COMPANY SURGEONS.

*Dr. Roscoe C. Webb, Chief Surgeon.....Minneapolis, Minn.
*Dr. Ernest R. Anderson,
Assistant Chief Surgeon .....Minneapolis, Minn.
*Dr. H. J. Knott .....Seattle, Wash.
*Dr. Geo. E. Hoxsey .....Wenatchee, Wash.
*Dr. Chas. E. Conner .....Cashmere, Wash.
*Dr. L. S. Trask .....Everett, Wash.
*Dr. Ross Wright .....Tacoma, Wash.
*Dr. G. H. Clement .....Vancouver, B. C.
*Dr. Thos. B. Dodgson, ...East Stanwood, Wash.
*Dr. G. H. Stollwerck .....Burlington, Wash.
*Dr. D. W. Kirkpatrick .....Bellingham, Wash.
Dr. Minard Allison .....Monroe, Wash.
Dr. Lawrence Mattison .....Seattle, Wash.
Dr. Roy F. West .....Seattle, Wash.
Dr. D. A. Clark .....New Westminster, B. C.
Dr. Albert Ehrlich .....Tacoma, Wash.
Dr. Henry Bell .....Centralia, Wash.
Dr. Henry M. Wiswall .....Vancouver, Wash.
Dr. Ralph M. Dodson .....Portland, Ore.
Dr. E. W. Rockey .....Portland, Ore.
Dr. Austin Shaw .....Anacortes, Wash.
*Designates also Examining Surgeons.

OPHTHALMIC SURGEONS.
(Eye Doctors)

Dr. H. R. Secoy .....Everett, Wash.
Dr. H. F. Thorlakson .....Seattle, Wash.
Dr. Frederick A. Kiehle .....Portland, Ore.

G. E. Wellein, Chief Dispatcher.
R. N. Whitman, Trainmaster.
E. T. Carter, Trainmaster.
L. E. Barnes, Trainmaster.
E. J. Gardner, Trainmaster.

GREAT NORTHERN RAILWAY COMPANY

CASCADE DIVISION

TIME TABLE 51

Effective 12:01 A. M. Pacific Time

Sunday, June 18, 1950

I. E. CLARY, Superintendent.
I. E. MANION, General Manager.
J. B. SMITH,
General Superintendent Transportation.

Time Table No. 51

Effective June 18, 1950

Station Numbers	Car Capacity: Siding	Car Capacity: Other Tracks	SECOND CLASS 403 C. M. St. P. & P. 591 Daily Ex. Mon.	SECOND CLASS 441 Daily	FIRST CLASS 361 Streamliner Daily	FIRST CLASS 359 Daily	FIRST CLASS 357 Streamliner Daily	FIRST CLASS 355 Streamliner Daily	FIRST CLASS 27 Daily	FIRST CLASS 5 Daily	FIRST CLASS 1 Streamliner Daily	FIRST CLASS 3 Daily	Distance from Wenatchee	STATIONS	Telegraph Calls
1648	Yard	1085		L 12.01Pm					L 11.15Pm	L 1.05Pm	L 4 3.25Am	L 2.00Am	0.00	WENATCHEE	WC
1655	70	47		12.25					11.25	f 6 1.18	3.40	2.12	7.38	MONITOR	MR
1659	113	213		12.33					11.30	s 1.29	3.47	2.20	11.00	CASHMERE	OM
1664	64	35		6 12.57					11.38	s 1.38	28 3.55	4 2.40	15.65	DRYDEN	DN
1667	0	236		1.05					11.43	s 1.44	4.00	2.46	18.77	PESHASTIN	PN
1671	112	18		1.15					11.48	s 1.52	4.07	2.51	22.05	LEAVENWORTH	CH
1676	25	0		1.35					12.01Am	f 2.03	4.17	3.03	27.90	CHUMSTICK	
1684	109	28		1.59					12.17	f 2.16	4.32	28 3.20	35.60	WINTON	WI
1691	135	41		5 2.27					12.32	f 441 2.27	4.42	3.32	42.15	MERRITT	
1699	104	11		3.03					12.56	f 2.42	4.58	3.48	49.18	BERNE	BR
1716	135	16		3.35					4 1.25	s 3.03	5.18	4.08	58.16	SCENIC	MA
1723	60	10		4.01					1.43	f 3.20	5.36	4.26	66.00	TONGA	
1728	E-191 W-99	271		2 5.13					s 28 2.00	s 3.37	s 442 5.54	s 442 4.45	70.96	SKYKOMISH	KY
1732	59	68		5.27					2.10	f 3.43	6.00	4.52	74.77	GROTTO	GO
1736	165	19		5.33					2.17	f 3.48	6.05	5.00	78.65	BARING	
1742	58	14		5.45					2.30	s 3.59	6.15	5.13	85.24	INDEX	
1747	100	80		5.55					2.39	f 4.08	6.23	5.23	90.14	REITER	
1751	149	Yard		6.05					442 28 2.48	s 2 4.28	6.29	5.33	94.51	GOLD BAR	GB
1757	59	41		6.15					2.57	s 4.36	6.35	5.41	99.91	SULTAN	
													107.10	MONROE JCT.	
1764	139	127	L 3.00Pm	6.30					3.08	s 4.48	6.43	5.51	107.37	MONROE	RO
1771	137	136	3.20	6.40					3.17	s 4.58	6.51	6.01	114.37	SNOHOMISH	SH
													115.01	SNOHOMISH JCT.	
													119.94	N. P. RY. JCT.	
1777	Continuous	112	3.39	7.05					3.24	5.06	6.57	6.09	120.19	LOWELL	W
			A 3.40Pm										120.20	LOWELL JCT.	
		104							3.27	5.09	6.59	6.12	121.81	PACIFIC AVENUE	D
1779	0			7.10					s 3.55	s 5.25	s 7.06	s 6.28	122.86	EVERETT	JN
1780		4		7.15	L 9.19Pm	L 8.32Pm	L 3.32Pm	L 11.05Am	3.58	5.27	7.07	6.30	123.67	EVERETT JCT.	
1784	0	75		7.22	9.25	f 8.37	3.37	11.11	4.05	f 5.33	7.12	6.36	127.42	MUKILTEO	
1793				7.35	9.36	f 8.49	3.47	11.23	4.17	5.45	7.21	6.47	134.56	MEADOWDALE	
1795	0	107		7.42	9.42	s 8.55	3.52	11.29	4.22	s 5.52	7.26	6.53	138.27	EDMONDS	DR
1796	0	79		7.49	9.48	f 9.01	3.57	11.35	4.27	s 5.59	7.31	6.58	141.37	RICHMOND BEACH	R
1807	0	190		8.00	9.59	9.15	4.07	11.49	4.40	6.15	7.41	7.10	149.23	BALLARD	
1808	Yard	1195		A 8.10Pm	10.03	f 9.19	4.10	11.52	4.44	f 6.18	7.45	7.14	150.99	INTERBAY	RB
											356 7.47		151.97	N. P. RY. CROSSING	
													154.27	NORTH PORTAL	
														SOUTH PORTAL	
1813	Yard	589			A 10.20Pm	A 9.35Pm	A 4.25Pm	A 12.05Pm	A 5.00Am	A 6.30Pm	A 8.00Am	A 7.30Am	155.67	SEATTLE	UD
			.40 19.24	8.09 18.43	1.01 31.47	1.03 30.47	.53 36.23	1.00 32.00	5.45 27.01	5.25 28.73	4.35 33.96	5.30 28.30		Time Over Subdivision Average Speed Per Hour	

DOUBLE TRACK — AUTOMATIC BLOCK SIGNALS

BETWEEN SOUTH PORTAL AND NORTH PORTAL INTERLOCKING RULES AND KING STREET PASSENGER STATION TUNNEL RULES GOVERN

Westward trains are superior to eastward trains of the same class, except as follows:
No. 1 is superior to all trains. No. 2 is superior to all trains, except No. 1.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 7 THROUGH 18.

Conditional flag stops—
Nos. 3 and 4 stop at any station between Wenatchee and Seattle, to pick up or discharge revenue passengers from or to points south of Shelby, and from or to points east of Havre, where Nos. 3 and 4 are scheduled to stop.
Nos. 5 and 6 stop on flag at Miller River, Startup and Halford.

Time Table No. 51
Effective June 18, 1950

STATIONS	Distance from Seattle	FIRST CLASS 356 Streamliner Daily	358 Daily	6 Daily	360 Streamliner Daily	2 Streamliner Daily	362 Streamliner Daily	4 Daily	28 Daily	SECOND CLASS 442 Daily	406 C. M. St. P. & P. 592 Daily Ex. Mon.		SIGNS
WENATCHEE	155.67			A 1.35Pm		A 7.30Pm		A 3.10Am	A 4.30Am	A 9.45Am		4-06	RKDNW XPBJ
7.38													
MONITOR	148.29			f 1.18		7.10		2.56	4.16	9.20		3-56	DP
3.62													
CASHMERE	144.67			s 1.09		7.04		2.50	s 4.10	9.10		3-50	DNWXP
4.65													
DRYDEN	140.02			s 12.57		6.57		2.40	3.55	8.55		3-43	DP
3.12													
PESHASTIN	136.90			s 12.49		6.52		2.35	3.46	8.45		3-38	DP
3.28													
LEAVENWORTH	133.62			s 12.43		6.47		2.30	s 3.41	8.35		3-33	DNP
5.85													
CHUMSTICK	127.77			f 12.34		6.39		2.22	3.32	8.20		3-25	P
7.70													
WINTON	120.07			f 12.24		6.27		2.10	3.20	8.00		3-15	DP
6.55													
MERRITT	113.52			f 12.15		6.18		2.00	3.10	7.45		3-06	WYPN
7.03													
BERNE	106.49			f 12.01Pm		6.03		1.45	2.55	7.20		2-58	NPT
8.98													
SCENIC	97.51			s 11.40		5.43		1.25	2.35	6.50		2-32	IDNP
7.84													
TONGA	89.67			11.22		5.24		1.06	2.15	6.20		2-14	P
4.96												2-05	
SKYKOMISH	84.71			s 11.10		s 5.13		s 12.55	s 2.00	5.54		1-58	RKDNW BOXYP
3.81													
GROTTO	80.90			f 10.51		4.57		12.40	1.40	4.05		1-52	DP
3.88													
BARING	77.02			f 10.45		4.53		12.36	1.36	3.55		1-42	WP
6.59													
INDEX	70.43			s 10.33		4.42		12.24	1.24	3.40		1-37	P
4.90													
REITER	65.53			f 10.24		4.34		12.16	1.16	3.20		1-30	P
4.37													
GOLD BAR	61.16			s 10.16		4.28		12.09	1.08	2.48		1-23	NDWYP
5.40													
SULTAN	55.76			s 10.07		4.22		12.02Am	1.00	2.30		1-17	P
7.19													
MONROE JCT.	48.57												VJ
0.27													
MONROE	48.30			s 9.57		4.14		11.52	s 12.50	2.15	A 4.35Am	6.9	DNWPRB
7.00													
SNOHOMISH	41.30			s 9.42		4.06		11.42	s 12.31	2.00	4.16	6.1	DNPR
0.64													
SNOHOMISH JCT.	40.66												VJ
4.93													
N. P. RY. JCT.	35.73												VRJ
0.25													
LOWELL	35.48			9.34		4.00		11.35	12.21	1.26	4.02	5.5	DNXYP
0.01													
LOWELL JCT.	35.47										L 4.01Am		RVJ
1.61													
PACIFIC AVENUE	33.86			9.32		3.57		11.32	12.18	1.20		5.2	DIXP
1.05													
EVERETT	32.81			s 9.30		s 3.55		s 11.30	s 12.15Am	1.18		5.1	DNXPI
.81													
EVERETT JCT.	32.00	A 8.35Am	A 8.55Am	9.19	A 2.20Pm	3.50	A 6.50Pm	11.19	11.49	1.15		4.8	IXPJ
3.75													
MUKILTEO	28.25	8.30	f 8.49	9.14	2.15	3.45	6.45	11.14	11.44	1.07		4.3	P
7.14													
MEADOWDALE	21.11	8.20	f 8.38	9.05	2.05	3.36	6.35	11.05	11.35	12.51		3.5	P
3.71													
EDMONDS	17.40	8.15	s 8.33	f 9.00	2.00	3.31	6.30	11.00	11.30	12.44		3.0	DNWP
3.10													
RICHMOND BEACH	14.30	8.10	f 8.26	8.55	1.55	3.26	6.25	10.55	11.25	12.35		2.5	DP
7.86													
BALLARD	6.44	8.00	8.16	8.45	1.45	3.16	6.15	10.45	11.15	12.20		1.5	XP
1.76													
INTERBAY	4.68	7.57	s 8.13	8.42	1.42	3.13	6.12	10.42	11.12	L 12.15Am		1.2	RKDNW ZBOXPVT
0.98													
N. P. RY. CROSSING	3.70	7.55	8.10	8.40	1.40	3.11	6.10	10.40	11.10			1.0	I
2.30													
NORTH PORTAL	1.40												I
1.30													
SOUTH PORTAL	0.10												I
0.10													
SEATTLE	0.00	L 7.45Am	L 8.00Am	L 8.30Am	L 1.30Pm	L 3.00Pm	L 6.00Pm	L 10.30Pm	L 11.00Pm				RKDNXP VZB
Time Over Subdivision		.50	.55	5.05	.50	4.30	.50	4.40	5.30	9.30	.34		
Average Speed Per Hour		38.40	34.90	30.62	38.40	34.59	38.40	33.35	28.30	15.89	22.64		

DOUBLE TRACK — AUTOMATIC BLOCK SIGNALS

DOUBLE TRACK

BETWEEN NORTH PORTAL AND SOUTH PORTAL INTERLOCKING RULES AND KING STREET PASSENGER STATION TUNNEL RULES GOVERN.

