

# **NORTHERN PACIFIC RAILWAY COMPANY**

## **TACOMA DIVISION**

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# **Special Instructions No. 1**

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

**Sunday, July 9, 1933**

**These Instructions govern Current Time Table.  
Read carefully and be positive that you have the  
Current Time Table, also copy of Current Special  
Instructions.**

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**W. C. SLOAN,  
General Manager.**

**R. T. TAYLOR,  
Superintendent.**

**T. F. LOWRY,  
Assistant General Manager.**

**P. H. McCAULEY,  
General Superintendent of  
Transportation.**

# SPECIAL INSTRUCTIONS

## FIRST SUBDIVISION.

### (MAIN LINE)

1. **Card train order Form AB** will govern the movement of trains between East Auburn and Auburn and between East Auburn and Auburn Yard, and trains must not move in this territory unless conductor and engineman each hold a copy properly filled out.
2. **Automatic signals between Lester and Easton**—Attention is particularly directed to signals with two arms, used where traffic is moved in the same direction on parallel tracks. The signals governing eastward track between Lester and Stampede govern eastward trains only. The signals governing the westward track between Stampede and Lester govern trains in either direction. Eastward trains using westward track will be governed by Stop-signal 1400 feet east of Lester. When train crosses over from westward to eastward track at Kennedy the lower arm of signal at cross-over governs movement. When both cross-over switches are open this signal will show clear or caution indication if block is not occupied. The signals governing eastward track between Martin and Easton are operative for trains in either direction. Westward trains using eastward track will be governed by Stop-signal 600 feet west of Easton. When train crosses over at cross-over east of Tunnel No. 2 the lower arm on signal at east end of cross-over will govern the movement and when both cross-over switches are open the signal will show clear or caution indication if block is not occupied. The signals governing westward track between Easton and cross-over at Tunnel No. 2 cut govern westward trains only. The signals governing westward track between Tunnel No. 2 cut and Martin govern trains in either direction. Eastward trains using westward track will be governed by Stop-signal at east switch at Martin and if instructed to cross over to eastward track at cross-over east of Tunnel No. 2 will be governed by lower arm on signal at west end of cross-over, when both cross-over switches are open this signal will show clear or caution indication if block is not occupied. Eastward trains using the westward track through to Easton must have train order authority to pass stop signal east of Tunnel No. 2.
3. **At East Auburn** the transfer track will be used as siding. The Gravel Pit Siding will be known as "Extension," and may be used by trains as per Rule 105, or when directed by train dispatcher. Eastward trains holding main track meeting westward trains, will stop west of overlap sign opposite Signal 1025 and remain there until westward train has passed Signal 1013. Enginemen on passenger trains will keep air applied while switching.
4. **At Palmer Junction**—Westward trains holding main track, meeting eastward trains, will stop east of the overlap sign about 1,000 feet east of Junction switch.
5. **Between Headworks and Humphrey** all toilets in trains must be kept locked and employees are cautioned against throwing off refuse or articles which might become unsanitary.
6. **At Humphrey**—No. 1 track will be used as westward siding and No. 2 track as eastward siding.
7. **At Lester**—Number 1 Track will be used as Westward Siding, Number 2 Track as Eastward Siding.
8. **At Martin**—Westward passenger trains when meeting freight trains must not enter Tunnel No. 3 until tunnel has been cleared of smoke.
9. **At Easton**—Normal position of switch leading from East end of West Number 2 Track to Eastward Main Track is for Number 2 Track.
10. **At Cle Elum**—Electric coal bunker, on west extension, will not clear man on side of car or engine. Logs will not be handled on this track.
11. **At Dudley**—No. 1 track will be used as westward siding and No. 2 track as eastward siding.
12. **At Ellensburg**—All trains approach Ellensburg passenger station at restricted speed. When passenger trains meet at Ellensburg inferior train will take siding on City Track, unless otherwise instructed. Number One Track in East Yard (East of Fifth Street) will be used as WESTWARD SIDING, and Number One Track in West Yard (West of Fifth Street) will be used as EASTWARD SIDING.
13. **At Yakima**—All trains approach passenger station at restricted speed. Time of first class trains and passenger extras applies at passenger station. When passenger trains meet at Yakima, inferior train will take siding on high-line pocket unless otherwise instructed. Switching Lead extending 1500 feet eastward from the east switch of Track 1, normal position of this switch is for the switching lead to serve as a derail, protecting all yard tracks. To avoid blocking street crossings, westward trains with more than 65 cars will not leave the east yard, when meeting trains, until the eastward train arrives. Flagman must precede cars shovled or light engines backing over Yakima Avenue crossing in addition to gate protection.
14. **Staff system between Stampede and Martin**—No train, engine or self-propelled car will run in either direction until engineman receives from operator a staff which must be retained and delivered to the operator at the opposite end of the block. The possession of a staff makes the train superior to all other trains between Stampede and Martin. The eastward train order signal at Stampede, and westward train order signal at Martin, are interlocked with staff machines in the telegraph office at Stampede and Martin, and except when used must be set normally at stop and cannot be cleared until the operator at opposite end of block returns staff to machine, which must not be done until rear of train has passed 300 feet beyond the signal. After signal has been cleared for a train entering the tunnel it must be restored to stop immediately after the rear of the train has passed the signal. To use the switches in Old Stampede yard, the staff must be used to unlock switch levers, and levers will have to be returned to normal position before staff can be moved. These tracks cannot be used for trains or engines getting into clear as the staff which is used for unlocking the switches must be returned to machine at Stampede or Martin. Pusher staff will not unlock switches. When a helper engine is used behind caboose or on rear of passenger train, operators at Stampede will be prepared to deliver pusher staff to engineman. When engine is cut off at Old Stampede, the pusher staff will be his authority to return to Stampede. The pusher staff cannot be put into the machine at Martin but must be returned to the machine at Stampede. In tunnel section between double track switch at Martin and double track switch at Stampede, flagging is not required. Headlight will be used both day and night.
15. **Mountain Grade Operation**—Mountain grade between Easton and Lester.
  - (a) Engines pushing freight trains between Lester and Easton may be cut off while moving; speed to be reduced to ten (10) miles per hour before pusher engine is detached. When helper engines are used on rear of freight trains, they must be placed in advance of cars of insufficient strength to safely resist the push of such engines. Under no conditions will more than one helper be placed behind caboose. When a passenger train is furnished two (2) helper engines over Cascade Mountain, the lighter engine must be placed on the rear of train.
  - (b) At Martin when block is not clear for eastward trains operator will head them in on eastward siding.
  - (c) Sidings between Tunnel No. 3 and westward switches of sidings west of Tunnel No. 4 will be considered in Stampede station limits. The sidings between Tunnels Nos. 3 and 4 must not be used for the meeting or passing of train.
  - (d) Normal position of double track switches at Easton and Stampede will be for westward trains and at Martin and Lester for eastward trains.
  - (e) Eastward freight trains will stop at Lester for Terminal Air Test and at Easton for inspection and to cool wheels.

- (f) Westward freight trains will stop at Easton for Terminal Air Test, and at Lester for inspection and to cool wheels.
- (g) In order to facilitate the terminal test of air brakes on freight trains at Lester and Easton, as required by Transportation Rule No. 1003, engineman who is handling the air brakes will before the engine is detached to take coal, water, or do station work, make a straight twenty pound reduction from maximum brake pipe pressure with the automatic brake valve. As soon as the brake valve has stopped exhausting engineman will give one blast of the whistle. Trainmen will not close angle cock to detach engine until this signal is given. Immediately after the brakes have been applied a car to car inspection of the brakes will be made. Defect card, Form 684, properly filled out, must be attached to any car on which the air brake has failed to apply. This inspection must be completed within fifteen (15) minutes after the brake application. The air must not be coupled into the train from the helper or road engine until the enginemen have been informed that the inspection has been completed. If, for any reason, the road engine is not detached, the brakes must be applied and the test made as outlined above. Conductors and engineman must fill out air test card, Form 3632, before leaving Easton or Lester.
- (i) Through Tunnel No. 3—On whistling for either Martin or Stampede, the enginemen will cut out low pressure governor head, then increase train line pressure to 90 pounds by turning up feed valve. When stop is made at Easton eastbound and Lester westbound restore train line pressure to 70 pounds by cutting in low pressure governor and readjusting feed valve.
- (j) Following this he must obtain "Proceed" signal before entering Tunnel No. 3 to be passed from conductor to head engineman by helper engine whistle and head brakeman. Conductor will not give this signal until the train pipe pressure in the caboose has been increased to at least 80 pounds.
- (k) On westward trains of all empties one-third of the retaining valves will be turned up commencing at the head end and alternating every third car before entering Tunnel No. 3 and stop will be made at New Stampede to turn up balance of retainers. With other freight trains, before entering Tunnel No. 3 turn up all retaining valves Westward, and all but the rear one-third Eastward turning all up before leaving Martin.
- (l) If for any reason the train breaks in two or more parts while in Tunnel No. 3, train and engineman should arrange to get engines out of tunnel as promptly as possible. If necessary, take engines and cars out in either or both directions. When portion of train is left in tunnel, same should be made secure by blocking and not moved out until smoke and gas have cleared and it can be done safely. Blocking will be found on walls of tunnel on right hand side going east, about 100 feet apart and six feet above the rail.
- (m) Descending trains will carry 90 pounds train pipe pressure to Lester and to Easton. Following any stops during the descent the engineman must fully recharge the brakes before starting and the conductor must not give the "Proceed" signal until at least 80 pounds is shown by the caboose gauge.
- (n) If enginemen handling eastward freight trains find that fan at mouth of Tunnel No. 3, Stampede, is in operation when passing vents, train must be stopped at once and engineer in charge of plant notified to stop the fans.
- (o) Conductors in charge of freight trains will wire operators at Martin or Stampede, as the case may be, when they have stockmen or messengers or any one legitimately carried on train in excess of regular train crew so that operators can hand up sufficient number of respirators.
- (p) Speed of trains through Stampede Tunnel No. 3 must not exceed 30 miles per hour and must be so controlled that they can be stopped on emerging. Passenger trains must not exceed 30 miles per hour and freight trains 20 miles per hour Martin to Hubner eastward or Stampede to Lester westward. Passenger trains must not exceed 25 miles per hour and freight trains 15 miles per hour Hubner to Martin westward and Lester to Stampede eastward, nor while running against the current of traffic between these points.
16. **Retaining Valves** will be used LESTER TO EAST AUBURN on trains of 60 cars or more as follows:  
Trains of 60 to 80 cars will use 12 retainers.  
Trains of 80 cars or more will use 18 retainers.  
Same to be turned up on cars from the head end alternating by

using the retainer on every other car, or the first, third, fifth, etc. On trains of less than sixty cars, retainers will be used on request of the engineman but not to exceed ten. These retaining valves must be turned down before engine passes over the hump at bridge between East Auburn and east leg of wye.

17. **Helper District**—Between Easton and Lester.
18. **Pusher District**—Between Auburn and Lester.
19. **Yard Limits**—Track between Yard Limit Signs East of Palmer Junction and West of Kanaskat will be operated as one yard.
20. **Bridge and Engine Restrictions**—  
Class A and A-1 engines twenty (20) miles per hour over  
Bridge 98 between Pomona and Hillside.  
Bridge 122 between Thrall and Ellensburg.  
Bridge 32 between Nelson and Talmage.  
Bridge 34-1 between Talmage and Easton.  
Bridge 101 between Wynaco and East Auburn.  
Bridges 102 and 102-1 between East Auburn and Auburn.
21. **Speed Restrictions**—First Class Trains will not exceed schedule time between Thrall and Hillside. Freight trains thirty (30) miles per hour between Thrall and Selah.  
CLE ELUM, twenty-five (25) miles per hour over important street crossings.  
YAKIMA, ten (10) miles per hour within corporate limits.
22. **Register Stations**—  
Yakima Passenger Station for first class and passenger extras.  
Yakima yard office for second class and inferior trains except passenger extras.  
Easton—For westward trains and trains originating and terminating.  
Lester—For eastward trains and trains originating and terminating.  
Auburn Yard—For trains originating and terminating.
23. **Commercial Spurs**—
- |                 | Miles from<br>Yakima | Car<br>Capacity |
|-----------------|----------------------|-----------------|
| Holmes .....    | 34.6                 | 12              |
| Haybow .....    | 39.1                 | 11              |
| Taneum .....    | 46.6                 | Conn.           |
| Swauk .....     | 50.1                 | Conn.           |
| Hubner .....    | 77.6                 | Conn.           |
| Nagrom .....    | 101.8                | 20              |
| Baldi .....     | 109.9                | 8               |
| Headworks ..... | 115.8                | 7               |
| Henrys .....    | 126.2                | Conn.           |
| Newker .....    | 127.2                | Conn.           |
24. **Lap Sidings**—Selah, Pomona, Thrall, Thorp, Teanaway, Maywood, Eagle Gorge, Kanaskat, Covington.
25. **Cross-overs**—Easton, Kennedy, Lester.

