

NORTHERN PACIFIC RAILWAY COMPANY.

TACOMA DIVISION

TIME **35** TABLE

In Effect at 12:01 A. M. Pacific or 120th Meridian Time.

(One hour slower than Mountain or 105th Meridian Time.)

SUNDAY, September 24th, 1911.

For the Government of Employes only. The Company reserves the right to vary therefrom at pleasure. Be positive that you have the Current Time Table and destroy all previous numbers. Read carefully the Special Rules and always have for reference a copy of TRANSPORTATION RULES.

H. C. NUTT,
General Manager.

I. B. RICHARDS,
General Superintendent.

P. H. McCAULEY,
Superintendent of Transportation.

W. C. ALBEE,
Superintendent.

T. E. COYLE,
Assistant Superintendent.

C. E. McMULLIN,
Superintendent Tacoma Terminals.

J. C. ROTH,
Assistant Superintendent of Transportation.

West Bound.

MAIN LINE.

THIRD CLASS TRAINS.					SECOND CLASS		Station Numbers	Time Table 35		FIRST CLASS TRAINS.																
995	973	963	997	965	691	679		Succeeding No. 34C September 24, 1911.		355	363	301	389	361	321	307	357	391	311	369	333	365	359	313	323	393
DAILY	EX. SUN.	EX. SUN.	DAILY	EX. SUN.	DAILY	DAILY		STATIONS.	Distance from Tacoma Wharf	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY
							Telegraph Offices and Calls																			
							Water, Coal, Scales, Tables, and Wyes																			
							Station Numbers																			
							1976	0.0																		
							1977	1.4																		
							1981	5.9																		
							1985	9.6																		
							1990	14.6																		
							1996	20.6																		
							2002	26.1																		
							2007	31.5																		
							2011	35.8																		
							2015	40.4																		
							2020	43.7																		
							2025	48.9																		
							2027	50.7																		
							2031	54.8																		
							2032	55.8																		
							2038	62.3																		
							2044	68.5																		
							2050	75.0																		
							2053	77.4																		
							2060	85.1																		
							2066	90.8																		
							2071	91.6																		
							2077	95.3																		
							2081	101.0																		
							Cx 4	105.5																		
							Cx 9	109.8																		
							Cx 15	114.6																		
							Cx 21	120.6																		
							Cx 23	126.2																		
							Cx 25	128.5																		
							Cx 29	131.3																		
							No. Portland Junction	134.4																		
							ST. JOHNS	136.7																		
							WILLBRIDGE	137.3																		
							BEATTY	139.9																		
							CITY LIMITS	140.4																		
							PORTLAND	143.3																		
								144.4																		
							Time Over District																			
							Average Speed per Hour																			

SEE SPECIAL RULES, PAGES 6, 9, 10 AND BACK COVER.

MAIN LINE.

East Bound.

FIRST CLASS TRAINS.

SECOND CLASS TRAINS.

THIRD CLASS TRAINS.

Table with 17 columns for train numbers (356-364), 12 columns for train types, 1 column for distance from Portland, 1 column for stations, 1 column for telegraph offices, 1 column for capacity of passing tracks, and 7 columns for third-class train numbers (964-974). Rows include train numbers, departure times, arrival times, and freight rates.

West Bound

GRAY'S HARBOR LINE

Time Table No. 35
Succeeding No. 34C
September 24, 1911

Water, Coal, Scales, Tables and Wyes	Station Numbers	Distance from Lakeview	STATIONS Telegraph Offices and Calls	Capacity of Passing Tracks	FIRST CLASS TRAINS.					SECOND CLASS.			THIRD CLASS TRAINS					
					321	371	365	379	323	585	587	693	965	975	977	967		
					Nor. Pac. Passenger DAILY	O-WRR&N Passenger DAILY	Nor. Pac. Passenger DAILY	C.M.&P.S. Passenger DAILY	Nor. Pac. Passenger DAILY	Nor. Pac. Mixed EX. SUN.	Nor. Pac. Mixed EX. SUN.	Nor. Pac. Freight EX. SUN.	Nor. Pac. Way Frt. EX. SUN.	O-WRR&N Way Frt. EX. SUN.	C.M.&P.S. Way Frt. EX. SUN.	Nor. Pac. Way Frt. EX. SUN.		
	1985	0.0	VA..... LAKEVIEW D	100	* 9.20AM		2.15PM		6.01PM				6.10AM					
	CK 2	2.3	..... COUNTRY CLUB D	No Sdg.	* 9.23		f 2.20		f 6.05									
	CK 3	2.9	..... AMERICAN LAKE D	40	* 9.24		* 2.21		* 6.06				6.20					
	CK 5	4.3	..... COSGROVE D	35	* 9.27		f 2.25		f 6.09				6.25					
S	CK 7	8.0	D..... DU PONT D	Spur	* 9.32		2.35 966		6.16				7.00					
W	CK 13	12.5	..... SHERLOCK D	25	* 9.42		2.47		6.28				7.20					
	CK 18	17.9	..... UNION MILL D	Spur	* 9.53		3.00		6.43				7.45					
	CK 20	19.5	..... LACEY T	40	9.55		3.05 324		6.46				7.55					
W T	CK 25	24.5	OY..... OLYMPIA D	110	10.10		3.20		7.00 7.10 322				8.15AM 366					
		25.2	PT. TOWNSEND SOUTHERN C'G. (Track Connection)															
	CK 30	29.9	..... BELMORE T	40	* 10.23		f 3.33		f 7.22									
	CK 37	36.4	RK..... LITTLE ROCK D	43	f 10.35 366		3.47		7.88									
		37.7	..... BORDEAUX JUNCTION D		* 10.38		* 3.49		* 7.40									
	CK 40	39.6	..... MIMA D	13	* 10.45		f 3.53		f 7.47									
W Y	CK 44	43.7	HK..... GATE D	50	11.00 11.15		4.10 4.15		8.00 8.10									
	CM 5	48.6	OX..... OAKVILLE D	90	11.25		4.26		8.21									
	CM 12	55.5	..... LYTLE D	80	* 11.38		* 4.42		* 8.36									
W	CM 13	56.6	OR..... PORTER D	20	f 11.40		4.45		8.39									
	CM 19	63.1	EF..... ELMA D	120	11.53 968		5.02		8.55 694									
		65.6	..... MACKS D		* 11.56		f 5.07		f 9.00									
	CM 23	66.8	SP..... SATSOP D	37	11.59AM		5.11		9.05									
W	CM 29	72.4	MO..... MONTESANO D	70	12.09PM		5.25 322		9.20									
	CM 37	81.0	..... ABERDEEN JCT T	42	12.25 324		* 5.45		* 9.43									
	CM 40	84.1	SA..... ABERDEEN D	50	12.40 586	2.15PM	6.00	8.55PM	10.00	7.45AM 366-968		4.80						
W C Y	CM 44	87.6	HO..... HOQUIAM D	150	12.55PM	2.30PM	6.20 6.30	9.10PM	10.20PM			4.80	5.15					
	CM 47	90.9	..... GRAYS HARBOR CITY D	No Sdg.			f 6.40		9.10									
	CM 52	95.6	..... GRAY GABLES D	No Sdg.			f 6.55		9.20									
	CM 54	97.0	..... CHENOIS CREEK D	No Sdg.			f 7.01		9.25									
	CM 56	100.2	..... TULIPS T	40			f 7.09		9.40									
	CM 61	103.4	..... COPALIS CROSSING D	Spur			f 7.20		9.55									
	CM 62	106.1	..... KUHN D	No Sdg.			f 7.27		10.10									
	CM 63	106.5	..... McGLAUFILIN D	No Sdg.			f 7.30		10.15									
	CM 64	107.7	..... ONSLOW D	30			f 7.34		10.20									
	CM 66	109.5	..... STEARNSVILLE D	No Sdg.			f 7.39		10.30									
	CM 68	111.4	..... ALOHA D	Spur 12			f 7.45		10.41									
W	CM 69	113.2	..... PACIFIC D	Spur 7			7.50		10.48									
	CM 71	114.6	..... SUNSET BEACH D	No Sdg.			f 7.55		10.55									
Y	CM 72	115.6	MC..... MOCLIPS D	40			8.00PM		11.00AM									
			Time Over District		3.35	.15	5.45	.15	4.19				2.05	.30	.30	5.50		
			Average Speed per Hour		24.4	14.0	20.1	14.0	20.2	18.6	14.0	13.8	11.8	7.0	7.0	7.5		

SEE SPECIAL RULES, PAGE 5.

