
MT. VERNON	36.2	DN	3.08	11.10	7.45	6.45	8.35		8.00		10.00	
FIR	30.5	D	2.45	10.53	7.21	6.27	8.20		5.40		9.20	
MILLTOWN	29.1			10.46	7.26		8.14					
STANWOOD	23.7	DN	2.25	10.37	7.17	6.26	8.05		5.20		277 8.47	
SILVANA	18.2	D W	2.11	10.28	7.05	6.18	7.51		5.00		8.00	
ENGLISH	14.1		1.59	10.13	6.55	6.11	7.42		4.45		7.80	
MARYSVILLE	7.1	DN	1.42	9.59	6.40	6.01	7.25		4.05		6.45	
DELTA WYE	4.4	R WY	1.30	9.49	6.32	5.55	7.10		3.50am		357 6.15am 2.00pm	
LONG SIDING	3.4		1.27	9.45	6.29	5.52	7.07				359 1.49	
EVERETT	0.5		1.20	9.35	6.22	5.47	7.00				1.35	
EVERETT JUNCTION	0.0	R DN	1.10am	9.25am	6.15pm	5.40pm	6.50pm				1.30pm	
			Leave Daily		Leave Daily		Leave Daily Ex. Sunday					
			3.10	3.00	2.40	2.05	2.50		7.12		7.14	
			19.7	21.4	23.2	20.5	22.1		15.0		9.15 6.7	
											0.30 8.8	

Time Over District
Average Speed Per Hour

Business tracks not shown as stations on time table.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Chuckanut Quarry Spur	1.0 Miles north of Sockeye	North		38
Blanchard Spur	0.7 Miles north of Sockeye	North		3
Sound Shingle Co.'s Spur	0.5 Miles south of Samish	North		30
Everett Pulp and Paper Co., Spur	2.9 Miles north of Belleville	South		6
Skagit Crossing Tr. Track	1.7 Miles north of Mt. Vernon	South		5
Hawley Spur	0.9 Miles south of Fir	South		6
Morrison Mill Spur	2.1 Miles south of Fir	North		6
Ketchikan Spur	1.3 Miles south of Stanwood	South		6
Hal's Spur	2.5 Miles north of Stanwood	South		4
Florence	1.4 Miles south of Stanwood	South		2
Isabel's Spur	1.5 Miles south of Stanwood	North		4
Norman Spur	1.5 Miles north of Silvana	North		2
Burnitt Mill Co	1.1 Miles north of Silvana	South		2
Kennedy Spur	0.1 Miles north of English	South		2
	4.2 Miles north of Marysville	South		6

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Kruse Bros. Spur	2.5 Miles north of Marysville	North		2
Cox's Spur	1.4 Miles north of Marysville	North		4
Union Slough	1.5 Miles south of Marysville	South		6
Old Main Lane	1.5 Miles south of Marysville	South		14
Transfer Track	0.8 Miles north of Long Siding	North		7
Blackman Spur	0.4 Miles south of Long Siding	North		14
Wedauer & Landslown Spur	0.0 Miles south of Long Siding	South		20
Nell's Spur	1.0 Miles south of Long Siding	North		50
Woodhian Spur	1.1 Miles north of Everett	North		7
Los Dump Spur	1.0 Miles north of Everett	North		5
Clark Nickerson Mill	0.7 Miles north of Everett	North		31
Everett Milling Co	0.7 Miles north of Everett	North		26
Nickerson Machinery Co.	0.0 Miles north of Everett	North		21
Nail House Spur	0.8 Miles north of Everett Jct.	South		4
Weyerhaeuser Timber Co	0.2 Miles north of Everett Jct.	South		24
		North		38

THIRD CLASS.		SECOND CLASS.		FIRST CLASS.					Capacity of Side Tracks		Distance from Vancouver	Time Table No. 81. In Effect February 16, 1913	STATIONS.	Telegraph Call.
719	711	385	397	277	355	273	359	357	Passenger	Other				
Mde. Freight	Fast Freight	Mixed	Mixed	Passenger	Passenger	Passenger	Passenger	Passenger						
Leave Daily Ex. Sunday	Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily										
5 00am	10 40am		2 00pm		4 00pm	12 15pm	9 30am	12 15am	31	113	0 0	VANCOUVER	VN	
5 05	10 50		2 05		4 04	12 20	9 34	12 20			0 7	WYE		
5 20	11 12		2 10		4 09	12 27	9 41	12 26			1 0	STILL CREEK		
5 30	11 20		2 15		4 12	12 30	9 44	12 30	9	3 1		ARDLEY		
5 45	11 30		2 22		4 17	12 34	9 48	12 36	39		2 1	BURNABY		
											12 9	SAPPERTON WYE		
6 10	11 50		2 35		4 24	12 42	9 56	12 42	27	53	12 1	SAPPERTON		
6 15	11 57	1 00pm	2 40		4 28	12 47	10 00	12 55	17	17 5		NEW WESTMINSTER	MN	
6 20	12 02pm	1 10pm	2 45pm		4 33	12 54	10 05	1 00			14 2	FRASER RIVER JCT.		
6 40	12 15				4 42	1 01	10 14	1 10	54	1	19 1	TOWNSEND		
7 10	12 30				4 51	1 14	10 22	1 20	55	58	24 8	COLEBROOK	G	
7 25	12 40				4 57	1 21	10 29	1 28			10 25 1	CRESCENT		
8 00	1 10				5 07	1 32	10 40	1 40	70	22	33 2	WHITE ROCK	WR	
											30 2	INTERNATIONAL BOUND.		
8 15	1 25			6 15am	5 20	1 40	10 53	1 50	62	124	30 7	BLAINE	BN	
10 25	3 05			6 30	5 30	2 06	11 06	2 20	10	5	31 2	CUSHER	CU	
11 06	3 45			6 35		2 11		2 26			6 40 9	ENTERPRISE		
12 52pm	4 17			6 44	5 43	2 20	11 17	2 35	41	23	33 5	FERNDALE	FD	
				6 49		2 25		2 40			52 0	BRENNAN		
1 45pm	5 00pm			7 05am	6 00pm	2 40pm	11 35am	2 55am	40	110	38 8	BELLINGHAM	HM	
Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily										
719	711	385	397	277	355	273	359	357						
8 15 6 7	8 20 9 3	10 4	1 15 19	26 6	2 00 29 4	2 25 29 3	2 05 27 9	2 30 23 1						

Special Rules.

South bound trains are superior to north bound trains of the same class.

The normal position of switches at Colebrook Junction, Guichon Line Junction and Fraser River Junction will be for main line. Ferndale will be flag stop for 358 for passengers for Everett and south of Everett. Custer will be flag stop for 355 for passengers for south of Seattle. Semaphores for protection of draw on Fraser River bridge between Fraser River Junction and New Westminster are located on south and north ends of bridge.

All trains will come to full stop within 50 feet of home signal on either side of Fraser River Bridge and will not proceed until clear signal is displayed and will not exceed a speed of six miles per hour over this Bridge. All trains will reduce speed to 5 miles per hour over all other draw bridges.

All trains will reduce speed to 5 miles per hour through city limits Blaine.

No trains in either direction will cross International Boundary at Blaine and White Rock without permission of Customs Officers. Yard limit boards at Bellingham and Vancouver.

Yard limit board at Sapperton Sand Pit North of Wye, covers limits to Fraser River Bridge.

All trains to and from Sixth district will protect between New Westminster and Fraser River Junction.

Bulletin boards are located at Bellingham and Vancouver.

Trains 359, 270, 355 and 357 will register by card at Colebrook.

DERAIL SWITCHES. Ferndale, 200 feet from east head block passing track.

New Westminster Interlocking System.—Signal tower is located 3,094 feet north of north end of Fraser River bridge, opposite crossing of the C. P. Ry. This apparatus controls the crossing of the C. P. Ry., also switches leading to and from the Fraser River Bridge tracks and New Westminster. Distant Semaphores are located 1,200 feet south and north and Home Signals are 500 feet south and north of tower, respectively.

Interlocking plants are in use on bridges 69 and 70 between Crescent and Colebrook. Home signals and derails are located 600 feet north and south of both bridges. The caution fixed signals are located 3000 feet from home signals. All signals have standard indications.

Interlock system used on bridge 61, 1,000 feet south of Ferndale. Derails located 55 feet in advance of home signals. Standard indications.

