

NORTHERN PACIFIC RAILWAY COMPANY.

TACOMA DIVISION

TIME **38F** TABLE

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

SUNDAY, October 26, 1913

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

E. C. BLANCHARD,
General Manager.

I. B. RICHARDS,
General Superintendent.

P. H. McCAULEY,
Superintendent of Transportation.

W. C. ALBEE,
Superintendent.

T. E. COYLE,
Assistant Superintendent.

Westward

FIRST SUBDIVISION
MAIN LINE

| Station Numbers | Time Table 38F Succeeding No. 38E October 26, 1913. | Distance from Tacoma | SECOND CLASS | | | | THIRD CLASS | | | | | | | |
|-----------------|---|-------------------------|-----------------|-----------------|-----------------------|-------------------|---------------------------|-----------------------|-----------------------|---------------------------|----------------------|-----------------------|-----------------------|----------|
| | | | 589 | 591 | 691 | 679 | 977 | 973 | 969 | 975 | 997 | 963 | 965 | |
| | | | DAILY | EXCEPT SUNDAY | DAILY | DAILY | EXCEPT SUNDAY | EXCEPT SUNDAY | EXCEPT SUNDAY | EXCEPT MONDAY | DAILY | EXCEPT SUNDAY | EXCEPT SUNDAY | |
| | | | Nor. Pac. Mixed | Nor. Pac. Mixed | O.-W. R. & N. Freight | Nor. Pac. Freight | O.-W. R. & N. Way Freight | Nor. Pac. Way Freight | Nor. Pac. Way Freight | O.-W. R. & N. Way Freight | Qt. Nor. Way Freight | Nor. Pac. Way Freight | Nor. Pac. Way Freight | |
| 1977 | Q.....TACOMA...DN 4.5 | 0.0 | | | L 9.30PM | L 9.00PM | | | | | L 4.15AM | L 4.50AM | L 5.00AM | L 7.00AM |

BETWEEN TACOMA AND SOUTH TACOMA TRAINS WILL BE GOVERNED BY PUGET SOUND DIVISION TIME TABLE RULES AND REGULATIONS

| W S T | Station | Distance | 10.00 356 | 9.45 356 | 4.45 302 | 5.15 | 5.45 360 | 7.45 |
|-----------|-----------------------------|----------|-----------------------------|------------------|----------------------|-----------------------------|---------------|---------------------------------|
| 1981 | SU SOUTH TACOMA DN 3.7 | 4.5 | | | | | | |
| 1985 | VA...LAKEVIEW...D 5.0 | 8.2 | 10.15 | 10.00 | f 5.00 | f 5.35 360 | f 6.00 | A 8.00AM 976 |
| 1990 | HI...HILLHURST...D 6.1 | 13.2 | 10.35 | 10.15 | f 5.25 360 | f 5.55 | f 6.15 | See page 5 |
| 1996 | RY...ROY...DN 5.5 | 19.3 | 10.55 | 10.38 | s 5.45 | f 6.15 | s 7.00 | |
| 2002 | YA...YELM...D 5.4 | 24.7 | 11.15 | 10.44 | s 6.00 | s 6.80 | s 7.20 976 | |
| 2007 | RA...RAINIER...DN 4.3 | 30.1 | 11.35 | 11.05 | s 6.20 | s 6.55 976 | s 8.10 964 | |
| 2011 | JS...McINTOSH...D 4.6 | 34.4 | 11.50PM | 11.19 | f 6.40 976 | f 7.05 | f 8.80 | |
| 2015 | NO...TENINO...DN 3.4 | 39.0 | 12.01AM 680 | 11.81 | s 6.55 964 | s 7.20 964 | s 9.00 | |
| 2020 | Bu...BUCODA...D 5.1 | 42.4 | 12.10 | 11.41PM | s 7.80 | s 8.00 | s 9.20 | |
| 2025 | WABASH...P 1.8 | 47.5 | | | | | | |
| 2027 | CN...CENTRALIA...DN 4.1 | 49.3 | 12.30 1.00 | 12.05AM 12.30 | L 5.00AM | L 5.30AM | L 6.00AM | A 8.00AM |
| 2031 | CH...CHEHALIS...DN 1.0 | 53.4 | 1.15 | 12.45 | s 5.80 | s 6.00 | 6.40 | s 9.80 |
| 2032 | CHEHALIS JCT...P 6.4 | 54.4 | | | | | A 6.45AM | |
| 2038 | NA...NAPAVINE...D 6.3 | 60.8 | 1.55 | 1.15 | s 6.10 | s 7.00 | See page 8 | s 10.10 |
| 2044 | WI...WINLOCK...D 6.4 | 67.1 | 2.10 | 1.80 | s 6.40 | s 8.00 | | s 10.40 |
| 2050 | PN...VADER...DN 2.7 | 73.5 | 2.25 | 2.07 | s 7.20 | s 8.80 | | s 11.02 |
| 2053 | OLEQUA... 6.8 | 76.2 | 2.35 | 2.15 | f 7.35 | f 9.00 | | f 11.10 |
| 2060 | CA...CASTLE ROCK...D 6.3 | 83.0 | 3.00 4.55 355 363 301 | 2.42 | s 8.10 | s 10.15 | | s 11.35AM 12.45PM 361 307 |
| 2066 | OSTRANDER... 3.7 | 89.3 | 5.15 | 2.55 | f 8.80 | f 10.85 | | f 1.00 |
| 2071 | KS...KELSO...D 5.7 | 93.0 | 5.25 | 3.02 | s 9.25 | s 11.80 | | s 1.80 |
| 2077 | CARROLLS... 4.4 | 98.7 | 5.40 | 3.18 | f 9.45 | f 11.45 | | f 1.45 |
| 2081 | KA...KALAMA...DN 4.3 | 103.1 | 5.55 | 3.35 | s 10.55 | 11.55AM 12.45PM | | s 2.10 |
| Cx 4 | MARTIN'S BLUFF... 4.8 | 107.4 | 6.06 | 4.00 | f 11.10 | f 1.00 | | f 2.20 |
| Cx 9 | WD...WOODLAND...D 6.0 | 112.2 | 6.20 | 4.15 | s 11.45AM | s 1.15 1.35PM | | s 2.40 |
| W Cx 15 | RG...RIDGFIELD...D 5.6 | 118.2 | 6.35 | 4.31 | 301 12.01 PM 5.00 | s 1.55 | | s 3.05 |
| Cx 21 | KNAPPS... 2.3 | 123.8 | 6.50 | 4.46 | f 1.15 | f 2.10 | | f 3.25 |
| W Cx 23 | FELIDA...P 2.8 | 126.1 | 6.56 | 4.52 | f 1.25 | f 2.25 | | f 3.35 |
| Y Cx 25 | VANCOUVER JCT...P 3.1 | 128.9 | L 7.10AM | L 8.35PM | 1.85 | 2.35 | | 3.45 |
| W T Cx 29 | MX.VANCOUVER.DN 10.0 | 132.0 | A 7.25AM | A 8.50PM | A 7.15AM | 5.15 5.45 ³⁵⁵ | | A 4.00PM |

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

| W C S T | Station | Distance | DAILY | EXCEPT SUNDAY | DAILY | DAILY | EXCEPT SUNDAY | EXCEPT SUNDAY | EXCEPT SUNDAY | EXCEPT MONDAY | DAILY | EXCEPT SUNDAY | EXCEPT SUNDAY |
|---------|------------------------|----------|-------|---------------|----------|-------|---------------|---------------|---------------|---------------|-------|---------------|---------------|
| 2121 | VC...PORTLAND...DN | 142.0 | | | A 6.45AM | | | | | | | | |
| | Time Over Subdivision | | .15 | .15 | 9.15 | 8.55 | 7.56 | 8.30 | .45 | 3.25 | 9.35 | 5.00 | 1.00 |
| | Average Speed per Hour | | 12.4 | 12.4 | 14.3 | 16.1 | 11.5 | 10.7 | 6.8 | 14.4 | 13.8 | 10.1 | 9.6 |

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

Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.

