

NORTHERN PACIFIC RAILWAY COMPANY

LAKE SUPERIOR DIVISION

TIME 50B TABLE

In Effect at 12:01 A. M. Central or 90th Meridian Time.

SUNDAY, APRIL 20, 1924.

For the Government of Employes only. The Company reserves the right to vary therefrom at pleasure. Be positive that you have the Current Time Table and destroy all previous numbers. Read carefully the Special Instructions and always have for reference a copy of TRANSPORTATION RULES.

C. L. NICHOLS,
General Manager.

NEWMAN KLINE,
General Superintendent.

W. H. STRACHAN,
Superintendent.

P. H. McCAULEY,
General Superintendent of Transportation.

WESTWARD

FIRST SUB-DIVISION
(MAIN LINE)

EASTWARD

THIRD CLASS				FIRST CLASS				TIME TABLE No. 50B April 20, 1924. Succeeding No. 50A				FIRST CLASS				THIRD CLASS						
729				53		51		STATIONS				52		54		730						
Way Freight				Passenger		Passenger		Telegraph Offices and Calls				Passenger		Passenger		Way Freight						
Tue. Thur. and Sat.				Daily		Daily						Daily		Daily		Mo. We. and Fri.						
L	8.00AM			L	4.40PM	L	8.45AM	AD	ASHLAND	D	75.8	Yard	A	6.45PM	A	11.15AM	A	1.30PM				
f	8.15			s	4.50	s	8.55	Crossing	4.6	Track Conn.							f	1.10				
f	8.35			f	5.02	f	9.08	ASHLAND JCT.	5.6		71.2	None	s	6.34	s	11.00	f	12.55				
f	8.55			f	5.15	f	9.22	Crossing	5.6				f	6.22	f	10.49	f	12.40				
f	9.21			f	5.19	f	9.26	MOQUAH	6.1		65.6	32	f	6.08	f	10.39						
s	9.39			f	5.31	f	9.39	INO	1.8		59.5	30	f	6.05	f	10.31						
f	10.15			f	5.42	f	9.48	SPIDER	5.6		57.7		f	5.53	f	10.18						
f	10.30			s	5.42	s	9.48	TOPSIDE	4.7		52.1	30	f	5.42	f	10.08	s	11.30AM				
f	10.40			f	5.54	f	9.58	RV	IRON RIVER	D	47.4	30	s	5.30	f	9.58	s	9.20				
f	10.45			f	6.03	f	10.04	Crossing	4.0				f	5.23	f	9.53	f	9.09				
f	11.04			f	6.08	f	10.07	MUSKEG	2.7		43.4	30	f	5.20	f	9.50	f	9.01				
f	11.14			f	6.16	f	10.15	TARTER	1.3		40.7	13	f	5.11	f	9.42	f	8.57				
f	11.20			f	6.20	f	10.18	BX	BRULE	D	39.4	35	f	5.07	f	9.39	f	8.42				
f	11.30			f	6.26	f	10.24	BELLWOOD	1.5		35.8	Spur	f	5.01	f	9.34	f	8.34				
f	11.50AM			f	6.29	f	10.28	BLUEBERRY	2.5		34.3	31	f	4.57	f	9.30	f	8.29				
f	12.15PM			f	6.35	f	10.35	MN	MAPLE	D	31.8	13	f	4.51	f	9.24	f	8.21				
f	12.40			f	6.40	f	10.41	WIEHE	2.6		30.3	22	f	4.46	f	9.18	f	8.14				
A	12.45PM			f	6.47	f	10.49	AR	POPLAR	D	27.7	16	f	4.38	f	9.10	f	8.14				
				f	6.54	f	10.57	WENTWORTH	3.2		25.5	20	f	4.30	f	9.01	f	7.55				
				f	6.58	f	11.02	AMNICON FALLS	3.2		22.3		f	4.26	f	8.57						
				f	7.05	f	11.10	CUTTER	1.8		19.1	20	f	4.19	f	8.50						
								PARKDALE	3.0		17.3		f	4.15PM	L	8.45AM						
								ALLOUEZ	1.8		14.3	70										
								N. W. C. and G. N. Crossings	1.8													
								Interlocked	1.8													
								Track Conn.														
								SP	EAST END	D	12.5	Yard	L	4.15PM	L	8.45AM	L	7.35AM				
								C. St. P. M. & O. Crossing														
								Interlocked														
								Track Conn.														