Interlocking plant at Ardley, B. C., governing movement of G. N. Ry. trains and B. C. Electric Railway Company trains: Northbound home signal is located 553 feet from crossing and has two arms. Derrail is 55 feet ahead of signal. Northbound distant signal is located 2900 feet from home signal and is automatic. Southbound home signal is located 553 feet from crossing and has two arms. Derrail is 55 feet ahead of signal. Southbound distant signal is located 2900 feet from home signal and is automatic. Both home signals on B. C. Electric line are located 558 feet from crossing and have two arms, with derails 55 feet ahead of signals. Distant signal is located 2900 feet from home signals and the normal position is 45 degrees up. Distant signals work from 45 to 90 degrees from tower with line control and can only be cleared to the 90 degree position after home signal is cleared to 90 degrees. All signals are standard upper quadrant.

THIRD DISTRICT—VANCOUVER TO BELLINGHAM.

NORTH BOUND. 9

Time Table No. 81. In Effect Feb. 16, 1912.	STATIONS.	Telegraph Code.	Distance from Bellingham.	SIGNS. <small>See Rule 7, page 12.</small>	FIRST CLASS.					SECOND CLASS.			THIRD CLASS.	
					356	360	270	358	278	398	386	712	720	
					Passenger Arrive Daily	Mixed Arrive Daily Ex. Sunday	Mixed Arrive Daily Ex. Sunday	Fast Freight Arrive Daily	Midw. Freight Leave Daily Ex. Sunday					
	VANCOUVER	VN	55.5	R DN WC O K	7 30am	8 30am	6 30pm	10 00pm		11 25am		4 40pm	3 10pm	
	WYE		56.1	Y	7 24	8 25	6 28	9 53		11 20		4 35	3 00	
	STILL CREEK		56.2		7 18	8 19	6 17	9 47		11 12		4 09	2 45	
	ARDLEY		53.5		7 13	8 15	6 13	9 43		11 07		3 50	2 35	
	BURNABY		50.9		7 07	8 10	6 07	9 37		11 00		3 40	2 22	
	SAPPERTON WYE		45.9	W Y K										
	SAPPERTON		45.7		6 58	8 07	5 58	9 28		10 47		3 20	1 55	
	NEW WESTMINSTER	MN	17.0	R DN K	6 55	8 03	5 55	9 25		10 42	11 10am	3 05	1 25	
	FRASER RIVER JCT		14.6		6 49	8 07	5 48	9 18		10 35am	11 05am	3 00	1 15	
	TOWNSEND		39.4		6 40	8 05	5 40	9 10				2 45	1 01	
	COLEBROOK	Q	34.0	R DN W Y	6 25	8 12	5 31	9 00				2 20	12 30	
	CRESCENT		30.4		6 19	8 05	5 20	8 50				1 55	12 10pm	
	STATE ROCK	WR	25.6	DN	6 00	8 32	5 07	8 40				1 32	11 50	
	INTERNATIONAL BOUND		22.6										11 00	
	BLAINE	BN	22.1	R DN TW O	5 25	8 25	4 45	8 25	10 30pm			12 05pm	10 53	
	CUSTER	CU	14.6	D	5 07	8 08	4 30	8 13	10 15			10 05	9 30	
	ENTERPRISE		11.9		4 59	8 00	4 17	7 57	10 07					
	FERDALE	FD	9.0	D	4 54	8 02	4 17	7 52	10 02			9 40	8 40	
	BRENNAN		6.8		4 45	7 45	4 08	7 45	9 55					
	BELLINGHAM	HM	0.0	R DN CW T K	4 30am	7 30pm	4 00pm	7 50pm	9 45pm			9 00am	7 45am	
					Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily	Leave Daily Ex. Sunday					
					356	360	270	358	278	398	386	712	720	
Time Over District					3 00	3 00	2 30	2 10	1 45	50	05	2 40	2 20	
Average Speed Per Hour					19.4	19.6	22.6	27.2	30	17.3	6	7.7	5.01	

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	Length	Car Capacity
Maldouga-Shaw Spur	0.7 Miles north of Ardley	South	5	6
Wells Spur	0.5 Miles north of Burnaby	North	22	4
Mill No. 2 Spur	0.7 Miles south of Burnaby	South	8	8
Pifers Mill Spur	3.0 Miles north of Sapperton	South	150	8
Haight Spur	2.3 Miles north of Sapperton	South	2	2
Bradley and Taylor	1.5 Miles north of Sapperton	South	18	31
Sand Pit Spur	0.7 Miles north of Sapperton	South	630	13
Distillery Spur	9.0 Miles north of Sapperton	South	13	13
Mosher Lumber & Logging Spur	1.0 Miles south of Townsend	South	9	9
Blaine Spur	1.9 Miles south of Blaine	South	2	2
Blaine Shingle Co.'s Spur	2.0 Miles south of Blaine	South	2	2
Blaine Spur	1.9 Miles south of Blaine	South	2	2
Shelton Spur (off Blaine Spur)		South	51	6
City Dock Spur (off Blaine Spur)		South	11	5
Eric Mill Spur (off City Dock Spur)		South	5	4
Monarch Mill Spur (off City Dock Spur)		South	2	2
Barge Spur (off City Dock Spur)	0.0 Blaine	South	3	3
Melrose Spur	2.5 Miles north of Custer	South	2	2
McDonald Spur	1.2 Miles north of Custer	South	13	13
Enterprise Spur	0.7 Miles north of Enterprise	South	2	2
Sand Pit Spur	0.5 Miles south of Enterprise	South	2	2
Henry Spur	1.0 Miles south of Brennan	South	2	2
Marjette Spur	3.3 Miles north of Bellingham	South	2	2

10 WEST BOUND.

FOURTH DISTRICT—ANACORTES TO ROCKPORT.

EAST BOUND.

THIRD CLASS.		SECOND CLASS.	FIRST CLASS.				Capacity of Side Tracks		Time Table No. 81. In Effect February 16, 1913.	Stations.	Telegraph Code.	Distance from Anacortes.	SIGNS.	FIRST CLASS.					THIRD CLASS.	
724	726	400	284	292	290	280	Passenger	Freight						289	279	293	291	283	725	723
Midw. Frt.	Midw. Frt.	Mixed	Passenger	Passenger	Passenger	Passenger	Tramway	Other						Arrive Daily						
8 16am					4 10pm	6 00am	19		ROCKPORT	RK	54.7	R D Y W	2 10pm	9 10pm		5 00pm				
8 35					7 23 4 30	8 17	16	5.8	FABER		17.9		1 50	8 54		4 30				
7 06					4 44	6 28	83	9.1	CONCRETE	BA	41.6	D	1 37	8 48		3 45				
8 00					4 50	6 32	39	76	GRASSMERE		43.5	W	1 25	8 38		3 00				
8 25					5 08	6 47	41	13.5	BIRDSVIEW		38.2		1 10	8 20		2 30				
8 50					5 18	7 02	35	9	HAMILTON	H	33.1	D W	12 55	8 07		2 00				
9 25					5 32	7 13	25	23.9	LYMAN	MY	29.5		12 40	7 55		1 30				
9 50					5 48	7 27	21	29.2	COKEDEALE JUNCTION		24.5		12 22	7 40		12 45				
10 20	8 30am				6 08	7 42	42	63	SEDRO-WOOLLEY	WL	21.3	R D K	12 10pm	7 31		7 30am				
					6 15	7 48		34.7	STERLING		19.0		11 58	7 19		12 30				
10 45am	8 50 11 15 291	11 50am	7 16pm	8 35am	6 30pm	8 00am	63	225	BURLINGTON	RU	16.5	R DN CO WYX	11 50am	7 10pm	8 00am	11 15am				
	11 30	11 58	7 24	8 43			16	40.0	AVON		13.7		7 40	11 05	8 14	6 00				
	11 40	12 06pm	7 38	8 51			7	43.6	FREDONIA		11.1		7 41	10 58	8 07	5 45				
	11 55	12 12	7 40	9 00			17	44.1	WHITNEY		9.4		7 55	10 58	8 00	5 35				
	12 30pm	12 31	7 58	9 15			3	49.6	DRAW BRIDGE		7.4		7 21	10 37	8 48	5 15				
	12 30pm	12 45pm	8 10pm	9 25am			235	53.7	ANACORTES	AC		R D T W		7 10am	10 35am	8 55pm				
Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily						Leave Daily	Leave Daily	Leave Daily	Leave Daily				
724	726	400	284	292	290	280							289	279	293	291				
4 30 8 2	6 00 5 3	5 55 12 2	5 55 12 2	5 50 12 5	2 30 12 6	2 00 12 8							2 30 12 0	2 00 12 8	5 50 12 5	5 50 12 5				

Time Over District
Average Speed Per Hour

Business tracks not shown as stations on time table.

Special Rules.

