

NORTHERN PACIFIC RAILWAY COMPANY

Lake Superior Division

Special Instructions No. 1

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

Tuesday, December 1, 1959

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.

**W. L. WOOD,
Superintendent.**

**D. A. THOMSON,
General Manager.**

**E. S. ULYATT,
General Superintendent
of Transportation.**

ALL SUBDIVISIONS.

1. Speed Restrictions—

Maximum Speeds Permitted

Passenger trains75 MPH.

Freight and mixed trains50 MPH.

The above speeds are subject to the restriction of maximum speeds in miles per hour as shown by zones under each subdivision.

All trains and engines, except as otherwise specified:

Through crossovers, turnouts and gantlets, except where fixed signals provide otherwise15 MPH.

Handling wrecking cranes, pile drivers, locomotive cranes and similar equipment30 MPH.

Handling 4-wheel scale test cars and scale test car 254 { Main Line35 MPH.
Branch Lines25 MPH.

Handling air dump cars 89000 to 89059 series35 MPH.

Picking up train orders from operators30 MPH.

Handling dead diesel-electric engines other than NP and Tenant Lines35 MPH.

Handling loaded ore cars40 MPH.

Diesel-electric engines	Handling trains	Running light
No. 98	35 MPH.	35 MPH.
No. 99	50 MPH.	50 MPH.
No. 100	40 MPH.	40 MPH.
100 series, except No. 100	60 MPH.	60 MPH.
200 and 300 series, except Nos. 244 and 245	65 MPH.	65 MPH.
Nos. 244 and 245	75 MPH.	65 MPH.
400, 600 and 700 series	45 MPH.	45 MPH.
500, 501 and 552-569, incl.	65 MPH.	65 MPH.
No. 525	60 MPH.	60 MPH.
No. 550-551	75 MPH.	65 MPH.
Nos. 800-803	60 MPH.	60 MPH.
850-860 series	65 MPH.	65 MPH.
900-911, 6000 and 7000 series	65 MPH.	65 MPH.
5400 series	55 MPH.	55 MPH.
6500, 6600 and 6700 series	75 MPH.	65 MPH.
Diesel-electric motor cars in service or being towed:		
Car B-13		55 MPH.
Cars B-6, B-11, B-15, B-16 and B-18 thru B-22 incl.		65 MPH.
Cars B-30, B-40 and B-41		75 MPH.

Diesel-Electric Engines Handled Dead in Train—Diesel-electric engines or units may be handled dead in trains. The speed of such trains must not exceed the authorized operating speed specified for such engines or units.

When handling diesel-electric single units, road-switcher engines and switch engines dead in a freight train, they shall be separated from the engine handling the train and each other by at least one freight car. This does not apply to diesel-electric road engines of two or more units coupled in multiple.

All diesel-electric engines or units handled dead in freight train must be placed on head end of train within ten cars of road engine handling train, this to insure that brakes will release properly.

When handling diesel-electric units dead in train, bridge, speed and other restrictions must be observed, same as when in operating condition.

Diesel-Electric Engines Mixed Consist, Passenger and Freight—Multiple unit diesel-electric engines having consist of freight and passenger units: The passenger units must be placed in trailing position and speed restrictions for freight units observed, this to prevent damage to traction motors and reduce the danger of sliding wheels on freight units.

If the units of a consist are of different gear ratio, the engine must not be operated at speeds exceeding that of the unit having the lowest maximum permissible speed. Also, the overload short time rating of any unit in the consist must not be exceeded.

When two, Four-Unit diesel-electric engines are used to double-head freight trains, the leading engine only will apply power to start train, or to make backup movement with cars.

Heavy cars—Cars heavier than the following not permitted without authority of Superintendent:

30 ft. or less in length	210,000 Lbs.
Over 30 ft. long:	
First Subdivision	280,000 "
Second "	270,000 "
Third "	400,000 "
All other "	210,000 "

In weed spraying trains, when tank cars having a capacity of over 13,000 gallons are used, they should be separated from each other by a car of lesser capacity.

3. Rule 200—Lights will not be displayed on train order signals on the 8th and 9th Subdivisions, except at Walker and Blackduck. Trains will be governed by the day indication of these train order signals.