BETWEEN EAST END AND DULUTH TRAINS WILL BE GOVERNED BY DULUTH AND SUPERIOR TERMINALS TIME TABLE

A 2.00PM				A 7.50PM				A 12.05PM				L 3.35PM				L 8.00AM				L 6.00AM			
Tue. Thur. and Sat.				Daily		Daily		DULUTH				Daily		Daily		Mo. We. and Fri.							
4.09				2.30		2.33		DU				2.30		2.30		3.45							
15.1				25.3		24.8		DN				25.3		25.3		16.8							
								Time Over Sub-division															
								Average Speed Per Hour															

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

SPECIAL INSTRUCTIONS, PAGES 6, 7 AND 8.

WESTWARD

SECOND SUB-DIVISION (MAIN LINE)

EASTWARD

TIME TABLE No. 50B April 20, 1924 Succeeding No. 50-A. STATIONS Telegraph Offices and Calls. Table with columns for Third Class, Second Class, First Class, and Third Class, including station names like Duluth, Staples, and various passenger/freight times.

BETWEEN CENTRAL AVE. AND DULUTH TRAINS WILL BE GOVERNED BY DULUTH AND SUPERIOR TERMINALS TIME TABLE.

Main time table grid with columns for Westward and Eastward directions, listing stations from Duluth to Superior and corresponding train times for various classes and services.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. AUTOMATIC BLOCK BETWEEN CARLTON AND CENTRAL AVENUE. DOUBLE TRACK BETWEEN STATE LINE AND ANTON. SPECIAL INSTRUCTIONS PAGES 6, 7 AND 8.

WESTWARD

THIRD SUB-DIVISION (MAIN LINE)

Table with columns for Third Class (727, 723, 721, 627), Second Class, and First Class (61, 63, 65, 71, 67, 79, 77). Includes 'TIME TABLE No. 50B' and 'STATIONS'.

BETWEEN DULUTH AND WEST DULUTH JCT. TRAINS WILL BE GOVERNED BY DULUTH AND SUPERIOR TERMINALS TIME TABLE.

Main time table grid with columns for departure/arrival times, station names (e.g., WEST DULUTH JCT., SMITHVILLE, BARNUM, WHITE BEAR), and class designations.

NOTE: Passenger trains will run from White Bear to Bald Eagle and return as follows and will be handled by train orders. Lv. White Bear 7.11 a.m. Ar. Bald Eagle 7.14 a.m. Ar. White Bear 7.17 a.m. Daily except Sunday.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. AUTOMATIC BLOCK BETWEEN WHITE BEAR AND WEST DULUTH JUNCTION.

THIRD SUB-DIVISION (MAIN LINE)

EASTWARD

Summary table with columns for First Class (78-66), Second Class (628), and Third Class (722-728). Includes 'TIME TABLE No. 50B' and 'STATIONS'.

BETWEEN WEST DULUTH JCT. AND DULUTH TRAINS WILL BE GOVERNED BY DULUTH AND SUPERIOR TERMINALS TIME TABLE

NOTE: Passenger trains will run from White Bear to Bald Eagle and return as follows and will be handled by train orders.

Main time table grid with columns for arrival/departure times, station names (e.g., WEST DULUTH JCT., SMITHVILLE, etc.), and class codes.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. AUTOMATIC BLOCK BETWEEN WHITE BEAR AND WEST DULUTH JUNCTION. SPECIAL INSTRUCTIONS, PAGES 6, 7 AND 8.

WESTWARD

EIGHTH SUB-DIVISION
(CUYUNA NORTHERN RAILWAY)