## SECOND SUBDIVISION.

1. **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.  
Trains must not move in this territory unless conductor and engineman each hold a copy properly filled out.
2. **At Seattle**—Trains and light engines entering King Street Station from the East must not pass the stand pipe at East 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 the dwarf type (low semaphores) to the right of track governed; where two arm are on one post, upper arm governs trains on main track and lower arm trains diverging from main track.  
Trains or engines must not pass over Atlantic Street crossings, Colorado Avenue 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 for Chicago, Milwaukee, Saint Paul and Pacific, three for the P. C. R. R. and four for the O.-W. R. & N. When no crossing flagman is on duty trains must flag themselves across.  
At Spokane Street Tower following whistle signals to be used for interlocking routes.
- |                            |                 |  |
|----------------------------|-----------------|--|
| To or from Argo .....      | 2 long          |  |
| From West Seattle .....    | 1 long, 1 short |  |
| To West Seattle Line ..... | 1 long, 2 short |  |

3. **At Argo**—Following whistle signals to be used for interlocking routes:  
Colorado Avenue Line: One Long, One Short, One Long.  
Short Line: Two Short, One Long.  
Eastward to Westward Main Track through crossover: Four Short.  
Eastward Main Track to Coal Spur: Four Short.
4. **At Auburn**—All trains will approach junction switch and crossovers at east end of depot platform at restricted speed.
5. **At Reservation**—Freight trains, light engines and yard engines may use draw bridge line between Reservation and O. W. R. & N. Crossing Tower about one-half mile east without card train order Form AB, protecting against first class trains. All trains, light engines or yard engines with or without card Form AB must move through this territory at restricted speed.
6. **At 15th St. Tower**—A single arm semaphore near junction of line leading to Tacoma Union Station and Drawbridge Line is controlled by Towerman and governs single track passenger line between 15th St. and Union Station. No train from the Drawbridge Line or westward main track will enter Union Station when signal is at stop.
7. **At Tacoma**—No train will proceed from Union Station to Drawbridge Line or westward main track when signal on incline is at stop. This signal is operated by Towerman at 15th St. and is equipped with two semaphore arms. The lower arm governs movement from Union Station to Drawbridge Line. The upper arm governs movement, Union Station to westward main track. Trains will call for signal by using push button when ready to leave Union Station.
8. **Bridge and Engine Restrictions**—  
Bridge 12.3 Dempsey Tide Flat line Tacoma Terminal eight (8) miles per hour, class Q engines and heavier not permitted.  
Bridge 36.8 West Seattle line fifteen (15) miles per hour.  
Bridge 39 Tacoma Waterway fifteen (15) miles per hour.  
Bridges 6 and 7, between Argo and Black River, N. P. classes A and A-1, G. N. Class P-2, twenty (20) miles per hour.
9. **Speed Restrictions**—  
AT SEATTLE, all trains move at restricted speed between switches of the cross-over east of the East Wye Switch Spokane Street and King Street Station, second class and inferior trains, switch engines and light engines may use main tracks with current of traffic between East 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.  
SPOKANE STREET AND HORTON STREET fifteen (15) miles per hour.  
KING STREET STATION over switches eight (8) miles per hour.  
AUBURN over streets within corporate limits twenty (20) miles per hour.  
KENT, SUMNER AND PUYALLUP, over streets within corporate limits twenty-five (25) miles per hour.  
TACOMA—Approach cross-over switches at East "D" Street and South 21st Street (on Head of Bay Line) at restricted speed and be governed by signal from switchtender, green flag by day, green light by night.  
Trains or engines entering or leaving Union Station between 15th Street Tower and 21st Street ten (10) miles per hour.  
15TH STREET TOWER, while any portion of train passing over switches ten (10) miles per hour.  
BETWEEN TACOMA AND RESERVATION (via Head of Bay Line), twenty (20) miles per hour.
10. **Register Stations**—Seattle (King Street Station), Middle Yard, Auburn Yard Office, for trains originating or terminating. Tacoma Union Station for passenger trains; Yard Office for freight trains.
11. **Cross-overs**—Seattle, Middle Yard, Black River, C. M. St. P. & P. Crossing, Kent, Auburn, Sumner, Puyallup, Reservation.
2. **At Vancouver Junction**—Derail on West Leg of Wye.
3. **At Nisqually**—Trains from Seventeenth Subdivision must not pass Automatic Block Signal 245 to enter the Third Subdivision if signal indicates stop, except under protection of flag. If signal indicates proceed, movement may be made without flag protection.
4. **At Saint Clair**—Trains from the Sixteenth Subdivision must not pass Automatic Block Signal 284 to enter the Third Subdivision if signal indicates stop, except under protection of flag. If signal indicates proceed, movement may be made without flag protection.
5. **At Tenino Junction**—Trains from the Fourth Subdivision must not pass Automatic Block Signal 435 to enter the Third Subdivision if signal indicates stop, except under protection of flag against first class trains. If signal indicates proceed, movement may be made without flag protection against first class trains.
6. **At Chehalis Junction**—When the Home Signal will not clear for trains from the Twenty-first Subdivision they will be governed by Interlocking Rules, except that before proceeding on Hand Signals they must be sure there is no immediate movement evident on the Milwaukee tracks. The junction and cross-over switches must be operated by hand. Trains crossing over from westward track to enter C. M. St. P. & P. R. R. will be governed by lower light of westward home signal.
7. **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.
8. **At Olequa**—Distant signal normal position "Caution" 1566 feet west of depot on Longview Line between Olequa and Vader Junction.  
Distant signal normal position "Caution" 1340 feet east of depot on Longview Line. Automatic signal 808 normal position "Stop" 15 feet east of junction switch on Longview Line governs movement of westward trains for Longview Line to Double track. Signal 808 will indicate "Proceed" when junction switch is set for movement of westward trains from Longview Line to double track. Normal position of spring switch at junction on Longview Line is for connection to double track. Train order signal on double track side of depot governs trains moving via Third Subdivision and train order signal on opposite side governs trains between Olequa and Vader Junction on Longview Line.  
Junction and cross-over switches will be handled by operator when on duty for trains to and from Longview Line.
9. **At Vancouver**—Junction switch at west end of Columbia River Bridge will be set for Northern Pacific Main Track. Eastward trains approach passenger station at restricted speed and stop before engine reaches point of clearance between N. P. and S. P. & S. tracks.
10. **Yard Limits**—Track between Yard Limit Signs east of Centralia and west of Wabash will be operated as one yard.  
Track between West Yard Limit Signs, 11,187 feet west of Longview Passenger Station and Junction Switch at Longview Junction will be operated as one yard.
11. **Drawbridge Interlocking**—  
LEWIS RIVER 2.5 miles east of Woodland.  
CHAMBERS CREEK 1.4 miles west of Steilacoom.  
COWLITZ RIVER (On Longview Line) 0.6 miles west of Longview Junction.  
If necessary to flag through Interlocking Plant flagman must precede train and be sure that derails and rail locks are in proper position.
12. **Pusher District**—Between Tenino Jct. and Castle Rock,
13. **Bridge and Engine Restrictions**—Cowlitz River Bridge, Longview Line—Double heading not permitted; N. P. engines Classes Q-5, Q-6, W, W-1, W-2, W-4 eight (8) miles per hour. Engines Classes A, W-3, W-5 and heavier not permitted. G. N. engines, Classes series 2500 to 2527, eight (8) miles per hour. O.-W. R. & N. engines, Classes series 2100 to 2165 and 3200 to 3227, eight (8) miles per hour.
14. **Speed Restrictions**—Northern Pacific engines Classes W, W-1, W-2, W-3, W-4, W-5, fifty (50) miles per hour.

### THIRD SUBDIVISION. (MAIN LINE)

1. **Nelson Bennett Tunnel**—Headlight must be used and Marker Lamps lighted by all trains passing through Tunnel between McCarver Street and Sixth Avenue.  
Rock loaded on flat cars must not be handled through Nelson Bennett Tunnel unless secured on cars with side boards.

- O. W. R. & N. engines of Consolidation or Mikado class forty (40) miles per hour, except Mikado class with drivers 63 inches diameter or over passenger trains fifty (50), freight trains forty-five (45) miles per hour.  
Great Northern engines of 500, 700 and 1100 series twenty-five (25) miles per hour, engines classes J-2 and O-5 forty-five (45) miles per hour.  
BETWEEN OLEQUA AND LONGVIEW JUNCTION (On Longview Line)—Passenger trains forty-five (45), freight trains thirty (30) miles per hour; trains handling logs twenty-five (25) miles per hour.  
BRIDGE 78, Olequa Creek, between Vader and Vader Junction, twenty (20) miles per hour.  
AT TACOMA—Trains approach cross-over switches at 15th Street and 21st Street (entering Union Station) at restricted speed and be governed by signal from switchtender, green flag by day, green light by night.  
AT SIXTH AVENUE, Over Sixth Avenue and Day Island crossings twenty-five (25) miles per hour, trains running against current of traffic over these crossings six (6) miles per hour.  
AT KELSO, over Allen Street, leading to bridge over Cowlitz River fifteen (15) miles per hour.  
AT WINLOCK, NAPA VINE, CHEHALIS, CENTRALIA, BUCODA, RIDGEFIELD, over highway crossings within corporate limits twenty-five (25) miles per hour.

15. Register Stations—

Tacoma Union Station for passenger trains, Yard Office for freight trains.  
McCarver Street.  
Centralia Telegraph Office.  
Vancouver.  
Longview Passenger Station, trains originating and terminating.  
Portland Telegraph Office.

16. Commercial Spurs—

	Miles from Tacoma	Car Capacity
Pioneer	13.0	60
Gravel Center (State Gravel Co.)	14.0	15
Cascade Paper Co. (West Tacoma)	14.4	6
Olegard	26.1	15
Plumb	37.6	4
Chain Hill Lumber Co.	41.2	4
Evaline	68.2	5
Menefee	73.2	24
McNelly	73.9	4
Cascade Timber Co.	85.0	10
Gravel Pit, Longview Line	88.2	25
Rocky Point	95.6	20
Milco, Longview Line	96.2	27
Carrolls	103.0	9
Knapp	127.2	4

17. Cross-overs—Tacoma, McCarver Street, Sixth Avenue, Steilacoom, Ketrone, Nisqually, Saint Clair, Kyrone, East Olympia, Tenino Junction, Bucoda, Centralia, Chehalis, Chehalis Junction, Napavine, Winlock, Vader, Olequa, Castle Rock, Ostrander, Kelso, Longview, McNelly Junction, Kalama, Woodland, Ridgefield, Vancouver Junction, Vancouver.

## FOURTH SUBDIVISION. (PRAIRIE LINE)

- Card train order form AB—Will govern the movement of trains between Reservation and 15th St. Tower via Drawbridge Line and trains must not move in this territory unless conductor and engineman hold a copy properly filled out.
- At 15th St. Tower—A single arm semaphore near junction of Line Leading to Tacoma Union Station and Drawbridge Line is controlled by Towerman and governs single track passenger line between 15th St. and Union Station. No train from the Drawbridge Line or westward main track will enter Union Station when signal is at stop.
- At Tacoma—No train will proceed from Union Station to Drawbridge Line or westward main track when signal on incline is at stop. Double arm semaphore is operated by Towerman at 15th St. The lower arm governs movement from Union Station to Drawbridge Line. The upper arm governs movement Union Station to westward main track. Trains will call for signal by using push button when ready to leave Union Station.