East Bound

GRAY'S HARBOR LINE.

Time Table No. 35

Succeeding No. 84C.
September 24, 1911

STATIONS.

Telegraph Offices and Calls

Distance from Moclips	FIRST CLASS TRAINS.					SECOND CLASS.			THIRD CLASS TRAINS.															
	380	372	366	324	322	588	586	694	976	978	968	966												
	C.M. & P.S. Passenger	O-WRR&N Passenger	Nor. Pac. Passenger	Nor. Pac. Passenger	Nor. Pac. Passenger	Nor. Pac. Mixed	Nor. Pac. Mixed	Nor. Pac. Freight	O-WRR&N Way Frt.	C.M. & P.S. Way Frt.	Nor. Pac. Way Frt.	Nor. Pac. Way Frt.												
	DAILY	DAILY	DAILY	DAILY	DAILY	EX. SUN.	EX. SUN.	EX. SUN.	EX. SUN.	EX. SUN.	EX|MON.	EX. SUN.												
VA..... LAKEVIEW D 115.6			12.01PM	8.55PM	* 7.55PM							8.20PM												
..... COUNTRY CLUB 113.3			f 11.54AM	f 8.47	* 7.50																			
..... AMERICAN LAKE 112.7			* 11.58	* 8.46	* 7.49							8.10												
..... COSGROVE 111.3			f 11.51	f 8.48	* 7.46							8.00												
D..... DU PONT D 107.6			11.46	8.35	f 7.39							³⁶⁵ 2.35 2.00												
..... SHERLOCK 103.1			11.32	8.22	* 7.26							1.26												
..... UNION MILL 97.7			11.20	8.09	* 7.15							12.46												
..... LACEY T 96.1			11.17	³⁶⁵ 3.05	* 7.12							12.26												
OY..... OLYMPIA D 91.1			⁹⁶⁵ 11.05 ⁹⁶⁵ 11.00	³²³ 2.50 2.45	³²³ 7.00 6.50							³⁶⁶ 12.01PM												
PT. TOWNSEND SOUTHERN C'G. 90.4 (Track Connection)																								
..... BELMORE T 85.7			f 10.47	f 2.84	* 6.40																			
RK..... LITTLE ROCK D 79.2			³²¹ 10.35	2.20	* 6.28																			
..... BORDEAUX JUNCTION 77.9			* 10.28	* 2.17	* 6.26																			
..... MIMA 76.0			f 10.25	* 2.14	* 6.23																			
HK..... GATE D 71.9			10.15 10.10	2.05 2.00	6.15 6.10			See page 5 10.10PM			See page 5 1.30PM													
OX..... OAKVILLE D 67.0			10.00	⁹⁶⁷ 1.45	6.08			9.52			⁹⁶⁷ 1.15 1.00													
..... LYTLE 60.1			* 9.42	* 1.27	* 5.52			9.24			12.25													
OR..... PORTER D 59.0			9.40	1.25	f 5.50			9.21			12.20PM													
EF..... ELMA D 52.5			9.25	1.09	5.41			³²³ 8.55 8.50			³²¹ 11.53AM 11.15													
..... MACKS 50.0			f 9.20	f 1.01	* 5.37			8.38			11.00													
SP..... SATSOP D 48.8			9.17	12.58	f 5.35			8.35			10.50													
MO..... MONTESANO D 43.2			9.05	12.45	³⁶⁵ 5.25			8.20			10.30													
..... ABERDEEN JCT T 34.6			* 8.45	* ³²¹ 12.25	* ⁹⁶⁷ 5.07			See page 5 1.15PM			9.40													
SA..... ABERDEEN D 31.5	7.00AM	8.05AM	⁵⁸⁵ 8.35	12.15	5.00			³²¹ 1.00PM	7.30	6.35AM	6.50AM	⁵⁸⁵ 9.00												
HO..... HOQUIAM D 28.0	6.45AM	7.50AM	³⁷²⁻⁵⁸⁷ 8.10	12.01PM	4.45PM			1.45PM	7.00PM	6.15AM	6.30AM	³⁶⁶ 8.30AM												
..... GRAYS HARBOR CITY 24.7			f 7.57					1.25																
..... GRAY GABLES 20.0			f 7.44					1.05																
..... CHENOIS CREEK 18.6			f 7.36					12.58																
..... TULIPS T 15.4			f 7.30					12.48																
..... COPALIS CROSSING 12.2			f 7.18					12.30																
..... KUHN 9.5			f 7.11					12.26																
..... McGLAUFFLIN 9.1			f 7.09					12.24																
..... ONSLOW 7.9			f 7.05					12.20																
..... STEARNSVILLE 6.1			f 7.00					12.12																
..... ALOHA 4.2			f 6.52					12.04PM																
..... PACIFIC 2.4			6.46					11.58AM																
..... SUNSET BEACH 1.0			f 6.43					11.50																
MC..... MOCLIPS D 0.0			6.40AM					11.45AM																
Time Over District	.15	.15	5.21	3.10	3.20			2.00	.15	3.10	.20	.20	5.10	3.19										
Average Speed per Hour	14.0	14.0	21.7	27.7	26.3			14.0	12.4	13.8	10.5	10.5	8.5	7.3										

West Bound.

GATE LINE.

East Bound.

West Bound.

OCOSTA BRANCH.

East Bound.

GATE LINE						OCOSTA BRANCH														
West Bound.			East Bound.			West Bound.			East Bound.											
THIRD CLASS.	SECOND CLASS.	FIRST CLASS.				Water, Coal, Scates, Tables and Wyes	Station Numbers	Distance from Centralia	Time Table No. 35 Succeeding No. 34C September 24, 1911.				Distance from Gate	Capacity of Passing Tracks	FIRST CLASS.				SECOND CLASS.	THIRD CLASS.
967	693	387	385	383	381				382	384	386	388			694	968	583	581	STATIONS.		582	584
Way Freight	Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Freight	Way Freight	Mixed	Mixed	STATIONS.		Mixed	Mixed			
EXCEPT SUNDAY	DAILY EX. MON.	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY EX. SUN.	EXCEPT MONDAY	Wed., Sat.	EX. SUN.	STATIONS.		EX. SUN.	Wed., Sat.			
9.15 AM 381	1.00 AM	7.25 PM 386	3.30 PM 384	10.45 AM	9.00 AM 967	11.00 AM	3.00 PM 385	6.55 PM 387	8.55 PM	11.80 PM	2.80 PM	* 1.15 PM		ABERDEEN JCT.	18.7	* 7.45 AM				
												1.18		JUNCTION CITY	17.9	7.37				
9.30	1.15	* 7.34	* 3.34	* 10.48 382	* 9.04	* 10.48 383	* 2.51	* 6.43	* 8.50	11.15	2.20	* 1.20		COSMOPOLIS JCT.	17.3	* 7.35				
												1.35 PM	1.30 PM	MP. COSMOPOLIS	15.7	7.30 AM	3.35 PM			
9.55	1.30	7.45	3.45	10.55	f 9.20	10.40	2.41	6.35	8.40	11.05	2.05			COSMOPOLIS JCT.	14.1		3.32			
												* 1.40		COSMOPOLIS JCT.	14.1	No Sdg.				
10.16 11.15 383 382	1.55	7.55	3.55	11.05 967	f 9.38	10.30 967	2.27	6.25	8.31	10.45	1.45	f 1.48		SOUTH ABERDEEN	13.0	90	3.29			
												f 1.58		WEST ABERDEEN	10.7	No Sdg.	3.25			
												f 2.21		SOUTH ARBOR	4.0	No Sdg.	2.56			
												f 2.28		MARKHAM	2.5	10	2.55			
11.45 AM	2.20 AM	8.05 PM 388	4.10 PM 386	11.15 AM 384	9.45 AM 382	10.20 AM 381	2.15 PM 383	6.15 PM 385	8.20 PM 387	10.30 PM	1.80 PM	2.35 PM		OCOSTA	0.0	75	2.45 PM			
EXCEPT SUNDAY	DAILY EX. MON.	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY	DAILY EX. SUN.	EXCEPT MONDAY	Wed., Sat.	EX. SUN.	STATIONS.		EX. SUN.	Wed., Sat.			
2.30	1.20	.40	.40	.30	.45	.40	.40	.40	.35	.55	1.00	1.00	.15	STATIONS.		.15	.50			
5.2	9.7	19.5	19.5	26.0	17.3	19.5	19.5	19.5	22.3	14.1	13.0	15.7	12.0	STATIONS.		12.0	18.8			

Special Rules Gray's Harbor and Gate Line.