EASTWARD

THIRD CLASS			SECOND CLASS		FIRST CLASS		TIME TABLE No. 50B. April 20, 1924. Succeeding No. 50A.	FIRST CLASS		SECOND CLASS		THIRD CLASS	
741	739	737	801		800	738		740	742				
Soo Line Way Freight 189	Mixed	Mixed	Soo Line Passenger 165	Water, Fuel, Scales, Turn Tables, Wye and Yard Limits.	Station Number.	Distance from Deerwood.		Distance from Trommald.	Car Capacity of Staging.	Soo Line Passenger 164	Mixed	Mixed	Soo Line Way Freight 188
Ex. Sun.	Ex. Sun.	Ex. Sun.	Ex. Sun.						Ex. Sun.	Ex. Sun.	Ex. Sun.	Ex. Sun.	
	L 10:40AM	L 7:30AM		X Y	160	0.0	DO	DEERWOOD 3.9	DN	7.2		A 10:20AM	A 2:40PM
	L 8:15AM	10:55	7:45	WY X	LK 4	3.9	RN	IRONTON Soo Line 0.7 Track Connection	D	3.3		10:05	2:25
	A 8:18AM	10:58	7:48			4.6		SOO JUNCTION Soo Line 0.6 Track Connection		2.6		L 7:06AM	10:02
						5.2		C. M. L. JCT. 2.0		2			2:22
						7.2		TROMMALD		0.0		L 9:50AM	L 2:10PM
	A 11:10AM	A 8:00AM											
Ex. Sun.	Ex. Sun.	Ex. Sun.	Ex. Sun.						Ex. Sun.		Ex. Sun.	Ex. Sun.	Ex. Sun.
.03 14.0	.30 14.4	.30 14.4	.02 21.0					Time Over Sub-division Average Speed per Hour	.02 21.0		.30 14.4	.30 14.4	.03 14.0

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION, EXCEPT

No. 737 is superior No. 738.

Special Instructions Pages 7 and 8.

No. 739 is superior to No. 740.

SPECIAL INSTRUCTIONS.

FIRST SUBDIVISION.
(MAIN LINE.)

- At Ashland**—Trainmen and Enginemen will familiarize themselves with the schedule of C. & N. W. and Omaha first class trains, when using main tracks.
- Bridge Restrictions**—Speed will be restricted over Bridge O, Vaughan Avenue, Ashland, Bridge 5, Fish River, Bridge 29, Iron River, Bridge 48, Poplar River; Bridge 49, Middle River and Bridge 53, Amnicon River, as follows:
Single or double header engine classes T, Q-3, Q-4, W, W-1, W-2 and W-4 will not exceed eight (8) miles per hour.
Engines, classes Q-5, Q-6, W-3, W-5, Z, Z-1, Z-2, Z-3 and Z-4 will not be permitted—Speed will be restricted over Bridge 37, Brule River, as follows:
Single header engine classes W, W-1, W-2 and W-4 will not exceed eight (8) miles per hour.
Double header engine classes Q, Q-1, Q-2, Q-3, Q-4, R, S, S-1, S-2, S-3, S-4, S-10, X, Y, Y-1, Y-2, Y-3, Y-4 and Y-5 will not exceed twenty (20) miles per hour.
Single and double header engine classes Q-5, Q-6, W-3, W-5, Z, Z-1, Z-2, Z-3 and Z-4 will not be permitted.
Double header engine classes W, W-1, W-2 and W-4, will not be permitted.
- Speed Restrictions**—All trains, ten (10) miles per hour between 22nd Ave., West and 7th Ave., West, Ashland.
Class T—Engines, 20 miles per hour, on curves 15 miles per hour.
- Register Stations**—
Central Avenue Passenger Station.
Ashland Freight Office and C. & N. W. Ry. Passenger Station.
- Derail Switches**—
Wentworth..... East End Siding.
Poplar..... West End Siding.
Wiehe..... East End Siding.
Maple..... West End Siding.
Tarter..... West End Siding.
Iron River..... West End Transfer Track.

SECOND SUBDIVISION.
(MAIN LINE.)

- At Brainerd**—
Connection with the Minnesota & International Railway just west of the Mississippi River Bridge is governed by automatic signals.
- Pusher Districts**—
Central Avenue to Sawyer.
- Double Track Switches**—at Anton will be kept set and locked for westward track. Switch at State Line is handled from tower.
- Retainers**—
Retainers must be used on grades between Iverson and Central Avenue and other grades where in the judgment of the Enginemen they are necessary; Conductors are responsible for the application of retaining valves on commencement of descent and for their release at the foot of grades. Such full use of retainers is required as will prevent placing an undue amount of braking on any particular car or cars and as will afford full opportunity for enginemen to recharge and retain a maximum air pressure at all points.