Westward trains are superior to eastward trains of the same class, except as follows:
No. 1 is superior to all trains. No. 2 is superior to all trains, except No. 1.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 7 THROUGH 18.

Conditional flag stops—
Nos. 3 and 4 stop at any station between Wenatchee and Seattle, to pick up or discharge revenue passengers from or to points south of Shelby, and from or to points east of Havre, where Nos. 3 and 4 are scheduled to stop.
Nos. 5 and 6 stop on flag at Miller River, Startup and Halford.

Station Numbers	Car Capacity: Siding	Car Capacity: Other Tracks	THIRD CLASS 735 C. N. 398 Tues., Fri.	SECOND CLASS 739 C. N. 406 Daily	SECOND CLASS 737 C. N. 404 Daily	FIRST CLASS 103 C. N. 4 Daily	FIRST CLASS 101 C. N. 2 Daily	FIRST CLASS 361 Streamliner Daily	FIRST CLASS 359 Daily	FIRST CLASS 357 Streamliner Daily	FIRST CLASS 355 Streamliner Daily	Distance from Vancouver	Time Table No. 51 Effective June 18, 1950 STATIONS	Telegraph Calls
CL 125	Yard	400						L 6.25Pm	L 4.10Pm	L 12.30Pm	L 8.10Am	0.00	VANCOUVER	VN
			L 9.02Am			L 8.02Pm	L 7.32Pm					0.71		
												0.71	VANCOUVER JCT.	
			9.04	L 11.05Am	L 12.50Am	8.05	7.35					0.54		
												1.25	C. N. RY. JCT.	
CL 122			9.09	11.17	12.58	738 8.08	7.38	6.28	4.13	12.33	8.13	1.48		
												2.73	STILL CREEK	
												1.84		
												4.57	B. C. E. RY. CROSSING	
CL 115			9.25	356 11.30	1.18	8.20	738 7.50	6.36	4.21	12.41	102 8.21	5.12		
												9.69	ENDOT	
CL 112	Yard	169	9.30	11.35	1.25	8.24	7.54	6.39	4.24	12.44	8.24	2.01		
												11.70	SAPPERTON	
CL 107	0	60	A 9.39Am	A 11.40Am	A 1.30Am	A 8.35Pm	A 8.05Pm	s 6.42	s 4.29	s 12.47	s 8.27	1.36		MN
												13.06	NEW WESTMINSTER	
								6.48	4.35	12.53	8.33	0.48		
												13.54	FRASER RIVER JCT.	
CL 101	48	0						6.55	360 4.46	358 12.59	8.40	5.24		
												18.78	TOWNSEND	
CL96	46	47						7.01	f 4.54	1.05	8.46	5.25		
												24.03	COLEBROOK	
CL92	0	8						7.06	f 4.59	1.10	8.51	3.69		
												27.72	CRESCENT	
CL87	57	10						s 7.13	s 5.16	s 1.17	s 8.57	5.03		WR
												32.75	WHITE ROCK	
												2.68		
												35.43	INTERNATIONAL BORDER	
CL84	50	142						s 7.21	s 5.35	s 1.25	s 9.05	0.45		
												35.88	BLAINE	BN
CL77	0	55						7.29	s 5.47	1.33	9.13	7.58		
												43.46	CUSTER	
CL71	60	118						7.36	s 5.57	1.40	9.20	5.58		
												49.04	FERNDALE	FD
CL62	52	539						s 7.46	s 6.15	s 1.50	s 9.30	8.98		
												58.02	BELLINGHAM	HM
												0.23		
												58.25	C.M.St.P.&P.R.R.CROS'ING	
												0.31		
												58.56	C.M.St.P.&P.R.R.CROS'ING	
												0.37		
												58.93	C.M.St.P.&P.R.R.CROS'ING	
												0.06		
												58.99	C.M.St.P.&P.R.R.CROS'ING	
												0.82		
												59.81	N. P. RY. CROSSING	
CL60	91	101						7.51	f 6.21	1.55	9.35	1.14		
												60.95	SOUTH BELLINGHAM	
CL50	67	0						362 8.06	f 6.39	2.12	356 9.50	9.88		
												70.83	SAMISH	
CL46	98	14						8.11	f 6.45	2.17	9.55	3.80		
												74.63	BOW	
CL39	51	258						8.20	s 6.59	2.27	10.05	7.38		
												82.01	BURLINGTON	BU
CL35	93	121						s 8.28	s 7.15	s 2.35	358 s 10.13	3.97		
												85.98	MT. VERNON	NR
CL30	28	17						8.34	362 f 7.29	2.41	10.19	5.33		
												91.31	FIR	
												1.34		
												92.65	ENGLISH LBR. CO. CROSSG	
CL23	50	52						8.42	s 7.41	360 2.53	10.27	5.76		
												98.41	STANWOOD	B
CL17	11	6						8.48	f 7.50	3.01	10.33	5.57		
												103.98	SILVANA	
CL13	50	15						8.52	f 7.56	3.05	10.37	3.95		
												107.93	ENGLISH	
								8.56	8.01	3.09	10.41	3.77		
												111.70	KRUSE JCT.	
CL6	50	70						9.01	s 8.09	3.13	10.45	3.41		
												115.11	MARYSVILLE	MS
CL3								9.07	8.16	3.19	10.51	2.60		
												117.71	DELTA JCT.	WY
												.07		
												117.78	N. P. RY. CROSSING	
	75	35						9.09	8.19	3.22	10.54	1.05		
												118.83	LONG SIDING	
1779	Yard	277						s 9.17	s 8.30	s 3.30	s 11.02	2.74		
												121.57	EVERETT	JN
1780	0	4						A 9.19Pm	A 8.32Pm	A 3.32Pm	A 11.05Am	0.81		
												122.38	EVERETT JCT.	
			.37 20.02	.35 20.24	.40 17.71	.33 22.45	.33 22.45	2.54 42.20	4.22 28.02	3.02 40.34	2.55 41.95		Time Over Subdivision Average Speed Per Hour	

DOUBLE TRACK

AUTOMATIC BLOCK SIGNALS

Southward trains are superior to Northward trains of the same class except as follows:
Nos. 355, 357 and 361 are superior to all other trains. Nos. 356, 360 and 362 are superior to all other trains except Nos. 355, 357 and 361.
Conditional flag stops—Nos. 358 and 359 stop on flag at Ocean Park.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 7 THROUGH 18.

Time Table No. 51

Effective June 13, 1950

STATIONS	Distance from Everett Junction	FIRST CLASS 104 C. N. 3 Daily	102 C. N. 1 Daily	356 Streamliner Daily	358 Daily	360 Streamliner Daily	362 Streamliner Daily	SECOND CLASS 738 C. N. 403 Daily		THIRD CLASS 736 C. N. 397 Wed., Sat.			SIGNS
VANCOUVER	122.88			A 11.40Am	A 1.40Pm	A 5.25Pm	A 9.55Pm						RKDNWV BYXOPZT
0.71													
VANCOUVER JCT.	121.67	A 7.40Am	A 8.40Am							A 3.25Pm			XJV
0.54													
C. N. RY. JCT.	121.13	7.37	8.36					A 8.15Pm		3.22			XVJ
1.48								103					
STILL CREEK	119.65	7.35	8.33	11.34	1.33	5.19	9.50	8.08		3.18			XP
1.84													
B. C. E. RY. CROSSING	117.81												I
5.12													
ENDOT	112.69	7.22	355 8.21	739 11.23	1.22	5.08	9.41	101 7.40		3.01			P
2.01													
SAPPERTON	110.68	7.17	8.18	11.20	1.19	5.05	9.38	7.35		2.56			ZWYXPV
1.36													
NEW WESTMINSTER	109.32	L 7.13Am	L 8.13Am	s 11.18	s 1.17	s 5.03	s 9.36	L 7.30Pm		L 2.50Pm			DNRIXPV
0.48													
FRASER RIVER JCT.	108.84			11.10	1.07	4.55	9.29						IJV
5.24					357	359							
TOWNSEND	103.50			11.03	12.59	4.46	9.22						P
5.25													
COLEBROOK	98.35			10.57	f 12.40	4.38	9.16						P
3.69													
CRESCENT	94.66			10.52	s 12.35	4.32	9.11						P
5.03													
WHITE ROCK	89.63			s 10.45	s 12.25	s 4.25	s 9.04						DNXP
2.68													
INTERNATIONAL BORDER	86.95												
0.45													
BLAINE	86.50			s 10.37	s 12.01Pm	s 4.15	s 8.56						DNWXP
7.58													
CUSTER	78.92			10.28	s 11.48	4.03	8.46						P
5.58													
FERNDALE	78.84			10.22	s 11.40	3.57	8.40						DP VZ
8.98													
BELLINGHAM	64.86			s 10.12	s 11.24	s 3.47	s 8.30						KDNXWPB T
0.23													
C.M.St.P.&P.R.R.CROS'ING	64.13												M
0.31													
C.M.St.P.&P.R.R.CROS'ING	63.82												M
0.37													
C.M.St.P.&P.R.R.CROS'ING	63.45												M
0.06													
C.M.St.P.&P.R.R.CROS'ING	63.39												M
0.82													
N. P. RY. CROSSING	62.57												M
1.14													
SOUTH BELLINGHAM	61.43			10.05	f 11.09	3.40	8.22						XP
9.88				355			361						
SAMISH	51.55			9.50	f 10.52	3.25	8.06						P
3.80													
BOW	47.75			9.35	f 10.46	3.20	7.55						P
7.38													
BURLINGTON	40.37			9.27	s 10.35	3.12	7.44						JRDNKZ BOWYXPM
3.97					355								
MT. VERNON	36.40			s 9.22	s 10.13	s 3.07	s 7.38						DNXP
5.33							359						
FIR	31.07			9.14	f 9.57	2.59	7.29						P
1.34													
ENGLISH LBR. CO. CROSSG	29.73												I
5.76						357							
STANWOOD	23.97			9.08	s 9.48	2.53	7.23						DNPW
5.57													
SILVANA	18.40			9.03	s 9.39	2.48	7.18						P
3.95													
ENGLISH	14.45			8.59	f 9.34	2.44	7.14						P
3.77													
KRUSE JCT.	10.68			8.55	9.29	2.40	7.10						PJV
3.41													
MARYSVILLE	7.27			8.52	s 9.24	2.37	7.07						DP
2.60													
DELTA JCT.	4.67			8.46	9.16	2.31	7.01						JDNIYXPV
.07													
N. P. RY. CROSSING	4.60												IM
1.05													
LONG SIDING	3.55			8.44	9.14	2.29	6.59						
2.74													
EVERETT	0.81			s 8.40	s 9.10	s 2.25	s 6.55						DNPX
0.81													
EVERETT JCT.	0.00			L 8.35Am	L 8.55Am	L 2.20Pm	L 6.50Pm						IXPJ
Time Over Subdivision		.27	.27	3.05	4.45	3.05	3.05	.45		.35			
Average Speed Per Hour		27.44	27.44	39.68	25.76	39.68	39.68	15.24		21.17			

DOUBLE TRACK

AUTOMATIC BLOCK SIGNALS

Southward trains are superior to Northward trains of the same class except as follows:
Nos. 355, 357 and 361 are superior to all other trains. Nos. 356, 360 and 362 are superior to all other trains except Nos. 355, 357 and 361.
Conditional flag stops—Nos. 358 and 359 stop on flag at Ocean Park.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 7 THROUGH 18.