East bound trains are superior to west bound trains of the same class.

No. 724 has right over No. 723, Rockport to Burlington.
Yard limit boards are located at Burlington and Anacortes.
All trains will reduce speed to 8 miles per hour over all draw bridges.
Bulletin boards are located at Anacortes, Burlington and Rockport.

INITIAL STATIONS.

Anacortes for trains Nos. 291, 293, 283 and 725.
Rockport for trains Nos. 280, 290 and 724.
Burlington for trains Nos. 292, 284, 400, 289, 279 and 723.
Sedro-Woolley for No. 726.

TERMINAL STATIONS.

Anacortes for trains Nos. 292, 284, 400 and 726.
Rockport for trains Nos. 289, 279 and 723.
Burlington for trains Nos. 280, 290, 293, 291, 283 and 724.
Sedro-Woolley for 725.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Sauk Spur	2.0 Miles west of Rockport	West		2
Towey Mill Co	0.3 Miles west of Faber	East		19
Van Horne's Spur	0.5 Miles west of Faber	East		16
Harper Lumber Co. Spur	0.8 Miles east of Faber	West		3
Washington Port Cement Co	0.7 Miles east of Concrete	East		30
Superior Portland Cement Co. Spur	0.7 Miles west of Concrete	West		28
Burpee Shingle Spur	0.4 Miles west of Grassmere	West		3
Anna Shingle Spur	2.0 Miles west of Grassmere	West		2
L. L. Spur	0.2 Miles west of Hamilton	West		3
Hop Hatch Spur	0.8 Miles east of Lyman	West		3
Shagin Mill Co. Spur	Lyman	West		22
Hitchcock-Kelly	0.1 Miles west of Lyman	West		3
Minkler's Mill	3.0 Miles east of Cokedale Jet.	Both Ends		7
Green Mill Spur	3.3 Miles east of Woolley	Both Ends		22
Sound Iron Spur	Woolley	West		7
Holtzook's Spur	0.4 Miles west of Woolley	West		8
Burlington Mill Spur	0.6 Miles west of Burlington	West		6
Hawkin's Spur	0.7 Miles east of Fredonia	East		6
Callan-Abbott Spur	Fredonia	West		6
Gravel Pit Spur	5.9 Miles east of Anacortes	West		9
Log Railway	1.5 Miles east of Anacortes	Both Ends		21
Fidalgo Island Shingle Co. Spur	4.5 Miles east of Anacortes	East		2
Fidalgo Mill Spur	2.3 Miles east of Anacortes	East		3

WEST BOUND.

FIFTH DISTRICT—SUMAS TO GUICHON.

EAST BOUND.

SECOND CLASS.				Capacity of Side Tracks	Distance from Sumas	Time Table No. 81. In Effect February 16, 1913.				Telegraph Calls	Distance from Quilchena	SIGNS.	SECOND CLASS.		
387	387	397	397			398	398	388							
Mixed	Mixed	Mixed	Mixed	Passing Track	Other Tracks	STATIONS.	Arrive Tue. Thur. Sat.	Leave Mon. Wed. Fri.	Arrive Daily Ex. Sunday	Leave Tue. Thur. Sat.	Leave Mon. Wed. Fri.	Leave Daily Ex. Sunday			
7 00am	5 30am					SUMAS, WASH.....						6 35pm			
						INTERNATIONAL BOUNDARY.....									
7 02	5 32			29	3	HUNTINGDON.....					W	6 40			
7 15	5 45			37	31	ABBOTSFORD.....				FS	R D W	6 20			
7 30	7 00				7	PINEGROVE.....						6 45			
7 55	7 55			62	25	ALDERGROVE.....						5 20			
8 10	8 10			26		OTTER.....						4 45			
8 35	8 35			61	15	LINCOLN.....					W	4 20			
9 00am	9 00am	4 30pm	8 45pm	64	38	CLOVERDALE.....				CL	R D Y	8 30am	9 00am	3 45pm	
		4 45	4 00	4	33.4	ALLUVIA.....						8 15	8 45		
		4 50	4 05	4	34.9	SOUTHPORT.....						8 10	8 40		
		4 55	4 10		35.9	COLEBROOK JCT.....					Y	8 00	8 30		
		5 10	4 25	28	38	COLEBROOK.....				G	R DN W	7 55	8 25		
		5 15	4 30		36.7	GUICHON LINE JCT.....					Y	7 45	8 15		
		5 40	4 55	9	42.7	INVERHOLM.....						7 25	7 55		
		5 50	5 05	2	43.1	CHALLUCHAN.....					W 1/2 Mile East	7 10	7 40		
		6 00pm	5 15pm	10	46.5	GUICHON.....					W	7 00am	7 30am		
387	387	397	397									398	398	388	
7 00	7 00	1 30	1 30									1 30	1 30	3 00	
11 7	11 7	11 4	11 4									11 4	11 4	9 4	
Time Over District Average Speed Per Hour															

Special Rules.
West bound trains are superior to east bound trains of the same class.
The normal position of switches at Colbrook Junction, Guichon Line Junction are for main line. All trains Fifth District will protect against all Third District trains between Colbrook Jct. and Guichon Line Jct.
INITIAL STATIONS.
Guichon for train No. 398. Sumas for train No. 387. Cloverdale for trains Nos. 388 and 397.
TERMINAL STATIONS.
Guichon for train No. 397.
Cloverdale for trains Nos. 387 and 398.
Sumas for train No. 388.
DERAIL SWITCHES.
Derail switches must always be set for derail except when in actual use whether there are cars on the tracks or not.
Abbotford east end of passing track.
INTERLOCKING governing B. C. E. Ry. crossing, Cloverdale, B. C. Distant signal on north side is located 2,500 feet from crossing and has one arm showing caution. Home signal is located 75 feet from crossing and has two arms. Lower arm one indication, upper arm governs train movements. Home signal on south side is located 15 feet from crossing and distant signal 1,500 feet from crossing. Derails are placed five feet inside each home signal. Normal position of signals will be clear for our line.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	CAR CAPACITY
Guichon Slip Spur	0.1 Miles east of Guichon	East	3
Goody Road Spur	2.9 Miles east of Guichon	West	1
Patterson's Spur	5.7 Miles east of Guichon	West	9
Smith Road Spur	5.8 Miles east of Guichon	West	2
Mathies Road Spur	5.8 Miles east of Guichon	West	3
Colbrook Road Spur	8.2 Miles west of Cloverdale	West	5
Gravel Pit Spur	3.3 Miles west of Cloverdale	West	9
Surry Spur	1.1 Miles west of Cloverdale	West	3
Ferridge Lbr. Co. Spur	1.4 Miles east of Lincoln	West	15
Lincoln Lbr. Co. Spur	1.0 Miles west of Otter	West	30
Clark's Spur	1.0 Miles west of Otter	East	2
Otter Shingle Co. Spur	at Otter	East	15
Aldergrove Lbr. Co. Spur	at Aldergrove	East	20
Fish Trap Pit	1.5 Miles west of Pinegrove	Both	40
Pinegrove Lbr. Co. Spur	0.8 Miles east of Lincoln	West	10

SOUTH BOUND.

SIXTH DISTRICT—FRASER RIVER JCT. TO CLOVERDALE.

NORTH BOUND.

SECOND CLASS.				Capacity of Side Tracks	Distance from Fraser River Jct.	Time Table No. 81. In Effect February 16, 1913.				Telegraph Calls	Distance from Hazelmere	SIGNS.	SECOND CLASS.			
387	397	397	385			398	398	386	384							
Mixed	Mixed	Mixed	Mixed	Use Capacity of Other Sides	Use Capacity of Passing Tracks	STATIONS.	Arrive Tue. Thur. Sat.	Leave Mon. Wed. Fri.	Arrive Daily Ex. Sunday	Leave Tue. Thur. Sat.	Leave Mon. Wed. Fri.	Leave Daily Ex. Sunday	Arrive Tue. Thur. Sat.			
2 47pm	2 47pm	1 10pm				FRASER RIVER JCT.....						10 55am	10 35am	11 05am		
		2 55	1 15			LIVERPOOL.....						10 30	10 30	10 55		
		3 20	2 00			BON ACCORD.....					W 2 Miles South					
		3 30	2 00	15	9.0	PORT KELLS.....						10 05	10 05	10 30		
8 40am	8 35	3 35pm	2 45pm	64	38	CLOVERDALE.....				CL	R D Y	9 45	9 45am	9 55am		
8 55am	4 00pm				8	HAZELMERE.....						9 05am		4 05pm		
387	397	397	385									398	398	386	384	
15	1 13	48	1 35									1 30	50	1 10	15	
30 0	15 3	18 5	11 4									15 3	19 0	15 0	20 0	
Time Over District Average Speed Per Hour																

