NORTHERN PACIFIC RAILWAY COMPANY

Rocky Mountain Division

Special Instructions No. 5

In Effect at 12:01 A. M. Mountain or 105th Meridian Time.

Thursday, June 20, 1940

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

W. C. SLOAN,
Asst. Vice President and General Manager.

D. S. COLBY,
Superintendent.

F. R. BARTLES,
Assistant General Manager.

P. H. McCAULEY,
General Superintendent of Transportation.

SPECIAL INSTRUCTIONS
FIRST SUBDIVISION.
(MAIN LINE)

1. **At Logan**—Eastward trains heading into the yard will set the first two switches for the crossover movement and be governed by automatic signal 1648. If this signal does not indicate proceed movement may be made protecting against second subdivision first class trains.
2. **At Trident**—No. 5 track cannot be used across coal hopper at cement plant. On tracks 2 and 3 hold onto enough cars so that engine does not pass the chutes located on these tracks.
3. **At East Helena**—Overhead bridge at cinder track just east of American Smelting and Refining Company ore bins will not clear engines or cars of greater height than 9 feet 6 inches from top of rail.
4. **Extra Freight Trains**—Bozeman to Logan, will run via Manhattan; Logan to Bozeman, will run via Powers, unless otherwise instructed by train order.
5. **Double Track**—The normal position of switches at Livingston and Muir are for the eastward track. At West End for the westward track.
6. **At Muir and West End**—Dual control switches at end of double track are electrically operated and also hand-throw switches. To operate by hand unlock power lever and throw in reverse position. Switch can then be thrown with hand-throw lever. When switches are restored to normal position the power lever must also be restored to normal position.

   Between Muir and West End—Single track. Interlocking Rules govern except that for movement to single track, trains must not pass an interlocking "Stop" signal without train order authority. TRAIN MOVEMENTS OVER SINGLE TRACK WILL BE GOVERNED BY INTERLOCKING SIGNALS AND RULES AND RULE S-83 WILL NOT APPLY. Switching movements inside the interlocking limits may be made on authority from operator at West End, in which case switches will be thrown by hand.

   Trains moving on dwarf signal indication must approach signals at opposite end of tunnel at restricted speed.

   Proceed dwarf signals indicate the route is set and block clear.

   At Muir—Helper engines will not require clearance for movement Muir to Livingston moving with current of traffic if interlocking signal indicates proceed. Operator at West End must obtain authority from the train dispatcher before displaying the proceed indication for this movement. When the eastward dwarf signal at end of double track displays a yellow indication helper engines will go in on westward siding and report on telephone for instructions. Authority must be secured from the train dispatcher before engines leave the spur to make a reverse movement on eastward main track.

   The operator must obtain authority from the dispatcher before lining the remote control switch at Muir for a movement to the westward main track. Such authority will not be given by the dispatcher if there is a train on the westward track that has departed Livingston, nor will the dispatcher clear a train at Livingston until the movement is completed after having given permission for such a lineup.

   When it is necessary to make a move into the siding at Muir and the dispatcher cannot give permission as above outlined, it will be necessary for the crew to handle both the spring switch at west end of the siding and the power switch at the end of double track by hand.

   At Bozeman—The switches at end of double track and low line are dual controlled. The normal position of the switch at end of double track is for the eastward track. Normal position of switch to low line is for the main track via Manhattan. To operate switches by hand, unlock POWER LEVER and throw in reverse position. Switch can then be thrown with HAND THROW LEVER. When switches are restored to normal position the POWER LEVER must also be restored to normal position.
8. **Pusher District**—Between Livingston and Bozeman and between Townsend and Helena.
9. **Yard Limits**—Tracks between yard limit signs east of Muir and west of West End, will be operated as one yard. Westward trains will not require rear end protection between end of double track at Muir and west switch of westward siding at West End. Eastward trains will not require rear end protection between end of double track at West End and east switch of crossover at Muir.

10. **Bridge and Engine Restrictions**—

    At Bozeman and Townsend, engines must not pass over hopper pit of coal docks.

    At Manhattan, Class W-3 and heavier engines must not use wye.

    At East Helena, engines heavier than class W will not be used on McClelland Spur.

    At Logan, engines heavier than Class W not permitted on hopper pit of coal dock.

    Z-5 and Z-6 engines twenty (20) MPH over Bridge 164 Gallatin River.

    Z-5 engines, twenty (20) MPH over Bridge 143, near Story.
11. **Speed Restrictions**—At Livingston, eastward freight trains eight (8) MPH.

    Between Muir and Livingston and between West End and Bozeman, passenger trains, twenty-five (25) MPH on curves when running against the current of traffic descending mountain grade.

    At Belgrade Tower—Westward trains moving via Powers restrict speed to twenty (20) miles per hour within the home signals of the automatic interlocking.

    Thirty-five (35) MPH between Bozeman and Logan via Powers. See also mountain grade operation and bridge restrictions.
12. **Mountain Grade Operation**—

    Mountain grade, Livingston to 1400 West of M. P. 135. Speed of passenger trains descending seven (7) minutes Muir to Hoppers and thirteen (13) minutes Hoppers to Livingston; six (6) minutes West End to Chestnut and fourteen (14) minutes Chestnut to Bozeman. Light engines and freight trains descending must not exceed one (1) mile in three (3) minutes. Passenger trains must not use less than two and one-half (2½) minutes and freight trains not less than three (3) minutes through Bozeman tunnel. All trains ascending forty (40) MPH Livingston to Muir and thirty (30) MPH M. P. 134 to West End. Trains handling berry, cherry, lettuce or silk specials will be governed by speed of passenger trains descending mountain grades.

    Air brake tests will be made in accordance with Rule 1063 before leaving Bozeman and Livingston.

    On eastward freight trains the retaining valves will be turned up on all loads and one-half of the empties, alternating the empties.

    On westward freight trains with all empty cars, the retainers will be turned up on one-third of the number of cars in train, alternating, beginning at the engine. On trains consisting of loads and empties, retainers will be turned up on all loads and one-third of the empties, alternating the empties.

    Eastward freight trains will carry ninety (90) pounds train line pressure between West End and Livingston and westward freight trains will carry seventy (70) pounds train line pressure between Muir and Bozeman.
13. **Register Stations**—

    Livingston.
    Bozeman.
    Logan.
    Helena.
    East End Helena Yard for westward light engines.
14. **Register and Clearance Exceptions**—At Bozeman and Logan, trains may register by Form 608 and will not require a clearance if train order signal is in "proceed" position.
15. **Commercial Spurs**—

	Miles from Livingston	Car Capacity
Montellis	19.7	28
Catron	27.3	7
Bisel	28.3	4
Kerns	31.6	3
McLees	50.5	5
Penwell	111.5	8

16. **Cross-overs:** Livingston.
    Hoppers.
    Muir.
    Chestnut.
    Bozeman.
17. **Lap Sidings:** Townsend.
    Winston.