See Special Rules, page 6, governing use of double track between Aberdeen and Hoquiam.

Registering Stations—Lakeview, Olympia, Gate, Elma, Aberdeen Junction, Aberdeen, Hoquiam and Moclips. Clearance will not be issued at Olympia, Elma and Aberdeen Jct., unless red signal is displayed. Trains will register by ticket at Lakeview; will not be required to procure clearance unless red signal is displayed. Trains from Grays Harbor Line must ascertain Main Line rights before occupying Main Line at Lakeview. Engineers will not be required to consult register, except at initial or starting point.

Bulletin Stations—Olympia, Hoquiam and Moclips.

Standard Clocks—Tacoma.

Maximum grades, 3 1/4 miles west of Sherlock; 3 miles east to 2 miles west of Olympia. Speed of trains when backing up must not exceed twenty miles per hour. Junction switches will be set for line Olympia to Moclips.

No. 323 and No. 324 will stop on flag at Burrows, 2.0 miles west of Chenois Creek; Wilderness, 1.3 miles west of Tulips, and at Bale, 0.9 miles west of Copalis Crossing. Malone 5 miles east of Elma.

No. 323 and No. 324 will stop at Malone on flag.

No. 321 will stop on flag at Dupont to let off Passengers.

No. 323 and No. 324 will stop on flag at Nisqually Gun Club, two miles east of Sherlock.

No. 322 will stop at Little Rock on Saturdays, only, to take on passengers, and will stop on flag at Union Mills Saturdays only.

No. 322 will stop at Malone on Sunday when there are ten or more passengers.

No. 323 and No. 324 will stop on flag at Overton, three miles east of Little Rock.

When No. 324 meets No. 321 at Aberdeen Junction No. 324 will take siding on west leg of wye.

When No. 382 and No. 383 meet at Blakeslee, No. 382 will take siding.

No. 321 will wait at Gate for connection with No. 383.

Trains will approach Gate looking out for trains to arrive from Gate line turning on wye.

No. 583 has right over No. 586 and No. 366, Aberdeen Junction to Aberdeen.

No. 381 has right over No. 382. No. 383 has right over No. 384. No. 385 has right over No. 386, and No. 387 has right over No. 388 between Centralia and Gate.

No. 965 has right over No. 966, Lakeview to Olympia.

No. 381 will turn on wye on arrival at Gate.

Yard limits at Centralia extends to a point 2200 feet west of the west switch of the new yard at Blakeslee on Gate Line. Capacity of this yard 300 cars.

Telegraph offices are located in Section House at Sherlock, in Depot at Lacey, and in Section House at Belmore, and are connected with telegraph office at Olympia, and may be used by train crews in emergency.

Class S or S4 engines will not exceed 8 miles per hour over Satsop river bridge.

All trains will stop 400 feet from and will not proceed until following draw bridges are known to be closed: Wishka River, 3/4 mile east of Aberdeen; Hoquiam River, 1/4 mile east of Hoquiam.

Derail switches at east end of house track at Elma, at Vance's Spur, at Macks spur, and at Java spur west of Elma, at east end of Satsop Siding, and at Ninemire & Morgan's spur, two miles west of Aberdeen, must be kept set in derailing position when not in use.

The movement of Port Townsend Southern trains from transfer track near Port Townsend Southern crossing to Northern Pacific depot, and from Northern Pacific depot to transfer track, will be protected by flag. All Northern Pacific trains will approach these points with train under control, expecting to be flagged by flagman of Port Townsend Southern train.

Normal position of crossing gates at Olympia where Northern Pacific tracks cross those of the Port Townsend Southern Ry. will be closed and locked across the Port Townsend Southern Tracks; and when train of that company desires to use crossing, gates will be swung across Northern Pacific track. Danger signal will be maintained day and night on gates, which will consist of switch light at night. All Northern Pacific trains must approach this crossing prepared to stop, but full stop will be not required if it is found that crossing is clear and gates are in normal position.

The tunnel district at Olympia is protected by automatic electric signals as follows: No. 1 large disc just west of passenger station. No. 2 small starting signal just east of passenger station. No. 3 switch indicator at east switch of team track. No. 4 large disc just east of tunnel. Trains and engines will be governed as follows: East bound—must not pass signal No. 1 or No. 2 at "Danger" and finding signals in this position must protect against west bound trains coming out of tunnel. East bound trains standing at station must have particular to get clear indication on Signal No. 2 before proceeding east of same. Crews switching at east end of team track must have clear indication on No. 3 signal before throwing switch and thereafter while switching will find this signal at "Danger" when cars or engines are on main line and can continue to switch with switch indicator at "Danger," but when main line has been cleared and switch has been closed signal must show clear before switch is thrown or main line obstructed. Cars on team track must be left west of clearance post as cars overhanging this point will set signals No. 1, No. 2 and No. 3 at "Danger." Trains or engines on Jefferson Street line must get clear o. 4 signal before throwing switch or proceeding out of Jefferson Street line at east end of tunnel. West Bound—west bound trains or engines must not pass No. 4 signal at "Danger." Signals at "Danger" show red banner by day and red light by night and when at safety a clear disc by day and white light by night. Train and engine men must observe position of signal before engine reaches the signal and not pass signal at "Danger," finding signals in this position will be governed by Rule No. 299. In case of failure of signal apparatus, all signals will indicate danger and after five minutes have elapsed, train will proceed through the block under protection of flagman in advance.

No. 322 will slow up sufficiently at South Tacoma to allow Agent to throw on Railway Mail.

Sige track, length 2000 feet, located on the Mason County Logging Co.'s road, 1,985 feet from main line switch at Bordeaux Junction. Mason County Logging Company will deliver loads to Northern Pacific Ry. Co. at this siding, and N. P. crews will leave empties for Logging Company at same location. N. P. train crews will not operate on Mason County Co.'s line, beyond siding.

Registering Stations—Aberdeen Junction, Cosmopolis and Ocosta.

Bulletin Station—Cosmopolis.

No. 583 has right over No. 584, Cosmopolis to Ocosta.

583 and 584 will stop on flag at Redmond Creek, located one mile east of Ocosta, for transfer of passengers, baggage and express destined to and from Westport.

All trains will stop 400 feet from and will not proceed until following draw bridges are known to be closed. Chehalis River, between Aberdeen Junction and Cosmopolis Junction; Johns River, 1/2 mile west of Markham. Junction switches will be set for line Junction City to Ocosta.

Trains will come to full stop before passing over grade crossings of O.-W. R. & N. Co. at various industry tracks in South Aberdeen and Cosmopolis.

West Bound. YACOLT BRANCH. East Bound.

West Bound.			East Bound.		
FIRST CLASS.			FIRST CLASS.		
389			390		
Passenger			Passenger		
DAILY			DAILY		
7.20 AM			6.20 PM		
7.37			6.00		
7.48			5.55		
7.50			5.48		
8.05			5.38		
8.20			5.28		
f 8.24			f 5.22		
f 8.27			f 5.18		
f 8.32			f 5.12		
f 8.37			f 5.02		
8.47 AM			4.50 PM		
DAILY			DAILY		
1.27			1.30		
18.5			18.1		

Registering Stations—Yacolt and Vancouver Junction.

Engineers will not be required to consult register except at initial or starting point.

Bulletin Stations—Vancouver and Yacolt.