4. Rule 607: Emergency Signals are not used at interlockings or drawbridges operated by the Northern Pacific Railway.

5. Cars will not be handled behind light-weight observation cars except in emergency or when so authorized by the superintendent. In such cases passengers shall not be permitted to pass between such cars while train is in motion due to the unprotected opening.

Diesel-electric motor cars, when handled dead in freight trains, must be behind caboose.

Four-wheel scale test cars must be handled only in local freight trains. Exception:—If there is no local service available, these cars may be handled in dead freights which must be governed by speed restrictions for the handling of four-wheel scale test cars shown under Item 1. All scale test cars must be placed immediately ahead of caboose.

Air dump cars, series 89000-89059, will be handled only in work trains and local trains when available. If local trains not available, cars may be handled on the rear of other trains at a speed not to exceed 35 MPH.

Instructions for handling Pile Drivers, Cranes, Derricks, Shovels, or similar equipment of the swinging or pivoting type, are as follows:

(a) When such equipment is moved on their own wheels they shall be prepared and carded in accordance with current A.A.R. Loading Rules unless some condition exists which prevents those requirements being complied with.

(b) Equipment properly prepared and carded may be moved at normal freight train speeds unless there is some condition that prevents it, and in that event the maximum permitted speed shall be noted on the waybill.

(c) Such equipment when not prepared and carded shall be handled at speeds not to exceed 30 miles per hour.

(d) Such equipment that is geared for self-propulsion shall have the driving gears disconnected or removed.

(e) Such equipment that is Company owned that requires speed to be restricted shall be covered by a message to the train crew stating the maximum speed permitted.

6. Precautions must be taken on double track to prevent accidents from swinging doors or other loose construction attached to cars or engines. Trains handling logs must stop when being met or passed by passenger trains.

7. Roller bearing failures on cars or engines equipped with roller bearing boxes may be due to lack of oil or grease. If the box is not blazing, the oil plug in the cover should be removed and heavy oil added and plug replaced. Oil must never be added to a box that is blazing. Grease lubricated roller bearing boxes have grease plugs locked with a metal strap which must be cut off with chisel before plug can be removed. In cases of a hot box, oil should be added and the plug replaced, train should proceed at reduced speed and care exercised until it is apparent the box is running cool.

8. Spring Switches

Instructions for operation of spring switches are posted at or near the spring switch and must be complied with.

Unless otherwise specified, the normal position of spring switches is for main track.

When the target of a spring switch shows "red" to an approaching train or engine, a trailing point movement actuating the spring switch points must not be made.

Normal indication of siding signal is STOP. If siding signal does not clear on approach of train, movement must be governed by instructions posted at the switch.

9. Bulletin Stations—

Ashland—Soo Line Passenger Station.

Duluth—Union Depot, Fifth Avenue Yard Office, Rices Point North and South End Yard Offices and Roundhouse, West Duluth Yard Office, Soo Line Passenger Station and Roundhouse.

Superior—Superior Yard Office, Soo Line Yard and Roundhouse.

Carlton—Passenger Station.

Ironton—Passenger Station.

Brainerd—Passenger Station.

North Bemidji—Yard Office and Roundhouse.

International Falls—Passenger Station and Roundhouse.

Staples—Passenger Station, Yard and Roundhouse.

White Bear Lake—Passenger Station.

St. Paul—Miss. St. Yard and Roundhouse, CMStP&P Yard and Roundhouse.

Train and Engine men from St. Paul and Minneapolis without access to bulletins at those points will check bulletins at White Bear Lake.

10. Standard Time Clocks—

Duluth—Union Depot, Rices Point Yard Office and Round House.

Carlton—Passenger Station.

Brainerd—Passenger Station.

North Bemidji—Yard Office.

International Falls—Passenger Station.

Staples—Passenger Station, Round House and Yard Office.

White Bear Lake—Passenger Station.

11. Watch Inspectors—

Bemidji—O. E. Erwig; Willis Norden.

Brainerd—R. A. Ashmun.

Carlton—Schrafters Jewelry.

