

NORTHERN PACIFIC RAILWAY COMPANY.

SEATTLE AND TACOMA TERMINALS

TIME 51 TABLE

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

SUNDAY, JUNE 15, 1924.

For the Government of Employees 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.

A. V. BROWN,
Acting General Manager.

J. E. CRAVER,
General Superintendent.

I. B. RICHARDS,
Assistant General
Superintendent of Transportation.

F. R. BARTLES,
Superintendent
Seattle Division.

W. C. ALBEE,
Superintendent
Tacoma Division.

P. H. McCAULEY,
General Superintendent of Transportation.

Time Table 51
June 15, 1924
Succeeding No. 50.

TRAIN ORDERS GOVERNING THE MOVEMENT OF TRAINS AND INSTRUCTIONS PERTAINING THERETO, WILL BE ISSUED BY AND OVER THE SIGNATURE OF THE SUPERINTENDENT OF THE SEATTLE DIVISION.

EASTWARD.

Distance from Tacoma	Time Table 51. June 15, 1924. Succeeding No. 50.			Car Capacity of Sidings	FIRST CLASS																		SECOND CLASS			THIRD CLASS
	402	408	412		414	416	418	422	424	428	436	438	440	450	454	456	458	596	562	564	672	674	680	930		
	Passenger	Passenger	Passenger		Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Freight	Freight	Freight	Freight		
	Daily	Daily	Daily		Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Daily	Daily	Ex. Sat.	Daily	Ex. Sun.		
	Portland Seattle Express	Portland Seattle Express	No. 2's Connection		No. 1 North Coast Limited	No. 41 Puget Sound Limited	No. 42's Connection Mississippi Valley Limited	Puget Sound Express	Puget Sound Limited	No. 337 Grandview	No. 333 Spokane	No. 334's Connection Spokane	No. 3 Northern Pacific Express	No. 4's Connection	G. N. No. 2	Gt. Nor. Portland	Gt. Nor. Portland	No. 338 Connection	O.W.R.&N Tacoma Seattle Express	O.W.R.&N Seattle Express	G. N. Portland	Nor. Pac. Sumas	Nor. Pac. Portland	Nor. Pac. Local		
40.1	UD	SEATTLE King Street Station 0.8 Cross Over	DN	A 6.45AM	A 2.45PM		A 6.35AM	A 8.20AM		A 2.15PM	A 9.50PM	A 3.15PM	A 6.25AM		A 9.15PM		A 7.35PM	A 7.45PM	A 4.40PM				A 2.35AM			
39.3		MIDDLE YARD 2.4	P																				A 6.45AM			
36.9		ARGO Cross Over O. W. R. & N. and P. C. R. R. Crossings Interlocked 6.8 Track Conn.	P	6.34	2.34		6.24	8.09		2.04	9.39	3.04	6.14		9.02		7.24	7.34	4.29				2.20	See Seattle Div.	6.30	See Seattle Div.
30.1		C. M. & St. P. R. R. CROSSING Interlocked 0.8 Track Con. Cross Over																								
29.3	BI	BLACK RIVER 1.4 Cross Over	DN	6.24	2.23		6.11	7.56		1.51	9.28	f 2.50	6.01		8.48		7.13	7.23	4.18				2.05	A 10.50PM	6.15	A 7.55AM
27.9		ORILLIA 2.0								f 1.49																
25.9		O'BRIEN 2.1								f 1.46																
23.8	KN	KENT 1.9 Cross Over	D	s 6.13	2.13		6.00	7.45		f 1.42	f 9.18	s 2.40	s 5.50		8.37		7.05	s 7.13	4.08				1.50	10.30	6.00	7.40
21.9		THOMAS 1.4								f 1.38																
20.5		CHRISTOPHER 1.9								f 1.36																
18.6	AU	AUBURN 0.9 Cross Over	DN	s 6.02	s 2.03		s 5.50	s 7.35		s 1.32	s 9.08	s 2.29	s 5.40		s 8.26		6.56	f 7.03	3.58				1.40	L 10.10PM	s 5.45	L 7.25AM
19.5	GR	EAST AUBURN 0.9	DN			A 10.05AM	L 5.44AM	L 7.29AM	A 5.35PM			L 2.24PM	L 5.35AM	A 11.50PM	L 8.20PM	A 7.35PM										
18.6	AU	AUBURN 4.9 Cross Over	DN	s 6.02	s 2.03	s 9.59			s 5.29	s 1.32	s 9.08			s 11.45		s 7.28	6.56	f 7.03	3.58				1.40		s 5.45	
13.7		DIERINGER 2.6		5.51	1.55	f 9.48			5.18	f 1.22	8.58			f 11.38		f 7.18	6.48	6.53	3.48	See Tacoma Div.			1.30		5.35	
11.1	SN	SUMNER 1.6 Cross Over	D	s 5.47	1.51	s 9.43			s 5.13	s 1.18	s 8.54			s 11.33		s 7.13	6.43	s 6.49	3.44				1.25		5.30	
9.5		MEEKER 1.3	P	5.43	1.48	9.38			5.08	1.15	8.50			11.28		7.08	6.40	6.45	3.40	A 7.30AM			1.20		5.25	
8.2	PY	PUYALLUP 6.4 Cross Over	DN	s 5.41	s 1.46	s 9.36			s 5.06	s 1.12	s 8.47			s 11.25		s 7.06	s 6.38	s 6.42	s 3.37	s 7.26			1.15		5.20	
1.8	RN	RESERVATION O. W. R. & N. 1.8 Track Conn. Cross Over	DN	5.31	1.36	9.26			4.56	1.02	8.36			11.16		6.56	6.26	6.32	3.27	7.16	A 9.31PM	A 5.06AM	12.55		4.55	
0.0	Q	TACOMA Cross Over	DN	L 5.25AM	L 1.30PM	L 9.20AM			L 4.50PM	Via Draw Bridge Line	L 8.30PM			L 11.10PM		L 6.50PM	L 6.20PM	Via Draw Bridge Line	Via Draw Bridge Line	L 7.10AM	L 9.25PM	L 5.00AM	L 12.50AM		L 4.45AM	
2.1	RN	RESERVATION 0.2 Cross Over	DN							L 1.02								6.32	3.27							
1.9		O. W. R. & N. Co. CROSSING																								
1.6		O. W. R. & N. Co. CROSSING Interlocked 1.4 Track Conn.																								
0.2	AX	FIFTEENTH ST. TOWER 0.2 Cross Over	DN																							
0.0	Q	TACOMA Cross Over	DN							L 12.55PM								L 6.25PM	L 3.20PM							
				Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Daily	Daily	Ex. Sat.	Daily	Ex. Sun.
		Time Over Subdivision		1.20	1.15	.45	.51	.51	.45	1.20	1.20	.51	.50	.40	.55	.45	1.15	1.20	1.20	.20	.06	.06	1.45	.40	2.00	.30
		Average Speed Per Hour		30.3	32.3	26.0	26.4	26.4	26.0	30.5	30.5	26.4	26.3	29.2	24.2	26.0	32.3	30.5	30.5	28.5	18.5	18.5	22.9	16.1	19.2	21.4