SECOND SUBDIVISION.

(MAIN LINE)

1. **At Logan**—Train order signal does not govern second sub-division trains.
2. **At Whitehall**—Station platform will not clear man on steps of cars or engines.
   The west switch of the cross-over at the passenger station is the west end of the siding.
3. **Double Track**—The normal position of switches at M. U. Transfer and Butte is for westward track.
4. **Helper District**—Between Whitehall and Butte.
5. **Yard Limits**—Tracks between yard limit signs east of Homestake and west of Highview will be operated as one yard.
   Tracks between yard limit signs east of M. U. Transfer and west of Butte will be operated as one yard.
6. **Bridge and Engine Restrictions**—
   Bridge 51 Spire Rock Viaduct, Bridge 52 Big Pipestone Creek Viaduct, Bridge 63 Ealean Gulch Viaduct—engine classes Z-5, ten (10) MPH; A-2, A-3 and Z-6, thirty (30) MPH.
   At Logan—Engines heavier than Class W not permitted on hopper pit of coal dock.
   At Whitehall—Engines must not pass over hopper pit of coal dock.
   All trains restrict speed to ten (10) MPH over crossing west of coal dock.
7. **Speed Restrictions**—At M. U. Transfer thirty (30) MPH over highway crossing in middle of yard. See also mountain grade operation and bridge restrictions.
8. **Mountain Grade Operation**—Mountain grade two (2) miles east of Pipestone to two (2) miles east of M. U. Transfer. When trains are directed by train order to meet at Pipestone, Spire Rock, Welch, Homestake, Highview or Skones, the ascending train will unless otherwise directed take siding, except that descending light engines will take siding. Freight trains and light engines must not exceed one (1) mile in three (3) minutes and passenger trains one (1) mile in two (2) minutes descending, except passenger trains will use fourteen (14) minutes Homestake to Welch, eleven (11) minutes Welch to Spire Rock and eleven (11) minutes Spire Rock to Pipestone; all trains ascending thirty (30) MPH Pipestone to Homestake and from M. P. 68 east of M. U. Transfer to Homestake.
   Trains handling berry, cherry, lettuce or silk specials will be governed by speed of passenger trains descending mountain grades.
   Air brake test will be made in accordance with Rule 1063 before leaving Homestake on westward and Highview on eastward freight trains. The air brake must be charged to a maximum of ninety (90) pounds pressure and conductors must know by caboose gauge that this pressure is attained before making terminal test. Enginemen will maintain a working basis of ninety (90) pounds pressure descending mountain grade. Retaining valves will be used on all loaded and empty cars.
   Eastward freight trains will stop at Spire Rock to cool wheels and inspect train.
9. **Register Stations**—
   Logan.
   Whitehall for second class and inferior trains.
   Butte.
   M. U. Transfer for helper engines; to be telephoned by engineman to operator at Butte.
10. **Commercial Spurs**—

	Miles from Logan	Car Capacity
Ingleside	17.7	5
Fisherman	34.2	6

THIRD SUBDIVISION.

(MAIN LINE)

1. **At Helena**—End of double track is at first cross-over switch west of Roberts Street crossing. Normal position of switch is for eastward track. Between Helena and G. N. crossing, trains must keep to the left unless otherwise instructed by train order.
2. **At Austin**, south siding is westward siding and north siding is eastward siding.
3. **At Ventilating Plant**—When leaving cars on tail of spur, the switch must be lined for the track leading to the trestle.

4. **At Blossburg**, south siding is eastward siding and north siding is westward siding.
   Pusher engines in addition to coming to full stop after cutting loose from train will not turn the head light on until the caboose has passed the telegraph office.
5. **At Garrison**, eastward trains moving against the current of traffic into Garrison will re-enter the eastward main track at cross-over just west of telegraph office.
6. **At Austin and Skyline, the derail switch at the east end of Skyline siding and at the east end of the westward siding at Austin will be kept closed when sidings are clear.**
7. **At Missoula**—Westward freight trains will, unless otherwise directed, head into the old yard just east of Woody Street, except when there are conflicting passenger train movements, will head in at Madison Street.
8. **At Austin, Skyline and Garrison**—The east switch of the westward siding at Austin, the east switch of the siding at Skyline, and the east and west switches of the cross-over from the third to fourth sub-division at Garrison are dual control. At Austin and Skyline the normal position of the switches is for the main track. At Garrison the normal position of the east switch is for the third sub-division and the west switch for the fourth sub-division. Trains finding the Home Signals in "Stop" position will examine the switch and if not in proper position, first throw "POWER LEVER", then operate switch with the "HAND THROW LEVER." "POWER LEVER" must not be returned to normal position until after the final move over the switch is made. Both levers must be left in normal position and locked. If signals still indicate "Stop", trains may proceed, complying with automatic block signal rules.
9. **Helper District** between Helena and Blossburg.
10. **Pusher District** between Garrison and Blossburg.
11. **SPEED RESTRICTIONS**
    Between Garrison and Missoula—Passenger trains sixty-five (65) MPH on straight track. See also mountain grade operation.
12. **STAFF BLOCK SYSTEM**

    Between BLOSSBURG AND SKYLINE.

    No train will move between Skyline and Blossburg until engineman of the leading engine has received a staff from the operator **which must be delivered to the operator at the opposite end of the block.** Possession of the staff makes a train superior to all other trains between Skyline and Blossburg.

    No eastward train will leave Blossburg, and no westward train will leave Skyline unless the train order signal indicates proceed. When a staff has been delivered to the operator at Skyline or Blossburg, it must not be used for another train movement until it has been passed through the staff machine; and it must not be placed in the staff machine until the rear of the train from which the staff is received has passed the train order signal at least 300 feet and the signal has again been placed at **"Stop,"** unless for any reason the rear of the train does not pass the train order signal, in which event the operator will, upon written advice of the conductor that the **Staff Block is Clear, place the staff in the machine.**

    At Blossburg when westward freight trains have helper engines on rear, the operator will not put the staff in machine until caboose has been dropped onto train and helper engines are clear of main track.
13. **Mountain Grade Operation**—Mountain grade East Switch Birdseye to Blossburg.
    An air test will be made in accordance with Rule 1063 before leaving Garrison or Blossburg. When the test is made at Garrison, a brake pipe test will be made at Blossburg before the retainers are turned up and following the parting of the hose between the helper and caboose. If, for any reason, the brake pipe or hose couplings have been parted after the test is made at Garrison a terminal test must be made at Blossburg and a second card filled out.

Retaining valves must be used on all loaded cars and on one-half of the empty cars, alternating the empties, Blossburg to Fort Harrison.

When trains, directed by train order, meet at Birdseye, Austin, Weed or Skyline, the westward train will, unless otherwise directed, take siding. When at Blossburg, the eastward train will, unless otherwise directed, take siding.

When trains meet at Skyline, Weed, Austin or Birdseye, the eastward train, unless otherwise instructed, will not pass the west switch until the westward train is clear of main track.