Cloquet—T. W. Alaspa.

Duluth—Kanter Jewelers, 325 W. Superior.

Erwin Moen, 1908 W. Superior.

Nold Jewelers, 414 N. Central.

H. W. Schmidt, 25 West Superior.

Security Co., Inc., 307 W. Superior St.

Staples—Imgrund's Jewelry; C. E. LaBonte.

Superior—Peters' Jewelry, 1220 Tower Ave.

FIRST SUBDIVISION.

(MAIN LINE)

1. **Speed Restrictions—**

Zone—Between	Maximum Speeds Permitted	
	Freight	Passenger
Ashland and Allouez	35 MPH.	40 MPH.
Exception: On all curves between MP 12 and Allouez	25 MPH.	25 MPH.
Trains handling loaded ore cars.....	20 MPH.	---
Trains handling ore loaded in other than ore cars	25 MPH.	---
All trains and engines, 7th Ave. West to 22nd Ave. West, between MP 0 and 2, Ashland	10 MPH.	---
2. **Bridge and Engine Restrictions:**

Wrecking cranes 45 to 48 inc. not permitted.

Bridge 0, Vaughn Avenue:
 Bridge 5, Fish River:
 Bridge 49, Middle River:
 All trains

25 MPH.

Bridge 37, Brule River:
 Multiple unit diesels

25 MPH.

Bridge 48, Poplar River:
 Bridge 53, Amnicon River:
 Multiple unit DSS&A diesel engines

25 MPH.

Heavy Car Restrictions: Bridges 0, 5, 37, 48, 49 and 53: Cars less than 30 ft. long with total weight over 170,000 pounds must be separated from each other and engine with an empty car. Cars 30 ft. or longer with total weight over 169,000 pounds must be separated from engine with a car 40 ft. long with total weight under 169,000 pounds.
3. **At Ashland—**Normal position of main track switch just east of Seventh Ave., leading to the Soo Line, is for the Soo Line connection.
 At Ellis Ave., all trains must stop in advance of crossing, and will proceed only after crossing is protected by a member of the crew.
4. **Between Allouez and Duluth, Duluth and Superior Terminals** instructions govern.
5. **Yard Limits—**Tracks between yard limit signs west of East End and east of Allouez.
6. **Register Stations—**

Central Avenue.
 Ashland, Soo Line Station.
 Superior, Soo Line 21st Street Yard Office, for DSS&A trains.
7. **Clearance Exceptions—**
 At Allouez—Trains originating secure clearance at Central Avenue, or Soo Line 21st Street Yard Office.

SECOND SUBDIVISION.

(MAIN LINE)

1. **Speed Restrictions—**

Zone—Between	Maximum Speeds Permitted	
	Freight	Passenger
Central Ave. and Anton.....	50 MPH.	65 MPH.
Anton and State Line Both Tracks,....	50 MPH.	60 MPH.
Against the current of traffic	49 MPH.	59 MPH.
State Line and MP 20	50 MPH.	60 MPH.
MP 20 and MP 28 (Carlton)	50 MPH.	65 MPH.
MP 28 and MP 148 (Staples)	45 MPH.	55 MPH.

At Brainerd, over public crossings10 MPH.

First class trains—

Between east switch of north siding (east of car shop) and St. Paul Division connection at 8th St.20 MPH.
 Between St. Paul Division connection and 8th Subdivision Jct.Restricted speed.

At Aitkin, through village30 MPH.

At Carlton, over double-slip switch within interlocking; through movements via Second Subdivision30 MPH.

Other movements15 MPH.

2. **Bridge and Engine Restrictions:**

Wrecking cranes 45 to 48 inc. over bridges15 MPH.
 Bridge 9 just west of Central Avenue20 MPH.
 Avoid using automatic brakes on bridge, except in emergency.
3. **At Anton and State Line—**Time of all trains applies at end of double track.