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

DOUBLE TRACK BETWEEN SEATTLE AND TACOMA VIA HEAD OF BAY.

AUTOMATIC BLOCK BETWEEN HOLGATE STREET, SEATTLE AND RESERVATION.

SPECIAL INSTRUCTIONS, PAGES 3 AND 4.

TRAIN ORDERS GOVERNING THE MOVEMENT OF TRAINS AND INSTRUCTIONS PERTAINING THERETO,
WILL BE ISSUED BY AND OVER THE SIGNATURE OF THE SUPERINTENDENT OF THE SEATTLE DIVISION.

SPECIAL INSTRUCTIONS.

1. **AT SEATTLE**—Trains and light engines entering King Street Station from the west, must not pass the stand pipe at west end of yard without proceed signal from the switch tender given with green flag by day or green light by night. Interlocking plant at South portal of King Street tunnel—Signals are of the dwarf type (low semaphores) and are located to the right of track governed; where two arms are on one post, higher arm governs trains along main tracks and lower arm trains diverging from main track.

Trains or engines must not pass over Atlantic Street crossings, Colorado Street line, unless they receive signal from crossing flagman with green flag by day and green light by night. One motion of regular proceed signal is for the Northern Pacific, two motions of regular proceed signal is for Chicago, Milwaukee & Saint Paul, three motions of the regular proceed signal is for the P. C. R. R. and four motions of the regular proceed signal is for the O.-W. R. & N. When no crossing flagman is on duty trains must flag themselves across.

Trains approaching Spokane St. Tower on Colorado Ave. line will call for route as follows:

INBOUND.

C. M. & St. P. Ry.
Nor. Pac. Ry.
P. C. Ry.

OUTBOUND.

C. M. & St. P. Ry.
P. C. Ry.
Nor. Pac. Ry.

WEST SEATTLE LINE.