Special Rules.
South bound trains are superior to north bound trains of the same class.
INITIAL STATIONS.
Fraser River Jct. for trains Nos. 385 and 397. Cloverdale for trains Nos. 386, 387 and 398.
Hazelmere for trains Nos. 384 and 395.
TERMINAL STATIONS.
Cloverdale for trains Nos. 385, 384 and 397. Hazelmere for trains Nos. 387 and 397. Fraser River Jct. for trains Nos. 386 and 398.
Trains will register at Cloverdale.
All Sixth District trains will protect against all Third District trains between Fraser River Junction and New Westminster.
All trains will reduce speed to 8 miles per hour over all draw bridges.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	CAR CAPACITY
Davis Spur	0.5 Miles south of Liverpool	North	4
Brownsville Spur	1.0 Miles north of Liverpool	South	15
Flummerfelt Spur	2.0 Miles north of Port Kells	South	4
David Bell & Co. Spur	1.5 Miles north of Cloverdale	South	25
McNair Spur	2.0 Miles north of Cloverdale	South	2
Washington Shingle Co.	2.2 Miles north of Blaine	South	6
Great Western Shingle Spur	0.5 Miles south of Port Kells	North	7
Blaine Shingle Co. Spur	1.8 Miles north of Hazelmere	North	4

SEVENTH DISTRICT—ABBOTTSFORD TO KILGARD.

SECOND CLASS.										Capacity of Side Tracks.			Time Table No. 81. In Effect February 16, 1913.				SECOND CLASS.						
										Passing Tracks	Other Tracks	Distance from Kilgard.	STATIONS.				Telegraph Cuts	Distance from Abbottsford	SIGNS.				
										395							394						
										Mixed									See Rule 7, page 15.	Mixed			
										Leave Tues., Fri.										Arrive Tues., Fri.			
										6 25Am	30	10	0	KILGARD					5.0		6 20Am		
										6 55Am		31	5.0	ABBOTTSFORD				FS	0	RDW	6 50Am		
										Arrive Tues., Fri.	395										Leave Tues., Fri.		
										30											394		
										10.											30		
																				10.			

East bound trains have right over west bound trains of same class.

Seventh District trains will protect themselves against Fifth District trains between Abbottsford and Junction, one half mile east of Abbottsford.

INITIAL STATIONS.
Abbottsford . . . 394.
Kilgard 395.

TERMINAL STATIONS.
Kilgard 394.
Abbottsford . . . 395.

WEST BOUND.

CHERRY VALLEY BRANCH.

EAST BOUND.

SECOND CLASS.				Capacity of Side Tracks.			Time Table No. 81. In Effect Feb. 16, 1913.				SECOND CLASS.					
				Passing Tracks	Other Tracks	Distance from Monroe	STATIONS.				Distance from Tolt	Telegraph Cuts	SIGNS.			
				391							390					
				Mixed									392			
				Leave Daily	Leave Daily								Arrive Daily			
				Ex. Sunday	Ex. Sunday								Ex. Sunday			
				6 20Am	11 00Am	0.0	MONROE				17.6	Re	D N Y W P	10 05Am	4 00Pm	
				6 50	11 45	36	DUVALL				8.6		D P	9 30	5 10	
				7 16Pm	12 00Pm	31	TOLT				0.0		D T W P	9 00Am	2 40Pm	
				Arrive Daily	Arrive Daily								Leave Daily			
				Ex. Sunday	Ex. Sunday								Ex. Sunday			
				391	393								390			
				55	1 30								105			
				19 4	11 7								102			
														1 20		
														13.2		

East bound trains have right of track over west bound trains of the same class.

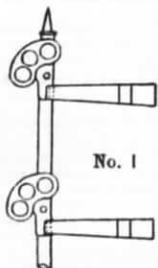
INITIAL STATIONS.
Tolt 390-392.
Monroe 391-393.

TERMINAL STATIONS.
Monroe 390-392.
Tolt 391-393.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Stephens Bird Ind. Spur	3.5 Miles west of Monroe	West	510 ft.	10
Stephens Bird Logging Co.'s Spur	3.8 Miles west of Monroe	East	388 ft.	7
Cerenis Spur	4.6 Miles west of Monroe	West	288 ft.	6
C. V. Spur	5.2 Miles west of Monroe	East	418 ft.	8
O'Neill Gowen Shingle Co. Spur	6.0 Miles west of Monroe	East	350 ft.	4
Bacus Spur	6.4 Miles west of Monroe	West	320 ft.	5
C. V. Log. Co.'s Spur	7.3 Miles west of Monroe	West	474 ft.	9
Novelty Spur	11.6 Miles west of Monroe	West	658 ft.	15

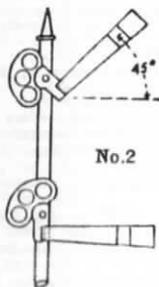
ELECTRIC TRAIN STAFF BLOCK SIGNAL DIAGRAMS.



No. 1

Home Signal.

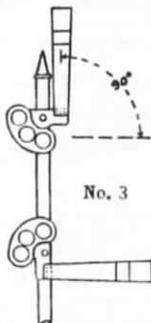
Color. Upper Arm RED light at night.
Lower Arm RED light at night.
Indication. STOP. Proceed only when Signal clears.
Name. STOP Signal.



No. 2

Home Signal.

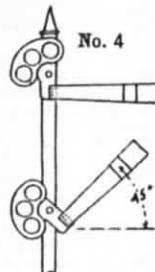
Color. Upper Arm, YELLOW light at night.
Lower Arm, RED light at night.
Indication. Proceed on main line with caution, be prepared to stop at the Block Station.
Name. CAUTION Signal.



No. 3

Home Signal.

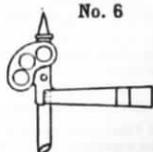
Color. Upper Arm GREEN light at night.
Lower Arm, RED light at night.
Indication. Main line route clear staff in crane
PROCEED.
Name. CLEAR Signal.



No. 4

Home Signal.

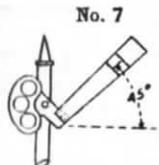
Color. Upper Arm, RED light at night.
Lower Arm, YELLOW light at night.
Indication. Take Passing track.
Name. CAUTION Signal.



No. 6

Distant Signal.

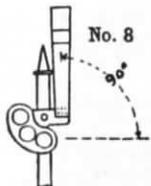
Color. RED light at night.
Indication. STOP then proceed with caution to Home Signal.
Name. STOP Signal.



No. 7

Distant Signal.

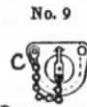
Color. YELLOW light at Night.
Indication. Proceed with CAUTION prepared to stop at Home Signal.
Name. CAUTION Signal.



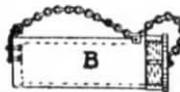
No. 8

Distant Signal.

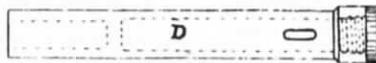
Color. GREEN light at night.
Indication. PROCEED. Staff in Crane
Name. CLEAR Signal.



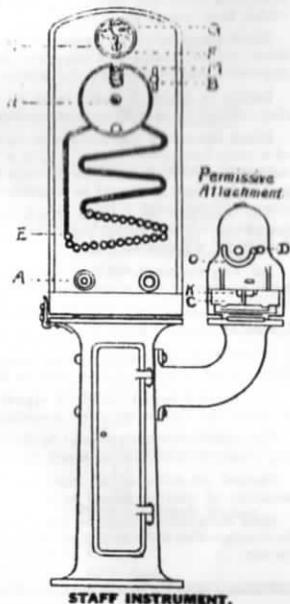
Pouch for permissive staff disc.



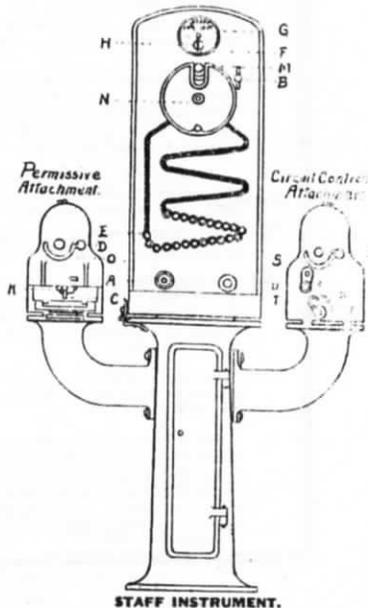
Pouch for permissive Staff complete



POUCH FOR ABSOLUTE STAFF.