At Carlton—

Interlocking—Trains will call for route as follows:

Second to Second "East & West":	00 & 00.
Second to Third "East & West":	00 & 000.
Second to Loop Track "West":	00 & 0000.
Second to 5th Subdivision "East":	00 & 0000.
Third to Third "East and West":	000 & 000.
Third to Second "East and West":	000 & 00.
Third to Loop Track "West":	000 & 0000.
Third to 5th Subdivision "East":	000 & 0000.
Fifth to Second "West":	0000 & 00.
Fifth to Third "West":	0000 & 000.
Fifth to Loop Track:	0000 & 0000.
Loop Track to Second "East":	0000 & 00.
Loop Track to Third "East":	0000 & 000.
Loop Track to 5th Subdivision "West":	0000 & 0000.
Lower yard lead to Second Subdiv. "East and West":	—0.
No. 9 Lead through Interlocking "East and West":	—.

Push button system controlling operation of lower arm of Second Subdivision Home Signal, Carlton Interlocking, has been installed to govern follow-up westward movements to either Second or Third Subdivisions. All follow-up movements will be governed by lower arm of Second Subdivision Home Signal as well as return movements to train after setting out in Carlton Yard from Second Subdivision Main Track.

5. **At McGregor—**

At Interlocking—Trains will call for route as follows:

For Northern Pacific and Soo Line main tracks:	—
From Northern Pacific and Soo Line to West wye:	—0
Between Interchange Track and West wye:	0000
To eastward siding:	00—

6. At Aitkin—Cemetery road crossing one mile west of this point must not be blocked in excess of ten (10) minutes, except in case of emergency, when it must be opened as soon as possible.

7. At Brainerd—St. Paul Division trains must stop before fouling Lake Superior Division main track.

St. Paul Division first class trains head in on inside track at passenger station.

Connection with 8th Subdivision is governed by automatic block signals.

City ordinance provides that crossings must not be blocked more than five (5) minutes by standing trains or cars. Shop crossings must not be blocked when employees are going to work at 7:00 AM and 1:00 PM. Westward trains stop clear of shop crossing 300 feet east of Thirteenth Street, and eastward trains either move a sufficient distance to clear City crossings or stop clear of First Street crossing, to make setouts or pickups. Trains must not block Oak Street Crossing near milk plant and must promptly clear crossings when coupling up in South Yard for movement.

8. At Staples Interlocking—Westward trains which may be unable to start at home signal may pass signal 1459 only when lower arm indicates Proceed, and must then proceed at slow speed. If such indication is not secured, use telephone and then proceed at restricted speed on instructions from towerman.

9. At Staples, St. Paul Division instructions govern.

10. Sidings—

McGregor, siding east of passenger station is westward siding.

Siding west of passenger station is eastward siding.

Aitkin, north siding is westward; south siding is eastward.

11. Signal Overlap—

Kimberly & Woodbury—Trains holding main track to meet an opposing train taking siding will stop before reaching signal overlap sign, about middle of siding, to avoid giving approaching train two stop signals.

12. Spring Switches—

Anton, at end of double track, normal position for westward track, equipped with facing point lock.

Carlton, east switch of north siding equipped with facing point lock. Not equipped for switch key operation.

Woodbury, east switch of siding with facing point lock, equipped for switch key operation.

Kimberly, west switch of siding with facing point lock, equipped for switch key operation.

Deerwood, at junction of Second and Fourth Subdivisions, one and three-fourths miles east of passenger station, normal position for Second Subdivision main track, equipped with facing point lock.

Indications displayed by two-position color light signal controlling spring switch indicate only if points of the spring switch are in proper adjustment.

13. Retaining Valves—On freight trains retaining valves shall be used on grades Sawyer to Pokegama, as outlined in following paragraphs:

Retaining valve handles must not be turned up until air brakes are all released following stop at Sawyer.

Handles to be turned up to low pressure (horizontal) position, beginning at head end of train, as follows:

Trains of 8000 tons or over—20 retainers.
Trains of 6000 tons or over—16 retainers.
Trains of 4000 tons or over—10 retainers.
Trains of less than 4000 tons—No retainers unless requested by engineman.

All retaining valves will be turned down where first stop is made, at either Pokegama, Central Ave. or Hill Ave.

On solid trains of ore, or trains consisting of a large percentage of ore, handled by Diesel-electric engine with dynamic brake inoperative on either unit, retaining valve handles must be turned up on one-fourth of the total number of cars in train. When engine has been cut off and recoupled, retaining valve handles will be turned down while brake pipe test is being made, then turned up again.

