

NORTHERN PACIFIC RAILWAY COMPANY

TACOMA DIVISION

Special Instructions No. 6

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

Sunday, March 18, 1945

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

**Employees 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—

Except as otherwise provided, passenger trains sixty (60) MPH, freight and mixed trains fifty (50) MPH.

J Manifest freight trains35 MPH.

All trains and engines:

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

Handling steam wrecking cranes, pile drivers or

locomotive cranes30 MPH.

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

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

All A and Q and classes Z-6, Z-7 and Z-8.....	50 MPH.
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S-4, T, T-1, W to W-5 inc., Y-2.....	35 MPH.
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Z-5, D-2, D-3, S-10, Y, Y-1, Y-3.....	30 MPH.
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Z-2, Z-3, Z-4, F-1	25 MPH.
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Main Line—With main and side rods removed:

All A and Q and classes Z-6, Z-7 and Z-8.....	30 MPH.
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Z-5, D-2, D-3, S-4, S-10, T, T-1, W to W-5 inc., Y to Y-3 inc.....	25 MPH.
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Z-2, Z-3, Z-4, F-1	20 MPH.
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With main rods removed and side rods in place:

All A and Q and classes Z-6, Z-7 and Z-8.....	35 MPH.
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Z-5, D-2, D-3, S-4, S-10, T, T-1, W to W-5 inc., Y to Y-3 inc.....	30 MPH.
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Z-2, Z-3, Z-4, F-1	25 MPH.
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Branch Lines—With either or both main and side rods removed:

All A and Q classes	25 MPH.
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All other classes	20 MPH.
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On bridges—With either or both main and side rods removed:

Steam switch engines, without engine trucks	15 MPH.
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Other engines	20 MPH.
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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 above for engines coming from shops under steam.

Diesel-electric 660 HP Nos. 125 to 130 inc., when handled dead in train	45 MPH.
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Diesel-electric, other engines, when handled dead in train	50 MPH.
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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, and double headers of engines of different classes carry the restrictions applicable to single headers of the heavier class of the combination.

Double-Heading Restrictions—Engines, Classes A-2 to A-5 or Z-6 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-6 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 be displayed at night on all main line train order signals. On branch line subdivisions where lights are not displayed on day-office train order signals, all trains will positively ascertain position of signal and be governed by the day indication.

4. Transportation Rule D-97 applies to all divisions.

5. Transportation Rule 509(B): In complying with this rule the following must be observed—Where the Stop-and-Proceed signal is located at the leaving end of a siding, the Stop-indication may be due to an opposing train proceeding in the same block on an Approach-signal indication and every precaution consistent with train rights and the track ahead should be taken before proceeding, to insure safe movement through the block.

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

7. Transportation Rule 726 is modified to require that yellow signals will be placed one and one-fourth (1¼) miles, instead of one mile, distant from the location of the slow track.

8. Transportation Rule 728 is modified as follows: The red flag by day, and in addition the red light at night, will be placed twenty (20) rail lengths distant from the point of obstruction instead of fifty (50) rail lengths. The flagman will be located with the yellow signals, one and one-fourth miles distant beyond the red signals. On the approach of a train the flagman will display the yellow signals which must be acknowledged by the enginemen in accordance with Rule 14(g). On all Subdivisions except the First, Second and Third, and also in special cases authorized by the superintendent and protected by train order, the yellow signals will be placed as prescribed and flagman will not be required except during fog, storms or otherwise bad weather. On the Fourth Subdivision, flagman must be employed when protecting against first class trains or passenger extras.

9. When a siding is to be used temporarily as a main track, the switches will be set and locked for the siding and must be protected by flagman until train order covering the movement is issued to all trains, and the section foreman of that section notified, the flagman to remain until released by the train dispatcher.

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

11. In case of failure of communicating signal system on passenger trains, and on freight trains when conditions permit, enginemen will receive "proceed" signal before passing any station.

12. Spring Switches—

A train or engine stopping on a spring switch while trailing through and actuating the switch points must not make a reverse movement, or take slack until the switch has been operated by hand and it is known that switch points are in proper position for safe movement. When a train or engine moving in either direction is stopped by a signal governing movements over a spring switch, the switch must be examined to make certain it is properly lined, locked or secured and that points fit.

When a train or engine is stopped by a signal governing a trailing point movement through a spring switch, and no conflicting train movement is evident, the switch must be operated by hand for the route. If switch is equipped with a facing point lock, it must not be lined and locked in normal position until after movement has been completed. If switch is not equipped with a facing point lock, it must be lined and locked in normal position after the leading wheels have passed the fouling point.

When moving against the current of traffic on double or three or more tracks, trains must stop and examine facing points of spring switches unless such switches are protected by signals.

Unless otherwise provided, in automatic block signal territory, when a train or engine has been stopped by a signal governing movement through or over a spring switch and signal continues to display Stop indication, after complying with above requirements movement must be made as provided by Rule 509 (B).

- 12(a). Movement in facing point direction over a spring switch equipped with facing point lock may be made at normal speed. Movement in facing point direction over a spring switch not equipped with facing point lock must not exceed 30 miles per hour.

If switch is lined for turnout, the allowable turnout speed must be observed.

Movement in trailing point direction over a spring switch on track for which the switch is lined may be made at normal speed. Movement in trailing point direction which springs the switch points must not exceed 30 miles per hour.

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

13. Before moving a work or wrecking train, the whistle signal (14-b) or (14-h) must be sounded for the protection of men working about such trains.

Adequate protection must be given where crane or derrick booms foul adjacent tracks.