- At South Tacoma, normal position of double track switch is for westward track. Siding will be used as storage track.

- Logs—May be handled after dark on double track between South Tacoma and Tacoma but will not be permitted to meet any train except switch engines and switching trains. Conductors will notify Dispatcher when there are logs in the train and secure train order that opposing trains will be held as provided above. Trainmen must be stationed on 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 will run via Half Moon yard pulling train in reverse order to River St. Yard.

- Mountain Grade—15th Street, Tacoma, to 2 1/2 miles east.

At South Tacoma—Test inspection and understanding as required by Rule 1003, Book of Transportation Rules, will be had on all westward 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.

Engines pushing eastward trains over Tacoma Hill will not cut off from train until the rear end of the train is over Wilkeson Street crossing, speed of train to be reduced to ten miles per hour before pusher is cut off.

At Tacoma—Enginemen on road engines, on westward 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 eastward 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.

Westward trains will approach Pacific Avenue at restricted speed and be governed by Signal No. 7 at Pacific Avenue and controlled from 15th Street Tower.

Top arm of this signal governs movements on Westward main track; lower arm governs movements on westward main track over cross-over to Drawbridge Line or from Westward track through pocket back of westward track.

Automatic Signals T-1-A and T-2-A control the short piece of single track between Half Moon yard, Tacoma and double track switch on Fourth subdivision. Trains or engines using cross-over to enter single track between these signals must do so expecting to find track occupied.

- Pusher District between Tenino Jct. and Rainier and between Tacoma and South Tacoma.

8. Bridge and Engine Restrictions—

Northern Pacific engines, Classes A, Q-5, Q-6, W-3 and W-5 and Great Northern Class P-2, thirty-five (35) miles per hour over Bridge No. 22-1, Nisqually River between Roy and Yelm, and over Bridge No. 33, Deschutes River, between Rainier and McIntosh.

9. Speed Restrictions—

Northern Pacific engines Classes W, W-1, W-2, W-3, W-4 and W-5 fifty (50) miles per hour.

Great Northern engines Classes J-2 and O-5 forty-five (45) miles per hour, engines series 500, 700 and 1100 twenty-five (25) miles per hour.

AT ROY, over crossings within corporate limits twenty-five (25) miles per hour.

AT SOUTH TACOMA, entering double track fifteen (15) miles per hour, over Union Avenue twenty-five (25) miles per hour. AT TACOMA, between Wilkeson Street and Pacific Avenue, on descending grade, passenger trains thirty (30), freight trains twenty (20) miles per hour.

Between Commerce Street and 15th Street Tower while any portion of train passing between these points six (6) miles per hour.

Trains or engines entering or leaving Union Station between 15th Street Tower and 21st Street ten (10) miles per hour.

15TH STREET TOWER—While any portion of train passing over switches ten (10) miles per hour.

10. **Register Stations**—15th Street Tower, South Tacoma, Tacoma, West Tenino.
11. **Commercial Spurs**—
- |                          | Miles from Tacoma | Car Capacity |
|--------------------------|-------------------|--------------|
| Triangle Lumber Co. .... | 23.1              | 2            |
| Wetico .....             | 32.0              | 20           |
| Russell Shingle Co. .... | 37.1              | 6            |
| Mutual .....             | 37.6              | 15           |
12. **Lap Siding**—Yelm.
13. **Cross-overs**—Fifteenth Street Tower, Tacoma.

### FIFTH SUBDIVISION. (SUMAS BRANCH.)

- Card train order Form AB** will govern the movement of trains between Lowell and Everett and between Everett and G. N. Junction and trains must not move in this territory unless conductor and engineman each hold a copy properly filled out. N. P. Eastward trains secure card order at Delta Wye authorizing movement from G. N. Jct. to Everett and Westward trains will turn in card authorizing movement Everett to G. N. Jct. at Delta Wye.
- At North Portal**—Westward N. P. Trains from tunnel are governed by lower arm of semaphore about 150 feet east of tower building. Eastward N. P. trains to the tunnel or to the waterfront are governed by semaphore signal about 350 feet west of tower. Upper arm governs route to the tunnel; lower arm to the waterfront. Westward trains from the waterfront are governed by semaphore about 300 feet east of tower. Upper arm governs movement, lower arm stationary in stop position. The dwarf signal at the base of this semaphore governs G. N. trains. At night and during foggy weather eastward trains will give one long blast of whistle for tunnel and three shorter blasts for waterfront. Westward trains from waterfront will give three blasts of whistle for N. P. main line.
- At Seattle INTERLOCKING PLANT AT SOUTH PORTAL OF KING STREET TUNNEL**—Signals are of the dwarf type (low semaphores) to the right of track governed; where two arms are on one post, upper arm governs trains on main track and lower arm trains diverging from main track. Westward trains are governed by the semaphore block signal about 50 feet south of the south portal. Eastward trains are governed by the semaphore block signal 250 feet north of the portal.  
**LOGS**—Freight trains with logs must not be run via King Street Tunnel.
- At Fremont**—Station is one-half mile west of siding.
- Delta Wye Interlocking**—Westward trains will call for route by one long, one short, one long blast of whistle. Eastward trains by two long, one short, one long blast of whistle.
- At Sedro-Woolley**—G. N. crossings are protected against eastward N. P. trains by an automatic return derail switch 200 feet west of first crossing, and may be run through by westward trains, but must be manually operated by eastward trains. Derail must be left in derail position when N. P. track is not in use.
- At Deming**—Distant signals 3000 feet east and west of C. M. St. P. & P. R. R. crossing two miles west of Deming, regulate approach to gate governing movement of trains over this crossing. Normal position of gate is against C. M. St. P. & P. R. R. trains. Light on revolving gate post on south side of track immediately west of crossing displays yellow indication when set against C. M. St. P. & P. R. R. trains and red indication when against Northern Pacific trains. All trains approach at restricted speed but may proceed without stopping if yellow light displayed on gate post.
- Draw Spans**—Skagit River Bridge between Sedro-Woolley and Clear Lake, Salmon Bay bridge, between Interbay and Fremont. Westward interlocking signal at Salmon Bay Drawbridge, upper arm governs movement to Fremont, lower arm governs movement to Ballard.
- Pusher District**—Between Snohomish and Woodinville.
- Bridge and Engine Restrictions**—Salmon Bay Drawbridge, Bridge 85, Skagit River, twenty (20) miles per hour.

- Speed Restrictions**—Trains handling logs twenty (20) miles per hour. Trains handling steam wrecking derrick, pile driver or locomotive crane, twenty-five (25) miles per hour. **AT SEATTLE**, between Bay and Bell Street, six (6) miles per hour.
- Register Stations**—Seattle (King St. Station), Woodinville, G. N., Snohomish, Everett for N. P. trains, Kruse, Wickersham, Sumas.
- Commercial Spurs**—

	Miles from King St. Station	Car Capacity
Keith .....	12.2	18
Navalair Jct. ....	13.6	Conn.
Lake Forest Park .....	18.6	2
Kenmore .....	19.8	12
Wayne .....	21.8	3
Cathcart .....	33.7	12
Cobbner .....	36.1	Conn.
M. & A. Tr. ....	59.7	Conn.
Days .....	69.2	2
Tiloh .....	80.7	12
Skagit Junction .....	85.5	7
Norlum Spur .....	87.6	Conn.
Neal (on Norlum Spur) .....	88.1	8
Hospital Spur (on Norlum Spur) .....	90.3	12
Delvan .....	89.9	41
Hoogdale .....	92.2	4
Prairie .....	95.8	4
Saxon .....	102.1	Conn.
Clipper .....	107.3	4
Coyne .....	109.2	9
Van Zandt .....	109.4	8
Case .....	110.6	13
Lawrence .....	116.3	6

### SIXTH SUBDIVISION. (ROSLYN BRANCH.)

- At Roslyn**, Eastward trains departing must keep at least twenty (20) minutes apart.
- At Cle Elum**, Eastward trains must stop 1200 feet west of wye switch.
- Speed Restrictions**—Cle Elum ten (10) miles per hour through city limits. Trains handling steam wrecking derrick, pile driver or locomotive cranes, twenty (20) miles per hour.
- Register Station**—Cle Elum.

### SEVENTH SUBDIVISION. (BUCKLEY LINE AND BRANCHES.)

- At Enumclaw**—While using main track of White River Lumber Co., between Junction Switch with C. M. St. P. & P. and yard limit sign 2000 feet east, all movements will be made in accordance with Transportation Rule S93.
- At Naco**—Normal position of gates at crossing with C. M. St. P. & P. Ry., on Ozark Mine Spur, is against Northern Pacific.
- At Fairfax**—The Manley Moore Lbr. Company engines and logging trains are authorized to use N. P. tracks between their interchange track and connection with their logging road west of coal bunkers, protecting against Northern Pacific trains. Derail on Montezuma Line ten (10) feet west of Hill Track switch.
- At Wilkeson**—Normal position of junction switch is for Fairfax Line. Derail on Main Track in front of Coal Bunkers.
- Pusher District**—Between South Prairie and Buckley. Between South Prairie and Carbonado.
- Bridge and Engine Restrictions**—Cascade Jct. to Wilkeson and Fairfax—Bridge O, South Prairie, and Bridge 4, Gale Creek:  
Engines classes W, W-1, W-2 and W-4, ten (10) miles per hour.  
Engines Classes A, Q-5, Q-6, W-3, W-5 and heavier not permitted.  
Black Carbon to Cascade Jct.—Engines classes heavier than S-4 not permitted.

7. **Speed Restrictions—**  
**BETWEEN PALMER JUNCTION AND MEEKER** thirty (30) miles per hour.  
**BETWEEN CASCADE JUNCTION AND BLACK CARBON** fifteen (15) miles per hour, backing up ten (10) miles per hour.  
**BETWEEN CASCADE JUNCTION AND FAIRFAX** fifteen (15) miles per hour, backing up ten (10) miles per hour.  
**BETWEEN FAIRFAX AND SOUTH PRAIRIE** trains handling logs twelve (12) miles per hour.  
 Trains handling steam wrecking derrick, pile driver or locomotive crane between Palmer Junction and Meeker twenty (20) miles per hour, between South Prairie and Fairfax ten (10) miles per hour.  
 Over cribbed track one and one-half (1½) miles east of Carbonado four (4) miles per hour.  
 AT ENUMCLAW, through corporate limits ten (10) miles per hour.  
 AT BUCKLEY, through corporate limits six (6) miles per hour.  
 AT ORTING, through corporate limits ten (10) miles per hour.
8. **Register Stations—** Fairfax. South Prairie.
9. **Commercial Spurs—**

	Miles from Palmer Junction	Car Capacity
Dencia .....	0.5	2
Occidental, C. M. St. P. & P. Connection .....	2.0	..
Webstone .....	12.5	4
Broomfield .....	19.6	15
Brew Mill Spur .....	32.5	2

### EIGHTH SUBDIVISION. (GREEN RIVER BRANCH.)

1. **At Halmar**, Derail in main track sixty feet from West Wye Switch, also 550 feet from Wye switch on Northwest Lumber Company's Spur. This forms tail end of wye and switch must be left in derail position.
2. **At Selleck** trains will run at restricted speed and look out for engines and cars of the Pacific States Lumber Company between 1000 feet west of siding and the Pacific States Lumber Co. office.  
Derail one half (½) mile west on Kangley Line.
3. **Bridge and Engine Restrictions—**  
 Bridge 6-1, Cedar River:  
 Engines classes S-2, S-3, S-4, Q and Q-1, eight (8) miles per hour.  
 Double header engines class F-1, eight (8) miles per hour.  
 Engines classes Q-2 and heavier not permitted.  
 Kanaskat to Kerriston and Selleck—Engines classes heavier than S-4 not permitted.
4. **Speed Restrictions—**  
 Between Kanaskat and Halmar, fifteen (15) miles per hour.  
 Trains handling logs twelve (12) miles per hour.  
 Between Halmar and Kerriston ten (10) miles per hour.  
 Trains handling steam wrecking derrick, pile driver, or locomotive crane, ten (10) miles per hour.  
 AT SELLECK—Trains will run at restricted speed, looking out for engines and cars of the Pacific State Lumber Company between one thousand feet west of siding and Lumber Company's Office.
5. **Register Station—**Kanaskat.
6. **Commercial Spur—**

	Miles from Kanaskat	Car Capacity
Monroe Shingle Co. ....	13.8	3

### NINTH SUBDIVISION. (CROCKER BRANCH.)

1. **At Wingate**, side and overhead clearance is restricted at the Coke and Coal Bunkers.
2. **At Crocker—**Derail in main track in east end of yard.
3. **Bridge and Engine Restrictions—**  
 Bridge 3, Carbon River:  
 Engines classes W, W-1, W-2 and W-4 eight (8) miles per hour.  
 Engines classes A, Q-5, Q-6, W-3 and W-5 not permitted.
4. **Speed Restrictions—**  
 Twelve (12) miles per hour.  
 Over slide one-quarter mile west of Tunnel Number 1, five (5) miles per hour.