When eastward freight trains meet first-class trains or passenger extras at Skyline or Austin, operator at meeting point will open upper switch of siding and safety switch before the freight train leaves the station next west of the meeting point and will not close them until the eastward train has stopped; eastward train will not pass safety switch until westward train is known to be clear.

When an eastward first-class train, passenger extra or light engine, meets a westward train at Skyline or Austin, operator will not open safety switch.

Eastward second-class or inferior trains, except light engines or engines with caboose only, will not be permitted to follow first-class trains or passenger extras from Blossburg, Skyline or Austin until the operator at the next office reports the preceding train by, and that the safety switch has been opened.

The normal position of the eastward train order signal at Blossburg, Skyline and Austin will be stop, and the operator will not clear it to allow an eastward movement until assured by the operator at the next station that the safety switch is properly set.

Operators at Skyline or Austin will not open the safety switch for meeting trains until advised by the operator at the preceding station that there is no train ahead of the train for which the safety switch is to be opened.

Operators at Blossburg, Skyline and Austin must keep a record, beginning at 12:01 A. M., of all eastward trains passing their station and notify the operator at the next station in each direction the departing time of such trains. Eastward second-class and inferior trains, other than passenger extras and light engines, will obtain a meet order before leaving Blossburg on all superior westward trains, if unable to make G. N. Crossing for such trains.

Operator will close east switches of both sidings at Blossburg after departure of eastward trains. Operators at Austin and Skyline will close the west switch of siding after departure of westward trains.

Eastward second-class and inferior trains, except passenger extras, unless otherwise instructed, will take siding at Blossburg, test air and obtain staff before again using the main track.

The air brakes must be charged to a maximum of ninety "90" pounds pressure on eastward freight trains at Blossburg and conductors must know by caboose gauge that this pressure is attained before making terminal test. Engineman will maintain a working basis of ninety "90" pounds pressure descending mountain grade.

Eastward freight trains must stop at Austin and Fort Harrison to cool wheels and make inspection.

Passenger trains will use two (2) minutes and thirty (30) seconds thru Mullan Tunnel, and will not exceed any one (1) mile in two (2) minutes and freight trains and light engines any one (1) mile in three (3) minutes, descending.

Passenger trains descending will not exceed twenty-two (22) MPH between Blossburg and Austin, and will use not less than six (6) minutes Blossburg to Skyline, six (6) minutues Skyline to Weed, and nine (9) minutes Weed to Austin. All ascending trains thirty (30) MPH Birdseye to Blossburg. Trains handling berry, cherry, lettuce or silk specials will be governed by speed of passenger trains descending mountain grades.

The following instructions govern operation of the ventilating plant east end of Mullan Tunnel:

"When fan is in operation westward freight trains will not exceed a speed of seven (7) MPH through Mullan Tunnel, and when there is a helper engine on rear of train, lead engine will so regulate the speed that the entire train will not exceed this speed through the tunnel.

"If the plant fails, train and enginemen and yard master at Helena will be notified so that helper engines may be turned out of Helena. If the failure of the plant occurs after a train has left Helena, they will be notified by the dispatcher, or if it has departed from Skyline they will be flagged by the engineer at the ventilating plant, in which case train and enginemen will arrange to use necessary precaution for personal protection through the tunnel."

14. **Register Stations—**
Helena Yard.
Garrison.
Missoula.

15. **Register and Clearance Exceptions**—At Garrison, trains may register by Form 608 and will not require clearance if the train order signal is in "proceed" position.

16. **Commercial Spurs—**

	Miles from Helena	Car Capacity
Fort Harrison	4.2	2
Rheems, off Ft. Harrison Spur	4.2	2
Rich	23.6	6
Calcium	26.7	6
Bradman	75.3	9
Missoula Tile	116.5	4

17. **Crossovers:**

Garrison.	Willis.
Gold Creek.	Bonita.
Jens.	Clinton.
Drummond.	Bonner.
Bearmouth.	Missoula.
Nimrod.	

FOURTH SUBDIVISION.

(MAIN LINE)

1. **Card Train Order (Form AB)** will govern the movement of trains between Butte and Silver Bow, and trains must not move in this territory unless conductor and engineman each hold a card properly filled out.
At Silver Bow the normal position of eastward train order signal is "stop" and must not be cleared except for delivery of card without restrictions. If an eastward train is to meet an opposing train at Silver Bow it must be brought to a stop before card is delivered.

2. **At Durant**—Station platform will not clear man on steps of car or engine.

3. **At Garrison**—Train order signal does not govern fourth subdivision trains.

4. **Speed Restrictions—**
At Butte—Fifteen (15) MPH within the city limits.

5. **Bridge and Engine Restrictions**—Bridges 11.1 and 11.2 Silver Bow Creek; Bridge 21.0 Deer Lodge River, engines Class Z-5 thirty (30) MPH.

6. **Register Stations**—Butte, Garrison.
Silver Bow for UP trains.

7. **Commercial Spurs—**

	Miles from Butte	Car Capacity
Rocker	4.3	20
Elide	34.2	2

FIFTH SUBDIVISION.

(MAIN LINE)

1. **Extra Trains**—Between Missoula and Paradise will run via Fifth Subdivision unless otherwise instructed by train order.

2. **At Rivulet**—South siding will be used as a single siding.

3. **At Paradise**—Trains arriving Paradise, before heading out on main track through crossover in making move to coal dock, must secure a check of register by train order, or Form 602 from operator.

4. **Bridge and Engine Restrictions**—Class Z-5 not permitted.
Bridges 122 and 122.1 near Missoula stock yard, engines Class Z-6 forty (40) MPH
Bridge 122.2, Grant Creek, Engines Class Z-6 twenty (20) MPH.
Bridge 168, Engines A-2, A-3 and Z-6 twenty (20) MPH.
Bridge 179 Trout Creek, Engines A-2, A-3 and Z-6 ten (10) MPH.

5. **Speed Restrictions**—Passenger Trains—Husen to Paradise fifty (50) MPH.

6. **Register Stations**—Missoula and Paradise.
St. Regis for No. 255 and No. 256.

7. **Commercial Spurs**—

	Miles from Missoula	Car Capacity
Grass Valley	8.7	19
Mellady	13.9	4
Huson	22.1	17

SIXTH SUBDIVISION.
(MAIN LINE)

1. **At DeSmet**—Standard switches at east end of east cross-over and at west end of west cross-over are normally lined for the cross-over. Spring switches at west end of east cross-over and east end of west cross-over are normally lined for movement from the 5th sub-division to eastward main track. A train from the 5th sub-division being passed by a train from the 6th sub-division or vice versa, or a train standing on the westward main track to meet a train from the 6th sub-division, will operate the release in order to give the train being met or passed a clear route.

2. **At Arlee**—Normal position of switch at east end of siding is for house track.

3. **At Ravalli**—Normal position of switch at west end of siding is for house track.

