

NORTHERN PACIFIC RAILWAY COMPANY.

TACOMA DIVISION

TIME 49 TABLE

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

SUNDAY, MAY 20, 1923.

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 Instructions and always have for reference a copy of TRANSPORTATION RULES.

E. C. BLANCHARD,
General Manager.

A. V. BROWN,
General Superintendent.

I. B. RICHARDS,
Superintendent of Transportation.

W. C. ALBEE,
Superintendent.

P. H. McCAULEY,
General Superintendent of Transportation.

WESTWARD.

FIRST SUBDIVISION. MAIN LINE.

Time Table No. 49 May 20, 1923 Succeeding No. 48B. Table with columns for Station Numbers, Time Table No. 49, Stations, Distance from Reservation, and train classes (First Class, Second Class, Third Class) with various train numbers and schedules.

BETWEEN VANCOUVER AND PORTLAND TRAINS WILL BE GOVERNED BY SPOKANE, PORTLAND AND SEATTLE RAILWAY TIME TABLE AND RULES.

Table with columns for Station Numbers (WTCY, WCOT) and Station Names (CITY LIMITS, PORTLAND), including times and average speeds.

MANUAL BLOCK BETWEEN STADIUM AND TENINO STAFF SYSTEM BETWEEN STADIUM AND McCARVER STREET. EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. AUTOMATIC BLOCK BETWEEN TENINO AND VANCOUVER DOUBLE TRACK BETWEEN VANCOUVER AND McCARVER STREET AND BETWEEN STADIUM AND TACOMA UNION STATION. SPECIAL INSTRUCTIONS PAGES 9, 12, 13 AND 14

EASTWARD.

FIRST SUBDIVISION.
MAIN LINE.

Distance from Portland	Time Table No. 49 May 20, 1923. Succeeding No. 48B		Car Capacity of Stations	FIRST CLASS										SECOND CLASS					THIRD CLASS					
				402	408	422	456	458	466	562	564	592	594	514	516	588	680	692	964	966	970	974	976	978
				Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Ex. Sun.	Ex. Sun.	Daily	Daily	Tue. Thur. Sat.	Ex. Sun.	Ex. Sun.	Ex. Sun.	Ex. Sun.	Ex. Sun.
				Nor. Pac. Seattle Express	Nor. Pac. Seattle Passenger	Nor. Pac. Grays Harbor Limited	Great Northern	Great Northern	Nor. Pac. Grays Harbor Passenger	O-W.R.&N Tacoma-Seattle Express	O-W.R.&N Seattle Express	Nor. Pac. Willapa Harbor Passenger	Nor. Pac. Willapa Harbor Limited	Nor. Pac. Mixed	O-W.R.&N Mixed	Nor. Pac. Mixed	Nor. Pac. Time Freight	O-W.R.&N Time Freight	Nor. Pac. Way Freight	Nor. Pac. Way Freight	Nor. Pac. Way Freight	Nor. Pac. Way Freight	O-W.R.&N Way Freight	O-W.R.&N Way Freight
146.4	Q	TACOMA Union Station 0.4	D. N. Cross Over																					
		O.-W. R. & N. Co. CONNECTION 2.0																						
146.0																								
144.0	NX	STADIUM 0.4	DN																					
143.6		McCARVER ST. 6.9	DN																					
136.7	SX	SIXTH AVENUE 6.0	DN Cross Over	E 73 W 73																				
130.7	UO	STELACOOM 2.0	DN Cross Over																					
128.7		KETRON 6.7	P Cross Over	E 73 W 73																				
122.0	NU	NISQUALLY 3.8	DN Cross Over																					
118.2	SR	ST. CLAIR 1.6	DN Cross Over																					
116.6		KYRO 5.1	P Cross Over	W 73																				
111.5	MA	CHAMBERS PRAIRIE 2.6	DN Cross Over	E 73 W 73																				
108.9		PLUMB 5.4	P Cross Over																					
103.4	NO	TENINO 0.5	DN																					
102.9		TENINO JCT. 3.2	P Cross Over	E 73 W 74																				
99.7	BU	BUCODA 5.1	D Cross Over																					
94.6		WABASH 2.2	P																					
92.4	CN	CENTRALIA 3.7	DN Cross Over	500																				
88.7	CH C.M.&St.P.	CHEHALIS 0.9	DN Cross Over Tk Con	E 66 W 36																				
87.8		CHEHALIS JCT. 6.5	P Cross Over	Y																				
81.8	NA	NAPAVINE 3.1	DP Cross Over	E 73 W 73																				
78.2		EVALINE 3.1	Spur																					
75.1	WI	WINLOCK 8.5	D Cross Over	74																				
68.6	PN	VADER 2.7	DN Cross Over	E 51 W 56																				
65.9		OLEQUA 6.9	Spur																					
59.0	CA	CASTLE ROCK 6.3	D Cross Over	E 69 W 70																				
52.7		OSTRANDER 3.6	DN Cross Over																					
49.1	KS	KELSO 5.7	D Cross Over	E 74																				
43.4		CARROLLS 4.5	Spur																					
38.9	KA	KALAMA 4.3	DN Cross Over	E 66 W 88																				
34.6		MARTINS BLUFF 4.8																						
29.8	WD	WOODLAND 5.4	D Cross Over	Spur																				
24.4	RG	RIDGEFIELD 5.2	D Cross Over	E 114 W 93																				
19.2		KNAPP 3.3	Spur																					
15.9		FELIDA 2.8	P Cross Over	Spur																				
13.1		VANCOUVER JCT. 3.1	P Cross Over																					
10.0	MX S.P.&S.	VANCOUVER 8.2	DN Cross Over Track Conn.	1000																				

BETWEEN VANCOUVER AND PORTLAND TRAINS WILL BE GOVERNED BY SPOKANE, PORTLAND AND SEATTLE RAILWAY TIME TABLE AND RULES.

Distance	Station	Class	Capacity	402	408	422	456	458	466	562	564	592	594	514	516	588	680	692	964	966	970	974	976	978
1.8	CITY LIMITS (Guilds Lake Yard) 1.8																							
0.0	PORTLAND DN		1000	L 11.30PM	L 8.05AM		L 1.00PM	L 10.00AM		L 4.00PM	L 11.15PM													
	Time Over Subdivision			4.45	4.30	.10	3.03	3.09	.10	4.45	4.45	.45	.20	.05	.10	.10	7.26	7.32	.40	2.30	.40	5.53	5.15	6.19
	Average Speed Per Hour			28.7	30.8	22.8	30.4	29.2	22.8	28.7	28.7	20.1	13.8	26.4	13.2	18.6	18.4	18.1	13.3	11.3	6.9	14.0	10.3	13.0

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

STAFF SYSTEM BETWEEN STADIUM AND McCARVER STREET.
MANUAL BLOCK BETWEEN STADIUM AND TENINO

AUTOMATIC BLOCK BETWEEN TENINO AND VANCOUVER
DOUBLE TRACK BETWEEN TACOMA UNION STATION AND STADIUM, AND BETWEEN McCARVER ST. AND VANCOUVER.

SPECIAL INSTRUCTIONS PAGES 9, 12, 13 AND 14.

WESTWARD

SECOND SUBDIVISION. (GRAY'S HARBOR LINE AND OCOSTA BRANCH)

Table with columns for Station Number, Distance from St. Clair, Time Table No. 49 (May 20, 1923), STATIONS, Telegraph Offices and Calls, Car Capacity of Sidings, and train classes (FIRST CLASS, SECOND CLASS, THIRD CLASS) with various time and fare details.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION, EXCEPT No. 991 IS SUPERIOR TO No. 992 COSMOPOLIS TO BAY CITY. MANUAL BLOCK BETWEEN ST. CLAIR AND ABERDEEN 7:00 A. M. TO 11:00 P. M. DOUBLE TRACK BETWEEN ABERDEEN AND HOQUIAM RIVER DRAWBRIDGE. SPECIAL INSTRUCTIONS PAGES 9, 10, 12, 13 AND 14.

SECOND SUBDIVISION. (GRAY'S HARBOR LINE AND OCOSTA BRANCH)

EASTWARD.

Time Table No. 49 May 20, 1923. Succeeding No. 48-B.

STATIONS Telegraph Offices and Calls

Table listing stations from ST. CLAIR to MOCLIPS with distance from Moonde and station codes.

Main table with columns for First Class (422-584), Second Class (694-698), and Third Class (966-992). Rows show fares for various passenger types and freight rates.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION EXCEPT NO. 991 IS SUPERIOR TO NO. 992 COSMOPOLIS TO BAY CITY. MANUAL BLOCK BETWEEN ST. CLAIR AND ABERDEEN 7:00 A. M. TO 11:00 P. M. DOUBLE TRACK BETWEEN ABERDEEN AND HOQUIAM RIVER DRAWBRIDGE

WESTWARD

THIRD SUBDIVISION. (AMERICAN LAKE LINE)

EASTWARD

Table for Third Subdivision (American Lake Line) showing train schedules for Third Class and First Class in both directions. Includes columns for train numbers (985, 527, 519, 517, 423, 421, 422, 466, 518, 520, 528, 986), departure times, and station names like LAKEVIEW, COUNTRY CLUB, TILICUM, MURRAY, AMERICAN LAKE, and NISQUALLY.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

MANUAL BLOCK BETWEEN LAKEVIEW AND NISQUALLY 8:00 A. M. TO 8:45 P. M.

SPECIAL INSTRUCTIONS PAGES 10, 12, 13 AND 14

WESTWARD.

FOURTH SUBDIVISION. (PRAIRIE LINE)

EASTWARD.

Table for Fourth Subdivision (Prairie Line) showing train schedules for Third Class and First Class in both directions. Includes columns for train numbers (997, 985, 963, 591, 459, 457, 423, 421, 422, 456, 466, 458, 592, 964, 986), departure times, and station names like TACOMA, 15th ST. TOWER, SOUTH TACOMA, LAKEVIEW, HILLHURST, ROY, YELM, RAINIER, McINTOSH, and WEST TENINO.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

AUTOMATIC BLOCK BETWEEN TACOMA AND SOUTH TACOMA.

MANUAL BLOCK BETWEEN SOUTH TACOMA AND LAKEVIEW 8:00 A. M. TO 8:45 P. M.

DOUBLE TRACK BETWEEN TACOMA AND SOUTH TACOMA.

SPECIAL INSTRUCTIONS PAGES 10, 12, 13 AND 14

WESTWARD.

FIFTH SUBDIVISION.
(BUCKLEY LINE—BURNETT AND WILKESON BRANCHES)

EASTWARD.