When trains are seen or known to be closely approaching and while passing on an adjacent track:—

Snow plows must not be operated to throw snow on passing trains;

Trains unloading ballast or other track material or operating spreaders, or other track equipment must stop;

Booms of cranes, ditchers or other similar equipment or other projecting parts of rotating machinery must be secured in position to clear adjacent track and operation stopped, unless properly protected.

14. 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.

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

16. 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.

17. Cranes, derricks, steam shovels, mining machinery, and spreaders etc., moving either on their own wheels or on cars, with or without booms attached, must be moved with boom or spreader wings trailing except when necessity requires otherwise.

18. 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. 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 two 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.

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

20. 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.

21. 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.

22. 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.

23. WATCH INSPECTORS—

Yakima—Carson and Stedman, Ellensburg—Phillips Jewelry.
Cle Elum, Easton and Lester—G. Davies.
Auburn—R. DeBarthe.
Seattle—R. A. McReynolds, Ben Tipp.
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.

NOTE:

Schedule meeting or passing stations are indicated by figures in full-faced type; numbers of the trains meeting, passing, or being passed will not be shown.

FIRST SUBDIVISION.

(MAIN LINE)

1. **Speed Restrictions**—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-535 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, or coupled with class A, A-1, W-3, or W-5.....20 MPH.
Engines Class Z-420 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, Shoskin, Thorp, Swauk, Bristol, Nelson and Tal-mage. 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.

At Dudley, water cannot be obtained by these classes of engines account spout too low.

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.

4. **At East Auburn No. 1 transfer track** will be used by all eastward first class trains, including sections thereof. No. 1 transfer track will be used by westward passenger trains having transfer to make with connecting trains. No. 2 transfer track will be used by passenger trains handling connection to and from Tacoma.

The time of first-class trains and passenger extras applies at passenger station.

Eastward trains holding main track meeting westward trains, will stop west of overlap sign opposite Signal 1025 and remain there until westward train has passed Signal 1013.

Engineers of passenger trains will keep brakes applied while standing.

When necessary for a westward passenger train to use transfer track at East Auburn and a member of the crew of the Tacoma connection is available, crossover switches leading from the main track to transfer track may be set for crossover movement as follows: When the westward train has passed the switch at the east end of the siding the inside switch of the crossover may be set for the crossover but switch at main track end of crossover must not be set for crossover movement until the engineman of the westward train has called for the switch by sounding four short blasts of engine whistle and the train is seen to be approaching at restricted speed. Westward passenger trains will approach this crossover prepared to stop and proceed only on signal from trainman at crossover or when crossover switches can be plainly seen to be set for crossover movement.

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 Hot Springs**—Eastward trains holding main track meeting trains will stop back of signal overlap sign to avoid signal interference at west end Lester.
7. **At Martin**—Westward passenger trains must not enter Tunnel No. 3 until tunnel has been cleared of smoke.
8. **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.
9. **At Cle Elum**—Electric coal bunker, on west extension, will not clear man on side of car or engine. Logs will not be handled on this track.
Switch on west leg of wye leading to coal dock track must be left lined for coal dock track.
10. **At Ellensburg**—All train 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.
11. **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. Unless otherwise provided, time specified for other westward extra trains applies at yard office.
The switch to the 1500-foot spur track used as a switching lead at east end of yard must be left lined for spur to serve as a derail for all yard tracks.
To avoid blocking street crossings, westward trains with more than 65 cars will not leave the east yard, when meeting trains, until the eastward train arrives.
Flagman must precede cars shoved or engines backing over Yakima Avenue crossing in addition to crossing watchman protection.
12. **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.
Yakima; Passenger trains taking siding will use high-line pocket unless otherwise instructed.
13. **Spring switches**—equipped with facing point locks; at end of double track at Lester and Easton and between East Auburn and Auburn where outbound wye track from Auburn yard connects with main track.
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. **Automatic signalling on double track between Lester and Easton**—Westward track between Lester and Stampede is signalled for movement in both directions, the eastward track is signalled for eastward movement only.
Eastward trains using westward track will be governed by Stop signal 1400 feet east of Lester passenger station.
At Kennedy, crossover movement from westward to eastward track is governed by lower arm of signal at crossover, and when both switches are lined for crossover movement, if block is not occupied, will show proceed or approach indication.
Eastward track between Martin and Easton is signalled for movement in both directions. Westward track between Easton and Tunnel No. 2 crossover is signalled for westward movement only, but between Tunnel No. 2 crossover and Martin, is signalled for movement in both directions.
Westward trains using eastward track will be governed by Stop signal 600 feet west of Easton train order office.
At crossover east of Tunnel No. 2, crossover movement from eastward to westward track is governed by lower arm of signal at east end of crossover and crossover movement from westward to eastward track is governed by lower arm of signal at west end of crossover. When both switches of either crossover are lined for crossover movement, if block is not occupied, the lower arm of signal governing the crossover will show proceed or approach indication.
Eastward trains using westward track will be governed by Stop signal at east switch at Martin and if instructed to cross over to eastward track at crossover east of Tunnel No. 2 will be governed by lower arm on signal at west end of crossover.
Eastward two-arm stop signal located east of Tunnel No. 2 Cut governs movement through crossover and does not govern the movement of eastward trains on the westward track. Eastward trains using the westward track through to Easton may pass this signal at restricted speed without stopping.
AT LESTER: When dwarf signal located at end of double track governing westward trains on eastward track does not indicate proceed, use push button located on relay case just east of the three arm westward signal at end of double track. If no conflicting movement in the block, the signal will then indicate proceed.
AT EASTON: When dwarf signal located at end of double track governing eastward trains on westward track does not indicate proceed, after train has entered circuit beginning 400 feet west of this signal, use push button located on top of signal, if no conflicting movement in the block, the signal will then indicate proceed.
16. **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 signal 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 signal 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 signal at west end of westward siding.