STAFF INSTRUMENT.



STAFF INSTRUMENT.

Bell Code of Signals

1 —	To attract attention.
2 --	All Right. Yes.
3 ---	Block wanted, Unlock my Instrument, Ann. by Unlocking or by 5 or 3-1.
4 ----	Train has entered Block.
5 -----	Block is not clear.
6 -----	Has a train entered this Block? Answer by 2 or 2-1.
1-2 ---	Clear. Train has cleared Block.
2-1 ---	No.
2-2-2 ----	Previous Signal given in error. Answer by 2.
2-4 ----	Has train Cleared Block? Answer by 5 or 3-1.
3-1 ---	Have unlocked. Block is clear. It must not be used unless Block is known to be clear.
3-3 ----	Train in Block.
5-5-5 ----	Obstruction in Block. Stop all trains approaching this Station. Answer by repeating.
8 -----	Testing. Answer by repeating.

GENERAL INSTRUCTIONS

FOR

OPERATING TRAIN STAFF INSTRUMENTS.

TO REMOVE STAFF FROM MACHINE.

Instructions to Operator removing staff.

- 1st. Press bell key "A" once. Answer will be two @ taps.
- 2nd. Press bell key "A" three @ times. Then watch current indicating needle "F" until it deflects to the right.
- 3rd. Turn preliminary spindle "B" to the right as far as it will go and then release it, permitting it automatically to return to its former position. A white disc will appear in place of the red one at "H". This indicates that staff is ready to be removed.
- 4th. Move end staff "E" up to vertical slot into engagement with guard "N". This guard having been turned so that the staff will slip into the slot in the edge of the guard "N."
- 5th. Revolve guard "N" using staff as a handle and withdraw the staff through the opening at "M". This operation moves staff, indicating needle "G" from "Staff in" to "Staff out."
- 6th. Immediately upon withdrawal of staff, press bell key "A" once. This is absolutely necessary.

Instructions to Operator aiding in removal of a staff.

- 1st. Upon receipt of one ring acknowledge same by two pushes on bell key "A."
- 2nd. Upon receipt of three rings, press bell key and hold it so until staff indicating needle "F" moves from left to right. Twice then release key "A" as operation is complete.

TO REPLACE STAFF IN THE MACHINE.

Instructions to Operator replacing staff.

- 1st. Turn outer guard "N" to place and insert staff in the opening "M."
- 2nd. Using staff as handle revolve guard "N" to the right and allow staff to roll down signal into place.

3rd. Press bell key "A" according to signal 1-2 of the bell code.

Instructions to Operator at opposite end of Block.

The signal 1-2 of the bell code must in every case be answered in order to place the machines in proper condition for the withdrawal of the next staff.

TO REMOVE THE PERMISSIVE STAFF FROM MACHINE.

- 1st. Insert solid staff in the opening "D" of the permissive attachment and move to the extreme left of the slot "O."
- 2nd. Turn the latch "K" and allow door "C" to drop and the permissive staff to roll out.

TO REPLACE THE PERMISSIVE STAFF IN THE MACHINE.

- 1st. Be sure all discs are on the permissive staff in their proper numerical order.
- 2nd. Place staff in attachment, close door "C" and latch with "K."
- 3rd. Move solid staff to the right thru slot "O" and remove at opening "D."

INSTRUCTIONS FOR OPERATING SEMAPHORE SIGNALS THROUGH CIRCUIT CONTROLLER ATTACHMENT.

- 1st. To operate Upper Arm of Semaphore 0° to 45° (See Fig. No. 2), turn handle "T" to the right clockwise to stop "X."
- 2nd. To operate Upper Arm of Semaphore 45° to 90° (See Fig. No. 3), withdraw absolute staff and insert into opening "R" and move to extreme left of slot "B" then turn handle "T" to right to stop "Y," remove absolute staff from opening "R" and place staff in Pouch "D", Fig. 9. Then place Pouch in staff crane which action automatically "Clears" Home and Distant Signals to 90° Position. (See Fig. Nos. 3 and 9).
- 3rd. To operate Lower Arm of Semaphore 0° to 45° (See Fig. No. 4), turn handle "U" to the right as far as it will go.

ELECTRIC TRAIN STAFF BLOCK SIGNAL RULES AND INSTRUCTIONS.