Standard Clocks—Vancouver.

Derail switches located on Daly Spur and on Smith Spur must be kept in derailing position when not in use.

Trains from Yacolt Branch must ascertain main line rights before occupying main line at Vancouver Junction.

No. 389 and No. 390 will stop on flag at Lucia and Dole for passenger.

The east switch of the north leg of the wye at Yacolt will be kept set and locked for the north leg of the wye. Derail has been installed about three hundred feet south of and south end of passing track switch at Rileys, north of Yacolt. This derail must be kept open and locked at all times when not in use.

West Bound. BUCKLEY LINE. East Bound. West Bound. GREEN RIVER BRANCH. East Bound.

Table with multiple columns for train classes (Third Class, First Class), stations, times, and distances. Includes sub-tables for 'Time Table No. 35' and 'Time Table No. 35' for the Green River Branch.

(10) Speed of trains over crossover switches at Tidewater and Puyallup and over 15th Street Bridge, entering Tacoma passenger yard, must not exceed ten miles per hour. Trains entering Tacoma Union Station from Tacoma Division Main Line or Draw Bridge Line, will not exceed five miles per hour over switches at the north end of passenger yard, and over switches at Fifteenth street.

Maximum grades, one mile west of Buckley to Cascade Junction. Engines of any class must not be double headed over Bridge 228, Buckley loop, between Cascade Junction and Buckley. No engine heavier than N. P. class "W" loaded weight, of which is as follows. Weight on drivers, 207,000 lbs.; weight of engine and tender, 456,800 lbs will be run over Bridge No. 254, Tacoma Draw Span.

West Bound.		BURNETT BRANCH.				East Bound.			
FIRST CLASS.		Time Table No. 35 Succeeding No. 34C September 24, 1911				FIRST CLASS.			
373	375	Water, Coal, Scales, Tables and Wyes	Station Numbers	Distance from Spiketon	Distance from Cascade Jct.	Capacity of Passing Tracks	374	376	
Passenger	Passenger						Passenger	Passenger	
DAILY	DAILY	STATIONS.				DAILY	DAILY		
6.21PM	7.26AM	Telegraph Offices and Calls				7.25AM	6.20PM		
		C C	0.0	.....SPIKETON.....	3.4	45			
				2.1					
6.26	7.84	S	C C	2.1	BN.....BURNETT.....D	1.3	45	7.15	6.15
					1.3				
* 6.81PM*	* 7.39AM*		1949	3.4	.....CASCADE JCT.....	0.0	No Sdg.	* 7.10AM*	6.10PM
DAILY	DAILY	Time Over District				.15	.10	DAILY	DAILY
.10	.13	Average Speed per Hour				13.6	20.4		
20.4	15.6								

Registering Stations.—Burnett and Cascade Junction. Engineers will not be required to consult register except at initial or starting point. Switches above Burnett will be set to protect cars at quarries by derail. Speed of trains when backing up must not exceed 20 miles per hour. Speed must not exceed six miles per hour within the corporate limits of Burnett. Derail Switch east station platform at Spiketon must be set and locked for derail when not in use.

West Bound.		ORTING BRANCH.				East Bound.			
FIRST CLASS.		Time Table No. 35 Succeeding No. 34C September 24, 1911				FIRST CLASS.			
STATIONS.		Water, Coal, Scales, Tables and Wyes	Station Numbers	Distance from End of Track	Distance from Ortting	Capacity of Passing Tracks			
Telegraph Offices and Calls									
0.0				.....END OF TRACK.....	10.0			
1.3				TACOMA & EASTERN CROSS'G	8.7				
1.4			PUYALLUP RIVER.....	7.3	10			
2.7		C E	8	10.0	OG.....ORTING.....D	0.0	200		
1958		W T	1958	10.0					

Registering Station.—Orting. Engineers will not be required to consult register except at initial or starting point. Junction switch, one mile east of Orting station will be set for cross-over, and track from cross-over to station will be used as a main line passing track. Maximum grades on St. Paul & Tacoma Lumber Co.'s line east of Puyallup River. See special rules, page 10. Derailing switch 200 feet east of Junction switch must be left set for derail. Derail at Fisks must be left set for derail.

West Bound.		WILKESON BRANCH.				East Bound.	
FIRST CLASS.		Time Table No. 35 Succeeding No. 34C September 24, 1911				FIRST CLASS.	
377		Water, Coal, Scales, Tables and Wyes	Station Numbers	Distance from Fairfax	Distance from Cascade Jct.	Capacity of Passing Tracks	378
Passenger							Passenger
DAILY		STATIONS.				DAILY	
6.10AM		Telegraph Offices and Calls				7.85PM	
		T	C B	0.0	FX.....FAIRFAX.....D	15.5	5
					1.7		Spur
6.17			C B	1.7	.....MELMONT.....	13.8	5
					4.5		Spur
				6.2	CARBON COAL CO. CROSSING	9.3	
					0.6		
6.35			C B	6.8	CB.....CARBONADO.....D	8.7	5
					3.8		
6.55	S T		C B	10.6	WX.....WILKESON.....D	4.9	90
					4.9		
* 7.10AM				1949	.....CASCADE JCT.....	0.0	No Sdg.
DAILY		Time Over District				1.04	
1.00		Average Speed per Hour				15.4	
15.5							

Maximum Grades.
Registering Stations.—Fairfax and Cascade Junction. Engineers will not be required to consult register except at initial or starting point. Derailing switch located 200 feet east of east switch at Montezuma will be kept set and locked for derail. Carbonado Junction switch at Wilkeson and Fairfax Junction switch at Carbonado will be set for Fairfax Line. Speed of trains when backing up must not exceed 20 miles per hour. Trains will stop at railroad crossing near Fairfax Junction, between Carbonado and Fairfax. Derail switches at west end of coal track at Melmont and 200 feet east of Cascade Junction must be kept set in derailing position when not in use. Switch east of depot at Fairfax will be set to protect cars at Bunkers by derail. Trains between Fairfax and Montezuma will look out for logging train of Washington Manufacturing Company, switching at Montezuma. No. 377 has right over No. 378 Fairfax to Cascade Junction.

West Bound.		ELMA BRANCH.				East Bound.			
FIRST CLASS.		Time Table No. 35 Succeeding No. 34C September 24, 1911				FIRST CLASS.			
STATIONS.		Water, Coal, Scales, Tables and Wyes	Station Numbers	Distance from Simpson	Distance from Elma	Capacity of Passing Tracks			
Telegraph Offices and Calls									
0.0				.....SIMPSON.....	10.0	7			
1.2				.....SMITHS SPUR.....	8.8	4			
1.1				.....HILLGROVE.....	7.7	4			
2.3		C H	7 1/2	2.3	.....McCLEARY.....	7.5	8		
2.5				2.6	.....RAYVILLE.....	4.9	4		
5.1				0.9	.....WHITE'S.....	4.0	5		
6.0				4.0	.....ELMA.....D	0.0	60		
19				10.0					

Train service irregular—dependent on amount of business to be handled.
Registering Station.—Elma. Engineers will not be required to consult register except at initial or starting point. Kraft, 2.0 miles west of Elma, is spur for carload shipments. Note.—All trains will run slow between Simpson and Hillgrove account light rails. Switch in main track just above switch leading to Siding at Simpson must be left to act as derail. See Special Rules, page 10.

West Bound.		CROCKER BRANCH.				East Bound.		
FIRST CLASS.		Time Table No. 35 Succeeding No. 34C September 24, 1911				FIRST CLASS.		
STATIONS.		Water, Coal, Scales, Tables and Wyes	Station Numbers	Distance from Wingate	Distance from Crocker	Distance from Cascade Jct.		
Telegraph Offices and Calls								
0.0				.....WINGATE.....	5.2	140		
5.2				.....CROCKER.....	0.0	100		

Registering Station.—Crocker. Switches below station at Wingate will be set to act as derail. Engineers will not be required to consult register except at initial or starting point. Derailing switches at Crocker, and in main track 550 feet west of depot at Wingate, must be left set for derail. See special rules, page 10. Maximum grades.

COMMERCIAL SPURS.