THIRD CLASS			SECOND CLASS			FIRST CLASS			Time Table No. 49 May 20, 1923 Succeeding No. 48B			FIRST CLASS			SECOND CLASS			THIRD CLASS		
	971			525	523		597					596		522	526			972		
	Ex. Sun.			Ex. Sun.	Ex. Sun.		Daily					Daily		Ex. Sun.	Ex. Sun.			Ex. Sun.		
	Way Frt.			Mixed	Mixed		Passenger					Passenger		Mixed	Mixed			Way Frt.		
	L 6.30AM						L 4.15PM		A 1	0.0	GV	KNASKAT	DN	44.6	140	A 9.05AM				A 1.05PM

BETWEEN PALMER JCT. AND KANASKAT TRAINS WILL BE GOVERNED BY SEATTLE DIVISION TIME TABLE AND SPECIAL INSTRUCTIONS

	L 6.35AM						L 4.20PM		1932	1.2	JC	PALMER JCT.	D	43.4	70	A 8.55AM					A 1.00PM
	f 6.40						f 4.23	W	1933	2.1		PALMER		42.5	30	f 8.52					f 12.45
	f 6.50						s 4.26		1934	3.4		BAYNE		41.2	Spur	f 8.48					f 12.30
	f 6.55						s 4.29		1936	4.7		CUMBERLAND		39.9		f 8.44					f 12.01PM
	f 7.00						4.31		1937	5.5		NACO		39.1	52	8.42					f 11.50AM
	7.10						f 4.35		1939	7.5		VEAZIE		37.1	Spur 10	8.37					11.25
	s 7.20						s 4.45		1942	10.9	CW	ENUMCLAW	D	33.7	52	s 8.30					s 11.00
	8.40 596						s 4.55		1945	14.3	BK	BUCKLEY	D	30.3	60	s 8.20					10.00 9.20 971
	s 9.20 972																				
	9.40						5.05	X	1949	18.6		CASCADE JCT.		26.0		8.07					8.50
									CC 4	0.0		MORRISTOWN		3.4	24						
									O	2.0	BN	BURNETT	D	1.4	63						A 8.30AM 525
							L 8.40AM 526														8.20
							8.50		1949	3.4		CASCADE JCT.		0.0							
									T	0.0	FX	FAIRFAX	D	14.8	18						A 11.35AM
							L 2.50PM		CB 15	2.0		MELMONT		12.8	Spur 5						s 11.20
							s 3.00		CB 13	2.0		CARBON COAL CO. CROSS'G		8.7							
									CB 8	7.0	CB	CARBONADO	D	7.8	5						s 10.45
							s 3.30		CB 5	10.4	WX	WILKESON	D	4.4	82						s 10.10
							s 4.00		TO W												
							4.30		1949	14.8		CASCADE JCT.		0.0							9.30
	s 10.10						A 8.55AM		WCT X	1950	19.7	SO	SOUTH PRAIRIE	DP	24.9	52	s 8.04 972				L 9.25AM
	f 10.30						A 4.35PM			1955	24.2		CROCKER	P	20.4	73	f 7.50				L 8.15AM 972
	s 11.05								T X	1958	26.9	OG	ORTING	D	17.7	51	s 7.45				s 8.45 526 7.00 596
	f 11.20									1961	30.3		McMILLIN	P	14.3	Spur 8	f 7.38				s 6.30
	f 11.30									1963	32.4		ALDERTON		12.2	25	f 7.35				s 6.10
	A 11.45AM								Y W X	1966	34.8		MEEKER		9.8		L 7.30AM				L 5.00AM

BETWEEN MEEKER AND TACOMA UNION STATION TRAINS WILL BE GOVERNED BY SEATTLE AND TACOMA TERMINALS TIME TABLE AND SPECIAL INSTRUCTIONS.

							A 6.10PM		1976	44.6	Q	TACOMA Union Station	DN	0.0		L 7.10AM					
	Ex. Sun.			Ex. Sun.	Ex. Sun.		Daily									Daily		Ex. Sun.	Ex. Sun.		Ex. Sun.
	3.50			.15	1.45		1.20									1.25		2.10	.15		5.35
	8.7			10.0	9.0		25.2									23.7		7.3	10.0		6.0

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.
DOUBLE TRACK BETWEEN CASCADE JUNCTION AND SOUTH PRAIRIE
SPECIAL INSTRUCTIONS PAGES 10, 11, 12, 13 AND 14.

WESTWARD.

SIXTH SUBDIVISION.
(GREEN RIVER BRANCH)

EASTWARD.

SECOND CLASS				Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers	Distance from Kerrison	Time Table No. 49 May 20, 1923 Succeeding No. 48B				Distance from Kanaskat	Car Capacity of Sidings	SECOND CLASS						
533		531					STATIONS		532				534						
Ex. Sun.	Ex. Sun.	Ex. Sun.	Ex. Sun.				Telegraph Offices and Calls	Ex. Sun.	Ex. Sun.	Ex. Sun.			Ex. Sun.						
Mixed	Mixed																		
	L 1.10 PM				CJ 15	0.0	KERRISTON	1.6			14.7		A 1.00 PM						
	s 1.20			Y		1.6	HALMAR	5.9		40			s 12.50						
	1.50			W	CJ 7	7.5	HEMLOCK	0.8		6			12.10						
	s 2.00				CJ 6	8.3	BARNESTON	3.4		Spur 30			s 12.01 PM						
	2.30					12.4	KANGLEY JCT.	1.6		15			L 11.30 AM						
L 11.15 AM					CJ 4	14.0	SELLECK	0.1					A 10.55 AM						
						13.9	C. M. & St. P. Ry. Crossing	0.9											
	f 11.25					13.0	YANDELL	0.6					f 10.45						
A 11.30 AM	2.30				CJ 2	12.4	KANGLEY JCT.	0.3					A 10.40 AM	L 10.40 AM					
	s 2.35					12.7	HIAWATHA	.08		Spur			s 10.35						
	s 2.45				CJ 1	13.3	DURHAM	1.4		30			s 10.30						
	A 3.00 PM			W Y OX	A 1	14.7	GN KANASKAT	DN	0.0	75			L 10.15 AM						
Ex. Sun.	Ex. Sun.												Ex. Sun.	Ex. Sun.					
.15	1.50						Time Over Subdivision						1.55	.15					
10.4	8.0						Average Speed Per Hour						7.6	10.4					

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION
SPECIAL INSTRUCTIONS PAGES 11, 12, 13 AND 14

WESTWARD.

SEVENTH SUBDIVISION.
(CROCKER BRANCH)

EASTWARD.

SECOND CLASS				Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers	Distance from Wingate	Time Table No. 49 May 20, 1923 Succeeding No. 48B				Distance from Crocker	Car Capacity of Sidings		
533		531					STATIONS		532				534	
Ex. Sun.	Ex. Sun.	Ex. Sun.	Ex. Sun.				Telegraph Offices and Calls	Ex. Sun.	Ex. Sun.	Ex. Sun.			Ex. Sun.	
					WO	0.0	WINGATE	5.1			5.1	140		
					1955	5.1	CROCKER	0.0			0.0	73		

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION
SPECIAL INSTRUCTIONS PAGES 11, 12, 13 AND 14

WESTWARD.

EIGHTH SUBDIVISION
(ORTING BRANCH)

EASTWARD.

SECOND CLASS				Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers	Distance from End of track	Time Table No. 49 May 20, 1923 Succeeding No. 48B				Distance from Orting	Car Capacity of Sidings		
533		531					STATIONS		532				534	
Ex. Sun.	Ex. Sun.	Ex. Sun.	Ex. Sun.				Telegraph Offices and Calls	Ex. Sun.	Ex. Sun.	Ex. Sun.			Ex. Sun.	
						0.0	LAKE KAPOWSIN (St. P. & T. Lbr. Co. Camp No. 1)	1.3			10.0			
						1.3	C. M. & St. P. Ry. Crossing	1.0			8.7			
					CE 8	2.3	PUYALLUP RIVER JCT.	7.7			10			
					WT	1958	OG ORTING	D	0.0		51			

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION
SPECIAL INSTRUCTIONS PAGES 11, 12, 13 AND 14

WESTWARD.

NINTH SUBDIVISION
(GATE LINE)

EASTWARD

THIRD CLASS			SECOND CLASS		FIRST CLASS			Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers	Distance from Centralia	Time Table No. 49 May 20, 1923 Succeeding No. 48B	Distance from Gate	Car Capacity of Sidings	FIRST CLASS			SECOND CLASS		THIRD CLASS		
987		967	693		577	505	503							502		504	578	694		968	988
Ex. Sun.	Ex. Sun.	Ex. Sun.	Ex. Sun.	Daily	Daily	Daily	Nor. Pac. Passenger							Nor. Pac. Passenger	Nor. Pac. Passenger	Daily	Daily	Daily	Ex. Sun.	Ex. Sun.	Ex. Sun.
O-W.R.&N Way Frt. 51	Nor. Pac. Way Frt.	Nor. Pac. Freight		O-W.R.&N Passenger 43	Nor. Pac. Passenger	Nor. Pac. Passenger	WCY X	2027	0.0	CN CENTRALIA	DN	13.6	500	A 11.05 AM	A 6.30 PM	A 2.00 AM	A 8.05 PM	A 4.00 PM	A 9.45 PM		
L 8.00 AM	L 7.30 AM	L 3.30 AM		L 3.00 AM	L 7.50 PM	L 11.50 AM	X		2.2	BLAKESLEE JUNCTION O-W.R. & N. Co. Crossing Interlocked Track Conn. C. M. & St. P. Ry. Crossing		11.4		10.55	6.20	L 1.30 AM	7.51 505	3.51	L 9.30 PM		
A 8.10 AM	7.40	3.40		A 3.07 AM	7.56 694	11.55	X		2.3	BLAKESLEE		11.3	71	10.54	6.19		7.50	s 3.50			
	7.42	3.41			8.07	12.05 PM			CK 51	6.4	GRAND MOUND	P	7.3	60	10.46	6.11	7.35	s 3.35			
	s 8.05	3.50		s 8.17	12.18				CK 47	11.0	RH ROCHESTER	DP	3.6	65	10.37	6.02	7.20	s 3.15			
	s 8.30	4.00								11.0	C. M. & St. P. CROSSING		2.6								
	A 8.45 AM	A 4.10 AM		A 8.25 AM	A 12.30 PM		WY X	CK 44	13.6	HK GATE	D	0.0	82	L 10.30 AM	L 5.55 PM		L 7.10 PM	L 3.00 PM			
Ex. Sun.	Ex. Sun. see page 3	Ex. Sun. see page 3		Daily	Daily	Daily								Daily	Daily	Daily	Ex. Sun. see page 4	Ex. Sun. see page 4	Ex. Sun.		
.10	1.15	.40		.07	.35	.40								.35	.35	.30	.65	1.00	.15		
13.2	10.8	20.4		18.8	23.3	20.4								23.3	23.3	4.4	14.8	13.6	8.8		
Time Over Subdivision Average Speed Per Hour																					

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION
DOUBLE TRACK BETWEEN CENTRALIA AND BLAKESLEE JUNCTION
MANUAL BLOCK BETWEEN BLAKESLEE JUNCTION AND GATE, 7:00 A. M. TO 11:00 P. M.
SPECIAL INSTRUCTIONS PAGES 11, 12, 13 AND 14

WESTWARD. TENTH SUBDIVISION (MENDOTA BRANCH) EASTWARD.

Table for Tenth Subdivision (Mendota Branch) showing second-class train schedules (513 and 514) with columns for stations, times, and distances.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. SPECIAL INSTRUCTIONS PAGES 12, 13 AND 14.