Trains handling steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) miles per hour.

	Miles from Crocker	Car Capacity
McMillan Lumber Co. ....	1	25

### TENTH SUBDIVISION. (ORTING BRANCH.)

1. **At C. M. St. P. & P. Ry. Crossing—**Normal position of gates are clear for Northern Pacific, trains approach at restricted speed.
2. **At Puyallup River Junction—**  
 Northern Pacific trains will look out carefully for St. Paul & Tacoma Lumber Company's engines and logging trains, using main track within yard limits.  
 Between One (1) P. M. and Twelve (12) midnight Northern Pacific trains will protect against St. Paul & Tacoma Lumber Company's logging engines and trains using main track between Puyallup River Junction and Lake Kapowsin.  
 Derail in main track twenty (20) feet west of west switch of interchange track.
3. **Bridge and Engine Restrictions—**  
 Engines classes heavier than W not permitted between Orting and Puyallup River Junction.  
 Bridge 8, Puyallup River:  
 Engines classes S-2, S-3, S-4, Q and Q-1 eight (8) miles per hour.  
 Double header engines class F-1 eight (8) miles per hour.  
 Engines classes T and heavier not permitted.  
 At Lake Kapowsin—Engine or loaded cars must not be placed on trestle on interchange track of the St. Paul and Tacoma Lbr. Co.
4. **Speed Restrictions—**  
**BETWEEN ORTING AND PUYALLUP RIVER JUNCTION** twenty (20) miles per hour, trains handling logs twelve (12) miles per hour.  
**BETWEEN PUYALLUP RIVER JUNCTION AND LAKE KAPOWSIN** ten (10) miles per hour.

### ELEVENTH SUBDIVISION. (BELT LINE.)

1. **At Renton**, P. C. R. R. Crossing is protected by derails 75 feet East and 75 feet West of crossing, and operated by switch stand between the P. C. R. R. Tracks, normal position of derails is against Northern Pacific.
2. **At Kirkland—**Station is 2250 feet east of siding.
3. **Yard Limits—**Tracks between yard limit sign west of Renton and the connections with double track at Black River will be operated as one yard.
4. **Bridge and Engine Restrictions—**Bridge No. 11, east of Wilburton, fifteen (15) miles per hour.
5. **Speed Restrictions—**  
**BETWEEN BLACK RIVER AND WOODINVILLE**, thirty (30) miles per hour.  
 Trains handling logs, steam wrecking derrick, pile driver, or locomotive crane, twenty (20) miles per hour.
6. **Register Stations—**  
 Black River and Woodinville.
7. **Commercial Spurs—**

	Miles from Black River	Car Capacity
Lakeside .....	3.8	3
Speigel .....	4.4	3
May Creek .....	6.7	4
Kardong .....	12.6	3
Midlakes .....	12.7	5
Redbell .....	16.3	4

### TWELFTH SUBDIVISION. (SNOQUALMIE BRANCH.)

1. **At Tanner—**Derail 915 feet West of C. M. St. P. & P. Crossing.
2. **At North Bend**, normal position of west wye switch will be for the wye.

3. **At Preston**—Station is one-half mile west of siding. Trains departing must keep at least fifteen (15) minutes apart.
4. **Bridge and Engine Restrictions**—Twenty (20) miles per hour over high trestles.  
Bridge 31.2, ten (10) miles per hour.  
Bridge 6.1, Sammamish River; Bridge 27.1, Raging River and Bridge 35, Snoqualmie River, and spans on spur leading to Snoqualmie Lumber Company's mill:  
Engines classes S-2, S-3, S-4, Q and Q-1, eight (8) miles per hour.  
Double header engines, class F-1, eight (8) miles per hour.  
Engines classes Q-2 and heavier not permitted.
5. **Speed Restrictions**—  
Between Woodinville and Falls City twenty-five (25) miles per hour. Trains handling logs twenty (20) miles per hour.  
BETWEEN FALLS CITY AND NORTH BEND, fifteen (15) miles per hour.  
BETWEEN WOODINVILLE AND NORTH BEND, trains handling steam wrecking derrick, pile driver, or locomotive crane fifteen (15) miles per hour.
6. **Register Stations**—Woodinville and North Bend.
7. **Commercial Spurs**—

	Miles from Woodinville	Car Capacity
Hollywood	1.9	19
Earlmont	4.8	8
Sammamish	9.8	6
Tanner	38.1	9
Weeks	38.3	Conn.

### THIRTEENTH SUBDIVISION. (HARTFORD LINE.)

1. **Draw Span**—Bridge 38, Snohomish River just east of Snohomish.
2. **Bridge Restrictions**—Draw span, Bridge 38, Snohomish River, twenty (20) miles per hour.
3. **Speed Restrictions**—Trains handling logs, steam wrecking derrick, pile driver, or locomotive crane, twenty (20) miles per hour.

### FOURTEENTH SUBDIVISION. (DARRINGTON BRANCH.)

1. **At Darrington**, derail on main track 300 feet west of station.
2. **Bridge and Engine Restrictions**—Trains handling logs ten (10) miles per hour over truss bridges Nos. 2, 7, 11 and 22.  
Engines classes Y-2 and heavier not permitted.  
Over Bridge 18, Boulder Creek, eight (8) miles per hour.
3. **Speed Restrictions**—  
BETWEEN ARLINGTON AND DARRINGTON twenty-five (25) miles per hour. Trains handling logs twenty (20) miles per hour. Trains handling steam wrecking derrick, pile driver, or locomotive crane fifteen (15) miles per hour.
4. **Register Stations**—Arlington and Darrington.
5. **Commercial Spurs**—

	Miles from Arlington Jct.	Car Capacity
Cooper	4.5	3
Cicero	7.4	2
Sepost	16.0	14
Vallamont	19.4	9
Sheomet	21.7	3
Alvey	21.9	12
Markle	22.4	4
Barco	23.4	Conn.
Andron	26.7	Conn.

### FIFTEENTH SUBDIVISION. (BELLINGHAM BRANCH.)

1. **At Bellingham** flagman must precede all trains between Champion and Laurel Sts.  
Trains must stop and be preceded by flagman crossing Holly St. Restricted clearance under overhead roadway at the E. K. Wood Mill.  
Normal position of gate at G. N. crossing near E. K. Wood Mill is against N. P. trains.  
Derail 568 feet East of G. N. crossing between Bellingham and South Bellingham.

2. **Between Park and Larson** all toilets in trains must be kept locked and employes are cautioned against throwing off refuse or articles which may become unsanitary.
3. **Bridge Restriction**—  
Bridge 14, east end Silver Beach ten (10) miles per hour.
4. **Speed Restrictions**—  
Between Mile Posts 5 and 8 fifteen (15) miles per hour.  
Between Wickersham and Bellingham freight trains twenty (20) miles per hour.  
Enginemen on all trains exercise judgment in speed where trouble may be expected.  
Over Street Car crossings at Kentucky Street and between that point and Bellingham Station eight (8) miles per hour.  
Over Street Car crossing between Silver Beach and Larson eight (8) miles per hour.  
Trains handling steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) miles per hour, except between Mile Posts 5 and 8 ten (10) miles per hour.
5. **Register Stations**—Wickersham and Bellingham.
6. **Commercial Spurs**—

	Miles from Wickersham	Car Capacity
Woodnite	4.3	2
Mogul	14.6	24
Matson	14.7	7
Futurity	15.3	4
Upright Shingle Co.	15.4	7

### SIXTEENTH SUBDIVISION. (GRAYS HARBOR LINE.)

1. **At Olympia**—  
Tunnel district is protected by Light Type Automatic signals. Signal 93 located 275 feet east of tunnel, signal 94 located 275 feet west of tunnel, dwarf signal 96 between main track and siding opposite governs movement of trains between these signals and dwarf signal 96 governs eastward movement out of siding, normal indication "Stop". Siding switch must be lined before signal will indicate "PROCEED."  
Trains or engines from Jefferson Street line must have PROCEED indication from signal 93 before opening main track switch, eastward trains or engines from siding must have PROCEED indication from signal 94 before opening siding switch. Westward trains finding signal 93 and Eastward trains finding signals 94 or 96 in STOP position may proceed through tunnel only under protection of flag. Speed of all trains through tunnel must be so controlled that they can be stopped on emerging. Connection leading from Northern Pacific Jefferson Street Spur to O. W. R. & N. Scale Track, at Eighth Street, just East of Tunnel has no clearance with the O. W. R. & N. siding for a distance of 150 feet from a point 195 feet from switch connection on Jefferson Street Spur.  
Trains or Yard Engines moving to or from Northern Pacific Jefferson Street Spur and O. W. R. & N. Scale Track must protect themselves and make certain that no O. W. R. & N. trains are moving on either their Main Track or siding while movement is being made either to or from Scale Track.  
TUMWATER SPUR Crossing, normal position of gates against spur, trains approach at restricted speed.  
DESCHUTES RIVER DRAWBRIDGE, gates 50 feet each side will be turned across main track when bridge is raised.  
Track next to Bay used exclusively for repair track from west switch to 650 feet east of switch.
2. **At Bordeaux Junction** on the Mason County Logging Company tracks a siding is 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 First Class Trains. 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.
3. **At Gate**, normal position of the main track junction switch is for the Sixteenth Subdivision. Normal position of switch connecting west leg of wye and siding will be for Eighteenth Subdivision. Trains entering sidings must move at restricted speed, expecting to find sidings blocked with cars.



4. **At Montesano**—Station is one-half mile west of siding. Switch leading to industry spur west end of team track to be left set for spur to act as derail.

5. **Gravel Bunkers**, Mile Post 58.6, bunkers will not clear man on top or side of car.

6. **At Aberdeen** all trains and engines will move at restricted speed 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.

Westward trains will stop East of Chehalis Street when Wishkah River draw bridge signals do not indicate clear route.

At passenger station, umbrella shed, restricted clearance.

7. **At Hoquiam** all trains and engines will move at restricted speed within yard limits.

8. **Drawbridge Interlocking**—

Wishkah River . . . . . Aberdeen.

Hoquiam River . . . . . Hoquiam.

At Hoquiam River drawbridge, gauntlet extends 496 feet from the double track frog to the double track switch points. The second signal east of drawbridge may indicate clear while a train or engine occupies the gauntlet.

9. **Yard Limits**—Tracks between the yard limit signs east of Carlisle and west of Stearnsville will be operated as one yard.

10. **Bridge and Engine Restrictions**—

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.

Engines Classes heavier than W2 not permitted.

Engines Classes W, W-1, W-2 and W-4 ten (10) miles per hour.

Double header engines Classes Q, Q-1, Q-2, Q-3, Q-4, T, S-2, S-3 and S-4 twenty (20) miles per hour.

Engines Classes A, Q-5, Q-6, W-3, W-5 and heavier, and and double header engines Classes W, W-1, W-2 and W-4 not permitted.

Draw spans of Bridge 9, Des Chutes River, Bridge 68, Wishkah River and Bridge 72, Hoquiam River twenty (20) miles per hour.

At Olympia—Class W engines are permitted on the west side main track as far as Buchanan's mill but no power will be permitted beyond Bent 14 on the trestle of the west side log rollway. Heavier than F1 power not permitted on the trestle leading to Tumwater and on Jefferson Street or Port Dock tracks.