Helper District, Vader to Rainier.

Eastward

FIRST SUBDIVISION. MAIN LINE.

Table with columns for Distance from Portland, Time Table 38F, STATIONS, Car Capacity of Siding, and train numbers 364, 302, 360, 392, 308, 366, 362, 358, 314, 324, 370, 312, 394, 334, 322, 356.

BETWEEN TACOMA AND SOUTH TACOMA TRAINS WILL BE GOVERNED BY PUGET SOUND DIVISION TIME TABLE RULES AND REGULATIONS

Main schedule table with columns for station names (e.g., SU SOUTH TACOMA, VA LAKEVIEW, HI HILLHURST), times, and train numbers.

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

Summary table for Vancouver and Portland trains with columns for station names and times.

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

Automatic Block.—Between Tenino and Vancouver. Manual Block.—Between South Tacoma and Tenino. Rule D-97 is modified to the extent that extra trains may be run with the current of traffic without orders, provided they secure a clearance, Form "A," from the Operator upon entering double track.

Registering Stations.—South Tacoma, Tenino, Centralia, Vancouver and Portland. Chehalis is registering station for South Bend Branch trains only. Bulletin Stations.—Centralia, Vancouver, Portland. SEE SPECIAL RULES, PAGES 11 AND 12.

Eastward

FIRST SUBDIVISION MAIN LINE

Table with columns for Time Table 38F, Succeeding No. 38E, October 26, 1913. It includes columns for Second Class (590, 592, 680, 692) and Third Class (976, 964, 966, 998, 978, 974, 970) with various service and freight categories.

BETWEEN TACOMA AND SOUTH TACOMA TRAINS WILL BE GOVERNED BY PUGET SOUND DIVISION TIME TABLE RULES AND REGULATIONS

Main table containing train schedules with columns for distance from Portland, station names (e.g., SU SOUTH TACOMA, VA LAKEVIEW, HI HILLHURST, RY ROY, YA YELM, RA RAINIER, JS MCINTOSH, NO TENINO, BU BUCODA, CN CENTRALIA, CH CHEHALIS, NA NAPAVINE, WI WINLOCK, PN VADER, OLEQUA, CA CASTLE ROCK, OSTRANDER, KS KELSO, CARROLLS, KA KALAMA, MARTINS BLUFF, WD WOODLAND, RG RIDGEFIELD, KNAPPS, FELIDA, VANCOUVER JCT, MX VANCOUVER), and arrival/departure times.

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

Summary table for Vancouver and Portland trains, including columns for station (VG PORTLAND), service types (EXCEPT SUNDAY, DAILY), and average speed per hour.

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

Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.

Westward

SECOND SUBDIVISION (GRAY'S HARBOR LINE)

Table with columns for Station Numbers, Distance from Lakeview, STATIONS, Car Capacity of Sidings, and train classes (FIRST CLASS, SECOND CLASS, THIRD CLASS) with various train numbers and times.

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

Double Track.—Between Aberdeen and Hoquiam, except single track between the passenger station at Hoquiam, and the double track switch located just east of Hoquiam River draw bridge, three-quarters (¾) of a mile east of Hoquiam. See page 6 for Special Rules governing. Automatic Signals.—Olympia Subway. See page 6 for Special Rules governing.

SEE SPECIAL RULES, PAGES 14 AND 12.

Eastward

SECOND SUBDIVISION GRAY'S HARBOR LINE

Time Table No. 38F Succeeding No. 38E October 26, 1913

Table with columns for Class (First Class, Second Class, Third Class) and Stations. Rows include station names and departure/arrival times. Includes a 'Distance from Moclips' column and a 'Time Over Subdivision' summary row at the bottom.

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

Registering Stations.—Lakeview, Olympia, Gate, Elma, Aberdeen Junction, Aberdeen, Hoquiam and Moclips.

SEE SPECIAL RULES, PAGES 14 AND 12

Maximum speed of passenger trains is one minute or sixty seconds per mile. This limit must never be exceeded. Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.

Westward

FIFTH SUBDIVISION

Eastward

Westward

SEVENTH SUBDIVISION

Eastward

SECOND CLASS
591 589

Time Table No. 38F
Succeeding No. 38E
October 26, 1913.

SECOND CLASS
590 592

THIRD CLASS 969
FIRST CLASS 393 391

Time Table No. 38E
Succeeding No. 38E
October 26, 1913.

FIRST CLASS 392 394
THIRD CLASS 970

| STATIONS. | | Distance from Yaocolt | Distance from Vancouver Jct. | Car Capacity of Sidings | STATIONS. | | Distance from Chehalis Junction | Distance from South Bend | Car Capacity of Sidings | |
|------------------------|-----|--------------------------|---------------------------------|----------------------------|----------------------------|-----|------------------------------------|-----------------------------|----------------------------|--|
| YACOLT | 6.6 | D | 27.2 | 35 | CHEHALIS JCT. | 3.4 | 0.0 | 0.0 | Y | |
| WALL | 1.4 | 20.6 | 20.6 | No Sdg. | LITTELL | 1.3 | 3.4 | 58.1 | 20 | |
| HEISON | 1.8 | 19.2 | 19.2 | 25 | ADNA | 2.5 | 4.7 | 51.8 | 37 | |
| CRAWFORD | 3.0 | 17.4 | 17.4 | No Sdg. | BUNKER | 2.9 | 7.2 | 49.3 | Spur | |
| BATTLE GROUND | 4.2 | 14.4 | 14.4 | 20 | CERES | 6.1 | 10.1 | 48.4 | 35 | |
| BRUSH PRAIRIE | 1.6 | 10.2 | 10.2 | 25 | LUEDINGHAUS R. R. CROSSING | 0.1 | 16.2 | 40.3 | Track Connection | |
| LAURIN | 1.5 | 8.6 | 8.6 | 80 Spur | DRYAD | 1.3 | 16.8 | 40.2 | 35 | |
| HOMAN | 1.0 | 7.1 | 7.1 | 4 Spur | DO | 4.7 | 17.6 | 38.9 | Spur 35 | |
| BARBERTON | 3.0 | 6.1 | 6.1 | 4 Spur | PE ELL | 1.4 | 22.3 | 34.2 | 60 | |
| HIDDEN | 3.1 | 3.1 | 3.1 | No Sdg. | McCORMICK R. R. CROSSING | 0.6 | 23.7 | 32.8 | Track Connection | |
| VANCOUVER JCT. | 0.0 | 0.0 | 0.0 | No Sdg. | McCORMICK | 1.8 | 24.3 | 32.2 | Spur 15 | |
| | | | | | WALVILLE | 1.2 | 26.1 | 30.4 | Spur 15 | |
| | | | | | WALVILLE R. R. CROSSING | 1.6 | 27.3 | 29.2 | No Track Connection | |
| | | | | | PLUVIUS | 6.4 | 28.9 | 27.6 | 36 | |
| | | | | | FRANCES | 1.3 | 35.8 | 21.2 | 35 | |
| | | | | | GLOBE | 1.4 | 36.6 | 19.9 | Spur 15 | |
| | | | | | LEBAM | 4.3 | 38.0 | 18.5 | 14 | |
| | | | | | HOLCOMB | 4.2 | 42.3 | 14.2 | 30 | |
| | | | | | MENLO | 4.0 | 46.5 | 10.0 | 9 | |
| | | | | | WILLAPA | 2.6 | 50.5 | 6.0 | 16 | |
| | | | | | RAYMOND | 3.4 | 53.1 | 3.4 | 40 | |
| | | | | | SOUTH BEND | 0.0 | 56.5 | 0.0 | 150 | |
| | | | | | | | | | | |
| Time Over Subdivision | | | | | | | Time Over Subdivision | | | |
| Average Speed per Hour | | | | | | | Average Speed per Hour | | | |

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.
Registering Stations—Yaocolt and Vancouver Junction.
Standard Clocks—Vancouver.
Derail Switches—Vancouver Junction—East leg of wye 135 feet from the Yaocolt end of the wye switch. Crusher. Smith's spur—Yaocolt, north leg of wye, switch normal position for north leg of wye.
Trains from Fifth Sub-Division must ascertain 1st. Sub-Division Rights before occupying main line at Vancouver Junction.
Speed of passenger or mixed trains will not exceed 35 miles per hour and freight trains 25 miles per hour.
Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.
Nes. 589, 590, 591 and 592 will stop on flag at Lucia, Moulton and Crusher for passengers.