When a train running against the current of traffic and a train running with the current of traffic are both closely approaching the Tunnel Section, the train order signal must be displayed as Stop signal until both trains have stopped. The train to be admitted to Tunnel Section will then be given staff and clearance. 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.

17. 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 moving with current of traffic must not follow a passenger train from Stampede until the passenger train has arrived at Lester. As soon as such westward passenger train from Stampede has cleared the circuit, the operator at Stampede must open the circuit switch and hold the westward automatic block signal at the west end of the westward siding at Stop. After the operator at Lester reports the arrival of the passenger train there, the circuit switch at Stampede will be closed, allowing the signal to operate automatically.

Eastward trains except passenger trains moving with the current of traffic must not follow a passenger train from Martin until the passenger train has arrived at Easton. As soon as such eastward passenger train from Martin has cleared the circuit, the operator

at Martin must open the circuit switch and hold the eastward automatic block signal on the signal bridge at the east end of the siding at Stop. After the operator at Easton reports the arrival of the passenger train there, the circuit switch at Martin will be closed, allowing the signal to operate automatically.

An exception to the above instructions may be made 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.

For following movements on descending grades against current of traffic between Stampede and Lester and between Martin and Easton, the following will govern: Operator at Martin will display at Stop eastward automatic signal governing eastward trains on westward track, until preceding train is reported crossed-over at Tunnel 2 Cut or as having arrived Easton.

Staff must not be issued at Martin to following westward train, until preceding train is reported crossed-over at Kennedy or as having arrived Lester, except when authorized by train dispatcher, a following train may be moved to Stampede and in such case clearance will not be delivered at Stampede until preceding train has crossed over at Kennedy or arrived at Lester.

(c) Helper Engines—

Diesel-Electric engines in helper or pusher service—

When 5400 HP diesel-electric engines are used in helper or pusher service in freight or mixed trains of approximately full tonnage rating, the diesel-electric helper engine will be placed approximately at the tonnage center of the train, unless otherwise instructed.

The dynamic brake on diesel-electric helper or pusher engine must not be used.

When double heading diesel-electric engines, the dynamic brake should be used on both engines when descending grades.

When diesel-electric engines are located at any point in train other than as leading engine, the air brakes should be allowed to function in conjunction with the train brakes operated from the 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.

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 Transportation 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 Easton and Stampede will be for westward trains and at Martin and Lester 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.

(g-1) On these trains handled by diesel-electric 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 two-fifths (40%) 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-third (33 1/3 %) of the cars in train beginning with head car.

On trains of all empties having in excess of 2250 tons, turn handles up on fifteen (15) 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 Easton will not be required for turning down retaining valve handles, cooling of wheels and inspection of 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 (33 1/3 %) 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, 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) In the event of failure of the dynamic brake feature on diesel-electric engine when handling eastward or westward trains having retaining valves used of a number less than that specified for similar trains handled by steam engines, the engineman must stop the train by use of train brakes and instruct head brakeman to notify conductor that an additional number of retaining valves must be used. The additional number of retaining valve handles to be turned up on cars in train must bring the total number up to the requirements specified in paragraphs (g) and (h) above for steam train operation. Conductor must instruct brakemen accordingly and notify engineman when the additional number of retaining valve handles have been turned up, after which train may then 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 engineman 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 engineman on road engine for a release of brakes until the examination has been completed. Conductors and enginemen 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) Through Tunnel No. 3—On approaching either Martin, westward, or Stampede, eastward, engineman will increase train line pressure to 90 pounds. Before entering Tunnel No. 3, conductor must know by caboose gauge that this has been done and, if sufficient pressure is not recorded, 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 engineman must fully recharge the brakes before starting and the conductor must not give the "Proceed" signal until at least 80 pounds is shown by the caboose gauge.
- (m) If for any reason the train breaks in two or more parts while in Tunnel No. 3, train and engineman should arrange to get engines out of tunnel as promptly as possible. If necessary, take engines and cars out in either or both directions. When portion of train is left in tunnel, same should be made secure by blocking and not moved out until smoke and gas have cleared and it can be done safely. Blocking will be found on walls of tunnel on right hand side going east, about 100 feet apart and six feet above the rail.
- (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, engineman 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.

Freight trains must not exceed twenty (20) MPH in either direction, on either track, between Martin and Hubner or between Stampede Tunnel No. 3 and Lester.

Passenger trains must not exceed thirty (30) MPH in either direction on eastward track between Martin and Hubner or on westward track between Stampede Tunnel No. 3 and Lester.

Passenger trains must not exceed twenty-five (25) MPH in either direction on eastward track between Lester and Stampede Tunnel No. 3 or on westward track between Hubner and Martin.

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 enginemen handling eastward freight trains find that fan at mouth of Tunnel No. 3, Stampede, is in operation when passing vents, train must be stopped at once and engineer in charge of plant notified to stop the fans.