Station Numbers	Car Capacity: Siding	Car Capacity: Other Tracks	SECOND CLASS 275 Daily Ex. Sun.	SECOND CLASS 277 Daily Ex. Sun.	Distance from Rockport	Time Table No. 51 Effective June 18, 1950 — STATIONS	Telegraph Calls	Distance from Anacortes	SIGNS	SECOND CLASS 278 Daily Ex. Sun.	SECOND CLASS 276 Daily Ex. Sun.
CN53	Yard	69	.....	L 10.30Am	0.00	ROCKPORT	RK	53.41	XWYVD	A 9.30Am	.....
					9.13						
CN44	35	158	.....	s 1.30Pm	9.13	CONCRETE	BA	44.28	WDX	s 8.30	.....
					1.26						
CN43	0	92	.....	f 1.45	10.39	GRASSMERE	.....	43.02	X	f 6.45	.....
					5.05						
CN38	0	36	.....	f 2.15	15.44	BIRDSVIEW	.....	37.97	.....	f 6.30	.....
					5.23						
CN33	0	39	.....	f 2.35	20.67	HAMILTON	.....	32.74	W	f 6.10	.....
					0.60						
.....	.....	.....	.....	s 2.36	21.27	HAMILTON JCT.	H	32.14	RBV	s 6.07	.....
					2.63						
CN29	0	33	.....	f 2.50	23.90	LYMAN	.....	29.51	.....	f 5.55	.....
					5.45						
CN23	0	5	.....	f 3.05	29.35	COKEDALE	.....	24.06	.....	f 5.35	.....
					3.12						
CN20	32	53	.....	f 3.30	32.47	SEDRO-WOOLLEY	SW	20.94	DX	f 5.20	.....
					0.10						
.....	.....	.....	.....	.....	32.57	N. P. RY. CROSSING	.....	20.84	M	.....	.....
					4.65				MJRDNOZ		
CL39	Yard	258	L 6.00Am	A 3.45Pm	37.22	BURLINGTON	BU	16.19	PKWXYZ	L 5.00Am	A 4.50Pm
					5.41						
CN9	0	15	f 6.25	.....	44.13	WHITNEY	.....	9.28	.....	.....	f 4.23
					3.16						
.....	.....	.....	6.35	.....	47.29	WHITMARSH JCT.	.....	6.12	RV	.....	4.16
					0.51						
CN6	0	9	6.37	.....	47.80	WHITMARSH	WH	5.61	.....	.....	4.15
					5.61						
CN0	Yard	265	A 6.55Am	.....	53.41	ANACORTES	AC	0.00	RDXWBT	.....	L 4.00Pm
			.55	5.15		Time Over Subdivision				4.30	.50
			17.66	7.09		Average Speed Per Hour				8.27	19.48

Westward trains are superior to eastward trains of the same class except No. 278 is superior to No. 277.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 7 THROUGH 18.

ALL SUBDIVISIONS

1. INSTRUCTIONS GOVERNING THE OPERATION OF STREAMLINER TRAINS.

CLEARING OF STREAMLINERS.

The time of No. 1 must be cleared by westward first class trains not less than 5 minutes before No. 1 is due to leave the last station where time is shown, and by other westward trains not less than 10 minutes before No. 1 is due to leave the last station where time is shown.

The time of No. 1 must be cleared by eastward first class trains, except No. 2, not less than 10 minutes at all stations, and by other eastward trains not less than 15 minutes.

The time of No. 2 must be cleared by eastward first class trains not less than 5 minutes before No. 2 is due to leave the last station where time is shown, and by other eastward trains not less than 10 minutes before No. 2 is due to leave the last station where time is shown.

The time of No. 2 must be cleared by westward first class trains, except No. 1, not less than 10 minutes at all stations, and by other westward trains not less than 15 minutes.

Within yard limits, yard engines and light engine movements must clear the main track not less than 10 minutes before Nos. 1 and 2 are due to leave last station where time is shown.

MAXIMUM SPEED OF STREAMLINERS.

Maximum speed of Streamliner trains, consisting of Streamliner cars hauled by Diesel engines, will be designated by distinctive reflectorized roadway signs in the shape of the letter "D".

Except as directly affected by speed restrictions under Items 1 and 2, All Subdivisions, the "D" signs designate zone speed territories and the numerals thereon indicate in miles per hour the maximum permissible speed which will govern until the next zone is reached.

Between Ballard and Seattle, Streamliners will also be governed by speed restrictions as indicated under Item 2, First Subdivision.

Where the movement is from a higher to a lower speed zone the zone sign is located approximately one mile from the point where the lower speed becomes effective. When the movement is from a lower to a higher speed zone the zone sign is located at the point where speed may be increased. Zone territories are listed herein for the convenience of employes.

MAXIMUM SPEED EXCEPTIONS:

When a Streamliner is detoured over Great Northern tracks outside of regular Streamliner territory, the Streamliner must not exceed the maximum permissible speed for other passenger trains in the territory operated.

When Streamliner is operated against the current of traffic in double track territory the Streamliner must not exceed the maximum permissible speed for other passenger trains. This does not modify Rule 93.

When Streamliner is handled by steam engine, or when other passenger trains are operated on Streamliner schedule, or when train consists of mixed Streamliner and conventional type equipment, the train must not exceed maximum permissible speed for other passenger trains in territory operated.

In event of failure of the electric straight air brakes, or if electric brakes cannot be used on account of cars not equipped with electric straight air brakes being handled in the train, the automatic air brakes will be used and Superintendent notified. In this event speed of train will not exceed the maximum permissible speed for other passenger trains.

ZONE TERRITORIES AND MAXIMUM SPEED OF STREAMLINERS.

Between Seattle and Everett Junction

Zones	Mileposts	MPH
King Street Station to Bay Street	0- 1.9	20
Bay Street to south end Bridge 4	1.9- 6.1	35
Bridge 4, Ballard	6.1- 6.4	25
E. end Bridge 4 to E. end Curve 335	6.4- 8.8	50
E. end Curve 335 to W. end Curve 314	8.8-16.7	60
W. end Curve 314 to City Limits—Edmonds	16.7-17.3	45
Through Edmonds	17.3-17.8	35
Edmonds to Everett Junction	17.8-32.2	60

Between Everett Junction and Skykomish

Zones	Mileposts	MPH
Everett Jct. to E. end Pacific Ave. crossing	32.2-1782.8	20
Pacific Ave. crossing to E. end Curve 270	1782.8-1780.7	60
E. end Curve 270 to Snohomish	1780.7-1775.6	75
Curve 267, Snohomish	1775.6-1775.5	55
E. end Curve 267 to Monroe	1775.5-1768.9	75
Through Monroe	1768.9-1768.4	25
Monroe to Sultan	1768.4-1761.4	60
Through Sultan	1761.4-1760.6	50
Sultan to W. end Curve 254	1760.6-1757.7	75
W. end Curve 254 to E. end Curve 252	1757.7-1756.7	60
E. end Curve 252 to W. end Curve 251	1756.7-1753.8	75
W. end Curve 251 to E. end Curve 218	1753.8-1740.5	35
E. end Curve 218 to W. Switch, Skykomish	1740.5-1732.5	50
Through Skykomish	1732.5-1731.2	20

Between Skykomish and Wenatchee

Zones	Mileposts	MPH
E. switch, Skykomish, to W. end curve 196	1731.2-1728.7	30
Curve 196 and Foss River Bridge No. 418	1728.7-1727.9	20
E. end curve 196 to E. end curve 67, Merritt	1727.9-1693.2	30
E. end curve 67 to W. end curve 33, Peshastin	1693-2-1670.2	55
W. end curve 33 to E. end curve 519	1670.2-1667.1	35
E. end curve 519 to E. end curve 512	1667.1-1663.6	50
E. end curve 512 to City Limits, Cashmere	1663.6-1661.3	40
Through Cashmere	1661.3-1660.7	25
Cashmere to Wenatchee	1660.7-1650.3	45

2. SPEED RESTRICTIONS GENERAL.

(a) Maximum permissible speed of passenger and freight trains, except Streamliners, will be designated by distinctive reflectorized roadway signs set in an upward angle of 45 degrees.

Except as directly affected by speed restrictions prescribed below and other speed restrictions covered by Item No. 2 under individual Subdivisions, the 45 degree signs prescribe the speed territories and the numerals thereon indicate in miles per hour the maximum permissible speed which will govern until the next territory is reached.

When the movement is from a higher to a lower speed territory the 45 degree sign is located approximately one mile from the point where the lower speed becomes effective. When the movement is from a lower to a higher speed territory, the 45 degree sign is located at the point where speed may be increased.

When operating against the current of traffic in double track territory, trains must not exceed the maximum permissible speed prescribed by the 45 degree sign with the current of traffic. This does not modify Rule 93.

When the 45 degree sign has two sets of figures, the numerals preceded with letter "P" apply to passenger trains, except Streamliners, and letter "F" to freight trains.

(b) When passenger trains are handled by freight engines or when freight cars, except cars equipped with passenger trucks and steel wheels, are handled in passenger trains, the train will not exceed maximum permissible speed for freight trains in the territory operated.

(c) Speed shown on Speed Limit Plate on engines must not be exceeded.

(d) Steam engines backing up	20 MPH
Steam engines in forward motion running light or with caboose only	35 MPH
Diesel and Electric engines light or with caboose only	50 MPH
Trains handling steam derricks, pile drivers, ditchers, cranes, steam shovels, dozers, etc. on Main Lines	25 MPH
except on 6 degree curves or sharper, and on Branch Lines	15 MPH
Trains handling ore cars or air dump cars loaded with ore or gravel and scale test car on Main Lines	30 MPH
except on 6 degree curves or sharper, and on Branch Lines	20 MPH

Trains handling carload poles or piling on open cars when operating on double track, siding or other adjacent track must stop meeting or being passed by Passenger Trains. For other trains reduce speed to.... 10 MPH

Unless conditions require a further speed restriction, trains or engines moving against the current of traffic on double track thru interlockings ..... 15 MPH

Trains or engines moving on main routes actuating points of spring switches ..... 35 MPH

Trains or engines moving in facing point direction at spring switches without facing point lock ..... 25 MPH

Trains or engines thru No. 20 turnouts at:..... 35 MPH

Cashmere, east siding switch.
Leavenworth, east and west siding switch.
Winton, east and west siding switch.
Scenic, east and west siding switch.
Skykomish, east siding switch.
Gold Bar, east siding switch.
Pacific Ave., west siding switch.
Interbay, end of double track east and west end of yard, and yard lead at 23rd Ave. overhead bridge.
Still Creek, end of double track.
Endot, end of double track.

Trains or engines thru No. 15 turnouts at: ..... 25 MPH

Wenatchee, east and west crossover switch west end of yard.
Merritt, east and west siding switch.
Baring, east and west siding switch.
Monroe, east and west siding switch.
Snohomish, east and west siding switch.
Everett Jct., junction switch end of double track.

Trains or engines thru all other turnouts..... 15 MPH

3. **MOVEMENT OF ENGINES DEAD IN TRAINS.**

Class O and larger engines will be placed not to exceed 15 cars behind road engine. In electrified zone only class R engines will be handled on head end, all others near rear.
Class F-8 and smaller engines will be placed next ahead of caboose.

Diesel and Gas-Electric engines 2300-2341 must be handled on rear of train.

Not less than five cars will be placed between all engines.

Trains handling steam engines dead in train with side rods on both sides will not exceed 40 MPH; and without side rods will not exceed 10 MPH.