- At Carlton**—Eastward Freight Trains and light engines from the Second Sub-division will head in on North Siding.
Westward Trains, Switch Crews or Branch Trains will not use North Siding without permission from the Dispatcher.
- At Staples**—When freight trains have received train orders and clearance at the yard office at Staples, the position of the train order signal at passenger station is to be disregarded.
- Engine Restrictions**—Engines, Classes W, W-1, W-3 and W-4 must not use the following tracks except that Class W engines may turn on the wye at McGregor by using the east leg first.
Wrenshall..... Brick and Hart Spurs.
Carlton..... Zenith Gravel Pit Track.
Iverson..... South Spur.
Tamarack..... Stock Track.
McGregor..... Class W engines turning on Wye, will use East Leg first.
Aitkin..... Hole Track and Power House Spur.
Deerwood..... Loading Track.
Brainerd..... Track No. 17 in New Yard.
Motley..... North Spur.
- Speed Restrictions**—At Brainerd twelve (12) miles per hour between East Switch and Passenger Station.
At Aitkin—15 miles per hour through village.
Trains handling loaded ore cars will not exceed twenty-five (25) miles per hour between Deerwood and Aitkin, Kimberly and Lansford and Sawyer to Hill Avenue.
- Joint Tracks**—Trainmen and Enginemen when using Soo Line Tracks between Cedar Lake Junction and Kennedy Mine will supply themselves with Soo Line Time Tables which may be procured at McGregor. Trainmen and Enginemen will familiarize themselves with the schedules of the St. Paul Division and M. & I. first class trains at Brainerd, when using Main Tracks at that point.
- At Loerch**—Territory between Loerch and Omaha Mine is a part of Loerch Yard.
- At Deerwood**—Territory between Deerwood and Orelands is a part of Deerwood Yard.
- Special Stops, Connections, Etc.**—
No. 57 will wait at Brainerd for No. 11.
No. 58 will wait at Staples for No. 8.
No. 58 will wait 45 minutes at Staples for No. 4.
No. 60 will wait at Staples for No. 2.
No. 56 will wait at Staples for No. 10, at Brainerd for No. 31.
Nos. 58 and 60 will stop at all stations to discharge passengers from Fargo and west and from Red River Branch.
Freight trains authorized to carry adult male passengers from and to points at which these trains stop for other purposes:
Nos. 727 and 728 between Carlton and Brainerd.
Nos. 719 and 720 between Brainerd and Staples.
- Register Stations**—
Central Avenue Passenger Station.
Carlton Telegraph Office.
Brainerd Telegraph Office.
Staples. Yard Office or Telegraph Office.

- Bulletin Stations**—
Duluth Passenger Station.
Duluth Yard Office.
Duluth Roundhouse.
Carlton Telegraph Office.
Brainerd Passenger Station.
Brainerd Round House.
Staples Passenger Station.
Staples Yard Office.
Staples Roundhouse.

- Standard Time Clocks**—
Duluth Passenger Station.
Carlton Telegraph Office.
Staples Passenger Station.
Brainerd Passenger Station.

- Watch Inspectors**—
John Howard..... Duluth, 432 West 1st St.
O. F. Wennerlund..... Duluth.
C. A. Swanson..... Superior.
C. L. Burnett..... Brainerd.
Jesse L. Cross..... Staples.

- Derail Switches**—
Iverson..... East End Siding.
Iverson..... East End Loading Track.
Sawyer..... East End North Siding.
Wright..... West End Loading Track.
McGregor..... East End West Siding.
McGregor..... West End Transfer Track.
Loerch..... East End Omaha Mine Spur.
Brainerd..... West End Hospital Spur.

- Commercial Spurs**—
Zenith Gravel Pit Spur..... Miles from Duluth 30.2 Car Capacity 30
Grass Twine Spur..... 72.6 5

THIRD SUBDIVISION.
(MAIN LINE.)