- (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. 3, 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 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—
GN engines, classes O-4 and O-5.....50 MPH.
GN engines, classes Q-1 and Q-2.....40 MPH.
Between King Street Station and Argo,
over all street crossings.....20 MPH.
Argo Interlocking (UP-PC Crossing).....30 MPH.
Black River Interlocking:—
Passenger trains60 MPH.
Freight trains40 MPH.
Over street crossings within corporate limits:—
At Puyallup25 MPH.
At Sumner30 MPH.
At Kent and Auburn40 MPH.
Reservation Interlocking30 MPH.
At Seattle—
King St. station, over switches 8 MPH.
Over Puzzle Switches, west of Holgate St.10 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, move at 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 Street10 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. 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.

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-120 MPH.

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

Engines Classes, NP, Z-5 to Z-8 inc., and GN, R-1 and R-2, not permitted.

Engines Classes, NP, A-2 to A-5 inc., and GN, O-8, Q-1 and S-110 MPH.

Bridge 12.3, Tacoma Terminal, Dempsey Tide Flat line;

Engines Classes, G-1, G-2, Q-5 and heavier not permitted.

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

Engines classes Q-4 and T, UP No. 710, and lighter and single

header Diesel switch engines10 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 cars10 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 engines; when switching or setting out on spur 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 Seattle1 long, 1 short.

To West Seattle Line1 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 cross-overs 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; Interlocking home signal located west of Drawbridge 39. Upper arm governs movement into Union Station. Lower arm governs movements to Fourth Subdivision. Westward home 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 home signal, located opposite west switch of the cross-over 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 Station1 long, 4 short.

Westward trains from Fourth Subdivision—

To Moon Yard or Union Station.....1 short, 1 long.
To Drawbridge Line1 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 by1 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 enginemen 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 enginemen 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**—

UP engines, Consolidation or Mikado classes.....40 MPH.

UP engines, Mikado class with drivers, 63 inch or over;

Freight trains50 MPH.

Passenger trains55 MPH.

GN engines, Classes Q-1 and Q-2.....40 MPH.

Classes O-4 and O-550 MPH.

CMStP&P engines, Class C-5.....50 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 curves50 MPH.

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.

Between UP Jct. and McCarver St.....30 MPH.

Trains approach East D St., 21st St. South and 15th St., at restricted speed and proceed only on signal from switchtender. 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 crossings at Sixth Ave. and Day Island15 MPH.

At Chehalis Jct. Interlocking (C. M. St. P. & P. Crossing);

Freight trains35 MPH.

Passenger trains50 MPH.

At Kelso, over Allen St., which leads to the bridge over the Cowlitz River15 MPH.

Over highway crossings within corporate limits;

Bucoda35 MPH.

Chehalis25 MPH.

Centralia, Napavine, Winlock and Ridgefield30 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 span20 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 engineman for quick stop. Engineman must be on lookout for such signal.

- Bridge 47, Skookumchuck River, between Bucoda and Wabash.
 " 59, Newaukum River, between Chehalis Jct., and Napa-vine.
- 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 round-house 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 Reservation1 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 cross-overs 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 indicates 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. 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 enginemen 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 enginemen 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—

Passenger trains45 MPH.

Freight trains30 MPH.

GN engines class Q-240 MPH.

At Tacoma, trains or engines entering or leaving Union Station between 15th St. Tower and 21st St. South.....10 MPH.

15th St. Tower—While any portion of train passing over switches10 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 trains30 MPH.

Freight trains20 MPH.

At South Tacoma, entering double track15 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 logs10 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.

At Mobase, on government tracks; hospital spur-trains must back in, as platform paralleling track does not clear engine, or man on side of car.

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. Siding will be used as storage track.

7. At McChord Field and Mobase—Toilets of cars must be kept locked, and no refuse thrown from trains.

8. At Rainier—South siding is eastward siding, north siding is westward siding.

9. At Tenino Jct.—Switch leading to Third Subdivision and west switch of crossover are electrically locked. See also item 9 of Third Subdivision.

10. 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.

11. Mountain Grade—Between 15th Street, Tacoma, and 2½ miles east.

At South Tacoma—Air brake tests as prescribed by Air Brake Rule 35 must be made.

Air test card to be delivered to the operator.

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.

Westward trains will approach Pacific Avenue at restricted speed and be governed by home signal at Pacific Avenue controlled from 15th St. Tower.

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

Automatic Signals 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.

12. **Pusher District**—Between Tacoma and South Tacoma.
13. **Yard Limits**—Tracks between yard limit signs west of Reservation and east of McCarver St. and South Tacoma operated as one yard.
14. **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.
15. **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.
16. **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—

Freight trains	40 MPH.
Passenger trains; Steam	45 MPH.
Motor	50 MPH.

Trains handling steam wrecking derricks, pile driver or locomotive crane

Engines classes W-3 and W-5

At Seattle—Between South Portal and north entrance of tunnel

Between North Portal and Bay St.

At Interbay—

Through crossover, 1000 feet east of station

Between Home signals of interlocking at G. N. Crossing of lead to Naval Supply Depot Spur

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. Bridge 4, Lake Washington Canal, between Interbay and Fremont, over Bascule Span

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.
Bridge 85, Skagit River, between Clear Lake and Sedro-Woolley, over draw span20 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.

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 61-120 MPH.

Over Bridge 11010 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 derricks 41, 42, 43 and 44 not permitted.