4. **At Paradise**—House track in rear of passenger station will be used as siding for first class trains and passenger extras.

5. **Extra Trains** between Missoula and Paradise will run via Fifth Subdivision unless otherwise instructed by train order.

6. **Mountain Grade Operation**—Mountain grade one (1) mile west of DeSmet to two (2) miles east of Arlee.
When trains meet at Nagos, the eastward train, unless otherwise instructed, will not pass the west switch until the westward train is clear of main track; at Schley, the westward train, unless otherwise instructed, will not pass the east switch until the eastward train is clear of the main track.
When trains directed by train order, meet at Nagos or Schley, the ascending train will unless otherwise directed take siding; when at Evaro, the westward train will unless otherwise directed take siding.
On freight trains air brake test will be made in accordance with Rule 1063 before leaving Evaro.
The air brakes must be charged to a maximum of ninety (90) pounds pressure at Evaro and conductors must know by caboose gauge that this pressure is attained before making terminal test.
Enginemen will maintain a working basis of ninety (90) pounds pressure descending mountain grade.
Retainers must be used on all cars Evaro to Reid Spur and from Evaro to two miles east of Arlee.
Passenger trains must not exceed any one (1) mile in two (2) minutes, freight trains and light engines any one (1) mile in three (3) minutes descending.
All ascending trains thirty (30) MPH from one (1) mile west of DeSmet to Evaro and from MP 19 east of Arlee to MP 12.
Trains handling berry, cherry, lettuce or silk specials will be governed by speed of passenger trains descending mountain grades.

7. **Helper District**—Between Missoula and Arlee.

8. **Speed Restrictions**—See mountain grade operation and bridge restrictions.

9. **Bridge and Engine Restrictions**—
Engine classes A-2, A-3, Z-3, Z-4, Z-5 and Z-6 not permitted.
Bridge 7 Marent Trestle—Double header engine Classes A, A-1 and Z-2 not permitted.
A, A-1, Z-2, W-3 and W-5 engines, twenty (20) MPH. W-3 and W-5 engines must never be coupled to the tender of a Class A or A-1 engine.
Bridge 55 Over Flathead River—
Doubleheader engine Classes A, A-1, W-3 and W-5 not permitted.
Single A and A-1 or with head end helper, Classes W, W-1, W-2, W-4, Q-5 or Q-6 and doubleheader Classes Q-5 and Q-6, ten (10) MPH.
Single Q-5, Q-6, W-3, W-5 and Z-2 and single or doubleheader Classes T, W, W-1, W-2, W-4, Z and Z-1, twenty (20) MPH.

10. **Register Stations**—
Paradise.
Arlee for helper engines.

11. **Clearance Exceptions**—
At DeSmet—Trains will not require a clearance if the train order signal is in "Proceed" position.

EIGHTH SUBDIVISION.
(PARK BRANCH)

1. **At Electric**—Siding is one (1) mile west of station.

2. **Bridge and Engine Restrictions**—Engines A-2 and heavier not permitted.

3. **Speed Restrictions**—Forty (40) MPH, except ten (10) MPH on circle at Gardiner.

4. **Register Stations**—
Livingston.
Gardiner.

5. **Commercial Spurs**—

	Miles from Livington	Car Capacity
Allens Spur	4:5	5
Stock Spur	23.8	10

NINTH SUBDIVISION.
(CAMP CREEK BRANCH)

1. **At Manhattan**—Train order signal does not govern ninth subdivision trains.

2. **Manhattan Wye**—Eastward trains will obtain necessary information from dispatcher as to overdue trains before occupying First Subdivision main track.

3. **At Anceney**—Derail located on main track three hundred thirty (330) feet east of east switch. Derail to be left in derail position and east switch of industry track line for main track when occupied by cars.

4. **Speed Restrictions**—Twenty-five (25) MPH.

5. **Commercial Spurs**—

	Miles from Manhattan	Car Capacity
Dyk	5.8	6
Westlake	9.1	2

TENTH SUBDIVISION.
(RED BLUFF AND PONY BRANCHES)

1. **Bridge and Engine Restrictions**—Engines heavier than Class W not permitted. Bridge 14, Norwegian Gulch, five (5) miles per hour.

2. **Speed Restrictions**—Twenty-five (25) MPH.

3. **Mountain Grade Operation**—Mountain grade two (2) miles west of Sappington to two (2) miles east of Harrison, and from Pony to two (2) miles east. Passenger trains must not exceed one (1) mile in two (2) minutes and freight trains one (1) mile in four (4) minutes descending.

4. **Register Stations**—
Sappington.
Harrison.
Norris.

Clearance Exceptions—

5. **At Sappington**—No. 823 will not require a clearance.
At Pony—No. 826 will not require a clearance.

6. **Derail Switches**—Pony 285 feet from end of track and just opposite depot.

7. **Commercial Spurs**—

	Miles from Sappington	Car Capacity
Clarks Spur	3.7	3
Beals Spur	5.6	4
Shaws Spur	12.2	4
Dawes Spur	16.7	21
Tinsley Spur (On Pony Branch)	12.5	2

ELEVENTH SUBDIVISION.
(RUBY VALLEY BRANCH)

1. **At Whitehall**—Train order signal does not govern eleventh subdivision trains.

2. **At Alder**—Derail located on west end of house track, one hundred forty (140) feet from head block.
Normal position of the east switch of the stockyard track is for the stockyard track.

3. **Bridge and Engine Restrictions**—Engines Classes Q-3, T and heavier not permitted.
Bridge 9 Jefferson River—Engines Classes F-1, Q, S-4, S-10 and single header Class Q-1 eight (8) MPH.
Wrecking cranes 41 and 44 ten (10) MPH and must have an empty or light load between the engine and wrecking crane.

4. **Speed Restrictions**—Twenty-five (25) MPH.

5. **Register Stations**—
Whitehall.
Alder.

6. **Commercial Spurs**—

	Miles from Whitehall	Car Capacity
Parrot Spur	4.0	16
Winslow Spur	7.9	3
Colterville Spur	39.5	10

TWELFTH SUBDIVISION.
(PHILIPSBURG BRANCH)

1. **At Drummond**—Train order signal does not govern twelfth subdivision trains.

2. **Bridge and Engine Restrictions**—
Engines Classes Q-1, T and heavier not permitted.
Bridge 0.1 Hell Gate River—Wrecking cranes 41 and 44 ten (10) MPH and must have an empty car or light load between the engine and wrecking crane.

3. **Speed Restrictions**—Twenty-five (25) MPH.
Twenty (20) MPH within the home signals of the C. M. St. P. & P. Ry. automatic interlocking.

4. **Register Stations**—Drummond, Philipsburg.

5. **Derail Switches**—
Philipsburg.....650 feet East of Station on Main Track.
On Main Track—Fifty feet west of MP 1—Normal position, derail position.