From West to East
From East to West

2. **Speed Restrictions**—All trains must run under control at Seattle between the switches of the crossover west of the west wye switch Spokane Street and King Street Station expecting to find main track occupied. Second class and inferior trains, switch engines and light engines may use main tracks running with current of traffic between west wye switch Spokane Street and King Street Station on time of first class trains without orders. In foggy or obscure weather all trains must stop and know before proceeding that there are no trains approaching on intersecting tracks. All trains eight (8) miles per hour over switches King Street Station. Passenger trains must not exceed a speed of one minute or sixty seconds per mile. Passenger trains with helper engines on rear thirty (30) miles per hour. When Mallet engine is used, fifteen (15) miles per hour. Class Q-5 engines fifty-five (55) miles per hour. Class W engines thirty (30) miles per hour and Class W-3 engines twenty-five (25) miles per hour. Ten miles per hour within the corporate limits of Puyallup, Sumner, Auburn and Kent. Trains and light engines entering or leaving Tacoma Union Station to or from the drawbridge line limit speed to ten (10) miles per hour while any portion of train is passing over switches at Fifteenth Street Tower. All trains thirty (30) miles per hour over interlocked crossings and fifteen (15) miles per hour through crossovers, turnouts and gauntlets. Fifteen (15) miles per hour passing telegraph offices where orders are received. Light engines backing up twenty (20) miles per hour. Passenger trains via Head of Bay twenty (20) miles per hour between Tacoma Union Station and Reservation. Trains in both directions on Drawbridge Line will run under control between Reservation and Freight Yard connection one quarter mile west thereof. Trains entering or leaving Tacoma Union Station will move under control between 15th Street Tower and 21st Street.
3. **At O. W. R. & N. Crossing located 0.2 miles west of Reservation**, all trains and engines via Drawbridge Line in both directions will stop at Stop Boards and will proceed when signal is received from switch tender using yellow flag by day and yellow light by night. All O.-W. R. & N. Co. trains in both directions will stop before entering connection and will proceed when signal is received from switch tender, using yellow flag by day and yellow light by night. All westward trains via Head of Bay from Reservation will approach this connection prepared to stop unless proceed signal is given by switch tender, using yellow flag by day and yellow light by night.
4. **Bridge Restrictions**—Speed will be restricted over Bascule Bridges 36.8 Duwamish River and No. 4 Salmon Bay Waterway to twenty (20) miles per hour. Speed will be restricted over Bridge 39, Tacoma Waterway as follows: Engines Class W, W-1, W-2 and W-4, ten (10) miles per hour. Engines Class G-1, G-2, Q-5, Q-6, W-3 and W-5, and heavier, not permitted. Double-headers not permitted. Bridge 12.3 on what is known as the Dempsey or Tide Flat Branch (Tacoma Terminal). Heavier than Class Q engines not permitted. Speed of other engines over this bridge eight (8) miles per hour.
5. **Between Reservation and Tacoma**—Trains will approach crossoverswitches located at East "D" Street (near roundhouse) at South 21st Street (entering passenger station) under control, and will not proceed until tracks are known to be clear and signal is received from switch tender with green flag by day and green light by night.

