NORTHERN PACIFIC RAILWAY COMPANY

TACOMA DIVISION

Special Instructions No. 7

In Effect at 12:01 A. M.
Pacific Standard Time

Tuesday, January 1, 1946

These instructions constitute a part of the Time Table currently in effect.

Employes whose duties are in any way affected by the Time Table must have a copy of The Current Special Instructions and Current Time Table with them on duty.

J. F. ALSIP,
Assistant General Manager.

C. H. BURGESS,
Superintendent.

F. R. BARTLES,
General Manager.

C. V. BERGLUND,
General Superintendent of Transportation.

ALL SUBDIVISIONS.

1. Speed Restrictions—

Maximum Speeds Permitted—

The maximum speeds in miles per hour permitted are listed by zones for each Subdivision.

Except on mountain grades, passenger trains with diesel-electric engines and all light weight cars may run at speeds ten (10) miles per hour faster than passenger trains with steam engines.

Speed Restrictions Account Curves, etc.—

Reductions of seeds, within the zones listed for each Subdivision, when necessitated by curves or for other reasons, are designated by Advance Warning, Reduce Speed and Resume Speed signs.

The maximum permissible speeds in miles per hour for trains with steam engines are shown on the signs.

Except on mountain grades, passenger trains with diesel-electric engines and all light weight cars may operate through the restricted zones at speeds ten (10) miles per hour faster than those shown on the signs.

Speed Restrictions, Miscellaneous—

The locations where reduced speeds are required, for such reasons as city ordinances, bridges, etc., where not designated by Advance Warning, Reduce Speed and Resume Speed signs, are listed for each Subdivision and appear directly after the list of maximum speeds permitted.

J Manifest freight trains ..... 35 MPH.

All trains and engines:

Through crossovers, turnouts and gantlets..... 15 MPH.

Over spring switches—

In facing point direction,

If not equipped with facing point lock..... 30 MPH.

If equipped with facing point lock..... Normal Speed.

In trailing point direction,

When movement actuates switch points..... 30 MPH.

On track for which switch is lined..... Normal Speed.

If any movement is through turnout, the allowable turnout speed must be observed.

Handling steam wrecking cranes, pile drivers or locomotive cranes ..... 30 MPH.

Picking up train orders from operators..... 30 MPH.

Engines— Classes—	Handling trains	Running light
All A and Q (except on passenger trains where higher speed is authorized)	60 MPH.	60 MPH.
Z-6, Z-7 and Z-8	60 MPH.	50 MPH.
Z-5, Y, Y-1, Y-3	40 MPH.	35 MPH.
Z-3, Z-4	35 MPH.	30 MPH.
S-4, T, T-1, W to W-5 inc., Y-2	50 MPH.	45 MPH.
S-10	45 MPH.	40 MPH.
Steam switch engines, without engine trucks, under all conditions	15 MPH.	15 MPH.
660 HP diesel-electric switch engines, Nos. 125 to 130 inc.	45 MPH.	45 MPH.
5400 HP diesel-electric road engines, Nos. 6000 to 6010 inc.	65 MPH.	65 MPH.
900 HP and 1000 HP diesel-electric switch engines and combination road-switch engines	60 MPH.	60 MPH.

Coming from shops, under steam, to prevent running hot:

All A and Q and classes Z-6, Z-7 and Z-8..... 50 MPH.
S-4, T T-1, W to W-5 inc., Y-2..... 35 MPH.
Z-5, S-10, Y, Y-1, Y-3..... 30 MPH.
Z-3, Z-4 ..... 25 MPH.

Main Line—With main and side rods removed:

All A and Q and classes Z-6, Z-7 and Z-8..... 30 MPH.
Z-5, S-4, S-10, T, T-1, W to W-5 inc., Y to Y-3 inc..... 25 MPH.
Z-3, Z-4 ..... 20 MPH.

With main rods removed and side rods in place:

All A and Q and classes Z-6, Z-7 and Z-8..... 35 MPH.
Z-5, S-4, S-10, T, T-1, W to W-5 inc., Y to Y-3 inc..... 30 MPH.
Z-3, Z-4 ..... 25 MPH.

Branch Lines—With either or both main and side rods removed:

All A and Q classes ..... 25 MPH.
All other classes ..... 20 MPH.

On bridges—With either or both main and side rods removed:

Steam switch engines, without engine trucks ..... 15 MPH.
Other engines ..... 20 MPH.

In the event the above speeds are in excess of 50% of the permissible speed for operating the engine in working order over any bridge carrying speed restrictions, speed on such bridges shall be 50% of the permissible speed for engine in working order.

Dead engines going to shops or being transferred from one district to another with all rods up or in place, the piston rod parted from the crosshead and removed and the valve motion disconnected and blocked, may be moved in trains at not to exceed the permissible speed of freight trains operating in the territory over which the engines are to be moved, or the operating speed restriction for track or bridges for that class of engine, whichever is the lower.

Engines handled in this manner when coming from shops must not exceed the operating speeds specified for engines coming from shops under steam.

Diesel-electric 660 HP Nos. 125 to 130 inc., when handled dead in train ..... 45 MPH.

Diesel-electric, other engines, when handled dead in train ..... 50 MPH.

Bridge or other restrictions must be observed for these engines the same as when in operating condition.

2. Single and Double Headers; operation—track and bridges—general.

Except as otherwise provided, double header operation of engines of the same class carry the restrictions applicable to single headers of that class. Double headers of engines of different classes carry the restrictions applicable to double headers of the heavier class of the combination.

Double-Heading Restrictions—Engines, Classes A-2 to A-5 or Z-5 to Z-8 inclusive:

When necessary to use two such engines on freight trains, the second engine must be cut in at the middle or in the rear portion of the train. When such engines are used as helpers on passenger trains handled by engines of the same class, such helper engine must be placed on the rear of the train. When engines of these classes are used to double-head with engines of W or other A or Z classes, the A-2 to A-5 or Z-5 to Z-8 inclusive, must be the lead engine.

Diesel engines—Except as otherwise provided, diesel-electric engines of the 6000 series and all diesel switch engines may be operated over bridges under the same restrictions shown for Class T engines.

3. Lights will not be displayed at night on train order signals on the 6th, 7th, 8th, 10th, 12th, 14th, 15th, 20th, 21st, 22nd, 23rd and 24th subdivisions.

Trains will be governed by the day indication of these train order signals.

4. Rule D-97 applies to all divisions.

5. Except in case of fog, storms, or otherwise bad weather, yellow signals may be used, without flagmen, when placed as prescribed by Rule 10(h) to indicate approach to a red signal on all subdivisions, except the 1st, 2nd, 3rd, 4th and 17th subdivisions, and also in special cases authorized by the Superintendent and protected by train order.

6. Rule 606: Emergency Signals are not used at interlockings or drawbridges operated by the Northern Pacific Railway.

7. Test of hand brakes of gas-electric motor cars must be made once each trip. If crew has charge of moving car prior to leaving initial station, test will be made during such movement; otherwise as soon as possible after leaving initial station. On cars equipped with "Deadman's Control", conductor and engineer will cooperate in making test.

Gas-electric motors cars, when handled dead in freight trains, must be behind caboose.

8. Precautions must be taken on double track to prevent accidents from swinging doors or other loose construction attached to cars or locomotives.

9. Electric Switch Locks—To operate, open door of electric switch lock and, if indicator shows "proceed", move lock lever to the left, which will unlock switch and permit it to be opened and movement may be made at once. If indicator shows "stop", and conflicting train movement is not evident, open door of release box and push the button. This will start operation of clockwork release which will run down in three minutes and at the end of that time, indicator will show "proceed" and switch can be unlocked by moving lever to the left. Restore lock lever, close and lock doors of electric locks and release boxes when switches are restored to normal position.

10. Log Trains—
Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, will be governed by the following instructions:
Conductors 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 tables.
Lost logs must be reported and when they obstruct traffic or other tracks, or damage roadway, trains must be stopped and effort made to clear obstruction. Special precautions should be observed to avoid logs falling from cars when using overhead crossings and in all cases of obstructions, take prompt action to protect trains.
Double track:
Such trains must not meet or be passed by trains, except work trains, between stations on opposite track of double track; must be standing when passenger trains on opposite track meet or pass such train, and if practicable must be standing when freight trains are met, or passed on opposite track, but if not practicable will pull by standing freight trains at restricted speed. When meeting or passing work trains between stations, one train must, when practicable, be standing.
Conductors will notify Dispatcher when logs, wood bolts, or veneer blocks, loaded on flat cars are in their train, and secure train order that trains, except work trains, on opposite track will be held at next station until they have arrived.
Such trains 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.
Must not be handled in trains after dark, except as otherwise provided, 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.
Single Track—Such trains must be standing when meeting or being passed by passenger trains. When running, a trainman must be stationed on rear platform of caboose to watch for logs, wood bolts, or veneer blocks that may have fallen from cars.
These rules will not apply to logs, wood bolts, or veneer blocks loaded in gondola cars properly secured, staked and wired.

11. Pusher engines must not push on cabooses not equipped with steel sills.

12. Special trains having a consist throughout of cars of the type designated as Special Troop Sleeping and Troop Kitchen cars, when operating on descending grades designated as Mountain Grades, must have retaining valves used on all cars. Retaining valve handles to be turned to the slow direct exhaust (uppermost) position just before passing summit of grade and turned down when foot of mountain grade is reached.

13. Bulletin Stations—
Yakima, Passenger Station, Yard Office, Roundhouse.
Ellensburg, Cle Elum, Easton, Lester.
Auburn, Yard Office, Round House.
Seattle, South Portal Tower, Middle Yard, Round House.
Tacoma, Union Station, Yard Office, Round House.
Centralia, Passenger Station, Yard Office, Round House.
Longview, Freight Station, Vancouver, Passenger Station.
Portland, Telegraph Office.
Woodinville. Everett, Yard Office, Round House.
Sumas, Enumclaw, Bellingham.
Hoquiam, Passenger Station, Round House.
Elma, South Bend, Olympia.

14. Standard Time Clocks—
Yakima, Passenger Station, Yard Office.
Ellensburg, Cle Elum, Easton, Lester.
Auburn Yard Office.
Seattle, South Portal Tower, 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.
Elma, Telegraph Office.

15. Watch Inspectors—
Yakima—Carson and Stedman, Ellensburg—Phillips Jewelry.
Cle Elum—Morrow Jewellers.
Auburn—R. DeBarthe.
Seattle—R. A. McReynolds, Ben Tipp, T. O. Wold.
Tacoma—Mierows, 1105 Broadway, A. G. Paulson.
Centralia—C. R. Ahern, Vancouver—W. L. Runyon.
Portland—Roy and Malin, 316 S. W. Alder St.
Everett—Oscar P. Nelson, Snohomish—D. J. Dougherty.
Arlington—E. H. Richter.
Bellingham—Erving H. Easton.
Sumas—Henrickson Jewelry Company.
Aberdeen—Hansmans Jewelry Co.
Hoquiam—Carl Kneipp, Fred Wetzel.
Olympia—Talcott Bros., Shelton—J. C. Beckwith.
South Bend—H. Holte.

FIRST SUBDIVISION.

(MAIN LINE)

1. **Speed Restrictions**

Zone—Between	Freight and mixed	Passenger Steam	Passenger Diesel
Yakima and MP 93 (east of Selah)	50	60	70
MP 93 and MP 96 (east of Pomona)	50	70	80
MP 96 and MP 121 (east of Thrall)	50	60	70
MP 121 and MP 11 (Dudley)	50	70	80
MP 11 and MP 16 (Kountze)	50	60	70
MP 16 and MP 38 (Easton)	50	70	80
MP 38 and Hubner	50	60	70
Hubner and Martin, in either direction	20 MPH.	30	30
Ascending or descending against the current of traffic	20	25	25
Through Stampede Tunnel No. 3	30	30	30
Stampede Tunnel No. 3 and Lester, in either direction	20 MPH.	30	30
Ascending or descending against the current of traffic	20	25	25
Lester and MP 82 (Kanaskat)	50	60	70
MP 82 and MP 101 (east of East Auburn)	50	70	80
MP 101 and East Auburn	50	60	70

Approach Ellensburg and Yakima passenger stations at restricted speed.

All eastward trains approach Lester and all westward trains approach Easton at restricted speed expecting to find main track occupied.

At Yakima—over Yakima Ave., B, C, and D streets.....20 MPH.
At Cle Elum—over important street crossings.....25 MPH.
Engines Class Z-5 .....35 MPH.
See also Mountain Grade Operation.

2. **Bridge and Engine Restrictions**—Engines classes A-2 to A-5 inc. and Z-5 to Z-8 inc., not permitted west of Easton, except as authorized by superintendent.

Bridges 74 and 75, between Eagle Gorge and Lemolo, 78, 78-1 and 79, between Lemolo and Palmer Jct., 81, between Palmer Jct. and Kanaskat, 100, between Wynaco and East Auburn, all Green River,

Engines Class Z-3, double-headed .....20 MPH.
Engines Class Z-4 .....20 MPH.

At Ellensburg, Class A engines not permitted on house track beyond clearance point. Engines heavier than Class W5 not permitted on wye and other engines turning on wye track, must start movement via east leg and move slowly on curves.

Engines Classes A-2 to A-5 inc., and Z-5 to Z-8 inc.:

Extra precautions must be taken when using station tracks to be sure of proper clearance and guard against accidents or injuries. When taking siding to meet or pass other trains, train and engine men must be sure that clearance is sufficient, and when possible, engine should be on straight track.

These engines not permitted on spur tracks at Yakima, Selah, Roza, Wymer, Umtanum, Holmes, Ellensburg spurs north of main track, Thorp, Swauk, Bristol and Nelson. If necessary to handle cars on these tracks hold onto enough cars to avoid engine going on such tracks.

At Yakima, not permitted on yard tracks 6, 7, 8, 9, 10 and 11, or on tracks west of passenger station, except main track, highline No. 1 and old eastward siding.

At Thorp, two engines of these classes must not occupy lap switches simultaneously.

At Cle Elum, tracks 11 to 16 may be used if adjacent tracks are clear to insure proper clearance, otherwise when picking up or setting out cars hold onto enough cars so engine will not go beyond frog of lead switches.

3. **Between Auburn and East Auburn:** Automatic signal indications governing the use of main tracks between Auburn and west switch East Auburn supersede the superiority of trains. All train and engine movements between these points and also movements between East Auburn and Auburn Yard will be made subject to signal indications. Freight trains, yard engines and light engines moving within these limits must avoid delay to first-class trains and passenger extras.

   Eastward second subdivision trains will be governed by the top light of signal 213: Eastward trains from second to first subdivision will be governed by lower light of signal 213. Westward trains from first subdivision, entering second subdivision westward main track, will be governed by top light of signal 1029. Westward trains from first subdivision moving through crossover to second subdivision eastward main track will be governed by lower light of signal 1029. All switches connected with these movements must be properly lined before signal will indicate "proceed".

   Eastward trains moving from Auburn Yard on outbound track to first subdivision main track, will be governed by dwarf signal near junction switch. Trains using this track, enter the track circuit approximately 500 feet before reaching this signal and, when occupying track circuit, will set signals against movements in either direction on main track between Auburn and East Auburn. These signals may be cleared by opening knife switch located inside of metal case at signal. This knife switch must be returned to closed position after being used.

   Eastward trains, moving from Auburn Yard on inbound track to first subdivision main track, will be governed by dwarf signal near junction switch. Trains or engines will stop at this signal and, before lining main track switch, a member of crew must observe switch indicator, which will show "proceed" if main track is unoccupied between Auburn and East Auburn. If switch indicator shows "proceed", main track switch may be opened and signal will show "proceed" if route is clear.

   At Auburn, westward trains or engines on second subdivision westward main track, awaiting arrival or departure of trains to or from first subdivision, must remain east of stop signal, located on westward main track about 500 feet east of first subdivision junction switch.

   Electric switch locks are located at junction switch leading to first subdivision and at both ends of crossover east of Auburn passenger station.

   Trains or engines will not pass signal 1029 in "stop" position except under protection of flag against first-class trains.

   Eastward second subdivision trains or engines, using crossover to first subdivision, will not pass signal 213 if lower light indicates "stop" except under protection of flag against first-class trains. If signals indicate "proceed", movements may be made without flag protection.
   At Auburn, Second Subdivision instructions govern.

4. At East Auburn, unless required to take siding, through first class trains having transfer to make will hold main track, and trains handling Tacoma connections will use transfer track north of main track while transferring. Telltales are located on main track at each end of transfer platform to call attention to restricted clearance of umbrella shed.

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 Headworks**—Switch to spur spiked. When necessary to use this spur, call section foreman to remove spikes.

7. **At Hot Springs**—Eastward trains holding main track meeting **trains will stop back of signal overlap sign to avoid signal interference at west end Lester.**

8. **At Martin**—Westward passenger 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 No. 2 track to eastward main track and switch of crossover leading from east No. 2 track to siding is for No. 2 track and **must be left lined for No. 2 track when not in use.**

10. **At Cle Elum**—Electric coal bunker, on westward siding, will not clear man on side of car or engine. Logs will not be handled on this track.
    Switch on west leg of wye leading to coal dock track must be left lined for coal dock track.

11. **At Ellensburg**—All train, engine and car movements over Fifth Street Crossing, on Auxiliary Tracks, must be preceded by trainmen.

    Conductors of passenger trains relieved at Ellensburg by another conductor will be governed by Transportation Rule 220 in delivering orders to the relieving conductor.

12. **At Yakima**—Freight Trains arriving Yakima freight yard will **be secured by setting not less than six (6) hand brakes on head end of eastward, and on rear end of westward trains.**

    Time of first class trains and passenger extras applies at passenger station. These trains taking siding will use high-line pocket unless otherwise instructed. Unless otherwise provided, time specified for other westward extra trains applies at yard office.

    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 shoved or engines backing over Yakima Avenue crossing in addition to crossing watchman protection.

    Normal position of switch leading to siding extending between east end of Yakima Yard and Union Gap is for siding. Switch to spur track leading off this siding, located 200 feet east of west switch of siding, must be left lined and locked for spur track when not in use to act as a derail for all yard tracks.