- Pusher Districts**—West Duluth to Otter Creek.
- At West Duluth Junction**—All eastward trains must come to a stop at double track switch and know that track is not obstructed by trains crossing to Grassy Point Line or the Fond du Lac Branch.
- At White Bear**—Trainmen and Enginemen will familiarize themselves with the schedules of the Saint Paul Division first class trains when using main track at that point.
- Retainers**—Retainers must be used on grades between Brownell and West Duluth Junction. Conductors are responsible for application of retaining valves on commencement of descent, and for their release at foot of grade. Such full use of retainers is required as will prevent placing an undue amount of braking on any particular car or cars, and as will afford full opportunity for Enginemen to recharge and retain maximum air pressure at all points.
- Engine Restrictions**—Engines Classes W, W-1, W-3 and W-4 must not use the following tracks:
Pine City..... Beyond Highway Crossing east of depot on House track.
Rock Creek..... Beyond Highway Crossing on Loading Spur.
Rush City..... Mercantile Spur west End of Yard.
Harris..... Spur Track west end of Yard.
Hugo..... House and Stock Tracks West End.
- Speed Restrictions**—Eastward Freight Trains must not exceed any one mile in two minutes and thirty seconds, Brownell to Smithville and must use not less than twelve minutes, Brownell to Short Line Park and nine minutes, Short Line Park to Smithville. These restrictions do not apply to light engines or to engines running with caboose only.
Freight Trains and Light Engines ten (10) miles per hour through Village Limits, Rush City.
Rock Creek. All trains reduce speed to 15 miles per hour.
- Special Stops and Connections—Etc.**
Freight Trains authorized to carry adult male passengers from and to points at which these trains stop for other purposes:
Nos. 721 and 722 between Hinckley and Rush City.
Nos. 723 and 724 between Carlton and Hinckley.
Nos. 67, 68, 77, 78 and 79 will stop on signal at Collette, one and one fourth miles east of Bald Eagle.
Nos. 71 and 72 will stop on flag at Sloan's crossing, one and three-fourths miles east of Brownell.
- Registering Stations**—
West Duluth Passenger Station.
Carlton Telegraph Office.
Hinckley Passenger Station.
Wyoming " "
White Bear " "
- Register Exceptions**—Eastward trains register at Wyoming by ticket, Form 608, and will not require clearance if Train Order Signal is in clear position Eastward Trains register at West Duluth by ticket, Form 608, and will not require clearance if train order signal is in clear position.

SPECIAL INSTRUCTIONS—Continued.

THIRD SUBDIVISION—Continued.

- 10. **Bulletin Stations—**
 Duluth Passenger Station.
 Duluth Yard Office.
 Duluth Roundhouse.
 Carlton Telegraph Office.
 Hinckley Passenger Station.
 Rush City " "
 White Bear " "
 - 11. **Standard Time Clocks—**
 Duluth Passenger Station.
 Carlton Telegraph Office.
 Hinckley Passenger Station.
 Rush City " "
 White Bear " "
 - 12. **Watch Inspectors—**
 John Howard..... Duluth, 432 West 1st St.
 O. F. Wennerlund..... Duluth.
 George Cook..... White Bear.
 - 13. **Derail Switches—**
 Smithville..... East End Spur.
 Short Line Park..... East End Siding.
 Mile Post 17..... East End Spur.
 Brownell..... East End Siding.
 Frieland..... West End Loading Track.
 Stacy..... West End House Track.
 Garen..... West End Siding.
 Bald Eagle..... East End Transfer Track.
 Thornton Siding..... East End Siding.
 - 14. **Commercial Spurs—**
- | | Miles from Duluth | Car Capacity |
|-------------------------|-------------------|--------------|
| Power Company Spur..... | 17.0 | 4 |
| Garen Siding..... | 130.7 | 8 |
| Thornton Siding..... | 45.7 | 80 |

FOURTH SUBDIVISION.

(CODA BRANCH.)

- 1. **Connections—**No. 96 will wait at Iron River for connections.
- 2. **Register Stations—**
 Iron River Passenger Station.
- 3. **Special Stops—**Trains 95 and 96 will carry passengers from and to points at which these trains stop for other purposes.

FIFTH SUBDIVISION.

(CLOQUET BRANCH.)

- 1. **Register Stations—**Carlton and Cloquet. Telegraph Office.
- 2. **Standard Time Clock—**Carlton. Telegraph Office.
- 3. **Bulletin Station—**Carlton. Telegraph Office.
- 4. **Watch Inspector—**L. A. Freeman, Cloquet.

SIXTH SUBDIVISION.

(GRANTSBURG BRANCH.)

- 1. **Bridge Restrictions—**Speed will be restricted over Bridge 5, St. Croix River, as follows:
 Engines, classes S, S-1, S-2, S-3, S-4, S-10 and Q eight (8) miles per hour.
 Double header engines, class F-1, eight (8) miles per hour.
 Engines, classes T, Q-1 and heavier, not permitted.
 - 2. **Speed Restrictions—**Trains, four (4) miles per hour on curve one quarter of a mile west of Grantsburg.
 - 3. **Register Stations—**
 Rush City Passenger Station.
 Grantsburg Passenger Station.
 - 4. **Bulletin Station—**
 Rush City Passenger Station.
 - 5. **Standard Time Clock—**
 Rush City Passenger Station.
 - 6. **Commercial Spurs—**
- | | Distance from Rush City | Car Capacity |
|----------------------|-------------------------|--------------|
| St. Croix River..... | 5.1 | 6 |
| Lind Spur..... | 10.5 | 4 |
| Anderson's Spur..... | 15.0 | 4 |
- 7. **Special Stops—**Anderson's Spur flag stop for Trains 735, 736, 101 and 102.