WESTWARD. ELEVENTH SUBDIVISION (WILLAPA HARBOR LINE) EASTWARD.

Table for Eleventh Subdivision (Willapa Harbor Line) showing third and first class train schedules (969, 593, 591, 592, 594, 970) with columns for stations, times, and distances.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. SPECIAL INSTRUCTIONS PAGES 12, 13 AND 14.

WESTWARD. TWELFTH SUBDIVISION. YACOLT BRANCH EASTWARD.

Table for Twelfth Subdivision (Yacolt Branch) showing second-class train schedules (587 and 588) with columns for stations, times, and distances.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. SPECIAL INSTRUCTIONS PAGES 12, 13 AND 14.

WESTWARD. THIRTEENTH SUBDIVISION. ELMA BRANCH EASTWARD.

Table for Thirteenth Subdivision (Elma Branch) showing second-class train schedules (551 and 552) with columns for stations, times, and distances.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. SPECIAL INSTRUCTIONS PAGES 12, 13 AND 14.

SPECIAL INSTRUCTIONS.

**FIRST SUBDIVISION.
(MAIN LINE)**

1. **Pusher District**—Between Tenino Jet, and Vader.
2. **Drawbridge Interlocking**—Chambers Creek, 1.4 miles east of Steilacoom. Lewis River, 2.5 miles west of Woodland.
3. **At Centralia and Chehalis** normal position of crossing gates over the several industry spurs which cross the C. M. & St. P. Ry. main track will be set and locked across the spurs, and when train on spur desires to use crossing, gates will be swung across C. M. & St. P. Ry. main track.
4. **At Nisqually**—Train order signal next to depot governs First Subdivision trains, and signal next the Third Subdivision track governs Third Subdivision trains. Operator will handle switches for trains 421, 422, 423 and 466 to and from Third Subdivision.
5. **At Ketron**—Telephone on Dispatchers circuit is located in section house.
6. **Logs Loaded on Flat Cars** will not be handled through Nelson Bennett and Ostrander tunnels or across Lewis River bridge. This does not apply to logs loaded in gondola cars and properly secured, staked and wired. Rock loaded on flat cars must not be handled through Nelson Bennett Tunnel unless secured on cars with side boards.
7. **Between Tacoma Union Station and Stadium**—Trains will approach crossover switches at South 21st Street (entering union station) and O.-W. R. & N. connection at 15th Street under control, and will not proceed until tracks are known to be clear and signal is received from switch tender with yellow flag by day and yellow light by night. Trains will approach crossover switches on double track at cold storage plant opposite Tacoma Wharf, under control and will not proceed until tracks are known to be clear.
8. **Staff System Between McCarver Street and Stadium**—Trains running with the current of traffic will not pass McCarver Street or Stadium until engine man has received from operator the staff and is given clear signal or clearance. Trains running against the current of traffic, and switch engines, will proceed on receipt of staff and clearance. Staff must be retained and delivered to operator at opposite end of block or in case of switching movements either operator when movement has been completed. Headlight must be used by all trains passing through Nelson Bennett Tunnel between McCarver Street and Sixth Avenue.
9. **At Castle Rock**—Cars must not be left below derailing switch on Silver Lake Logging Company's connection.
10. **At Kalama**—When doing switching on Salmon track, enough cars must be used so that engine will not go on trestle. Engines must move slowly on Kalama Lumber & Shingle Co. spur. Engines will not run on trestle of Port Commission located about 1500 ft. from switch. Look out for locomotive crane also using this track. Do not exceed four (4) miles per hour on Port of Kalama spur and five (5) miles per hour on curve of Mountain Timber Company's spur.
11. **At Winlock**—Engines must not go beyond frog on Johnson's spur.
12. **At Napavine**—Trains using Newaukum Valley Railway tracks will do so under protection of flag. Cars must not be left below derailing switch on Napavine Lumber Company's spur.
13. **At Ridgefield**—Cars must not be placed on O.-W. R. & N. Co. Tie Spur between switch and lower road crossing at Shingle Mill, and, on account of heavy grade, cars must be fully secured when left standing. Eastward siding will be used as storage track.
14. **At Hermione Powder Spur**—There is a 2.7 grade descending eastward from siding between Powder Magazine and Northern Pacific main tracks. Utmost care must be exercised handling cars while switching on this track. Cars should never be left below derail at summit grade. All derailing switches must be left in derailing position and safety switch set for safety track. Trains approach County Road Crossing on this spur under control, at very low speed, and see that movement over road crossing is fully safeguarded.
15. **At Vancouver**—Junction switch at east end of Columbia River Bridge will be set and locked for N. P. main line. Trains and switch engines using track leading to wharf will come to a stop before crossing S. P. & S. Ry. crossing, and will not proceed until a man has been sent ahead to flag the crossing. Westward trains will stop at passenger station before engine reaches point of clearance between N. P. and S. P. & S. tracks and must be under control before passing station, expecting to find main line occupied.
16. **At Portland**—Trains will be governed by the rules of the Northern Pacific Terminal Company while in Portland yard.
17. **Logs** must not be moved in trains after dark, except between Chehalis and Centralia, in which case a trainman will be stationed on the rear platform of the caboose with lighted lantern or fusee to watch for logs that may be lost from cars and obstruct opposite track. Trains handling logs are not permitted to meet regular or special passenger trains between stations and must not be permitted to meet any trains between stations after dark. Conductors will notify Dispatcher when there are logs in the train and secure train order that opposing trains are held as provided above. Cars with logs must be inspected to be sure they are safely loaded and secured.
18. **Speed Restrictions**—Passenger trains must not exceed a speed of one minute or sixty seconds per mile, and freight trains thirty-five (35) miles per hour. Class W, or other freight engines, weighing 201,500 pounds or over on drivers; thirty (30) miles per hour. Engines with drivers 48 inches in diameter, or less; twenty-five (25) miles per hour. O.-W. R. & N. engines of Consolidation, or Mikado class; thirty-five (35) miles per hour, except Mikado class with drivers 63 inches diameter, or over, handling passenger trains; fifty (50) miles per hour. Mallet class of 3800 series, fifteen (15) miles per hour, and of 3600 series, twenty (20) miles per hour. Great Northern engines of 500, 700 and 1100 series; twenty-five (25) miles per hour.

- City or Village ordinances restrict speed of trains over highway crossings within corporate limits as follows: Chehalis and Winlock, six (6) miles per hour, Centralia, ten (10) miles per hour. Bucoda and Ridgefield, fifteen (15) miles per hour. Vader, twelve (12) miles per hour. At Sixth Avenue, over Sixth Avenue and Day Island street crossings, twenty-five (25) miles per hour. Trains running against current of traffic over these crossings six (6) miles per hour. From Mile Post 52 to Centralia Passenger Station, westward trains, thirty-five (35) miles per hour. At Napavine, over street crossing just east of depot, fifteen (15) miles per hour. At Kelso, over Allen Street leading to bridge over Cowlitz River, fifteen (15) miles per hour. At Vancouver, 13th Street crossing (500 feet east of passenger station) ten (10) miles per hour. Look out for ship yard employees. In case train is moving on opposite track over the crossing, approaching train will come to stop before reaching crossing. Between Plumb and Tenino, ten (10) miles per hour on Westward track from a point 200 feet east of crossover at Mile Post 42 to crossover switch at Mile Post 42. Lewis River and Chambers Creek bridges, ten (10) miles per hour over rail-locks at ends of draw spans. Reduce speed to twenty (20) miles an hour on eastward track through first rock cut east of Martin's Bluff. At Carrrolls, between 7:00 a. m. and 7:00 p. m., approaching highway crossing prepared to stop account teams hauling logs across track. All trains must not exceed a speed of fifteen miles per hour between Stadium and McCarver Street and twenty (20) miles per hour between Stadium and Tacoma Union Station.
19. **Special Stops, Connections, Etc.**—No. 401 Sundays reduce speed at Bucoda, Tenino, Chambers Prairie to throw off papers. No. 402 will stop at stations east of Centralia to discharge passengers originating at points where No. 564 does not stop. No. 407 will leave Grays Harbor line transfer at Nisqually for No. 421. No. 408 will stop at Bucoda to unload express and discharge passengers from west of Chehalis and for passengers for American Lake. No. 408 on Sundays will slow up at Vancouver Junction to throw off papers. Nos. 458 and 459 will stop on flag at stations between Tacoma and Portland for passengers to or from Spokane or east. No. 459 will stop to discharge passengers from North and East of Everett. No. 514 will connect with Nos. 407 and 408 at Centralia. No. 561 will connect with No. 504 at Centralia. No. 563 will stop at stations west of Centralia to discharge passengers originating at points where No. 401 does not stop. No. 564 will dispatch United States mail at St. Clair. No. 591 will connect with No. 407 at Centralia.
 20. **Register Stations**—Tacoma Union Station. Centralia Passenger Station. Vancouver Passenger Station. Portland Telegraph Office. Stadium. River Street for freight trains only.
 21. **Register Exceptions**—At Centralia and Vancouver enginemen will not be required to consult register but will be furnished register check, form 602 by conductor. At Stadium all trains register by ticket form 608.
 22. **Clearance Exceptions**—Clearance will not be required at Stadium by eastward trains if train order signal is in clear position.
 23. **Bulletin Stations**—Tacoma..... Union Station, Round House, Yard Office. Centralia..... Passenger Station, Round House, Yard Office. Vancouver..... Passenger Station, Round House. Portland..... Telegraph Office.
 24. **Standard Time Clocks**—Tacoma Union Station. Centralia Passenger Station. Vancouver Passenger Station.
 25. **Watch Inspectors**—R. Vaeth, 924 Pacific Ave., Tacoma. Ben Salick, Centralia. Coovert & Carter, Vancouver. W. H. Sexton, 245 Washington St., Portland.
 26. **Derail Switches**—West Tacoma..... Spur Track. Pioneer Sand and Gravel Spur. East and West End, switch at West End to be set for straight track to act as derail. Olegard..... East End Spur. Nisqually..... Team Track and Set Out Track. Chambers Prairie..... East End Industry Track. Plumb..... Spur Track. Chain Hill Lumber Co..... Spur Track. Bucoda..... Bucoda Lumber Co. Spur. Wabash..... Interlocking Derail on O.-W. R. & N. connection. Chehalis..... On Coal Creek Lumber Co., Track about 250 feet from passing track switch. East end track No. 2, 165 feet from main line switch. Napavine..... On Somerville and Emery Nelson spur tracks. On House track 110 feet west of switch connection with passing track.

- Evaline..... West End Spur. Winlock..... West End Passing Track. Menefee..... 500 feet from main line switch. Olegard..... House Track. Castle Rock..... 150 feet from main track on Silver Lake Log R. R. Carrolls..... House Track. Hermione..... 250 feet from main track; 66 feet east of Powder Magazine also safety switch same track about 900 feet east of magazine. Ridgefield..... O.-W. R. & N. Tie Spur, 600 feet from passing track switch. Knapp..... House Track. Vancouver..... On Wood Spur and Cannery Spur, both on switch leading to wharf freight house. East end lead No. 1 track on N. P. side. McNelly..... 100 feet from main track. Kyro..... East and west end of Industry Track, 200 feet from switch.