THIRTEENTH SUBDIVISION.
(BITTER ROOT BRANCH)

1. **At Darby**—Derail installed on Main Track just east of Harper Logging Spur. When cars spotted on Main Track between the derail and depot, the Main Track and spur switches just east of depot will be lined for the spur.

2. **Bridge and Engine Restrictions**—
Bridge O. Missoula River—Engine Class Z-5 not permitted. Engine Classes A-2, A-3 and Z-6 ten (10) MPH. Engine Classes A, A-1, Z-3 and Z-4 twenty (20) MPH.
Bridge 4 Bitter Root River—Engine Classes Z-4 and heavier not permitted. Singleheader engine Class Z-3 and doubleheader Classes W-3 and W-5, ten (10) MPH. Singleheader engine Classes W-3, W-5, Z and Z-2 and doubleheader Classes Q-5 and Q-6 twenty (20) MPH.
Bridge 11.1 Lolo Creek—Engine Classes A-2, Z-4 and heavier not permitted. Engine Classes A, W-3, W-5, Z-2 and Z-3 ten (10) MPH. Engine Classes Q-5 and Q-6 twenty (20) MPH.
Bridge 23.2 Bitter Root River—Engine Classes Z-5 and Z-6 not permitted. Engine Classes A-2, A-3, Z-3 and Z-4 ten (10) MPH. Engine Classes A, A-1, W-3, W-5, Z and Z-2 twenty (20) MPH.
Bridge 51 Bitter Root River
Bridge 57 Lost Horse Creek
Bridge 59 Rock Creek
Engine Classes Q-3, T and heavier not permitted. Engine Classes F-1, S-4, S-10 and Q and singleheader Q-1 eight (8) MPH.
Bridge 51 Bitter Root River—Wrecking cranes 41 and 44 ten (10) MPH and must have an empty or light load between the engine and wrecking crane. Wrecking cranes 41 and 44 not permitted on Bridge 57, Lost Horse Creek.

3. **Speed Restrictions**—Passenger trains thirty-five (35) MPH.
Except as otherwise provided, freight trains thirty (30) MPH Missoula to M. P. 54 and twenty-five (25) MPH M. P. 54 to Darby.
Five (5) MPH over highway crossing 1817 feet east of Stevensville Station.
Trains handling steam wrecking derrick, pile driver or locomotive crane, twenty (20) MPH.

4. **Register Stations**—Missoula, Darby.

5. **Commercial Spurs**—

	Miles from Missoula	Car Capacity
Bing	33.9	8
Wood	36.6	15
Quast	42.2	8
Kyle	45.6	8
Charlos Heights	57.3	10

FOURTEENTH SUBDIVISION.
(FLATHEAD VALLEY BRANCH)

1. **At Dixon**—Train order signal does not govern fourteenth subdivision trains.

2. **Speed Restrictions**—Passenger trains thirty (30) MPH and freight trains, twenty-five (25) MPH.

3. **Register Stations**—Dixon. Polson.

FIFTEENTH SUBDIVISION.
(COEUR D'ALENE BRANCH)

1. **At St. Regis**—Train order signal does not govern fifteenth subdivision trains.

2. **At Lookout**—Freight trains and light engines will follow passenger and freight trains in either direction twenty (20) minutes. Passenger trains will follow freight trains or light engines in either direction fifteen (15) minutes.

3. **Bridge and Engine Restrictions**—
Engines Classes A, A-1, A-2, A-3, Z-2, Z-3, Z-4, Z-5, and Z-6 not permitted, except Z-3 engines 4020, 4021 and 4025. All Classes W power not permitted Tammany to Wallace.
Bridge 57 South Fork of Coeur d'Alene River—Wallace Yard. Engines classes heavier than Z-3 not permitted. Classes Q-5, Q-6, W-3, W-5, Z, Z-2, and Z-3 five (5) MPH. Classes Q-4, S-4, T, W, and Z-1 and lighter, ten (10) MPH.
Bridge 57-A opposite Bridge 57—Also scales just east of Bridge 57-A all engines barred.

4. **Speed Restrictions**—
Passenger trains thirty (30) MPH and freight trains twenty (20) MPH.
Six (6) MPH over public crossings Wallace.
See also mountain grade operation.

5. **Mountain Grade Operation**—Mountain grade between Saltese and Mullan. Air brake test will be made in accordance with Rule 1063 before leaving Lookout.
Safety switch at foot of four per cent grade at Sohon and Dorsey will be kept set and locked for main track, except when doubling trains to Lookout, when switches will be opened between head and rear portion of train.
The air brakes must be charged to a maximum of ninety (90) pounds pressure on freight trains at Lookout, and conductors must know by caboose gauge that this pressure is attained before making terminal test. Enginemen will maintain a working basis of ninety (90) pounds, Lookout to Saltese and Lookout to Mullan.
Train and enginemen using the Hercules high line at Wallace must leave a flagman at the foot of the grade to protect return movement. Train and enginemen must at all times expect to find a flagman at this point.
Passenger trains will not exceed any one (1) mile in two and one-half (2½) minutes and freight trains any one (1) mile in four (4) minutes and light engines any one (1) mile in three (3) minutes descending.
All trains ascending twenty-four (24) MPH, Tammany to Lookout and Mullan to Lookout.
When trains directed by train order meet at Larson, Dorsey or Lookout, the eastward train will take siding. When at Taft or Tammany the westward train will take siding.
Retaining valves must be used on all cars Lookout to Saltese and Lookout to Mullan.

6. **Helper District**—Between Saltese and Wallace.

7. **Register Stations—**
St. Regis. Haugan. Wallace. Lookout.
Saltese for helper engines.

8. **Commercial Spurs—**

	Miles from St. Regis	Car Capacity
Wileys	20.2	6
McKinnis	49.0	11
Hunter	49.3	15
Compressor	52.8	2
Golconda	54.3	6
Gentry	55.4	2

8. **Lap Sidings**—Saltese. Lookout.

SIXTEENTH SUBDIVISION.
(BURKE BRANCH)

1. Between Wallace and Burke Northern Pacific Railway trains will operate over the Union Pacific Railway and be governed by Union Pacific Railway time table and rules.
2. **At Dorn**—Engines not permitted inside loading shed.
3. **Mountain Grade Operations**—Mountain grade between Burke and Wallace. At the initial point of descent and trains originating east of and picking up at Dorn will make air brake test in accordance with Rule 1063.
The air brakes must be charged to a maximum of ninety (90) pounds pressure on freight trains at Burke and conductors must know by caboose gauge that this pressure is attained before making terminal test. Enginemen will maintain a working basis of ninety (90) pounds pressure Burke to Wallace.
Retaining valves must be used on all cars Burke to Wallace.
Freight trains will not exceed any one (1) mile in four (4) minutes and light engines any one (1) mile in three (3) minutes descending.
4. **Register Station—Wallace.**
5. **Commercial Spurs—**

	Miles from Wallace	Car Capacity
Webb	1.7	4
Markwell	2.2	3
Dorn	5.3	12

SEVENTEENTH SUBDIVISION.
(SUNSET BRANCH)

1. Trains will not require train orders or clearance, and will be governed by transportation rule 93.
2. **Mountain Grade Operations**—Mountain grade between Bunn and Wallace. Air brake test will be made in accordance with Rule 1063 before leaving Bunn.
The air brakes must be charged to a maximum of ninety (90) pounds pressure on freight trains at Bunn and conductors must know by caboose gauge that this pressure is attained before making terminal test. Enginemen will maintain a working basis of ninety (90) pounds Bunn to Wallace.
Retaining valves must be used on all cars Bunn to Wallace.
Freight trains will not exceed any one (1) mile in four (4) minutes and light engines any one (1) mile in three (3) minutes descending.
3. **Register Station—Wallace.**
4. **Commercial Spurs—**

	Miles from Wallace	Car Capacity
Mahoney	2.0	2

ALL SUBDIVISIONS.