MAIN LINE.	MAIN LINE—Cont.	ORTING BRANCH.	BUCKLEY LINE.	GATE LINE—Cont.	SOUTH BEND BRANCH—Cont.	GRAY'S HARBOR LINE.
DISTANCE FROM TACOMA.		DISTANCE FROM ORTING.	DISTANCE FROM PALMER JCT.			DISTANCE FROM LAKEVIEW.
Stone..... 37.4	Byckford..... 53.7	Veneer..... 3.1	Big 6..... 1.6	Foran..... 3.0	Lewis..... 40.2	Molberg..... 16.0
Mentzer..... 38.3	Newaukum..... 57.6	Fisks..... 5.2	Occidental..... 1.8	Duby..... 12.0	Trap Creek..... 41.2	Standard Oil Co..... 23.4
Tenino Stone Co..... 39.5	Evaline..... 65.0	Dempsey Lumber Co..... 8.3	Nolte..... 1.8		Wheaton..... 45.0	Black Lake..... 28.2
Blumauer..... 40.5	Capitol Mills..... 69.7	Electron Rock Crusher..... 8.6	Rosemar..... 4.0	SOUTH BEND BRANCH.	Shore..... 52.0	Overton..... 33.4
Great Western Coal Co..... 41.3	Hermione..... 109.1		Blackburn..... 11.1	DISTANCE FROM CHEHALIS JC.	Turney..... 54.0	Ames..... 45.6
Martin Lbr. Co..... 49.2		WILKESON BRANCH.	Webstone..... 12.5	Harmons..... 6.4	Mayfair..... 55.5	Bagshaw..... 50.5
Salzer..... 51.4		DISTANCE FROM CASCADE JCT.	Valley Mill..... 13.9	Donahue..... 12.0		Malone..... 58.1
Carlisle..... 51.5		Brierhill Coal & Coke Co..... 4.5	Broomfield..... 19.1	Meskill..... 12.5	YACOLT BRANCH.	Java..... 60.5
		Wilson's Mill..... 3.2	Firville..... 22.8	Mays..... 13.0	DISTANCE FROM YACOLT.	Vance..... 64.9
				Onn..... 16.9	McCutcheon..... 0.9	Weatherwax..... 73.9
				Cases..... 27.8	Dole..... 2.4	Ninemire & Morgan..... 86.4
				Ashlock..... 28.1	Bouton Perkins..... 4.7	
				Siler..... 29.6	Lucia..... 4.9	
				Custer..... 34.6	Daley..... 7.9	
				Guerrier..... 35.0	Smith..... 10.0	
				Soule..... 35.8	Tenny..... 13.2	

FREIGHT TRAINS AUTHORIZED TO CARRY ADULT MALE PASSENGERS, WHEN PROVIDED WITH PROPER TRANSPORTATION.
ORTING LOG TRAIN.—Between Ortting and End of Track on Ortting Branch.
ELMA LOG TRAIN.—Between Elma and End of Track on Elma Branch.
OLYMPIA LOG TRAIN.—Between Olympia and Bordeaux.

TONNAGE RATINGS—FREIGHT ENGINES—N. P. R. R.

BUCKLEY LINE—EAST BOUND.																		
	Class Z		Class W		Class Y-5		Class Y-2		Class F-1		Class S		Class E-4		Class E-3 or D-3		Class C-6	
	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars
Tacoma to South Prairie.....			1150	38	1100	37	950	32	900	30	800	27	500	17	475	16	350	12
South Prairie to Buckley.....			600	20	625	21	500	17	450	15	400	14	250	9	235	8	175	6
Buckley to Palmer Jct.....			1100	37	1100	37	900	30	900	30	800	27	500	17	475	16	350	12
Tacoma to South Prairie.....			Maximum 80 Cars		Maximum 80 Cars		Maximum 80 Cars		Maximum 60 Cars		Maximum 80 Cars		Maximum 60 Cars		Maximum 60 Cars		Maximum 40 Cars	
BUCKLEY LINE—WEST BOUND.																		
Palmer to Tacoma.....			Maximum 80 Cars		Maximum 80 Cars		Maximum 80 Cars		Maximum 80 Cars		Maximum 80 Cars		Maximum 60 Cars		Maximum 60 Cars		Maximum 60 Cars	
MAIN LINE—WEST BOUND.																		
GRADES.	Class W		Class Y-2		Class F-1		Class S		Class P		Class E-4		Class E-3		Class D-3		Class C-6	
	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars
South Tacoma to Rainier.....	1600	53	1350	45	1200	40	1150	38	1050	35	850	28	825	27	825	27	700	23
Rainier to Chehalis.....		80		80		60		60		60		60		50		50		40
Chehalis to Napavine.....	1200	38	1000	34	900	30	850	28	750	25	550	18	525	17	525	17	400	13
Napavine to Portland.....		80		80	1500	50	2000	60	1400	47	1200	40	1175	39	1175	39	1050	35
MAIN LINE—EAST BOUND.																		
Portland to Winlock.....	1750	58	1550	52	1400	47	1350	45	1250	41	1050	35	1025	34	1025	34	900	30
Winlock to Napavine.....	1260	42	1110	37	1010	33	960	32	860	29	660	22	635	21	635	21	510	17
Napavine to Rainier.....	1500	50	1250	41	1100	36	1050	35	950	31	750	25	725	24	725	24	600	20
Rainier to Tacoma.....		60	1900	63	1750	58	1700	57	1500	50	1300	43	1275	42	1275	42	1150	38

Hereafter the above table of ratings will govern on ruling grades. These ratings are based on a normal number of cars of thirty tons each.

To find the rating of an engine when train contains more or less than normal number of cars, add five tons to the rating of each car less than the normal, and subtract five tons from

the rating for each car in excess of the normal. Maximum eighty cars between Tacoma and Portland.

Restrictions Governing Class of Power That May be Used on Tacoma Division.

Buckley Line.—All classes except Class Z Mallet Engines.
Wilkeson Branch, Cascade Jct. to Wilkeson and Wilkeson to Carbonado.—No engine heavier than S.
Carbonado to Fairfax.—No engine heavier than F-1.
Burnett Branch.—All classes except Q. T., W X Y and Z.
Crocker Branch.—No engine heavier than F-1.
Orting Branch.—No engine heavier than F-1.
Green River Branch.—No engine heavier than F-1.
Main Line.—All classes except engines heavier than S must not go beyond house track switch leading from log dump track at Felida.
Grays Harbor Line, Lakeview to Gate.—No engine heavier than P compound passenger engine and S at slow speed.
Grays Harbor and Gate Line, Gate to Hoquiam.—No engine heavier than S-4.
Grays Harbor Line, Hoquiam to Moclips.—No engine heavier than F-1.
Ocosta Branch, Aberdeen Jct. to Cosmopolis.—No engine heavier than D-3.
Cosmopolis Jct. to Ocosta.—No engine heavier than mogul.
Elma Branch.—No engine heavier than F-1.
South Bend Branch.—No engine heavier than S, except Draw Span between Raymond and South Bend; no engine heavier than mogul.
Yacolt Branch.—No engine heavier than S-4.
 No engine heavier than N. P. class W, loaded weights of which is as follows: Weight on drivers, 203,000 lbs.; weight of engine and tender, 407,500 lbs.
 No two engines of any class will double head over this bridge where combined weight is greater than N. P. Class W.
 Speed of trains will be restricted to ten (10) miles per hour over this bridge.
 Double headers will not be run over the following bridges when road engine is heavier than mogul.
 No. 2 and No. 13 between Centralia and Gate.

TONNAGE RATING—ENGINES OF O.-W. R. & N. CO. BETWEEN SEATTLE AND PORTLAND.