27. Commercial Spurs—

	Miles from Tacoma	Car Capacity
Pioneer Sand & Gravel Co.....	13.0	60
Cascade Paper Co. (West Tacoma).....	14.4	6
Olegard.....	26.1	15
Chain Hill Lumber Co.....	41.2	4
Menefee.....	73.2	24
McNelly.....	73.9	4
Laughlin (State Highway Spur No. 1).....	82.7	10
Toultle River (State Highway Spur No. 2).....	85.0	10
Rocky Point (State Highway Spur No. 3).....	95.6	10
Coweeman River (State Highway Spur No. 4).....	99.6	25
Hermione.....	110.1	30

**SECOND SUBDIVISION.
(GRAYS HARBOR LINE)**

1. **Automatic Signals**—Tunnel district at Olympia is protected by automatic electric disc signals located as follows: No. 1 (large disc) just west of passenger station. No. 2 (large disc) just east of passenger station. No. 3 (switch indicator) at east end of passing track. No. 4 (large disc) just east of tunnel. Eastward trains or engines finding signals 1 or 2 at stop will protect against westward trains coming out of tunnel. Signal No. 3 will govern eastward movement from passing track. Trains or engines coming from Jefferson Street line must have clear indication from signal No. 4 before opening main track switch.
2. **Drawbridge Interlocking**—Wishkah River..... Aberdeen. Hoquiam River..... Hoquiam.
3. **At Gate** trains will approach expecting to find Ninth Subdivision trains turning on wye. Normal position of switch connecting west leg of wye and passing track is for passing track.
4. **Gravel Bunkers**, Mile Post 58.6, bunkers will not clear man on top or side of car.
5. **At Montesano** depot is located one-half mile west of passing siding.
6. **At Aberdeen Junction**—No. 1 siding north of main line will be used as repair track between 6:00 A. M. and 6:00 P. M., during which time it is prohibited to switch or place cars on this track without first obtaining a Repair Track Clearance from Car Repairer.
7. **At Olympia** crossing gate, with light at night, is maintained at Tumwater Spur crossing. Normal position of gate is locked across spur. Trains must be prepared to stop when gate is set against them.
8. **At Olympia and Cosmopolis**—Northern Pacific trains will protect themselves while on O.-W. R. & N. tracks.
9. **At Bordeaux Junction** on the Mason County Logging Company tracks a siding is located 1985 feet from the Junction switch where interchange of cars will be made. Northern Pacific trains will look out for the Logging Co. trains and must not block their passenger trains from connecting with Nos. 466, 421, 422 and 423. Normal position of switch leading to spur track at Bordeaux Junction which is used by Mason County Logging Company's trains in making connection with Northern Pacific passenger trains will be left for spur, derailing switch is located between this spur and Northern Pacific main track and must be left in derailing position after using.
9. **At Bay City** look out for cars spotted on main track at freight shed located at Highway crossing.
10. **At Aberdeen** all trains and engines will move under control within Yard Limits. The normal position of switch at the end of double track, 250 feet east of passenger station, is for eastward trains, and normal position of Junction switch, ten feet east of double track switch, is for the O.-W. R. & N. track.
11. **At South Aberdeen and Cosmopolis** trains and yard engines will stop at grade crossings of the O.-W. R. & N. Co. industry tracks.
12. **At Hoquiam** all trains and engines will move under control within yard limits. This rule must be observed while passing through the limits of Hoquiam River drawbridge interlocking plant. At the draw bridge, gauntlet extends 496 feet from the double track frog to the double track switch points. The second signal east of draw bridge may indicate clear while a train or engine occupies the gauntlet. Staff System Hoquiam River Spur—No train or engine will move on the Hoquiam River Spur until they have obtained a staff from the staff box at the Junction switch. Possession of the staff makes a train superior to all other trains on this spur. After completion of trip staff must be returned to the staff box.

SPECIAL INSTRUCTIONS.

**SECOND SUBDIVISION—Continued.
(GRAYS HARBOR LINE—Continued.)**

- 13. **Bridge Restrictions**—St. Clair to Moclips: Speed will be restricted over Bridge 9, Des Chutes River; Bridge 46, Cloquallum River; Bridge 82, Chenois River; Bridge 84, Berg Slough; Bridge 86, Humptulips River; Bridge 91-1, Copalis River and Bridge 97, Joe Creek.
Engine classes W, W1, W2 and W4 ten (10) miles per hour.
Double header engine classes Q, Q1, Q2, Q3, Q4, T, S, S1, S2, S3 and S4 twenty (20) miles per hour.
Engine classes W3 and heavier, and double header engine classes W and heavier not permitted.
Speed will be restricted over draw spans of Bridge 68, Wishkah River and Bridge 72, Hoquiam River to twenty (20) miles per hour.
Aberdeen Junction to Ocosta: Speed will be restricted over Bridge 1, Chehalis River, and Bridge 13, Johns River, as follows:
Engine classes S, S1, S2, S3, S4 and Q eight (8) miles per hour.
Double header engines class F1 eight (8) miles per hour.
Engine classes T, Q1 and heavier not permitted.
At Malone: Engines not permitted on Vance Lumber Co. trestle.
- 14. **Engine Restrictions**—
Hoquiam to Moclips: Engine classes heavier than S4 not permitted.
St. Clair to Hoquiam: Engine classes heavier than W2 not permitted.
Aberdeen Junction to Cosmopolis, Cosmopolis to Bay City: Engine classes heavier than F1 not permitted.
At Markham: Engines not permitted on Red Cedar Shingle Co. spur.
At Aloha: Engines heavier than class F1 not permitted on Mill Spur.
- 15. **Speed Restrictions**—
Passenger trains fifty (50) miles per hour between St. Clair and Hoquiam; thirty-five (35) miles per hour between Hoquiam and Copalis; twenty-five (25) miles per hour between Copalis and Moclips.
Freight trains twenty-five (25) miles per hour between Hoquiam and Copalis; fifteen (15) miles per hour between Copalis and Moclips.
Engines Classes Y and heavier twenty-five (25) miles per hour.
All trains twenty (20) miles per hour between Aberdeen Junction and Bay City except ten (10) miles per hour between Mile Post 3 and Mile Post 7.
Through Subway at Olympia, and around curve at east end of subway, fifteen (15) miles per hour.
Around high bluff at Porter between Standard Oil Spur east of Aberdeen and Wishkah Street fifteen (15) miles per hour.
Around curve along Chehalis River, and for 600 feet west of curve, between Mile Post 62 and 62½, three miles east of Aberdeen Junction, twenty (20) miles per hour.
Around high bluffs at Grays Harbor City, fifteen (15) miles per hour.
Trains handling logs, five (5) miles per hour between west end Hoquiam River drawbridge and street crossing west of passenger station at Hoquiam.
At Aberdeen City ordinance requires reduce speed to ten (10) miles per hour over streets and crossings used by public and twenty (20) miles per hour elsewhere within city limits.
Trains handling logs reduce speed to five (5) miles per hour passing through paved street between Wishkah River drawbridge and log rollway one mile east of Aberdeen.
- 16. **Special Stops, Connections, etc.**—
No. 422 will stop on flag at Mima Sunday only.
No. 466 will stop at Wynooche Spur to discharge passengers.
Nos. 421 and 466 will stop on flag at North Bay Lumber Co. Mill one mile east of Gray Gables and at Linde Spur located one-half mile west of Onslow also one-half mile east of Burrows to pick up and let off school children.
Nos. 421, 422, 423, 466 will stop on flag at Gibson Creek; also, at Golf Links 3 miles east of Aberdeen Junction.
- 17. **Register Stations**—
St. Clair Elma Moclips
Olympia Aberdeen
Gate Hoquiam Cosmopolis
- 18. **Register Exceptions**—
At St. Clair trains will register by ticket, Form 608, and will be furnished Register Check, Form 602.
- 19. **Clearance Exceptions**—
At St. Clair westward trains will not require clearance if train order signal is in clear position.
- 20. **Bulletin Stations**—
Elma Hoquiam
- 21. **Standard Time Clock**—
Hoquiam
- 22. **Watch Inspectors**—
S. J. Stietglitz Aberdeen.
Fred Straub Hoquiam.
Talcott Bros. Olympia.
D. P. Pearson Elma.
- 23. **Derail Switches**—
Union Mills. West end rollway spur.
Belmore. White's Log Spur.

- Bordeaux Junction. Mason County Log Spur.
- Gate. Coal Track and west end passing track.
- Lytles. West end siding.
- Malone. East spur track and west end mill track.
- Elma. East end of Horn Track.
- Satsop. East end of siding.
- Brady. Hayes spur and switch leading to Schaeffer Bros. Store, switch to be left set for spur to act as derail for track leading to Nor. Pac. main track.
- Montesano. Switch leading to industry spur west end of Team Track to be left set for spur to act as derail for Team Track.
- Weatherwax. 188 feet from main track.
- Wynooche. West end of spur.
- Copalis. Log spur 500 feet west of station.
- Carlisle. East end of siding.
- Joe Creek. Log spur just west of Aloha.
- Gibson Creek. Both ends of siding.
- Weatherwax Lmbr. Co. spur. 150 feet from main track.
- St. Clair. East end of siding.

24. Commercial Spur—

	Miles from St. Clair	Car Capacity
Black Lake.	13.2	3
Gibson Creek.	38.0	25
Weatherwax.	58.6	25
Gravel Bunkers.	58.6	12
Standard Oil Co.	58.7	3
Stockwell.	59.4	4
Wynooche.	60.4	20
North Bay Lumber Co.	79.0	6
Grays Harbor County.	80.0	8
Linde.	93.2	4
Wooster.	96.0	10
Joe Creek.	97.4	2
Hobi.	97.8	3

**THIRD SUBDIVISION.
(AMERICAN LAKE LINE)**

- 1. **At Nisqually** train order signal next to Third Subdivision track governs Third Subdivision trains, and the signal next to depot governs First Subdivision trains.
- 2. **At Lakeview**, operators will handle switches for First Class trains to and from Third Subdivision.
- 3. **At American Lake**, entrance to Dupont Powder Co. plant protected by gate across the spur near Cap Magazine. No cars will be disturbed inside of gate until foreman consulted and permission obtained.
Staff System Dupont Spur: No train or engine will move on the Dupont Powder Co. spur until they have obtained a staff from the staff box at the Junction switch. Possession of the staff makes a train superior to all other trains on this spur. After completion of the trip the staff must be returned to the staff box.
Cantonment Tracks:
North and South lines operated under staff system.
Speed of fifteen (15) miles per hour must never be exceeded.
Train must stop and flagman protect movement when backing or pushing cars ahead of engine over street crossings. All movements over Pacific Highway must be protected by flagman.
Toilets must be kept locked and no refuse thrown from trains on Cantonment Tracks, Camp Lewis, Nisqually, or inside yard limits American Lake.
At Remount Station, loading platform will not clear man on side of car.
Trains using North and South lines will move under control at all times expecting to find cars spotted at different locations on these tracks.
Staff System North and South Lines: No train or engine will move on the North line until they have obtained a staff from the North Line staff box at the Junction switch, and will not move on the South Line until they have obtained a staff from the South Line staff box at the Junction switch. Possession of the staff makes a train superior to all other trains on that line and after completion of the trip the staff must be returned to the staff box from which it was obtained.
- 4. **Speed Restrictions**—
Passenger trains fifty (50) miles per hour.
At Murray, ten (10) miles per hour over road crossing just east of station.
At American Lake, approach road crossings at east and west end Green Park with caution; ring bell and sound whistle.
- 5. **Register Stations**—
Nisqually Lakeview
American Lake for trains originating and terminating.
- 6. **Register Exceptions**—
At Nisqually and Lakeview trains register by ticket, Form 608, and will be furnished check of register by train order or Form 602.