At Aloha: Engines heavier than Class F1 not permitted on Mill Spur.

11. **Speed Restrictions**—

**BETWEEN SAINT CLAIR AND HOQUIAM** Passenger trains forty-five (45), Freight trains Engines Classes Y-2, W, W-1, W-2, thirty (30) miles per hour.

Trains handling steam wrecking derrick, pile driver, or locomotive crane, twenty (20) miles per hour.

**BETWEEN HOQUIAM AND MOCLIPS**, twenty-five (25) miles per hour.

Trains handling steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) miles per hour.

**AT OLYMPIA** around curve East end of subway fifteen (15) miles per hour.

**AT GATE** approach Eighteenth Sub-Division Junction Switch at restricted speed.

**BETWEEN STANDARD OIL SPUR**, East of Aberdeen, and **WISHKAH STREET** fifteen (15) miles per hour.

**AT ABERDEEN**, over streets and crossings ten (10) and elsewhere within City Limits twenty (20) miles per hour.

Passing through paved street between Wishkah River Drawbridge and Log Rollway, one mile East of Aberdeen, five (5) miles per hour.

12. **Register Stations**—

Saint Clair.

Olympia.

Gate.

Aberdeen.

Hoquiam.

Moclips.

13. **Commercial Spurs**—

	Miles from St. Clair	Car Capacity
Black Lake . . . . .	13.2	3
Schafer . . . . .	54.0	10
Gravel Bunkers . . . . .	58.6	12
Standard Oil Co. . . . .	58.7	3
Consolidated Plywood Mill Co. . . . .	66.5	18
Western Ceramic Mfg. Co. . . . .	67.1	4
Neff Logging Co. . . . .	89.4	15
Linde Shingle Co. . . . .	93.5	4
Linde Logging Co. . . . .	93.6	6
Joe Creek . . . . .	97.4	2
Hobi . . . . .	97.8	3

## SEVENTEENTH SUBDIVISION.

(AMERICAN LAKE LINE.)

1. **At Fort Lewis**—

Entrance to Dupont Powder Company Plant protected by gate across the spur near Cap Magazine, no cars will be disturbed inside of gate until foreman consulted and permission obtained, speed restricted to fifteen (15) miles per hour.

Engines using north and south lines move at restricted speed expecting to find cars spotted at different locations on these tracks.

**STAFF SYSTEM DUPONT SPUR**, no train or engine will move on the Dupont Powder Company's Spur until they have obtained staff from staff box at the junction switch, possession of staff makes a train superior to all other trains on this spur, staff to be returned to staff box after completion of trip.

Derail on Dupont Powder Company's Spur 950 feet from main track switch and derail on track leading to Black Powder Mill.

**CANTONMENT Tracks.**

Speed restricted to fifteen (15) miles per hour.

Trains must stop and flagman protect movement when backing or pushing cars ahead of engine over Street crossings.

All movement over Pacific Highway must be protected by flagman.

Toilets must be kept locked and no refuse thrown from trains on Cantonment tracks or inside Fort Lewis Yard Limits.

House track switch will be set for house track to act as derail for east end of siding.

2. **Speed Restrictions**—

Passenger trains fifty (50) miles per hour.

At Camp Murray, ten (10) miles per hour over road crossing just west of station.

At Fort Lewis, approach road crossings at east and west end Green Park at restricted speed.

Trains handling steam wrecking derrick, pile driver, or locomotive crane, twenty (20) miles per hour.

3. **Register Stations**—

Nisqually

Lakeview

## EIGHTEENTH SUBDIVISION.

(GATE LINE.)

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

Northern Pacific track will be known as Route 2; O.-W. R. & N. track will be known as Route 1. Both routes are included in Centralia yard limits. Eastward movements will be made over Route 2. Westward movements will be made over Route 1. Eastward first class trains will move at restricted speed, Blakeslee Junction to Centralia Passenger Station, and westward first class trains will move at restricted speed, Centralia Passenger Station to connection with Route 1.

Second class and inferior trains may run ahead of first class trains, Blakeslee Junction to Centralia Yard without train order authority.

2. **Blakeslee Junction Interlocking**—

If a home signal does not indicate proceed the time release may be operated according to instructions inside of box on instrument house at crossing.

**SPRING SWITCH**, trailing from west end of connection from ROUTE 1 to Northern Pacific main track, normal position for Northern Pacific main track.

**HANDTHROW SWITCH**, at East end of connection leading from Northern Pacific main track to ROUTE 1 normal position for connection.

**SPRING SWITCH** trailing from each end of connection between ROUTE 2 and O.-W. R. & N. main track, normal position of west switch for the connection, of the east switch for Northern Pacific main track.

**3. Bridge and Engine Restrictions—**

Engines classes Q-5, Q-6, W-3, W-5 and heavier, not permitted on Route 1 (O.-W. R. & N.) Centralia and Blakeslee Junction.

**4. Speed Restrictions—**

Passenger trains forty-five (45), freight trains twenty-five (25) miles per hour.

**AT CENTRALIA**—Over streets within corporate limits twenty-five (25) miles per hour.

**AT BLAKESLEE JUNCTION**—Over C. M. St. P. & P. and O.-W. R. & N. crossings fifteen (15) miles per hour.

Between Centralia and Gate trains handling steam wrecking derrick, pile driver, or locomotive crane, twenty (20) miles per hour.

**5. At Gate** normal position of main track junction switch is for 16th Subdivision. Normal position of switch connecting west leg of wye on Gate Line and siding will be for 18th Subdivision. Trains entering sidings must move at restricted speed expecting to find sidings blocked with cars.

**6. Register Stations—** Centralia Passenger Station. Gate.

**7. Commercial Spur—**

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

**NINETEENTH SUBDIVISION.**

(ELMA BRANCH.)

**1. At Whites—**

Normal position of gates at crossing with White Star Lumber Company R. R. clear for Northern Pacific, trains will approach at restricted speed and will look out for White Star Lumber Company's Engines and Cars occupying main track within Yard Limits.

**2. At McCleary Junction**—Northern Pacific trains using wye or main track between McCleary Junction and McCleary, will protect against McCleary Timber Company's trains.

**3. At Shelton**—Northern Pacific engines may operate over Peninsula Railway Company main tracks between junction with N. P. main track at Olympic highway and east switch of N. P. interchange yard, and from west switch N. P. interchange yard to yard limit board, 786 feet west. Northern Pacific crews occupying Peninsula Railway Company tracks within these limits must be protected as per Transportation Rule No. 99. Northern Pacific trains will look out for Peninsula Railway Company engines and derrick working on main track in Shelton Yard.

**4. Bridge and Engine Restrictions—**

Engines heavier than Classes W and W-1 not permitted.

**5. Speed Restrictions**—Twenty (20) miles per hour. Around curve at Kamilche fifteen (15) miles per hour.

Trains handling steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) miles per hour.

**6. Register Station**—Elma.

**7. Commercial Spurs—**

	Miles from Elma	Car Capacity
Doubling Spur .....	20.3	12
Reed Shingle Co. ....	24.3	9

**TWENTIETH SUBDIVISION.**

(OCOSTA BRANCH.)

**1. At South Aberdeen and Cosmopolis**—Trains and yard engines will stop at grade crossings of the O.-W. R. & N. Co., industry tracks.

**2. Bridge and Engine Restrictions—**

Engine classes T and heavier not permitted. On Michigan Mill and Bishop Tracks, Engines heavier than F-1 not permitted.

Bridge 1, Chehalis River, between Aberdeen Junction and Cosmopolis Junction, Engines Classes S-2, S-3, S-4, Q and Q-1 eight (8) miles per hour. Doublehead Engines Class F-1 eight (8) miles per hour.

**3. Speed Restrictions—**

Between Aberdeen Jct. and Mile Post 3, twenty (20) miles per hour.

Between Mile Post 3 and Markham, twelve (12) miles per hour. Between Aberdeen Jct. and Markham trains handling steam wrecking derrick, pile driver, or locomotive crane, ten (10) miles per hour.

**TWENTY-FIRST SUBDIVISION.**

(WILLAPA HARBOR LINE.)

**1. At Dryad—**

Normal position of gates at crossing with Leudinghaus Lumber Company R. R. is clear for Northern Pacific, trains will approach at restricted speed. Normal position of gates at crossing of Leudinghaus Lumber Co. R. R. with C. M. St. P. & P. Ry. is clear for C. M. St. P. & P. Ry.

**2. At McCormick—**

Normal position of gates at crossing with McCormick Lumber Company R. R. is for Northern Pacific, trains will approach at restricted speed.

**3. At Walville—**

Normal position of gates at crossing with Walville Lumber Company R. R. is clear for Northern Pacific, trains will approach at restricted speed.

**4. At Raymond—**

All trains stop before passing over Ocean Beach Highway, 250 feet West of Station, and all switching movements over this crossing must be protected by a Flagman. Drawbridge over Willapa River, West of Station, Bridge Tenders on duty 7:30 A. M. to 4:30 P. M. Bridge will be left open when Tenders not on duty. Trains will not pass over Drawbridge until proceed signal is received from Drawbridge Tender, using a yellow flag by day and a yellow light by night.

**5. Yard Limits**—Tracks between yard limit signs west of Willapa and east of Willapa Junction to be operated as one yard.

**6. Pusher District**—Between Pe Ell and Frances.

**7. Drawbridge**—Bridge 53, Willapa River, West of Raymond.

**8. Bridge and Engine Restrictions—**

Engines Classes A, Q-5, Q-6, W-3, W-5 and heavier not permitted.

Bridges O Newaukum River, 2-1, 5, 6, 16-1 and 23 Chehalis River, 38, 42 and 45 Willapa River.

Engines Classes W, W-1, W-2, W-4 twenty-five (25) miles per hour.

Doublehead Engines Classes W, W-1, W-2 and W-4 not permitted.

Draw Span of Bridge 53, Willapa River, twenty (20) miles per hour.

**9. Speed Restrictions—**

Passenger trains forty (40), freight trains thirty (30) miles per hour.

Trains handling steam wrecking derrick, pile driver, or locomotive crane, twenty (20) miles per hour.

**BETWEEN PE ELL AND FRANCES**, Passenger Trains thirty (30), Freight Train twenty-five (25) miles per hour.

Trains handling steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) miles per hour.

**10. Register Stations**—South Bend.

Chehalis.

**11. Commercial Spurs—**

	Miles from Chehalis Junction	Car Capacity
Rhyne, connection Willapa Harbor Mills Co. ....	38.0	..

## TWENTY-SECOND SUBDIVISION.

(YACOLT BRANCH.)

1. **At Vancouver Junction**—Derail on west leg of wye 200 feet from Third Subdivision, end of wye switch.
2. **Bridge and Engine Restrictions**—  
Engine classes heavier than W-1 not permitted.  
Bridge 23, Lewis River, Engines Classes W, W-1, eight (8) miles per hour.
3. **Speed Restrictions**—  
Twenty (20) miles per hour; trains handling logs approaching and passing through tunnel west of Yacolt, ten (10) miles per hour.  
Trains handling steam wrecking derrick, pile driver, or locomotive crane, fifteen (15) miles per hour. Except approaching and passing through tunnel West of Yacolt ten (10) miles per hour.
4. **Register Station**—Vancouver Junction.
5. **Commercial Spurs**—

	Miles from Yacolt	Car Capacity
Cedar Creek Lumber Co. . . . .	13.1	4

## TWENTY-THIRD SUBDIVISION.

(MOXEE BRANCH.)

1. **Speed Restrictions**—  
Twenty (20) miles per hour. Trains handling steam wrecking derrick, pile driver, or locomotive crane, ten (10) miles per hour.
2. **Bridge Restrictions**—  
Bridge 1, Yakima River, Engines classes S-2, S-3, S-4, Q and Q-1, eight (8) miles per hour.  
Engines class T and heavier not permitted.
3. **Register Station**—  
Yakima.

## TWENTY-FOURTH SUBDIVISION.

(NACHES AND TIETON BRANCHES.)