Westward

SIXTH SUBDIVISION

Eastward

FIRST CLASS
353 351

Time Table No. 38F
Succeeding No. 38E
October 26, 1913.

FIRST CLASS
352 354

| STATIONS. | | Distance from Simpson | Distance from Elma | Car Capacity of Sidings | STATIONS. | | Distance from Chehalis Junction | Distance from South Bend | Car Capacity of Sidings | |
|----------------------------|-----|--------------------------|-----------------------|----------------------------|----------------------------|-----|------------------------------------|-----------------------------|----------------------------|--|
| SIMPSON | 1.2 | 0.0 | 11.6 | 7 Spur | CHEHALIS JCT. | 3.4 | 0.0 | 0.0 | Y | |
| SMITH | 1.1 | 1.2 | 10.4 | 4 Spur | LITTELL | 1.3 | 3.4 | 58.1 | 20 | |
| HILLGROVE | 0.2 | 2.3 | 9.3 | 4 Spur | ADNA | 2.5 | 4.7 | 51.8 | 37 | |
| McCLEARY JUNCTION | 0.8 | 2.5 | 9.1 | | BUNKER | 2.9 | 7.2 | 49.3 | Spur | |
| McCLEARY | 0.8 | 3.3 | 8.3 | 15 Spur | CERES | 6.1 | 10.1 | 48.4 | 35 | |
| McCLEARY JUNCTION | 2.6 | 4.1 | 7.5 | | LUEDINGHAUS R. R. CROSSING | 0.1 | 16.2 | 40.3 | Track Connection | |
| RAYVILLE | 0.9 | 6.7 | 4.9 | 4 Spur | DRYAD | 1.3 | 16.8 | 40.2 | 35 | |
| WHITE LUMBER CO. R. R. CR. | 0.2 | | | | DO | 4.7 | 17.6 | 38.9 | Spur 35 | |
| WHITE'S | 4.0 | 7.6 | 4.0 | 5 Spur | PE ELL | 1.4 | 22.3 | 34.2 | 60 | |
| ELMA | 0.0 | 11.6 | 0.0 | 80 | McCORMICK R. R. CROSSING | 0.6 | 23.7 | 32.8 | Track Connection | |
| | | | | | McCORMICK | 1.8 | 24.3 | 32.2 | Spur 15 | |
| | | | | | WALVILLE | 1.2 | 26.1 | 30.4 | Spur 15 | |
| | | | | | WALVILLE R. R. CROSSING | 1.6 | 27.3 | 29.2 | No Track Connection | |
| | | | | | PLUVIUS | 6.4 | 28.9 | 27.6 | 36 | |
| | | | | | FRANCES | 1.3 | 35.8 | 21.2 | 35 | |
| | | | | | GLOBE | 1.4 | 36.6 | 19.9 | Spur 15 | |
| | | | | | LEBAM | 4.3 | 38.0 | 18.5 | 14 | |
| | | | | | HOLCOMB | 4.2 | 42.3 | 14.2 | 30 | |
| | | | | | MENLO | 4.0 | 46.5 | 10.0 | 9 | |
| | | | | | WILLAPA | 2.6 | 50.5 | 6.0 | 16 | |
| | | | | | RAYMOND | 3.4 | 53.1 | 3.4 | 40 | |
| | | | | | SOUTH BEND | 0.0 | 56.5 | 0.0 | 150 | |
| | | | | | | | | | | |
| Time Over Subdivision | | | | | | | Time Over Subdivision | | | |
| Average Speed per Hour | | | | | | | Average Speed per Hour | | | |

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.
Registering Stations—Elma and McCleary.
Bulletin Station—Elma.
Switch in main track just above head switch leading to Siding at Simpson, must be set to act as derail.
Trains will not exceed thirty miles per hour on Sixth Subdivision.
Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.
No. 352 will connect with No. 321 at Elma.
Trains from Sixth Subdivision will ascertain Second Subdivision main line rights before occupying main line at Elma.
No. 351, No. 352, No. 353 and No. 354 will stop on flag at Church's Crossing.
Freight trains authorized to carry adult male passengers when provided with proper transportation between Elma and end of track, local freight.
Gates are installed at the crossings of private railroads over Northern Pacific tracks at White Star Lumber Co. crossing 3/4 mile east of Whites.
Normal position of gates is closed across the logging road. When crossing is being used by private companies' trains the gates will be closed across the Northern Pacific track. Northern Pacific trains will approach these crossings under control, prepared to stop, but full stop will not be required if it is found that the crossing is clear and gates in normal position. Switch lights will be maintained on these gates at night.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.
Register Station—Chehalis and South Bend.
Standard Clock—Centralia.
Bulletin Stations—South Bend.
Derailing Switches—Bunker, Meskill (East end), Walville (mill spur), Mays, Lebam (mill spur), Nallpee (log spur), Green Creek Spur and Wheaton.
Yard Limit Sign—Chehalis Junction, Raymond and South Bend.
Maximum speed of passenger trains forty-five miles per hour. Trains will not exceed 35 miles per hour between Frances and Pe Ell.
Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.
Maximum Grade—Between Frances and Pe Ell.
Helper District—Between Frances and Pe Ell.
Trains will stop 400 feet from draw span over South Fork of Willapa River, at Raymond. Will not proceed until draw is known to be closed. No. 391, No. 392, No. 393 and No. 394, will stop on flag at Meskill, Nallpee, and make regular stops at Ashlock and Mays.
Gates are installed at the crossings of private railroads over Northern Pacific tracks, as follows:
 Dryad, Leudinghaus Lbr. Co., crossing; East of McCormick, McCormick Lbr. Co., crossing; West of Walville, Walville Lbr. Co. crossing.
Normal position of gates is closed across the logging road. When crossing is being used by private companies' trains the gates will be closed across the Northern Pacific track. Northern Pacific trains will approach these crossings under control, prepared to stop, but full stop will not be required if it is found that the crossing is clear and gates in normal position. Switch lights will be maintained on these gates at night.
Hereafter when any slow boards are erected, they will be of the new standard reading in the following form:

SLOW
 25..... 35
 1/2 Mile
 The first figures being the speed for freight and the second the speed for passenger trains, and the distance given indicating the distance that the slow speed should be maintained commencing at the sign. If only one rate of speed given under the work slow this will be the limit for all trains.