7. Clearance Exceptions—

At Nisqually trains will not require clearance if train order signal is in clear position.

8. Derail Switches—

- Lakeview. Standard Oil Spur.
- Military Spur. 456 feet from main line switch.
- American Lake. Dupont Powder Co. spur 950 feet from main track and on the track leading to Black Powder Mill. Green Park Spur 177 feet from main track. Camp Lewis Lmbr. Co. spur 400 feet from main track.
House Track switch will be set for House Track to act as derail for west end of passing track.

**FOURTH SUBDIVISION.
(PRAIRIE LINE)**

- 1. **Pusher District** between Tenino Jct. and Rainier and between Tacoma and South Tacoma.
- 2. **Card train order form A. B.**—Will govern the movement of trains between Reservation and the 15th St. Tower via Drawbridge Line and trains must not move in this territory unless conductor and engineman each hold a copy properly filled out.
- 3. **At Tacoma**—A signal arm semaphore pattern, located near junction of line leading to Union Station and Drawbridge Line at 15th Street, is controlled by operator at 15th Street and will govern single track passenger line between 15th Street and Union Station. No train from the Drawbridge Line or east of main line will enter Union Station when signal is at stop. No train will proceed from Union Station to Drawbridge Line or eastward main line when signal on incline, which is equipped with two red blades by day, and in addition, two red lights by night, is at stop. Lower arm governs train movements from Union Station to Drawbridge Line; upper arm governs movement to eastward main track. Push button operating signal to towerman is located on post under Union Station concourse; switch crews will operate for Portland bound trains and conductors will operate for Seattle bound trains.
- 4. **Mountain Grade**—15th Street, Tacoma, to 2½ miles west.
At South Tacoma—Test inspection and understanding as required by Rule 703, Book of Transportation Rules, will be had on all eastward freight trains. Conductors will fill out card, Form 3632, and deliver to the operator who will complete and mail to Superintendent, Tacoma, each day. Retainers will be turned up on all cars before descending Tacoma Hill.
At Tacoma—Enginemen on road engines, on eastward trains, before backing into Union Station after stop has been made will cut out air brake valve and leave air applied to be released by switch engine. Switch engine will control the air until stop is made at the Union Station, leaving brakes applied after making the stop.
At Union Station, enginemen on road engines of westward trains will, after terminal air test is made, apply air to the train and cut out air brake valve, leaving the air applied to be released by switch engine when ready to depart.
Switch engine will control the air while backing out of the station and make the stop before starting up the hill, leaving the air applied, to be released by the road engine.
The leading engine will control the air under all conditions.
Eastward trains will approach Pacific Avenue under control and be governed by signal No. 4 located at gate tower of Pacific Avenue and controlled from 15th Street Tower.
Top arm of this signal governs movements on Eastward main track; lower arm governs movements on eastward main track over crossover to Drawbridge Line or from Eastward track through pocket back of eastward track. Any train or engine moving east will not exceed a speed of six miles per hour with any part of train passing over Pacific Avenue.
Trains and light engines entering or leaving passenger station at Tacoma from the fourth sub-division limit speed to ten (10) miles per hour while any portion of train is passing over switches at Fifteenth Street Tower.
- 5. **At Tenino Junction**, westward trains must stop clear of automatic signal No. 43.5, and if switch indicator shows block on the First Subdivision is clear, will open Junction and Crossover switches leading to the First Subdivision main track; then, if signal 43.5 indicates caution, crossover movement may be made, but if signal 43.5 indicates stop, the movement must be protected by flag.
- 6. **At South Tacoma**, normal position of double track switch is for eastward track. Passing siding will be used as storage track.
- 7. **Speed Restrictions**—
Passenger trains: between South Tacoma and Lakeview, fifty (50) miles per hour; between Lakeview and Yelm, sixty (60) miles per hour; between Yelm and West Tenino, fifty (50) miles per hour.
At South Tacoma, fifteen (15) miles per hour entering double track.
At Roy, ten (10) miles per hour within corporate limits.
Passenger trains 30 miles per hour and freight trains 20 miles per hour on descending grade between Bailey Street and Pacific Avenue.
Trains entering or leaving Union Station will move under control between 15th Street and 21st Street.
Class "W" or other freight engines weighing 201500 lbs. or over on drivers thirty (30) miles per hour, engines with drivers 43 inch diameter or less twenty-five (25) miles per hour, Great Northern engines of 500, 700 and 1100 series twenty-five (25) miles per hour.

SPECIAL INSTRUCTIONS.

FOURTH SUBDIVISION—Continued.

(PRAIRIE LINE—Continued.)

8. **Register Stations**—
 15th Street Tower Tacoma
 South Tacoma Lakeview West Tenino
9. **Register Exceptions**—
 At Lakeview, trains will register by ticket, Form 608, and will be furnished check of register by train order or Form 602. When operator not on duty leave register ticket in way bill box near freight house door.
 At 15th Street Tower, South Tacoma and West Tenino, first class trains will register by ticket, Form 608, and will be furnished check of register by train order or Form 602, except when operator not on duty.
10. **Bulletin Stations**—Tacoma (Union Station).
11. **Clearance Exceptions**—
 At West Tenino and South Tacoma, eastward trains will not require clearance if train order signal is in clear position.
12. **Derail Switches**—
 South Tacoma..... East end South Tacoma Lumber Co.'s Spur.
 Yelm..... East end House Track.
 Rainier..... Lindstrom-Handforth Lmbr. Co. spur.
 Mutual..... Spur track leading to mill.
 West Tenino..... Tenino Stone Co. spur.
 Mentzer..... Track leading to siding.
13. **Commercial Spurs**—
- | | Miles from Tacoma | Car Capacity |
|--------------------------|-------------------|--------------|
| McKenna Lumber Co..... | 23.2 | 10 |
| Mentzer..... | 32.9 | 15 |
| Bordeaux Shingle Co..... | 37.1 | 6 |
| Mutual..... | 37.6 | 15 |

FIFTH SUBDIVISION.

(BUCKLEY LINE AND BRANCHES)

1. **Pusher District**—
 Between South Prairie and Buckley.
 Between South Prairie and Carbonado.
2. **At Carbonado**, ½ mile east, crossing gates are maintained at crossing with Carbon Hill Coal Company track. Normal position of gates "clear" for Northern Pacific Company's trains, which must approach crossing under control expecting to find gates set against them.
3. **At Hyde**, the clearance is restricted at Hyde Coal Co. mine just west of bunkers on the outside track, and engines will not use crossover.
4. **At Cascade Junction and South Prairie** normal position of double track switches is for eastward track.
5. **Bridge Restrictions**—Speed will be restricted over Bridge 1, South Prairie and Bridge 4, Gale Creek, as follows:
 Engines classes W, W1, W2 and W4, eight (8) miles per hour.
 Double header engines classes W, W1, W2 and W4 not permitted.
 Engines classes G1, G2, Q5, W3, Z, Z1, Z2 and Z3 not permitted.
 Speed will be restricted over Bridge 7.1, Carbon River, as follows:
 Engines classes S, S1, S2, S3, S4 and Q, eight (8) miles per hour.
 Double header engine class F1, eight (8) miles per hour.
 Engines classes T, Q1 and heavier not permitted.
 Kanaskat to Meeker no restrictions.
 Over Bridge 228, Buckley Loop, double header engines of any class not permitted.
6. **Engine Restrictions**—
 Kanaskat to Meeker: Engine classes Z Mallet and heavier not permitted.
 Morristown to Cascade Junction: Engine classes heavier than S4 not permitted.
 Fairfax to Cascade Junction: Engine classes heavier than F1 not permitted.
7. **Speed Restrictions**—
 Between Palmer Junction and Meeker: Passenger trains, fifty (50) miles per hour.
 Between Cascade Junction and Morristown, and between Cascade Junction and Fairfax: Passenger trains, twenty-five (25) miles per hour; freight trains fifteen (15) miles per hour. Backing up between these points passenger trains, twenty (20) miles per hour; freight trains, ten (10) miles per hour.
 On Big Six and Hyde Coal Company's spurs, ten (10) miles per hour.
 At Enumclaw and Burnett, ten (10) miles per hour through corporate limits.
 At Buckley, six (6) miles per hour through corporate limits.
 At Orting, fifteen (15) miles per hour except between Bridge street and Leiber street, ten (10) miles per hour.
8. **Special Stops, Connections, etc.**—
 No. 596 will connect with No. 526 at South Prairie, and with Seattle Division No. 338 at Kanaskat.

No. 597 will connect with Seattle Division No. 450 and No. 456 at Puyallup and No. 523 at South Prairie.
 Train No. 597 will stop on flag at Broomfield.

9. **Register Stations**—Cascade Junction for trains to and from Wilkeson and Burnett Branches and westward first class trains only.
 Fairfax Palmer Junction Puyallup South Prairie
10. **Register Exceptions**—Palmer Junction and Puyallup trains register by ticket Form 608 and will be furnished check of register by train order or Form 602.
11. **Bulletin Station**—South Prairie.
12. **Derail Switches**—
 Big Six..... 300 feet east of main line switch. On same track 300 feet west of coal bunkers, and on Clay Company's track 250 feet from connection with Big Six Spur.
 Occidental..... Coal track 300 feet west of bunkers.
 Bayne..... Coal spur.
 Fleet..... Fleet Coal Company's track.
 Hyde..... Hyde Coal Company's spur, first derail 190 feet from main line; second derail 920 feet from main line; derail on siding 609 feet from the west switch.
 Naco..... West end Naval Coal Co. track. West end Sunset Coal Co. track.
 Veazie..... West end spur track.
 Webstone..... Spur track.
 Buckley..... McDougal Log Track, and on west end Standard Oil spur.
 South Prairie..... West end passing track. West end house track. West end coal spur.
 Broomfield..... 165 feet from main line switch and 369 feet from main line switch.
 Crocker..... West end passing track.
 Orting..... West end house track. West end westward passing track. West end Orting Branch track 300 feet east of station.
 Wilkeson..... Scale track, and passing track opposite station.
 Burnett..... West end of siding. Black Carbon Coal Co.'s spur.
 Fairfax..... On Montezuma line 200 feet east of depot.
 International..... West end.
13. **Commercial Spurs**—
- | | Miles from Palmer Junction | Car Capacity |
|-----------------|----------------------------|--------------|
| Big Six..... | 1.7 | 10 |
| Occidental..... | 2.0 | 4 |
| Fleet..... | 3.2 | 20 |
| Hyde..... | 3.9 | 20 |
| Birch..... | 7.9 | 6 |
| Webstone..... | 12.5 | 4 |
| Broomfield..... | 19.6 | 15 |
| Moneko..... | 31.8 | 5 |
- | | Miles from Cascade Junction | Car Capacity |
|--------------------|-----------------------------|--------------|
| International..... | 0.5 | 15 |

SIXTH SUBDIVISION.