Lighter engines10 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. 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. Time of first class trains applies at passenger station.
8. **At Woodinville**—Normal position of junction switch is for Eleventh Subdivision.
9. **At Bromart and Edgcomb**—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 Edgcomb, 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**20 MPH.
Cle Elum through city limits10 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, engineman 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**—
Between Kanaskat Jct. and Bayne Jct. via joint track....15 MPH.
Between Palmer Jct. and Meeker:
Trains handling steam wrecking crane, pile driver
or locomotive crane20 MPH.
Other trains25 MPH.
Between Cascade Jct. and Wilkeson and Carbonado:
Trains handling steam wrecking crane, pile driver
or locomotive crane10 MPH.
Trains with engine backing15 MPH.
Other trains20 MPH.
Through corporate limits of:
Enumclaw and Buckley25 MPH.
Orting10 MPH.
2. **Bridge and Engine Restrictions**—
Between Kanaskat Jct. and Bayne Jct. via joint track, wrecking derricks 41, 42, 43 and 44, and engines heavier than class S-4, not permitted.
Between Palmer Jct. and Meeker, Engine Classes A-2 to A-5 inc. and Z-5 to Z-8 inc., not permitted.
Between Cascade Jct., Wilkeson and Carbonado, Engine Classes Q-5, Q-6, W-3, W-5 and A to A-5 inc. and Z-2 to Z-8 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.
Bridge 16, South Prairie Creek, between Cascade Jct. and Buckley. Engines classes Z-410 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 1610 MPH.
Over Bridge 16-120 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 exceed25 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 tippie 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**—
Trains handling steam wrecking derrick, pile driver, or locomotive crane10 MPH.
Other Trains15 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, 42, 43 and 44 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**—
Between Orting and Puyallup River Jct.20 MPH.
Between Puyallup River Jct. and Lake Kapowsin10 MPH.
Trains handling steam wrecking derrick, pile driver or locomotive crane10 MPH.
2. **Bridge and Engine Restrictions**—
Engines heavier than Class W-2 not permitted.
Bridge 8, Puyallup River, at Puyallup River Jct.—
Wrecking cranes 41, 42, 43 and 4415 MPH.
Engines classes G, G-1, G-2, Q-5, Q-6, W, W-1, W-210 MPH.
L-9, S-4, Q-1, Q-3, Q-4, T and Y20 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**30 MPH.
Trains handling steam wrecking derrick, pile driver, or locomotive crane20 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-2, Z-3, Z-4 and trains handling wrecking cranes 41, 42, 43 and 4420 MPH.
Heavy Car Restrictions—Trains handling cars with total weight exceeding 214,000 pounds, or cars less than 30 ft. long with total weight exceeding 169,000 pounds when in groups of two or more or coupled to engine or tender20 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.
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**—
Between Woodinville and Fall City25 MPH.
Between Fall City and North Bend15 MPH.
Near Issaquah, over grade crossing 1062 feet west of MP 1810 MPH.
Trains handling steam wrecking derrick, pile driver, or locomotive crane15 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 and Q-1 not permitted.
Between Issaquah and North Bend, wrecking cranes 41, 42, 43 and 44 not permitted.
All high trestles15 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-210 MPH.

F-1 and P20 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**—

Freight Trains40 MPH.

Passenger trains; Steam45 MPH.

Motor50 MPH.

Trains handling steam wrecking derrick, pile driver, or

locomotive crane20 MPH.

Engines classes W-3 and W-530 MPH.

At Snohomish, over highway crossing just west of Snohomish River Bridge10 MPH.

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

Draw Span, Bridge 38, Snohomish River20 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**—

Trains handling steam wrecking derrick, pile driver, or locomotive crane15 MPH.

Other Trains20 MPH.

2. **Bridge and Engine Restrictions**—Engine Classes heavier than W-2 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 header8 MPH.

Trains handling logs over steel truss bridges Nos. 2, 7, 10, 11, 18 and 22-110 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.

At Darrington, NP engines must not use Sauk Logging Co.'s main track, or empty 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**—

Freight trains20 MPH.

Passenger trains, Steam30 MPH.

Motor35 MPH.

Trains handling steam wrecking derrick, pile driver, or locomotive crane; between Mile Posts 5 and 810 MPH.

Balance of subdivision15 MPH.

At Bellingham, between Kentucky Street and Passenger

Station15 MPH.

Between M. P. 15 and Larson, over highway

crossing15 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 employees 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**—

Between Saint Clair and Hoquiam,

Freight trains35 MPH.

Passenger trains, Steam45 MPH.

Motor50 MPH.

Trains handling Steam wrecking crane, pile driver or locomotive crane20 MPH.

Between Hoquiam and Moclips:

Trains handling wrecking crane, pile driver or

locomotive crane15 MPH.

Other trains20 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 crossings10 MPH.

Within City Limits, elsewhere20 MPH.

2. **Bridge and Engine Restrictions**—

Engines classes A to A-5 inc. and Z-2 to Z-8 inc., not permitted.

Between Hoquiam and Moclips, engines classes Q-5, Q-6, W-3, W-5 not permitted.

Bridge 46, Cloquallum River between Malone and Elma.

Engines classes W-3 and W-5.....10 MPH.

Engines Classes G-1, G-2, Q-5, Q-6, W, W-1, W-2 and W-420 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 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 30 ft. or more long with total weight exceeding 169,000 pounds in groups must be separated 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 to Bridge 8.1.

Engines or cars, other than empty log flats or gondolas, not permitted on Tumwater spur south of main track.

Engines heavier than class F-1 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.

4. **At Olympia**—

Time of trains applies at passenger station.

First track north of main track, from switch just east of passenger station to crossover switch just west of freight house, (capacity 20 cars) is designated as siding.