Westward

TENTH SUBDIVISION
(BURNETT BRANCH)

Eastward

| FIRST CLASS | | | | Water, Fuel, Scales, Turn-tables and Wyes | Station Numbers | Distance from Spike-ton | Time Table No. 38F Succeeding No. 38E October 26, 1913 | | Distance from Cascade Jct. | Car Capacity of Sidings | FIRST CLASS | | | | | | | | |
|-------------|-----------|-----------|-----------|---|-----------------|-------------------------|--|-----------|----------------------------|-------------------------|-------------|-----------|----------|--|--|--|--|--|--|
| 295 | 293 | 375 | 373 | | | | 374 | 376 | | | 294 | 296 | | | | | | | |
| Passenger | Passenger | Passenger | Passenger | | | | Passenger | Passenger | | | Passenger | Passenger | | | | | | | |
| DAILY | DAILY | DAILY | DAILY | | | | | | | | | | | | | | | | |
| L 7.11PM | L 5.80PM | L 9.55AM | L 7.26AM | | CC 4 | 0.0 |SPIKETON..... | 3.4 | 45 | A 7.25AM | A 9.55AM | A 5.80PM | A 7.10PM | | | | | | |
| s 7.16 | s 5.85 | s 10.01 | s 7.84 | | CC 2 | 2.1 | BN.....BURNETT..... | 1.3 | 45 | s 7.15 | s 9.45 | s 5.20 | s 7.00 | | | | | | |
| A 7.21PM | A 5.40PM | A 10.06AM | A 7.89AM | | 1949 | 3.4 |CASCADE JCT..... | 0.0 | No Sdg. | L 7.10AM | L 9.40AM | L 5.15PM | L 6.55PM | | | | | | |
| DAILY | DAILY | DAILY | DAILY | | | | | | | DAILY | DAILY | DAILY | DAILY | | | | | | |
| .10 | .10 | .11 | .13 | | | | | | | .15 | .15 | .15 | .15 | | | | | | |
| 20.4 | 20.4 | 20.4 | 15.6 | | | | | | | 13.6 | 13.6 | 13.6 | 13.6 | | | | | | |

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

Registering Station.—Cascade Junction.

Derail Switch—Burnett, west end of siding, Black Carbon, Coal Company's spur, Spiketon, west end of siding, and main line, 100 feet east of station platform.

Speed of trains when backing up must not exceed 20 miles per hour.

Speed must not exceed ten miles per hour within the corporate limits of Burnett.

Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.

Hereafter when any slow boards are erected, they will be of the new standard reading in the following form:

SLOW
25..... 35
1/2..... Mile

The first figures being the speed for freight and the second the speed for passenger trains, and the distance given indicating the distance that the slow speed should be maintained commencing at the sign. If only one rate of speed given under the work slow this will be the limit for all trains.

Westward

TWELFTH SUBDIVISION
(ORTING BRANCH)

Eastward

| | | | | Water, Fuel, Scales, Turn-tables and Wyes | Station Numbers | Distance from End of Track | Time Table No. 38F Succeeding No. 38E October 26, 1913 | | Distance from Orting | Car Capacity of Sidings | | | | | | | | | |
|-----------------------------|--|--|--|---|-----------------|----------------------------|--|------|----------------------|-------------------------|--|--|--|--|--|--|--|--|--|
| STATIONS. | | | | | | | | | | | | | | | | | | | |
| Telegraph Offices and Calls | | | | | | | | | | | | | | | | | | | |
| | | | | | | 0.0 |END OF TRACK..... | 10.0 | | | | | | | | | | | |
| | | | | | | 1.3 | TACOMA & EASTERN CROSS'G | 8.7 | | | | | | | | | | | |
| | | | | | CE 8 | 2.7 |PUYALLUP RIVER..... | 7.3 | 10 | | | | | | | | | | |
| | | | | | WT 1958 | 10.0 | OG.....ORTING..... | 0.0 | 200 | | | | | | | | | | |

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

Registering Station.—Orting.

Derail Switch—400 feet east of Junction Switch at Orting.

Junction switch, one mile east of Orting station will be set for crossover, and track from cross-over to station will be used as a main line passing track.

Maximum grades on St. Paul & Tacoma Lumber Co.'s line east of Puyallup River.

Freight trains authorized to carry adult male passengers, when provided with proper transportation, Orting Log Train—Between Orting and End of track.

Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.

See special rules, page 12.

Westward

ELEVENTH SUBDIVISION
(WILKESON BRANCH)

Eastward

| THIRD CLASS | | | FIRST CLASS | | | Water, Fuel, Scales, Turn-tables and Wyes | Station Numbers | Distance from Fairfax | Time Table No. 38F Succeeding No. 38E October 26, 1913 | | Distance from Cascade Jct. | Car Capacity of Sidings | FIRST CLASS | | THIRD CLASS | | | | |
|-------------|-----------|-----------|-------------|-----------|-------------|---|------------------------------|-----------------------|--|-----------|----------------------------|-------------------------|-------------|--|-------------|--|--|--|--|
| 981 | 297 | 377 | 378 | 298 | 982 | | | | | | | | | | | | | | |
| Way Freight | Passenger | Passenger | Passenger | Passenger | Way Freight | | | | | | | | | | | | | | |
| EX. SUNDAY | DAILY | DAILY | DAILY | DAILY | EX. SUNDAY | | | | | | | | | | | | | | |
| L 1.40PM | L 4.25PM | L 6.10AM | L 1.40PM | L 4.25PM | L 6.10PM | | FX.....FAIRFAX..... | 15.5 | 5 | A 11.10AM | A 8.20PM | A 12.20PM | | | | | | | |
| s 2.10 | s 4.80 | s 6.15 | s 11.00 | s 8.15 | s 12.10PM | |MELMONT..... | 13.8 | 5 | s 11.00 | s 8.15 | s 12.10PM | | | | | | | |
| | | | | | | | 6.2 CARBON COAL CO. CROSSING | 9.3 | | | | | | | | | | | |
| s 2.80 | s 4.45 | s 6.85 | s 10.45 | s 8.00 | s 11.40AM | | CB.....CARBONADO..... | 8.7 | 5 | s 10.45 | s 8.00 | s 11.40AM | | | | | | | |
| s 3.80 | s 5.00 | s 6.55 | s 10.30 | s 7.45 | s 11.00 | | WX.....WILKESON..... | 4.9 | 90 | s 10.30 | s 7.45 | s 11.00 | | | | | | | |
| A 4.00PM | A 5.15PM | A 7.10AM | L 10.20AM | L 7.85 | L 8.00 | |CASCADE JCT..... | 0.0 | No Sdg. | L 10.06AM | L 7.21PM | L 7.15AM | | | | | | | |
| EX. SUNDAY | DAILY | DAILY | DAILY | DAILY | EX. SUNDAY | | | | | DAILY | DAILY | EX. SUNDAY | | | | | | | |
| 2.20 | .50 | 1.00 | .54 | .49 | 2.05 | | | | | .54 | .49 | 2.05 | | | | | | | |
| 6.5 | 8.6 | 15.5 | 17.2 | 19.0 | 7.4 | | | | | 17.2 | 19.0 | 7.4 | | | | | | | |

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

Helper District.—South Prairie to Carbonado

Maximum Grades.—Cascade Junction to Fairfax.

Registering Stations.—Fairfax and Cascade Junction.

Derail Switches.—At west end of coal track, Melmont; Fairfax, on Montezuma line, 2,500 feet east of depot.

Junction switch at Wilkeson, Carbonado and Fairfax will be set for Fairfax Line.

Trains will stop at railroad crossing about 1/4 mile east of Junction switch between Carbonado and Melmont.

Trains between Fairfax and Montezuma will look out for engine and motor car operated by Manley-Moore Lumber Company in this location.

Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.

No. 377 has right over No. 378 Fairfax to Cascade Junction.

Gates are installed at the crossing of private railroads over Northern Pacific tracks on:

Wilkeson Branch, Carbon Hill Coal Co. crossing.

Normal position of gates is closed across the logging road. When crossing is being used by private companies' trains the gates will be closed across the Northern Pacific track. Northern Pacific trains will approach these crossings under control, prepared to stop, but full stop will not be required if it is found that the crossing is clear and gates in normal position. Switch lights will be maintained on these gates at night.