13. **Sidings—**

    Covington; north siding is eastward, south siding is westward.
    Kanaskat; north siding is eastward, south siding is westward.
    Humphrey; No. 2 track is eastward siding, No. 1 track is westward siding.
    Maywood; north siding is eastward, south siding is westward.
    Lester; No. 2 track is eastward siding, No. 1 track is westward siding.
    Cle Elum; No. 6 track between crossover opposite passenger station and first crossover east is eastward siding. "West extension" between crossover at east end of coal dock to extreme west switch is westward siding.
    Teanaway; south siding is eastward, north siding is westward.
    Thorp; north siding is eastward, south siding is westward.
    Ellensburg; When passenger trains meet at Ellensburg, the train required to take siding will use City track: When otherwise instructed, and for other trains, No. 1 track in east yard (east of Fifth Street) will be used as westward siding, and No. 1 track in west yard (west of Fifth Street) will be used as eastward siding. The normal position of switches of connecting track between west No. 1 and east No. 1 tracks is for the connecting track and must be left in normal position after being used.

Thrall; North siding is eastward, south siding is westward.
Pomona; North siding is eastward, south siding is westward.
Selah; South siding is eastward, north siding is westward.

14. **Logs—Westward trains handling logs between Lester and Auburn, will stop at Eagle Gorge for inspection of logs.**
Logs, woodbolts, or veneer blocks, loaded on flat cars, will not be handled through Stampede Tunnel, between Martin and Stampede, nor after dark, west of Lester.

15. **Spring and dual control switches—**

Spring switch equipped with facing point lock, between East Auburn and Auburn, where outbound wye track from Auburn yard connects with main track.

Dual control switches—At Easton and Lester, switches at end of double track, normal position for westward track are dual control and electrically operated with remote control by operator.

16. Both tracks between Lester and Stampede and between Martin and Easton are signalled for movements in both directions. At crossover at Tunnel No. 2 Cut and at Kennedy, crossover movement from eastward to westward track is governed by lower arm of signal at east end of crossover. Crossover movement from westward to eastward track is governed by lower arm of signal at west end of crossover. When both switches of crossover are open, lower arm of signal governing the movement may display indications 601 A, 601 F or 601 G.

17. **Staff Block system between Stampede and Martin—No train, engine, self-propelled car or machine, or track car, will run in either direction until engineer or car operator receives from telegraph operator a staff, which must be retained until delivered to the operator at the opposite end of the block when movement is through the block, or to operator at starting point when movement is part way through the block and return. On trains handling rotaries, staff will be delivered to engineer handling the air. The possession of the staff makes the train superior to all other trains between the double track clearance point at Stampede and the double track clearance point at Martin, which is designated as the Tunnel Section.**

Under no circumstances may a staff be delivered to a train without having first been passed through the staff machine, or before operator delivering staff ascertains from operator at opposite end of Tunnel Section that switches to be used are properly lined. In case of break-in-two or doubling, engineer must retain staff until entire train is clear of Tunnel Section, and when necessary for another train or engine to enter the Tunnel Section to assist, it must be done under flag protection.

The eastward train order signal at Stampede and the westward train order signal at Martin are interlocked with the staff machines in those offices. The normal indication of these train order signals is stop and may be changed to indicate proceed for delivery of staff only, or to a "19 order signal" when staff, train orders and clearance are to be delivered but only after the operator at the opposite end of the block has returned the staff to the machine, which must not be done until the rear of the train leaving Tunnel Section has passed a point 300 feet beyond the train order signal. The train order signal must be restored to stop position immediately after the rear of train entering the Tunnel Section has passed the signal. Except for light engine movements, or in case of emergency when authorized by train dispatcher, a staff must not be issued to any train at Martin until preceding train is clear of the main track to be used between the double track switch at Stampede and the westward automatic block signals at west end of westward siding nor to any train at Stampede until preceding train is clear of the main track to be used between the double track switch at Martin and the eastward automatic block signals on the signal bridge at east end of siding.

Light engines may be given the staff at either Martin or Stampede when preceding train is standing at opposite end of Tunnel Section clear of the double track switch, after switch has been lined for a track other than the one occupied, but must not be allowed to follow a train on main track from Martin until such train has passed the signal bridge at east end of siding and must not be allowed to follow a train on main track from Stampede until such train has passed the signals at west end of westward siding.

After being cut off trains, helper engines must remain clear of main tracks until ready to depart. At Martin helper engines standing on eastward siding must avoid obstructing the view of the train order signal by westward trains.

To use the switches at Old Stampede, the staff must be used to unlock switch levers, and levers must be returned to normal position before staff can be removed. These tracks must not be used by trains or engines for meeting or passing trains and the staff which is used for unlocking the switches must be returned to the machine at Stampede or Martin. Pusher staff will not unlock switches.

When helper engine is used behind caboose or on rear of passenger train and is to be cut off at Old Stampede, operator at Stampede will deliver pusher staff to such helper engineer. This pusher staff will be authority to return to Stampede and can only be put into the machine at Stampede.

In Tunnel Section, protection by flag is not required and headlight must be used and marker lamps lighted both day and night. Outside of Tunnel Section, Rule 99 must be observed.

Where automatic block signals are located within Tunnel Section, these special instructions do not modify or supersede Automatic Block Signal Rules.

Should staff system become inoperative, trains will be handled through Tunnel Section on authority of train orders and staff system must not be returned to service without authority of the train dispatcher.

18. **Mountain Grade Operation—**

Mountain grade between Easton and Lester.

(a) **Rules governing operation of trains under Form D-R train order are modified to permit making train order meeting point between opposing trains on the eastward track between Lester and Stampede and on the westward track between Easton and Martin.**

When such meeting point is established by train order, the order must specify which train will take siding. Unless otherwise directed ascending freight trains will take the siding. Descending freight trains holding main track must not pass the upper switch of the siding at the meeting point until the ascending train is clear of the main track.

(b) Westward trains, except passenger trains, must be held at Stampede while a preceding passenger train is occupying the track to be used between Stampede and Lester.

As soon as a westward passenger train has cleared the circuit, the Operator at Stampede must open the circuit switch and set at stop the westward automatic signal governing the track to be used at the west end of the siding.

After the passenger train has been reported clear of the track to be used at Kennedy, or arrived at Lester, the circuit switch at Stampede will be closed, allowing the signal to operate automatically.

Eastward trains, except passenger trains, must be held at Martin while a preceding passenger train is occupying the track to be used between Martin and Easton.

As soon as an eastward passenger train has cleared the circuit, the Operator at Martin must open the circuit switch and set at stop the eastward automatic signal governing the track to be used on the signal bridge at the east end of the siding.

After the passenger train has been reported clear of the track to be used at Tunnel 2 or arrived at Easton, the circuit switch at Martin will be closed, allowing the signal to operate automatically.

Westward trains, except passenger trains using eastward track Stampede to crossover at Kennedy or through to Lester must not be permitted to meet ascending passenger train on eastward track at Kennedy.

Eastward trains, except passenger trains, using westward track Martin to crossover at Tunnel No. 2 or through to Easton must not be permitted to meet ascending passenger train on westward track at Upham or at crossover at Tunnel 2.

An exception may be made to the above four paragraphs when authorized by the train dispatcher and under favorable weather conditions, for the movement of light engines and of light tonnage trains not exceeding the engine rating on ascending grade.

(c) Helper Engines—

Diesel-Electric engines in helper or pusher service—

When diesel-electric engines are used in helper service in freight or mixed trains of approximate full tonnage rating, the diesel-electric helper engine will be placed ahead of approximately 40% of the train tonnage, unless otherwise instructed.

When diesel-electric helper engine is placed ahead of road engine, the dynamic brakes should be used on all diesel-electric engines when descending grades.

When diesel-electric helper engines are located ahead of 40% of the tonnage handled, the dynamic brake should be used when descending grades. The dynamic brake on helper engine located back in train should not be operated until rear portion of train is over summit of grade.

Speed of freight trains at exit of Tunnel No. 3 should not be in excess of 15 MPH, controlled by use of dynamic brake on leading engine. The dynamic brake lever on helper engine should be operated to increase the braking force as rear portion of train reaches the steeper grade after leaving Tunnel No. 3, and its use gradually increased to its full capacity as needs indicate to enable control of speed as required.

The application of the air brakes on helper engine when dynamic braking is used must be prevented by use of release position of the independent brake valve during time of application of train brakes by engineer on leading engine.

Placing **steam** helper engines in freight trains out of Lester and Easton:

Except in emergency not more than one helper engine will be used in service behind caboose.

EASTWARD OUT OF LESTER—When trains, except as otherwise provided, require one helper it will be placed ahead of caboose, or ahead of cars of insufficient strength to withstand the push of helper engine.

When trains require two helpers, one will be cut in ahead of caboose and one behind caboose, except when cars on rear of train are of insufficient strength to withstand the push of helper engine, the rear helper will be cut in just ahead of cars of insufficient strength and the other helper will be cut in not less than fifteen (15) cars ahead of rear helper.

When trains, handled with Class Z-3 or heavier power, consist of 2000 tons or less, the helper engine may be placed behind caboose but ahead of cars (if any in train) of insufficient strength to withstand the push of helper engine.

WESTWARD OUT OF EASTON—Same rules will apply to westward trains out of Easton as to eastward trains out of Lester, except that on one-helper trains, regardless of tonnage, the helper may be placed behind the caboose, but ahead of cars (if any in train) of insufficient strength to withstand the push of helper.

When necessary to handle more than one caboose on rear of train, either deadhead or occupied, over the mountain, in either direction, in trains requiring one helper engine, all cabooses will be placed behind the helper. When two helpers are required one helper will be cut in ahead of all cabooses and the other helper will be cut in not less than fifteen (15) cars ahead of the rear helper. In either case where there are cars in train of insufficient strength to withstand the push of helper engine, the helper engines must be cut in ahead of such cars.

When helper engines are cut in train ahead of cars of insufficient strength to withstand the push of helper engines and the helper engine is to cut out at west switch at Stampede or east switch at Martin, the movement must be protected as prescribed by Rule 99.

Detaching helper engines from behind caboose on freight trains at Martin and Stampede:

Engines pushing freight trains between Lester and Easton may be cut off while moving providing the caboose is equipped with vented angle cock and has an operating rod for use by trainmen in closing angle cocks and uncoupling air hose between caboose and helper engine, handled at rear of caboose, on freight train. In using this rod to close angle cocks, the angle cock on the helper engine must be closed before closing angle cock on the caboose, to prevent possible application of brakes on helper engine due to air vent in angle cock on caboose. If caboose is not equipped with these special devices, the train will stop at Martin or Old Stampede to permit trainmen to close angle cocks and uncouple air hose.

When detaching helper engines from behind caboose on moving freight trains approaching Martin and Old Stampede. The angle cocks will first be turned and air hose parted, on westward freight trains when approaching telegraph office at Martin when train is slowed down to ascertain position of train order signal and on eastward freight trains when passing the west switch at Old Stampede.

On westward freight trains the coupling pin must not be lifted until rear of train has reached a point approximately 500 feet east of the double track switch at Martin, except on trains with Diesel road engine and Z-3 helper behind caboose, the pin will be lifted when rear of train is passing water tank at Martin.

On eastward freight trains the coupling pin must not be lifted until rear of train has passed section house at Old Stampede, except on trains with Diesel road engine and Z-3 helper behind caboose, the pin will be lifted when rear of train is passing water column at Old Stampede.

Conductor will personally see that coupling pin is lifted on caboose and that signal is given to engineer of helper engine, who will allow slack to run out gradually. After separating from the caboose the helper engine must be stopped promptly.

When passenger train is furnished two (2) helper engines over Cascade Mountain, the lighter engine must be placed on rear of train.

5400 HP diesel-electric engines used as helpers on passenger trains must be on head end and following will govern when steam helpers used.

WESTWARD PASSENGER TRAINS—Unless otherwise provided, when one helper is required on Train No. 5, it will be placed on head end of train and will be cut out at Stampede or Lester. On other westward passenger trains, when one helper is required and is being run thru to Lester, it will be placed on head end of train; otherwise, helper will be placed on rear of train and will be cut out at Stampede. If two helpers are required, on westward passenger trains, the rear helper will continue through on rear of train to Stampede where it will be cut off.

EASTWARD PASSENGER TRAINS—Unless otherwise provided, when one helper is required on Train No. 4, it will be placed on head end of train and will be cut out at Martin or Easton. On other eastward passenger trains, when one helper is required and is being run thru to Easton, it will be placed on head end of train; otherwise, helper will be placed on rear of train and will be cut out at Martin. If two helpers are required on eastward passenger trains, the rear helper will continue through on rear of train to Martin where it will be cut off.

In cutting out Helpers at Martin and Stampede N. P. Air Brake Rule 38, and Air Brake Rules 11 to 11-M, page 58 of Air Brake Instruction Book No. 1, must be complied with. When freight trains stop at Martin, eastward, or Stampede, westward, the following will govern:

Trainmen will be relieved of the running inspection of train as prescribed by Rule 812 when departing from Martin, eastward, or Stampede, westward. The brakemen will be at their respective positions on engine and caboose when train is ready to start, and enginemen must wait at least five minutes after making brake pipe test to allow retainers to "blow down" and for trainmen to make inspection of train while standing at these points for possible defects of running gear, brake and draft rigging, hot journals, etc.

(d) Sidings between Tunnel No. 3 and westward switches of sidings west of Tunnel No. 4 will be considered in Stampede station limits. The side tracks between Tunnels Nos. 3 and 4 must not be used for meeting or passing trains.

(e) Normal position of double track switches at Stampede will be for westward trains and at Martin for eastward trains.

(f) Operators at Martin and Stampede are responsible for the position of the double track switches, and the siding switches adjacent to the Telegraph Office in connection with through train movements only.

(g) Eastward freight and mixed trains will stop at Lester for terminal test of brakes and turning up handles of retaining valves, and at Easton to turn handles down, cool wheels, and inspect train.

On these trains handled by **steam** engines at head end, retaining valve handles will be turned up as follows:

On trains of all loads, or when the number of empty cars in train is less than one-fifth (20%), turn handles up on three-fourths (75%) of cars in train beginning with head car.

On trains of loads and empties, having more than one-fifth (20%) empties, turn handles up on one-half (50%) of the cars in the train beginning with head car.

On trains of all empties, turn handles up on one-fourth (25%) of the cars beginning with head car.

On these eastward freight trains with 4000 tons or over handled by **diesel-electric** engines at head end and diesel helper located back in train, use no retaining valves.

On these trains handled with one diesel, having more than 2250 tons, turn handles up on fifteen (15) cars beginning with head car.

On trains handled with one diesel, having 2250 tons or less, use no retaining valves. On these trains the stop at Easton will not be required for turning down retaining valve handles, cooling wheels and inspect train.

(h) Westward freight and mixed trains will stop at Easton for terminal test of brakes and turning up handles of retaining valves, and at Lester to turn handles down, cool wheels and inspect train.

On these trains handled by **steam** engines at head end, retaining valve handles will be turned up as follows:

On trains of all loads, turn handles up on all cars in train.

On trains of loads and empties, turn handles up on all of the loaded cars and on one-third (33⅓%) of the empty cars, beginning with head car.

On trains of all empties, turn handles up on one-fourth (25%) of the cars beginning with head car.

Westward freight trains requiring water at Lester will stop east of crossover at coal dock, cut off engine, and while water is being taken, retainers will be turned down.

(h-1) On these trains handled by **diesel-electric** engines at head end only, retaining valve handles will be turned up as follows:

On trains of all loads having 65 or more tons per operative brake, turn handles up on all retaining valves.

On trains of all loads having less than 65 tons per operative brake, turn handles up on three-fourths (75%) of the cars beginning with head car.

On trains of loads and empties turn handles up on three-fourths (75%) of the loaded and one-fourth (25%) of the empty cars beginning with head car.

On trains of all empties having in excess of 2250 tons, turn handles up on twenty (20) cars beginning with head car.

On trains of all empties having 2250 tons or less, use no retaining valves. On these trains the stop at Lester will not be required for turning down retaining valve handles, cooling of wheels, and inspection of train.

(h-2) On these trains handled by diesel-electric engines at head end and diesel helper located back in train, retaining valve handles will be turned up as follows:

On trains having 4000 tons or over turn handles up on fifteen (15) cars beginning with head car. On trains having less than 4000 tons, use no retaining valves.

(h-3) In the event of failure of the dynamic brake feature on leading diesel-electric engine, or when proper control of speed indicates failure of dynamic brake feature on helper engine, the engineer on leading engine must take action promptly to stop the train by use of the train brakes and instruct head brakeman to notify conductor that retaining valve handles must be turned up on cars in train similar to the requirements specified in paragraphs (g) and (h) above for steam train operation. Conductor must instruct brakemen accordingly and notify engineer when the specified number of retaining valve handles have been turned up, after which train may proceed controlled by the air brakes.

(i) Test of air brakes on freight or mixed trains as prescribed by Air Brake Rule 35 must be made at Lester on eastward trains and at Easton on westward trains.

(i-1) On these trains the engineer will, after stopping the train properly, apply the brakes to the amount of a twenty pound reduction of brake pipe pressure; upon completion of the reduction sound whistle signal, one short blast.

(i-2) Trainmen must not close angle cocks to detach engine until this signal is given. An examination of the train brakes must be made to determine if brakes are applied on each car. The air pressure must not be coupled into the train from the helper or road engine, nor signal given engineer on road engine for a release of brakes until the examination has been completed. Conductors and engineers must fill out air test card before leaving Easton or Lester.

(i-3) On these trains handled by **diesel-electric** engine at head end the test will be made as above outlined following the placing of **diesel** helper in the train.

(i-4) On **diesel-electric** engines, when in helper service, the feed valve must be adjusted to the 90 pounds pressure regulation in order to insure releasing of brakes on cars handled during the movements involved when cutting in or out of helper at Easton or Lester.

(j) Engineer on leading diesel-electric engine will adjust the feed valve to the 90 pounds regulation at Easton on westward trains; at Lester on eastward trains. Conductor must observe caboose gauge before train enters Tunnel No. 3, and if sufficient pressure is not indicated, must take immediate action to stop the train.