Trains handling Electric, Diesel and Gas-Electric engines in tow dead in train will not exceed following speeds:

50	35 MPH
75 to 170	45 MPH
175 to 231 and 271	60 MPH
252 to 259-262 to 265-300 to 306-400 to 456 and 272	45 MPH
260-261-266 to 270	65 MPH
350 to 376-500 to 512	75 MPH
2300 to 2324	50 MPH
2325 to 2341	60 MPH
5000 to 5008B	45 MPH
5010 to 5019	55 MPH

4. Under Rule 2, watches that have been examined and certified to by a designated inspector must be used by train dispatchers and yardmen.

5. Brakemen with less than one year of experience should not be used as flagman except in emergency, and then Superintendent will be notified by wire.

6. When operating snow machines in non-block signal territory, no trains should be permitted to follow closer than a station apart; when that cannot be done, they will be blocked not less than thirty minutes apart.

7. After severe blizzard or dirt storm, employes on first train over road must exercise care to avoid accident caused by striking drifts without first having drifts faced with hand shovels, cutting in far enough to get beyond the hard snow and giving a perpendicular wall to strike against instead of slope or wedgelike shape. When operating snow dozer, conductor in charge will ride in the dozer. On snow and dirt dozers, every precaution must be taken to see that cage, flangers and wings clear all obstacles when in service and are properly secured when in thru trains, and dozers properly turned. Hand screws must be tightened to raise flanger on dozers as high as possible before making a back-up movement, and must not be released until the dozing work is actually to start. Hand screws holding the cage on dozers must be tightened or chains otherwise fastened, except when dozer has air in cylinders and is attended by an employee.

8. Loaded dump cars should not be handled on double track after dark, but if necessary to do so, close watch must be kept by trainmen and if a car dumps its load, train must be stopped and protection afforded on the opposite track.

9. Baggage cars returned deadhead when moved in storage mail service in opposite direction will be accompanied by waybill carrying notation "Deadhead mail car, no material of any character other than U. S. Mail or mail sacks to be loaded in it." Conductors will be held responsible for compliance of waybill instructions.

10. Trains 1, 2, 3, 4, 7 and 8 carry 100 ft. of steam hose in two 50 ft. lengths equipped with standard Vapor and engine steam dome connections for emergency use in event of steam failure on train engine and non-steam train line engine furnished to handle train. In case of steam line failure on a car, connect both hoses together to run around such car so can be taken to first terminal, using combination standard Vapor and steam dome connections attached to reel. Car must be drained before proceeding.

11. Unless otherwise provided, when passenger trains are operated against the current of traffic on double track or through sidings, conductors shall notify Railway Postal Clerks, train shall stop at points where U. S. Mail is usually picked up and conductors are responsible for delivery of mail to Postal car.

12. Conductors will report by wire all flat spots on wheels of passenger cars. Any cars having flat spots on wheels of more than two and one-half inches long must be set out.

13. Due to limited overhead clearance at tunnels and structures, employes are warned to keep off top of cars of extreme height and width when handled in trains and yards, also such standing cars in electrified zone, except in emergency. In absence of previous advice on such cars, wire proper officer for instructions.

14. The Railway Company is responsible for proper handling of perishable freight on road and at points where Western Fruit Express Company do not maintain representatives. Conductors on trains handling perishable freight will ascertain from waybills class of service required and light or extinguish heaters and manipulate vents in accordance with current instructions provided for handling perishable freight issued by the National Perishable Freight Committee.

15. Placarded loaded tank cars moving in through freight trains must be placed not less than 6th car from engine or caboose; cars placarded "Explosives", "Inflammable", or "Corrosive Liquids", not less than 16th car from road engine, one car from helper engine and 11 cars from caboose. These cars may be handled second car from engine or caboose in local trains. These cars must not be placed in trains next to each other, next to refrigerators equipped with gas burning heaters, stoves or lanterns, or flat cars loaded with logs, poles, lumber, pipe, rails, iron, steel, and gondola cars with such lading higher than ends, or cars of similar lading that is liable to shift.

Carload express shipments of explosives, sealed and placarded, may be handled on passenger trains; LCL shipments may be made in so-called peddler car with messenger in charge when such car is assigned to the handling of express and baggage exclusively, provided shipments are accompanied by authorized representative of United States Government while on trains. Terminals or pick-up points enroute must furnish conductor and engineer Form 250 showing consecutively location in train of all cars placarded "Explosives". At points other than terminals where crews change, notice will be transferred from crew to crew.

Further details governing handling of Explosives, Inflammable and Corrosive Liquids may be found in I.C.C. Regulations.

16. Gas-Electric engines must not be fueled while occupied by passengers, or coupled to cars occupied by passengers.

17. The normal position of a spring switch with facing point lock is identified by a color light type signal displaying a "lunar white" light for train or engine movements in a trailing point direction and for movements in facing point direction when conditions require.
The normal position of a spring switch without facing point lock is identified by a triangular yellow target on switch stand with letter "S" in black, and "lunar white" light in switch lamp in place of green light displayed in both directions thru or over the switch.
Trains departing from stations, either from siding or main track in trailing point movement actuating points of spring switches, a member of crew must observe indication of governing signal in opposite direction after rear end of train has passed thru switch to ascertain if switch points return to normal position. If this signal indicates Stop and no immediate train movement or other cause is evident report the fact to Superintendent from first available point of communication.
During and immediately following snow storms or violent wind storms, spring switches must be operated by hand and relined to normal position before heading out through switch in trailing point movement, actuating switch points, to insure switch is in proper operating condition.

INDICATORS AT SPRING SWITCHES.

A Switch Indicator, consisting of a single yellow light unit (normally dark) and a switch-key-controller mounted on an iron mast located at clearance point of a siding, must be operated by a member of the crew who, together with engineer, must observe and be governed by its indication before fouling main track or making movement from siding to main track thru a spring switch in automatic signal territory, unless the movement is made immediately after an opposing train has passed the switch, and Automatic Signal at leaving end of siding indicates "Proceed."

If Indicator displays a yellow light when switch-key-controller is operated, train or engine movement to main track may be made immediately in accordance with train rights and operating rules. Display of yellow light must continue until leading wheels have passed clearance point.

If Indicator does not display a yellow light when switch-key-controller is operated, train or engine movement to main track may be made in accordance with train rights and operating rules, after operating spring switch by hand; waiting three minutes and taking every precaution to provide proper protection. To operate Switch Indicator, insert switch key in controller and turn clockwise toward "R", hold a few seconds and remove key. If yellow light is displayed and intended movement is not made, insert switch key in controller and turn counter-clockwise toward "N" to restore signal system to normal condition to avoid delay to trains on main track.

Switch-key-controller must never be operated toward "N" after having been operated toward "R" if intended movement to main track is to be made.

18. **DRAGGING EQUIPMENT DETECTOR INDICATOR** consists of a single white light unit (normally dark) with circular background mounted on signal or other mast. When white light is displayed, train must be stopped and inspected for dragging equipment. Notify Superintendent from first available point of communication.

19. Facing point locks on hand operated switches are indicated by a six inch yellow stripe painted on target staff. Be positive locking device is restored to normal position after using. A running switch must not be made thru this type switch.

20. Under Rule 24, engine number only will be displayed in indicators on engines so equipped. This will also apply when our engines are operating over Northern Pacific tracks. Between Klamath Falls and Chemult, Southern Pacific rules will govern.

21. Rule 204(A) prescribes that copies of train orders will be furnished the rear trainman, such orders will only be furnished on trains designated: Nos. 1, 2, 3, 4, 7, 8, 9, 10, 28, 29, 30, 355, 358, 359, 360 and sections thereof; also extra passenger train whether operated as section of regular train or as a passenger extra.

22. Air hose on Diesel and Electric engines must be hooked up in hose fastener when not in use.

23. Before leaving any engine terminal, enginemen will make proper tests and inspections of water glasses, gauge cocks, water column and injectors, and will not leave the terminal unless all these are in proper working order.
Should enginemen on steam engines find that the water is not in sight in water glass, and if water cannot be raised to bottom gauge cock or water glass by opening throttle, on oil burning engines the fire must be extinguished immediately, and on coal burning engines the fire must be knocked out or smothered to the extent there will be no damage done to the crown sheet. If water can be raised to the bottom gauge cock or water glass the water level should be built up by use of the pump, or injector, or both.
Should the low water alarm whistle blow, on any engine so equipped, enginemen will immediately ascertain where the water level is in the boiler by blowing out water glasses and the water column, and being sure that water glass mounting valves are open and if water cannot be raised to the bottom gauge cock or water glass by opening throttle, enginemen will be governed by instructions in the preceding paragraph.

24. **ON ENGINES, PASSENGER, FREIGHT AND ORE CARS EQUIPPED WITH ROLLER BEARINGS, EMPLOYES WILL BE GOVERNED AS FOLLOWS:**
Roller bearing failures on cars or engines equipped with roller bearings in the journal boxes may be due to lack of oil. If the box is not blazing, the oil plug in the cover should be removed and engine or valve oil added. Oil must never be added to a box that is blazing. After the oil has been added and plug replaced, the train should proceed at reduced speed and care exercised until it is apparent that the box will run cool. If fire develops in roller bearing box of any equipment, it must be closely watched, train moved slowly, and Superintendent notified from first available point of communication, who will prescribe for the movement.
Some engines and cars equipped with roller bearings have heat indicators or stench bombs inserted in the housing of boxes which release a strong pungent odor in the event of excessive journal box temperatures. When this odor is detected train must be stopped at once and box located. Compare the temperature of this box with the other boxes on the same engine or car, check the oil level, and if there is no evidence of overheating, train may proceed, but if the box is overheating, proceed only as instructed in the preceding paragraph.
Ore cars equipped with roller bearings have box cover painted orange, four inch white stripe full length of car beneath stencilled name "GREAT NORTHERN", and "TIMKEN ROLLER BEARINGS" stencilled in black across center of white stripe.
Cars or engines equipped with roller bearings must not be allowed to stand alone, even on level track, without brakes adequately applied.

25. OSCILLATING EMERGENCY RED HEADLIGHT will be immediately displayed by day or night when a train is disabled or stopped suddenly by an emergency application of air brakes or when engineer or conductor find it necessary to stop train due to some defect which might cause accident, over-running clearance point at meeting and waiting point, end of double track or junction.
Engineer of an approaching train observing display of emergency red headlight must stop before passing and be governed by conditions existing. If operating on adjacent track, ascertain and if safe for passage, then proceed at restricted speed until train is passed.

OSCILLATING EMERGENCY RED REAR END LIGHT is of two types—Automatic Control—Portable Manual Control—and except as otherwise provided, must be displayed by day or night each time train stops or is running at speed less than 18 MPH. Automatic Control type automatically functions in this manner.

However, when train running at speed above 18 MPH and moving under circumstances in which it might be overtaken by another train or engine and during foggy and stormy weather, light may be operated manually with emergency switch and employes to afford other protection prescribed by rule.

THE USE OF EMERGENCY RED HEADLIGHT AND REAR END LIGHT DOES NOT IN ANY WAY RELIEVE ENGINEMEN AND TRAINMEN FROM RESPONSIBILITY OF COMPLYING WITH RULES 99 AND 102.

Emergency red rear end light must be extinguished; when standing at origin and terminus stations of train run; when switching being performed from rear; when on siding to be passed by another train; and, when another train operating on adjacent track is approaching from rear, but not until it is known such train is not on same track.

Portable light must be removed before coupling to rear of such car.

Oscillating white light on engines will be displayed in addition to standard headlight governed by Rules 17 and 17(B). In case of headlight failure it can be used as emergency headlight or as a focus light by push button control if desired.

Enginemen and trainmen on trains and engines equipped with oscillating emergency red lights must familiarize themselves with the operation of the lights.

26. Omitted.

27. Rule D-97 is in effect on this Division.

28. Trains handling flat or skeleton cars loaded with logs must stop at appropriate locations immediately before passing over through-truss bridges or through tunnels and make thorough inspection of all cars of logs in their train, making certain train and lading are in safe condition before proceeding. Extra stops en route will be made for this purpose when in the judgment of the conductor it is necessary.

Trainmen must maintain watch behind their trains for logs that may have rolled off cars and if main track is fouled take prompt action to protect trains.

On double track, conductors must notify train dispatcher when logs are to be handled and the log train must be at stop when being passed by other trains, except that when two trains handling logs are passed either one should stop until the other train has pulled by whether on siding or double track.

On single track, trains handling logs must be at stop when meeting or being passed by passenger and freight trains, except when there are more cars than siding will hold, it is permissible for log train to pull by such trains at restricted speed.