Westward

THIRTEENTH SUBDIVISION
(CROCKER BRANCH)

Eastward

| | | | Water, Fuel, Scales, Turn-tables and Wyes | Station Numbers | Distance from Wingate | Time Table No. 38F Succeeding No. 38E October 26, 1913 | | Distance from Crocker | Car Capacity of Switch | | | | | | | | | | |
|-----------------------------|--|--|---|-----------------|-----------------------|--|-------------------|-----------------------|------------------------|--|--|--|--|--|--|--|--|--|--|
| STATIONS. | | | | | | | | | | | | | | | | | | | |
| Telegraph Offices and Calls | | | | | | | | | | | | | | | | | | | |
| | | | | | | 0.0 |WINGATE..... | 5.2 | 140 | | | | | | | | | | |
| | | | | | 1955 | 5.2 |CROCKER..... | 0.0 | 100 | | | | | | | | | | |

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

Registering Station.—Crocker.

Derail Switches—At Crocker. Wingate, west end of siding, Morse Spur.

See Special Rules Page 12.

Maximum Grades—Crocker to Wingate.

Restricted Clearance.—Wingate, Coke and Coal Bunkers, side and over-head.

Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.

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

EIGHTH SUBDIVISION—EASTWARD.

| | Class Z | | Class W | | Class Y-5 | | Class Y-2 | | Class F-1 | | Class S | | Class E-4 | | Class E-3 or D-3 | | Class C-6 | |
|-------------------------------|-----------------|-------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|------------------|------|-----------|------|
| | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars |
| Tacoma to South Prairie..... | ..... | ..... | 1200 | 80 | 1100 | 80 | 1000 | 60 | 900 | 60 | 800 | 60 | 500 | 17 | 475 | 16 | 350 | 12 |
| South Prairie to Buckley..... | ..... | ..... | 600 | 20 | 625 | 21 | 500 | 17 | 450 | 15 | 400 | 14 | 250 | 9 | 235 | 8 | 175 | 6 |
| Buckley to Palmer Jct..... | ..... | ..... | 1200 | 80 | 1100 | 80 | 1000 | 60 | 900 | 60 | 800 | 60 | 500 | 17 | 475 | 16 | 350 | 12 |
| Tacoma to South Prairie..... | Maximum 80 Cars | | Maximum 80 Cars | | Maximum 80 Cars | | Maximum 60 Cars | | Maximum 80 Cars | | Maximum 60 Cars | | Maximum 60 Cars | | Maximum 40 Cars | | | |

EIGHTH SUBDIVISION—WESTWARD.

| | | | | | | | | |
|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Palmer to Tacoma..... | Maximum 80 Cars | Maximum 80 Cars | Maximum 80 Cars | Maximum 80 Cars | Maximum 80 Cars | Maximum 60 Cars | Maximum 60 Cars | Maximum 60 Cars |
|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|

FIRST SUBDIVISION—WESTWARD.

| | Class W | | Class Y-2 | | Class F-1 | | Class S | | Class P | | Class E-4 | | Class E-3 | | Class D-3 | | Class C-6 | |
|------------------------------|---------|------|-----------|------|-----------|------|---------|------|---------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars | Tons | Cars |
| South Tacoma to Rainier..... | 1600 | 70 | 1350 | 70 | 1200 | 60 | 1150 | 60 | 1050 | 60 | 850 | 28 | 825 | 27 | 825 | 27 | 700 | 23 |
| Rainier to Chehalis..... | ..... | 110 | ..... | 110 | ..... | 60 | ..... | 60 | ..... | 60 | ..... | 60 | ..... | 50 | ..... | 50 | ..... | 40 |
| Chehalis to Napavine..... | 1200 | 70 | 1000 | 70 | 900 | 60 | 850 | 60 | 750 | 60 | 550 | 18 | 525 | 17 | 525 | 17 | 400 | 13 |
| Napavine to Portland..... | ..... | 110 | ..... | 110 | 1500 | 60 | 2000 | 60 | 1400 | 47 | 1200 | 40 | 1175 | 39 | 1175 | 39 | 1050 | 35 |

FIRST SUBDIVISION—EASTWARD.

| | | | | | | | | | | | | | | | | | | |
|--------------------------|------|-------|------|-------|------|-------|------|----|------|----|------|----|------|----|------|----|------|----|
| Portland to Sopenah..... | 2300 | ..... | 2000 | ..... | 1800 | ..... | 1800 | 45 | 1250 | 41 | 1050 | 35 | 1025 | 34 | 1025 | 34 | 900 | 30 |
| Sopenah to Napavine..... | 1350 | ..... | 1150 | ..... | 1010 | ..... | 960 | 32 | 860 | 29 | 660 | 22 | 635 | 21 | 635 | 21 | 510 | 17 |
| Napavine to Rainier..... | 1500 | ..... | 1250 | ..... | 1100 | ..... | 1050 | 35 | 950 | 31 | 750 | 25 | 725 | 24 | 725 | 24 | 600 | 20 |
| Rainier to Tacoma..... | 2500 | ..... | 2100 | ..... | 1750 | ..... | 1700 | 57 | 1500 | 50 | 1300 | 43 | 1275 | 42 | 1275 | 42 | 1150 | 38 |

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

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

the rating for each car in excess of the normal.

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

Rating of Locomotives in Tons of 2000 Pounds

| CLASSIFICATION | Engine Numbers | EAST BOUND | | | | | | | WEST BOUND | | | | |
|--|------------------------|--------------------|------------------|-------------------|---------------------|----------------------|-----------------------|-------------------|-----------------------|----------------------|-------------------------|-----------------------|----------------------|
| | | Portland to Kalama | Kalama to Olequa | Olequa to Winlock | Winlock to Napavine | Centralia to Rainier | Rainier to So. Tacoma | Tacoma to Seattle | Seattle to Tacoma Jct | Tacoma to So. Tacoma | So. Tacoma to Centralia | Centralia to Napavine | Napavine to Portland |
| T-63 $\frac{20}{24}$ 113... | 136-146..... | 1580 | 1200 | 990 | 720 | 790 | 1120 | 1280 | 1280 | 315 | 900 | 655 | 1580 |
| ..... | 170-207..... | 1900 | 1440 | 1190 | 870 | 960 | 1310 | 1540 | 1540 | 370 | 1080 | 800 | 1900 |
| T-69 $\frac{22}{28}$ 159... | 250-305..... | 2200 | 1680 | 1380 | 1000 | 1110 | 1560 | 1790 | 1790 | 440 | 1250 | 900 | 2200 |
| C-57 $\frac{15\frac{1}{2} \times 26}{30}$ 176... | 330-349..... | 2335 | 1790 | 1475 | 1075 | 1190 | 1680 | 1900 | 1900 | 500 | 1335 | 985 | 2335 |
| C-57 $\frac{22}{30}$ 187... | 350-400..... | 2940 | 2250 | 1860 | 1360 | 1490 | 2120 | 2380 | 2380 | 560 | 1680 | 1220 | 2940 |
| Mik-57 $\frac{23\frac{3}{4}}{30}$ 208... | 500-540..... | 3100 | 2340 | 1930 | 1450 | 1550 | 2200 | 2490 | 2490 | 580 | 1700 | 1250 | 3100 |
| M-63 $\frac{20}{28}$ 147... | C. R. Y. y P. 504-526. | 2050 | 1550 | 1300 | 940 | 1035 | 1500 | 1710 | 1710 | 400 | 1150 | 840 | 2050 |
| T-57 $\frac{20}{26}$ 132... | 720-727..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| P-77 $\frac{25}{28}$ 170... | 208-209..... | 2500 | 1900 | 1550 | 1160 | 1280 | 1800 | 2000 | 2000 | 500 | 1420 | 1050 | 2500 |
| S-55 $\frac{19}{26}$ 130... | 39-42..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 380 | ..... | ..... | ..... |

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

The speed of Class S-4 engines must not exceed ten (10) miles per hour over Howe truss bridges on any subdivision.