(k) Descending trains will carry 90 pounds train pipe pressure to Lester and to Easton. Following any stops during the descent the engineer 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.

(m) If for any reason the train breaks in two or more parts while in Tunnel No. 3, train and enginemen 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.

(n) When stop is made at Easton, eastward, or Lester, westward, train line pressure will be reduced to 80 pounds and continued at that pressure through to terminal. Conductor must know by caboose gauge that this has been done before proceeding.

(n-1) When descending trains are recoupled following the cutting out of **diesel** helper engines at Easton or Lester, engineer on road engine will apply brakes on train to the amount of a service reduction of 25 pounds, readjust feed valve to 80 pounds, then place handle of automatic brake valve in running position.

(o) Speed of trains through Stampede Tunnel No. 3 must not exceed thirty (30) MPH and must be so controlled that they can be stopped on emerging.

Trains handling express or expedited freight having a consist of cars equipped for passenger train operation, or with a small percentage of freight refrigerators intermingled, will be governed by speed specified for passenger trains descending mountain grades.

(p) If engineer handling eastward freight train finds 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.

(q) 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.
Gas masks and pulmotors are maintained at telegraph office at Martin and at the ventilating plant at Stampede.

18. **Ventilating Plant at Tunnel No. 3** will be operated as follows:
Westward trains: Both fans will be operated for twelve minutes after rear end of train passes ventilating plant.
Eastward trains: Both fans will be started five minutes after eastward passenger trains or helpers pass ventilating plant and operated for twelve minutes.
Both fans will be started seven minutes after rear end of eastward freight trains pass ventilating plant and operated for twelve minutes.

EMERGENCY INSTRUCTIONS: If westward train does not pass ventilating plant within ten minutes after train is reported by Martin, ventilating plant engineer will operate both fans for twelve minutes, then operate one fan until train clears either at Stampede or Martin.

In case of work train working in Tunnel No. 8, engineer of plant will follow instructions of man in charge of train. If twelve minute blow is not finished when another train is reported in tunnel from Stampede or Martin, ventilating plant engineer will stop fans at once.

In case of a very strong east wind, ventilating plant engineer may have to let wind clear tunnel, or blow two or three minutes extra.

19. **Helper District**—Between Easton and Lester.

20. **Pusher District**—Between Auburn and Lester.

21. **Yard Limits**—Track between yard limit signs east of Palmer Junction and West of Kanaskat operated as one yard.

22. **Register Stations**—
Yakima Passenger Station for first class trains and passenger extras.
Yakima yard office for second class and inferior trains except passenger extras.
Easton, Lester.
Auburn Yard—For trains originating and terminating and through trains running via yard tracks.

23. **Register Exceptions**—At Lester and Easton, first class and passenger extra trains will register by Form 608. At Easton, eastward through trains and at Lester, westward through trains will be furnished check of register Form 602 issued by the operator.
At Ellensburg train register in passenger station to be used by conductors whose trip starts or terminates there, information required by this form to be furnished for record purposes.

24. **Clearance Exceptions**—**At Easton and Lester, all trains must secure clearance.**
At Martin, all eastward trains must secure clearance.
At Stampede, all westward trains must secure clearance.
At Auburn Yard, all through trains running via yard tracks must secure clearance.

SECOND SUBDIVISION.

(MAIN LINE)

1. **Speed Restrictions**—

Zone—Between	Freight and mixed	Passenger Steam	Passenger Diesel
MP 4 (east of Argo) and MP36 (west of Reservation)	50	70	80
GN Engines; Classes Q-1 and Q-2	40	40 MPH.	
Classes O-4, O-5, N-3	50	50 MPH.	
At Black River Interlocking	40	60	60
At Reservation Interlocking	30	30	30

At Seattle; King St. Station, over switches ..... 8 MPH.
West of Holgate St., puzzle switches ..... 10 MPH.

Between
King St. and Argo, over all street crossings ..... 20 MPH.
At Argo Interlocking ..... 30 MPH.

Over street crossings within corporate limits:—
At Puyallup ..... 25 MPH.
At Sumner ..... 30 MPH.
At Kent and Auburn ..... 40 MPH.

All trains and engines using westward or eastward main tracks between the east switch of the Diagonal Wye and King Street Station move at restricted speed. Second class and inferior trains, or engines, may use main track with current of traffic within these limits on the time of delayed first class trains without train order authority, but must be prepared to protect immediately. In foggy or obscure weather all trains must stop and know before proceeding that there are no trains approaching on intersecting tracks.

Trains and engines, moving east from Second Avenue Yard, will stop at a point 300 feet west of Puzzle Track Switch, just west of Holgate St.

All engines using West Seattle connection at Colorado Avenue, Seattle, will use every precaution when crossing the north and south strips of Spokane Street pavement, movement in both directions to be made at restricted speed.

At the point on East Marginal Way, Seattle, where West Seattle Line crosses the northbound traffic lane, vision of approaching motorists is obscured by a building. All trains and engines moving toward West Seattle, will come to a full stop short of northbound lane. A member of the crew will walk ahead and protect movement over crossing.

At First Ave., where the West Seattle line crosses, the view by southbound motorists is obscured by a building. Trains and engines moving eastward must not exceed two (2) MPH approaching this point, the whistle must be sounded and the bell ringing.

At Tacoma—
Reservation to East D Street, via Head of Bay Line..... 30 MPH.
Between East D Street (Head of Bay Line) and U. P. Jct., via passenger or freight tracks..... 10 MPH.
Between 15th St. and 21st Street, sections of first class trains using freight tracks instead of Union Station tracks ..... Restricted Speed.
On curves and over Drawbridge 39, between Cabin Tower on Drawbridge Line and 15th St. Tower..... 15 MPH.
Between 15th St. Tower, The Union Station and East D Street ..... 10 MPH.
Between Reservation and UP Cabin Tower on Drawbridge Line —All trains and engines..... Restricted speed

Trains approach East D Street, 21st Street South and 15th Street at restricted speed and proceed only on signal from switch tender. Westward trains may continue onto the freight tracks at 15th Street and may cross eastward main track to reach westward main track at 21st Street South on the time of delayed eastward first-class train on signal from switch tender. Signal will be given with green flag by day and green light by night. Yard engines entering or leaving Union Station tracks at 21st Street South via eastward main track will not cross westward freight track without signal from switch tender.

2. **Bridge and Engine Restrictions**—
Engines classes, NP, A-2 to A-5 inc. and Z-5 to Z-8 inc.; GN, R-1, R-2 and UP engines 3900 to 3999 inc., not permitted.

On West Seattle Line, wrecking cranes 45 to 48 inc., not permitted.

Bridge 36-8 West Seattle line, over bascule span..... 20 MPH.

Bridge 34, Clark's Creek, between Puyallup and Reservation, G. N. engines class Q-1 ..... 20 MPH.

Bridge 39, Tacoma Waterway, Drawbridge line..... 15 MPH.

Engines Classes, GN, O-8, Q-1 and S-1..... 10 MPH.

Bridge 12-3, Tacoma Terminal, Dempsey Tide Flat line;

Engine Classes, G-1, G-2, Q-5 and heavier, UP Nos. 119, 155, 158 and heavier, and wrecking cranes 45 to 48 inc., not permitted.

Wrecking cranes 41, 42, 43 and 44..... 8 MPH.

Engines classes Q-4 and T, UP Nos. 105, 113, 117, 400 to 477 inc., and 512 to 524 inc., 705, 707, 710, 715 and 718, and lighter and single header Diesel switch engines..... 10 MPH.

Heavy Car Restrictions—Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent. Cars less than 30 ft. long with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds.
Trains handling such cars ..... 10 MPH.

Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, will not exceed a speed of ten (10) MPH 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 engineer for quick stop. Engineer must be on lookout for such signal.

Bridge 29-1, Puyallup River, between Meeker and Sumner.
Bridge 24, Stuck River, between Dieringer and Auburn.
Bridge 17-1, White River, between Thomas and Kent.

Flat cars loaded with logs, wood bolts, or veneer blocks in trains not permitted over Bridge 39, Tacoma Waterway, Drawbridge Line, except as authorized in emergency.

Class A and GN class N3 engines; when switching or setting out on industry tracks, hold onto enough cars to avoid engine going on such tracks.

At Seattle, class A engines use westward main track moving from roundhouse to Second Ave. yard account sharp turnout on track No. 5.

At Tacoma, engines will not pass over East D Street on No. 1 roundhouse track while cars or engines occupy the crossover between the yard lead and eastward main track account restricted clearance.

3. **Card train order Form AB** will govern the movement of trains and engines between Argo and Spokane Street Tower on Colorado Avenue Line and between Reservation and 15th St. Tower via Drawbridge Line and trains or engines must not move in this territory unless conductor and engineer each hold a copy properly filled out, except that trains and engines may use the line between Reservation and UP cabin tower about one-half mile east without Form AB train order protecting against first class trains.

4. **At Seattle**—Trains or engines entering King Street Station from the East must not pass the fouling point of the trailing point crossover between eastward and westward main tracks located about 75 feet east of standpipe at east end of yard without proceed signal from the switch tender given with green flag by day or green light by night,

Interlocking at South Portal of King Street Tunnel—Signals are of the color light type displaying either red or yellow indication to the right of the track governed. Where two lights are on one post, the upper light governs trains on main track and lower light governs trains diverging from main track.

Trains or engines must not pass over Atlantic Street railroad 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 NP, two for CM StP&P, three for the PC and four for the UP. When no crossing flagman is on duty trains and engines must flag across.

Trolley wires will not clear man on top of car at First Ave. South and Railroad Way; on West Seattle Line at Pioneer Sand and Gravel Co's. spur at Spokane St., and at Eleventh Ave., Southwest.

Sirens located about 500 feet west of Horton St. and about 500 feet east of Spokane St. with a red flasher light above and between main tracks at Horton St. Immediate action must be taken by crews of trains or engines to stop clear of this crossing, or if occupying same, to clear it promptly to avoid delay to fire equipment.

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, 1 short, 1 long.

5. **At Argo**—Following whistle signals to be used for interlocking routes:

Colorado Avenue Line: 1 long, 1 short, 1 long.
Shore Line: 2 short, 1 long.
Eastward to westward main track through crossover: 4 short.
Eastward main track to coal spur: 4 short.
Switch at west end of crossover just west of Argo and switch on westward main track leading to Oregon St. Transfer are electrically locked. To operate these, first communicate by phone with interlocking signalman, who will release the locks so they may be operated in accordance with instructions governing electric switch locks.

6. **At Black River Interlocking**—Trains entering the interlocking to back in on west leg of wye, or working interchange tracks, or making reverse movement between Black River station and interchange track, should notify signalman by phone, so that arrangements can be made to protect movement.

7. Westward trains handling flat cars loaded with logs, wood bolts, or veneer blocks, must obtain train order authority and use eastward track between Black River and Argo. Westward trains moving with the current of traffic must be held at Black River until such trains have arrived at Argo.

8. **At Auburn**—All trains will approach junction switch and crossovers at east end of passenger station platform at restricted speed.
Westward trains or engines, on westward main track, awaiting arrival or departure of trains to or from first subdivision must remain east of stop signal located about 500 feet east of first subdivision junction switch.
Trains moving to or from first subdivision will be governed by instructions in item 3, of first subdivision special instructions.
Normal position of switches leading from NP connection to H&R Yard is for Air Port Lead at east end and for H&R Lead at west end. These switches are equipped with NP switch locks and must be left lined and locked in normal position when not in use.

9. **At Tacoma—**
15th Street Interlocking; Eastward interlocking signal located west of Drawbridge 39. Upper arm governs movement into Union Station. Lower arm governs movements to Fourth Subdivision.
Westward interlocking signal located just east of Pacific Ave.
Upper arm governs movements on westward Fourth Subdivision main track.
Lower arm governs movements to Drawbridge Line and also movements through pocket track to westward Fourth subdivision main track.

Eastward interlocking signal, located opposite west switch of the crossover just west of Pacific Ave., governs movements on eastward Fourth Subdivision main track.

Following whistle signals to be used for interlocking routes:

Eastward trains via Drawbridge Line—
To Fourth Subdivision.....1 long, 1 short, 1 long.
To Union Station .....1 long, 4 short.

Westward trains from Fourth Subdivision—
To Moon Yard or Union Station.....1 short, 1 long.
To Drawbridge Line .....1 long, 1 short.

Color light home signal located on incline from Union Station: Upper light governs movement from Union Station to Fourth Subdivision. Lower light governs movement to Drawbridge Line.

No trains or engines will proceed from Union Station to Fourth Subdivision or Drawbridge Line when signal on incline is at Stop. When ready to leave Union Station, push button must be operated to call for signal; two rings for Drawbridge Line, one ring for Fourth Subdivision.

When necessary to add helper to a train at 15th St. Tower, helper engine will move onto spur leading off eastward main track just west of Pacific Ave. and remain back of insulated joints until train to be helped has stopped. Switch to this spur is hand operated.
No train order signal maintained at 15th St. Tower.

Eastward trains to, or westward trains from, freight tracks will not proceed beyond 21st St. South, located just west of Union Station, without proceed signal from switchtender.

Westward trains via freight track will call for desired route, immediately after engine passes overhead viaduct at 15th Street, by whistle signal;

Westward main track to Reservation.....1 long.
Crossover movement to Head of Bay Yard (NP)....4 short.

Eastward trains desiring to use freight track from 21st St. South, will call for route by .....1 long, after engine passes East D Street, just east of NP roundhouse.

10. Trains on N. P. tracks will stop before reaching the C. M. St. P. & P. overhead bridge at the west end of Tacoma Yard, if a train handling logs is passing overhead.

11. **Yard limits**—Tracks between yard limit signs east of Argo and west of Fremont operated as one yard.
Tracks between yard limit signs west of Reservation and east of McCarver St., and South Tacoma operated as one yard.

12. **Register Stations**—Seattle (South Portal Tower), Middle Yard. Auburn Yard Office, for trains originating or terminating and for through trains running via yard tracks.
Reservation for extra trains.
Tacoma Union Station for first class trains. Extra trains that originate, terminate, or change crews at Union Station or on freight tracks adjacent thereto.
Head of Bay Yard office for extra trains that originate, terminate, change crews, set out or pick up at Head of Bay Yard or at Cabin Tower on Drawbridge Line.

13. **Register Exceptions**—At Reservation, extra trains register by Form 608. At Tacoma Union Station, when conductors and engineers run through Tacoma on both second and third subdivisions, trains 402, 408, 458 and 460 register by Form 608.

14. **Clearance Exceptions**—At Seattle, trains from Middle Yard secure clearance at Spokane St. Tower; trains from Second Avenue Yard at South Portal Tower.
At Auburn Yard, all through trains running via yard tracks must secure clearance.
At Meeker, trains originating must secure authority from dispatcher through operator at Puyallup, before entering second subdivision main track. Clearance will be issued at Puyallup.
At Reservation, westward extra trains will secure clearance. Westward extra trains originating at Head of Bay or GN yards, must obtain authority from operator at Reservation before leaving yard and may then proceed to and secure clearance at Reservation.
At Tacoma Union Station, when conductors and engineers run through Tacoma on both second and third Subdivisions, trains 401, 407, 457 and 459 will not require clearance.

THIRD SUBDIVISION.

(MAIN LINE)

1. **Speed Restrictions—**

Zone—Between	Freight and mixed	Passenger Steam	Passenger Diesel
Both tracks			
Tacoma and Vancouver, UP engines; Consolidation or MacArthur classes	40	40 MPH.	
MacArthur class, with drivers 63 inches or over	50	55 MPH.	
GN engines, classes Q-1 and Q-2	40	40 MPH.	
Classes O-4, O-5 and N-3	50	50 MPH.	
CMStP&P engines class C-5	50	50 MPH.	
Trains with helper engine NP class Z-3	25	25 MPH.	
Due to difference in curve elevation, westward trains, running against current of traffic on eastward track Napavine to Chehalis Jct., and eastward trains, running against current of traffic on westward track, Evaline to Vader, on curves	50	50	50
Eastward track			
UP Jct. and McCarver St.	30	30	30
McCarver St. and MP25 (Nisqually)	50	70	80
MP 25 and MP 34 (west of East Olympia)	50	60	70
MP 34 and MP 44 (Tenino Jct.)	50	70	80
MP 44 and MP 59 (just east of Chehalis Jct.)	50	60	70
except, Chehalis Jct. Interlocking	35	50	50
MP 59 and MP 79 (Vader Jct.)	50	70	80
MP 79 and MP 88 (east of Castle Rock)	50	60	70
MP88 and MP96 (Rocky Point)	50	70	80
MP 96 and MP 106 (west of Kalama)	50	60	70
MP 106 and MP 136 (Vancouver)	50	70	80

	Freight and mixed	Passenger Steam	Passenger Diesel
Westward track			
MP 136 (Vancouver) and MP 114 (west of Woodland)	50	60	70
MP 114 and MP 88 (east of Castle Rock)	50	70	80
MP 88 and MP 79 (Vader Jct.)	50	60	70
MP 79 and MP 59 (just east of Chehalis Jct.)	50	70	80
MP 59 and MP 51 (between Bucoda and Centralia)	50	60	70
except, Chehalis Jct. Interlocking	35	50	50
MP 51 and MP 48 (between Bucoda and Centralia)	50	70	80
MP 48 and MP 44 (Tenino Jct.)	50	60	70
MP 44 and MP 34 (west of East Olympia)	50	70	80
MP 34 and MP 25 (Nisqually)	50	60	70
MP 25 and McCarver St.	50	70	80
McCarver St. and UP Jct.	30	30	30

Where passenger train speed is specified as 60 MPH., it may be increased on straight track only, to 65 MPH. for steam and to 75 MPH. for Diesel.

At Tacoma—
Reservation to East D St. via Head of Bay Line.....30 MPH.
Between East D St., Head of Bay Line and UP Jct. via passenger or freight tracks.....10 MPH.
Between 15th St. and 21st St. South, sections of first class trains using freight tracks instead of Union Station tracks, move at .....Restricted Speed.
Trains approach East D St., 21st St. South and 15th St., at restricted speed and proceed only on signal from switchtender.
Westward trains may continue onto the freight tracks at 15th Street and may cross eastward main track to reach westward main track at 21st Street South, on the time of delayed eastward first class trains on signal from switch tender.
Signal will be given with green flag by day and green light by night. Yard engines entering or leaving Union Station tracks at 21st St. South via eastward main track will not cross westward freight track without signal from switchtender.