1. **At Naches**—Derail on main track 200 feet East of East switch.
2. **At Brace**, normal position of switch is for Tieton Branch.
3. **Bridge and Engine Restrictions**—  
Bridge 4, Naches Branch and Bridge 4.3 Tieton Branch.  
Engines Classes S, S-1, S-2, S-3, S-4, Q, Q-1, eight (8) miles per hour.  
Engines Class T and heavier not permitted.
4. **Speed Restrictions**—  
Twenty miles per hour.  
**BETWEEN BRACE AND WEIKEL**, ten (10) miles per hour.  
Between point 200 feet East and 500 feet West of water tank at Power House five (5) miles per hour.  
Trains handling steam wrecking derrick, pile driver, or locomotive crane, ten (10) miles per hour.
5. **Register Stations**—  
Brace, Yakima yard office.

## ALL SUBDIVISIONS.

1. Conductors of work trains will issue instructions to their flagmen in writing, except when flagmen go back immediately to stop an approaching train.
2. **Speed Restrictions**—  
Passenger trains, one mile per minute.  
All trains thirty (30) miles per hour over interlocked crossings. Fifteen (15) miles per hour through crossovers, turnouts, gauntlets and passing telegraph offices where orders are received.

Engines—Classes A, Q-5 and Q-6, sixty (60) miles per hour; W, W-1, W-2, W-3, W-4 and W-5, fifty (50) miles per hour, Z-3, thirty-five (35) miles per hour.

Switch engines moving between stations under steam fifteen (15) miles per hour.

Trains handling steam wrecking derrick, pile driver or locomotive crane thirty (30) miles per hour.

Trains handling logs twenty-five (25) miles per hour.

3. Except as otherwise provided enginemen will be required only to consult register at initial or starting point.
4. 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.
5. When conditions permit, enginemen on freight trains will receive proceed signal from rear of train before passing any station.
6. When it becomes necessary to temporarily utilize a side track as main track, in addition to setting and locking switches for side track, flagman with proper flagging material must be stationed to fully protect approaching trains per rules, until movement over main track is resumed. When conductors find it necessary to leave switches set for siding, they must fully protect approaching trains until relieved by trackmen, or other employes, fully competent and equipped to do so.
7. In automatic block territory gas-electric motor cars must not be stopped on sand, and when handled in freight trains, must be behind caboose.

8. Precautions must be taken on double track by inspection of train on double track side where stops are made to prevent accidents from swinging doors or other loose appurtenances or shifting loads on cars or locomotives.

Logs—Conductors of all trains picking up logs, wood bolts, or veneer blocks, loaded on flat cars, must personally know that cars are not overloaded or improperly loaded and are safe to move without loss of lading, giving particular attention to permitted maximum width of load, 11 feet 6 inches, as per clearance table pages 24, 25, 26 and 27.

Double Track—"A" On double track logs, wood bolts, or veneer blocks, loaded on flat cars, must not be handled in trains after dark, except between Chehalis Junction and Centralia and between South Tacoma and 15th Street, Tacoma, in which case a Trainman will be stationed on rear platform of caboose with lighted lantern or fusee, to watch for logs, wood bolts, or veneer blocks that may be lost from cars and obstruct opposite track and take prompt action to protect trains in case of obstruction.

"B" Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, must not meet or be passed by trains between stations on opposite double track and must be standing when trains on opposite track meet or pass such train.

"C" Conductors will notify Dispatcher when logs, wood bolts, or veneer blocks, loaded on flat cars, in their train, and secure train order that trains on opposite track will be held at next station until they have arrived.

"D" Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, during daylight hours must, when running between stations, have a Trainman stationed on rear platform of caboose to watch for logs, wood bolts, or veneer blocks that may be lost from cars and obstruct opposite track and take prompt action to protect trains in case of obstruction.

"E" Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, will not exceed a speed of ten (10) miles per hour over the following bridges and when passing over them Trainmen will be so stationed as to notice falling logs, wood bolts, or veneer blocks that might damage bridge and pass signal to engineman for quick stop. Engineman will be on lookout for such signal.

Kalama River Bridge, between Longview Jct. and Kalama.  
Coweman River Bridge, between Kelso and Longview Jct.  
Toutle River Bridge, between Castle Rock and Olegua.  
Cowlitz River Bridge, between Castle Rock and Olegua.  
Newaukum River Bridge, between Chehalis Jct. and Napavine.

Skookumchuck River Bridge, between Wabash and Bucoda.  
Puyallup River Bridge, between Puyallup and Sumner.

Stuck River Bridge, between Sumner and Auburn.  
White River Bridge, between Auburn and Kent.

"F" Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, through Ostrander Tunnel, will stop before entering tunnel, where a careful inspection of such loads will be made and if found in good condition train will pass through tunnel and stop; rear brakeman or flagman to follow through tunnel for purpose of inspecting track for falling logs, wood bolts, or veneer blocks, and if found clear will so report to Conductor and train may proceed.

"G" Logs, wood bolts, or veneer blocks loaded on flat cars will not be handled through Lewis River Drawbridge between Woodland and Ridgefield, Chambers Creek Lift Bridge between Steilacoom and Sixth Avenue, nor through Nelson-Bennett Tunnel between Sixth Avenue and McCarver Street.

"H" These rules will not apply to logs, wood bolts, or veneer blocks loaded in Gondola Cars properly secured, staked and wired.

Single Track—"I" On single track trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, when meeting passenger trains will not proceed unless or until passenger train has stopped or moved by log cars.

Logs, wood bolts, or veneer blocks loaded on flat cars will not be handled through Stampede Tunnel between Martin and Stampede.

9. Before occupied outfit cars are switched or handled, air brakes must be cut in.

10. IN TERRITORY EQUIPPED WITH AUTOMATIC BLOCK SIGNALS:

When a train dispatcher desires to advance a train from a station where by rule it should enter the siding before passing a train order office, he may instruct the operator to use white signal as prescribed by Transportation Rule 12-C. The engine-man may then continue to move his train on the main track to the signal at restricted speed and there be governed by train orders addressed to his train. When a train is stopped by a stop and proceed signal it may proceed at once at restricted speed expecting to find a train in the block, broken rail, obstruction or switch not properly set and must understand that such signal indication may be due to an opposing train proceeding into the same block at the opposite end, under an approach signal indication Rule 501-B, and before proceeding into the block every precaution consistent with running orders and the nature of the track ahead should be taken to insure safe movement through the block.

11. On all branch line sidings trains may expect to find cars at any time.

12. Spring Switches—

Maximum speed for all facing point and trailing point movements through switch fifteen (15) miles per hour.

Trailing movements on the track for which the switch is normally lined may be made at normal speed.

Trains trailing through or stopping on a spring switch must not back up or take slack until points have been thrown by hand.

Flying switches over or through spring switches are prohibited. When operated by hand, lever must be moved slowly, keeping a steady pressure on the handle until the switch is thrown and the handle is in the notch on the switch stand provided for it.

When signal governing block in which spring switch is located is at stop, or where automatic block signals do not govern account trains running against current of traffic, facing point movements must not be made over switch until points have been examined.

Sand must not be used over points of spring switches.

13. Derail switches will be set in derail position when not in use.

14. Trains pulling into side tracks, or leaving the main line at junction points, must pull entirely into clear of insulated joints before stopping to pick up the man attending the switch.

15. At terminals where engines are not changed nor train line separated on passenger trains and terminal brake test is not made by carmen after outgoing crew takes charge, a running brake test must be made as soon as train is moving at moderate speed.

When running test is made, trainmen should be on car steps to see that brakes apply properly and then give proceed signal to engineman.

16. Always observe position of switch points after throwing switch, and see that the switch lever is pushed firmly into the notch before leaving switch.

17. Helper engines waiting to help trains will keep clear of main track until train to be helped has arrived and stopped.

18. BULLETIN STATIONS—

Yakima, Passenger Station, Yard Office, Roundhouse.  
Ellensburg.

Cle Elum.

Easton.

Lester.

Auburn, Yard Office, Round House.

Seattle (King St. Station), Middle Yard, Round House.

Tacoma (Union Station), Yard Office, Round House.

Centralia, Passenger Station, Yard Office, Round House.

Vancouver, Passenger Station.

Portland, Telegraph Office.

Everett, Yard Office, Round House.

South Prairie.

Woodinville.

Bellingham.

Hoquiam, Passenger Station, Round House.

Elma.

South Bend.

19. STANDARD TIME CLOCKS—

Yakima, Passenger Station, Yard Office.

Ellensburg.

Cle Elum.

Easton.

Lester.

Auburn Yard Office.

Seattle (King St. Station), Middle Yard Office, Round House.

Tacoma (Union Station), Yard Office, Round House.

Centralia, Passenger Station, Yard Office, Round House.

Longview, Freight Station.

Vancouver, Passenger Station.

Everett.

Bellingham.

Hoquiam, Telegraph Office.

20. WATCH INSPECTORS—

Yakima—Noble Jewelry Company.

Ellensburg—M. W. Davies.

Cle Elum—M. W. Davies.

Easton—G. Davies.

Lester—G. Davies.

Auburn—A. A. Schuchard.

Seattle—Arnt Setter, 521 Second Ave.

C. B. Coffin, 1426 Fourth Ave.

Tacoma—Mierows, 1105 Broadway.

Centralia—C. R. Ahern.

Vancouver—Joseph Carter.

Portland—W. H. Sexton, 245 Washington St.

Everett—C. M. Smith.

Sedro-Woolley—Horace Condy.

Snohomish—H. L. Emmons.

Bellingham—Erving H. Easton.

Aberdeen—S. J. Stieglits.

Hoquiam—Fred Straub.

Olympia—Talcott Bros.

Elma—D. P. Pearson.

South Bend—S. Holte.

North Bend—D. H. Phillips.

NOTE:

Effective with Time Table No. 66, Schedule meeting or passing stations are indicated by figures in full-faced type; numbers of the trains meeting, passing, or being passed will not be shown.

# MAXIMUM CLEARANCES

## LIMIT OF LOAD—MEASUREMENT.

	HEIGHT ABOVE TOP OF RAIL										Max. Height	Max. Width
	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			
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"	11' 6"
West Seattle Line	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	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"	20' 7"	20' 7"	11' 6"
Main Line (Yakima-East Auburn)	17' 8"	17' 7"	17' 6"	17' 3"	16' 11"	16' 7"	16' 3"	16' 1"	15' 11"	17' 8"	17' 8"	11' 6"
Reservation—South Tacoma (Via Drawbridge Line)	20' 8"	20' 8"	20' 8"	20' 8"	20' 7"	20' 7"	20' 7"	20' 7"	20' 7"	20' 8"	20' 8"	11' 6"
Main Line (Reservation-McCarver St.)	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	11' 6"
Main Line (McCarver St.-Tenino)	20' 5"	20' 2"	19' 10"	19' 5"	18' 11"	18' 5"	17' 10"	17' 6"	17' 2"	20' 5"	20' 5"	11' 6"
Main Line (Tenino-Portland)	19' 3"	19' 3"	19' 3"	19' 0"	19' 0"	18' 7"	18' 7"	17' 9"	17' 5"	19' 3"	19' 3"	11' 6"
South Tacoma—Tenino	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 1"	20' 11"	21' 4"	21' 4"	11' 6"
Main Line (Seattle "King St. Station" to Sumas)	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	11' 6"
Roslyn Branch	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	11' 6"
Buckley Line	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 4"	21' 1"	21' 5"	21' 5"	11' 6"
Burnett Branch	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	19' 0"	11' 6"
Wilkeson Branch	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	11' 6"
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"	11' 6"
Crocker Branch	17' 2"	17' 1"	16' 11"	16' 9"	16' 7"	16' 5"	16' 3"	16' 1"	16' 0"	17' 7"	17' 7"	11' 6"
Orting Branch	18' 9"	18' 9"	18' 9"	18' 6"	18' 3"	17' 11"	17' 7"	17' 5"	17' 3"	18' 9"	18' 9"	11' 6"
Belt Line (Black River-Woodinville)	21' 6"	21' 5"	21' 5"	21' 5"	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 6"	21' 6"	11' 6"

12th Subdivision	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	11' 6"
13th Subdivision	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 1"	20' 11"	21' 3"	21' 3"	11' 6"
14th Subdivision	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	11' 6"
15th Subdivision	19' 2"	19' 2"	17' 11"	17' 11"	17' 11"	17' 11"	17' 11"	17' 11"	17' 11"	19' 2"	19' 2"	11' 6"
16th Subdivision	17' 7"	17' 7"	17' 6"	17' 5"	17' 5"	17' 4"	17' 4"	17' 3"	17' 3"	17' 7"	17' 7"	11' 6"
16th Subdivision	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 1"	20' 11"	21' 4"	21' 4"	11' 6"
16th Subdivision	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	11' 6"
16th Subdivision	16' 11"	16' 9"	16' 7"	16' 6"	16' 3"	16' 1"	15' 10"	15' 9"	15' 7"	16' 11"	16' 11"	11' 6"
17th Subdivision	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	21' 7"	11' 6"
18th Subdivision	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 2"	21' 1"	21' 5"	21' 5"	11' 6"
Mendota Branch	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	11' 6"
Elma Branch	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	11' 6"
Ocoosa Branch	20' 10"	20' 10"	20' 10"	20' 10"	20' 10"	20' 4"	19' 8"	19' 4"	19' 1"	20' 10"	20' 10"	11' 6"
Willapa Harbor Line	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 1"	21' 1"	21' 3"	21' 3"	11' 6"
Yacolt Branch	18' 1"	18' 1"	18' 1"	18' 1"	18' 0"	18' 0"	18' 0"	18' 0"	18' 0"	18' 1"	18' 1"	11' 6"
Moxee Branch	18' 9"	18' 6"	18' 4"	18' 1"	17' 10"	17' 8"	17' 5"	17' 4"	17' 3"	18' 9"	18' 9"	11' 6"
Naches-Tieton Branch	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 1"	19' 1"	19' 4"	19' 4"	11' 6"

MAXIMUM CLEARANCES—Continued.