First Subdivision.—All classes except engines heavier than S must not go beyond house track switch leading from log dump track at Felida.

Second Division, Lakeview to Gate.—No engine heavier than P compound passenger engine and S at slow speed.

Second Subdivision, Gate to Hoquiam.—No engine heavier than S-4.

Engines heavier than Class E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Second Division, Hoquiam to Moclips.—No engine heavier than F-1. Engines heavier than Class E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Third Subdivision.—No engine heavier than Class S-4. Engines heavier than Class E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Fourth Subdivision, Aberdeen Jct. to Cosmopolis.—No engine heavier than F-1. Engines heavier than Class E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Cosmopolis Jct. to Ocosta.—No engine heavier than E-3. Engines heavier than E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Fifth Subdivision.—No engine heavier than F-1. Engines heavier than E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Sixth Subdivision.—No engine heavier than S-4. Engines heavier than E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Seventh Subdivision.—No engine heavier than Class S. Engines heavier than Class E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Eighth Subdivision.—All classes except Class Z Mallet Engines.

Ninth Subdivision.—No engine heavier than F-1. Engines heavier than Class E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Tenth Subdivision.—No engine heavier than Class S-4. **Eleventh Subdivision.**—No engine heavier than F-1. Engines heavier than Class E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Twelfth Subdivision.—No engine heavier than F-1. Engines heavier than Class E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

Thirteenth Subdivision.—No engine heavier than F-1. Engines heavier than Class E-3 must not double head over Howe truss bridges. Engines double heading must not exceed speed of 8 miles per hour over Howe truss bridges.

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

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

CLASS

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

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

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

SPECIAL RULES FIRST SUBDIVISION.

Passenger trains will register by ticket at South Tacoma, and Tenino.
 Nos. 679, 680, 691 and 692 will register by ticket at Tenino.
 Clearance will not be issued to westward trains at Tenino, unless Stop or Caution signal is displayed.
 Standard Clocks.—Tacoma, Centralia, Vancouver and Portland.
 Junction switch at the east end of Columbia River bridge, Vancouver, will be set and locked for N. P. main line.
 Trains and switch engines using track leading to the wharf at Vancouver, will come to a full stop before crossing S. P. & S. Ry. crossing and will not proceed until a flagman has been sent ahead to flag the crossing.
 At Vancouver, 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 full control before passing station, expecting to find main line occupied.
 Class S or heavier engines must not use incline track at Kalama, known as the "Salmon track." When doing switching on this track, enough cars must be used so that engine will not need to go on this track.
 All trains must not exceed ten miles per hour, through the corporate limits of Roy, Centralia, Chehalis, Winlock and Bucoda, and fifteen miles per hour through the corporate limits of Ridgefield.
Derailing Switches.—Rainier (Lindstrom Handforth Lumber Co.'s Spur); Tenino (Mutual Spur); Stone Quarry; Wabash. Interlocking derail on O.-W. R. & N. connection; Chehalis, east end of the House track; west end of Flour Mill track; Napavine (Summerville's Spur and Pitcher's Spur); Winlock (west end of passing track) Capital Mills on spur 500 feet from main line switch, Olequa (House track), Carrolls House track, Knapps House track.
Yard Limit Signs.—Centralia, Chehalis, Vancouver and Portland.
 Dupont Powder Co.'s Spur, located half mile east of Martin's Bluff, about 4,000 feet in length, derailing switch located 66 feet east of siding at magazine; safety switch 900 feet east of this derail, also derailing switch 250 feet from the main line switch. Derailing switches must be left set for derail and safety switch for the safety track. There is a 2.7 per cent grade descending eastward from the siding. Therefore, the utmost care must be used in handling switching on this track. Cars should never be left below the derailing switch at the summit of grade. Care must be used in approaching the county road crossing on this track and movement over the crossing fully safeguarded.
Switching Limits.—Signs indicate territory within which switching will be performed by yard crews. Switch engines going beyond yard limit boards must secure train rights.
 Evaline is a "Flag" stop for trains Nos. 307, 308, 369, 370, 361 and 362.
 No. 314 will stop at St. John's on flag for passengers for points north of Kalama.
 Nos. 358 and 359 will stop on flag at any station between Tacoma and Portland to receive or discharge passengers holding Great Northern tickets reading "Spokane or points east thereof."
Lap Sidings.—Roy and Rainier. Trains taking sidings will head in at the lap.
 Telephones are located at Chehalis and Chehalis Junction. Trains from seventh sub-division, South Bend branch, before leaving Chehalis Junction, will ascertain by telephone, position of all main line trains, and secure rights authorizing them to use tracks between Chehalis Junction and Chehalis before proceeding.
 Between Centralia and Wabash, the third or extreme right hand track going east, will be used as a switching lead, for the east end of Centralia yard, as far as Martin's Mill; any train going beyond Martin's Mill will obtain train order authority from dispatcher at Tacoma, by the use of telephone, which is located in the building formerly used for telegraph office at Wabash. Communication with Dispatcher can be had by the use of telephone located on the

Dispatcher's wire, in accordance with instructions, which will be found posted in the telephone booth. Under such authority, the third track will be used by trains to or from the Centralia Eastern Railway, and the Tono branch of the O.-W. R. & N. Co. at Wabash, and for such eastbound main line freight trains as may be designated by the yard master at Centralia. No cars will be left on this third track either by train crew or yard crews, without train order authority.
 Normal position of double track switch South Tacoma is for eastward track.
 Rule 316 is modified as follows: "Where the telephone is used, signal men will transmit the words represented by the figures".
 When reverse movement of trains is made, speed must not exceed 40 miles per hour on curves between Chehalis and Vader.
 Train handling logs on double track will not be permitted to meet passenger trains between stations. Conductor will inform dispatcher when he has logs in train and such train and opposing passenger trains will be blocked at each telegraph office in double track district to insure that no passenger trains are met. This does not apply between Hoquiam and Aberdeen.
Reduce Speed to 15 miles per hour at High Bluffs near mile post 76, one mile west of Vader, and look out for land slides.
 Hereafter when any slow boards are erected, they will be of the new standard reading in the following form:

| SLOW | |
|------|------|
| 25 | 35 |
| 1/2 | Mile |

The first figures being the speed for freight and the second the speed for passenger trains, and the distance given indicating the distance that the slow speed should be maintained commencing at the sign. If only one rate of speed given under the work slow this will be the limit for all trains.

Special Rules for Movement of Trains on Double Track.

On double track, as indicated by division time table, Rule 86 is modified to the extent that inferior class trains and extras may run ahead of second class trains without authority of a train order.
 In manual block territory any train moving against the current of traffic must receive a proper clearance card at every open block office.
 In automatic block territory Rule 514 does not apply to trains moving against the current of traffic, and the rear of the train must be protected as prescribed in Rule 99.
 To insure personal safety, operators having train orders or messages for passing trains should stand on the right hand side of the train and never stand between the tracks.
 Except as modified above, the Transportation Rules govern.

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

Automatic signal No. 115.9 west of Woodland is distant signal on west bound track; signal 117.8, east of Ridgefield, is distant signal on east bound track.
 Home signals located 1010 feet from draw span.
 Dwarf signals, 660 feet from draw span, between tracks.
 Home signals govern as follows:
 Upper arm governs trains moving in the direction of traffic, or using the right hand track.
 Arm horizontal, stop
 45 degrees upward, caution.
 90 degrees upward or vertical, proceed.
 Lower arm governs trains moving with traffic to the double track switch and which are to be diverted to the left hand track after crossing bridge or, slow movements with traffic, when for any reason the proper indication cannot be given with the upper arm, in which case position of lower arm will govern.
 Lower arm has two positions only. Horizontal, stop; 45 degrees upward, caution.
 Trains will not run against traffic even though proper signal to do so is received, without regular train order authority.