At Sixth Ave., over,
Sixth Ave. crossing .....15 MPH.
Day Island crossing .....25 MPH.
At Kelso, over Allen St., which leads to the bridge over the Cowlitz River .....15 MPH.
Over highway crossings within corporate limits;
Bucoda ..... 35 MPH.
Chehalis ..... 25 MPH.
Centralia, Napavine, Winlock and Ridgefield ..... 30 MPH.
At Castle Rock, trains to which mail is dispatched.....25 MPH.
At Vancouver, eastward trains approach passenger station at restricted speed.

2. **Bridge and Engine Restrictions**—Engines N. P. Classes A-2 to A-5 inc. and Z-5 to Z-8 inc., G. N. Classes R-1 and R-2, and U. P. engines numbers 3900 to 3999 inc., not permitted.
Bridge 0.59—Cowlitz River—Longview Line—
Over bascule span .....20 MPH.
Trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, must not exceed ten (10) MPH 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 engineer for quick stop. Engineer must be on lookout for such signal.

Bridge 47, Skookumchuck River, between Bucoda and Wabash.
" 59, Newaukum River, between Chehalis Jct., and Napavine.

Bridge 81, Cowlitz River, between Vader Jct., and Castle Rock.
" 84, Toutle River, between Vader Jct., and Castle Rock.
" 100, Coweman River, between Kelso and Longview Jct.
" 105-1, Kalama River, between Longview Jct., and Kalama.

Flat cars loaded with logs, wood bolts, or veneer blocks must not be handled in trains over,
Bridge 14, Chambers Creek Lift Bridge, between Sixth Avenue and Steilacoom.
" 119, Lewis River Drawbridge, between Woodland and Ridgefield.

At Tacoma, engines will not pass over East D St. on No. 1 roundhouse track while cars or engines occupy the crossover between the yard lead and eastward main track account of restricted clearance.

3. **Extra Trains**—Between Tenino Jct. and Tacoma, will run via Third Subdivision unless otherwise instructed by train order.

4. **At Tacoma**—Eastward trains to, or westward trains from, freight tracks will not proceed beyond 21st St. South, located just west of Union Station, without proceed signal from switchtender. Westward trains via freight track will call for desired route, immediately after engine passes overhead viaduct at 15th Street, by whistle signal;

   Westward main track to Reservation .....1 long.
   Crossover movement to Head of Bay yard NP.....4 short.

   Eastward trains desiring to use freight track from 21st St. South, will call for route by.....1 long, after engine passes East D Street, just east of NP roundhouse.

5. **Nelson Bennett Tunnel**—Between McCarver St. and Sixth Avenue—Headlight must be used and marker lamps lighted by all trains passing through tunnel.

   Rock loaded on flat cars must not be handled unless secured on cars with side boards and logs, wood bolts, or veneer blocks, loaded on flat cars, must not be moved through tunnel.

6. **Between McCarver St. and Sixth Ave.**—Switches of both crossovers between MP 7 and MP 8 are spiked and are to be used only in emergency, when section foreman should be called to remove spikes.

7. **At Nisqually**—Trains from Seventeenth Subdivision must not pass Stop Signal 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. Switch leading to Seventeenth Subdivision and west switch of crossover are electrically locked.

8. **At Saint Clair**—Trains from the Sixteenth Subdivision must not pass Stop Signal 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. Switch leading to Sixteenth Subdivision and east switch of crossover are electrically locked.

9. **At Tenino Junction**—Trains from the Fourth Subdivision must not pass Signal 435 to enter the Third Subdivision if signal indictates stop, except under protection of flag. If signal indicates proceed, movement may be made without flag protection. Switch leading to Fourth Subdivision and west switch of crossover are electrically locked.

10. **At Centralia**—That portion of first track north of the westward main track, west of the crossover at viaduct, will be used as a westward siding. That portion of first track south of eastward main track from west end of yard to crossover at viaduct will be used as eastward siding.

11. **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 conflicting movement evident on the C. M. St. P. & P. 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. will be governed by lower light of westward home signal. Switch leading to Twenty-first Subdivision and east switch of west crossover are electrically locked.

    Second class and inferior trains may run ahead of delayed No. 597 between Chehalis Jct. and Centralia without train order authority, avoiding delay to No. 597 and being prepared to protect immediately.

12. **At Vader Junction**—Trains from L. P. & N. must not pass Stop Signal to enter Eastward track, Third Subdivision, if Signal indicates stop, except under flag protection; if signal indicates proceed, movement may be made without flag protection.
    Trains crossing over from Westward track to enter L. P. & N. track will be governed by lower arm on Signal 792. If Signal indicates stop, movement may be made under flag protection; if signal indicates proceed, movement may be made without flag protection.

Switch from L. P. & N. to eastward track, on Third Subdivision, and east switch of crossover are electrically locked.

13. **At Longview Junction**—Trains from Longview using west leg of wye to enter Third Subdivision main tracks will not pass stop signal if signal indicates stop, except under protection of flag against first class trains. If signal indicates proceed, movement may be made without protection. Switch leading to west leg of wye and east crossover switch are electrically locked.
    Normal position of switch to the wye just east of Cowlitz River Bridge is for the west leg of wye.
    Normal position of tail track switch on east leg of wye is for the tail track.

14. **At Longview**—Following whistle signals to be used for routes, by trains or engines approaching Drawbridge 0.59 from East Yard:

    To west leg of wye.....1 long.
    To east leg of wye.....4 short.

15. **At Vancouver**—Junction switch at west end of Columbia River Bridge will be set for N. P. Main Track. Eastward trains stop before engine reaches fouling point between N. P. and S. P. & S. tracks.
    No. 1 track will be used as eastward siding.

16. **Logs**—Flat cars loaded with logs, wood bolts or veneer blocks must not be handled in trains after dark except between Chehalis Junction and Centralia, and then only as provided under instructions for all subdivisions.
    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 fallen logs, wood bolts, or veneer blocks, and if found clear, will so report to conductor and train may proceed. Under conditions allowing for full view of tunnel, a trainman may ride on rear of train with lighted fusee, and if positive that track is clear and no logs have fallen, will give proceed signal after having passed through tunnel. The conductor of train will decide at time of stopping for inspection and be responsible for knowing that track is clear after passing through.
    Log loading gauges have been placed at Ostrander Tunnel to show tunnel clearance; one on Eastward track, 1200 feet west of MP93; and one on Westward track, 1800 feet east of MP96. Gauges are placed in vertical position four feet, six and three-quarters inches from gauge side of outside rail.
    Before pulling through this tunnel trains handling logs, wood bolts, or veneer blocks, loaded on flat cars, must have a trainman stationed at gauge to observe that such loads have proper tunnel clearance.

17. **Yard Limits**—Tracks between yard limit signs west of Reservation and east of McCarver St., and South Tacoma operated as one yard. Eastward extra trains originating at GN yard or at Head of Bay Yard will use freight track and enter double track at 11th St. Eastward extra trains originating at 15th St., or entering double track at 11th St., may run to McCarver St. ahead of delayed first-class trains without train order authority, avoiding delay to first-class trains, and must be prepared to protect immediately.
    Tracks between Yard Limit signs east of Centralia and west of Wabash operated as one yard.
    Tracks between Yard Limit signs east of Chehalis Jct. and west of Chehalis operated as one yard.
    Track between Longview, East Yard and Longview Junction operated as one yard. At East Yard, normal position of switches will be for siding.

18. **Pusher District**—Between Centralia and Longview Jct.
    Engines pushing freight trains between Centralia and Longview Jct. may be cut off while moving providing the caboose is equipped with vented angle cock and has an operating rod for use by trainmen in closing angle cocks and uncoupling air hose between caboose and helper engine, handled at rear of caboose, on freight train. In using this rod to close angle cocks, the angle cock on the helper engine must be closed before closing angle cock on the caboose, to prevent possible application of brakes on helper engine due to air vent in angle cock on caboose.

19. **Register Stations**—
    Tacoma, Union Station, for first class trains. Extra trains

that originate, terminate, or change crews at Union Station or on freight tracks adjacent thereto.
Head of Bay Yard office for extra trains that originate, terminate, change crews, set out or pick up at Head of Bay Yard.
McCarver St., for extra trains.
Centralia Telegraph Office.
Chehalis for 21st subdivision trains.
Longview Freight Station for trains originating and terminating.
Vancouver Telegraph Office, Portland Telegraph Office.

20. **Register Exceptions**—At Tacoma Union Station: When conductors and engineers run through Tacoma on both second and third subdivisions trains 401, 407, 457, and 459 register by Form 608.
At McCarver St., extra trains will register by Form 608.
At Chehalis: Second class and inferior trains to and from 21st subdivision register by Form 608 when operator on duty.
At Vancouver: All trains register by Form 608 and will be furnished check of register by train order, or register check Form 602, issued by operator.

21. **Clearance Exceptions**—At Tacoma Union Station, when conductors and engineers run through Tacoma on both second and third subdivisions, trains 402, 408, 458 and 460 will not require clearance.
Eastward extra trains may run with the current of traffic to McCarver St. without clearance, but must secure clearance at McCarver St. for movement beyond.
At Tenino Jct., Longview and Vancouver Jct: Trains originating will not require clearance.
At Centralia, all trains must secure clearance.
At Chehalis Jct: N. P. trains originating will not require clearance.

22. **Derails**—Vader Jct. on LP&N connection, Vancouver Jct., on twenty-second subdivision main track, 200 ft. from junction switch.

FOURTH SUBDIVISION.

(PRAIRIE LINE)

1. **Speed Restrictions**—

	Freight and mixed	Passenger
Zone—Between		
Double and single tracks,		
15th St. Tower and Tenino Jct.	30	45 MPH.
With helper engines, NP Class Z-3	25	25 MPH.
GN engines Class Q-2	30	40 MPH.

At Tacoma,
Westward trains or engines approach Pacific Ave. at ....Restricted Speed.
Trains or engines entering or leaving Union Station, between 15th St. Tower and 21st South....10 MPH.
At 15th St. Tower, while any portion of train is moving over switches ....10 MPH.
Between Commerce St. and 15th St. Tower while any portion of train passing between these points.... 6 MPH.
Between Wilkeson St. and Commerce St., on descending grade;
Passenger trains ....30 MPH.
Freight and mixed trains ....20 MPH.
At South Tacoma, entering double track ....15 MPH.
At McChord Field and Mobase—on Government tracks..10 MPH.
At Roy, over crossings within corporate limits....25 MPH.
See also Mountain Grade Operation.

2. **Bridge and Engine Restrictions**—
Engines, NP Classes A-2 to A-5 inc., Z-5 to Z-8 inc., GN Classes Q-1, R-1, and R-2, and U. P. engines numbers, 3900 to 3999 inc., not permitted.
Bridge 22-1, Nisqually River, between Roy and Yelm.
Engines, NP class Z-4; GN classes O-7, O-8, and U. P. engines, numbers 800 to 834, 3515 to 3564, 3600 to 3664, 4000 to 4019,

5000 to 5006, 5008 to 5054, 5056 to 5099, 5306 to 5313, 5500 to 5524, 7002, 8800 to 8809 and 9000 to 9087....10 MPH.
Engines NP classes, A, A-1, W-3, W-5 and Z-3,
Engines GN classes M-2, N-3, O-4, S-1, P-2, and Q-2 with 17,000 gallon tenders and
Engines U. P. numbers 2295 to 2310, 2906, 7000, 7001, 7003 to 7014 and 7016 to 7039....20 MPH.
Trains handling logs ....10 MPH.
Bridge 33, Des Chutes River, between Rainier and West Tenino, NP class Z-4, GN class S-1, and U. P. engines numbers, 3515 to 3564, 3600 to 3664, 4000 to 4019 and 9000 to 9087....20 MPH.
Heavy Car Restrictions: Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent.
Trains handling cars with total weight exceeding 169,000 pounds when coupled in groups or next to engine or tender....20 MPH.
If such cars are separated from each other and from engine or tender with one car 40 ft. long with total weight of not over 169,000 pounds, the speed restriction will not apply.

3. **Card train order form AB**—Governs movements between Reservation and 15th St. via Drawbridge Line as provided in Rule 3, of Second Subdivision.

4. **Extra Trains**—Between Tenino Jct. and Tacoma, will run via Third Subdivision unless otherwise instructed by train order.

5. **At Tacoma**—Movements between Union Station, Drawbridge Line and Fourth Subdivision through 15th St. Interlocking must be governed as provided for in item 9 of Second Subdivision.

6. **At South Tacoma**—Normal position of double track switch is for westward track.

7. **At Mobase and McChord Field**—Train or engine movements over cantonment tracks must be made as prescribed by Rule 93. Toilets of cars must be kept locked and no refuse thrown from trains.
On hospital spur at Mobase, trains must back in, as concrete wall and platform paralleling track on engineer's side will not clear engine or man on side of car.

8. **At Yelm**—Train or engine movements on siding or house track over highway crossings east and west of passenger station must be protected by trainman on ground.

9. **At Rainier**—South siding is eastward siding,
north siding is westward siding.

10. **At Tenino Jct.**—Switch leading to Third Subdivision and west switch of crossover are electrically locked. See also item 9 of Third Subdivision.
Movements between clearance point between Third and Fourth Subdivisions and yard limit sign on Fourth Subdivision one mile west of Tenino Jct. must be made as prescribed by Rule 93.

11. **Logs**—Flat cars loaded with logs, wood bolts or veneer blocks may be handled in trains after dark between South Tacoma and Tacoma, as provided under instructions for all Subdivisions.
Trains handling logs will run via Half Moon yard pulling train in reverse order to Head of Bay yard.

12. **Mountain Grade**—Between 15th Street, Tacoma, and 2½ miles east.
At South Tacoma—
Terminal test of air brakes must be made on all freight or mixed trains before commencing the descent of mountain grade, record of test to be furnished on prescribed form, filled out by the conductor and engineer.
Air test card to be delivered to the operator or left in register box.
Descending trains will carry 90 pounds train pipe pressure South Tacoma to Tacoma. Following any stops during the descent the engineer must fully recharge the brakes before starting and the conductor must not give proceed signal until at least 80 pounds is shown by the caboose gauge.
Immediately following departure from Lakeview engineer of westward freight trains will increase train line pressure to 90 pounds.
Retaining valve handles must be turned up on all loaded cars and on one-half the empty cars in mixed trains of loads and empties, using retaining valves on one-half the empties, beginning at the head end and alternating on every other car.

On trains of all empty cars the retaining valve handles must be turned up on fifty per cent of the cars beginning at the head car and alternating every other car.

These instructions do not apply to yard crews leaving Tacoma to perform switching on mountain grade and who do not go to South Tacoma but are applicable to yard crews on westward movements from South Tacoma.

At Tacoma—Engineers on westward trains, after stopping west of 15th St. Tower to allow helper engine to be coupled on at rear of train, will leave train brakes applied with a 20-pound brake pipe reduction, then close the double-heading cock to brake valve. Helper engineer, after coupling is made, will release train brakes, following this by making the required brake pipe test before starting train movement to depot. At time of brake pipe test a member of the train crew must observe that brakes have applied on car next to road engine before signal to release brakes and proceed signal is given. Upon completion of stop made at depot, and leaving train brakes applied as required, the angle cocks on helper engine and next car will be closed and hose parted. Engineer on road engine will open double-heading cock to brake valve to release train brakes, following which a brake pipe test must be made before departure.

At Union Station—Engineers on eastward trains, after stop is made, will leave train brakes applied with a 20-pound brake pipe reduction, then close the double-heading cock to brake valve.

Helper engineer, after coupling to rear of train, will release train brakes, following which a brake pipe test must be made before departure. Train brakes will be under his control until stop is made west of 15th St. Tower and left applied with a 20-pound reduction before closing the double-heading cock to brake valve. Engineer on road engine will then open double-heading cock to brake valve, release train brakes, following which a brake pipe test must be made.

Automatic Signals 07 and 08 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.

13. **Pusher District**—Between Tacoma and South Tacoma.

14. **Yard Limits**—Tracks between yard limit signs west of Reservation and east of McCarver St. and South Tacoma operated as one yard.

15. **Register Stations**—Tacoma, Union Station for first class trains. Extra trains that originate or terminate.
Head of Bay Yard office for extra trains that originate, or terminate at Head of Bay Yard, or change crews at Cabin Tower on Drawbridge Line.
15th St. Tower.
South Tacoma for Westward Trains.

16. **Register Exceptions**—At 15th St. Tower trains will register by Form 608, and will be furnished check of register by train order, or register check, Form 602, issued by operator.

17. **Clearance Exceptions**—At 15th St. Tower, eastward trains must secure clearance.
At Lakeview, Train 423 will not require clearance if train order signal indicates proceed.
At Tenino Jct., clearance not required.

FIFTH SUBDIVISION.

(SUMAS BRANCH.)

1. **Speed Restrictions**—

Zone—Between	Freight and mixed	Passenger Steam	Passenger Motor
North Portal and Sumas	40	45	50 MPH.

Except,
Trains handling steam wrecking derricks, pile driver or locomotive crane ..... 25 MPH.
Engines classes W-3 and W-5 ..... 30 MPH.
At Seattle—Between South Portal and north entrance of tunnel ..... 20 MPH.
Between North Portal and Bay St. ..... 6 MPH.

At Interbay—
Through crossover, 1000 feet east of station ..... 10 MPH.
Between Home signals of interlocking at G. N. Crossing of lead to Naval Supply Depot Spur ..... 20 MPH.
At University, approach public crossing just east of station at restricted speed, not exceeding 10 MPH over crossing and protecting all switch movements by flagman.
Between Keith and Navalair Jct., approach crossing on 65th Street at restricted speed.