	LIMIT OF LOAD—MEASUREMENT.										Max. Height	Max. Width		
	HEIGHT ABOVE TOP OF RAIL													
	8ft. 6in. Wide	9 ft. Wide	9ft. 6in. Wide	10 ft. Wide	10ft. 2in. Wide	10ft. 6in. Wide	11 ft. Wide	11ft. 6in. 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"	11' 6"
West Seattle Line	21' 1"	20' 9"	20' 7"	20' 3"	20' 2"	20' 0"	19' 9"	19' 7"	19' 7"	21' 3"	21' 3"	21' 3"	21' 3"	11' 6"
Lake Union Line	14' 10"	14' 5"	14' 0"	13' 5"	13' 3"	12' 11"	12' 5"	11' 11"	11' 11"	20' 7"	20' 7"	20' 7"	20' 7"	11' 6"
Main Line (Yakima-East Auburn)	15' 9"	15' 7"	15' 3"	15' 1"	14' 11"	14' 7"	14' 0"	13' 5"	13' 5"	17' 8"	17' 8"	17' 8"	17' 8"	11' 6"
Reservation—South Tacoma (Via Drawbridge Line)	20' 7"	20' 7"	20' 7"	20' 4"	20' 3"	20' 1"	19' 9"	19' 6"	19' 6"	20' 8"	20' 8"	20' 8"	20' 8"	11' 6"
Main Line (Reservation-McCarver St.)	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	11' 6"
Main Line (McCarver St.-Tenino)	16' 9"	16' 4"	15' 11"	15' 5"	15' 2"	14' 10"	14' 2"	13' 6"	13' 6"	20' 5"	20' 5"	20' 5"	20' 5"	11' 6"
Main Line (Tenino-Portland)	17' 1"	16' 9"	16' 4"	15' 10"	15' 9"	15' 5"	14' 11"	14' 3"	14' 3"	19' 3"	19' 3"	19' 3"	19' 3"	11' 6"
South Tacoma—Tenino	20' 8"	20' 6"	20' 4"	20' 2"	20' 1"	20' 0"	19' 10"	19' 8"	19' 8"	21' 4"	21' 4"	21' 4"	21' 4"	11' 6"
Main Line (Seattle "King St. Station" to Sumas)	19' 11"	19' 9"	19' 6"	19' 3"	19' 2"	18' 11"	18' 8"	18' 4"	18' 4"	20' 3"	20' 3"	20' 3"	20' 3"	11' 6"
Roslyn Branch	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	11' 6"
Buckley Line	20' 11"	20' 10"	20' 8"	20' 7"	20' 6"	20' 5"	20' 4"	20' 2"	20' 2"	21' 5"	21' 5"	21' 5"	21' 5"	11' 6"
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"	11' 6"
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"	11' 6"
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"	11' 6"
Crocker Branch	15' 11"	15' 9"	15' 6"	15' 5"	15' 2"	15' 0"	14' 8"	14' 5"	14' 5"	17' 7"	17' 7"	17' 7"	17' 7"	11' 6"
Orting Branch	17' 1"	17' 0"	16' 10"	16' 8"	16' 7"	16' 7"	16' 5"	16' 3"	16' 3"	18' 9"	18' 9"	18' 9"	18' 9"	11' 6"
Belt Line (Black River-Woodinville)	21' 3"	21' 3"	21' 3"	21' 1"	21' 0"	20' 10"	20' 8"	20' 6"	20' 6"	21' 6"	21' 6"	21' 6"	21' 6"	11' 6"

12th Subdivision	21' 0"	20' 10"	20' 6"	20' 3"	20' 2"	20' 0"	19' 8"	19' 4"	19' 4"	21' 0"	21' 0"	21' 0"	21' 0"	11' 6"
13th Subdivision	20' 9"	20' 7"	20' 4"	20' 2"	20' 1"	19' 11"	19' 9"	19' 7"	19' 7"	21' 3"	21' 3"	21' 3"	21' 3"	11' 6"
14th Subdivision	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"
15th Subdivision	16' 10"	16' 8"	16' 4"	16' 2"	16' 2"	16' 0"	15' 9"	15' 6"	15' 6"	19' 2"	19' 2"	19' 2"	19' 2"	11' 6"
16th Subdivision	17' 2"	17' 2"	17' 1"	17' 0"	17' 0"	16' 11"	16' 10"	16' 9"	16' 9"	17' 7"	17' 7"	17' 7"	17' 7"	11' 6"
16th Subdivision	20' 10"	20' 9"	20' 7"	20' 5"	20' 4"	20' 1"	19' 9"	19' 6"	19' 6"	21' 4"	21' 4"	21' 4"	21' 4"	11' 6"
16th Subdivision	20' 6"	20' 6"	20' 6"	20' 5"	20' 5"	20' 4"	20' 2"	20' 1"	20' 1"	20' 6"	20' 6"	20' 6"	20' 6"	11' 6"
16th Subdivision	15' 5"	15' 3"	15' 1"	15' 0"	14' 11"	14' 10"	14' 8"	14' 4"	14' 4"	16' 11"	16' 11"	16' 11"	16' 11"	11' 6"
17th Subdivision	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"
18th Subdivision	20' 11"	20' 10"	20' 8"	20' 7"	20' 6"	20' 5"	20' 4"	20' 2"	20' 2"	21' 5"	21' 5"	21' 5"	21' 5"	11' 6"
19th Subdivision	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	25' 0"	11' 6"
20th Subdivision	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"
20th Subdivision	18' 9"	18' 6"	18' 2"	17' 10"	17' 9"	17' 7"	17' 3"	16' 11"	16' 11"	20' 10"	20' 10"	20' 10"	20' 10"	11' 6"
21st Subdivision	21' 0"	20' 10"	20' 8"	20' 6"	20' 6"	20' 4"	20' 3"	20' 1"	20' 1"	21' 3"	21' 3"	21' 3"	21' 3"	11' 6"
22nd Subdivision	17' 9"	17' 5"	16' 3"	15' 2"	14' 9"	13' 11"	10' 9"	5' 6"	5' 6"	18' 1"	18' 1"	18' 1"	18' 1"	11' 6"
23rd Subdivision	17' 1"	17' 0"	16' 11"	16' 10"	16' 9"	16' 8"	16' 7"	16' 6"	16' 6"	18' 9"	18' 9"	18' 9"	18' 9"	11' 6"
24th Subdivision	19' 1"	19' 0"	18' 11"	18' 10"	18' 9"	18' 7"	18' 4"	18' 1"	18' 1"	19' 4"	19' 4"	19' 4"	19' 4"	11' 6"

**TONNAGE RATINGS—FREIGHT ENGINES**

DISTRICTS	Ruling Grade %	Class Z 3	Class W 3	Class W 1	Class W	Class Y 2	Class S 4	Class F 1
		Tons	Tons	Tons	Tons	Tons	Tons	Tons
<b>First Subdivision—Eastward.</b>								
Auburn to Lester.....	1.0	2500	1700	1200	1100	900	800	
Lester to Easton. Maximum 80 cars.....	2.2	1250	750	600	550	450	400	
Easton to Yakima.....	Down	Car Limit	Car Limit					
<b>First Subdivision—Westward.</b>								
Tacoma to Auburn.....				3600				
Yakima to Thrall.....	0.7	3600	3125		2100		1550	
Thrall to Ellensburg.....	0.3	5000	4000		3800		2450	
Ellensburg to Easton.....	0.8	3600	2300	1800	1700	1300	1200	
Easton to Lester. Maximum 80 cars.....	2.2	1250	750	600	550	450	400	
Lester to Auburn.....	Down	Car Limit	Car Limit					
<b>Fifth Subdivision—Eastward.</b>								
Sumas to Wickersham...	0.5		3150	2600	2500	2300	2000	1700
Wickersham to Hoogdale.	0.9		2900	2500	2400	2100	1800	1600
Hoogdale to Clear Lake..	0.3		5000	4600	4500	4000	3500	3000
Clear Lake to Edgecomb..	0.6		2950	2500	2400	2100	1800	1600
Edgecomb to Bromart...	0.4		5000	4700	4600	4200	3000	2500
Bromart and Snohomish to Maltby.....	1.8		1200	975	900	800	660	625
Maltby to Woodinville...	Down		5000	4100	4000	4000	3170	3000
Woodinville to Lake.....	0.7		3150	2900	2800	2600	2500	2200
Lake to Keith.....	0.8		2850	2400	2300	2100	1650	1500
Keith to Seattle.....	0.5		3150	2900	2800	2600	2500	2200
<b>Fifth Subdivision—Westward.</b>								
Seattle to Interbay.....	0.0		5000	4600	4500	4000	3500	3000
Interbay to Keith.....	1.2		1750	1325	1250	1100	1000	900
Keith to Woodinville....	0.4		3650	3100	3000	2500	2200	2000
Woodinville to Maltby...	1.9		1100	905	830	780	635	600
Maltby to Bromart.....	0.5		2350	1900	1800	1600	1500	1400
Bromart and Snohomish to Arlington.....	0.8		4150	3700	3600	3200	2700	2500
Arlington to McMurray..	1.0		2400	2150	2050	1900	1650	1400
McMurray to Sedro-Woolley.....	0.4		4150	3700	3600	3200	2500	2000
Sedro-Woolley to Thornwood.....	1.0		1750	1400	1300	1050	1000	950
Thornwood to Sumas....	0.5		3150	2600	2500	2300	2000	1700
<b>Eleventh Subdivision—Eastward.</b>								
Woodinville to Kirkland..	1.0		2350	1900	1800	1600	1215	1150
Kirkland to Black River..	0.3		5000	4600	4500	4000	3500	3000
<b>Eleventh Subdivision—Westward.</b>								
Black River to Woodinville.....	0.5		2650	2350	2250	2000	1700	1500

**TONNAGE RATINGS—FREIGHT ENGINES**  
—Continued.

DISTRICTS.	Ruling Grade %	Class W 3	Class W 1	Class W	Class Y 2	Class S 4	Class F 1
		Tons	Tons	Tons	Tons	Tons	Tons
<b>Twelfth Subdivision—Eastward.</b>							
North Bend to Falls City.....	0.7				1585	1740	1650
Falls City to Preston.....	2.0				700	580	550
Preston to Woodinville.....	0.5				2300	2000	1700
<b>Twelfth Subdivision—Westward.</b>							
Woodinville to Issaquah.....	0.6				2500	2100	1700
Issaquah to Preston.....	2.3				700	550	450
Preston to Falls City.....	1.6				900	800	700
Falls City to North Bend.....	0.7				2000	1600	1500
<b>Thirteenth Subdivision—Eastward.</b>							
Edgecomb to Getchell.....	1.8	1350	1075	1000	800	750	700
Getchell to Snohomish.....	0.8	5000	4600	4500	4000	3500	3000
<b>Thirteenth Subdivision—Westward.</b>							
Bromart and Snohomish to Hartford	0.6	2150	1800	1700	1500	1200	1100
Hartford to Getchell.....	1.5	1650	1300	1200	1100	900	800
Getchell to Edgecomb.....	0.0	5000	4600	4500	3500	3500	3000
<b>Fourteenth Subdivision—Eastward and Westward.</b>							
Arlington and Darrington.....	0.8				5000	4500	3000
<b>Fifteenth Subdivision—Eastward.</b>							
Bellingham to Larson.....	2.1	1050	800	725	600	555	525
Larson to Wickersham.....	0.9	3200	2500	2400	2200	2000	1800
<b>Fifteenth Subdivision—Westward.</b>							
Wickersham to Mirror Lake....	2.2	1080	835	760	750	580	550
Mirror Lake to Silver Beach....	0.9	2650	2250	2150	1750	1500	1250
Silver Beach to Larson.....	1.2	2150	1800	1700	1500	1300	1100
Larson to Bellingham.....	Down—	Maximum 80 Cars.					