Tunnel district is protected by color light type automatic signals. Signal 93 located 275 feet east of tunnel, signal 94 located 275 feet west of tunnel, dwarf signal 96 between main track and siding opposite governs movement of trains between these signals and dwarf signal 96 governs eastward movement out of siding, normal indication "Stop". Siding switch must be lined before signal will indicate "PROCEED."

Trains or engines from Jefferson Street line must have PROCEED indication from signal 93 before opening main track switch, eastward trains or engines from siding must have PROCEED indication from signal 94 before opening siding switch. Westward trains finding signal 93 and Eastward trains finding signals 94 or 96 in STOP position may proceed through tunnel only under protection of flag. 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.

Track next to Bay used exclusively for repair track from west switch to 650 feet east of switch.

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

6. **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.

7. **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.

8. 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.

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

10. **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.

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

12. **Register Stations**—

Saint Clair.

Olympia, for trains originating and terminating.

Gate, Aberdeen and Hoquiam.

13. **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.

14. **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**—

Freight Trains 30 MPH.

Passenger Trains, Steam 40 MPH.

Motor 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 road crossing 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.
At Fort Lewis on Dupont Spur, engines heavier than W-2 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**—
Freight Trains 35 MPH.
Passenger Trains, Steam 45 MPH.
Motor 50 MPH.
Between Centralia and Gate 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-2 to Z-8 inc., not permitted.

Bridge 1, Skookumchuck River, between Centralia and Blakeslee Junction, N. P. Route 2:

U. P. engines Nos. 820, 3950 to 3969 and 9078 to 9087 not permitted.

Engines classes W-3 and W-5 and U. P. engines Nos. 800 to 819, 3620 to 3629, 3803 to 3805, 3634 to 3664, 3915 to 3939, 5400 to 5414 and 9000 10 MPH.

Engines classes Q-5 and Q-6 and U. P. engines Nos. 7000 to 7800 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..... 10 MPH.

If such cars are separated from each other and from engine or tender, and if cars more than 30 ft. long with total weight exceeding 169,000 pounds, in groups of two or more, are separated from engine or tender with one car 40 ft. long with total weight not over 169,000 pounds, speed restriction will not apply.

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**—Trains handling steam wrecking derrick, pile driver, or locomotive crane 15 MPH.
Other Trains 20 MPH.

2. **Bridge and Engine Restrictions**—
Engines classes A to A-5 inc. and Z-2 to Z-8 inc., not permitted.
Bridge 1, County Road, and Bridge 2, Cloquallum River, between Elma and White:
Engines classes W-3 and W-5..... 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 and L-9..... 20 MPH.
Wrecking cranes 41, 42, 43 and 44..... 15 MPH.

Bridge 2-2, Wildcat Creek, between Elma and White:
Engines classes W-3 and W-5 20-MPH.

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 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, engine-man 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.

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

6. Register Station—Elma.

7. Clearance Exceptions—At Shelton, clearance not required.

TWENTIETH SUBDIVISION. (OCOSTA BRANCH.)

1. Speed Restrictions—

Between Aberdeen Jct. and Mile Post 320 MPH.
Between Mile Post 3 and Markham or Cosmopolis.....12 MPH.
Between Aberdeen Jct. and Markham or Cosmopolis,
trains handling steam wrecking derrick, pile driver,
or locomotive crane10 MPH.

2. Bridge and Engine Restrictions—

Engines Class T not permitted.

Engines heavier than class Q-1 and wrecking cranes 41, 42, 43 and 44, 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 F-1, Q, Q-1, S-4 and S-10..... 8 MPH.
Engine Classes lighter than F-1, 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—

Between Chehalis Jct. and PeEll, and between Frances and South Bend:

Freight Trains30 MPH.
Passenger trains, Steam40 MPH.
Motor45 MPH.

Engines backing up with or without cars, and trains handling steam wrecking derrick, pile driver, or locomotive crane20 MPH.

Between PeEll and Frances:

Trains handling steam wrecking derrick, pile driver, or locomotive crane15 MPH.
Freight Trains25 MPH.
Passenger Trains30 MPH.

2. Bridge and Engine Restrictions—

Engines Classes Q-5, Q-6, W-3, W-5, A to A-5 inc. and Z-2 to Z-8 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 Classes W, W-1, W-2, and W-4 doubleheader not permitted.

Single header 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 span20 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 Quarry—Account restricted clearance, engines or cars, higher than ballast cars, must not pass under bunkers.

6. Mullenix Spur—

Derail located 250 feet from main track switch, and safety switch located 200 feet beyond derail. Normal position of safety switch is for the safety spur.

Movements over Ocean Beach Highway, crossing this spur, must be protected by flagman.

7. 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.

8. 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.
9. 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.
10. Draw Spans—Bridge 53, Willapa River, west of Raymond.
11. 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.
12. Register Stations—South Bend. Dryad Jct. Chehalis. Millburn for CW trains.
13. 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—.....20 MPH.
Trains handling wrecking derrick, pile driver, or locomotive crane15 MPH.
Trains handling logs or wrecking derricks, pile drivers or locomotive cranes, approaching and passing through tunnel west of Yacolt10 MPH.
2. Bridge and Engine Restrictions—
Wrecking Derricks 41, 42, 43 and 44 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—.....20 MPH.
Trains handling steam wrecking derrick, pile driver, or locomotive crane10 MPH.

2. Bridge and Engine Restrictions—
Engines heavier than classes Q-1, S-4 and Y-3 and wrecking cranes 41, 42, 43 and 44, 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—
Between Brace and Weikel10 MPH.
Over balance of subdivision20 MPH.
Trains handling steam wrecking derrick, pile driver, or locomotive crane10 MPH.
2. Bridge and Engine Restrictions—
Engines heavier than classes Q-1, S-4 and Y-3, and wrecking cranes 41, 42, 43 and 44, not permitted.
Bridge 4, Naches River, between Brace and Glead:
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 Glead—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.