Logs must be secured to cars by chains or cables.

Unless conditions require further speed restrictions, trains handling logs must not exceed 25 MPH.

No trains may pass under overhead railroad bridge at Snohomish when cars loaded with logs are passing over this bridge.

29. **GREAT NORTHERN BULLETINS ON TENANT LINES.**

NP Ry	Everett, Auburn, Sumas, Seattle.
CMStP&P RR	Everett, Tacoma, Enumclaw.
Canadian National Ry	Port Mann.
National Harbours Board Ry	Vancouver, B. C.

30. SP&S Ry bulletins at Interbay roundhouse, Interbay Yard office and UD office, Seattle.

31. Engineers making stops to take water with long heavy freight trains must not attempt to spot at water spout with engine coupled to train.

32. Red signs on frost boxes of water and oil tanks—in case of emergency, close large valve in frost box.

33. EMERGENCY TELEPHONES.

Leavenworth, west switch	Booth
Tunnel 13.5, east end	Booth
Winton, west switch	Booth
Tunnel 14.7, one-half mile east	Booth
Berne, east switch	Booth
Cascade Tunnel No. 15	In each refuge bay, except Nos. 2, 4, 18 and 20
Scenic, west switch	Booth
East end Bridge 407	Booth
Skykomish, east switch	Booth
Grotto, west switch	Booth
Reiter, 2 miles east	Booth
Reiter, Gravel pit	Booth
Gold Bar, west switch	Booth
Monroe, east switch	Booth
Snohomish, east end Br. 455	Booth
Pacific Ave., west switch	Booth
Everett Tunnel No. 16, east end	Booth
Everett Jct.	Booth
Crossover, MP 24.29	Booth
MP 15, Standard Oil Spur	Booth
MP 11.5	Booth
MP 9.5	Booth
Ballard, crossover	Booth
Interbay yard, east end	Booth
Between Delta Jct. and wye	Booth
Bridge 11	Watchman Cabin
Kruse Jct.	Booth
Belleville Pit, switch	Booth
MP 76	Booth
MP 86	Watchman Cabin
Samish	Booth
Sockeye, highway crossing	Booth
So. Bellingham	Booth
No. Bellingham, cement spur	Booth
Custer, south switch	Booth
MP 125	Booth
Fraser Mill Spur	Booth
Sapperton	Switchman's Shanty
Dominion bridge	Booth
Endot	Booth
Still Creek	Booth
B. I. Jct.	Booth

34. **LOCATION OF TUNNELS**

First Subdivision:

Tunnel No. 13 —2 miles west of Chumstick.
Length—2601′.
O. H. Clearance 19′ 2″ to trolley wire.

Tunnel No. 13.5—4.7 miles west of Chumstick.
Length—788′.
O. H. Clearance 19′ to trolley wire.

Tunnel No. 14 —1.08 miles east of Winton.
Length—4059.4′.
O. H. Clearance 19′ 11″ to trolley wire.

Tunnel No. 14.7—2.67 miles east of Berne.
Length—674.5′.
O. H. Clearance 22′ to trolley wire.

Tunnel No. 15 —Between Berne and Scenic.
Length—41152′.
O. H. Clearance 19′ 3″ to trolley wire.

Tunnel No. 16 —0.24 miles east of Everett.
Length—2440′.
Height—21.1′.

Tunnel No. 17 —0.10 miles east of Seattle.
Length—5141.5′.
Height—23.3′.

Second Subdivision:

Tunnel No. 18 —0.33 miles north of Samish.
Length—1113′.
Height—21.2′.

Tunnel No. 19 —4 miles south of So. Bellingham.
Length—141.3′.
Height—20.5′.

Tunnel No. 20 —3.70 miles south of So. Bellingham.
Length—328.5′.
Height—20.35′.

Tunnel No. 21 —1 mile south of So. Bellingham.
Length—713.2′.
Height—20.9′.

FIRST SUBDIVISION

(Main Line)

1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

Between	Passenger	Freight
Wenatchee and Peshastin	45 MPH	45 MPH
Peshastin and Merritt	60 MPH	45 MPH
Merritt and Skykomish	30 MPH	20 MPH
Skykomish and Baring	50 MPH	45 MPH
Baring and Gold Bar	35 MPH	25 MPH
Gold Bar and Seattle	60 MPH	45 MPH

2. SPEED RESTRICTIONS.

Cashmere, Over public crossing Main Street	25 MPH
Bridge 370, Dryden, R engines	20 MPH
Bridge 371, Dryden, R engines	10 MPH
Bridge 372, Dryden, R engines	10 MPH
Bridge 406, Scenic 4 miles west of, R engines	20 MPH
Bridge 408, Tonga 3 miles east of, R and Q engines	20 MPH
Bridge 4, Ballard	25 MPH
Skykomish, over public crossings	20 MPH
Monroe, thru town limits	25 MPH
Everett, over public crossing Pacific Avenue	25 MPH
Edmonds, thru town limits	35 MPH
Interbay, over NP Ry crossing	25 MPH
Seattle, thru turnouts South Portal	10 MPH
Seattle, over public crossings	20 MPH
Between Home Signals of Interlockings at: Pacific Avenue. Everett Jct.	25 MPH

3. ENGINE RESTRICTIONS ON INDUSTRY TRACKS.

Cashmere, Earl Fruit Spur and Fruit Growers Union Spur, engines heavier than O prohibited.

O and heavier freight engines not permitted Seattle, King Street Terminal, on north end of tunnel tracks 1 and 3.

Skykomish, GN engines prohibited on Wood Spur.

Delta, trains running via this yard with R engines must make their set out or pick up on tracks 1, 2, 3, or 4.

4. TRAIN REGISTER EXCEPTIONS.

Appleyard, register is for second and inferior class trains.
Wenatchee, register is for first class trains and passenger extras.
Monroe, register only for CMStP&P RR trains.

Snohomish, register only for NP Ry trains and eastward NP Ry trains register by ticket.

Lowell, NP Jct., register only for NP Ry and CMStP&P RR trains.

Interbay and Skykomish, first class trains register by ticket.
Wenatchee, Nos. 1 and 2 register by ticket.
Interbay, engineers and conductors of trains originating which operate over joint track south of Seattle must register at yard office and show number of last bulletin issued by NP and GN.

5. CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).

At Everett Jct., trains for which this point is initial station may proceed on authority of clearance under which such trains arrive.

6. IN ELECTRIFIED ZONE, APPLEYARD TO SKYKOMISH.

Power transmission line carries 44,000 volts.
Signal transmission line carries 13,200 volts.
Trolley line carries 11,500 volts.

All wires must be considered energized unless a clearance has been obtained from the operator at Skykomish substation.

Telegraph and telephone wires are not located along right-of-way. Never attempt to connect field telephone apparatus to any wires located along right-of-way in this zone.

RESTRICTED OVERHEAD CLEARANCES.

The trolley wires in the open sections provide a clearance of 21 feet to 24 feet above top of rail.

At the following locations the overhead clearance of trolley wire is restricted to 19 feet:

Columbia River Bridge between Appleyard and Wenatchee.
Overhead bridge ½ mile west of Cashmere.
Bridge 370, 1 mile east of Dryden.
Tunnel No. 13, 2 miles west of Chumstick.
Tunnel No. 13, 5.2 miles east of Winton.
Tunnel No. 14, 1 mile east of Winton.
Cascade Tunnel No. 15, between Berne-Scenic.

Employes must keep off the top of cars and engines on electrified tracks, except in emergency, and then must use extreme care.

Snohomish, NP overhead bridge ..... 19′ 0″

Skykomish, targets on roundhouse switch stands will not clear man riding on side of cars or engines.

Seattle, overhead bridge between Washington and Main Sts.....19′ 4″
overhead bridge between Third and Fourth Ave. So.....19′ 4″

Seattle, King Street station, close clearance between eaves of umbrella shed and sides of cabs, P-2 and larger engines.

7. Between Appleyard and Wenatchee, eastward First Subdivision freight trains will use main track, westward freight trains will use lead track entering main track at crossover just west of passenger station, Wenatchee, or Olds crossover, unless otherwise instructed by Yardmaster.

8. Wenatchee, Crossovers main track to yard lead located as follows:
Crossover No. 1, about one mile east of depot.
Crossover No. 2, 800 ft. east of depot.
Crossover No. 3, 670 ft. west of depot.
Crossover No. 4, 685 ft. west of depot.
Crossover No. 5, at 5th Street, about one mile west of depot.
Olds crossover, about 3 miles west of depot.
Crossovers 1, 2 and 4 are trailing point, and 3, 5, and Olds, facing point for eastward trains.

9. Wenatchee, westward trains moving from W-O Line lead to First Subdivision and required to wait for westward trains on First Subdivision shall stop east of sign reading "Wait Here". For further details and push button operation see instructions posted in iron box locked with switch lock.

10. Between Appleyard and Skykomish where helper engines are cut in copies of train orders must be furnished helper engines.

11. Cashmere and Snohomish, crossing signals are equipped with switch-key controllers. Trains or engines within circuit may clear signals for highway traffic by inserting switch key in controller and turn to right. Crossing signals must be restored to normal operating condition before leaving.

12. Winton, Berne, Scenic, electric knife switches located in depot provide manual control of signals at these locations so that signals can be set to display Stop-indication in case any defect is discovered while trains are passing depots. Trains stopped by any of these three signals will not proceed until instructed by trainmen to do so. Knife switches are connected to westward automatic block signal at west switch, Scenic and Winton, and to eastward automatic block signal at east switch, Berne.

Berne, two rail clamps have been placed in depot for emergency use. When necessary to set out bad order car on siding at Berne, train crew must get clamps from depot and see they are properly secured and blocked to rail on east end of car. Crew that picks up bad order car see clamps are removed and replaced in depot.

13. Cascade tunnel, track between Berne and Scenic is controlled by positive block in both directions. When stopped by a Stop-indication at automatic block signal located near entrance to tunnel, train must not proceed unless authorized by train order to do so. In case of loss of power or other emergency, a train in the tunnel may make a forward or backward movement to Scenic or Berne without flag protection and may pass signals indicating Stop and proceed at restricted speed without stopping. Westward trains encountering Signal 1707.9 inside west portal displaying Stop-indication must not pass west portal until it is known track is clear to east switch Scenic.

14. Scenic, water tank 3 miles west.

15. Skykomish, unless otherwise directed, extension on east end of siding for use only by eastward trains and in no case will train or cars be left on this extension without engine coupled and air brakes operative.

16. Baring, water tank 1.26 miles west.

17. Between NP Jct. and Delta (freight yard) 3.26 miles west, trains and engines will be governed by NP Ry time-table and Special Instructions.

18. Interbay, main track is a single track between 700 ft. east of NP Ry crossing and 4000 ft. west of bridge 4, Ballard. Each end of this single track is equipped with a spring switch, normal position is for trains entering double track.

When an eastward movement is to be made from yard lead to main track, trainmen shall operate push button "R" at signal 4.8. If no conflicting movement is being made on main track and spring switch is in proper operating condition, signal 4.8 will indicate proceed after a time interval of three minutes. After push button "R" is operated a white light will be displayed if operation is effective.

If push button "R" is operated and the intended movement is not made, or main track switch is not lined, push button "N" must be operated to restore signal system to normal condition to avoid delays to trains on main track. Push button "N" must never be operated, after push button "R" if the intended movement is to be made.

Westward freight trains will enter yard at the connection from westward main track at east end of yard unless otherwise instructed by yardmaster. Trains or engines must stop east of signal 5.3 and not proceed until trainmen have lined switch to enter yard.

19. **SEATTLE, KING STREET PASSENGER STATION TUNNEL RULES.**

1. King Street Passenger Station Tunnel Rules shall consist of Great Northern Interlocking Rules as set forth in the Consolidated Code of Operating Rules and General Instructions, supplemented by the following special instructions, and will govern train and engine movements between North Portal and South Portal.

2. A positive block is maintained in both directions between these stations. Trains and engines may make a forward or backward movement within these limits without flag protection, observing governing signal indications.

3. No train or engine will make a complete through movement between North Portal and South Portal against the current of traffic, or pass the governing home signal at the immediate entrance to the tunnel on either track displaying a "Stop" indication, except on the authority of a "Tunnel Card" properly completed by signalman in charge and OK'd by the Signalman at opposite station. When this governing home signal indicates "Stop", trains and engines, after stopping, must proceed at restricted speed to the next signal and be governed by its indication.