1. Transportation Rule 11 is modified as follows: A train finding a fusee burning on or near its track may proceed at restricted speed without stopping.
2. Lights will be displayed at night on all main line train order signals. On Branch line sub-divisions 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.

3. Transportation Rule D-97 applies to all divisions.
4. Transportation Rule 105 is modified as follows: When a siding of an assigned direction is blocked with cars, or taken out of service for any reason, the siding of the opposite direction will be used as a single siding. At lap sidings, unless otherwise provided, trains taking siding must head in at the lap.
5. IN AUTOMATIC BLOCK SIGNAL TERRITORY:—When moving with the current of traffic, or on single track, where the automatic block signals governing the track in use are of the semaphore type and can be plainly seen from the rear of a standing train to be at stop, such signal being not less than one-half mile from the rear of such train, it will not be necessary to protect the train by a flagman. Under all other circumstances Rule 99 must be observed.
Transportation Rule 501-B is modified as follows: INDICATION —Approach next signal prepared to stop. Block is clear; second block in advance is not clear.
Transportation Rule 509(B) is modified as follows: It must be understood that such signal indication may be due to an opposing train proceeding into the same block at the opposite end under an approach signal indication Rule 501-B and before proceeding into the block every precaution consistent with running orders and the nature of the track ahead should be taken to insure safe movement through the block.
When a train dispatcher desires to advance a train from a station where by rule it should enter the siding before passing a train order office, he may instruct the operator to use white signal as prescribed by Transportation Rule 12-C. The engineman may then continue to move his train on the main track to the signal at restricted speed and there be governed by train orders that are addressed to his train.
6. Transportation Rule 606: Emergency Signals are not used at interlockings or drawbridges operated by the Northern Pacific Railway.
7. 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 mile 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 branch lines and on the Bozeman-Logan low line, the yellow signals will be placed as prescribed and the flagman will not be required, except during fog, storms or otherwise bad weather.
8. Transportation Rule 1062 requiring the making of running brake test on passenger trains must also be observed on all passenger trains following departure from terminals, or from a station at which either train or engine crews, or both of them, have been changed or where switching has been done. Engineman will acknowledge proceed signals of trainmen by two short blasts of the whistle.
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. SPEED RESTRICTIONS—Except as otherwise provided: Passenger trains, sixty (60) MPH. Freight trains, fifty (50) MPH, except when restricted to lower rate of speed by engine speed restriction.
ENGINES—A-2, A-3, Q and P Classes, and Classes S-4 and T, sixty (60) MPH, except when used on passenger trains where higher speed is authorized; A and Z-6, sixty (60) MPH, other Z classes, thirty-five (35) MPH. All other classes fifty (50) MPH. Switch engines under steam, moving between stations, fifteen (15) MPH.
ALL TRAINS AND ENGINES—Fifteen (15) MPH through crossovers, turnouts and gauntlets; twenty-five (25) MPH passing telegraph offices where orders are delivered; thirty (30) MPH over interlocked crossings, and when handling steam wrecking derrick, pile driver or locomotive crane.

To avoid damage to rail and bridges by moving locomotives having main or side rods down, over the road at too high a speed, the following speeds will be maximum permitted:

On Main Line—

With main and side rods removed:

All A, and Q classes ..... 30 MPH.
All other classes ..... 25 MPH.

With main rods removed and side rods in place:

All A and Q classes ..... 35 MPH.
All other classes ..... 30 MPH.

On Branch Lines—

With either or both main and side rods removed:

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

Over Bridges—Main or Branch Line.....20 MPH.

Engines with either or both main and side rods removed shall not be moved over any bridge at a speed in excess of 20 MPH and the speed shall be further reduced over bridges which carry speed restrictions against the class of power being so moved. In the latter case, the speed of an engine with rods removed shall be reduced over the bridge to one half the restricted speed for that engine in working order, as shown under "Bridge and Engine Restrictions."

13. Bridge Restrictions for Single and Double Header Engines—Where no mention is made of single or double heading, the instructions apply alike to single and double header engines of each class.
An engine of any class doubleheaded with an engine of lighter class will carry the same restrictions as if the heavier engine was doubleheaded with its own class, unless instructions to the contrary have been issued.

14. SPRING SWITCHES:—
Maximum speed for all facing point and trailing point movements through switch fifteen (15) MPH. Trailing movements on the track for which the switch is normally lined may be made at normal speed.
Trains trailing through or stopping on a spring switch must not back up or take slack until points have been thrown by hand.
Flying switches over or through spring switches are prohibited.
When operated by hand, lever must be moved slowly, keeping a steady pressure on the handle until the switch is thrown and the handle is in the notch on the switch stand provided for it.
When signal governing block in which spring switch is located is at stop, or where automatic block signals do not govern account trains running against current of traffic, facing point movements must not be made over switch until points have been examined.
Sand must not be used over points of spring switches.

15. 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.

16. Gas-electric motor cars, when handled in freight trains, must be behind caboose. 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 engineman will cooperate in making test.

17. Precautions must be taken on double track to prevent accidents from swinging doors or other loose construction attached to cars or locomotives.
On double track, trains handling logs will not be permitted to meet passenger trains between stations. Conductors will notify Dispatcher when there are logs in their trains and secure train order that passenger trains will be held at next station until they have arrived. On single track, trains handling logs when meeting passenger trains will not proceed unless the passenger train is standing still or has moved by the log cars. Conductors of all trains picking up logs must know personally that cars are not overloaded or improperly loaded and are safe to move without loss of lading.

18. BULLETIN STATIONS:—
Livingston, Bozeman, Logan, Whitehall, Butte.
Helena. Garrison.
Missoula.
St. Regis, Wallace, Paradise.
Silver Bow—for Union Pacific trains.

19. STANDARD TIME CLOCKS:—
Livingston, Bozeman, Logan, Whitehall, Butte, Helena, Garrison, Missoula, Wallace and Paradise.