MAXIMUM CLEARANCES

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

LIMIT OF LOAD—MEASUREMENT.

LIMIT OF LOAD—MEASUREMENT.											
HEIGHT ABOVE TOP OF RAIL											Max. Height
	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. 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"	
West Seattle Line.....	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	
Lake Union Line.....	20' 7"	20' 7"	20' 7"	18' 3"	18' 3"	17' 4"	16' 4"	15' 10"	15' 4"	20' 7"	
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"	
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"	
Tacoma Tideflats.....	18' 9"	18' 9"	18' 9"	18' 9"	18' 9"	18' 8"	18' 8"	18' 8"	18' 7"	18' 9"	
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"	
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"	
Westward Main Track (McCarver St.-Tenino).....	20' 1"	19' 9"	19' 4"	18' 10"	18' 4"	17' 9"	17' 2"	16' 10"	16' 5"	20' 1"	
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"	
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"	
Between Longview and Longview Jet.....	20' 3"	20' 3"	20' 3"	20' 3"	20' 1"	19' 8"	19' 4"	19' 1"	18' 11"	20' 3"	
South Tacoma—Tenino Jet.....	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 2"	21' 0"	21' 5"	
Sumas Branch (via Everett).....	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 2"	20' 3"	
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"	
Roslyn Branch.....	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	
Buckley Line.....	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 4"	21' 2"	21' 1"	21' 5"	
Wilkeson Branch. No Restriction.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Green River Branch.....	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	
Orting Branch.....	18' 9"	18' 9"	18' 9"	18' 6"	18' 3"	17' 11"	17' 7"	17' 5"	17' 3"	18' 9"	

11th Subdivision....	21' 6"	21' 5"	21' 5"	21' 5"	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 6"	11' 6"
12th Subdivision....	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	11' 6"
13th Subdivision....	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 1"	20' 11"	21' 3"	11' 6"
14th Subdivision....	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	19' 1"	11' 6"
15th Subdivision....	19' 2"	19' 2"	17' 11"	17' 11"	17' 11"	17' 11"	17' 11"	17' 11"	17' 1"	19' 2"	11' 6"
16th Subdivision....	17' 7"	17' 7"	17' 6"	17' 5"	17' 5"	17' 4"	17' 4"	17' 3"	17' 3"	17' 7"	11' 6"
16th Subdivision....	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 4"	21' 3"	21' 1"	20' 11"	21' 4"	11' 6"
16th Subdivision....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	11' 6"
16th Subdivision....	16' 11"	16' 9"	16' 7"	16' 6"	16' 3"	16' 1"	15' 10"	15' 9"	15' 7"	16' 11"	11' 6"
17th Subdivision....	22' 3"	22' 3"	22' 3"	22' 3"	22' 3"	22' 3"	22' 3"	22' 3"	22' 3"	22' 3"	11' 6"
18th Subdivision....	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 5"	21' 3"	21' 2"	21' 1"	21' 5"	11' 6"
19th Subdivision....	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	24' 3"	11' 6"
20th Subdivision....	20' 10"	20' 10"	20' 10"	20' 10"	20' 10"	20' 10"	19' 8"	19' 4"	19' 1"	20' 10"	11' 6"
21st Subdivision....	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 2"	21' 1"	21' 1"	21' 3"	11' 6"
22nd Subdivision....	18' 1"	18' 1"	18' 1"	18' 1"	18' 0"	18' 0"	18' 0"	18' 0"	18' 0"	18' 1"	11' 6"
23rd Subdivision....	18' 9"	18' 6"	18' 4"	18' 1"	17' 10"	17' 8"	17' 5"	17' 4"	17' 3"	18' 9"	11' 6"
24th Subdivision....	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 1"	19' 1"	19' 1"	19' 4"	11' 6"
24th Subdivision....	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												Max. Height	Max. Width
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.	11 ft. 6 in.	11 ft. 6 in.	11 ft. 6 in.	11 ft. 6 in.		
		21' 0"	20' 10"	20' 9"	20' 8"	20' 7"	20' 6"	20' 5"	20' 3"	21' 4"	11' 6"		
	Main Line (Seattle Middle Yard-Reservation).....	20' 11"	20' 7"	20' 2"	19' 10"	19' 9"	19' 6"	19' 2"	18' 9"	21' 3"	11' 6"		
	West Seattle Line.....	14' 10"	14' 5"	14' 0"	13' 5"	13' 3"	12' 11"	12' 5"	11' 11"	20' 7"	11' 6"		
	Lake Union Line.....	15' 10"	15' 6"	15' 3"	15' 2"	14' 11"	14' 7"	14' 0"	13' 5"	17' 11"	11' 6"		
1st Subdivision....	Main Line (Yakima-East Auburn).....	21' 2"	20' 11"	20' 8"	20' 4"	20' 3"	20' 0"	19' 9"	19' 6"	21' 3"	11' 6"		
2nd Subdivision....	Reservation—South Tacoma (Via Drawbridge Line).....	18' 4"	18' 2"	17' 11"	17' 9"	17' 8"	17' 6"	17' 4"	17' 1"	18' 9"	11' 6"		
2nd Subdivision....	Tacoma Tidelands.....	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	11' 6"		
3rd Subdivision....	Main Line (Reservation-McCarver St. via Head of Bay Line).....	17' 5"	17' 1"	16' 9"	16' 4"	16' 2"	15' 11"	15' 4"	14' 9"	20' 11"	11' 6"		
3rd Subdivision....	Eastward 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....	Westward Main Track (McCarver St.-Tenino).....	17' 5"	17' 1"	16' 8"	16' 3"	16' 1"	15' 9"	15' 3"	14' 8"	20' 4"	11' 6"		
3rd Subdivision....	Eastward 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....	Westward Main (Track Tenino-Vancouver).....	18' 8"	18' 6"	18' 3"	18' 1"	18' 0"	17' 11"	17' 8"	17' 6"	20' 3"	11' 6"		
3rd Subdivision....	Between Longview and Longview Jct.....	20' 10"	20' 8"	20' 6"	20' 3"	20' 2"	20' 0"	19' 10"	19' 8"	21' 5"	11' 6"		
4th Subdivision....	South Tacoma—Tenino Jct.....	19' 11"	19' 9"	19' 6"	19' 3"	19' 2"	18' 11"	18' 8"	18' 4"	20' 3"	11' 6"		
5th Subdivision....	Sumas Branch (via Everett).....	15' 6"	15' 0"	14' 4"	13' 7"	13' 3"	12' 6"	11' 0"	.....	18' 7"	11' 0"	
5th Subdivision....	Argo-Bell Street (Via Seattle Tunnel).....	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	20' 11"	11' 6"		
6th Subdivision....	Roslyn Branch.....	20' 11"	20' 10"	20' 8"	20' 7"	20' 6"	20' 5"	20' 4"	20' 2"	21' 5"	11' 6"		
7th Subdivision....	Buckley Line.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11' 6"	
7th Subdivision....	Wilkeson Branch. No Restriction.....	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	22' 9"	11' 6"		
8th Subdivision....	Green River Branch.....	17' 1"	17' 0"	16' 10"	16' 8"	16' 7"	16' 6"	16' 5"	16' 3"	18' 9"	11' 6"		
10th Subdivision....	Orting Branch.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