(GREEN RIVER BRANCH)

1. **Between Halmar and Kerriston** extra trains must protect against Logging Company trains. All trains will sound whistle approaching curves.
2. **At Selleck** trains will run under control and look out for engines of the Pacific States Lumber Company between 1000 feet west of siding and the Pacific States Lumber Co. office.
3. **Bridge Restrictions**—Speed will be restricted over Bridge 6.1, Cedar River, as follows:
 Engines classes S, S1, S2, S3, S4 and Q, eight (8) miles per hour.
 Double header engine class F1, eight (8) miles per hour.
 Engine class Q1 and heavier not permitted.
4. **Engine Restrictions**—
 Engine classes heavier than S4 not permitted.
5. **Speed Restrictions**—
 Passenger trains twenty (20) miles per hour; freight trains fifteen (15) miles per hour.
 Between Halmar and Kerriston ten (10) miles per hour.
6. **Register Station**—Kanaskat.
7. **Derail Switches**—
 Durham..... East end of coal track 250 feet from main track, and west end coal track.
 Hiawatha..... East end.
 Yandell..... West end.
 Selleck (½ mile west)..... On Kangley Line.
 Hemlock..... West end siding.

Halmar..... In main track 60 feet from west wye switch; also, 550 feet from wye switch on Northwest Lmbr. Co. spur. This spur forms tail end of wye at Halmar and switch must be left in derail position.

8. **Commercial Spurs**—
- | | Miles from Kanaskat | Car Capacity |
|-----------------------|---------------------|--------------|
| Buffelin Mfg. Co..... | 3.0 | 10 |

**SEVENTH SUBDIVISION.
(CROCKER BRANCH)**

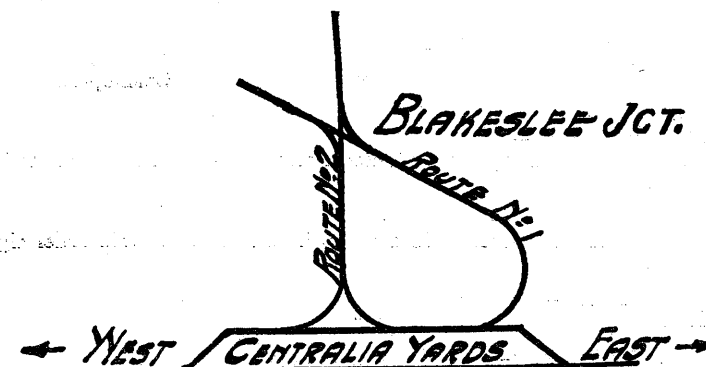
1. **Staff System Crocker Branch**—No train or engine will move on the Crocker Branch until they have obtained a staff from the staff box at the Junction switch. Possession of the staff makes a train superior to all other trains on this branch. After completion of the trip the staff must be returned to the staff box and Dispatcher wired departing and arriving time and mileage made on the Branch.
2. **At Wingate**, side and overhead clearance is restricted at the Coke and Coal Bunkers.
3. **Bridge Restrictions**—
 Speed will be restricted over Bridge 3, Carbon River, as follows:
 Engines classes S, S1, S2, S3, S4 and Q, eight (8) miles per hour.
 Double header engine class F1, eight (8) miles per hour.
 Engines classes T, Q1 and heavier not permitted.
4. **Engine Restrictions**—
 Engines classes heavier than F1 not permitted.
5. **Speed Restrictions**—Twenty (20) miles per hour.
6. **Derail Switches**—
 Crocker..... In main track east end of yard.
 Wingate..... West end of siding, and 600 feet east of depot at west end of Coal Bunkers.

**EIGHTH SUBDIVISION.
(ORTING BRANCH)**

1. **At Puyallup River Junction**—one mile east—crossing gates are maintained at crossing with C. M. & St. P. Ry. Normal position of gates "clear" for Northern Pacific Company trains, which must approach crossing under control expecting to find gates set against them.
2. **Bridge Restrictions**—Speed will be restricted over Bridge 8, Puyallup River, as follows:
 Engines classes S, S1, S2, S3, S4 and Q, eight (8) miles per hour.
 Double header engine class F1 eight (8) miles per hour.
 Engines classes Q1 and heavier not permitted.
3. **Engine Restrictions**—
 Engines classes heavier than F1 not permitted.
4. **Speed Restrictions**—Twenty (20) miles per hour.
 Trains on this branch must not exceed ten miles an hour between points 1000 feet west of Junction switch at Puyallup River Junction and Lake Kapowsin and must protect itself against St. Paul and Tacoma Lumber Company's log trains using tracks within these limits between the hours of 12 noon and 12 midnight.
5. **Derail Switches**—
 Orting..... 600 feet east of Junction switch.
6. **Commercial Spurs**—
- | | Miles from Orting | Car Capacity |
|----------------------------|-------------------|--------------|
| Dempsey..... | 8.4 | 12 |
| Electron Rock Crusher..... | 8.6 | 10 |

**NINTH SUBDIVISION.
(GATE LINE)**

1. **Movement of Trains Between Centralia and Blakeslee Junction**—



Northern Pacific track will be known as Route No. 2. O.-W. R. & N. track will be known as Route No. 1. Both routes are included in the Centralia Yard limits. Trains and engines using either route will do so under control. Eastward movements will be made over Route No. 2. Westward movements will be made over Route No. 1. First Class trains to and from Routes No. 1 and No. 2 will move under control between Centralia passenger station and connection with these Routes.

2. **At Blakeslee Junction**, no telegraph service. Operator at Centralia will handle Manual Block for Blakeslee Junction.

SPECIAL INSTRUCTIONS.

NINTH SUBDIVISION—Continued.

(GATE LINE—Continued.)

- 3. **Blakeslee Junction Interlocking**—
Westward trains will indicate to Towerman route wanted as follows:
Northern Pacific: One long, one short, one long. Thus: — o —
O.-W. R. & N.: One long, two short, one long. Thus: — o o —
- 4. **Bridge Restrictions**—
Engine classes heavier than W2 not permitted.
Over bridge 1—29 route No. 1 Skookumchuck River engines heavier than 214,000 pounds on drivers not permitted.
- 5. **Engine Restrictions**—
Engine classes heavier than W2 not permitted.
- 6. **Speed Restrictions**—Passenger trains forty-five (45) miles per hour. At Blakeslee Junction: Fifteen (15) miles per hour over C. M. & St. P. Ry. crossing. Engines classes Y and heavier twenty-five (25) miles per hour.
- 7. **Special Stops, Connections, etc.**—
Regular passenger trains will stop on flag at State Training School at Grand Mound for passengers or to unload express.
No. 503 will connect with No. 408 and No. 505 will connect with No. 562 at Centralia.
- 8. **Register Station**—
Centralia Passenger Station
Blakeslee Junction for Northern Pacific trains only.
Gate
- 8-A **Register Exceptions**—
At Centralia Enginemen will not be required to consult register but will be furnished register check, form 602, by conductor.
- 9. **Bulletin Stations**—
Centralia Round House Yard Office
Passenger Station
- 10. **Standard Time Clock**—Centralia Passenger Station.
- 11. **Watch Inspector**—Ben Salick, Centralia.
- 12. **Derail Switches**—
Blakeslee..... Williams Mill Spur.
Foran..... Coal Spur.
- 13. **Commercial Spur**—

	Miles from	Car
Foran.....	Centralia	Capacity
	2.9	6

TENTH SUBDIVISION. (MENDOTA BRANCH)

- 1. **Engine Restrictions**—
Engines classes heavier than D4 not permitted.
- 2. **Speed Restrictions**—Fifteen (15) miles per hour, except eight (8) miles per hour between mile post six and mile post eight.
- 3. **Register Stations**—Wabash.
- 4. **Bulletin Stations**—
Centralia Roundhouse Yard Office
Passenger Station
- 5. **Derail Switches**—
Mendota..... Connection with Martin Log Spur.
- 6. **Commercial Spur**—

	Miles from	Car
Eastern Ry. & Lbr. Co.....	Wabash	Capacity
	7.8	20

ELEVENTH SUBDIVISION. (WILLAPA HARBOR LINE)

- 1. **Pusher District**—Between Pe Ell and Frances.
- 2. **At Dryad**, 300 feet east and
At McCormick, 6-10 mile east, gates are maintained at railroad crossings at grade. Normal position of gates "clear" for Northern Pacific Co. trains, which must approach crossings under control expecting to find gates set against them.
- 3. **At Dryad**, on Leudinghaus Lumber Co. spur, gates are maintained at crossing with main line of C. M. & St. P. Ry. Co. Normal position of gates "clear" for C. M. & St. P. Ry. Co. trains.
- 4. **At Raymond**, low platform at the end of Siler-Willapa Lumber Co. spur will not clear foot-board or pilot of engine. Draw bridge tenders on duty 6:30 A. M. to 11:30 P. M.
Draw bridge will be left open when tenders not on duty.
- 5. **Bridge Restrictions**—
Speed will be restricted over Bridge 0, Newaukum River; Bridge 2.1, Bridge 5 and Bridge 16.1, Chehalis River, and Bridge 33, Willapa River, as follows:
Engines classes T, Q3, Q4, W, W1, W2 and W4, eight (8) miles per hour.
Double header engines classes T, Q3, Q4, W, W1, W2 and W4 not permitted.
Engines classes G1, G2, Q5, W3, Z, Z1, Z2 and Z3 not permitted.

Speed will be restricted over Bridge 6 and Bridge 23, Chehalis River, Bridge 42 and Bridge 45, Willapa River, as follows:

Engines classes W, W1, W2 and W4, eight (8) miles per hour.
Double header engines classes W, W1, W2 and W4 not permitted.
Engines classes G1, G2, Q5, W3, Z, Z1, Z2 and Z3 not permitted.

Speed will be restricted over draw spans of Bridge 53, Willapa River, to twenty (20) miles per hour.

- 6. **Engine Restrictions**—
Engines classes heavier than Y2 not permitted.
At Lebam, Engines Class Y-2 or heavier not permitted on Lebam Timber Company's Spur.
At Raymond, engines heavier than Class F not permitted on Quinault Lumber Company's Spur.
- 7. **Speed Restrictions**—
Passenger trains forty (40) miles per hour, except between Pe Ell and Frances, thirty (30) miles per hour.
At Raymond, ten (10) miles per hour over Seventh Street crossing.
Engines Classes Y and heavier twenty-five (25) miles per hour.
- 8. **Register Stations**—
South Bend Chehalis
- 9. **Bulletin Stations**—South Bend.
- 10. **Watch Inspectors**—S. Holt, South Bend.
- 11. **Derail Switches**—
Littell..... East and west end Chester Snow Mill Spur.
Bunker..... East and west end interchange track.
Meskill..... East end quarry track and west end mill track.
Doty..... 150 feet from main track switch.
McCormick Junction..... 200 feet from main track switch.
Walville..... Mill Spur.
Pluvius..... East and west end of siding.
Custer..... Log Spur.
Lebam..... Mill Spur.
Nalpee..... Log Spur.
Dryad..... Leudinghaus Lmbr. Co. 500 feet from main track.
Donguire..... 146 feet from main track switch.