4. Tunnel Cards shall be used as required: Form 26 for train and engine movements from North Portal to South Portal, and Form 26-A for train and engine movements from South Portal to North Portal.

5. "Tunnel Card" does not dispense with the observance of or compliance with the indications of southward home signals at the South end of the tunnel governing entrance to the South Portal Interlocking or the northward home signals governing entrance to the North Portal Interlocking.

6. At South Portal, trains and engines may enter the tunnel on either track for short switching movements if required. If the governing home signal at the immediate entrance to the tunnel displays a Stop-indication, a Tunnel Card must first be secured, as prescribed by Rule 3.

7. Interlocking signal located at the north entrance of the tunnel, controlled from South Portal, and governing southward train and engine movements on the Southward track, displays indications in accordance with Great Northern Rules 601-A, 601-C and 601-D.

Green over Red (Rule 601-C) displayed indicates route through South Portal Interlocking to southward main track (Tunnel track 4) properly lined.

Red over Yellow (Rule 601-D) displayed indicates diverging route through South Portal Interlocking properly lined.

These indications repeat the indications of the dwarf signal of color light type located at the south exit of the tunnel, governing southward train and engine movements to Southward main track (Tunnel track 4) and other tracks of King Street Passenger Station. Emergencies may arise which may cause a change in the indications of this dwarf signal after southward train or engine has entered the tunnel and enginemen and trainmen must be on the alert to observe such change which will be indicated by the display of a yellow light at the special approach signal located in the tunnel about 1200 feet from the south exit.

8. The maximum permissible speeds between North Portal and South Portal for all trains and engines are: 20 MPH moving with the current of traffic, and 10 MPH moving against the current of traffic.

9. Operating directions are: "North" from south end of King Street Station through South Portal to North Portal, and "South" from North Portal through South Portal to south end of King Street Station.

10. Dwarf signal of color light type, located between northward and southward main tracks, south end of King Street Station governing northward train and engine movements on southward main track (Tunnel track 4) is controlled from South Portal Interlocking.

When Red is displayed, Great Northern Rule 601-A governs.

When Yellow is displayed, Great Northern Rule 601-E governs.

When a train or engine is stopped by the Stop-indication of this signal, Signalman must be informed of desire to make the northward movement on southward main track (Tunnel track 4) by four operations of the push button located on top of the signal.

20. Seattle, train, yard and engine movements between GN freight yard and 5th Avenue tracks will be made via NP and UP main track Oregon Street connection and their time-tables and Special Instructions will govern.

21. SPEED TEST BOARDS.

Engineers shall test speed of their trains passing following points as compared with Speed Table:

Westward,

Between MP 1779 and MP 1780 approximately 2 miles west of Snohomish.

Eastward,

Between MP 11 and MP 12 approximately 4 miles east of Ballard.

Between MP 1779 and MP 1780 approximately 2 miles west of Snohomish.

22. CROSSOVERS ON DOUBLE TRACK.

Facing Point.	Trailing Point.
MP 7.36 just east of Ballard, to Industrial district off of westward main track.	MP 7.36 just east of Ballard. MP 14.5, ¼ mile west of Richmond Beach. MP 15, Standard Oil Spur ¾ mile east of Richmond Beach. MP 17.92 just east of Edmonds. MP 24.29 between Meadowdale and Mukilteo. MP 29.21 at Mukilteo. MP 31.33 GN oil spur, 1 mile west of Everett Jct.

23. SPRING SWITCHES WITH FACING POINT LOCK.

Wenatchee Olds crossover (Connection to W-O Line) east and west crossover switches.

Cashmere .....east and west siding switch.
Leavenworth .....east and west siding switch.
Winton .....east and west siding switch.
Merritt .....east and west siding switch.
Skykomish .....east and west siding switch.
Baring .....east and west siding switch.
Gold Bar .....east and west siding switch.
Monroe .....east and west siding switch.
Snohomish .....east and west siding switch.
Interbay .....yard lead switch near 23rd Avenue overhead bridge.
Normal position is for main track.
Interbay .....east end double track.
Normal position is for eastward main track.
Interbay .....west end double track.
Normal position is for westward main track.

24. DRAGGING EQUIPMENT DETECTOR INDICATORS.

Westward,
On signal 1696.3 approximately 3½ miles west of Merritt.
On cable post approximately 4 miles west of Baring.
On cable post just east of Index.
Eastward,
On cable post approximately 2½ miles east of Index.
On signal 1742.0 approximately 2 miles west of Baring.
On cable post approximately 1 mile east of Berne.
On signal 1693.2 just west of Merritt.

25. MANUAL INTERLOCKINGS.

Ballard, Br. 4 .....Salmon Bay drawbridge.
North Portal-South Portal.....King Street tunnel and terminal tracks.

26. MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.

Scenic .....East and west siding switch.
Everett—Pacific Ave. .....West siding switch.
Everett Jct.....End of double track junction with 2nd Subdivision single track between these stations.

Scenic, switches electrically controlled by operator at depot.

Eastward home signals at east switch equipped with Red Marker Disc and "Positive Block" sign, Item 13 of this Subdivision governs in addition to Interlocking Rules.

Home signal governing eastward movements on main track at east siding switch is located to left of main track.

Home signal governing westward movements from siding to main track at west siding switch is located to left of siding.

Everett, interlocking electrically controlled by operator at depot.

The Home Signal Limits (Rule 605) of this interlocking extend from westward home signal for west siding switch at Pacific Ave. to Eastward home signals for end of double track and junction switches Everett Jct.

Trains and engines receiving a proceed indication of home signal governing entrance to these "Home Signal Limits" at either Pacific Ave. or Everett Jct. may proceed, regardless of class, in accordance with Rule 605. A Positive Block is maintained in both directions within the "Home Signal Limits" and Rule 670 does not apply.

Trains and engines may make forward or backward movements within these home signal limits without flag protection, observing all governing signal indications. When stopped by a Stop-indication of the governing home signal at entrance to home signal limits at either Pacific Ave. or Everett Jct., trains and engines may proceed only when a change in the governing home signal indication permits or when authorized by train order.

27. AUTOMATIC INTERLOCKINGS.

Interbay .....NP Ry crossing.

28. INSTRUCTIONS GOVERNING OPERATION OF TRAINS IN ELECTRIFIED TERRITORY.

Between Peshastin and 1 mile east of east switch, Leavenworth, between 1 mile west of west switch, Leavenworth, and Winton tunnel, when, for any reason, single trains in excess of 3500 tons with three General Electric engines coupled on the head end are stopped on heavy grade specified above will double their trains into either Leavenworth or Winton and will not attempt to start train on Chumstick Line to avoid damage to equipment and excessive delays. When helper engine is operated on freight trains, conductors must see that helper engine is cut into train so that not more than rated tonnage of the helper engine will be trailing. When train does not have full tonnage for all of the engines, tonnage in the train must be prorated between the train engine and the helper engine.

When necessary to make a backup movement on ascending mountain grade sufficient hand brakes must be set on rear end to hold up the slack; then when ready to proceed ahead, hand brakes must be released starting from the rear car first and working toward the head end of train so the slack will run out gradually and avoid break-in-two.

Engineers, when practicable, must operate helper engines from controls on the right side.

Between Skykomish and Wenatchee, in handling trains of 5000 tons or over, see that 15 heavily constructed cars with large A.A.R. drawbars and heavy draft rigging are placed next behind engines with the heavy drawbar pull.

Helper engines on eastward tonnage trains will drop their regeneration load at 20 MPH at foot of 2.2 grade, Merritt, and pick it up again starting down Winton Hill and will drop their regeneration load at 20 MPH when stopping at Dryden to cut out helper.

Westward helper engines will not assist train engineer thru regeneration in making final stop at Skykomish.

Holding capacity of each unit in regeneration as follows:

	2.2% grade	1.6% grade
5010-5017	1400 tons	1900 tons
5018-5019	2800 tons	4500 tons
5000-5008	1250 tons	1750 tons

Tonnage rating of electric engines on 2.2 grade:

5010-5017 ..... 1000 tons per unit,
5018-5019 ..... 1900 tons per unit,
5000-5008 ..... 750 tons per unit.

Steam derricks, ditchers, and other roadway machines must not be worked within 200 ft. of tunnel portals within the electrified territory unless power is turned off on the trolley line.

Arrangements for handling of the power shall be made with Electrical Superintendent or his representatives.

General Electric engines 5010 to 5017 inclusive, operating between Appleyard and Skykomish, are equipped with high voltage connectors at the top of each end of cabs so that when engines are coupled together these connectors contact each other. These connectors are painted red, and when any pantagraph of a coupled number of these units is in contact with the trolley wire, all of these connectors are energized.

Do not come in contact with these connectors.

Diesel freight engines, 5400 H.P., have the following tonnage ratings:

2.2 grades, 2000 trailing tons.
1.6 grades, 3000 trailing tons.
1.0 grades, 4800 trailing tons.

These 5400 H.P. diesel engines will handle 2000 tons, Skykomish to Berne, in helper service and the same combination of electric engines should be operated thru Skykomish to Berne.
Diesel engines will handle 1500 tons single thru Cascade tunnel eastward.

The electric holding brakes on these engines will hold at approximately 17 MPH the same tonnage on a descending grade that the engine will pull up the grade at continuous tractive effort. That is, the regenerative brake on these engines will hold 2000 tons on a 2.2 grade, 3000 tons on a 1.6 grade and 4800 tons on a 1.0 grade at approximately 17 MPH. At either a higher or lower speed than this, the engines will handle less than this maximum tonnage. On the 2.2 grade, diesel engines should be cut into the train approximately 1800 tons from the rear end which is the tonnage the diesel engines can hold with the electric brake at from approximately 15 to 20 MPH.

This brake was not designed as a stopping brake, but is primarily for holding trains on long grades and engineers in the electrified territory must not expect diesel engine holding brake to have the capacity for slowing down heavy freight trains that the electric engines have.

Diesel engines must not be cut in ahead of the electric engines in either direction.

Engineers on diesel engines will not use any power to push train at any point from Berne to Appleyard, except when stop is made at Winton, and then only to get the train started at speed of 10 MPH.

All trains approaching Skykomish, with diesel engines cut in as helper, must stop before passing automatic block signal 1731.7, east of east switch, before proceeding into yard regardless of signal indication.

Diesel engines, 5400 H.P., operated on eastward freight trains thru Cascade tunnel will be governed as follows:

1. Engage both cooling fans on all four units of the diesel leaving Skykomish and control the engine cooling water temperatures between 155 and 165 degrees by proper shutter regulation.

2. When diesel engine passes Scenic depot, open all four radiator shutters on the two rear units wide open.

3. When diesel engine enters tunnel, reduce throttle to No. 6 position and operate diesel engine thru tunnel in No. 6 throttle.

4. Regulate water temperature on the two leading cabs with the radiator shutters to maintain a water temperature of between 155 and 165 degrees.

5. Hot engine alarms are set at 195 degrees and should the hot engine alarm sound on either of the two rear cabs, isolate the unit with high temperature and handle train on three units thru tunnel. Place the unit back on the line after water temperature is reduced to normal and check water level in engine cooling water tanks. Should the water level fall below minimum level as indicated in the water glass, shut engine down.

6. If, for any reason, eastward trains being handled or helped by diesel engines are stopped in tunnel, diesel engines must be closed down and members of crew on both head end and rear end of train must communicate with each other on telephones located in each bay of the tunnel and have a thorough understanding with entire crew whether train will be backed out of tunnel or doubled out to Berne. If backed out to Scenic, train must be stopped before passing east siding switch and not back down main track unless protected by train order or flagman, or backing in on siding, it must be known siding is clear. In making these moves definite understanding must be had with all members of the crew as to what is to be done to avoid accident.

7. Report maximum engine water temperature reached in tunnel each trip on the engineer's work report on arrival at Appleyard.

29. Skykomish, Spring switch indicator located at clearance point of east switch of extension to eastward siding is connected with a repeat indicator at crossover near signal 1731.4. These indicators govern train and engine movements through spring switch at east end of siding extension.

This repeat indicator must not be operated, except when train rights and operating rules permit movement through eastward siding extension without stopping at clearance point of east switch. A yellow light displayed on repeat indicator does not authorize movement beyond switch indicator at clearance point of east switch which indicator must also display yellow light for continuous movement.