- Electric Train Staff Block Signal System in operation between Leavenworth and Skykomish.
- The use of the divided staff through Cascade Tunnel and all rules and instructions pertaining thereto will continue in effect.
- All rules relating to the protection of trains are in force and are only modified by the General Instructions herein.
1. All trains and engines in both directions will be governed exclusively in their movements by the train staff.
 2. Home and Distant semaphores are located at each block station. Home signals are located at the passing track switches. Distant Signals are located about 4000 feet from home signals. The signal indications are illustrated by figures Nos. 1, 2, 3, 4, 6, 7, 8 and the meaning of the positions of the signal arms and lights is explained under the diagrams. In all cases the block signals are located upon the right of and adjoining the track upon which trains are governed by them. The semaphore arms that govern are displayed to the right of the signal mast as seen from an approaching train.
 3. The possession of the staff by the Engineer gives his train the absolute right of track to the next block.
ENGINEERS MUST KNOW THAT THE STAFF IS IN THE POUCH BEFORE PROCEEDING.
 4. The staff will be handled by the Engineer of the leading engine of the train; and the staff must be in the actual possession of the Engineer before he moves his train into a block, and such engine must not be uncoupled from the train except at a block station. The Conductor will receive a "proceed" signal from Block Operator to indicate that staff has been delivered to Engineer. (See Rule 29).
 - 4-A. In the case of an engine pushing a train, it must be considered as part of that train through to the next block station, and may be uncoupled only at a block station. Such engine, if then uncoupled, must be treated as a separate train.
 5. When a staff has been secured by the Engineer, he will announce the fact by sounding one short, one long and one short blast of the whistle, thus (o—o).
 6. An absolute staff permits but one train at a time to use a block. See D figure No. 9.
 - 6-A. A permission staff disc, permits two or more trains in the same direction at one time to use a block on ascending grade only. Each train must be in possession of a permissive staff disc before proceeding. See C, Fig. No. 9.
 - 6-B. Permissive staff complete permits but one train at a time to use a block. See B, Fig. No. 9 and Rule No. 22-F.
 7. The delivery of the staff to the Enginemen will be either by staff crane, hand of Block Operator, or the Conductor or head Brakeman of his own train and the Engineer must not accept delivery of a staff from any other person. Block Operators will not deliver staff to any other than one of these employes.
 8. Staff will be delivered by Engineer on arrival at Block Station by dropping same at a designated spot, or, in case of taking siding, and it cannot be personally delivered by Engineer, it will immediately be sent to Block Operator by head Brakeman or Conductor.
UNDER NO CIRCUMSTANCES WILL A STAFF BE TRANSFERRED FROM ONE TRAIN TO ANOTHER. IT IS THE DUTY OF THE BLOCK OPERATOR TO SEE THAT ALL OF THE TRAIN CLEARS THE BLOCK BEFORE INSERTING STAFF INTO INSTRUMENT.
 9. In case a train parts, or it is necessary to "double," the staff must be retained by the Engineer until all the train is clear of the block. A train is clear of a block when it has passed the home signal. A train proceeding on main track enters a block at the block office. It may occupy the main track inside of home signals in either direction to do station work or to allow another train to enter the sidetrack, but must not proceed until in possession of a staff, as per Rule No. 3.
 - 9-A. A train making switching movements may use the main track to, but not beyond the distant signal, when protected as per Rule 99. Superior class trains must not be delayed.
 10. Enginemen and Trainmen will carefully note the position of all signals and be governed accordingly in the movement and protection of their trains. See Figs. Nos. 1, 2, 3, 4, 6, 7, 8.
 11. Conductors and Engineers, before leaving initial points, must secure clearance card, Form 219.
 12. Block Operators, unless otherwise instructed by Train Dispatcher, will staff the train of superior time table rights and side track the inferior train when a meeting point develops at their station.
 13. When it is desired to reverse the right of track, trains will be moved by Train Dispatcher's orders on Form 19, issued to Block Operators giving instructions to staff the train that is to receive preferred attention, and side track the superior train.
 14. Work trains, after receiving orders authorizing the existence of the train, will occupy the block after receiving the absolute staff until same is surrendered at a block station at either end of the block. They will be given a time by the Train Dispatcher when delivery shall be made, and unless otherwise instructed, they shall clear the block and deliver the staff to the Block Operator so that regular and extra trains will not be delayed. Train Dispatcher may authorize the delivery of a permissive disc in the prescribed direction to enable work train to work under protection of flag until following train approaches.
 15. In case of failure of staff apparatus, all concerned must be notified and trains will be moved by train orders until it has been repaired. In such event, the train order takes the place of the staff, though only one block on each train order and this order must be given jointly to the Conductor and Engineer of the train and the Block Operator at both ends of the block.
 - 15-A. In the event of staff apparatus and other means of communication becoming out of order due to the breakage of line wires or other causes, trains will move in accordance with general rules and time table rights, obtaining at each block office, block card, Form No. 2615 signed by Block Operator.
 - 15-B. When a staff apparatus has been repaired it will not be put into use until authorized by Train Dispatcher.
 - 15-C. Before issuing train orders, superseding staff system, the Train Dispatcher must know that block is clear and the Block Operator and Train Dispatcher must know that the full number of staffs are in the two instruments of this block.
 16. In case a staff should be lost, the staff instruments in this block are inoperative and trains must be moved only by the authority of Train Dispatcher, who will then issue train orders. The staff can only be replaced by Signal Repairman who has charge of the staffs not in use. No extra staffs will be allowed in the possession of any other employe.
 17. Should a train pass a block station without markers the Block Operator must notify the Train Dispatcher and the next block station in each direction and must not report that train clear of the block until he has ascertained that the train is complete.
 18. A record of all trains must be kept at each block station on Form No. 290.
 19. In case of unexpected delay to a train to which a staff has been delivered, same can be recalled by Block Operator and return of staff to the instrument will cancel the authority given to such train to proceed. The train then has no right to main track until given another staff.
 20. Block Operators must not deliver a staff received from one train to another train. It must be placed in the instrument and another withdrawn in accordance with the rules.
 21. BLOCK OPERATORS WILL HANDLE THE STAFF MACHINES IN ACCORDANCE WITH THE RULES AND GENERAL INSTRUCTIONS FOR OPERATING STAFF INSTRUMENTS.
 - 21-A. When two or more trains bound in opposite directions are at a block station Block Operator must exercise great care in delivery of staffs and must know that the staff is delivered to the train for which it was withdrawn.
 22. Absolute staffs (See D, Fig. No. 9) must be used for all trains on descending grades, or eastbound from Cascade Tunnel to Leavenworth, and westbound from Tye to Skykomish.
 - 22-A. Permissive staff discs (See C, Fig. No. 9) may be used on ascending grades, or westbound from Leavenworth to Cascade Tunnel, and eastbound from Skykomish to Tye, for all trains except as per rule 22-B.
 - 22-B. Permissive staff discs must not be given to Enginemen with light engines or light tonnage trains to follow a passenger train.
 - 22-C. Trains moving under authority of a permissive staff disc must protect against following trains as per Rule No. 99.
 - 22-D. When two or more trains use permissive staff discs the last train will be given the permissive staff (See B, Fig. No. 9) with all the remaining discs and this confers the same rights as a single permissive staff disc.
 - 22-E. The Block Operator receiving the permissive staff must at once assemble on it in numerical order all the permissive discs received from preceding trains and place the complete permissive staff in the permissive attachment.
 - 22-F. The first train in the opposite direction (descending the grade) must be given the complete permissive staff, which confers the same rights as an absolute staff.
 23. When no train movement is imminent, home signals must be kept in stop position.
 24. Block Operators must not make nor permit any unauthorized alterations or additions to the apparatus. If alterations or additions are made, the work will be done under the direction of the Signal Supervisor.
 25. If any electrical or mechanical appliance fails to work properly, the Signal Repairman and Train Dispatcher must be notified and only duly authorized persons permitted to make repairs.
 26. Block Operators must have the proper appliances for hand signaling (a yellow flag by day and a yellow light by night) ready for immediate use. Hand signals must not be used when the proper indications can be displayed by the fixed signals. When hand signals are necessary, they must be given from such a point and in such a way that there can be no misunderstanding on the part of Enginemen or Trainmen as to the signals or as to the train for which they are given.
 27. Block Operators are responsible for the care of the block station, lamps and supplies and of the signal apparatus unless provided for otherwise.
 28. Lights in block stations must be so placed that they cannot be seen from approaching trains.
 29. Block Operators will remain in view until the rear of a train has passed and will give a "proceed" signal to the Conductor on rear of train to indicate that a staff has been delivered to Engineer.
 30. The Engineer of a train which has parted must sound the whistle signal for "train parted" on approaching a block station.
 31. An Engineer receiving a "train parted" signal must answer by two short blasts of the whistle.
 32. When a parted train has been recoupled the Block Operator must be notified.
 33. If the track is obstructed between block stations notice must be given to the nearest Block Operator.
 34. If a train is held by a block signal to exceed two minutes, the Conductor must ascertain the cause.
 - 34-A. The Conductor must report to the Superintendent any unusual detention at block stations.
 35. Special attention of all concerned is directed to meaning of caution signal as shown by Fig. No. 2.
 36. Staff instruments must be kept locked. Keys will be furnished to the signal repairman but to no other person.

AUTOMATIC BLOCK, INTERLOCKING SIGNALS AND SEMAPHORES.

AUTOMATIC BLOCK SYSTEM.

Automatic Block Signals are in operation between King Street Station, Seattle and G. N. Dock, also between Metuna and Everett Junction.

The Controlled Manual Block Signal System is in operation between G. N. Dock and Metuna, and between Everett Jet. and Pacific Ave.

1. In all cases the Automatic Block and Interlocking Signals are located upon the Right or adjoining the track upon which trains are governed by them. The Semaphore Arms that govern are displayed to the Right of the Signal mast as seen from an approaching train.
2. The movement of trains will be regulated by Block Signal Indications as follows:
 - A. An Arm in the horizontal position (see Fig. No. 6) indicates that the Block is not clear and is a signal to "STOP."
 - B. An Arm in the inclined position 15 degrees above the horizontal, (see Fig. No. 7), indicates proceed with Caution prepared to stop at the next Signal.
 - C. An Arm in the vertical position 90 degrees above the horizontal (see Fig. No. 8), indicates that Block is "CLEAR" and is a Signal to "PROCEED."
 - D. At night the Position of the Signals will in addition be shown by the Standard Colored Lights.

RED indicates "STOP."
 YELLOW indicates "CAUTION," proceed with caution prepared to stop at next Signal.
 GREEN indicates "PROCEED."
3. Track Circuits are used to Control Automatic and Semi-Automatic Block Signals and include all turn-outs up to the fouling points.

4. Block Signals do not dispense with the use or observance of other Signals, whenever or where they may be required. Nor do they relieve Enginemen and Trainmen from taking all precautions required by train rules for the protection of their trains.
5. The Block Signals apply, only, to trains running in the established direction.
6. When a train is stopped by a Block Signal it may proceed with caution after coming to a FULL STOP, expecting to find Block obstructed.
7. A train stopped by a Block Signal must stand facing the signal so that its indication may be observed from the engine.
8. Switches in main tracks and switches of Cross-overs to main track, Set Signals to "STOP," when moved from their normal positions.
9. Main line Semaphore Interlocking Signals located within the Automatic Block Signal limits are made Semi-Automatic and part of the Block Signal System.
10. Cars and Engines on Sidings must stand clear of bonded frame and insulated joints.
11. In making train movements through cross-over switches, BETWEEN MAIN TRACKS, one of the switches must be kept open until the train movement is completed.
12. When a Signal is found at Stop, from any cause, other than a train in the Block, Enginemen will report same, using form 2600 and Operator will transmit in accordance with instructions thereon.
13. All Automatic Block Signals are designated by numbers. Signals governing West bound trains have even numbers, signals governing East bound trains have odd numbers.
14. Home Interlocking Signals are equipped with two arms and two lights (see Figs. Nos. 1, 2, 3, 4 and 5). These Signals are not permissive and may be passed only when signal indicates "PROCEED," or upon prescribed hand signal from Signalman. Rule governing reads as follows:

When from any cause signals cannot be operated, signalman must examine switches and know that the way is clear. The train must be required to come to a full stop before the prescribed hand signal is given. Signalman giving hand signal must do so from the center of the track upon which the train movement is to be made, using a yellow flag by day and a white light by night. When more than one train is in sight, hand signals must be given from a point not to exceed one hundred feet in advance of the locomotive.