Commercial Spurs—

	Miles from Chehalis Junction	Car Capacity
Marcilla.....	11.1	10
Donguire.....	20.5	15
Custer.....	34.2	25
Star Timber Co.....	38.7	8
Belhuse.....	39.6	15
Mayfair.....	55.6	20

TWELFTH SUBDIVISION. (YACOLT BRANCH)

- 1. **Bridge Restrictions**—
Speed will be restricted over Bridge 23, Lewis River, as follows:
Engine Classes S, S1, S2, S3, S4 and Q, eight (8) miles per hour.
Double header engine class F1, eight (8) miles per hour.
Engines classes Q1 and heavier not permitted.
- 2. **Engine Restrictions**—
Engines classes heavier than S4 not permitted.
- 3. **Speed Restrictions**—
Passenger trains thirty (30) miles per hour; mixed and freight trains, twenty (20) miles per hour; trains handling logs approaching and passing through tunnel west of Yacolt, ten (10) miles per hour.
- 4. **Special Stops, Connections, etc.**—
Nos. 587 and 588 will stop on flag at Crusher and Lucia.
- 5. **Register Stations**—
Yacolt Vancouver Junction
- 6. **Derail Switches**—
Vancouver Junction..... East leg of wye 135 feet from Yacolt end of wye switch.
Brush Prairie..... East end siding.
Crusher..... Spur track.
Yacolt..... North leg wye switch. Normal position this switch for north leg of wye.

Commercial Spurs—

	Miles from Yacolt	Car Capacity
Crusher.....	3.7	29
Lucia.....	5.0	6
Premier.....	10.9	4

THIRTEENTH SUBDIVISION.

(ELMA BRANCH)

- 1. **At Whites**, ¼ mile east, gates are maintained at crossing with Lumber Company's track. Normal position of gates "clear" for Northern Pacific Company's trains, which must approach crossing under control expecting to find gates set against them.
- 2. **At Hillgrove**—Northern Pacific engines will not go east as track between Hillgrove and Stimson is leased to, and operated by, the Stimson Lumber Company.
- 3. **Engine Restrictions**—
Engines classes heavier than F1 not permitted.
- 4. **Speed Restrictions**—
Passenger trains, twenty-five (25) miles per hour; freight trains, fifteen (15) miles per hour.
- 5. **Special Stops, Connections, etc.**—
No. 552 will connect with No. 421, and No. 551 will connect with No. 422 at Elma. No. 551 and 552 will stop on flag at Church's Crossing.
- 6. **Register Stations**—
Elma McCleary
- 7. **Bulletin Stations**—Elma.
- 8. **Derail Switches**—
Elma..... Standard Oil Spur.
Kraft..... Spur Track.
McCleary..... East end interchange track.
Hillgrove..... 800 feet west.

	Miles from Elma	Car Capacity
Kraft.....	2.3	4

ALL SUBDIVISIONS.

- 1. To insure personal safety operators in double track territory, having train orders or messages for passing trains, must stand on the right side of the train and never between the tracks.
- 2. Lap sidings: Trains taking siding must head in at lap except as otherwise provided.
- 3. Sidings blocked by occupied outfit cars must not be used to meet or pass trains.
- 4. Conductors of work trains will issue instructions to their flagman in writing, except when flagman goes back immediately to stop an approaching train.
- 5. When necessary to take slack of freight trains with helper engine on the rear, it should be done by the helper engine.
- 6. Before moving a work or wrecking train, the whistle signal (14-b) or (14-h) must be sounded for the protection of men working about such trains.
- 7. Except as otherwise provided, or when running light without conductor, enginemen will only be required to consult register at initial or starting points.
- 8. Brakemen will ride on top of freight trains descending mountain grades, except in case of inclement weather.
- 9. In the State of Washington rear brakeman or flagman must have at least one year's experience; passenger trains of four (4) or more cars must have two (2); and freight trains of twenty-five (25) or more cars must have three (3) brakemen.
- 10. Speed Restrictions: Passenger trains must not exceed a speed of one minute or sixty seconds per mile, and freight trains thirty-five (35) miles per hour. Trains must not exceed thirty (30) miles per hour through limits of interlocking plants, and fifteen (15) miles per hour through crossovers, turnouts and gauntlets. Light engines backing up twenty (20) miles per hour on main line, or fifteen (15) miles per hour on branches. Trains handling steam Wrecking Derrick or Pile Driver No. 22 will not exceed twenty-five (25) miles per hour. Troop trains handling freight equipment, twenty-five (25) miles per hour. Trains reduce speed to fifteen (15) miles per hour passing telegraph offices where orders are received.
- 11. The following signs when placed in columns provided indicate:
W—Water.
C—Fuel.
O—Track Scales.
T—Turntables.
Y—Wye.
D—Day office only.
DN—Day and night office.
P—Telephone.
X—Yard Limits.

AUTHORIZED SURGEONS, N. P. RY. CO.

DR. P. A. REMINGTON, Chief Surgeon, Western District, Tacoma.
 DR. A. H. BUIS, Assistant Surgeon, Western District, Tacoma.
 DR. M. ALLISON, Assistant Surgeon, Western District, Tacoma.

SPECIAL INSTRUCTIONS.

Name	Location	Stretchers At	Name	Location	Stretchers At
DR. W. G. CAMERON, Specialist.	Tacoma	Tacoma, Tool Car Hospital Round House Moon Yard Office Head-of-Bay Yard Baggage Room Wharf	DR. F. M. PETRIE	Lebam	South Bend
DR. A. E. HILLIS	Tacoma		DR. ORNE R. NEVITT	Raymond	
DR. W. H. LUDWIG	South Tacoma		DR. F. W. ANDERSON	South Bend	
DR. E. L. CARLSEN	South Tacoma		DR. G. A. TRIPP	South Bend	
DR. G. T. POOLE	Rainier		DR. C. L. SWIFT	Walville	
DR. J. H. DUMON	Centralia		DR. J. J. O'LEARY	Olympia	
DR. H. Y. BELL	Centralia		DR. A. W. SCHULTZ	Oakville	
DR. F. J. HACKNEY	Centralia		DR. W. G. TUCKER	Cosmopolis	
DR. G. W. KENNICOTT	Chehalis		DR. J. O. VAN WINKLE	Oakville	
DR. W. W. WEBB	Winlock		DR. A. A. FOOT	Elma	
DR. R. H. CAMPBELL	Vader	DR. F. L. CARR	Montesano	Aberdeen	
DR. H. H. QUALFE	Castle Rock	DR. J. H. FITZ	Montesano		
DR. E. C. HACKETT	Kelso	DR. I. R. WATKINS	Aberdeen		
DR. L. S. ROACH	Kalama	DR. H. C. WATKINS	Hoquiam		
DR. C. J. HOFFMAN	Woodland	DR. A. E. ALLEN	Rochester		
DR. R. S. STRYKER	Ridgefield	DR. F. A. PLUM	Cosmopolis		
DR. CHAS. McCALLUM	Vancouver	DR. J. H. FITZ	Montesano		
DR. C. E. RICHARDS	Yacolt				
DR. C. S. WHITE	Portland				
DR. J. F. DICKSON, Oculist	Portland				
DR. R. M. DODSON	Portland				
DR. W. M. KARSHNER	Puyallup				
DR. F. J. SHADD	Selleck				
DR. C. E. MARTIN	Wilkeson				
DR. J. H. SHEETS	Buckley				
DR. F. G. ULLMAN	Enumclaw				
DR. W. W. WICK	Burnett				
DR. THOS. RUNNELLS	Orting				
DR. A. R. BAILEY	Bucoda				
DR. A. P. HUGHES	Carlisle				
DR. E. W. STEVENS	Dryad				
DR. H. B. CRAVENS	Pe Ell				

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 surgeon 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 arrival 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 SURGEON G. N. RY. CO.

DR. J. A. LaGASSA, Tacoma, Wash.

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

Name	Location	District
DR. DONALD H. JESSOP, Chief Surgeon	Portland, Corbett Bldg	O.-W. R. & N. Co. Sys.
DR. M. K. HALL, Asst. Surgeon	Portland, Corbett Bldg	O.-W. R. & N. Co. Sys.
DR. G. M. PEARCE, Chief Oculist, Ear, Nose and Throat	Portland, Selling Bldg	O.-W. R. & N. Co. Sys.
DR. HENRY C. VIERECK, Eye, Ear, Nose and Throat	Portland, Selling Bldg	O.-W. R. & N. Co. Sys.
DR. EDWARD J. KANE, Asst. Surgeon	Portland, Selling Bldg	O.-W. R. & N. Co. Sys.
DR. E. G. MARGASON, Asst. Surgeon	Portland, 5904 1/2 72nd St. S. E.	O.-W. R. & N. Co. Sys.
DR. COURTLAND L. BOOTH, Asst. Surgeon	Portland, 798 Clinton Ave.	O.-W. R. & N. Co. Sys.
DR. CURTIS HOLCOMB, Asst. Surgeon	Portland, 119 1/2 Russell Ave.	O.-W. R. & N. Co., Albina to The Dalles and Vancouver.
DR. J. A. LOUNDAGIN, Dist. Surgeon	Vancouver	Vancouver District.
DR. C. HOLCOMB, Asst. Surgeon	Albina	Albina to Vancouver.
DR. MONTGOMERY RUSSELL, Division Surgeon	Seattle, 620 Leary Bldg.	Portland-Seattle.
DR. F. R. UNDERWOOD, Asst. Surgeon	Main 90	
DR. S. M. SAMUELS, Oculist and Aurist.	Seattle, Cobb Bldg., Main 2205	Portland-Seattle.
DR. WM. P. O'ROURKE, Asst. Surgeon	Seattle, (Georgetown)	Argo.
DR. F. D. MERRITT, District Surgeon	Auburn	Seattle-Tacoma.
DR. CHAS. JAMES, District Surgeon	Tacoma, Fidelity Bldg	Auburn-Tenino.
DR. W. A. MILLINGTON, Dist. Surgeon	Tenino	Tacoma-Centralia.
DR. DAVID LIVINGSTON, Dist. Surgeon	Centralia	Tenino-Winlock
DR. R. H. CAMPBELL	Vader	Centralia-So. Elma.
DR. C. W. BALES, District Surgeon	Kelso	Centralia-Tono.
DR. EDMUND A. SIZER, Dist. Surgeon	Cosmopolis	Winlock-Castle Rock.
DR. R. F. HUNTER, District Surgeon	Hoquiam	Castle Rock-Kalama
DR. J. H. FITZ, District Surgeon	Montesano	(Grays Harbor and North River Branches.
DR. W. L. BRIDGFORD, District Surgeon	Olympia	Olympia Branch.
DR. H. C. WATKINS, District Surgeon	Aberdeen	