On solid trains of ore, or trains consisting of a large percentage of ore and handled by diesel-electric engines having dynamic brake in effective operating condition, retaining valve handles will be turned up on the first ten cars behind the engines. Cars having four-position direct release control retainers or converted type four-position retainers, handles to be turned up to direct release control position (diagonal upward). Cars having three-position retaining valves, handles to be turned up to low pressure (horizontal) position. Retaining valve handles to be turned down when stop is made at Pokegama, Central Ave., or Hill Ave.

The feed valve will be adjusted and 90 pounds brake pipe pressure obtained prior to departure from Sawyer.

14. Register Stations—

Central Avenue, Carlton, Staples.

Brainerd—For trains originating or terminating at Brainerd only.

15. Register Exceptions—At Central Ave. and Carlton trains register by Form 608.

A check of register on Form 602 may be issued by operator when authorized by train dispatcher, either instead of, or in addition to, train order check, at Central Ave., Carlton, Deerwood, and Staples Interlocking.

At McGregor, for Soo Line trains entering, a check of the register, Form 602, may be issued by the operator when authorized by the train dispatcher as required, in addition to a previous train order check.

16. Clearance Exceptions—At Carlton, all trains secure clearance.

THIRD SUBDIVISION.

(MAIN LINE)

1. Speed Restrictions—	Maximum Speeds Permitted	
Zone—Between	Freight	Passenger
West Duluth Jct. and MP 143 (between Short Line Park and West Duluth Jct.)	50 MPH.	60 MPH.
MP 143 and MP 135 (Brownell)	25 MPH.	45 MPH.
MP 135 and MP 129 (West end Carlton yard)	50 MPH.	60 MPH.
MP 129 and MP 11 (White Bear Lake)	50 MPH.	75 MPH.

At Carlton, over double slip switch within interlocking; through movements via Third Subdivision.....30 MPH.

Other movements15 MPH.

At Rush City thru city limits passenger trains.....50 MPH.

2. Bridge and Engine Restrictions—

Wrecking cranes 45 to 48 inc. over bridges15 MPH.

3. **At West Duluth Jct.**—Switch at end of double track is automatically operated dual control. Normal position is for westward track.

4. **At Carlton**—Second Subdivision Instructions govern.

5. **At Hinckley**—Cars must not be left on No. 1 yard track.

Trains must not block highway crossing one-half mile west of passenger station, and South First Street Crossing more than five (5) minutes.

Foot crossing east of passenger station must not be blocked with cars.

At Interlocking—trains will call for route as follows:

For Through Main Track Movement:	—
For Movement from Main Track to Sidings:	—o
For Movement from Sidings to Main Track:	o—
For Movement between yard and eastward siding:	oo

6. **At White Bear Lake**—West switch of crossover to New Yard will be left lined for the lead, which is the normal position.

NP Ry and M&StL Ry Joint Terminal instructions govern.

White Bear Lake will not be considered an initial station for through trains moving TO or FROM Lake Superior Third Subdivision TO or FROM Joint Terminal First Subdivision.

7. **Sidings—**

Hinckley, siding east of Grind Stone River is westward siding; siding west of G. N. crossing is eastward siding.

8. **Signal Overlap—**

At Sturgeon Lake—Westward trains holding main track to meet an eastward train will stop before reaching signal overlap sign west of passenger station, to avoid giving approaching train three stop signals.

At Forest Lake—Eastward trains holding main track to meet westward train will stop before reaching signal overlap sign east of passenger station, to avoid giving approaching train three stop signals.

9. **Spring Switches—**

Pine City, west switch of siding, with facing point lock equipped for switch key signal operation.

10. **Retaining Valves**—On freight trains retaining valves must be used on grades Brownell to MP 143. Handles to be turned up to low pressure (horizontal) position, beginning at head end of train, as follows:

Trains of 8000 tons or over—20 retainers.

Trains of 6000 tons or over—16 retainers.

Trains of 4000 tons or over—10 retainers.