SECOND SUBDIVISION

(Vancouver Line)

INSTRUCTIONS GOVERNING THE OPERATION OF STREAMLINER TRAINS BETWEEN EVERETT JCT. AND VANCOUVER, B. C.

CLEARING OF STREAMLINERS.

The time of Nos. 355, 357 and 361 must be cleared by Southward first-class trains not less than 5 minutes before Nos. 355, 357 and 361 are due to leave the last station where time is shown, and by other Southward trains not less than 10 minutes before Nos. 355, 357 and 361 are due to leave the last station where time is shown.

The time of Nos. 355, 357 and 361 must be cleared by Northward trains, except Nos. 356, 360 and 362, not less than 10 minutes at all stations.

The time of Nos. 356, 360 and 362 must be cleared by Northward first-class trains not less than 5 minutes before Nos. 356, 360 and 362 are due to leave the last station where time is shown, and by other Northward trains not less than 10 minutes before Nos. 356, 360 and 362 are due to leave the last station where time is shown.

The time of Nos. 356, 360 and 362 must be cleared by Southward trains, except Nos. 355, 357 and 361, not less than 10 minutes at all stations.

Within yard limits, yard engines and light engine movements must clear the main track not less than 10 minutes before Nos. 355, 357, 361, 356, 360 and 362 are due to leave the last station where time is shown.

MAXIMUM SPEED OF STREAMLINERS.

Maximum speed of Streamliner trains, consisting of Streamliner cars hauled by Diesel engines, will be designated by distinctive reflectorized roadway signs in the shape of the letter "D". Except as directly effected by speed restrictions under Items 1 and 2 Second Subdivision the "D" signs designate zone speed territories and the numerals thereon indicate in miles per hour the maximum permissible speed which will govern until the next zone is reached.

2nd Subdivision Streamliner trains, running on 1st Subdivision between Everett Jct. and Seattle, will also be governed by speed restrictions as indicated under Item 2, First Subdivision. Where the movement is from a higher to a lower speed zone the zone sign is located approximately one mile from where lower speed becomes effective. When the movement is from a lower to a higher speed zone the zone sign is located at the point where speed may be increased. Zone territories are listed herein for the convenience of employes.

MAXIMUM SPEED EXCEPTIONS.

When a Streamliner is detoured over Great Northern tracks outside of regular Streamliner territory, the Streamliner must not exceed the maximum permissible speed for other passenger trains in the territory operated.

When Streamliner is operated against current of traffic in double-track territory the Streamliner must not exceed the maximum permissible speed for other passenger trains. This does not modify Rule 93.

When Streamliner is handled by steam engine, or when other passenger trains are operated on Streamliner schedule, or when train consists of mixed Streamliner and conventional type equipment, the train must not exceed maximum permissible speed for other passenger trains in territory operated. In the event of failure of the electric straight air brakes, or if electric brakes cannot be used on account of cars not equipped with electric straight air brakes being handled in the train, the automatic air brakes will be used and Superintendent notified. In this event speed of train will not exceed the maximum permissible speed for other passenger trains.

ZONE TERRITORIES AND MAXIMUM SPEED OF STREAMLINERS.

Between Everett Junction and Vancouver, B. C.

Zones	Mileposts	MPH
Everett Junction to Long Siding	32.2- 35.9	50
Long Siding to S. end Curve 11	35.9- 36.7	30
S. end Curve 11 to N. end Bridge 10	36.7- 37.2	20
N. end Bridge 10 to N. Switch, Marysville	37.2- 39.2	25
N. Switch, Marysville, to Bridge 17, Silvana	39.2- 50.3	75
Across Bridge 17	50.3- 50.8	60
Bridge 17 to Street Crossing, Stanwood Depot	50.8- 55.4	75
Across Street Crossing, Stanwood	55.4	65
St. Crossing, Stanwood to S. Switch, Mount Vernon	55.4- 67.0	75
S. Switch, Mount Vernon, to highway, N. Mt. Vernon	67.0- 68.9	25
N. Mt. Vernon to S. City Limits, Burlington	68.9- 71.4	55
Through Burlington	71.4- 72.3	25
N. City Limits, Burlington to S. end Curve 373	72.3- 74.5	55
Curve 373	74.5- 74.8	45
N. end Curve 373 to S. end Curve 376, Samish	74.8- 82.6	70
S. end Curve 376 to S. end Curve 403, S. Bellingham	82.6- 93.5	40
S. Bellingham to N. Switch, Bellingham	93.5- 98.2	30
N. Switch, Bellingham to N. end Curve 422	98.2-101.1	45
N. end Curve 422 to S. end Curve 427	101.1-105.9	60
Curve 427	105.9-106.1	50
N. end Curve 427 to Sinkhole	106.1-116.0	70
Across Sinkhole	116.0	25
Sinkhole to S. end Curve 429	116.0-118.2	70
S. end Curve 429 to N. end Curve 462	118.2-139.0	55
Curve 462 to Fraser River Bridge	139.0-140.9	35
Across Fraser River Bridge		6
Around Wye, N. end Fraser River Bridge		4
New Westminster to S. end Curve 481, Vancouver	143.8-155.2	55
S. end Curve 481 to Vancouver Station	155.2-156.4	35

NOTE: Other speed restrictions, as shown under Paragraph 2, Second Subdivision, must be observed.

1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

Between	Passenger	Freight
Everett Jct. and Mt. Vernon	75 MPH	45 MPH
Mt. Vernon and Samish	55 MPH	45 MPH
Samish and Bellingham	35 MPH	30 MPH
Bellingham and Blaine	65 MPH	45 MPH
Blaine and Vancouver	55 MPH	45 MPH

2. SPEED RESTRICTIONS.

Everett, Bond, Hewitt, California, 24th St. Crossings	20 MPH
Bridge 10, Delta	20 MPH
Bridges 11, 12, Marysville, Q, R, S, N engines	5 MPH
other engines	25 MPH
Marysville, thru city limits	25 MPH
Bridge 14, Silvana—Q, R, S, N engines	20 MPH
Bridge 15, Silvana—R engines	20 MPH
Mt. Vernon, thru city limits	25 MPH
Bridge 36, Mt. Vernon—Q, R, S, N engines	5 MPH
Burlington, thru city limits	25 MPH
South Bellingham, NP Ry Crossing	10 MPH
Bellingham, over street crossings	10 MPH
Bellingham, over CMStP&P RR Crossings	10 MPH
Bridge 64, Ferndale—Q, R, S, N engines	5 MPH
Blaine, thru city limits	25 MPH
Bridge 66, Blaine—Q, R, S, N engines	20 MPH
Bridge 69, Crescent—Passenger	25 MPH
Freight	15 MPH
Bridge 70, Colebrook—Passenger	25 MPH
Freight	15 MPH
White Rock-Crescent, October 15 to May 1, between MP 123 and MP 127	20 MPH
New Westminster, Fraser River Bridge	6 MPH
North Wye switch, Fraser River Bridge	4 MPH
Over Front and Columbia St. Crossings	10 MPH
Sapperton, Brunette St.	10 MPH
Vancouver, Burrard Inlet, CPR Crossing, Powell St.	8 MPH

3. ENGINE RESTRICTIONS.

Between White Rock and Vancouver, engines heavier than O-1 and O-4 prohibited.

4. TRAIN REGISTER EXCEPTIONS.

Vancouver, Vancouver Jct. C.N. Jct., trains arriving will register in G. N. train order office at Vancouver.
New Westminster, all trains register by ticket.
Burlington, first class trains register by ticket.
Delta, register only for trains originating and terminating.

5. CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).

Everett Jct., trains for which this point is initial station may proceed on authority of clearance under which such trains arrive.

6. RESTRICTED CLEARANCES.

The following overhead wires crossing our track do not have standard clearance of 27 ft. from top of rail:

Delta, south wye switch	25′
Marysville, industry track	23′
Stanwood, house track and industry track	24′
Fir, English Lumber Co. spur 1.3 Mi. south	25′
Mt. Vernon, Union Oil Company spur	25′ 10″
Burlington, Carnation Milk Company spur	25′ 6″

New Westminster, high voltage electric wires on Fraser River bridge and B. C. Elec. RR. Crossing will not clear man on top of cars. Train and engine men must keep off top of cars and engines while passing over this bridge and crossing, except in emergency and then use extreme caution.

New Westminster, retaining wall Front Street crossing in front of penitentiary will not clear man on side of car or engine.

7. Delta (freight Yard) located 1.08 miles south of Delta Jct. is provided with: Standard Clock, Bulletins, Train Register, Water, Oil, Wye, Track Scale, Turntable.

8. Delta, private road crossing near yard office must be protected as prescribed by Rule 103.

9. Bellingham, northward freight trains leave train south of Pine Street near old Bloedel-Donovan Mill site, bring their set-out to yard and move pick-up back to train. Southward freight trains leave train north of "F" Street crossing. When necessary to take siding at Bellingham, crossing at "C" and "F" Street will have to be cut. Under no circumstances will any crossing be blocked for more than five minutes.

10. Blaine-White Rock, trains will not pass International Border without permission of Customs and Immigration Inspectors.

11. White Rock, between 2 miles south and Ocean Park, from May 15 to September 15, engineers will sound engine whistle frequently and bell must be rung continuously.

12. White Rock, crossing signals are equipped with switch-key-controllers. Trains or engines within circuit may clear signals for highway traffic by inserting switch key in controller and turn to Right. Crossing signals must be restored to normal operating condition before leaving.

13. Still Creek, northward trains having wait or meet orders to fulfill at this point will stand south of Renfrew Street crossing until train to be met or passed is in the block to avoid circuit operating crossing signals at Grandview Highway, 13th Avenue.

14. Sapperton, push buttons and instructions for their operation are located in iron box locked with a switch lock near south wye switch and north siding switch for control of wigwag signals at Brunette Street crossing. Care must be exercised in the use of push button control to avoid unnecessary operation of crossing signals during switching movements.

15. Vancouver, National Harbours Board Railway operate jointly with GN Ry over Great Northern tracks between Water Front and connection with GN main track north of the roundhouse; also between north leg of wye from main track switch and connection with Canadian National Railway in the Great Northern South Yard, all of which is located within yard limits of Vancouver.

Telephones for City and train dispatcher are located in booth near Great Northern main track connection. There is also a City Telephone and train register in the National Harbours Board yard office.

Movements in both directions over the Burrard Inlet line must be recorded in train register.

Before movement is made over Burrard Inlet line in either direction, yard foreman or engineer will communicate with the yard office of the National Harbours Board Railway to ascertain if it is safe to proceed; air brakes must be cut in and operative on all engines and cars; the engine must be on the leading end of the cars during hours of darkness.

Speed restrictions:

8 MPH over Georgia, Kiefer, Pender and Cordova Streets.

10 MPH over Union Street on northward movements; southward movements must stop before passing over Union Street and a member of the crew must be on ground at crossing to protect traffic.

16. The Board of Railway Commissioners for Canada, General Order 571, forbids the handling of freight cars in main line passenger trains.

17. **SPEED TEST BOARDS.**

Engineers shall test speed of their trains passing following points as compared with Speed Table:

Northward, between MP 65 and 66 approximately 2 miles south of Mt. Vernon.

Southward, between MP 149 and MP150 approximately 3 miles south of Still Creek.
between MP 65 and 66 approximately 2 miles south of Mt. Vernon.

18. **CROSSOVERS ON DOUBLE TRACK.**

Facing point.	Trailing point.
	2054 ft. North of MP 152.
	Dominion Bridge Co. spur.

19. **SPRING SWITCHES WITH FACING POINT LOCK.**

Mt. Vernon, south siding switch.
Normal position is for main track.

Endot, end of double track.
Normal position is for northward main track.

Still Creek, end of double track.
Normal position is for southward main track.

20. **MANUAL INTERLOCKINGS.**

Marysville, 1.25 miles south of.....drawbridge 11.
0.50 miles south of.....drawbridge 12.

Fir, 1.34 miles south of .....English Lbr. Co. crossing.

New Westminster-Fraser River Jct. ...drawbridge and junction with CN and BCE Rys.

New Westminster-Fraser River Jct., when, for any reason, a proceed indication cannot be displayed at the home signal, no train or engine movement shall be made over bridge, except on authority of regular Dominion Government clearance.