Rating of Locomotives in Tons of 2000 Pounds

CLASSIFICATION	Engine Numbers	EAST BOUND							WEST BOUND					
		Portland to Kalama	Kalama to Olequa	Olequa to Winlock	Winlock to Napavine	Centralia to Rainier	Rainier to So. Tacoma	Tacoma to Seattle	Seattle to Tacoma Jct	Tacoma Jct to Tacoma	Tacoma to So. Tacoma	So. Tacoma to Rainier	Centralia to Napavine	Napavine to Portland
T-63 $\frac{20}{24}$ 113...	136-146.....	1580	1200	990	720	790	1120	1280	1280	655	315	900	655	1580
	170-207.....	1900	1440	1190	870	960	1310	1540	1540	800	370	1080	800	1900
T-69 $\frac{22}{28}$ 159...	250-305.....	2200	1680	1380	1000	1110	1560	1790	1790	900	440	1250	900	2200
C-57 $\frac{15\frac{1}{2} \times 26}{30}$ 176...	330-349.....	2335	1790	1475	1075	1190	1680	1900	1900	985	500	1335	985	2335
C-57 $\frac{22}{30}$ 187...	350-400.....	2940	2250	1860	1360	1490	2120	2380	2380	1220	560	1680	1220	2940
Mik-57 $\frac{23\frac{3}{4}}{30}$ 208...	500-540.....	3100	2340	1930	1400	1550	2200	2490	2490	1250	580	1700	1250	3100
M-63 $\frac{20}{28}$ 147...	C. R. Y. y P. 504-526.	2050	1550	1300	940	1035	1500	1710	1710	840	400	1150	840	2050
T-57 $\frac{20}{26}$ 132...	720-727.....													
M-63 $\frac{15\frac{1}{2} \times 26}{28}$ 144...	1740-1798.....	1800	1320	1130	840	910	1280	1460	1460	750	350	1020	750	1800
S-55 $\frac{19}{26}$ 130...	552.....										380			

These ratings include total weight of train, exclusive of engine and tender, which the different classes of locomotives will haul in each direction between the stations shown.

Between stations for which no rating is shown, maximum will apply.

CLASS

- "E" —Eight Wheelers
- "A" —Atlantic Type
- "P" —Pacific Type
- "T" —Ten Wheelers
- "M" —Moguls
- "Mik" —Mikado
- "C" —Consolidation Engines
- "TW" —Twelve Wheelers
- "S" —Switch

Example.—Consolidation engine having 57 inch drivers, cylinders 22-inch diameter and 30-inch stroke, and weighing 187,000 pounds on drivers:

C-57 $\frac{22}{30}$ 187

Ratings for time freight trains, Albina to Tacoma, is 10% less than tabulated rating as shown between Winlock and Napavine and between Centralia and Tacoma.

RULES GOVERNING AUTOMATIC SIGNALS BETWEEN SOUTH TACOMA AND HALF MOON YARD, TACOMA.

Automatic signals of the three position semaphore type govern East and West bound main line between South Tacoma and Half Moon Yard, Tacoma.

First semaphore on East bound main line is located about 1,500 feet east of passenger station, South Tacoma; the last semaphore before reaching Half Moon Yard, Tacoma, located just east of 15th Street viaduct, and governs the use of track between that point and the overhead bridge at 9th Street; the first semaphore on West bound main line located about 2,000 feet west of the overhead bridge at 11th Street; the last one is located one-half mile east of South Tacoma Station, and governs the use of the track to the South Tacoma Station. The semaphore shows three indications, as follows:

When semaphore arm is 90 degrees upward or light shows green, it indicates "Clear."

When semaphore arm is 45 degrees upward or light shows yellow, it indicates "Caution."

When semaphore arm is at horizontal position or light shows red, it is a signal to stop, block not clear.

All semaphore arms that govern are displayed to the right of signal mast as seen from approaching train. When semaphore arm is in horizontal position or light shows "red," it is a signal to stop, block immediately ahead is occupied. When semaphore is 45 degrees upward or light shows "yellow," it is caution signal, and indicates block immediately ahead is not occupied but next semaphore ahead is at Danger. When semaphore is 90 degrees upward or light shows "green," it indicates that block ahead is clear and the next signal is also clear. Train approaching semaphore and finding it at Danger, will come to full stop, and will proceed under full control, expecting to find block occupied. Train approaching semaphore and finding it at Caution, will proceed, expecting to find next signal in advance at Danger. Train approaching semaphore and finding it at Clear indication, will proceed, expecting to find next signal immediately ahead Clear.

Trains occupying East bound main line between 15th Street viaduct and 9th Street bridge, Half Moon Yard, will hold signal at 15th Street viaduct at Danger. Trains occupying West bound main line between passenger station South Tacoma and the semaphore located one-half mile east, will hold this semaphore at Danger.

All main line switches and both ends of crossover switches within automatic block limits are provided with switch instruments so connected to switch point that the opening of any switch will hold signal of that block at Danger until switch is again closed. The opening of switch at either end of main track crossover will hold signals on both tracks at Danger. If either end of crossover leading to siding is opened, it will hold the signal at Danger that controls block on track to which it is connected. Neither switch or crossover should, therefore, be opened until movement of train is to be made.

Switch indicators of semaphore pattern are located at both ends of crossover switches leading from West bound to East bound main line just east of Pacific Avenue crossing. When indicator arm is in horizontal position it is an indication that block is occupied; when indicator arm is downward it indicates Clear, block not occupied. The opening of either end of crossover switches will set indicator at horizontal or Danger position; in case indicator does not go to Danger when switch points are opened, it is an indication that the signals governing the block have not gone to Danger and that signals are out of order. In such cases movement must be made under protection of flag. Trainmen or yard crews desiring to occupy main line, or to move from West bound track to East bound track, must not open switch leading to that track when indicators show Danger, but must wait until the approaching train shall have passed the switch and out of the block.

If switch indicator shows Danger, provided that after waiting five (5) minutes train does not appear or indicator does not go Clear position, switches may be used provided movement is fully protected by flag.

Passenger trains must not proceed through crossover from Pacific Avenue passenger yard to outgoing main line when block on East bound main line is occupied, until it is positively known that descending train has stopped and will be held above crossovers until passenger train has passed and is clear of the crossover switches.

Cars and engines on side tracks must stand back of insulated joints in order that semaphore will not be held at Danger. Freight trains must clear block before passenger trains are due to enter same. Whenever a train is mentioned in these rules—the term "Train" applies to either a road or switch engine with or without cars. The practice of dumping cinders from engines within automatic block limits is prohibited as it interferes with operation of signals.

The semaphore located at 15th Street on East bound track and the one located one-half mile east of South Tacoma on West bound main track are of the cantilever pattern. These signals are equipped with a bracket upon which is erected a post four feet in length, four inches in diameter. The post is equipped with a yellow light at night, indicating that the semaphore upon which they are attached governs main line and NOT the side track.

Before using the crossover switches above Bailey Street and below Tacoma Avenue, in order to cross over from one Main Line to the other, after throwing the first switch wait three (3) minutes before throwing the next switch and crossing over. This in order to be sure that no train has entered the block before crossover switch had been thrown setting signals at danger.

RULES GOVERNING AUTOMATIC SIGNALS IN DOUBLE TRACK DISTRICT, BETWEEN KALAMA AND VANCOUVER.

1 Indications, automatic signals:

- (A) Semaphore arm in horizontal position or red light by night, STOP.
- (B) Semaphore arm 45 degrees upward, or yellow light by night, CAUTION.
- (C) Semaphore arm 90 degrees upward, or green light by night, CLEAR.

2 Governing arm is that seen to the right of the signal mast by approaching train.

3 Trains finding semaphore arm in stop position will, after coming to full stop, proceed with caution, expecting to find train in block, open switch, broken rail, or car foul of the main track.

4 Trains finding semaphore arm at caution will proceed under control, prepared to stop at next signal.

5 Signal light not burning, or white light by night, will be considered a "Stop" signal, and position of signal must be ascertained, and report of circumstances made at next telegraph office.

Indicators of miniature semaphore pattern with push buttons underneath are located at all switches and cross-overs except at Hermione and Knapps, and the house track switch at Ridgefield.

Normal position of indicators is "Stop."

To ascertain whether block is occupied or not, before throwing switch, push the button underneath the indicator. If block is clear when button is pushed, indicator will show clear position and remain in that position as long as pressure is maintained, on the button, and switch should immediately be thrown in order to place signals at stop position. If indicator does not clear when button is pushed, there is a train in the block or approaching, and switch must not be thrown. If indicator cannot be cleared after waiting five (5) minutes and a train does not appear, switches may be used provided movement is fully protected by flag.