2. **Bridge and Engine Restrictions**—
Engines Classes A to A-5 inc. and Z-5 to Z-8 inc., not permitted.
On Terry Ave. Line, wrecking cranes 45 to 48 inc., not permitted.
Bridge 4, Lake Washington Canal, between Interbay and Fremont, over Bascule Span ..... 20 MPH.
Bridge 61-1, Stillaguamish River between Arlington and Arlington Junction singleheader engines Classes Z-3 and Z-4 and doubleheader Classes W-3 and W-5 ..... 20 MPH.
Double header Engines Classes Z-3 and Z-4, not permitted.
Bridge 85, Skagit River, between Clear Lake and Sedro-Woolley, over draw span ..... 20 MPH.
Bridge 110, North Fork of Nooksack River, between Acme and Deming, engine Classes W-3, W-5, Z-3, Z-4 ..... 10 MPH.
Classes Q-5, Q-6, and Z-2 ..... 20 MPH.
Wrecking cranes 45 to 48 inc. ..... 15 MPH.
Heavy Car Restrictions:
Cars exceeding 214,000 pounds not permitted except on authority of superintendent.
Trains handling cars less than 30 ft. long with total weight exceeding 169,000 pounds, when coupled in groups, or next to engine or tender,
Over Bridge 61-1 ..... 20 MPH.
Over Bridge 110 ..... 10 MPH.
If such short cars are separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds, speed restriction will not apply.
At Clear Lake, engines heavier than Class W-2 not permitted on Clear Lake Shingle Company's tracks.
At Sedro-Woolley,
Norlum Spur, engines heavier than class W-2 and wrecking cranes 41 to 48 inc., not permitted.
Lighter engines ..... 10 MPH.
Union Oil Spur, when necessary for engine classes Y-2, W, W-1 or W-2 to make back-up movements, it must be at slow speed account of sharp curvature.
At Winco, engines must not move over bridge on either siding. Engines, cars of logs or box cars must not be moved past loading dock account of close clearance.

3. **Card train order Form AB** will govern the movement of trains and engines between Lowell, Belt Yard and Everett and between Everett and G. N. Junction, trains and engines must not move in this territory unless conductor and engineer each hold a copy properly filled out, except yard engine movements within yard limits may be made subject to the provisions of Rule 93. N. P. eastward trains secure card order at Delta Jct. authorizing movement from G. N. Junction to Everett and westward trains will turn in card authorizing movement Everett to G. N. Jct. at Delta Jct.

4. **At Seattle** Interlocking at South Portal of King Street Tunnel—Signals are of the colorlight type displaying either red or yellow indication to the right of track governed; where two lights are on one post, upper light governs trains on main track and lower light governs trains diverging from main track, except westward two light dwarf signal located between tracks 4 and 5 at south end of platform will display G. N. Ry Signal Rule 601E.
Westward trains are governed by the color light signal about 50 feet south of the south portal.
Eastward trains are governed by the color light signal 250 feet north of the portal.

5. **At North Portal**—No train order signal maintained.
Westward movements from King St. Tunnel are governed by a color light home signal located about 300 feet east of tower. Upper light governs route to G. N. main track; middle light governs route to N. P. main track; lower light governs diverging routes.
Westward movements from old main track are governed by a color light home signal located 200 feet east of tower. Upper light governs route to N. P. main track; lower light governs route to G. N. main track as well as diverging routes.

Whistle Signal: 4 long to N. P. main track; 2 long, 1 short to G. N. main track.
Westward movements from waterfront are governed by a color light dwarf signal located 200 feet east of tower.
Whistle Signal: 3 long to N. P. main track; 1 long to Pier 14 lead.
Eastward movements from N. P. main track are governed by a color light home signal located 1000 feet west of tower. Upper light governs route to tunnel; lower light governs diverging routes.
Whistle Signal: 1 long to tunnel; 3 long to waterfront; 4 long to old main track; 5 long to G. N. running track; 1 short from American Can Spur to main track.
Eastward movements from Pier 14 lead are governed by a color light dwarf signal located opposite tower. Whistle Signal: 1 long to waterfront.
Westward reverse movements from tunnel are governed by a color light dwarf signal located 300 feet east of tower. A color light dwarf signal is located about 250 feet west of north portal, King St. Tunnel, and governs reverse movement through the tunnel section only.

6. **At Seattle**—Rules governing operation King Street Passenger Station Tunnel.
Between South Portal and North Portal movements are controlled by interlocking signals and rules and positive block is maintained in both directions. A train or engine in the block may make either forward or backward movement without flag protection within these limits.
No train or engine will run against the current of traffic between South Portal and North Portal nor pass home signal in Stop position unless furnished "Tunnel Card" properly filled out and signed by the Operator-Signalman in charge. When moving against the current of traffic must not exceed ten (10) MPH. Tunnel directions are NORTH from South Portal to North Portal and SOUTH from North Portal to South Portal.

7. **At Fremont**—Passenger station is one-half mile west of siding.

8. **At Woodinville**—Normal position of junction switch is for Eleventh Subdivision.

9. **At Bromart and Edgecomb**—Normal position of junction switch is for Thirteenth Subdivision.

10. **At G. N.-Snohomish**—No N. P. train order signal maintained.

11. **At G. N. Junction**—No train order signal maintained.

12. **At G. N. Delta Jct. Interlocking**—Westward trains will call for route by one long, one short, one long blast of whistle. Eastward trains by one long, one short, two long blasts of whistle. No train order signal maintained at Delta Jct.

13. **Draw Spans**—Bridge 4, Lake Washington Canal, between Interbay and Fremont, Westward interlocking signal at Bridge 4, upper arm governs movement to Fremont, lower arm to Ballard.
Bridge 85, Skagit River, between Clear Lake and Sedro-Woolley.

14. **Logs**—Trains with logs must not run via King St. Tunnel.

15. **Yard Limits**—Tracks between yard limit signs east of Argo and west of Fremont operated as one yard.
Tracks between yard limit signs east of Bromart and G. N.-Snohomish, operated as one yard.
Tracks between yard limit signs east of Arlington and west of Arlington Jct. operated as one yard.

16. **Register Stations**—
Seattle (South Portal Tower), Woodinville, G. N.-Snohomish. Everett for N. P. trains.
Wickersham, Sumas.
Arlington for fourteenth subdivision trains.

17. **Register Exceptions**—Trains will register by Form 608 at G. N.-Snohomish.

18. **Clearance Exceptions**—Westward trains via waterfront will secure clearance at North Portal.
At Bromart and Edgecomb, clearance not required.
At G. N.-Snohomish, eastward trains must secure clearance.
At Arlington Junction, clearance not required. Trains originating secure clearance at Arlington.

SIXTH SUBDIVISION.

(ROSLYN BRANCH.)

1. **Speed Restrictions**—
Zone—Between

	All trains
Cle Elum and Ronald	20 MPH.
Cle Elum through city limits	10 MPH.

2. **Bridge and Engine Restrictions**—Engines Classes A-2 to A-5 inc. and Z-5 to Z-8 inc. not permitted.

3. **At Roslyn,** No train order signal maintained.
Eastward trains departing must keep at least twenty (20) minutes apart.

4. **At Cle Elum,** Eastward trains must stop 1200 feet west of wye switch.
Switch on west leg of wye, leading to coal dock track, must be left lined for coal dock track.

5. **Highway crossing**—On track leading to Mine 9, between Cle Elum and Mine Five, trains will stop before passing and trainmen protect movement of cars or engine over crossing.

6. **Mountain Grade:** Between Cle Elum and 4.2 miles west.
Before beginning descent, air brake tests must be made as prescribed by Air Brake Rule 35 and air test card delivered to operator at Cle Elum.
Descending trains must carry 90 pounds brake pipe pressure. Following any stops during descent, engineer must recharge brakes before starting, and conductor must not give proceed signal until at least 80 pounds is shown on caboose gauge.
Retaining valve handles must be turned up on all cars before beginning descent and turned down at Cle Elum.

7. **Register Station**—Cle Elum.

8. **Clearance Exceptions**—No. 474 will not require clearance at Ronald.

9. **Derail**—On main track at M. P. 1 plus 3180 feet, between Cle Elum and Mine 5, to be used in connection with main track dropping of caboose or cars in switching the washer plant, and derail must be left in a clear position at all other times.

SEVENTH SUBDIVISION.

(BUCKLEY LINE AND BRANCHES.)

1. **Speed Restrictions**—

Zone—Between

Kanaskat Jct. and Bayne Jct. via joint track, all trains	15 MPH.
Palmer Jct. and Meeker:	
Trains handling steam wrecking crane, pile driver or locomotive crane	20 MPH.
Other trains	25 MPH.
Cascade Jct. and Wilkeson and Carbonado:	
Trains handling steam wrecking crane, pile driver or locomotive crane	10 MPH.
Trains with engine backing	15 MPH.
Other trains	20 MPH.
Through corporate limits of:	
Enumclaw and Buckley	25 MPH.
Orting	10 MPH.

2. **Bridge and Engine Restrictions**—
Between Kanaskat Jct. and Bayne Jct. via joint track, wrecking cranes 41 to 48 inc., and engines heavier than class S-4, not permitted.
Between Palmer Jct. and Meeker, Engines, NP Classes A-2 to A-5 inc. and Z-5 to Z-8 inc., and CMStP&P Classes S-1 and S-2, not permitted.
Between Cascade Jct., Wilkeson and Carbonado, Engine Classes Q-5, Q-6, W-3, W-5 and A to A-5 inc., Z-3 to Z-8 inc., and wrecking cranes 45 to 48 inc., not permitted.
Trains handling logs will not cross on overhead bridge on C. M. St. P. & P. track between Bayne Jct. and Kanaskat Jct.

while a train is passing under this bridge on N. P. First Subdivision.

Trains handling wrecking cranes 45, 46, 47 and 48, over all bridges ..... 15 MPH.

Bridge 16, South Prairie Creek, between Cascade Jct. and Buckley. Engines classes Z-4 ..... 10 MPH.
A, A-1, W-3, W-5, and Z-3 ..... 20 MPH.

Bridge 16-1, South Prairie Creek, between Cascade Jct. and Buckley, engines class Z-4 ..... 20 MPH.

Bridge 0, South Prairie Creek, just east of Cascade Jct. on Wilkeson line, and Bridge 4, Gale Creek, at Wilkeson; Engines classes T, W, W-1, W-2 and W-4 ..... 25 MPH.

Heavy Car Restrictions: Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent.

Trains handling cars less than 30 ft. long with total weight exceeding 169,000 pounds when coupled in groups or next to engine or tender.

Over Bridge 16 ..... 10 MPH.
Over Bridge 16-1 ..... 20 MPH.

If such cars are separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds, above speed restrictions will not apply. Over Bridge 0 and Bridge 4, such cars must be separated from each other and from engine or tender with at least one car 40 ft. long with total weight not over 169,000 pounds and trains handling must not exceed ..... 25 MPH.

3. **At Bayne Jct.,** normal position of junction switch is for joint CMStP&P and NP track between Bayne Jct. and Kanaskat Jct.

4. **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 Rule 93.

   All movements of engines and cars over highway crossing on track between Northern Pacific and White River Company's tracks must be protected by flagman.

5. **At Wilkeson**—Normal position of junction switch is for Carbonado Line. Clearance under tipple of Wilkeson Products Co.'s coal bunker is 13′ 4″ from top of rail and cars higher than coal cars should not be moved under it.

   Before serving the East-Miller Coal Co., chutes of the Wilkeson Wingate Coal Co., located on tail track 3800 feet east of passenger station must be moved to proper clearance.
   Stone quarry spur out of service, switch spiked.

6. **Register Stations**—Enumclaw.

7. **Clearance Exceptions**—Eastward trains will obtain clearance at Puyallup instead of Meeker.
   At Kanaskat Jct. and Palmer Jct., clearance not required.

8. **Derails**—At Wilkeson on main track in front of coal bunkers. At Carbonado on main track 215 feet east of west switch of siding.

EIGHTH SUBDIVISION.
(GREEN RIVER BRANCH.)

1. **Speed Restrictions—**

   Zone—Between

   Bagley Jct. and Kanaskat.
   Trains handling steam wrecking derrick, pile driver, or locomotive crane ..... 10 MPH.
   Other Trains ..... 15 MPH.
   At Selleck—Restricted speed between one thousand feet west of siding and Cascade Timber Co. interchange tracks.

2. **Bridge and Engine Restrictions—**
   Wrecking cranes 41 to 48 inc., and engines heavier than Class S-4 not permitted.

3. **At Kanaskat**—normal position of wye switch is for west leg of wye.

4. **At Kanaskat Jct.,** normal position of junction switch is for joint CMStP&P and NP track between Kanaskat Jct. and Bayne Jct.

5. **At Selleck**—The Cascade Timber Company's tracks may be used to a point 250 feet beyond the east switch. All movements must be made at restricted speed, looking out for engines and cars of the Cascade Timber Company. The normal position of the switch leading to the Cascade Timber Company's track is for their track and must be left in normal position after being used.

6. **Register Station**—Kanaskat.

7. **Clearance Exceptions**—At Kanaskat Jct., clearance not required.

8. **Derails**—At Selleck, derail on west end of N. P. siding and derail on Cascade Timber Company's track 1020 feet west of west yard switch.

TENTH SUBDIVISION.
(ORTING BRANCH.)

1. **Speed Restrictions—**

   Zone—Between

   Lake Kapowsin and Puyallup River Jct. ..... 10 MPH.
   Puyallup River Jct. and Orting ..... 20 MPH.

   Lake Kapowsin and Orting—
   Trains handling steam wrecking derrick, pile driver or locomotive crane ..... 10 MPH.

2. **Bridge and Engine Restrictions—**
   Engines heavier than Class W-2 and wrecking cranes 45 to 48 inc., not permitted.
   Bridge 8, Puyallup River, at Puyallup River Jct.—
   Wrecking cranes 41, 42, 43 and 44 ..... 15 MPH.
   Engines classes G, G-1, G-2, Q-5, Q-6, W, W-1, W-2 .... 10 MPH.
   L-9, S-4, Q-1, Q-3, Q-4, T and Y ..... 20 MPH.

   Heavy Car Restrictions—Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent.

   Cars less than 30 ft. long with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender and cars more than 30 ft. long with total weight exceeding 169,000 pounds, in groups of two or more, must be separated from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds. Trains handling such cars.... 20 MPH.

3. **At Puyallup River Jct.—**
   N. P. trains will look out carefully for St. Paul & Tacoma Lumber Company's engines and logging trains using main track within yard limits.
   Between Puyallup River Jct. and Lake Kapowsin, between One (1) P. M. and Twelve (12) midnight N. P. trains will protect against St. Paul & Tacoma Lumber Company's logging engines and trains using main track.

4. **Clearance Exceptions**—At Orting, clearance not required if train order signal is in proceed position, except during assigned hours of telegraph service.
   At Lake Kapowsin, clearance not required.

5. **Derails**—At Orting, on main track just east of passenger station. At Lake Kapowsin, on main track 100 feet west of first west switch.

ELEVENTH SUBDIVISION.
(BELT LINE.)

1. **Speed Restrictions—**

   Zone—Between

   Black River and Woodinville
   Trains handling steam wrecking derrick, pile driver, or locomotive crane ..... 20 MPH.
   Other trains ..... 30 MPH.

2. **Bridge and Engine Restrictions**—Engine Classes A to A-5 inc. and Z-5 to Z-8 inc., not permitted.
Bridge 23, Sammamish River at Woodinville;
Engines classes Q-5, Q-6, W-3, W-5, Z-3, Z-4 and
Trains handling wrecking cranes 41, 42, 43 or 44.....20 MPH.
Trains handling wrecking cranes 45, 46, 47 or 48.....15 MPH.
Heavy Car Restrictions—Trains handling cars with total weight exceeding 214,000 pounds, or cars with total weight exceeding 169,000 pounds and next to engine or tender.....20 MPH.
If such heavy cars are separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds, speed restriction will not apply.

3. **At Kirkland**—Passenger Station is 2250 feet east of siding.

4. **At Woodinville**—Normal position of junction switch is for Eleventh Subdivision.

5. **Yard Limits**—Tracks between yard limit sign west of Renton and the connections with double track at Black River operated as one yard.

6. **Register Stations**—
Black River and Woodinville.

7. **Register Exceptions**—At Black River all trains register by Form 608.

8. **Clearance Exceptions**—At Black River, trains originating will not require clearance if train order signal indicates proceed, except during assigned hours of telegraph service.

9. **Derails**—At Renton, derails on main track 75 feet east and 75 feet west of P. C. Crossing, and operated by switch stand between P. C. Tracks. Normal position of derails is against N. P. trains.

TWELFTH SUBDIVISION.
(SNOQUALMIE BRANCH.)

1. **Speed Restrictions**—
Zone—Between
Woodinville and Fall City .....25 MPH.
Fall City and North Bend .....15 MPH.
Near Issaquah, over grade crossing 1062 feet west of MP 18 .....10 MPH.
Trains handling steam wrecking derrick, pile driver, or locomotive crane .....15 MPH.

2. **Bridge and Engine Restrictions**—
Between Woodinville and Earlmont, engines heavier than Class W-5, not permitted.
Between Earlmont and North Bend, engines heavier than Classes S-4, Y-2, Q-1 and wrecking cranes 45 to 48 inc., not permitted.
Between Issaquah and North Bend, wrecking cranes 41, 42, 43 and 44 not permitted.
All high trestles .....15 MPH.
Bridge 31-2, between Fall City and Snoqualmie Falls....10 MPH.
Bridge 6, Sammamish River, between Woodinville and Redmond, Bridge 27-2, Raging River, between Preston and Fall City, and Bridge 35, Snoqualmie River, between Snoqualmie and North Bend.
Engines classes Q, Q-1, S-4, S-10 and T double headers..20 MPH.
Bridge 5-4, Snoqualmie Falls Spur;
Engines class L-9, not permitted.
Engine classes T and heavier and double header Q-1, and Y to Y-2 and wrecking cranes 41, 42, 43 and 44.....not permitted.
Engines classes Q, S-4, S-10 and single header Q-1 and Y to Y-2 .....10 MPH.
Class P .....20 MPH.
Heavy Car Restrictions: Bridge 6, Bridge 27-2, Bridge 35 and Bridge 5-4;
Cars with total weight exceeding 214,000 pounds, not permitted except on authority of superintendent.
Cars with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds.
Trains handling such cars over bridges.....10 MPH.