Under these instructions vertical indication will not be given with both arms of the semaphore at the same time, but engineers will be governed by the position of the arm which accords with movement they have been authorized to make, whether with or against traffic.
 Dwarf Signals, arm horizontal, stop; 45 degrees upward, proceed with caution.
 These dwarf signals have only two positions and govern back up movements with or against traffic and govern trains moving against traffic to the double track switch.
 Night indications of signals, when displayed on arms governing: Red, stop; yellow, caution; green, proceed; white light, stop (to govern in case of broken lens. A light failure, either a white light or a light extinguished, will be considered stop, and reported from first office).
 Derails are located 55 feet beyond signals, and are open when signals are at danger. Trains must come to a full stop at least thirty feet in advance of signal and wait until either "proceed" or "caution" signal is displayed.
 If, for any reason, signals become inoperative, trains will proceed after proper hand signals are given and it is known that derails are closed and bridge is clear.
 Hand signals shall consist of a green flag by day, and a green light by night, and are not to be recognized unless given from track.
 Except as noted, the automatic signals between Vancouver and Kalama govern in the direction of traffic only.

RULES GOVERNING INTERLOCKING PLANTS: WISHKAH RIVER DRAW SPAN, ABERDEEN—HOQUIAM RIVER DRAW SPAN, HOQUIAM.

Aberdeen.—Distant signal located 900 feet east of draw span. Home signal located 350 feet from draw span on either side of bridge.
Hoquiam.—Home signals located 350 feet from draw span on either side of bridge.
 There is also one located 200 feet east of the double track switch on the westward track.
 Dwarf signal located 200 feet east of the double track switch on the eastward track.
 Signals govern as follows:
Distant Signal.—Clear, or 90 degrees upward, indicates Home signal is clear.
 Forty-five degrees upward, or Caution, indicates Home signal is at Stop.
Home Signal.—Ninety degrees upward, or clear, proceed.
 Horizontal position or red light by night—Stop.

Dwarf Signal.—45 degrees upward, proceed with caution.
 Horizontal position—indication to stop.
 Derailing switch is located immediately in advance of home signals—will be in derailing position when signals are at Stop position.
 The Dwarf Signal governs back-up movement for eastward trains and governs track to the Home Signal, located 350 feet east of the draw span, only.
 The double track switch east of the Hoquiam River Draw Span is connected with the Interlocking Plant and is operated by the Towerman on the draw bridge. The normal position is for Westward trains.

COMMERCIAL SPURS.

| First Subdivision DISTANCE FROM TACOMA. | Second Subdivision DISTANCE FROM LAKEVIEW. | Third Subdivision DISTANCE FROM CENTRALIA. | Sixth Subdivision DISTANCE FROM ELMA. | Seventh Subdivision Continued DISTANCE FROM CHEHALIS JC. | Eighth Subdivision DISTANCE FROM PALMER JCT. | Eleventh Subdivision DISTANCE FROM CASCADE JCT. |
|--|---|---|--|--|--|---|
| Scheel..... 38.2 | Molberg..... 16.0 | Forans..... 2.9 | Krafts..... 2.00 | Guerrier..... 35.0 | Big 6..... 1.6 | |
| Mutual..... 38.3 | Standard Oil Co..... 23.4 | | | Forrest..... 36.3 | Occidental..... 1.8 | |
| Polehn..... 41.3 | Black Lake..... 28.2 | Fifth Subdivision DISTANCE FROM YACOLT. | Seventh Subdivision DISTANCE FROM CHEHALIS JC. | Nallpee..... 41.2 | Nolte..... 1.8 | Twelfth Subdivision DISTANCE FROM ORTING. |
| Evaline..... 65.0 | Overton..... 33.4 | Dole..... 2.4 | Meskill..... 12.5 | Green Creek..... 44.0 | Fleet..... 3.4 | |
| Veness..... 69.7 | Bagshaw..... 50.5 | Crusher..... 3.9 | Mays..... 13.0 | Wheaton..... 45.0 | Rosemar..... 4.0 | Electron Rock Crusher..... 8.6 |
| Englands..... 105.6 | Smith & Prosser..... 48.6 | Bouton Perkins..... 4.7 | Onn..... 16.9 | Shore..... 52.0 | Myerson..... 5.8 | |
| Hermione..... 109.1 | Weatherwax..... 73.9 | Lucia..... 4.9 | Ashlock..... 28.1 | Turney..... 54.0 | Blackburn..... 11.1 | Thirteenth Subdivision DISTANCE FROM CROCKER. |
| | Stockwell..... 74.4 | | Custer..... 34.6 | Mayfair..... 55.5 | Webstone..... 12.5 | Morse..... 2.1 |
| | Carlisle..... 106.5 | | | | Valley Mill..... 13.9 | |
| | | | | | Tenth Subdivision DISTANCE FROM CASCADE JCT. | |
| | | | | | Black Carbon..... 3.00 | |

SPECIAL INSTRUCTIONS REGARDING USE OF STAFF ON SUBDIVISIONS AND SPURS.

Dupont Spur on Second Sub-Division at Dupont.
 Hoquiam River Spur on Second Sub-Division at Hoquiam.
 Centralia Eastern Ry. at Wabash, on 1st Sub-Division main line.
 Orting Branch, 12th Sub-Division

Crocker Branch, 13th Sub-Division.
 Before using these tracks trains will obtain staff, which is located in staff box, at each Junction.
 All other trains using these tracks, must be operated under protection as per Rule 99.

For completion of Dispatcher's record of service, operator at Main Line Junction will telegraph copy of register, including mileage made, information to be shown on register by conductor.
 If there is no operator at junction point, information will be telegraphed from first open telegraph station.

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

SEATTLE—

Dr. Montgomery Russell, Division Surgeon.
Dr. F. R. Underwood, Assistant Surgeon,
618-20-22 Leary Bldg.
District between Seattle and Tacoma.
Drs. Woods & Samules, Oculist and Aurist,
Cobb Bldg.

AUBURN—

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

TACOMA—

Dr. Chas. James, District Surgeon, 304 Berlin Bldg.
District between Auburn and Tenino.

TENINO—

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

VADER—

Dr. R. H. Campbell, District Surgeon.
District between Castle Rock and Centralia.

CENTRALIA—

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

CASTLE ROCK—

Dr. C. P. Fryer, District Surgeon.
District between Kelso and Winlock.

KELSO—

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

KALAMA—

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

VANCOUVER—

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

ALBINA—

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

PORTLAND—

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

AUTHORIZED SURGEONS, N. P. RY. CO.

Location of Stretchers (S).

Dr. S. W. Mowers, Chief Surgeon, Western Div., Tacoma.
Dr. J. H. Sheets, Buckley (S).
P. B. Sweet, Kangley, Wn.

Dr. E. P. Helker, Wilkeson, Wn. Orting (S).
Puyallup (S).
Tacoma Hospital (S).
Tacoma Round House (S).
Tacoma Moon Yard Office, (S)
Head-of-Bay Yard Office, (S)

Tacoma Baggage Room (S).
Tacoma Wharf (S).
Tacoma (Toolcar) (S).
Dr. P. B. Swearingen, So. Tacoma (S)
Dr. E. L. Carlsen, So, Tacoma (S).

Dr. G. W. Kennicott, Chehalis.
Dr. J. W. Mowell, Olympia (S).
Dr. J. H. Dumon, Centralia (S).
Dr. E. P. French, Elma.
Dr. F. L. Carr, Montesano (S).