Ambulance at Portland is located at Red Cross Ambulance Co., 391 Davis Street. Telephone, Broadway 78 A

CLEARANCES

LIMIT OF LOAD MEASUREMENT

HEIGHT ABOVE TOP OF RAIL

		1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7 ft. 6 in. Wide	8 ft. Wide	8 ft. 6 in. Wide	9 ft. Wide	9 ft. 6 in. Wide	10 ft. Wide	10 ft. 6 in. Wide	11 ft. Wide	11 ft. 6 in. Wide	Wide	Max. Height	Max. Width
1st Subdivision	Main Line (Tacoma to Tenino)	17' 7"	17' 7"	17' 7"	17' 7"	17' 7"	17' 7"	17' 7"	17' 6"	17' 2"	16' 9"	16' 4"	15' 11"	15' 5"	14' 10"	14' 2"	13' 6"		17' 7"	11' 6"
1st Subdivision	Main Line (Tenino to Vancouver)	19' 3"	19' 3"	19' 3"	19' 0"	19' 0"	18' 7"	18' 1"	17' 9"	17' 5"	17' 1"	16' 9"	16' 4"	15' 10"	15' 5"	14' 11"	14' 3"		19' 3"	11' 6"
2nd Subdivision	Grays Harbor Line (St. Clair-Gate)	17' 7"	17' 7"	17' 6"	17' 5"	17' 5"	17' 4"	17' 4"	17' 3"	17' 3"	17' 2"	17' 2"	17' 1"	17' 0"	16' 11"	16' 10"	16' 9"		17' 7"	11' 6"
2nd Subdivision	Grays Harbor Line (Gate-Aberdeen Jct.)	19' 2"	19' 2"	19' 2"	19' 2"	19' 2"	19' 2"	19' 2"	19' 2"	19' 2"	19' 2"	18' 9"	18' 2"	17' 6"	16' 10"	16' 2"	15' 6"		19' 2"	11' 6"
2nd Subdivision	Grays Harbor Line (Aberdeen Jct.-Moclips)	18' 9"	18' 9"	18' 9"	18' 9"	18' 9"	18' 9"	18' 9"	18' 9"	18' 2"	17' 5"	16' 11"	16' 9"	16' 9"	16' 9"	16' 9"	16' 9"		18' 9"	11' 6"
2nd Subdivision	Tumwater Spur	16' 11"	16' 9"	16' 7"	16' 6"	16' 3"	16' 1"	15' 10"	15' 9"	15' 7"	15' 5"	15' 3"	15' 1"	15' 0"	14' 10"	14' 8"	14' 4"		16' 11"	11' 6"
2nd Subdivision	Ocosta Branch	19' 2"	19' 2"	19' 2"	19' 2"	19' 2"	19' 2"	19' 1"	18' 9"	18' 6"	18' 2"	17' 11"	17' 7"	17' 3"	17' 1"	16' 9"	16' 5"		19' 2"	11' 6"
3rd Subdivision	American Lake Line	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"		21' 7"	11' 6"
4th Subdivision	Reservation to Tenino (via Draw Bridge Line)	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 1"	20' 11"	20' 8"	20' 6"	20' 4"	20' 2"	20' 0"	19' 10"	19' 8"		21' 4"	11' 6"
5th Subdivision	Buckley Line	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 4"	21' 2"	21' 1"	20' 11"	21' 10"	20' 8"	20' 7"	20' 5"	20' 4"	20' 2"		21' 5"	11' 6"
5th Subdivision	Burnett Branch	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"		19' 0"	11' 6"
5th Subdivision	Wilkeson Branch	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"		18' 7"	11' 6"
6th Subdivision	Green River Branch	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"		22' 9"	11' 6"
7th Subdivision	Crocker Branch	17' 7"	17' 7"	17' 6"	17' 5"	17' 0"	16' 6"	16' 1"	15' 10"	15' 7"	15' 4"	15' 1"	14' 11"	14' 7"	14' 4"	14' 2"	14' 0"		17' 7"	11' 6"
8th Subdivision	Orting Branch	18' 9"	18' 9"	18' 9"	18' 6"	18' 3"	17' 11"	17' 7"	17' 5"	17' 3"	17' 1"	17' 0"	16' 10"	16' 8"	16' 6"	16' 5"	16' 3"		18' 9"	11' 6"
9th Subdivision	Gate Line (Gate-Centralia)	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"		19' 1"	11' 6"
10th Subdivision	Mendota Branch	No obstructions on this Branch.																		
11th Subdivision	Willapa Harbor Line	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"	18' 8"		18' 8"	11' 6"
12th Subdivision	Yacolt Branch	19' 3"	19' 3"	19' 3"	19' 3"	19' 3"	18' 8"	18' 1"	17' 8"	17' 4"	17' 0"	16' 9"	16' 2"	15' 7"	15' 1"	14' 6"	14' 0"		19' 3"	11' 6"
13th Subdivision	Elma Branch	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"		24' 3"	11' 6"

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

SUB-DIVISION	DISTRICT	Ruling Grade %	CLASS OF ENGINE														
			Class W		Class Y-2		Class F-1		Class S		Class P		Class D-3 Class E-3 Class E-4		Class X		
			Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	
First Westward	Tacoma to South Tacoma.....	2.20	600	20	500	20	400	15	400	15	300	15	250	9			
	Tacoma to Chehalis.....	0.30	3500	99	3300	99	2000	80	1800	80	1500	50	40				
	Chehalis to Napavine.....	1.12	1250	70	1100	70	900	60	850	60	750	60	550	18			
	Napavine to Portland.....	0.00		99		99	3000	75	3000	75	1400	47	1200	40			
First Eastward	Portland to Vader.....	0.50	2500	99	2000	99	1800	80	1800	80	1250	60	1050	35			
	Vader to Napavine.....	0.90	1500		1350		1100		1000	32	860	29	660	22			
	Napavine to Tacoma.....	0.30	3500	99	3300	99	2500	80	2500	80	2300	50	2000	40			
Second Westward	St. Clair to Lacey.....	1.60	1000		900		800	40	800	40							
	Lacey to Olympia.....	0.70	2500		2400		70		70								
	Olympia to Belmore.....	1.80	900		800		600	35	600	35							
	Belmore to Gate.....	0.88	1500		1400		1200	40	1200	40							
	Gate to Elma.....	0.50	2900		2800		2200	99	2200	99							
	Elma to Moclips.....	0.40	3000		2900		2500	99	2500	99							
Second Eastward	Moclips to Gate.....	0.50	2900		2800		2000	99	2000	99							
	Gate to Olympia.....	0.87	1900		1700		1500	50	1500	50							
	Olympia to Lacey.....	1.61	1000		900		550	30	550	30							
Third Westward	Lacey to St. Clair.....	1.20	1350		1250		1050	40	1050	40							
	Lakeview to Nisqually.....	1.00	2500	99	2300	99	2000	80	2000	80							
Third Eastward	Nisqually to American Lake.....	1.60	1000	50	800	40	550	30	550	30							
	American Lake to Murray.....	1.00	2000		1800		1500		1500								
	Murray to Lakeview.....	0.66	2500		2300		2000		2000								
Fourth Westward	South Tacoma to Rainier.....	0.70	1800	99	1350	70	1200	60	1150	60	1050	60	850	28			
	Rainier to West Tenino.....	0.35	3200	99		99		60		60		60	60				
Fourth Eastward	West Tenino to Rainier.....	0.90	1500		1250		1100		1050	35	950	31	750	25			
	Rainier to Tacoma.....	0.50	2500	99	2100	99	1800	80	1800	75	1500	50	1300	43			
Fifth Westward	Palmer Jct. to Tacoma.....	0.00		99		99		80		80			60				
	Fairfax to South Prairie.....	0.00		99		99	2000	45	2000	45							
Fifth Eastward	Tacoma to Orting.....	0.56	2500	99	2250	99	1800	80	1800	80			1200	60			
	Orting to South Prairie.....	1.00	1300	80	1200	60	900	60	800	60			500	17			
	South Prairie to Buckley.....	1.70	700	20	600	17	450	15	400	14			250	9			
	Buckley to Palmer Jct.....	1.25	1500	80	1300	60	900	60	800	60			500	17			
	South Prairie to Morrystown.....	1.45					500	28	500	28							
	South Prairie to Wilkeson.....	2.20					400	25	400	25							
	Wilkeson to Carbonado.....	2.20					400	25	400	25							
	Carbonado to Fairfax.....	1.70					500	30	500	30							
Sixth Westward	Kerriston to Kanaskat.....	1.40					600	30	600	30							
Sixth Eastward	Kanaskat to Kerriston.....	2.30					400	25	400	25							
Seventh Eastward	Crocker to Wingate.....	1.70					500		500								
Eighth Eastward	Orting to Lake Kapowsin.....	1.40					600		600								
Ninth Westward	Centralia to Gate.....	0.50	3000		2900		2200	70	2200	70							
	Grand Mound to Centralia.....	0.00	3500		3500		3000	70	3000	70							
	Rochester to Grand Mound.....	0.40	3000		2900		2400	70	2400	70							
Ninth Eastward	Gate to Rochester.....	0.50	2900		2800		2000	70	2000	70							
	Wabash to Mendota.....	0.70					1250						750				
Eleventh Westward	Chehalis Jct. to Adna.....	0.50	2900		2800		2000	60	2000	60				2000	80		
	Adna to Pe Ell.....	0.66	1900		1700		1500	50	1400	50				1600	60		
	Pe Ell to McCormick.....	0.80	1200		1100		800	30	800	30				1000	40		
	McCormick to Pluvius.....	1.60	900		800		550	30	550	30				750	40		
	Pluvius to South Bend.....	0.53		99		99		70		70					80		
Eleventh Eastward	South Bend to Frances.....	0.60	2100		2000		1800	60	1800	60				2000	80		
	Frances to Pluvius.....	1.90	900		800		500	25	500	25				700	35		
	Pluvius to Chehalis Jct.....	0.40		99		99		70		70					80		
Twelfth Westward	Yacolt to Van Jct.....	0.58					1800	45	1800	45							
	Van Jct. to Homan.....	1.60					550	35	550	35							
Twelfth Eastward	Homan to Yacolt.....	1.66					800	45	800	45							
	Elma to Stimson.....	1.00					1000	70	1000	70							

SPEED TABLE.

Time per Mile		Miles per Hour
Min.	Sec.	
1	..	60
1	1	59
1	2	58
1	3	57.1
1	4	56.2
1	5	55.3
1	6	54.5
1	7	53.7
1	8	52.9
1	9	52.1
1	10	51.4
1	12	50
1	15	48
1	20	45
1	25	42.3
1	30	40
1	40	36
1	45	34.3
1	50	32.7
2	..	30
2	10	27.6
2	15	26.6
2	20	25.7
2	30	24
2	40	22.5
2	45	21.8
2	50	21.2
3	..	20
3	9	19
3	20	18
3	31	17
3	45	16
4	..	15
5	..	12
6	..	10
7	30	8
10	..	6

J. S. DEAN,
Assistant Superintendent.

J. F. ALSIP,
Trainmaster.

C. W. FEE,
Trainmaster.

J. F. COLEMAN,
Chief Dispatcher.