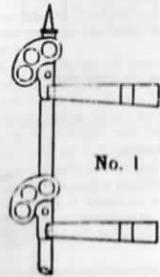
15. Dwarf signals (see Figs Nos. 9 and 10), are provided to govern train movements against the current of traffic and slow movements either to or from main tracks to storage and industry tracks.
16. Single Arm and Single Light Semaphores will be continued for Train order Signals.
17. A signal imperfectly displayed, the absence of a signal in place where one is usually shown, or a white signal at a place where a colored signal should be shown must be regarded as a STOP Signal, and the fact reported to the Superintendent.
18. Firemen as well as Enginemen must watch signals closely, as frequently the first view can be had from the Fireman's side.

Interlocking Signals.

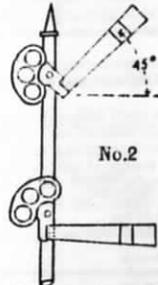
Within the limits of the Automatic Block signal System Interlocking Plants are located as follows:

SOUTH PORTAL OF SEATTLE TUNNEL
 NORTH PORTAL OF SEATTLE TUNNEL
 EVERETT JUNCTION

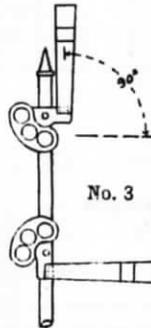
On the single track between G. N. Docks and Metuna an Interlocking Plant is in use at the Salmon Bay Draw Bridge, Ballard. At the crossing of the C. M. & P. S. located in 16th Ave. Ballard, and at N. P. Crossing west end Interbay Yard.



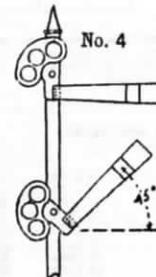
Interlocking Home Signal.
 Color. Upper Arm, RED light at night.
 Lower Arm, RED light at night.
 Indication. STOP. Proceed only when signal clear or upon prescribed hand signal from signalman.
 Name. STOP Signal.



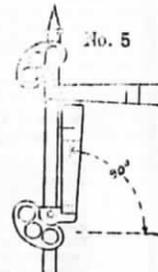
Interlocking Home Signal.
 Color. Upper Arm, YELLOW light at night.
 Lower Arm, RED light at night.
 Indication. Main line route clear, proceed with CAUTION, prepared to stop at next signal.
 Name. CAUTION Signal.



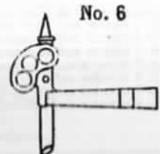
Interlocking Home Signal.
 Color. Upper Arm, GREEN light at night.
 Lower Arm, RED light at night.
 Indication. Main line route clear, PROCEED.
 Name. CLEAR Signal.



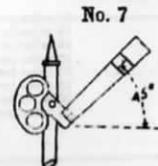
Interlocking Home Signal.
 Color. Upper Arm, RED light at night.
 Lower Arm, YELLOW light at night.
 Indication. Diverging route clear, proceed with CAUTION.
 Name. CAUTION signal.



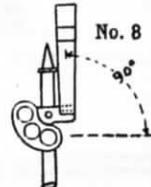
Interlocking Home Signal.
 Color. Upper Arm, RED light at night.
 Lower Arm, GREEN light at night.
 Indication. Diverging route clear, proceed at reduced speed.
 Name. CLEAR Signal.



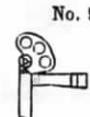
Automatic Block Signal.
 Color. RED light at night.
 Indication. STOP.
 Name. STOP Signal.



Automatic Block Signal.
 Color. YELLOW light at night.
 Indication. PROCEED with CAUTION, prepared to stop at next signal.
 Name. CAUTION Signal.



Automatic Block Signal.
 Color. GREEN light at night.
 Indication. PROCEED.
 Name. CLEAR Signal.



Dwarf Signal.
 Color. RED light at night.
 Indication. STOP.
 Name. STOP Signal.



Dwarf Signal.
 Color. GREEN light at night.
 Indication. PROCEED.
 Name. CLEAR Signal.

CAPACITY OF ENGINES IN ADDITION TO WEIGHT OF ENGINES, TENDERS AND CABOSES.

STATIONS	Ruling Grade	Class M2-1950-1990				Class L1-1900-1921				Class L2-1800-1944				Class F4-1095-1099 " F5-1100-1109 " F6-1110-1129 " F7-1130-1139 " F8-1140-1199 " F9-1300-1324 " G5- 800- 807				Class G2-700-719 " G3-720-769				Class F1-600-565 " D5-450-476				Class D2-300-359				Class D4-400-426				Class B6-232				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3		
		Everett to Skykomish	1.0	1700				1600				1400				1200				1000				775				575				715				385		
Skykomish to Cascade Tunnel	2.2	850				800				700				600				480				360				276				340				183				
Cascade Tunnel to Leavenworth	Down	1900				1800				1800				1500				1250				900																
Leavenworth to Cascade Tunnel	2.2	850				800				700				600				480				380				275				340				185				
Seattle to Delta	0.5													2100				1750				1350				1050												
Delta to Seattle	0.4													2500				2100				1400				1120												
Cascade Tunnel to Lowell	Down	1900				1800				1800				1500				1250				900																
Silvana to Delta	0.5													1800				1400				1080				875												
Delta to Silvana	0.4													2500				1800				1400				1120												
Bellingham to Silvana	0.5													2100				1800				1360				1050												
Silvana to Bellingham	0.5													2100				1800				1360				1050												
Bellingham to New Westminister	1.1													1080				900				700				516												
New Westminister to Bellingham	1.5													800				675				600				485												

WEATHER RATING

- 1—When temperature is 25 degrees above zero or over.
2—Very frosty or wet. 5 to 25 above zero.
3—Five degrees above to 10 below zero.
4—Ten below zero and colder.

Chief Train Dispatcher may increase or decrease above rating as it may be found necessary.

Weight of Empty Cars and Dead Engines and Tenders
will be estimated as follows, when not marked:

Box Cars, 25 to 30 foot	11 Tons
Box Cars, 33 foot	12 Tons
Box Cars, 34 foot	12 Tons
Box Cars, 35 foot	13 Tons
Box Cars, 36 foot	15 Tons
Box Cars, 40 foot	17 Tons
Refrigerator Cars	20 Tons
Furniture Cars, 30 to 40 foot	17 Tons
Furniture Cars, 40 to 50 foot	17 Tons
Caboose, 8 wheel	19 Tons
Caboose, 4 wheel	17 Tons
Flat Cars, 25 to 30 foot	10 Tons
Flat Cars, 33 and 34 foot	11 Tons
Flat Cars, 40 foot	12 Tons
Coal Cars	12 Tons
Gondola Cars	12 Tons
Ore Cars, Wood	15 Tons
Ore Cars, Steel	15 Tons
Oil Tanks	15 Tons
Ballast Cars	12 Tons
Steam Wreckers	12 Tons
Engine Tank (Empty)	30 Tons
Mail Cars	25 Tons
Baggage Cars	30 Tons
Coaches, 8 wheel	30 Tons
Coaches, 12 wheel	35 Tons
Dining Cars and Tourist Cars	40 Tons
Sleeping Cars, Parlor Cars and Observation Cars	40 Tons

Weight of Dead Engines.

Engines numbered below 200 series	80 Tons
Engines numbered in 200 series	90 Tons
Engines numbered in 300 series	85 Tons
Engines numbered in 400 series	110 Tons
Engines numbered in 600 series	115 Tons
Engines numbered in 800 series	120 Tons
Engines numbered in 700 series	140 Tons
Engines numbered in 800 series	155 Tons
Engines numbered in 900 series (except 992 to 997)	115 Tons
Engines numbered 992 to 997	95 Tons
Engines numbered 1000 to 1007	131 Tons
Engines numbered 1060 to 1069	144 Tons
Engines numbered 1079 to 1095	158 Tons
Engines numbered in 1100 and 1200 series	160 Tons
Engines numbered in 1300 series	160 Tons
Engines numbered 1400 to 1405	170 Tons
Engines numbered 1406 to 1425	173 Tons
Engines numbered in 1500 and 1600 series	188 Tons
Engines numbered in 1700 series	180 Tons
Engines numbered in 1800 series	219 Tons
Engines numbered in 1900 series	252 Tons

Speed Limits for Trains.

	Passenger	Freight
Leavenworth and Skykomish	35 miles per hour.	20 miles per hour.
Through Cascade Tunnel	20 miles per hour.	15 miles per hour.
Skykomish and Gold Bar	40 miles per hour.	20 miles per hour.
Gold Bar and Pacific Avenue	50 miles per hour.	25 miles per hour.
Cherry Valley Line	50 miles per hour.	15 miles per hour.
Everett Jet. and Seattle	25 miles per hour.	25 miles per hour.
Delta Wye and Samish	50 miles per hour.	25 miles per hour.
Samish and Bellingham	50 miles per hour.	20 miles per hour.
Bellingham and Still Creek	45 miles per hour.	25 miles per hour.
Still Creek and Vancouver	20 miles per hour.	15 miles per hour.
Skagit Branch	25 miles per hour.	15 miles per hour.
Frazer River Jet. to Cloverdale	25 miles per hour.	15 miles per hour.
Guichon to Cloverdale	25 miles per hour.	15 miles per hour.
Cloverdale to Sumas	30 miles per hour.	20 miles per hour.
Cloverdale to Hazelton	20 miles per hour.	15 miles per hour.