Dr. H. C. Watkins, Hoquiam.
Dr. Paul Smith, Aberdeen.
Dr. A. B. MacLean, Pe Ell.
Dr. W. Anderson, So. Bend (S).
Dr. N. C. McLafferty, Winlock.

Dr. O. K. Wolf, Castle Rock.
Dr. C. A. MacCallum, Kalama (S).
Dr. J. T. Guerin, Vancouver (S).
Dr. Andrew G. Smith, Portland (S).
Dr. P. B. Wing, Oculist, Tacoma.

Dr. W. G. Cameron, Specialist, Tacoma.
Dr. J. F. Dickson, Oculist, Portland
Dr. D. D. Stone, Yacolt (S).

Note.

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

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

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

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

AUTHORIZED SURGEONS, G. N. RY. CO.

Dr. J. A. La Gasa, Tacoma

Special Rules Second Subdivision (Gray's Harbor Line).

Northern Pacific trains look out for trains of Mason County Logging Co. between Bordeaux Jct. and siding located about 1000 feet west on tracks of the Mason County Logging Co. The Logging Co's. train connects at Bordeaux Jct. with trains No. 366, 321, 324 and 365. Northern Pacific trains must keep clear of Logging Co's. trains during that time.

At Montesano passing track located one half mile east of depot, is time card station.

Switching Limits.—Signs indicate territory within which switching will be performed by yard crews. Switch engines going beyond yard limit boards must secure train rights.

Yard Limit Signs.—Olympia, Gate, Aberdeen, "In Aberdeen passenger station yard limits all trains, yard engines and light engines will move under control. Under control means to be able to stop within the distance the track can be seen to be clear." Hoquiam.

At Aberdeen the passenger station is operated under O-W. R. R. & N. rules.

Clearance will not be issued at Olympia, Gate, Elma and Aberdeen Jct., unless stop signal is displayed.

Trains will register by ticket at Lakeview; will not be required to procure clearance unless Stop or Caution signal is displayed.

Trains from Second Subdivision must ascertain First Subdivision rights before occupying main line at Lakeview.

Bulletin Stations.—Olympia, Hoquiam and Moclips.

Standard Clocks.—Tacoma.

Maximum Grades.—3½ miles west of Sherlock; 3 miles east to 2 miles west of Olympia.

Junction switches will be set for line Olympia to Moclips.

No. 366 will connect with No. 582 and No. 321 with No. 581 at Aberdeen Jct.

No. 351 will connect with No. 587 at Hoquiam.

No. 365, No. 366, No. 587 and No. 588 will make regular stop at Carlisle, 3.1 miles west of Copalis Crossing.

No. 365 and 366 will stop on flag at Burrows, 2.0 miles west of Chenois Creek, and at Bale, 0.9 miles west of Copalis Crossing.

No. 365 will stop on flag at Wilderness, 1.8 miles west of Tulips.

No. 366 will make regular stop at Wilderness, 1.8 miles west of Tulips.

No. 365 will connect with No. 353 at Elma.

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

Golf Links, 3 miles east of Aberdeen Jct., is regular stop for trains 275, 276, 351 and 352, and is flag stop for train No. 365.

No. 322 will stop at Belmore Saturday for passengers.

No. 351, No. 352, No. 275 and No. 276 will make regular stop at Woods Crossing, 2 miles west of Satsop.

When No. 321 meets No. 352 at Montesano, No. 352 takes siding.

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

The East switch of passing track at Gate connects with the west leg of wye. Normal position is for the passing track.

Trains will approach Gate looking out for trains to and from Third Sub-divisions turning on wye.

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

Northern Pacific engines must not run on trestles Vance Lumber Co., tracks at Malone. In doing work a sufficient number of cars should be used so that it will not be necessary for engines to run on trestle.

Telegraphones are located in section house at Sherlock, in depot at Lacey, and in section house at Belmore, and are connected with telegraph office at Olympia, and may be used by train crews in emergency.

Derail Switches.—At east end of house track at Dupont Powder Company track, 950 feet from passing track connections, Elma, at Vance's Spur, at Mack's Spur, at east end of Satsop Siding, at Aberdeen Jct., coal bunker track, Copalis Spur, and at Bales Spur, just west of Copalis.

The movement of Port Townsend Southern trains from transfer track near Port Townsend Southern crossing to Northern Pacific depot, and from Northern Pacific depot to transfer track, will be protected as per rule 99. All Northern Pacific trains will approach these points with train under control, expecting to be flagged by flagman of Port Townsend Southern train.

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

The tunnel district at Olympia is protected by automatic electric disc signals located as follows: No. 1 (large disc) just west of passenger station; No. 2 (small disc) just east of passenger station; No. 3 (switch indicator) at east end of team track; No. 4 (large disc) just east of tunnel. **INDICATIONS.**—"Clear" a clear disc by day and a green light by night. "Stop" a red banner by day and a red light by night. Train and engine men will be governed as follows: **Eastward.**—Finding either signal 1 or 2 at **Stop** will protect against westward trains coming out of tunnel. Clear indication on signal No. 1 is authority to run only to signal No. 2, which must not be passed unless clear. Crews switching at east end of team track must get clear indication on No. 3 signal before throwing switch, which will set signals 1, 2, 3 and 4 at "Stop" and may continue to switch with switch indicator at stop, but when main line has been cleared and switch closed, switch indicator must show clear before switch is again thrown or main line obstructed. Trains or engines coming from Jefferson Street Line must get clear No. 4 signal before throwing main line switch. Train and engine men must observe position of signals before engine reaches them and finding any signal at "Stop" will not pass it, and will be governed by Rule No. 99. If apparatus fails, signal will indicate "Stop", and train will proceed through block under protection of flagman in advance, as per Rule No. 99.

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

Side track, length 2,000 feet, located on the Mason County Logging Co.'s road, 1,935 feet from main line switch at Bordeaux Junction. Mason County Logging Company will deliver loads to Northern Pacific Ry. Co. at this siding, and N. P. crews will leave empties for Logging Company at same location. N. P. train crews will not operate on Mason County Co.'s line, beyond siding.

The single track between the passenger station at Hoquiam, and the double track switch located 500 feet east of the Hoquiam River draw bridge, Hoquiam, will be operated under yard limit rules. Before using single track, trains must have time table or train order rights, or be fully protected as per Rule 99. All trains will ascertain position of double track switches before using, and will be under full control on the single track at Hoquiam.

Double track switch, Aberdeen, is located 250 feet east of passenger station. Switch will be set and locked for eastward trains. Switch leading to O-W. R. R. & N. located 50 feet east of double track switch, Aberdeen normal position for O-W. R. R. & N.

Freight trains authorized to carry adult male passengers, when provided with proper transportation. Olympia Log Train—Between Olympia and Bordeaux.

Reduce Speed.—Ten miles per hour between Nisqually River Bridge and Mile Post 11, East of Sherlock; ten miles per hour over Fill at Mile Post 15, one-half mile east of Coyleston; fifteen miles per hour through Olympia Subway and around the curve at East end of Subway; twenty-five miles per hour between Gate and Mima; fifteen miles per hour along Bluffs West of Grays Harbor City.

Speed of trains through cross-over tracks or entering sidings must not exceed 15 miles per hour.

Hereafter when any slow boards are erected, they will be of the new standard reading in the following form:

SLOW

25..... 35
 ½.....Mile

The first figures being the speed for freight and the second the speed for passenger trains, and the distance given indicating the distance that the slow speed should be maintained commencing at the sign. If only one rate of speed given under the work slow this will be the limit for all trains.

J. S. DEAN,
Train Master, Tacoma

J. F. ALSIP,
Chief Dispatcher, Tacoma