3. **At North Bend**—Normal position of west wye switch will be for the wye.

4. **At Preston**—Trains departing must keep at least fifteen (15) minutes apart.

5. **Register Stations**—Woodinville and North Bend.

THIRTEENTH SUBDIVISION.
(HARTFORD LINE.)

1. **Speed Restrictions**—

Zone—Between	Freight and mixed	Passenger Steam	Passenger Motor
Bromart and Edgecomb	40	45	50 MPH.

Trains handling steam wrecking derrick, pile driver, or locomotive crane .....20 MPH.
Engines classes W-3 and W-5 .....30 MPH.
At Snohomish, over highway crossing just west of Snohomish River Bridge .....10 MPH.

2. **Bridge and Engine Restrictions**—Engine Classes heavier than W-5 not permitted.
Draw Span, Bridge 38, Snohomish River .....20 MPH.

3. **At Bromart and Edgecomb**, the normal position of junction switch is for the Thirteenth Subdivision.

4. **At Hartford**—Switch leading to the mill should be left lined for the mill track to act as a derail for the lumber and shingle sheds and also for the rock cars loading on the siding.

5. **Draw Span**—Bridge 38, Snohomish River just east of Snohomish.

6. **Clearance Exceptions**—At Bromart and Edgecomb, clearance not required.

7. **Yard Limits**—Tracks between yard limits east of Bromart and west of Snohomish operated as one yard.

FOURTEENTH SUBDIVISION.
(DARRINGTON BRANCH.)

1. **Speed Restrictions**—
Zone—Between
Arlington Jct. and Darrington,
Trains handling steam wrecking derrick, pile driver, or locomotive crane .....15 MPH.
Other Trains .....20 MPH.

2. **Bridge and Engine Restrictions**—Engine Classes heavier than W-2 and wrecking cranes 45 to 48 inc., not permitted.
Bridges 2 and 7, Stillaquamish River between Arlington Jct. and Cicero.
Bridge 10, Deer Creek, between Cicero and Oso.
Bridge 11, Stillaquamish River, between Oso and Halterman.
Bridge 22-1, Squire Creek, between Fortson and Darrington:
Engine classes W, W-1, W-2, W-4, T, Q-3, and Q-4, single header ..... 8 MPH.
Trains handling logs over steel truss bridges Nos. 2, 7, 10, 11, 18 and 22-1 .....10 MPH.
Heavy Car Restrictions—Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent.
Cars less than 30 ft. long with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender and cars more than 30 ft. long with total weight exceeding 169,000 pounds in groups of two or more must be separated from engine or tender with one car 40 ft. long with total weight not exceeding 169,000 pounds.
Trains handling such heavy cars ..... 8 MPH.
At Darrington, engines may use main track to engines stop sign located 1028 feet west of east switch to Sauk Logging Co.'s set out track and may use set out track to engine stop sign located 1000 feet west of east switch to that track and will not use loaded track beyond a point 360 feet from east switch.

3. **Register Stations**—Arlington and Darrington.

4. **Clearance Exceptions**—At Arlington Jct. and Darrington, clearance not required.

5. **Derails**—
At Darrington, on main track 300 feet west of passenger station.

FIFTEENTH SUBDIVISION.
(BELLINGHAM BRANCH.)

1. **Speed Restrictions**—

Zone—Between	Freight and mixed	Passenger Steam	Passenger Motor
Wickersham and Bellingham, except, MP 15 and Larson, over highway crossing	20 / 15	30 / 15	35 MPH. / 15 MPH.

Trains handling steam wrecking derrick, pile driver, or locomotive crane.

Wickersham and MP5 (west of Park) ..... 15 MPH.
MP 5 and MP 8 ..... 10 MPH.
MP 8 and Bellingham ..... 15 MPH.
At Bellingham, between Kentucky Street and Passenger Station ..... 15 MPH.
Engineers on all trains exercise judgment in speed where trouble may be expected.

2. **Bridge and Engine Restrictions**—Engines heavier than class W-5 not permitted.

3. **At Bellingham,** flagman must precede all trains between Champion and Laurel Sts.
Trains must stop and be preceded by flagman crossing Holly St.
Normal position of gate at G. N. crossing is against N. P. trains.

4. **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.

5. **Register Stations—Wickersham and Bellingham.**

6. **Derails**—At Bellingham, derail in main track 568 feet east of G. N. crossing, between Bellingham and South Bellingham.

SIXTEENTH SUBDIVISION.
(GRAYS HARBOR LINE.)

1. **Speed Restrictions**—

Zone—Between	Freight and mixed	Passenger Steam	Passenger Motor
Saint Clair and Hoquiam	35	45	50 MPH.

Trains handling Steam wrecking crane, pile driver or locomotive crane ..... 20 MPH.
Hoquiam and Moclips:
Trains handling wrecking crane, pile driver or locomotive crane ..... 15 MPH.
Other trains ..... 20 MPH.
At Olympia, around curve east end of tunnel ..... 15 MPH.
Through tunnel speed must be controlled so that train can be stopped on emerging.
At Gate, approach Eighteenth Subdivision Junction Switch at restricted speed.
At Aberdeen and Hoquiam, all trains and engines at restricted speed within yard limits.
At Aberdeen—Over streets and crossings ..... 10 MPH.
Within City Limits, elsewhere ..... 20 MPH.

2. **Bridge and Engine Restrictions**—
Engines classes A to A-5 inc. and Z-4 to Z-8 inc., not permitted.
Between Hoquiam and Moclips, engines classes Q-5, Q-6, W-3, W-5, Z-3 to Z-8 inc., and wrecking cranes 45 to 48 inc., not permitted.
Bridge 46, Cloquallum River between Malone and Elma.
Engines classes W-3, W-5 and Z-3 ..... 10 MPH.

Engines Classes G-1, G-2, Q-5, Q-6, W, W-1, W-2 and W-4 ..... 20 MPH.
Trains handling wrecking cranes 45 to 48 inc., over all bridges ..... 15 MPH.
Bridge 82, Chenois Creek; Bridge 84, Berg Slough, between Hoquiam and Tulips; Bridge 86, Humptulips River between Tulips and Copalis; Bridge 91-1, Copalis River between Carlisle and Onslow; Bridge 97, Joe Creek, between Aloha and Pacific Beach.
Single header engine Classes W, W-1, W-2, and W-4 ..... 10 MPH.
Double header engine classes Q, Q-1, Q-3, Q-4, S-4, S-10 and T ..... 20 MPH.
Over draw spans of Bridge 9, Des Chutes River, at Olympia; Bridge 68, Wishkah River, at Aberdeen; Bridge 72.2, Hoquiam River, at Hoquiam ..... 20 MPH.
Bridge 91-1, wrecking cranes 41, 42, 43 or 44 ..... 15 MPH.
Heavy Car Restrictions:
Bridge 46—Trains handling cars with total weight exceeding 214,000 pounds, or cars less than 30 ft. long with total weight exceeding 169,000 pounds coupled in groups or next to engine or tender ..... 10 MPH.
If such short cars are separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds, above speed restriction will not apply.
Bridges 82, 84, 86, 91-1 and 97—Cars with total weight exceeding 214,000 pounds, not permitted except on authority of superintendent.
Cars with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds.
At Olympia—On west side, engines heavier than class W-2 not permitted, except Class W-3 engines may use wye and west side track for a distance of 200 feet north of the north switch of west leg of wye, but must not use any portion of Tumwater Branch south of this switch.
Engines or cars, other than empty log flats or gondolas, not permitted on Tumwater spur south of main track.
Engines heavier than class L-9 not permitted on Jefferson St., or Port Dock tracks.
At Aberdeen—Engines not permitted on trestle of spur serving National Lbr. Co.
At Carlisle—Engines or cars not permitted on Standard Oil Spur beyond 200 feet from head block of switch.
At Aloha: Engines heavier than Class F-1 not permitted on Mill Spur.

3. **At Saint Clair**—Switch leading to third subdivision and east switch of crossover are electrically locked.
Movements between clearance point between Third and Sixteenth Subdivisions and yard limit sign on Sixteenth Subdivision, one mile west of Saint Clair must be made as prescribed by Rule 93.

4. **At Olympia**—
Time of trains applies at passenger station.
First track north of main track,
(capacity 40 cars) is designated as siding.
Movements through Tunnel District are governed by color light type automatic signals as follows:
Westward three indication signal No. 87 located 1750 feet east of MP 9.
Westward two indication signal No. 94 located 275 feet east of tunnel.
Eastward two indication signal No. 94 located 275 feet west of tunnel.
Eastward two indication dwarf signal No. 96 located between main track and siding, 275 feet west of tunnel, normal indication stop, governs eastward movements from siding to main track.
Switch of siding must be lined for main track before signal will indicate proceed. Before opening switch of siding, eastward trains or engines from siding must have proceed indication from signal No. 94.

Trains or engines from Jefferson St. Line, in addition to having proceed indication from signal No. 93 before opening main track switch, must comply with the provisions of Rule 513.

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.

Connection leading from N. P. Jefferson Street Spur to U. P. scale track, at Eighth street, just east of tunnel has no clearance with the U. P. 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 N. P. Jefferson Street Spur and U. P. scale track must protect themselves and make certain that no U. P. 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.

Des Chutes River Drawbridge, gates 50 feet each side will be turned across main track when bridge is raised.

Second track north of main track from crossover opposite freight depot to west main track switch, used exclusively for repair track.

5. **At Gate, normal position of the main track junction switch is for the Eighteenth Subdivision.**

6. **At Elma**—Water spout must be left pointed east when not in use.

7. **At Montesano**—Passenger Station is one-half mile west of siding. **Time of first class trains applies at passenger station. Switch leading to industry spur west end of team track to be left set for spur to act as derail.**

8. **At Aberdeen,** 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 U. P. track.**

   Restricted clearance between coach track No. 1 just east of passenger station and U. P. main track, at turn out. Trains and engines using coach track No. 1 must protect against trains using U. P. track.

   Restricted clearance at umbrella shed passenger station.
   Westward trains will stop East of Chehalis Street when Wishkah River draw bridge signals do not indicate clear route.

9. Second class and inferior trains may run ahead of delayed first class trains between Aberdeen and Hoquiam without train order authority, avoiding delay to first class trains and being prepared to protect immediately.

10. **At Hoquiam,** no train order signal maintained.

11. **At Hoquiam River drawbridge—**
    All trains handling rock stop and make inspection of rock before passing over bridge.
    To call for route when running against current of traffic, one long, one short, one long blast of whistle.

12. **Yard Limits**—Tracks between the yard limit signs east of Carlisle and west of Onslow operated as one yard.

13. **Register Stations—**
    Saint Clair.
    Olympia, for trains originating and terminating.
    Gate, Aberdeen and Hoquiam.

14. **Register Exceptions**—At Saint Clair trains will register by Form 608 and will be furnished register check Form 602 by operator.
    At Olympia, No. 464 register by Form 608 leaving in box located west of draw bridge.
    At Gate, trains 461 and 464 will register by Form 608 and will be furnished register check Form 602 by operator.

15. **Clearance Exceptions**—At Saint Clair, westward trains will not require clearance, except during assigned hours of telegraph service, if train order signal indicates proceed.
    At Aberdeen Jct., trains originating will not require clearance.
    At Hoquiam, all trains must secure clearance.
    At Moclips, clearance not required.

SEVENTEENTH SUBDIVISION.

(AMERICAN LAKE LINE.)

1. **Speed Restrictions—**

Zone—Between	Freight and mixed	Passenger Steam	Passenger Motor
Nisqually and Lakeview	30	40	50 MPH.

Trains handling steam wrecking derrick, pile driver, or locomotive crane ..... 20 MPH.

At Camp Murray—
Over road crossings just east and west of station..... 10 MPH.
Between Stone and Wegoe, over grade crossing, 680 feet west of MP 6 ..... 15 MPH.

At Fort Lewis—
Approach first and second road crossings west of passenger station at ..... Restricted Speed.
Over Dupont highway crossing just east of passenger station ..... 5 MPH.
On Dupont Spur and all tracks within Dupont plant..... 15 MPH.

2. **Bridge and Engine Restrictions**—Engine Classes heavier than W-5 not permitted.
   Bridges 1 and 4, between Lakeview and Camp Murray;
   Trains handling wrecking cranes 45 to 48 inc..... 15 MPH.
   At Fort Lewis on Dupont Spur, engines heavier than W-2 and wrecking cranes 45 to 48 inc., not permitted.

3. **At Nisqually**—Switch leading to Third Subdivision and west switch of crossover are electrically locked.
   Train order signal does not govern Seventeenth Subdivision trains.
   See also item 7 of Third Subdivision.

4. **At Fort Lewis**—Time of trains applies at passenger station.
   Depot Siding (Capacity 27 Cars) designated as siding.
   House track switch must be left lined for house track to act as derail for east end of "depot" siding.

5. **At Fort Lewis and North Fort Lewis—**
   Train and engine movements over Cantonment tracks shall be as prescribed by Rule 93.
   Train or engine movements over the following crossings must be protected by flagman on ground:
   Pacific Highway, Fort Lewis proper;
   Steilacoom Highway, between Wegoe and North Fort Lewis;
   On Cantonment tracks when backing or pushing cars ahead of engine over street crossings . . . Other movements over street crossings to be made at restricted speed.
   Many government warehouses, semi-portable loading ramps and other structures have less than standard side clearance, and employes working along these tracks will be governed accordingly.
   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.
   Entrance to Dupont Powder Company Plant protected by gate across the spur near Cap Magazine, and before entering plant the stack of engine must be covered with the spark arresting device, located overhead near entrance. No cars will be disturbed inside of gate until foreman consulted and permission obtained.
   Engines using north and south lines move at restricted speed expecting to find cars spotted at different locations on these tracks.
   Toilets must be kept locked and no refuse thrown from trains on Cantonment tracks or inside Fort Lewis Yard Limits.
   At Camp Murray—Toilets of cars must be kept locked and no refuse thrown from trains.

6. **Register Stations—** Nisqually Lakeview

7. **Register Exceptions**—At Nisqually and Lakeview trains register by Form 608 and will be furnished register check by train order or Form 602 by operator.

8. **Clearance Exceptions**—At Lakeview trains will not require clearance if train order signal indicates proceed.

EIGHTEENTH SUBDIVISION.

(GATE LINE.)

1. **Speed Restrictions—**

Zone—Between	Freight and mixed	Passenger Steam	Passenger Motor
Centralia and Gate	35	45	50 MPH.

Trains handling steam wrecking derrick, pile driver, or locomotive crane ..... 20 MPH.
At Centralia—Over streets within corporate limits..... 30 MPH.
At Blakeslee Junction—Over CMStP&P and UP crossings ..... 15 MPH.

2. **Bridge and Engine Restrictions—**

Between Centralia and Gate, via either UP Route 1, or NP Route 2, engines classes A to A-5 inc. and Z-4 to Z-8 inc., not permitted.

Bridge 1, Skookumchuck River, between Centralia and Blakeslee Junction, N. P. Route 2:
U. P. engines Nos. 800 to 844, 3900 to 3999, 4000 to 4024, 5040 to 5099, 5306 to 5313, 5318, 5400 to 5414, 9000 to 9087 and 9500 to 9514 not permitted.

Engines classes W-3, W-5, Z-3 and U. P. engines Nos. 3500 to 3569, 3670 to 3674, 3800 to 3839, 5000 to 5039, 5300 to 5305, 5500 to 5529 and 7002 ..... 10 MPH.
Engines classes Q-5, Q-6 and U. P. engines Nos. 2100 to 2171, 2200 to 2320, 2480 to 2564, 2700 to 2715, 2726 to 2735, 7000, 7001 and 7003 to 7039 ..... 20 MPH.
Trains handling wrecking cranes 45 to 48 inc., over all bridges ..... 15 MPH.

Heavy Car Restrictions:
Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent.

Cars less than 30 ft. in length with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender and cars more than 30 ft. long with total weight exceeding 169,000 pounds each, in groups of two or more, must be separated from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds.

3. **Movement of Trains Between Centralia and Blakeslee Junction. N. P. track will be known as Route 2; U. P. 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.**

4. **Blakeslee Junction Interlocking—**
If 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 N. P. main track, normal position for N. P. main track.

Hand throw switch, at east end of connection leading from N. P. main track to Route 1, normal position for connection.

Spring switch trailing from each end of connection between Route 2 and U. P. main track, normal position of west switch for the connection, of the east switch for N. P. main track.

5. **At Grand Mound and Rochester**—When necessary, sidings will be blocked with cars without notice. Trains intending to use these sidings for meeting other trains will first ascertain if there is sufficient room.

6. **At Gate** normal position of main track junction switch is for Eighteenth Subdivision.

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

8. **Clearance Exceptions**—At Blakeslee Junction, trains originating will not require clearance.

NINETEENTH SUBDIVISION.

(ELMA BRANCH.)

1. **Speed Restrictions—**

Zone—Between	Other trains
Shelton and Elma, Trains handling steam wrecking crane, pile driver, or locomotive crane	15 MPH.
Shelton and Marmac	25 MPH.
Marmac and Stimson	20 MPH.
Stimson and Elma	25 MPH.

2. **Bridge and Engine Restrictions—**
Engines classes A to A-5 inc. and Z-4 to Z-8 inc., not permitted.

Bridge 1, County Road, and Bridge 2, Cloquallum River, between Elma and White:
Engines classes W-3, W-5 and Z-3 ..... 20 MPH.

Bridge 2-1, Wildcat Creek, between Elma and White:
Engines classes Q-5, Q-6, W-3 and W-5..... 10 MPH.
G-1, G-2, L-9 and Z-3 ..... 20 MPH.

Bridge 2-2, Wildcat Creek, between Elma and White:
Engines classes W-3, W-5 and Z-3 ..... 20 MPH.
Bridges 1, 2, 2-1 and 2-2, wrecking cranes 41 to 48 inc. 15 MPH.

Between McCleary Jct. and McCleary; engines heavier than Class W-2 and wrecking cranes 41 to 48 inc., not permitted on spur.

Heavy Car Restrictions—Bridges 1, 2 and 2-1. Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent. Cars less than 30 ft. long with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender, and cars more than 30 ft. long with total weight exceeding 169,000 pounds each, in groups of two or more, must be separated from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds.