20. WATCH INSPECTORS:—
H. N. Hull, Livingston.
S. V. Justus, Whitehall.
A. M. Flink, Wallace.
C. P. Steffens, Bozeman.
R. W. Crawford, Helena.
S. and S. Jewelry Co., Butte.
Kohn Jewelry Co., Missoula.
H. E. Rakeman, Polson.

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.

TONNAGE RATINGS—WESTWARD.

	ENGINES								
	Ruling Grade	Class W	Class W-1 and W-2	Class W3	Class Y1	Class Z2	Class Z3	Class Z4	Class Z6
Livingston to West End.....	1.8	950	1025	1240	775	1460	1900	2320	2200
West End to Townsend.....	....	....	....	....	....	....	....	....	....
Townsend to Winston	1.0	1400	1510	2050	1375	....	....	....	3700
Winston to Helena..	....	....	....	....	....	....	....	....	....
Logan to Whitehall..	0.5	2500	2700	3240	2400	....	....	....	6000
Whitehall to Homestake.....	2.2	700	755	850	575	1040	1250	1550	1300
Homestake to Butte.		Desc	endi	ngM	ount	ainG	rade	....	
Sappington to Norris	2.2	....	....	....	....	....	....	....	....
Whitehall to Alder..	1.0	....	....	....	....	....	....	....	....

TONNAGE RATINGS—EASTWARD.

	ENGINES								
	Ruling Grade	Class W	Class W-1 and W-2	Class W3	Class Y1	Class Z2	Class Z3	Class Z4	Class Z6
Helena to Placer....	1.0	1400	1510	2050	1375	....	....	....	3700
Placer to Logan.....	1.0	3000	3240	4000	2400	....	....	....	....
Logan to Bozeman (Via Manhattan)..	1.0	1600	1730	2260	1425	....	....	....	4000
Logan to Bozeman (Via Powers).....	0.4	2750	2970	4000	2400	....	....	....	7000
Bozeman to Muir...	1.9	900	970	1250	750	1400	1850	2320	1950
Muir to Livingston..		Desc	endi	ngM	ount	ainG	rade		
Butte to Homestake.	2.2	600	650	850	575	1040	1100	1300	1300
Homestake to Whitehall.....		Desc	endi	ngM	ount	ainG	rade		
Whitehall to Logan..	....	....	....	....	....	....	....	....	....
Norris to Sappington	1.3	....	....	....	....	....	....	....	....

TONNAGE RATINGS.

EASTWARD	ENGINES								
	Ruling Grade	A	W Sup.	W-3	W-5	Z	Z-1	Z-3	Z-6
Paradise to Missoula (Via St. Regis)....	0.4	4500	2800	4000	4500	....	....	...	....
Paradise - Dixon....	0.4	.....	2800	.....	....	....	....	....	....
Dixon - Arlee.....	1.0	.....	1800	.....	....	....	....	....	....
Arlee - Evaro.....	2.2	.....	700	850	850	....	....	....	....
Evaro - Missoula....	Down	.....	Car	Limit	....	....	....	....	....
Missoula - Garrison..	0.4	.....	2400	3700	....	....	....	4500	7000
Garrison - Elliston.. .	1.0	.....	1600	2000	....	2000	....	2500	3700
Elliston - Blossburg..	1.4	.....	1100	1500	....	1500	....	2100	2700
Blossburg - Helena..	Down	.....	Car	Limit	....	....	....	....	....
Garrison - Stuart....	0.7	.....	1800	2500	....	....	....	....	4200
Stuart - Butte.....	1.0	.....	1500	2100	....	....	....	....	3700
Wallace - Dorsey....	2.2	.....	.....	850	....	875	750	1200	....
Dorsey - Lookout...	4.0	.....	.....	.....	....	450	375	600	....
Lookout - Sohon....	Down	.....	Limit	2600 t	onsa	cc't	4%g	rade	....
Sohon - St. Regis....	Down	.....	Car	Limit	....	....	....	....	....
WESTWARD									
Helena - Blossburg..	2.2	.....	700	850	....	800	....	1150	1400
Blossburg or Butte to Missoula.....	Down	.....	Car	Limit	....	....	....	....	....
Missoula to Paradise (Via St. Regis)....	0.4	.....	Car	Limit	....	....	....	....	....
DeSmet - Evaro..	2.2	.....	700	850	850	....	....	....	....
Evaro - Paradise....	Down	.....	Car	Limit	....	....	....	....	....
St. Regis - Saltese...	1.0	.....	.....	.....	....	2000	1650	2500	....
Saltese - Sohon..	2.2	.....	.....	.....	....	875	750	1200	....
Sohon - Lookout....	4.0	.....	.....	.....	....	525	425	600	....
Lookout - Dorsey...	Down	.....	Limit	2000 t	onsa	cc't	4%g	rade	....
Dorsey - Wallace....	Down	.....	Car	Limit	....	....	....	....	....

MAXIMUM CLEARANCES.

NOTE—Length of Load 40 feet. Max. width of Load independent of Clearances 11'6". Heights and Widths in Table allow 9 inches Clearance.

		LIMIT OF LOAD--MEASUREMENT											Governing Structure
		Height Above Top of Rail											
		1'0" Wide	2'0" Wide	3'0" Wide	4'0" Wide	5'0" Wide	6'0" Wide	7'0" Wide	7'6" Wide	8'0" Wide	Max. Height	Max. Width	
1st Subdivision.	M. L., Livingston to Logan...	18'0"	17'11"	17'10"	17'9"	17'6"	17'3"	16'11"	16'9"	16'7"	18'0"	11'6"	Bozeman and Hoppers Tunnels
1st Subdivision.	M. L., Logan to Helena.....	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	11'6"	
2nd Subdivision.	M. L., Logan to Butte.....	18'3"	18'2"	18'0"	17'10"	17'8"	17'6"	17'3"	17'2"	17'0"	18'3"	11'6"	Homestake Tunnel and Tunnel at M. P. 57½
1st Subdivision.	Bozeman to Logan..... Low Grade Line	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	11'6"	Bridge 167.8
3rd Subdivision.	M. L., Helena to Garrison....	17'8"	17'7"	17'5"	17'3"	17'0"	16'9"	16'6"	16'3"	16'1"	17'8"	11'6"	Iron Ridge Tunnel
3rd Subdivision.	M. L., Garrison to Missoula...	20'9"	20'6"	20'2"	19'10"	19'5"	18'11"	18'4"	18'0"	17'8"	20'9"	11'6"	Garrison Tunnel
4th Subdivision.	M. L., Butte to Garrison.....	19'0"	19'0"	19'0"	19'0"	19'0"	19'0"	19'0"	19'0"	19'0"	19'0"	11'6"	B. A. & P. Overhead
5th Subdivision.	M. L., Missoula to Paradise...	17'4"	17'3"	17'2"	17'1"	16'11"	16'9"	16'6"	16'4"	16'3"	17'4"	11'6"	Tunnel No. 7 at M. P. 177½ on 6°30' Curve
6th Subdivision.	M. L., DeSmet to Paradise...	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	11'6"	
8th Subdivision.	Livingston to Gardiner.....	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	11'6"	
9th Subdivision.	Manhattan to Anceney.....	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	11'6"	
10th Subdivision	Sappington to Norris and Pony	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	11'6"	
11th Subdivision	Whitehall to Alder.....	19'3"	19'3"	19'3"	19'3"	19'3"	19'3"	19'3"	19'3"	19'3"	19'3"	11'6"	Bridge No. 9 Jefferson River
12th Subdivision	Drummond to Phillipsburg...	20'6"	20'6"	20'6"	20'6"	20'6"	20'6"	20'6"	20'6"	20'6"	20'6"	11'6"	Bridge O-1
13th Subdivision	Missoula to Darby.....	19'4"	19'4"	19'4"	19'4"	19'4"	19'4"	19'4"	19'4"	19'4"	19'4"	11'6"	Bridge 57
14th Subdivision	Dixon to Polson.....	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	11'6"	
15th Subdivision	St. Regis to Wallace.....	18'5"	18'5"	18'5"	18'5"	18'5"	18'5"	18'5"	18'5"	18'5"	18'5"	11'6"	Tunnel No. 1—1 mile west of Borax
16th Subdivision	Wallace to Burke.....	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	11'6"	
17th Subdivision	Wallace to Bunn.....	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	21'0"	11'6"	