Trains of less than 4000 tons—No retainers unless requested by engineman.

All retaining valves will be turned down between MP 143 and West Duluth Junction.

11. **Register Stations—**

West Duluth, Carlton.

12. **Register Exceptions—**

At West Duluth and Carlton trains register by Form 608.

A check of register on Form 602 may be issued by operator when authorized by train dispatcher, either instead of, or in addition to, train order check, at West Duluth and Carlton.

13. **Clearance Exceptions—**

At West Duluth Junction: Trains originating secure clearance at West Duluth.

At Carlton: all trains secure clearance.

FOURTH SUBDIVISION. (CUYUNA NORTHERN BRANCH)

1. **Speed Restrictions—** Maximum Speeds Permitted
Zone—Between

Deerwood and Ironton40 MPH.

2. **Bridge and Engine Restrictions—**

Engines not permitted on Middleton Coal Dock Trestle, and over Under-Track unloading pocket on Coke Track at Hanna Mine.

3. **At Deerwood**—Eastward trains use junction switch one and three-fourths miles east of passenger station; westward trains use crossover west of passenger station, unless otherwise authorized by train order.

Train order signal does not govern Fourth Subdivision trains.

4. **At Ironton**—Track must not be used beyond point 2400 feet west of Trommald Jct.

5. **Spring Switches—**

Deerwood, at junction of Second and Fourth Subdivision main tracks, one and three fourths miles east of passenger station, normal position for Second Subdivision main track, equipped with facing point lock.

Register Stations—Ironton and Deerwood.

7. **Register Exceptions**—At Deerwood, when operator on duty, trains will register by Form 608.

FIFTH SUBDIVISION. (CLOQUET BRANCH)

1. **Speed Restrictions—** Maximum Speeds Permitted
Zone—Between

Cloquet and MP 4 (west of Scanlon)15 MPH.

MP 4 and Carlton80 MPH.

Carlton, over double-slip switches through the Interlocking15 MPH.

2. **Bridge and Engine Restrictions—**

Wrecking cranes 45 to 48 inc. over Bridge 615 MPH.

3. **At Carlton**—Second Subdivision instructions govern.

4. **At Cloquet**—D.&N.E. engines may use main track between D.&N.E. connection at Broadway St. 200 feet east of passenger station and west end of yard.

Trains and yard engines must stop at the Northwest Paper Mill crossing (East Cloquet), and protect crossing by flagman. Movements over Arch Street crossing, West of passenger station, must be protected by flagman.

Derails located near East end of Great Northern tracks No. 1 and No. 2, are not provided with derail signs.

5. **Register Stations**—Carlton and Cloquet.

6. **Clearance Exceptions**—

At Cloquet trains will not require clearance.

SEVENTH SUBDIVISION. (BULLHEAD LAKE BRANCH)

1. **Speed Restrictions**—
Zone—Between
Funkley and Kelliher 15 MPH. Maximum Speeds Permitted
2. **Bridge and Engine Restrictions**—
Wrecking cranes 45 to 48 inc. Not permitted
3. **Register Stations**—
Funkley Kelliher
4. **Clearance Exceptions**—
At Funkley: Westward trains will not require clearance.

EIGHTH SUBDIVISION. (INTERNATIONAL FALLS BRANCH) (BRAINERD TO NORTH BEMIDJI)