3. **Mountain Grade**—Between Stimson and Marmac.

At Stimson—Air brake tests as prescribed by Air Brake Rule 35 must be made before beginning descent of mountain grade. Air test card to be delivered to operator at Shelton.

Descending trains will carry 90 pounds brake pipe pressure Stimson to Shelton. Following any stops during descent, engineman must fully recharge the brakes before starting, and conductor must not give proceed signal until at least 80 pounds is shown on caboose gauge.

Immediately following departure from McCleary engineman of eastward freight trains will increase brake pipe pressure to 90 pounds.

Retaining valves must be used on all loaded cars and on one-half the empty cars in mixed trains of loads and empties, using retaining valves on one-half the empties, beginning at the head end and alternating on every other car.

On trains of all empties the retaining handles must be turned up beginning at the head car and alternating every other car.

4. **At McCleary Junction**—N. P. trains using wye or main track between McCleary Junction and McCleary, will protect against McCleary Timber Company's trains.

5. **At Shelton**—N. P. engines may operate over Simpson Logging 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. N. P. crews occupying Simpson Logging Company tracks within these limits must be protected as per Rule 99. N. P. trains will look out for Simpson Logging Company engines and derrick working on main track in Shelton Yard.

Turntable cannot be used by class Z-3 engines.

Olympia Plywood Co. spur, overhead clearance is restricted on that portion paralleling loading sheds.

Normal position of switch leading from 19th Subdivision to Government Railroad is for the Government Railroad.

6. **Register Stations**—Elma, Shelton.

TWENTIETH SUBDIVISION.

(OCOSTA BRANCH.)

1. **Speed Restrictions—**

Zone—Between	
Aberdeen Jct. and Mile Post 3	20 MPH.
Mile Post 3 and Markham or Cosmopolis	12 MPH.
Aberdeen Jct. and Markham or Cosmopolis, trains handling steam wrecking derrick, pile driver, or locomotive crane	10 MPH.

2. **Bridge and Engine Restrictions—**
Engines Class T not permitted.

Engines heavier than class Q-1 and wrecking cranes 41 to 48 inc., not permitted, except engines not heavier than class W-2

may use Bishop spur and main track between Aberdeen Jct. and Bridge 1, Chehalis River.

Bridge 1, Chehalis River, between Aberdeen Jct. and Cosmopolis Jct., Bridges 0 and 1, between Cosmopolis Jct. and Cosmopolis; Engine Classes Q, Q-1, S-4 and S-10 ..... 8 MPH.
Engine Classes lighter than Q, Q-1, S-4 and S-10 .....12 MPH.

Heavy Car Restrictions—Bridge 1, between Aberdeen Jct. and Cosmopolis Jct., and Bridges 0 and 1 between Cosmopolis Jct. and Cosmopolis; cars with total weight exceeding 214,000 pounds not permitted.

Cars with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds.
Trains handling such cars over bridges..... 8 MPH.

3. **Clearance Exceptions—At Aberdeen Jct. and Markham, clearance not required.**

TWENTY-FIRST SUBDIVISION.

(WILLAPA HARBOR LINE.)

1. **Speed Restrictions—**

Zone—Between	Freight and mixed	Passenger Steam	Passenger Motor
Chehalis Jct. and PeEll	30	40	45 MPH.
Engines backing with or without cars, and trains with steam wrecking crane, pile driver or locomotive crane .....20 MPH.			
PeEll and Frances	25	30	30 MPH.
Trains with steam wrecking crane, pile driver or locomotive crane .....15 MPH.			
Frances and South Bend	30	40	45 MPH.
Engines backing with or without cars and trains with steam wrecking crane, pile driver or locomotive crane .....20 MPH.			

2. **Bridge and Engine Restrictions—**

Engines Classes Q-5, Q-6, W-3, W-5, A to A-5 inc. and Z-3 to Z-8 inc., and wrecking cranes 45 to 48 inc., not permitted.
Bridge 0, Newaukum River, and
" 2, Chehalis River, between Chehalis Jct. and Littell,
" 5, Chehalis River, between Adna and Millburn,
" 6, Chehalis River, between Millburn and Ceres,
" 16-1, Chehalis River, between Dryad and Dryad Jct.,
" 23, Chehalis River, between PeEll and McCormick,
" 38, Willapa River, between Lebam and Nallpee,
Bridges 42 and 45, Willapa River, between Holcomb and Menlo,

Engines NP Classes W, W-1, W-2, and W-4 doubleheader and CMStP&P Classes F-6, F-6A, L-3 and similar or heavier, and CMStP&P Class A doubleheader, not permitted.
CMStP&P engines Class L-2 .....10 MPH.
CMStP&P engines Classes C-7, single header Class A, doubleheader Class L-1 and 150-ton wrecking cranes X-8 and X-16 .....20 MPH.
Single header NP Engine Classes W, W-1, W-2 and W-4 .....25 MPH.
Heavy Car Restrictions—Cars with total weight exceeding 214,000 pounds or more not permitted except on authority of superintendent.
Cars less than 30 ft. in length with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender and cars more than 30 ft. long with total weight exceeding 169,000 pounds each, in groups of two or more, must be separated from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds.
At Raymond, engines classes W, W-1 and W-2 not permitted on trestle at west end of Port of Willapa Dock and engines of these classes, when using east connection to Port Dock Tracks, must not exceed ..... 8 MPH.
Bridge 53, Willapa River, between Raymond and South Bend, over draw span .....20 MPH.

3. **At Chehalis Jct.—**
Switch leading to Third Subdivision and east switch of west crossover are electrically locked.
See also item 11 of Third Subdivision.

4. **Between Chehalis Jct. and Dryad Jct.—**
Track will be used jointly by N. P. and C. M. St. P. & P. operated by and in accordance with N. P. Time Table, and Special Instructions.

At Chehalis Jct., westward trains from C. M. St. P. & P. to Twenty-first Subdivision, will stop at signal located on C. M. St. P. & P. track, line the switch to eastward N. P. track, and, if signal indicates "proceed", train may enter eastward track; then, if train rights permit, line the switch for the Twenty-first Subdivision.

Eastward trains, from Twenty-first Subdivision, to enter C. M. St. P. & P. tracks, will be governed by lower light on home signal on Twenty-first Subdivision.

5. **At Meskill Pit**—Account restricted clearance, engines or cars, higher than ballast cars, must not pass under bunkers.

6. **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 flagman.

7. **Drawbridge 53,** Willapa River, west of Raymond, bridge tenders on duty 9:00 A. M. to 5:00 P. M., on week days and 1:30 P. M. to 3:50 P. M. Sundays. 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 yellow flag by day and a yellow light by night.

8. **At South Bend**—First class trains must move at restricted speed between the passenger station and switch to team track, expecting to find main track occupied.

9. **Draw Spans**—Bridge 53, Willapa River, west of Raymond.

10. **Mountain Grade—**
Mile Post 30 to 2000 feet west of Mile Post 34, between Pluvius and Frances. This grade reaches a maximum of one and eight-tenths percent for short distances, and on westward freight or mixed trains a sufficient number of retaining valves, as determined by the conductor and engineman handling the train, will be used to insure proper control of speed.

11. **Register Stations**—South Bend. Dryad Jct. Chehalis. Millburn for CW trains.

12. **Clearance Exceptions**—At Chehalis Jct., N. P. trains will not require clearance. **At Dryad Jct., trains originating will not require clearance.**

TWENTY-SECOND SUBDIVISION.

(YACOLT BRANCH.)

1. **Speed Restrictions—**
Zone—Between
Yacolt and Vancouver Jct. .....20 MPH.
Except,
Trains handling wrecking derrick, pile driver, or locomotive crane .....15 MPH.
Trains handling logs or wrecking derricks, pile drivers or locomotive cranes, approaching and passing through tunnel west of Yacolt .....10 MPH.

2. **Bridge and Engine Restrictions—**
Wrecking cranes 41 to 48 inc., not permitted.
Engine classes heavier than W-2 not permitted between Ampere and Yacolt. Engines heavier than class W-3 not permitted between Vancouver Jct. and Ampere.

Bridge 23, Lewis River, between Heison and Yacolt; Engine classes W, W-1, W-2 and W-4..... 8 MPH.

Heavy Car Restrictions—Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent.

Cars less than 30 ft. long with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender and cars more than 30 ft. long with total weight exceeding 169,000 pounds, must be separated from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds.

3. **Register Station**—Vancouver Jct.

4. **Clearance Exceptions**—At Vancouver Jct. and Yacolt, clearance not required.

5. **Derails**—At Vancouver Jct., on main track 200 feet from Junction switch.

TWENTY-THIRD SUBDIVISION.

(MOXEE BRANCH.)

1. **Speed Restrictions**—
   Zone—Between
   Yakima and Moxee City ..... 20 MPH.
   Except,
   Trains handling steam wrecking derrick, pile driver, or locomotive crane ..... 10 MPH.

2. **Bridge and Engine Restrictions**—
   Engines heavier than classes Q-1, S-4 and Y-3 and wrecking cranes 41 to 48 inc., not permitted.
   Bridge 1-3, Yakima River, between Yakima and Terrace Heights; Engine classes Q-3, T, and heavier, and double header Q-1 and Y to Y-3, not permitted.
   Engine classes Q, S-4 and S-10, and single header classes Q-1, and Y to Y-3 ..... 8 MPH.
   Heavy Car Restrictions—Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent.
   Cars with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds.
   Trains handling such cars ..... 8 MPH.

3. **Register Station**—
   Yakima passenger station.

4. **Clearance Exceptions**—At Moxee City, clearance not required.

TWENTY-FOURTH SUBDIVISION.

(NACHES AND TIETON BRANCHES.)

1. **Speed Restrictions**—
   Zone—Between
   Yakima and Tieton and
   Yakima and Naches: Trains with steam wrecking crane, pile driver or locomotive crane ..... 10 MPH.
   All other trains
   Yakima and Brace ..... 20 MPH.
   Brace and Weikel ..... 10 MPH.
   Weikel and Tieton ..... 20 MPH.
   Brace and Naches ..... 20 MPH.

2. **Bridge and Engine Restrictions**—
   Engines heavier than classes Q-1, S-4 and Y-3, and wrecking cranes 41 to 48 inc., not permitted.
   Bridge 4, Naches River, between Brace and Gleed:
   Engines classes Q-3, T and heavier and double headers Q-1 and Y to Y-3 not permitted.
   Engine classes Q, S-4 and S-10 and single headers Q-1 and Y to Y-3 ..... 8 MPH.
   Heavy Car Restrictions—Cars with total weight exceeding 214,000 pounds not permitted except on authority of superintendent.
   Cars with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds. Trains handling such cars ..... 8 MPH.

3. **At Brace**, normal position of switch is for Tieton Branch.

4. **At Tieton, Naches and Gleed**—No train order signals maintained.

5. **Mountain Grade**—Tieton Branch, Mile Post 6 to Mile Post 8, between Weikel and Cowiche.
   At Cowiche—Air brake tests as prescribed by Air Brake Rule 35 must be made before beginning descent of mountain grade Cowiche to Brace. Air test card to be delivered to operator at Yakima.
   Descending trains will carry 90 pounds brake pipe pressure Cowiche to Yakima. Following any stops during descent, engineman must fully recharge brakes before starting, and conductor must not give proceed signal until at least 80 pounds is shown on caboose gauge.
   Retaining valves must be used on all cars in trains consisting of more than 25 loads, and on not less than fifty percent of all loaded cars in trains consisting of less than 25 cars.

6. **Register Stations**—
   Yakima passenger station.

7. **Derails**—At Naches, on main track 200 feet east of east switch.

Note—Length of load 52 feet—Heights and widths in table allow 9 inches clearance.

MAXIMUM CLEARANCES

Table is based on open car loading equally divided on either side of center line of car.

		LIMIT OF LOAD—MEASUREMENT. HEIGHT ABOVE TOP OF RAIL										
		1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7ft. 6in. Wide	8 ft. Wide	Max. Height	Max. Width
.....	Main Line (Seattle Middle Yard-Reservation)	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 3″	21′ 1″	21′ 4″	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″	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″	11′ 6″
1st Subdivision	Main Line (Yakima-East Auburn)	17′ 11″	17′ 10″	17′ 9″	17′ 7″	17′ 5″	17′ 1″	16′ 9″	16′ 5″	16′ 2″	17′ 11″	11′ 6″
2nd Subdivision	Reservation—South Tacoma (Via Drawbridge Line)	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	11′ 6″
2nd Subdivision	Tacoma Tideflats	18′ 9″	18′ 9″	18′ 9″	18′ 9″	18′ 9″	18′ 8″	18′ 8″	18′ 8″	18′ 7″	18′ 9″	11′ 6″
3rd Subdivision	Main Line (Reservation-McCarver St. via Head of Bay Line)	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	11′ 6″
3rd Subdivision	Eastward Main Track (McCarver St.-Tenino)	20′ 11″	20′ 7″	20′ 3″	19′ 10″	19′ 5″	18′ 11″	18′ 4″	18′ 1″	17′ 9″	20′ 11″	11′ 6″
3rd Subdivision	Westward Main Track (McCarver St.-Temino)	20′ 1″	19′ 9″	19′ 4″	18′ 10″	18′ 4″	17′ 9″	17′ 2″	16′ 10″	16′ 5″	20′ 1″	11′ 6″
3rd Subdivision	Eastward Main Track (Tenino-Vancouver)	20′ 4″	20′ 1″	19′ 10″	19′ 6″	19′ 2″	18′ 10″	18′ 3″	18′ 0″	17′ 9″	20′ 4″	11′ 6″
3rd Subdivision	Westward Main Track (Tenino-Vancouver)	20′ 5″	20′ 2″	19′ 11″	19′ 8″	19′ 5″	19′ 0″	18′ 5″	18′ 2″	17′ 11″	20′ 5″	11′ 6″
3rd Subdivision	Between Longview and Longview Jct	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 1″	19′ 8″	19′ 4″	19′ 1″	18′ 11″	20′ 3″	11′ 6″
4th Subdivision	South Tacoma—Tenino Jct	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 2″	21′ 0″	21′ 5″	11′ 6″
5th Subdivision	Sumas Branch (via Everett)	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 2″	20′ 3″	11′ 6″
5th Subdivision	Argo-Bell Street (Via Seattle Tunnel)	18′ 7″	18′ 7″	18′ 7″	18′ 7″	18′ 7″	18′ 0″	17′ 0″	16′ 6″	16′ 0″	18′ 7″	11′ 0″
6th Subdivision	Roslyn Branch	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	11′ 6″
7th Subdivision	Buckley Line	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 4″	21′ 2″	21′ 1″	21′ 5″	11′ 6″
7th Subdivision	Wilkeson Branch. No Restriction	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11′ 6″
8th Subdivision	Green River Branch	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	11′ 6″
10th Subdivision	Orting Branch	18′ 9″	18′ 9″	18′ 9″	18′ 6″	18′ 3″	17′ 11″	17′ 7″	17′ 5″	17′ 3″	18′ 9″	11′ 6″

11th Subdivision	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″	11′ 6″
12th Subdivision	Snoqualmie Branch	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21′ 0″	11′ 6″
13th Subdivision	Hartford Line (Bromart-Edgecomb)	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 2″	21′ 1″	20′ 11″	21′ 3″	11′ 6″
14th Subdivision	Darrington Branch	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	11′ 6″
15th Subdivision	Bellingham Branch	19′ 2″	19′ 2″	17′ 11″	17′ 11″	17′ 11″	17′ 11″	17′ 11″	17′ 11″	17′ 1″	19′ 2″	11′ 6″
16th Subdivision	Grays Harbor Line (St. Clair-Gate)	17′ 7″	17′ 7″	17′ 6″	17′ 5″	17′ 5″	17′ 4″	17′ 4″	17′ 3″	17′ 3″	17′ 7″	11′ 6″
16th Subdivision	Grays Harbor Line (Gate-Aberdeen Jct.)	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 4″	21′ 3″	21′ 1″	20′ 11″	21′ 4″	11′ 6″
16th Subdivision	Grays Harbor Line (Aberdeen Jct.-Moclips)	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	20′ 6″	11′ 6″
16th Subdivision	Tumwater Spur	16′ 11″	16′ 9″	16′ 7″	16′ 6″	16′ 3″	16′ 1″	15′ 10″	15′ 9″	15′ 7″	16′ 11″	11′ 6″
17th Subdivision	American Lake Line	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	11′ 6″
18th Subdivision	Gate Line (Gate-Centralia)	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 5″	21′ 3″	21′ 2″	21′ 1″	21′ 5″	11′ 6″
19th Subdivision	Elma Branch	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	11′ 6″
20th Subdivision	Ocosta Branch	20′ 10″	20′ 10″	20′ 10″	20′ 10″	20′ 10″	20′ 4″	19′ 8″	19′ 4″	19′ 1″	20′ 10″	11′ 6″
21st Subdivision	Willapa Harbor Line	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 3″	21′ 2″	21′ 1″	21′ 1″	21′ 3″	11′ 6″
22nd Subdivision	Yacolt Branch	18′ 1″	18′ 1″	18′ 1″	18′ 1″	18′ 0″	18′ 0″	18′ 0″	18′ 0″	18′ 0″	18′ 1″	11′ 6″
23rd Subdivision	Moxee Branch	18′ 9″	18′ 6″	18′ 4″	18′ 1″	17′ 10″	17′ 8″	17′ 5″	17′ 4″	17′ 3″	18′ 9″	11′ 6″
24th Subdivision	Naches Branch	19′ 4″	19′ 4″	19′ 4″	19′ 4″	19′ 4″	19′ 4″	19′ 1″	19′ 1″	19′ 1″	19′ 4″	11′ 6″
24th Subdivision	Tieton Branch	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	11′ 6″

Note—Length of load 52 feet—Heights and widths in table allow 9 inches clearance.

MAXIMUM CLEARANCES

Table is based on open car loading equally divided on either side of center line of car.