L-1, L-2 and M-2 engines will not exceed speed of 25 miles per hour.
F-7, 8 and 9 engines will not exceed speed of 30 miles per hour.

Speed Table.

50 miles per hour is equivalent to one mile in 1 minute and 12 seconds.
45 miles per hour is equivalent to one mile in 1 minute and 20 seconds.
40 miles per hour is equivalent to one mile in 1 minute and 30 seconds.
35 miles per hour is equivalent to one mile in 1 minute and 43 seconds.
30 miles per hour is equivalent to one mile in 2 minutes and 0 seconds.
25 miles per hour is equivalent to one mile in 2 minutes and 24 seconds.
20 miles per hour is equivalent to one mile in 3 minutes and 0 seconds.
15 miles per hour is equivalent to one mile in 4 minutes and 0 seconds.

The following will govern when handling empty cars: With 10 or less empty cars in a train no allowance will be made for wheel friction; with 10 to 20 empty cars in a train, add to actual weight 5 tons for each empty car for wheel friction; with more than 20 empty cars in a train add 6 tons per car for wheel friction.

SPECIAL RULES.

- Freight trains will not carry passengers.
- Horizontal position of the semaphore blades by day and yellow light shown by night indicates that switches with which the distant signals are connected are open and approaching trains should immediately be brought under control.

- Diagonal position of the blades and green lights displayed at night indicate that switches with which the distant signals are connected are properly set and train should proceed as per rule.
- Car capacity of passing tracks based on 42 feet to the car inside of clearance points and does not allow for engines or cabooses. Car capacity other tracks do not include engine house tracks, turn table tracks, shop tracks, safety tracks or wye tracks.

REFERENCE MARKS.

- In addition to signs provided for in Rule 7, Book of Rules, the following signs in column headed "Signs" indicate:
 - D Day telegraph or telephone office.
 - N Night telegraph or telephone office.
 - DN Day and night telegraph or telephone office.
 - P Dispatcher's telephone accessible at all times.
 - I Interlocked.
 - K Connection with foreign road.
 - * Standard clock.

LOCATION OF TUNNELS.

Tunnel No.	Length	Location
13, 13,873	feet long	between Tye and Cascade Tunnel.
" 14, 196	" "	1.18 miles west of Alvin.
" 15, 1,512	" "	.66 miles east of Corea.
" 16, 2,368	" "	Everett, Wash.
" 17, 5,141.5	" "	Seattle, Wash.
" 18, 1,096.6	" "	.46 miles north Samish.
" 19, 133	" "	.62 " south Sockeye.
" 20, 295.5	" "	.43 " " "
" 21, 697.5	" "	.32 " " South Bellingham.

PERSONAL INJURIES.

- Whenever passengers or employees are injured, everything must be done to care for them properly. If they are able to be moved, take them for treatment to the nearest place at which the Company has a surgeon. If they cannot be moved, call the nearest Company surgeon. If the case is urgent and the Company surgeon cannot be immediately procured, the conductor, agent or officer in charge is authorized to call the nearest surgeon available to administer first aid and care for the patient until the Company surgeon can take charge of the case.
 - No surgical operation must be performed until the arrival of the Company surgeon, unless it may be required for the immediate safety of the patient.
- In cases of serious accidents to trains, conductors, after making everything safe, must give their undivided attention to the care and comfort of their passengers, especially to those who are injured. Bedding and linen may be taken from sleepers for this purpose; the conductor keeping careful account of all material so taken, and its return or safe keeping attended to; and, when necessary, injured persons may be put in the sleepers.
 - When a number of persons are injured, the service of competent surgeons in the vicinity should at once be secured, and every possible effort made to care for the injured, the Division Surgeon being notified by wire to come immediately to the place of the accident.
- When tramps, boys and other persons, climbing on or jumping from moving trains, or persons walking or lying on the track, are injured or killed, they should be sent to their homes or placed in charge of the local county, city or village authorities, and no expense incurred on the part of the Company in the matter.
- When people are killed away from a station the body should be picked up and taken to the nearest station and the authorities notified. Never take a body out of the county where the accident happened if it can be avoided, but if there is no station in that county take it to the nearest station in the next county, notifying the county authorities in all cases.
- A report of all accidents must be made, and immediately sent by wire to Superintendent, giving all information.

In reporting accidents to trains carrying passengers, conductors should give the correct names of the injured and uninjured, the addresses and destinations of all persons on the train, and of the injured, and the extent of their injuries. This report must be sent from first telegraph office to the General Claim Agent and to the Assistant Claim Agent in whose jurisdiction the accident occurs.

- As soon as possible thereafter Form 245 should be made out by each employe and forwarded to the Superintendent of the Division; a separate report being made for each person injured.
- Every effort must be made to procure the names and addresses of all persons, outsiders as well as employes, who witnessed the accident, especially when persons are injured within the corporate limits of any city, town or village, or when crossing the tracks at a public highway.
- In every case of personal injury in any Department, a full and complete report must be made at once by every employe immediately present, no matter whether he considers his statement of importance or not, answering every question as fully as possible.
- When persons are injured by an accident which may have been caused by defective appliances, tools or machinery, the car or appliance, tool or machinery must be immediately examined by the person in charge to ascertain its condition, and report made of the inspection, giving the numbers and initials of cars examined, with names, occupation and address of the persons making the inspection. This inspection must be made before the car or engine leaves the place where the accident occurred, and afterwards at the first district terminal by the inspector, foreman, or Master Mechanic at such point, the Superintendent to notify such person of the necessity of making such examination. When an accident is caused by the breaking of machinery, tools, appliances or rails, the broken parts must be so marked as to be readily identified, and immediately turned over to the Superintendent.
- This Company will not recognize any responsibility for board, medicine, nursing or surgical attention furnished by other than Company Surgeons, except for the emergency service required under Rules 1 and 2, unless authorized by the Superintendent, General Claim Agent, or a general officer of the Company, and when so authorized the General Claim Agent should at once be notified.

COMPANY SURGEONS.

Dr. J. A. Quinn, Chief Surgeon, Ernst Building, Cor. 5th and Wabasha, St. Paul.
 Dr. J. W. Chamberlin, Ophthalmic Surgeon, Lowry Building, St. Paul.

Leavenworth	DR. G. W. HOXSEY.
Skykomish	DR. C. E. GREASON.
Monroe	DR. H. K. STOCKWELL.
Everett	DR. P. M. WALKER & W. O. COPPS.
Interbay	DR. F. A. BOOTH.
Seattle	DR. H. M. READ.
Seattle	DR. R. W. PERRY, Oculist.

Tacoma	DR. JAMES A. LA GASA.
Burlington	DR. H. E. CLEVELAND.
Bellingham	DR. W. A. KIRKPATRICK.
Blaine	DR. A. A. SUTHERLAND.
New Westminster	DR. GEO. E. DREW.
Vancouver	DR. A. S. MONRO.
Anacortes	DR. GEO. B. SMITH.
Woolley	DR. M. B. MATTICE.

TIME INSPECTORS.

Leavenworth	F. E. CARLQUIST.
Seattle	J. F. HUNTER.
Burlington	J. H. CROSSBY.
Everett	A. J. MOHN.
Bellingham	BEHRENS & SON.

Vancouver, B. C.	PAUL & McDONALD.
Tacoma, Wash.	RICHARD VEATH.
Centralia, Wash.	BEN SALICK.
Portland, Ore.	C. CHRISTENSON.
Moscow, Wash.	CARLQUIST BROS.

E. O. WADHAMS, Dispatcher.
 G. E. WELLEIN, Dispatcher.
 C. O. JOHNSON, Dispatcher.
 F. J. ROE, Dispatcher.
 T. H. REED, Dispatcher.

C. E. LAMKIN, Dispatcher.
 H. L. CAULKINS, Dispatcher.
 D. MOORE, Ass't Chief Dispatcher.
 G. R. MILLER, Chief Dispatcher.

S. CORRIGAN, Train Master.
 J. C. DEVERY, Assistant Superintendent.
 T. B. DEGNAN, Superintendent of Terminals.

GREAT NORTHERN RAILWAY and Connections.