1. **Speed Restrictions**—
Zone—Between
Brainerd and North Bemidji..... 40 MPH. 50 MPH. Maximum Speeds Permitted
At Bemidji—Over public crossings at,
Carpenter Ave. 30 MPH.
Mill Park 20 MPH.
Skelly Oil 20 MPH.
Other public crossings 15 MPH.
2. **Bridge and Engine Restrictions**—
Wrecking cranes 45 to 48 inc. Not permitted
Bridge 59.1 over Leech Lake, all trains 15 MPH.
Bridge 94 over Mississippi River (east of Bemidji psgr. station)
Trains handling cars less than 30 ft. long with total weight exceeding 169,000 pounds when coupled in group or next to engine when handling cars 30 ft. or longer with total weight exceeding 169,000 pounds when coupled next to engine..20 MPH.
If such short cars are not coupled in groups and if any such car is not coupled next to engine the above restriction does not apply.
3. **At Brainerd**—Connection with 2nd Subdivision is governed by automatic block signals.
The signal governing movements from the 8th to the 2nd Subdivision displays interlocking indication Rule 601A1 and will not display a proceed indication until the junction switch is properly lined and there are no conflicting train or engine movements in the Automatic Block Signal territory.
Train order signal does not govern Eighth Subdivision trains.
5. **At Bemidji**—The wye switch on the Bemidji Branch will be in normal position when lined for the east leg of the wye.
Within yard limit at Bemidji Tower, Bemidji, and North Bemidji, trains 11 and 12 will observe Operating Rule 93 the same as required of second class and inferior trains.
Tracks between yard limit sign east of Bemidji Tower, Bemidji, and yard limit sign west of North Bemidji, operated as one yard.

6. **Register Stations**—
Brainerd

North Bemidji

7. **Register Exceptions**—Eastward trains secure from the telegraph office at Brainerd by telephone check of register covering first class trains.

NINTH SUBDIVISION. (INTERNATIONAL FALLS BRANCH) (NORTH BEMIDJI TO INTERNATIONAL FALLS)

1. **Speed Restrictions**—
Zone—Between
North Bemidji and International Falls..... 35 MPH. 45 MPH. Maximum Speeds Permitted
Over public crossing 200 ft. west of MP 97, between North Bemidji and Lavinia 30 MPH.
2. **Bridge and Engine Restrictions**—
Wrecking cranes 45 to 48 inc. Not permitted
Bridge 166 Big Fork River and Bridge 185, Little Fork River:
All trains 10 MPH.
Heavy car restrictions Bridges 166 and 185:
Cars less than 40 ft. long with total weight exceeding 169,000 pounds must be separated from each other and from engine by two cars 40 feet long with total weight not over 169,000 pounds.
Cars 40 ft. or longer with total weight exceeding 169,000 pounds must be separated from engine by one car 40 ft. long with total weight under 169,000 pounds.
3. **At North Bemidji**—Eighth Subdivision Instructions govern. See Item 5—8th Subdivision.
4. **At Big Falls**—Track serving the National Pole & Treating Company must not be used beyond 1,510 feet from Highway No. 71 crossing. National Pole & Treating Company tracks may be used for switching cars to or from temporary pulpwood platform.
5. **At International Falls**—On K and S tracks all movements across Sixth Street must be protected.
Within Yard Limits Trains 11 and 12 will observe Operating Rule 93 the same as is required of second class and inferior trains.
6. **Register Stations**—
North Bemidji, International Falls.
- Clearance Exceptions**—
At Funkley:
Trains originating will not require clearance.

TONNAGE RATINGS PER DIESEL UNIT

Lake Superior Division		Unit Numbers					
Subdivision	District	99-106 400-427 700-724 750 800-803	500-551 6500-6513 6550 107-177 6600-6601	244 245 6000-6006 6700 Series	5400-5410 500-501 552-569 6007-6020 6050	525 850-863 900 Series 244-245	200-300 and 7000 Series Except 244-245
First—Eastward	Central Ave. to Iron River.....	790	950	1360	1680	2200	2100
	Iron River to Ashland.....	960	1140	1640	2020	2650	2525
First Westward	Ashland to Central Ave.....	790	950	1360	1680	2200	2100
	Staples to Brainerd.....	4070	4850	7000	8610	11300	10750
Second Eastward	Brainerd to Deerwood.....	1660	1970	2850	3500	4600	4380
	Deerwood to Central Ave.....	2160	2570	3710	4570	6000	5710
Second Westward	Duluth to Sawyer.....	1020	1230	1760	2180	2660	2730
	Sawyer to Brainerd.....	1440	1720	2480	3050	4000	3810
	Brainerd to Staples.....	1620	1930	2790	3430	4500	4280
Third Eastward	White Bear Lake to Hineckley.....	1260	1500	2170	2670	3500	3330
	Hineckley to Groningen.....	1120	1330	1920	2380	3100	2950
	Groningen to Carlton.....	1620	1930	2790	3430	4500	4280
	Carlton.....	1440	1720	2480	3050	4000	3810