6. **At Argo**—Trains must stop before crossing street car tracks at Eighth Avenue South.
7. **At Black River**—Telephone is located near westward crossover switch in box on telephone pole. Communication with Seattle Dispatcher's office can be had by calling Seattle two short rings and asking for Chief Dispatcher.
8. **At Auburn**—All eastward and westward trains will approach crossover at west end of Auburn depot platform leading to and from the First Subdivision main line, expecting to find crossover occupied, and will not proceed until track is known to be clear. Passenger trains in either direction making crossover movement to or from First Subdivision, Seattle Division will not be required to flag after having used signal indicator and found track to be clear. Normal position of switch at head of the wye will be for Seattle leg of wye.
9. **At Reservation**—No towermen are used to manipulate interlocking plant, O.-W. R. & N. crossing near Reservation. When train or yard crews have occasion to use crossing the conductor or foreman will operate the levers, bearing in mind that after used, signals and derails must be set clear for Northern Pacific route. When signals are against Northern Pacific route, conductor investigate cause and if necessary flag through interlocking district.
10. **At Fifteenth Street Tower**—A signal arm semaphore pattern, located near junction of line leading to Tacoma 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 tower man is located on post under Union Station concourse; switch crews will operate for Portland bound trains and conductors will operate for Seattle bound trains.
11. **Card train order form AB**—Will govern the movement of trains between Reservation and the Fifteenth Street Tower via Drawbridge Line; between Argo and Spokane Street Tower on Colorado Avenue line; between East Auburn and Auburn and between East Auburn and Auburn Yard. Trains must not move in this territory unless conductor and engineman each holds a copy properly filled out.
12. **Special stops, connections, etc.**—No. 401 stop at Kent for passengers for Tacoma and points South and at Auburn for pay passengers only. No. 421 stop on flag at Kent for Grays Harbor business west of Lakeview. No. 423 stop on flag at Orillia and Thomas or receipt and delivery of Parcel Post mail. No. 450 connects with No. 597 at Puyallup. Nos. 411 and 449 stop on flag at Kent for passengers holding tickets for Spokane and east. No. 408 stop at Sumner and Kent to let off passengers from points west of St. Clair. Nos. 414 and 440 stop at Kent to let off passengers from points east of Auburn. No. 416 stops at Kent to let off passengers from points east of Billings. Nos. 417 and 437 stop on flag at Kent to pick up passengers for points east of Auburn. No. 456 connect with No. 597 at Puyallup. No. 436 stop on flag at Thomas and Kent for express shipments. No. 459 stop on flag at stations between Seattle and Tacoma to discharge passengers from points north and east of Everett, and to receive passengers for points south of Tacoma. No. 458 stop on flag at Sumner for passengers Seattle and beyond and stop on flag at Auburn and Kent to discharge passengers from points south of Tacoma and receive passengers for points Everett and beyond. No. 454 stop on flag at Sumner, Auburn and Kent to receive passengers for points Everett and beyond.
13. **Register Stations—Seattle** (King Street Station), Middle Yard, East Auburn, Auburn Yard Office, for freight train originating or terminating. Puyallup for Tacoma Division Fifth (5th) Subdivision trains only. Tacoma Union Station for passenger trains; yard office for freight trains.
14. **Register Exceptions**—At East Auburn and Puyallup, second class and inferior trains register by ticket form 608.
15. **Bulletin Stations**—Seattle (King Street Station), Middle Yard, Auburn Yard Office; Tacoma Union Station and Yard Office.
16. **Standard Time Clocks**—Seattle (King Street Station), Round house and middle yard, Auburn Yard Office; and Tacoma (Union Station).
17. **Derail Switches**—Are located as follows, and must be kept in derailing position when not in use. Sumner, West end of passing siding.

GENERAL INSTRUCTIONS.

1. **Lap Sidings**—Unless otherwise instructed, trains taking siding must head in at the lap.
2. Siding blocked by occupied outfit cars must not be used to meet or pass trains.
3. Conductors of work trains will issue instructions to their flagmen in writing, except when flagman goes back immediately to stop an approaching train.
4. When necessary to take slack of freight trains with helper engine on the rear it should be done by the helper engine.
5. 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.
6. Except as otherwise provided, or when running light without conductor, engine-men will only be required to consult register at initial or starting points.
7. Brakemen will ride on top of freight trains descending mountain grades, except in case of inclement weather.
8. In the State of Washington, conductors of passenger trains consisting of four or more cars, and freight trains consisting of 25 or more cars, must know that brakeman has had at least one year's experience in train-service before assigning him to flagging duties.
9. 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.
10. Trains pulling into side tracks or leaving the main line at junction points must pull entirely into clear main line before stopping to pick up the man attending the switch.
11. **Logs**—Trains handling logs on double track will not be permitted to meet passenger trains between stations. Conductors will notify Dispatcher when there are logs in their trains and secure train order that passenger trains will be held at next station until they have arrived. Conductors of trains coming from Buckley Line must arrange with operator at Puyallup to hold opposing passenger trains. Cars with logs must be inspected to be sure they are safely loaded and secured.
12. The following signs when placed in columns provided indicate:
W—Water.
C—Fuel.
O—Track Scales.
T—Turntable.
Y—Wye.
D—Day office only.
DN—Day and night office.
P—Telephone.
X—Yard limits.

SPEED TABLE

Time	Per Mile		Miles Per Hour
	Mins.	Secs.	
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	21		18
3	31		17
3	45		16
4	..		15
5	..		12
6	..		10
7	30		8
10	..		6

MAXIMUM CLEARANCES

		LIMIT OF LOAD—MEASUREMENT																			Max. Height	Max. Width
		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. 2 in. Wide	10 ft. 6 in. Wide	11 ft. Wide	11 ft. 6 in. Wide				
.....	Main Line (Seattle-Reservation).....	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	11' 6"	
.....	West Seattle Line.....	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 1"	20' 9"	20' 7"	20' 3"	20' 2"	20' 0"	19' 9"	19' 7"	21' 3"	11' 6"		
.....	Lake Union Line.....	20' 7"	20' 7"	20' 7"	18' 3"	18' 3"	17' 4"	16' 4"	15' 10"	15' 4"	14' 10"	14' 5"	14' 0"	13' 5"	13' 3"	12' 11"	12' 5"	11' 11"	20' 7"	11' 6"		

WATCH INSPECTORS

F. H. WALDRON, Auburn.
HOUGHTON & SON, 215 Yesler Way, Seattle
RICHARD VAETH, 924 Pacific Ave., Tacoma

AUTHORIZED SURGEONS.