Indicators at main track cross-overs show condition of opposite track and not the track on which they are located.

Indicators on side track cross-overs are located on siding end of cross-overs, and indicate condition of main track to which cross-over leads.

Indicators at single switches indicate the condition of track to which switch leads.

Switch instruments are connected to main line switches and both end of cross-over switches within automatic signal limit. The opening of any switch will set and hold signal of that block at "Stop" until switch is again closed. The opening of any switch at either end of main track cross-over will hold signals on both tracks at "Stop." If either end of a siding cross-over is opened, it will set and hold the signal at "stop" that controls block on main track to which it leads. Neither switch or cross-over must, therefore, be opened until movement of train is to be made and must be closed immediately after movement has been made and switches locked. When it is necessary to stop at any signal, stop must be made thirty feet before reaching signal in order not to foul track circuits. Cars and engine on side tracks must stand back of insulated joints in order that signals will not be held at "stop." Whenever a train is mentioned in these rules, the term "train" applies to either a road or switch engine, with or without cars. The practice of dumping cinders from engines within Automatic Block Limits, is prohibited, as it interferes with operation of signals.

Signal 105.8, on east bound track, located 3,000 feet west of Kalama depot, operates in three positions, going to "stop" position when head end of train passes signal, will go to "caution" when the rear of train passes 3,200 feet beyond signal, and will go to "clear" when rear of train has passed a point 200 feet west of east switch of the passing track at Kalama.

Signals governing east bound trains are numbered and located as follows:

EAST-BOUND FROM VANCOUVER:

133.8—1500 feet east of Mile Post No. 134	119.8—4700 feet east of Mile Post No. 120
133.2—4500 feet east of Mile Post No. 134	117.8—400 feet east of Mile Post No. 118
132.8—2300 feet east of Mile Post No. 133	115.8—900 feet east of Mile Post No. 116
131.0—4800 feet east of Mile Post No. 132	114.6—1600 feet east of Mile Post No. 115
128.8—600 feet east of Mile Post No. 129	113.6—1800 feet east of Mile Post No. 114
127.2—3700 feet east of Mile Post No. 128	112.4—3200 feet east of Mile Post No. 113
125.6—2700 feet east of Mile Post No. 126	110.2—2700 feet east of Mile Post No. 111
123.8—400 feet east of Mile Post No. 124	108.6—2230 feet east of Mile Post No. 109
122.2—4200 feet east of Mile Post No. 123	107.0—4700 feet east of Mile Post No. 108
120.6—2800 feet east of Mile Post No. 121	105.8—2200 feet east of Mile Post No. 106

Signals governing west bound trains, are numbered and located as follows:

WEST-BOUND FROM KALAMA:

105.7—3400 feet west of Mile Post No. 105	120.7—3200 feet west of Mile Post No. 120
107.1—500 feet west of Mile Post No. 107	122.3—2000 feet west of Mile Post No. 122
108.5—3000 feet west of Mile Post No. 108	123.9—4800 feet west of Mile Post No. 123
110.3—800 feet west of Mile Post No. 110	125.5—2600 feet west of Mile Post No. 125
111.9—3600 feet west of Mile Post No. 111	127.3—1600 feet west of Mile Post No. 127
113.7—3400 feet west of Mile Post No. 113	129.1—400 feet west of Mile Post No. 129
114.7—3600 feet west of Mile Post No. 114	130.7—3800 feet west of Mile Post No. 130
115.9—4400 feet west of Mile Post No. 115	132.5—1800 feet west of Mile Post No. 132
117.9—4800 feet west of Mile Post No. 117	133.3—900 feet west of Mile Post No. 133
119.1—500 feet west of Mile Post No. 119	

Signal No. 133.3, located 5,150 feet east of passenger station, Vancouver, has two positions, viz.: "Danger" and "Caution" and governs use of track to the S. P. & S. connection, just west of passenger station, Vancouver.

East bound track between Vancouver passenger station and signal No. 133.8, 1,850 feet east of station, will be operated under Yard Limit rules.

A train having work to do which may detain it more than ten minutes, must obtain permission from Operator at the last station, before entering the block in which work is to be done.

Operator must obtain authority to give this permission, from the Dispatcher.

Except as affected by these rules, all block signal and train rules, remain in force.

RULES GOVERNING INTERLOCKING PLANTS LEWIS RIVER DRAW SPAN BETWEEN WOODLAND AND RIDGEFIELD.

Automatic signal No. 115.9 west of Woodland is distant signal on west bound track; signal 117.8, east of Ridgefield, is distant signal on east bound track.

Home signals located 1010 feet from draw span.

Dwarf signals, 660 feet from draw span, between tracks.

Home signals govern as follows:

Upper arm governs trains moving in the direction of traffic, or using the right hand track.

Arm horizontal, stop.

45 degrees upward, caution.

90 degrees upward or vertical, proceed.

Lower arm governs trains moving with traffic to the double track switch and which are to be diverted to the left hand track after crossing bridge, or, slow speed movements with traffic, when for any reason the proper indication cannot be given with the upper arm, in which case position of lower arm will govern. Lower arm has two positions only: Horizontal, stop; 45 degrees upward, caution.

Trains will not run against traffic even though proper signal to do so is received, without regular train order authority.

Under these instructions vertical indication will not be given with both arms of the semaphore at the same time, but engineers

will be governed by the position of the arm which accords with movement they have been authorized to make, whether with or against traffic.

Dwarf Signals, arm horizontal, stop; 45 degrees upward, proceed with caution.

These dwarf signals have only two positions and govern back up movements with or against traffic and govern trains moving against traffic to the double track switch.

Night indications of signals, when displayed on arms governing: Red, stop; yellow, caution; green, proceed; white light, stop (to govern in case of broken lens. A light failure, either a white light or a light extinguished, will be considered stop and reported from first office).

Derails are located 55 feet beyond signals and are open when signals are at danger. Trains must come to a full stop at least thirty feet in advance of signal and wait until either "proceed" or "caution" signal is displayed.

If, for any reason signals become inoperative, trains will proceed after proper hand signals are given and it is known that derails are closed and bridge is clear. Hand signals shall consist of a green flag by day, and a green light by night, and are not to be recognized unless given from track.

Except as noted, the automatic signals between Vancouver and Kalama govern in the direction of traffic only.

SPECIAL RULES REGARDING USE OF STAFF ON BRANCH LINES.

Du Pont Spur, Elma Branch, Cosmopolis Branch, Hoquiam River Spur, Centralia Eastern, Smelter line at Tacoma, Orting Branch, Crocker Branch and Green River Branch are operated under staff system. Before using these tracks, trains will obtain staff which is located in staff box at each junction. All other trains using these tracks must be operated under protection of flag. For completion

of Dispatcher's record of service, operator at main line junction point will telegraph copy of register showing departure and arrival and mileage made on branch. If there is no operator at junction point, conductor will telegraph this information from next open telegraph office.

AUTHORIZED SURGEONS, O.-W. R. R. & N. CO.

SEATTLE—

Dr. Montgomery Russell, Division Surgeon.
Dr. F. R. Underwood, Assistant Surgeon,
618-20-22 Leary Bldg.
District between Seattle and Tacoma.
Dr. E. B. Burwell, Oculist and Aurist, 300-1
Cobb Bldg.

AUBURN—

Dr. F. D. Merritt, District Surgeon.
District between Seattle and Tacoma.

TACOMA—

Dr. Chas. James, District Surgeon, 514 Cali-
fornia Bldg.
District between Auburn and Tenino.

TENINO—

Dr. Chas. E. Robson, District Surgeon.
District between Tacoma and Centralia.

WINLOCK—

Dr. Irvin W. Weichbrod, District Surgeon.
District between Castle Rock and Centralia.

CENTRALIA—

Dr. David Livingstone, District Surgeon.
District between Winlock and Tenino, and
Elma and Hannaford Creek Branch.

CASTLE ROCK—

Dr. T. C. Campbell, District Surgeon.
District between Kelso and Winlock.

KELSO—

Dr. C. W. Bales, District Surgeon.
District between Kalama and Castle Rock.