21. **MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.**

Delta Jct. .....Drawbridge 10 and NP Ry crossing.
These switches are electrically controlled by operator at Delta Jct.
Whistle signals for routes:

Main track	1 long.
From North to Delta Yard	1 long, 1 short.
From South to Delta Yard	2 long, 1 short.
From Delta Yard to North	2 long.
From Delta Yard to South	3 long, 1 short.
From NP Ry connection to North	1 long, 1 short, 1 long.
From North to NP Ry connection	1 long, 1 short, 2 long.

22. **AUTOMATIC INTERLOCKINGS.**

Still Creek, 1.84 miles south of .....B.C.E. Ry crossing.

23. **SEMI-AUTOMATIC INTERLOCKINGS.**

New Westminster, 0.50 miles north
CPR crossing.....Crossover to Waterfront track.

New Westminster, 1 mile north .....Fraser Mill Spur.
CPR crossing.

Vancouver .....CPR crossing at Burrard Inlet.

New Westminster, crossover to water front track:
GN train or engine movements between main track and water front track over CPR crossing are governed by electric lock at main track switch. Both switches of crossover are lined by operation of main track switch. Instructions for their operation are posted in lock box locked with a switch lock.

New Westminster, Fraser Mill Spur CPR crossing:
Normal position of gates is stop for Great Northern.
GN train or engine movements over CPR crossing are governed by manually operated gates electrically locked. Instructions for their operation are posted in lock box locked with a switch lock.

Vancouver, CPR crossing at Burrard Inlet:
Normal position of gates is stop for Great Northern.
GN trains or engines shall stop clear of Powell Street until gates are opened and the way is clear for movement across CPR tracks to avoid blocking traffic on Powell Street. Wigwag type crossing signals governing traffic on Powell Street are manually controlled by handle of electric gate lock.
GN trains or engine movements over CPR crossing are governed by manually operated gates electrically locked. Instructions for their operation are posted in lock box locked with a switch lock located at gate adjacent to Powell Street.

24. **RAILROAD CROSSINGS PROTECTED BY GATES.**

Burlington .....Third Subdivision crossing.
Normal position is for Second Subdivision.

South Bellingham, 1.14 miles north of.....NP Ry crossing.
Normal position is for Great Northern.

Bellingham .....CMStP&P RR crossings.
1 at Army Street, 1 at Commercial Street, 2 at Pine Street.
Normal position is for Great Northern.

Vancouver, Main Street .....BCE Ry crossing.
Normal position is stop for Great Northern.
Trains, engines or cars must not be moved over this crossing until a member of the crew is stationed at the crossing to protect traffic on Main Street.

25. **SWITCH INDICATORS.**

Vancouver, indicators are located near switches on each side of main track at the junction of the Burrard Inlet Line and Prior Yard, roundhouse lead and wye tracks about 800 ft. south of Vancouver Jct. First class trains must approach B. I. Line and roundhouse lead switches prepared to stop unless block signals governing movement over these switches indicate proceed and main track is seen to be clear. Yard and engine movements may be made in either direction across main track at this point on the time of delayed first class trains without flag protection pro-

vided yellow light is displayed in the indicator. First class trains will be considered delayed when they are more than ten minutes past due out of Vancouver Jct. or CN Jct.

Member of the crew who is to line switches must first operate push button "R" for route desired and hold few seconds. Both trainman and engineer must observe and be governed by indicator before lining switches or fouling main track.

Push buttons and instructions for their operation posted in lock box locked with switch lock.

Vancouver, B. C., Glen Drive Yard, light type indicator located at clearing point of main track switch 840 ft. North of CN Jct. Train or engine movements must stop clear of main track. Member of crew who is to line switches must first operate push button "R" for route and hold few seconds. Both trainman and engineer must observe and be governed by indicator before lining switch or fouling main track.

Push buttons and instructions for their operation posted in lock box locked with switch lock.

26. Order Board of Transport Commissioners for Canada, trains handling passenger carrying cars which have vestibules at one end only, such cars must when practicable be placed so that non-vestibule ends are not together.

THIRD SUBDIVISION

(Anacortes Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**
   Between
   Rockport and Anacortes ..... 20 MPH

2. **SPEED RESTRICTIONS.**
   Bridge 12, Whitney ..... 10 MPH
   Bridge 52, Concrete ..... 5 MPH
   Trains handling loaded log cars or high fuel racks..... 10 MPH

3. **ENGINE RESTRICTIONS.**
   Engines heavier than class indicated are prohibited:
   Between Burlington and Rockport, H-6.
   Between Burlington and Anacortes, F-1 and 600 H.P. Diesel.

4. **ENGINE RESTRICTIONS ON INDUSTRY TRACKS.**
   Engines not permitted on industry tracks at:
   Anacortes, Puget Sound Mill & Lumber Co. log dump trestle
   Anacortes Canning Co. spur track.
   Sedro-Woolley, Skagit Steel & Irons Works north spur.

5. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
   Burlington, Third Subdivision trains must secure clearance.

6. Concrete, water station is closed in emergency, call agent for instructions.

7. **MANUAL INTERLOCKINGS.**
   Whitney, one mile west of .....Drawbridge 12.
   Drawbridge will be left open for boat traffic at all times, except between hours 7:00 AM to 11:00 AM and 3:00 PM to 7:00 PM daily.

WATCH INSPECTORS

Cascade Division

Funk's Jewelry Store, 4 S. Wenatchee Ave., Wenatchee.

F. M. Merryfield, Jeweler, 1707 Hewitt Ave., Everett.

Weisfield & Goldberg, Inc., 414 Pike St., Seattle.

Peter Michael, 223 Pine St., Seattle.

Roy Davidson, Jeweler, 8524 Greenwood Ave., Seattle.

A. T. Crumpacker, Jeweler, 5308 Ballard Ave., Seattle.

Mierow's Inc., 1105 Broadway, Tacoma.

Benjamin F. Salewsky, Jeweler, Centralia.

Kenneth A. Wade, Jeweler, Burlington.

Erving H. Easton, Jeweler, 1308 Cornwall Ave., Bellingham.

Gifford's Jewellery, Ltd., 515 Columbia St., New Westminister, B. C.

W. H. Grassie, Watchmaker & Jeweler, 607 Hastings St., Vancouver, B. C.

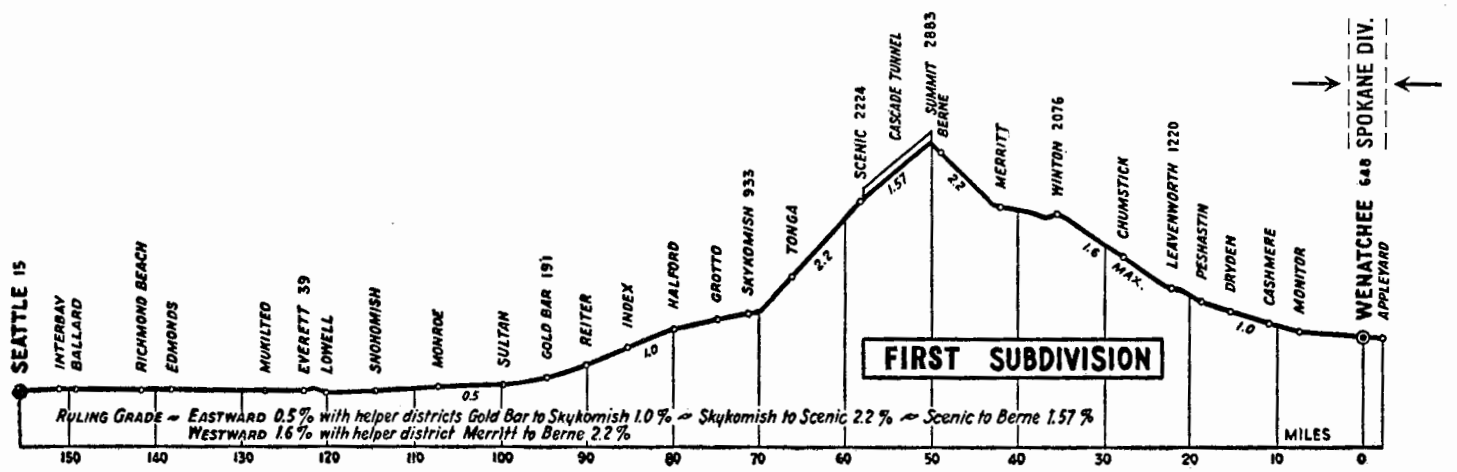
Weisfield & Goldberg, Inc., 530 S.W. Washington St., Portland.

SPEED TABLE

Time Min.	Per Mile Sec.	Miles Per Hour	Time Min.	Per Mile Sec.	Miles Per Hour
	40	90.0	1	12	50.0
	41	87.8	1	14	48.6
	42	85.7	1	16	47.4
	43	83.7	1	18	46.1
	44	81.8	1	20	45.0
	45	80.0	1	22	43.9
	46	78.3	1	24	42.9
	47	76.6	1	26	41.9
	48	75.0	1	28	40.9
	49	73.5	1	30	40.0
	50	72.0	1	33	38.7
	51	70.6	1	36	37.5
	52	69.2	1	39	36.4
	53	67.9	1	42	35.3
	54	66.6	1	45	34.3
	55	65.4	1	50	32.7
	56	64.2	1	55	31.3
	57	63.1	2	—	30.0
	58	62.0	2	10	27.7
	59	61.0	2	20	25.7
1	—	60.0	2	30	24.0
1	1	59.0	2	40	22.5
1	2	58.0	3	—	20.0
1	3	57.1	3	30	17.1
1	4	56.2	4	—	15.0
1	5	55.3	5	—	12.0
1	6	54.5	6	—	10.0
1	7	53.7	7	—	8.5
1	8	52.9	8	—	7.5
1	9	52.1	9	—	6.7
1	10	51.4	10	—	6.0

BUSINESS TRACKS NOT SHOWN AS STATIONS ON TIME TABLE

Name	Location	Capacity Cars	Switch Opens
First Subdivision			
Old Leavenworth	0.53 mile east of Leavenworth	67	East
J. R. Sweet Co.	2.0 miles east of Merritt	4	East
Weyerhaeuser Timber Co. Spur	1.0 mile east of Grotto	57	West
Bar Bee Mill	1.0 mile east of Baring	23	West
Halford Rock Spurs	1.26 miles west of Baring	50	West
Index, Galena Mill Industry	0.3 mile east of Index	42	Both
Manufacturers Mineral Spur	1.0 mile west of Index	8	West
Wallace Falls Timber Co.	1.8 miles east of Gold Bar	47	West
Startup Spur	2.0 miles west of Gold Bar	22	West
Fryelands Industry	1.9 miles west of Monroe	18	Both
Robinson Lettuce Spur	2.0 miles west of Monroe	56	East
McKinnon Spur	2.15 miles west of Monroe	7	East
G. N. Oil Spur	1.0 mile west of Everett	45	East
Standard Oil & Shell Co's Trks.	0.9 mile east of Richmond Beach	90	Both
Storage Yard-Pit Tracks	0.25 mile west of depot Richmond Beach	97	Both
Second Subdivision			
Clark & Buzza Spur	0.1 mile south of Still Creek	2	South
Overseas Commodity Spur	0.1 mile south of Still Creek	7	South
Golden Kist Spur	0.1 mile south of Still Creek, opens south off of Overseas Commodity Spur	2	.....
Andrews & George Spur	0.14 mile south of Still Creek	2	North
Dominion Bridge Co. Spur	1.4 miles south of Still Creek	58	South
Brownsville Connection to C. N. Ry	1.6 miles south of Frazer River Jct	.....	North
B. C. Peat Products Industry	6.05 miles north of Colebrook	12	Both
Industrial Peat Co., Ltd	0.9 miles north of Colebrook	25	Both
Dakota Creek Spur	2.1 miles south of Blaine	21	North
Olympic Portland Cement Co. Spur	2.0 miles south of Ferndale	27	North
Belleville Pit Tracks	4.3 miles north of Burlington	102	North
English Lumber Co.-Interchange	1.3 miles south of Fir	2	South
Third Subdivision			
Mountview	3.7 miles west of Rockport	16	Both
Puget Sound Saw Mill Co. Trackage	6.5 miles west of Rockport	35	Both
Van Horne Spur	7.0 miles west of Rockport	5	East
Walton Bros. Timber Co.	3 miles east of Concrete	19	Both



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