		LIMIT OF LOAD—MEASUREMENT.									
		HEIGHT ABOVE TOP OF RAIL									
		8 ft. 6 in.	9 ft.	9 ft. 6 in.	10 ft.	10 ft. 2 in.	10 ft. 6 in.	11 ft.	11 ft. 6 in.	Max. Height	Max. Width
.....	Main Line (Seattle Middle Yard-Reservation)	21′ 0″	20′ 10″	20′ 9″	20′ 8″	20′ 7″	20′ 6″	20′ 5″	20′ 3″	21′ 4″	11′ 6″
.....	West Seattle Line	20′ 11″	20′ 7″	20′ 2″	19′ 10″	19′ 9″	19′ 6″	19′ 2″	18′ 9″	21′ 3″	11′ 6″
.....	Lake Union Line	14′ 10″	14′ 5″	14′ 0″	13′ 5″	13′ 3″	12′ 11″	12′ 5″	11′ 11″	20′ 7″	11′ 6″
1st Subdivision	Main Line (Yakima-East Auburn)	15′ 10″	15′ 6″	15′ 3″	15′ 2″	14′ 11″	14′ 7″	14′ 0″	13′ 5″	17′ 11″	11′ 6″
2nd Subdivision	Reservation—South Tacoma (Via Drawbridge Line)	21′ 2″	20′ 11″	20′ 8″	20′ 4″	20′ 3″	20′ 0″	19′ 9″	19′ 6″	21′ 3″	11′ 6″
2nd Subdivision	Tacoma Tideflats	18′ 4″	18′ 2″	17′ 11″	17′ 9″	17′ 8″	17′ 6″	17′ 4″	17′ 1″	18′ 9″	11′ 6″
3rd Subdivision	Main Line (Reservation-McCarver St. via Head of Bay Line)	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	18′ 6″	11′ 6″
3rd Subdivision	Eastward Main Track (McCarver St.-Tenino)	17′ 5″	17′ 1″	16′ 9″	16′ 4″	16′ 2″	15′ 11″	15′ 4″	14′ 9″	20′ 11″	11′ 6″
3rd Subdivision	Westward Main Track (McCarver St.-Tenino)	16′ 0″	15′ 7″	15′ 1″	14′ 7″	14′ 5″	14′ 0″	13′ 3″	12′ 4″	20′ 1″	11′ 6″
3rd Subdivision	Eastward Main Track (Tenino-Vancouver)	17′ 5″	17′ 1″	16′ 8″	16′ 3″	16′ 1″	15′ 9″	15′ 3″	14′ 8″	20′ 4″	11′ 6″
3rd Subdivision	Westward Main (Track Tenino-Vancouver)	17′ 6″	17′ 1″	16′ 9″	16′ 4″	16′ 2″	15′ 11″	15′ 5″	14′ 10″	20′ 5″	11′ 6″
3rd Subdivision	Between Longview and Longview Jct	18′ 8″	18′ 6″	18′ 3″	18′ 1″	18′ 0″	17′ 11″	17′ 8″	17′ 6″	20′ 3″	11′ 6″
4th Subdivision	South Tacoma—Tenino Jct	20′ 10″	20′ 8″	20′ 6″	20′ 3″	20′ 2″	20′ 0″	19′ 10″	19′ 8″	21′ 5″	11′ 6″
5th Subdivision	Sumas Branch (via Everett)	19′ 11″	19′ 9″	19′ 6″	19′ 3″	19′ 2″	18′ 11″	18′ 8″	18′ 4″	20′ 3″	11′ 6″
5th Subdivision	Argo-Bell Street (Via Seattle Tunnel)	15′ 6″	15′ 0″	14′ 4″	13′ 7″	13′ 3″	12′ 6″	11′ 0″	.....	18′ 7″	11′ 0″
6th Subdivision	Roslyn Branch	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	20′ 11″	11′ 6″
7th Subdivision	Buckley Line	20′ 11″	20′ 10″	20′ 8″	20′ 7″	20′ 6″	20′ 5″	20′ 4″	20′ 2″	21′ 5″	11′ 6″
7th Subdivision	Wilkeson Branch. No Restriction	.....	.....	.....	.....	.....	.....	.....	.....	.....	11′ 6″
8th Subdivision	Green River Branch	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	22′ 9″	11′ 6″
10th Subdivision	Orting Branch	17′ 1″	17′ 0″	16′ 10″	16′ 8″	16′ 7″	16′ 6″	16′ 5″	16′ 3″	18′ 9″	11′ 6″

11th Subdivision	Belt Line (Black River-Woodinville)	21′ 3″	21′ 3″	21′ 3″	21′ 1″	21′ 0″	20′ 10″	20′ 8″	20′ 6″	21′ 6″	11′ 6″
12th Subdivision	Snoqualmie Branch	21′ 0″	20′ 10″	20′ 6″	20′ 3″	20′ 2″	20′ 0″	19′ 8″	19′ 4″	21′ 0″	11′ 6″
13th Subdivision	Hartford Line (Bromart-Edgecomb)	20′ 9″	20′ 7″	20′ 4″	20′ 2″	20′ 1″	19′ 11″	19′ 9″	19′ 7″	21′ 3″	11′ 6″
14th Subdivision	Darrington Branch	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	19′ 1″	11′ 6″
15th Subdivision	Bellingham Branch	16′ 10″	16′ 8″	16′ 4″	16′ 2″	16′ 2″	16′ 0″	15′ 9″	15′ 6″	19′ 2″	11′ 6″
16th Subdivision	Grays Harbor Line (St. Clair-Gate)	17′ 2″	17′ 2″	17′ 1″	17′ 0″	17′ 0″	16′ 11″	16′ 10″	16′ 9″	17′ 7″	11′ 6″
16th Subdivision	Grays Harbor Line (Gate-Aberdeen Jct.)	20′ 10″	20′ 9″	20′ 7″	20′ 5″	20′ 4″	20′ 1″	19′ 9″	19′ 6″	21′ 4″	11′ 6″
16th Subdivision	Grays Harbor Line (Aberdeen Jct.-Moclips)	20′ 6″	20′ 6″	20′ 6″	20′ 5″	20′ 5″	20′ 4″	20′ 2″	20′ 1″	20′ 6″	11′ 6″
16th Subdivision	Tumwater Spur	15′ 5″	15′ 3″	15′ 1″	15′ 0″	14′ 11″	14′ 10″	14′ 8″	14′ 4″	16′ 11″	11′ 6″
17th Subdivision	American Lake Line	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	22′ 3″	11′ 6″
18th Subdivision	Gate Line (Gate-Centralia)	20′ 11″	20′ 10″	20′ 8″	20′ 7″	20′ 6″	20′ 5″	20′ 4″	20′ 2″	21′ 5″	11′ 6″
19th Subdivision	Elma Branch	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	24′ 3″	11′ 6″
20th Subdivision	Ocosta Branch	18′ 9″	18′ 6″	18′ 2″	17′ 10″	17′ 9″	17′ 7″	17′ 3″	16′ 11″	20′ 10″	11′ 6″
21st Subdivision	Willapa Harbor Line	21′ 0″	20′ 10″	20′ 8″	20′ 6″	20′ 6″	20′ 4″	20′ 3″	20′ 1″	21′ 3″	11′ 6″
22nd Subdivision	Yacolt Branch	17′ 9″	17′ 5″	16′ 3″	15′ 2″	14′ 9″	13′ 11″	10′ 9″	5′ 6″	18′ 1″	11′ 6″
23rd Subdivision	Moxee Branch	17′ 1″	17′ 0″	16′ 11″	16′ 10″	16′ 9″	16′ 8″	16′ 7″	16′ 6″	18′ 9″	11′ 6″
24th Subdivision	Naches Branch	19′ 1″	19′ 0″	18′ 11″	18′ 10″	18′ 9″	18′ 7″	18′ 4″	18′ 1″	19′ 4″	11′ 6″
24th Subdivision	Tieton Branch	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	19′ 10″	11′ 6″

Note—19th Subdivision—Limit of clearance on Government Railway is 21′3″ high for all widths up to 11′6″.

TONNAGE RATINGS—FREIGHT ENGINES

TONNAGE RATING INSTRUCTIONS
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SUBDIVISION	DISTRICT	CLASS OF ENGINE								
		5400 H. P. Diesels	Z-6-7-8	Z 3	W 3	W 1 W 2	W	Y 2	S 4	F 1
		Tons		Tons	Tons	Tons	Tons	Tons	Tons	Tons
First Eastward	Auburn to Lester	4920	.....	2500	1700	1200	1100	900	800	.....
	Lester to Easton	2250	.....	1250	850	600	550	450	400	.....
	Easton to Yakima	.....	.....	.....	.....	.....	.....	.....	.....	.....
First Westward	Yakima to Thrall	6000	5000	3600	3125	.....	2100	.....	1550	.....
	Thrall to Ellensburg	7500	6500	5000	4000	.....	3800	.....	2450	.....
	Ellensburg to Easton	6000	5000	3600	2300	1800	1700	1300	1200	.....
	Easton to Lester	2250	.....	1250	850	600	550	450	400	.....
	Lester to Auburn	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fifth Eastward	Sumas to Wickersham	.....	.....	.....	3150	2600	2500	2300	2000	1700
	Wickersham to Sedro-Woolley	.....	.....	.....	2900	2500	2400	2100	1800	1600
	Sedro-Woolley to Clear Lake	.....	.....	.....	5000	4600	4500	4000	3500	3000
Fifth Eastward —Continued	Clear Lake to Edgecomb	.....	.....	.....	2950	2500	2400	2100	1800	1600
	Edgecomb to Bromart	.....	.....	.....	5000	4700	4600	4200	3000	2500
	Bromart and Snohomish to Maltby	.....	.....	.....	1200	975	900	800	660	625
	Maltby to Woodinville	.....	.....	.....	5000	4100	4000	4000	3170	3000
	Woodinville to Lake	.....	.....	.....	3150	2900	2800	2600	2500	2200
	Lake to Keith	.....	.....	.....	2850	2400	2300	2100	1650	1500
	Keith to Seattle	.....	.....	.....	3150	2900	2800	2600	2500	2200
Fifth Westward	Seattle to Interbay	.....	.....	.....	5000	4600	4500	4000	3500	3000
	Interbay to Keith	.....	.....	.....	1750	1325	1250	1100	1000	900
	Keith to Woodinville	.....	.....	.....	3650	3100	3000	2500	2200	2000
	Woodinville to Maltby	.....	.....	.....	1100	905	830	780	635	600
	Maltby to Bromart	.....	.....	.....	2350	1900	1800	1600	1500	1400
	Bromart and Snohomish to Arlington	.....	.....	.....	4150	3700	3600	3200	2700	2500
	Arlington to McMurray	.....	.....	.....	2400	2150	2050	1900	1650	1400
	McMurray to Sedro-Woolley	.....	.....	.....	4150	3700	3600	3200	2500	2000
	Sedro-Woolley to Thornwood	.....	.....	.....	2000	1400	1300	1050	1000	950
	Thornwood to Sumas	.....	.....	.....	3150	2600	2500	2300	2000	1700

TONNAGE RATINGS—FREIGHT ENGINES

SUBDIVISION	DISTRICT	CLASS OF ENGINE						
		Z 3	W 3	W 1 W 2	W	Y 2	S 4	F 1
		Tons	Tons	Tons	Tons	Tons	Tons	Tons
Eleventh Eastward	Woodinville to Kirkland	.....	2350	1900	1800	1600	1215	1150
	Kirkland to Black River	.....	5000	4600	4500	4000	3500	3000
Eleventh Westward	Black River to Woodinville	.....	2650	2350	2250	2000	1700	1500
Twelfth Eastward	North Bend to Fall City	.....	.....	.....	.....	1740	1585	1650
	Fall City to Preston	.....	.....	.....	.....	700	580	550
	Preston to Woodinville	.....	.....	.....	.....	2300	2000	1700
Twelfth Westward	Woodinville to Issaquah	.....	.....	.....	.....	2500	2100	1700
	Issaquah to Preston	.....	.....	.....	.....	700	550	450
	Preston to Fall City	.....	.....	.....	.....	900	800	700
	Fall City to North Bend	.....	.....	.....	.....	2000	1600	1500
Thirteenth Eastward	Edgecomb to Getchell	.....	1600	1075	1000	800	750	700
	Getchell to Snohomish	.....	5000	4600	4500	4000	3500	3000
Thirteenth Westward	Bromart and Snohomish to Hartford	.....	2150	1800	1700	1500	1200	1100
	Hartford to Getchell	.....	1650	1300	1200	1100	900	800
	Getchell to Edgecomb	.....	5000	4600	4500	3500	3500	3000
Fourteenth Eastward and Westward	Arlington and Darrington	.....	.....	.....	.....	5000	4500	3000
Fifteenth Eastward	Bellingham to Larson	.....	1050	800	725	600	555	525
	Larson to Wickersham	.....	3200	2500	2400	2200	2000	1800
Fifteenth Westward	Wickersham to Mirror Lake	.....	1080	835	760	750	580	550
	Mirror Lake to M. P. 15	.....	2650	2250	2150	1750	1500	1250
	M. P. 15 to Larson	.....	2150	1800	1700	1500	1300	1100
	Larson to Bellingham	.....	.....	.....	.....	.....	.....	.....

TONNAGE RATINGS—FREIGHT ENGINES

TONNAGE RATING INSTRUCTIONS
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SUBDIVISION	DISTRICT	CLASS OF ENGINE				
		W 3	W	Y 2	F 1	S
		Tons	Tons	Tons	Tons	Tons
Third Eastward	Tacoma to Chehalis	4500	3500	2000	2000	1800
	Chehalis to Napavine	1975	1350	1000	900	850
	Napavine to Portland	.....	.....	.....	3000	3000
Third Westward	Portland to Vader	4000	3000	2800	2500	2500
	Vader to Napavine	2350	1700	1500	1100	1000
	Napavine to Tacoma	4500	3500	3300	2500	2500
Fourth Eastward	Tacoma to South Tacoma	900	600	500	400	400
	South Tacoma to Rainier	3000	2000	1800	1200	1150
	Rainier to West Tenino	4500	3200	.....	.....	.....
Fourth Westward	West Tenino to Rainier	2500	1700	1500	1100	1050
	Rainier to Tacoma	4500	3200	3000	1800	1800
Seventh Westward	Palmer Jct. to Tacoma	.....	.....	.....	.....	.....
	Wilkeson and Carbonado to South Prairie	.....	.....	.....	2000	2000
Seventh Eastward	Tacoma to Orting	.....	3000	2800	1800	1800
	Orting to South Prairie	.....	1500	1400	900	800
	South Prairie to Buckley	.....	800	700	450	400
	Buckley to Palmer Jct.	.....	1650	1450	900	800
	South Prairie to Wilkeson	.....	.....	.....	400	400
	Wilkeson to Carbonado	.....	.....	.....	400	400
Sixteenth Westward	St. Clair to Lacey	.....	1000	900	800	800
	Lacey to Olympia	.....	2500	2400	.....	.....
	Olympia to Belmore	.....	1000	900	600	600
	Belmore to Gate	.....	1500	1400	1200	1200
	Gate to Hoquiam	.....	3500	3300	2200	2200
	Hoquiam to Moclips	.....	4000	4000	2500	2500
Sixteenth Eastward	Moclips to Hoquiam	.....	4000	4000	2500	2500
	Hoquiam to Gate	.....	3500	3300	2000	2000
	Gate to Belmore	.....	2700	2500	1500	1500
	Belmore to Olympia	.....	.....	.....	.....	.....
	Olympia to Lacey	.....	1000	900	550	550
	Lacey to St. Clair	.....	1350	1250	1050	1050
Seventeenth Eastward	Lakeview to Nisqually	3500	2500	2300	2000	2000
Seventeenth Westward	Nisqually to Fort Lewis	1500	1000	800	550	550
	Fort Lewis to Murray	3000	2000	1800	1500	1500
	Murray to Lakeview	3250	2500	2300	2000	2000

TONNAGE RATINGS—FREIGHT ENGINES.

TONNAGE RATINGS INSTRUCTIONS

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Subdivision	District	CLASS OF ENGINE			
		W	Y 2	F 1	S
		Tons	Tons	Tons	Tons
Eighth Westward	Kerriston to Kanaskat	....	....	600	600
Eighth Eastward	Kanaskat to Kerriston	....	....	400	400
Tenth Eastward	Orting to Lake Kapowsin	....	....	600	600
Eighteenth Westward	Centralia to Gate	3500	3300	2200	2200
Eighteenth Eastward	Grand Mound to Centralia	3500	3500	3000	3000
	Rochester to Grand Mound	3500	3500	2400	2400
	Gate to Rochester	3500	3300	2000	2000
Nineteenth Eastward	Elma to McCleary Jct.	1800	1700	1200	800
	McCleary Jct. to Stimson	1550	1450	1100	....
	Stimson to Shelton	1100	1000	700	550
Nineteenth Westward	Shelton to Marmac	1800	1700	1200	400
	Marmac to Stimson	600	500	400	....
	Stimson to Elma, Descending	....	....	....	....
Twenty-First Westward	Chehalis Jct. to Adna	....	2900	2800	2000	2000
	Adna to Pe Ell	....	2500	2500	1500	1400
	Pe Ell to McCormick	....	1700	1600	800	800
	McCormick to Pluvius	....	1000	900	550	550
	Pluvius to South Bend	....	....	....	....	....
Twenty-First Eastward	South Bend to Frances	....	2100	2000	1800	1800
	Frances to Pluvius	....	900	800	500	500
	Pluvius to Chehalis Jct.	....	....	....	....	....
Twenty-Second Westward	Yacolt to Vancouver Jct.	....	....	....	1800	1800
Twenty-Second Eastward	Vancouver Jct. to Homan	....	1000	....	550	550
	Homan to Yacolt	....	1500	....	800	800

T. J. KANE,
Asst. Superintendent.

I. P. IVERSEN,
Asst. Superintendent.

W. A. GERDON,
Trainmaster.

T. J. REGAN,
Trainmaster.

E. M. PRICE,
Trainmaster.

C. F. NASH,
Trainmaster.

S. J. CHARBONEAU,
Terminal Trainmaster.

C. E. DORFLER,
Trainmaster.

F. W. McCABE,
Trainmaster.

G. M. HARE,
Trainmaster.

A. W. ACKLEY,
Chief Dispatcher.