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

SUBDIVISION	DISTRICT	Rulings Grade %	CLASS OF ENGINE												
			Class W-3		Class W		Class Y-2		Class F-1		Class S		Class P		
			Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	
<b>Third Eastward</b>	Tacoma to South Tacoma.....	2.20	900	600	20	500	20	500	20	400	15	400	15	300	15
	Tacoma to Chehalis.....	0.30	4500	3500	.....	3300	.....	3300	.....	2000	80	1800	80	1500	50
	Chehalis to Napavine.....	1.12	1975	1350	70	1250	70	900	60	900	60	850	60	750	60
	Napavine to Portland.....	0.00	.....	.....	.....	.....	.....	3000	75	3000	75	3000	75	1400	47
<b>Third Westward</b>	Portland to Vader.....	0.50	4000	3000	.....	2800	.....	2800	.....	2500	80	2500	80	1250	60
	Vader to Napavine.....	0.90	2350	1700	.....	1500	.....	1500	.....	1100	.....	1000	32	860	29
	Napavine to Tacoma.....	0.30	4500	3500	.....	3300	.....	3300	.....	2500	80	2500	80	2300	50
	St. Clair to Lacey.....	1.60	1000	900	.....	900	.....	900	40	800	40	800	40	.....	.....
<b>Sixteenth Westward</b>	Lacey to Olympia.....	0.70	2500	2400	.....	2400	.....	2400	.....	70	.....	70	.....	.....	
	Olympia to Belmore.....	1.80	1000	900	.....	900	.....	900	35	600	35	600	35	.....	
	Belmore to Gate.....	0.88	1500	1400	.....	1400	.....	1400	40	1200	40	1200	40	.....	
	Gate to Hoquiam.....	0.50	3500	3300	.....	3300	.....	3300	99	2200	99	2200	99	.....	
	Hoquiam to Moclips.....	0.40	4000	4000	.....	4000	.....	4000	99	2500	99	2500	99	.....	
	Moclips to Hoquiam.....	0.40	4000	4000	.....	4000	.....	4000	99	2500	99	2500	99	.....	
<b>Sixteenth Eastward</b>	Hoquiam to Gate.....	0.50	3500	3300	.....	3300	.....	3300	99	2000	99	2000	99	.....	
	Gate to Olympia.....	0.87	2700	2500	.....	2500	.....	2500	50	1500	50	1500	50	.....	
	Olympia to Lacey.....	1.61	1000	900	.....	900	.....	900	30	550	30	550	30	.....	
	Lacey to St. Clair.....	1.20	1350	1250	.....	1250	.....	1250	40	1050	40	1050	40	.....	

<b>Seventeenth Eastward</b>	Lakeview to Nisqually.....	1.00	2500	2300	.....	2300	.....	2300	.....	2000	80	2000	80	.....	
	Nisqually to American Lake.....	1.60	1000	800	40	800	40	800	30	550	30	550	30	.....	
	American Lake to Murray.....	1.00	2000	1800	.....	1800	.....	1800	.....	1500	.....	1500	.....	.....	
	Murray to Lakeview.....	0.66	2500	2300	.....	2300	.....	2300	.....	2000	.....	2000	.....	.....	
<b>Fourth Eastward</b>	South Tacoma to Rainier.....	0.70	2000	1800	.....	1800	.....	1800	70	1200	60	1150	60	1050	60
	Rainier to West Tenino.....	0.35	3200	3000	.....	3000	.....	3000	.....	.....	60	.....	60	.....	
	West Tenino to Rainier.....	0.90	1700	1500	.....	1500	.....	1500	.....	1100	.....	1050	35	950	31
	Rainier to Tacoma.....	0.50	3200	3000	.....	3000	.....	3000	.....	1800	80	1800	75	1500	50
<b>Seventh Westward</b>	Palmer Jct. to Tacoma.....	0.00	.....	.....	.....	.....	.....	.....	.....	.....	80	.....	80	.....	
	Fairfax to South Prairie.....	0.00	.....	.....	.....	.....	.....	.....	.....	2000	45	2000	45	.....	
	Tacoma to Orting.....	0.56	3000	2800	.....	2800	.....	2800	.....	1800	80	1800	80	.....	
	Orting to South Prairie.....	1.00	1500	1400	80	1400	60	900	60	800	60	800	60	.....	
<b>Seventh Eastward</b>	South Prairie to Buckley.....	1.70	800	700	17	700	17	450	15	400	14	400	14	.....	
	Buckley to Palmer Jct.....	1.25	1650	1450	80	1450	60	900	60	800	60	800	60	.....	
	South Prairie to Black Carbon.....	1.45	.....	.....	.....	.....	.....	500	28	500	28	500	28	.....	
	South Prairie to Wilkeson.....	2.20	.....	.....	.....	.....	.....	400	25	400	25	400	25	.....	
<b>Seventh Eastward</b>	Wilkeson to Carbonado.....	2.20	.....	.....	.....	.....	.....	400	25	400	25	400	25	.....	
	Carbonado to Fairfax.....	1.70	.....	.....	.....	.....	.....	500	30	500	30	500	30	.....	



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

SUBDIVISION	DISTRICT	Ruling Grade %	CLASS OF ENGINE												
			Class W-3		Class W		Class Y-2		Class F-1		Class S		Class P		
			Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	
Eighth Westward	Kerriston to Kanaskat.....	1.40								600	30	600	30		
	Kanaskat to Kerriston.....	2.30								400	25	400	25		
Ninth Eastward	Crocker to Wingate.....	1.70								500		500			
	Orting to Lake Kapowsin.....	1.40								600		600			
Eighteenth Westward	Centralia to Gate.....	0.50			3500					2200	70	2200	70		
	Grand Mound to Centralia.....	0.00			3500					3000	70	3000	70		
Eighteenth Eastward	Rochester to Grand Mound.....	0.40			3500					2400	70	2400	70		
	Gate to Rochester.....	0.50			3500					2000	70	2000	70		
Twenty First Westward	Chehalis Jct. to Adna.....	0.50			2900					2000	60	2000	60		
	Adna to Pe Ell.....	0.66			2500					1500	50	1400	50		
Twenty First Westward	Pe Ell to McCormick.....	0.80			1700					800	30	800	30		
	McCormick to Pluvius.....	1.60			1000					550	30	550	30		
	Pluvius to South Bend.....	0.53									70		70		

Twenty First Eastward	South Bend to Frances.....	0.60								1800	60	1800	60		
	Frances to Pluvius.....	1.90			2100					500	25	500	25		
	Pluvius to Chehalis Jct.....	0.40									70		70		
Twenty Second Westward	Yacolt to Van Jet.....	0.58								1800	45	1800	45		
	Van Jet to Homan.....	1.60			1000					550	35	550	35		
Twenty Second Eastward	Homan to Yacolt.....	1.00			1500					800	45	800	45		
	Elma to Hillgrove.....	1.00			1800					1200	70	800	70		
Nineteenth Eastward	Hillgrove to Stimson.....	1.30			1550					1100					
	Stimson to Shelton.....	1.50			1100					700		550			
Nineteenth Westward	Shelton to Marmac.....	1.00			1800					1200		400			
	Marmac to Stimson.....	2.50			600					400					
	Stimson to Elma, Descending.....	1.00													

# RAILROAD CROSSINGS AND INTERLOCKINGS.

## Second Subdivision.

### SEATTLE.

South Portal of King Street Tunnel—Interlocked.

BETWEEN FIFTEENTH STREET TOWER AND RESERVATION.

OWR&N Crossing—Interlocked.

### RESERVATION.

Junction OWR&N—Interlocked.

BETWEEN BLACK RIVER AND ARGO.

CMStP&P Crossing—Interlocked.

BETWEEN ARGO AND MILLYARD.

OWR&N and PCR Crossings—Interlocked.

## Third Subdivision.

### CHEHALIS JUNCTION.

CMStP&P Crossings—Automatic interlocking.

LEWIS RIVER DRAWBRIDGE—Interlocked.

CHAMBERS CREEK DRAWBRIDGE—Interlocked.

COWLITZ RIVER (On Longview Line) Interlocked.

## Fifth Subdivision.

### G. N. JUNCTION.

Two CMStP&P Crossings.

### KRUSE.

M&A Crossings.

BETWEEN BIG LAKE AND CLEAR LAKE.

PS&C Crossing—Interlocked.

BETWEEN SEDRO WOOLLEY AND THORNWOOD.

Two GN Crossings.

BETWEEN DEMING AND NOOKSACK.

CMStP&P Crossing.

BETWEEN NOOKSACK AND SUMAS.

CMStP&P Crossing.

### SEATTLE.

South Portal King Street Tunnel—Interlocked.

Delta wye—Interlocked.

Draw Spans.

SKAGIT RIVER—Interlocked.

SALMON BAY—Interlocked.

## Eighth Subdivision.

### SELLECK.

CMStP&P Crossing.

## Eleventh Subdivision.

BETWEEN RENTON AND BRIQUETTEVILLE.

PCR and SR&C Crossings.

BETWEEN BRIQUETTEVILLE AND QUENDALL.

PCR Crossing.

### WOODINVILLE.

12th Subdivision Crossing.

## Twelfth Subdivision.

### WOODINVILLE.

11th Subdivision Crossing.

## Sixteenth Subdivision.

### OLYMPIA.

Tumwater Spur Crossing.

### DRAWBRIDGES.

ABERDEEN. Wishkah River—Interlocked.

HOQUIAM. Hoquiam River—Interlocked.

## Eighteenth Subdivision.

BETWEEN ROCHESTER AND GATE.

CMStP&P Crossing.

### BLAKESLEE JUNCTION.

OWR&N and CMStP&P Crossings—Automatic interlocking.

## Nineteenth Subdivision.

### MCCLEARY JUNCTION.

White Lumber Company R. R. Crossing.

## Twentieth Subdivision.

### COSMOPOLIS.

OWR&N Crossing.

### SOUTH ABERDEEN.

OWR&N Crossing.

## Twenty-First Subdivision.

### CHEHALIS JUNCTION.

CMStP&P Crossing—Automatic interlocking.

### MESKILL.

Leudinghouse R. R. Crossing.

### DRYAD.

CMStP&P Crossing—Automatic interlocking.

### PE ELL.

McCormick R. R. Crossing.

### WALVILLE.

Walville Lumber R. R. Crossing.

## Twenty-Fourth Subdivision.

### YAKIMA.

YVT Crossing.

## 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. J. McCULLOUGH,**  
Assistant Superintendent.

**J. E. CAMPBELL,**  
Trainmaster.

**W. W. JUDSON,**  
Trainmaster.

**O. REVLING,**  
Trainmaster.

**E. H. FRIBERG,**  
Assistant Superintendent.

**THEO. HARRIS,**  
Trainmaster.

**J. E. HOGAN,**  
Trainmaster.

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