MAXIMUM CLEARANCES

NOTE—Length of Load 40 feet. Max. width of Load independent of Clearances 11′6″. Heights and Widths in Table allow 9 inches Clearance.

		LIMIT OF LOAD--MEASUREMENT										Governing Structure
		Height Above Top of Rail										
		8′6″ Wide	9′0″ Wide	9′6″ Wide	10′0″ Wide	10′2″ Wide	10′6″ Wide	11′0″ Wide	11′6″ Wide	Max. Height	Max. Width	
1st Subdivision...	M. L., Livingston to Logan.....	16′4″	16′1″	15′9″	15′5″	15′4″	15′1″	14′9″	14′4″	18′0″	11′6″	Bozeman and Hoppers Tunnels
1st Subdivision...	M. L., Logan to Helena.....	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	11′6″	
2nd Subdivision..	M. L., Logan to Butte.....	16′10″	16′9″	16′7″	16′4″	16′3″	16′0″	15′6″	14′11″	18′3″	11′6″	Homestake Tunnel and Tunnel at M. P. 57½
1st Subdivision...	Bozeman to Logan, Low Grade Line	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	11′6″	Bridge 167.8
3rd Subdivision..	M. L., Helena to Garrison.....	15′11″	15′8″	15′4″	15′0″	14′11″	14′9″	14′5″	14′0″	17′8″	11′6″	Iron Ridge Tunnel
3rd Subdivision..	M. L., Garrison to Missoula.....	17′4″	16′11″	16′6″	16′0″	15′10″	15′5″	14′9″	14′0″	20′9″	11′6″	Garrison Tunnel
4th Subdivision..	M. L., Butte to Garrison.....	19′0″	19′0″	19′0″	19′0″	19′0″	19′0″	19′0″	19′0″	19′0″	11′6″	B. A. & P. Overhead
5th Subdivision..	M. L., Missoula to Paradise.....	16′0″	15′11″	15′7″	15′2″	15′0″	14′9″	14′2″	13′7″	17′4″	11′6″	Tunnel No. 7 at M. P. 177½ on 6°30′ Curve
6th Subdivision..	M. L., DeSmet to Paradise.....	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	11′6″	
8th Subdivision..	Livingston to Gardiner.....	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	11′6″	
9th Subdivision..	Manhattan to Ancency.....	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	11′6″	
10th Subdivision..	Sappington to Norris and Pony...	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	11′6″	
11th Subdivision..	Whitehall to Alder.....	19′3″	19′3″	19′3″	19′3″	19′3″	19′3″	19′3″	19′3″	19′3″	11′6″	Bridge No. 9 Jefferson River
12th Subdivision..	Drummond to Phillipsburg.....	20′6″	20′6″	20′6″	20′6″	20′6″	20′6″	20′6″	20′6″	20′6″	11′6″	Bridge O-1
13th Subdivision..	Missoula to Darby.....	19′4″	19′4″	19′4″	19′4″	19′4″	19′4″	19′4″	19′4″	19′4″	11′6″	Bridge 57
14th Subdivision..	Dixon to Polson.....	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	11′6″	
15th Subdivision..	St. Regis to Wallace.....	18′5″	18′5″	18′3″	17′11″	17′9″	17′6″	17′1″	16′7″	18′5″	11′6″	Tunnel No. 1—1 mile west of Borax
16th Subdivision..	Wallace to Burke.....	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	11′6″	
17th Subdivision.	Wallace to Bunn.....	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	21′0″	11′6″	

RAILROAD CROSSINGS AND INTERLOCKINGS.

First Subdivision—
Belgrade Tower—Automatic Interlocking.

Second Subdivision—
Sappington—C. M. St. P. & P. R. R.—Automatic Interlocking.

Third Subdivision—
Great Northern Crossing—G. N. Ry.—Interlocked.

Fourth Subdivision—
Silver Bow—U. P. R. R.—Interlocked.
Dempsey—C. M. St. P. & P. R. R.—Automatic Interlocking.

Fifth Subdivision—
Huson—C. M. St. P. & P. R. R.—Automatic Interlocking.

Ninth Subdivision—
Between Manhattan and White—Gallatin Valley Railway—Crossing.

Eleventh Subdivision—
Between Whitehall and Renova—C. M. St. P. & P. R. R.—Interlocked.

Twelfth Subdivision—
Drummond—C. M. St. P. & P. R. R.—Automatic Interlocking.

Fifteenth Subdivision—
0.4 miles east of Wallace Station—U. P. R. R.—Crossing.

SPEED TABLE.

Time per Mile Min.	Time per Mile Sec.	Miles per Hour	Time per Mile Min.	Time per Mile Sec.	Miles per Hour	Time per Mile Min.	Time per Mile Sec.	Miles per Hour
1	:	60	1	20	45	2	50	21.2
1	1	59	1	25	42.3	3	:	20
1	2	58	1	30	40	3	9	19
1	3	57.1	1	40	36	3	20	18
1	4	56.2	1	45	34.3	3	21	17
1	5	55.3	1	50	32.7	3	45	16
1	6	54.5	2	:	30	4	:	15
1	7	53.7	2	10	27.6	5	:	12
1	8	52.9	2	15	26.6	6	:	10
1	9	52.1	2	20	25.7	7	30	8
1	10	51.4	2	30	24	10	:	6
1	12	50	2	40	22.5			
1	15	48	2	45	21.8			

J. R. SMITH, Trainmaster.
B. H. HAMMER, Trainmaster.
DAN HEALY, Ass't Supt.
J. A. BRYAN, Roadmaster, Trainmaster.
H. LIVESEY, Chief Dispatcher.