Location of Stretchers (S).

P. A. REMINGTON, Chief Surgeon, Western Div., Tacoma.
Dr. A. H. BUIS, Assistant Surgeon.
Dr. M. ALLISON, "

FREDERICK ADAMS, Oculist, Seattle
ROBERT WIGHTMAN, "
P. W. WILLIS, Seattle
E. C. GROSS, Seattle
DR. I. J. D. SHULER, Seattle
Seattle Yard Office (S)
King St. Station, Seattle (S)
G. Mcgregor, Kent

B. E. HOYE, Auburn
WM. H. BRANDT, Auburn
Auburn Yard Office (S)
Auburn Station (S)
W. M. KARSHNER, Puyallup (S)

DR. W. B. MITCHELL, Sumner.
C. E. JUDD, Sumner
WM. H. LUDWIG, So. Tacoma.
E. L. CARLSON, So. Tacoma.
W. G. CAMERON, Specialist, Tacoma
A. E. HILLIS, Oculist, Tacoma.
N. P. B. A. Hospital, Tacoma (S)

Baggage Room, Tacoma (S)
Round House, Tacoma (S)
Head-of-Bay Yard Office, Tacoma (S)
Half Moon Yard Office, Tacoma (S)
Tool Car, Tacoma (S)
Wharf, Tacoma (S)

Note.

Surgeons will attend, when called upon officially, to all cases of ACCIDENT occurring to employees 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 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.

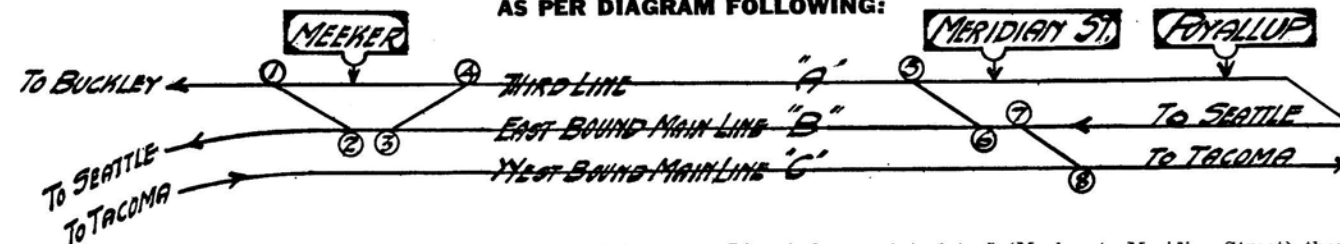
Boarding and Nursing are furnished ONLY AT OUR OWN HOSPITALS. We are not responsible for bills incurred elsewhere unless specially authorized or approved by the Chief Surgeon, and then only in critical cases of injury or illness occurring in the discharge of duty.

AUTHORIZED SURGEONS, G. N. RY.

DR. J. C. MOORE, Seattle.

DR. J. A. LA GASA, Tacoma.

37. SPECIAL RULES FOR MOVEMENTS OF TACOMA DIVISION TRAINS BETWEEN MEEKER AND PUYALLUP: AS PER DIAGRAM FOLLOWING:



All westward trains from Fifth Subdivision, Tacoma Division, use Line A from points 1 to 5 (Meeker to Meridian Street) thence to Line C.
All eastward Fifth Subdivision trains use Line B from points 6 to 2 (Puyallup to Meeker), thence to Line A.
Line A between points 1 and 5 (Meeker and Meridian Street), may be used as siding, protecting as per Transportation Rule 93.
Normal position of switches: At points 4 and 5 will be for Line A; at points 2 and 3, and 6 and 7 for Line B; at point 8 for Line C.

SEATTLE DIVISION.

J. J. McCULLOUGH,
Assistant Superintendent.

J. J. SEXTON,
Trainmaster.

J. E. CAMPBELL,
Trainmaster.

J. H. ROBINSON,
Trainmaster.

E. H. FRIBERG,
Chief Dispatcher.

TACOMA DIVISION.

J. S. DEAN,
Assistant Superintendent.

J. F. ALSIP,
Trainmaster.

C. W. FEE,
Trainmaster.

J. F. COLEMAN,
Chief Dispatcher.