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TONNAGE RATINGS PER DIESEL UNIT

Lake Superior Division		Unit Numbers					
Subdivision	District	99-106 400-427 700-724 750 800-803	500-551 6500-6513 6550 107-177 6600-6601	244 245 6000-6006 6700 Series	5400-5410 500-501 552-569 6007-6020 6050	525 850-863 900 Series 244-245	200-300 and 7000 Series Except 244-245
Third Westward	Duluth to Carlton.....	790	950	1360	1680	2050	2100
	Carlton to Hineckley.....	1530	1820	2630	3240	4250	4050
	Hineckley to White Bear Lake.....	1800	2150	3100	3810	5000	4760
Eighth Eastward	No. Bemidji to Brainerd.....	1070	1270	1840	2260	2970	2830
	No. Bemidji to Hackensack.....	1070	1270	1840	2260	2970	2830
Elighth Westward	Brainerd to No. Bemidji.....	750	890	1280	1580	2070	1970
	International Falls to Funkley.....	1010	1200	1730	2130	2800	2670
Ninth Eastward	Funkley to No. Bemidji.....	1850	2200	3170	3910	5130	4880
	No. Bemidji to Northome.....	950	1130	1630	2010	2640	2510
Ninth Westward	Northome to International Falls.....	1850	2200	3170	3910	5130	4880

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

MAXIMUM CLEARANCES.

LIMIT OF LOAD MEASUREMENT.												Governing Structure
Height Above Top of Rail.												
1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7 ft. 6 in. Wide	8 ft. Wide	Max. Hgt.	Max. Wth.		
1st Sub-division, Ashland to Allouez.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"	St. Louis Bay Bridge	
2nd Subdivision, Duluth to Staples.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"		
3rd Sub-division, Duluth to White Bear Lake..	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"		
4th Sub-division, Deerwood to Ironton Depot..	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"		
5th Sub-division, Carlton to Cloquet.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"		
8th and 9th Sub-divisions { Brainerd to Big Falls.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"	Big Fork & Little Fork River Bridges	
Big Falls to International Falls.....	19' 3"	19' 3"	19' 3"	19' 3"	18' 10"	18' 7"	18' 6"	18' 4"	19' 3"	12' 0"		
	19' 3"	19' 3"	19' 3"	19' 3"	19' 0"	18' 10"	18' 7"	18' 6"	18' 4"	19' 3"		

Note:—Limit of load measurements based on 52' cars with 42' truck centers. Heights and widths in table allow 6 inches clearance. Table is based on open car loading equally divided on either side of center line of car.

MAXIMUM CLEARANCES.

LIMIT OF LOAD MEASUREMENT.											Governing Structure
Height Above Top of Rail.											
8 ft. 6 in. Wide	9 ft. Wide	9 ft. 6 in. Wide	10 ft. Wide	10 ft. 6 in. Wide	11 ft. Wide	11 ft. 6 in. Wide	12 ft. Wide	Max. Hgt.	Max. Wth.		
1st Sub-division, Ashland to Allouez.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"	St. Louis Bay Bridge	
2nd Sub-division, Duluth to Staples.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"		
3rd Sub-division, Duluth to White Bear Lake.	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"		
4th Sub-division, Deerwood to Ironton Depot..	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"		
5th Sub-division, Carlton to Cloquet.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"		
8th and 9th Sub-divisions, { Brainerd to Big Falls.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"	Big Fork and Little Fork River Bridges	
Big Falls to International Falls.....	18' 2"	17' 11"	17' 9"	17' 6"	17' 3"	17' 0"	16' 6"	19' 3"	12' 0"		

Note:—Limit of load measurements based on 52' cars with 42' truck centers. Heights and widths in table allow 6 inches clearance. Table is based on open car loading equally divided on either side of center line of car.

S. A. ANDERSON, Asst. Superintendent. J. J. AUGER, Trainmaster. J. F. PETERSON, Trainmaster. C. E. JOHNSON, Trainmaster-Roadmaster. E. J. WIGG, Chief Dispatcher.