KALAMA—

Dr. Luther M. Simms, District Surgeon.
District between Vancouver and Kelso.

VANCOUVER—

Dr. J. T. Guerin, District Surgeon.
District between Kalama and Albina.

ALBINA—

Dr. Curtis C. Holcomb, District Surgeon.
District between Vancouver and Portland.

PORTLAND—

Dr. Kenneth A. J. Mackenzie, Chief Sur-
geon.
Dr. Geo. Ainslie, Consulting Oculist and
Aurist.
Dr. Frank M. Taylor, Assistant Surgeon.
Dr. D. H. Jessup, Assistant Surgeon.

AUTHORIZED SURGEONS, N. P. RY. CO.

Location of Stretchers (S).

DR. S. W. MOWERS, Chief Surgeon, Western Div., Tacoma. DR. J. H. SHEETS, Buckley (S). P. B. SWEET, Kangley, Wn.	DR. W. B. PENNY, Wilkeson, Wn. Orting (S). Puyallup (S). Tacoma Hospital (S). Tacoma Round House (S).
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Tacoma Baggage Room (S). Tacoma Wharf (S). Tacoma (Toolcar) (S). DR. P. B. SWEARINGEN, So. Tacoma (S). DR. E. L. CARLSEN, So. Tacoma (S).	DR. G. W. KENNICOTT, Chehalis. DR. J. W. MOWELL, Olympia (S). DR. J. H. DUMON, Centralia (S). DR. E. P. FRENCH, Elma. DR. F. L. CARR, Montesano (S).
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DR. H. C. WATKINS, Hoquiam. DR. PAUL SMITS, Aberdeen. DR. A. B. MACLEAN, Pe Ell. DR. W. GRUWELL, So. Bend (S). DR. I. A. WEICHBROD, Winlock.	DR. T. C. CAMPBELL, Castle Rock. DR. L. M. SIMS, Kalama (S). DR. J. MCCHESENEY, St. John's. DR. J. T. GUERIN, Vancouver (S). DR. ANDREW C. SMITH, Portland (S).
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DR. P. B. WING, Oculist, Tacoma. DR. W. G. CAMERON, Specialist, Ta- coma. DR. J. F. DICKSON, Oculist, Portland DR. A. W. STEVENSON, Yacolt (S).

Note.

Surgeons will attend, when called upon officially, to all cases of ACCIDENT occurring to employes or passengers. In cases of SICKNESS it is the intention to limit medical service to the locality or town where a surgeon resides, unless some urgent necessity exists, for which distinct official authority must be had in accordance with established regulations.

Railway Officials are required to call on the nearest authorized surgeons whenever practicable, when surgical or medical services are needed. When such are accessible, the Association will not be responsible for bills for medical services rendered by any other physician. In the event of a sudden emergency, arising from accident, if necessary proper surgical aid should be procured until the ar-

rival of a regularly appointed surgeon, when the case should be placed in his charge, and in no case should the services of any but an authorized company surgeon be continued at the expense of the Railway Company or of the Association after such surgeon is able to assume charge of the case.

Boarding and Nursing are furnished ONLY AT OUR OWN HOSPITALS. We are not responsible for bills incurred elsewhere unless specially authorized or approved by the Chief Surgeon, and then only in critical cases of injury or illness occurring in the discharge of duty.

AUTHORIZED SURGEONS, G. N. RY. CO.

DR. J. A. LA GASA, Tacoma

TACOMA TERMINAL DIVISION

Tacoma Terminal embraces Northern Pacific lines from Tidewater at the west line of East "Q" Street to Mile Post 8+942 feet, or approximately 2½ miles west of South Tacoma.

Registering Stations.—Tacoma yard office, Tacoma and South Tacoma.

Bulletin Stations.—Tacoma yard office and Tacoma.

Standard Clock.—Tacoma.

Passenger trains will register by ticket at South Tacoma. Clearance will not be issued at South Tacoma to east bound trains unless RED signal is displayed. At Tacoma yard office and Tacoma no clearance required.

Derail Switches are located as follows, and must be kept set in derailing position when not in use: Harrison Bros. Spur and Keystone Lumber Co. Spur.

Freight trains leaving Tacoma yard, or switch engine taking transfer to South Tacoma, will not pass cross-over track above 15th Street leading from passenger yard to outgoing track without signal from switch tender, who will not allow trains or transfers to pass this cross-over when any passenger train is backing out of or waiting in the passenger station. East bound trains will be under absolute control approaching Pacific Avenue at Tacoma and will not pass Pacific Avenue crossing without signal from switch tender, indicating that cross-overs at Pacific Avenue are clear. All trains which will use the Draw Bridge Line at Tacoma without entering passenger station will stop above Pacific Avenue and not proceed beyond there until engineer is furnished with a bridge card and an understanding established with tower man covering movement of train over Draw Bridge Line. If it is found that freight trains cannot use Draw Bridge Line and passenger train will be delayed on this account, conductor will arrange to enter Half Moon Yard and be handled via freight tracks to Tidewater.

Maximum Grades.—Tacoma Yard Office to two and one-half miles west. Speed of trains over cross-over switches at Tidewater and over 15th Street Bridge, entering Tacoma Passenger Yard, must not exceed ten (10) miles per hour, and five (5) miles per hour over switches at north end of passenger yard.

No engine heavier than N. P. class "W," loaded weight of which is as follows—weight on drivers, 207,000 lbs.; weight of engine and tender, 456,800 lbs., will be run over Bridge No. 254, Tacoma Draw Span.

No two engines of any class will double-head over this bridge where the combined weight is greater than N. P. class "W." Speed of all trains must not exceed ten (10) miles per hour over Tacoma Draw Span. Engineers will not use sand over derail switches and rail locks east and west end of Bridge 254, Tacoma draw span.

Trains will keep to the right on double track between Tidewater and Tacoma Wharf and between Tacoma and South Tacoma. Between Tidewater and Tacoma, engineer will obtain card order at Tidewater or Tacoma as authority to use Draw Bridge Line. Bridge card to be delivered to operator at Tidewater or to Chief Dispatcher at Tacoma. Interlocking signals at east and west approach to Draw Bridge control use of bridge and trains will not proceed unless Home signal shows clear indication. West bound trains that do not enter passenger station at Tacoma will leave draw bridge card with tower man at 15th street to be delivered to dispatcher's office.

Trains will approach Tidewater under full control and will not proceed until tracks are known to be clear and signal is received from switch tender.

Distance Signal located on drawbridge line 1500 feet east of home signal just east of Tacoma draw span, bridge 254, has been made semi-automatic. When home signal is clear, distance signal will be clear; when home signal shows stop position, distance signal will show stop position. Trains will observe automatic block rules, coming to full stop at distance signal, when same shows stop position, then proceed under full control to home signal.

Trains will approach cross-over switches on double track between Tidewater and Tacoma Wharf located at East L Street (near Head of Bay Yard Office), East D Street (near Round House) and South Twenty-first Street (entering Passenger Station) under full control, and will not proceed until tracks are known to be clear and signal is received from switch tender.

At Tacoma a signal of the single arm semaphore pattern, located near junction of line leading to passenger station and the Draw Bridge Line at 15th Street; another signal of the same pattern at the north end of Passenger Yard. The two signals are to be controlled by switch tender at 15th Street, and will govern single track passenger line between 15th Street and Tacoma passenger station. No train from the Draw Bridge Line or Tacoma Division main line will enter passenger station when signal at 15th Street is at "Danger" and no train will proceed from passenger station yard to Draw Bridge Line or Tacoma Division main line when signal at the north end of yard is at "Danger."

Trains entering passenger station via Head of Bay will use extreme care and not exceed eight (8) miles per hour around curves at south end of passenger yard. As there are no switch tenders at switches at the north end of passenger yard, trains coming into the yard at that point must positively know that switches are lined up for clear track before passing them. Push button operating signal to Tower man will be located on post under Concourse. Switch crew will operate for Portland bound trains and Conductors attend to it for Seattle bound trains.

**J. S. DEAN,
Train Master, Tacoma**

**J. F. ALSIP,
Chief Dispatcher, Tacoma**