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"	

TONNAGE RATINGS—FREIGHT ENGINES

TONNAGE RATING INSTRUCTIONS
This rating is made to govern ruling grades only and will in no manner interfere with handling additional tonnage where the grades will permit.

CLASS OF ENGINE

SUBDIVISION	DISTRICT	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	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.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Yakima to Thrall.....	6000	5000	3600	3125	.....	.....	2100	.....	1550	.....	.....	.....	.....	.....	.....
First Westward	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	.....	.....	.....	.....	.....	.....
	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	.....	.....	.....	.....	.....	.....
Fifth Westward	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.....	.....	.....	.....	1750	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
	North Bend to Fall City.....	.....	.....	.....	.....	1740	1585	1650
Twelfth Eastward	Fall City to Preston.....	.....	.....	.....	.....	700	550	550
	Preston to Woodinville.....	.....	.....	.....	.....	2300	2000	1700
Twelfth Westward	Woodinville to Issaquah.....	.....	.....	.....	.....	2500	2100	1700
	Issaquah to Preston.....	.....	.....	.....	.....	700	550	450
Thirteenth Eastward	Preston to Fall City.....	.....	.....	.....	.....	900	800	700
	Fall City to North Bend.....	.....	.....	.....	.....	2000	1600	1500
Thirteenth Westward	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
Fourteenth Eastward and Westward	Getchell to Edgecomb.....	.....	5000	4600	4500	3500	3500	3000
	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
Fifteenth Westward	M. P. 15 to Larson.....	.....	2150	1800	1700	1500	1300	1100
	Larson to Bellingham.....	.....	.....	.....	.....	.....	.....	.....

TONNAGE RATINGS—FREIGHT ENGINES

TONNAGE RATING INSTRUCTIONS
This rating is made to govern ruling grades only and will in no manner interfere with handling additional tonnage where the grades will permit.

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
	Portland to Vader.....	4000	3000	2800	2500	2500
Third Westward	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
Fourth Westward	Rainier to West Tenino.....	4500	3200			
	West Tenino to Rainier.....	2500	1700	1500	1100	1050
Seventh Eastward	Rainier to Tacoma.....	4500	3200	3000	1800	1800
	Palmer Jct. to Tacoma.....					
Seventh Westward	Wilkeson and Carbonado to South Prairie.....				2000	2000
	Tacoma to Orting.....		3000	2800	1800	1800
Seventh Eastward	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
Sixteenth Eastward	Gate to Hoquiam.....		3500	3300	2200	2200
	Hoquiam to Moclips.....		4000	4000	2500	2500
	Moclips to Hoquiam.....		4000	4000	2500	2500
	Hoquiam to Gate.....		3500	3300	2000	2000
Seventeenth Eastward	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 Westward	Lakeview to Nisqually.....	3500	2500	2300	2000	2000
	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 Hillgrove	1800	1700	1200	800
	Hillgrove 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 .....	....	....	....	....
	South Bend to Frances	2100	2000	1800	1800
Twenty-First Eastward	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.	F. W. McCABE, Asst. Superintendent.	W. A. GERDON, Trainmaster.	T. J. REGAN, Trainmaster.
O. D. NETHERY, Trainmaster.	C. F. NASH, Trainmaster.	S. J. CHARBONEAU, Terminal Trainmaster.	G. M. HARE, Trainmaster.
A. T. COLLINS, Trainmaster.	H. C. RUPPLE, Trainmaster.	A. W. ACKLEY, Chief Dispatcher.	