SEVENTH SUBDIVISION.

(TAYLORS FALLS BRANCH.)

- 1. **Bridge Restrictions—**Speed will be restricted over Bridges 18, 18.1, 18.2 and 19 as follows:
 Engines classes W, W-1, W-2, W-4, T, Q-3 and Q-4, eight (8) miles per hour.
 Double header engine, classes S, S-1, S-2, S-3, S-4, S-10 and Q, Q-1 and Q-2, eight (8) miles per hour.
 Engine classes Q-5, Q-6, W-3, W-5, Z, Z-1, Z-2, Z-3 and Z-4, not permitted.
- 2. **Special Stops, Etc.—**Passenger trains will stop on flag at Russell Beach.
- 3. **Register Stations—**
 Wyoming. Passenger Station.
 Taylors Falls Passenger Station.
- 4. **Derail Switches—**
 Franconia..... West End Siding.

EIGHTH SUBDIVISION.

(IRONTON BRANCH.)

- 1. **At Ironton—**Track from Soo Line connection east of depot to connection about one mile west of depot will be used jointly by Northern Pacific and Soo Line Rys. Movements over this track must be made at a speed that will insure safe operation.
 Trains using **Soo Line Track** between Ironton and Croft Mine connection will supply themselves with **Soo Line** time table which may be procured at Ironton. The Minneapolis, St. Paul and Sault Ste. Marie Ry. (Soo Line) have acquired running rights on Northern Pacific Ry. Co. tracks, 8th Subdivision, between Soo Line Junction and Maroco Mine. Trains moving on these tracks within these limits must be governed and comply with Rule 93 of Book of Transportation Rules, which reads as follows:
 "Within yard limits the main tracks may be used, protecting against first class trains. Second and third class and extra trains (including passenger extras) must move within yard limits prepared to stop unless the main track is seen or known to be clear."
- 2. **Register Stations—**Ironton Passenger Station.
 Deerwood Passenger Station.

ALL SUBDIVISIONS.

- 1. To insure personal safety, operators having train orders or messages to deliver to passing trains should stand to the right hand side of train, and avoid standing between tracks, when possible to do so.
- 2. Conductors of work trains will issue instructions to their flagmen in writing, except when flagman goes back immediately to stop approaching trains.
- 3. **Speed Restrictions—**Passenger Trains must not exceed a speed of one minute or sixty (60) seconds per mile.
 Class W, W-1, W-2 and W-3 Engines thirty (30) miles per hour and Light Engines backing up twenty (20) miles per hour.
 All trains fifteen (15) miles per hour passing telegraph offices where train orders are received.
 Trains fifteen (15) miles per hour through Crossovers entering Passing Tracks and thirty (30) miles per hour through Interlocking Plants.
- 4. Sidings blocked by occupied outfit cars must not be used to meet or pass trains.
- 5. When necessary to take slack of freight trains with helper engine on the rear, it should be done by the helper engine.
- 6. Except as otherwise provided or when running light without Conductor, Enginemen will only be required to consult register at initial or starting point.
- 7. Before moving a work or wrecking train whistle signal (14-b) or (14-h) must be sounded for the protection of men working about such trains.
- 8. The following signs when placed in columns provided indicate:
 W—Water.
 C—Fuel.
 O—Track scales.
 T—Turntable.
 Y—Wye.
 D—Day office only.
 DN—Day and night office.
 P—Telephone.
 X—Yard limits.

AUTHORIZED SURGEONS.

LOCATION OF STRETCHERS (S)

- Dr. A. W. IDE, Chief Surgeon, N. P. B. A. Hospital, St. Paul.
 - Dr. J. A. EVERT, Associate Surgeon, N. P. B. A. Hospital, St. Paul.
 - Dr. H. G. COLLIE, Associate Surgeon, N. P. B. A. Hospital, St. Paul.
 - Dr. M. A. SHILLINGTON, Associate Surgeon, N. P. B. A. Hospital, St. Paul.
 - Dr. H. J. HALL, Associate Surgeon, N. P. B. A. Hospital, St. Paul.
 - Dr. H. G. REINEKE, Associate Surgeon, N. P. B. A. Hospital, St. Paul.
- Hospital Phone Nestor 2866.

LOCAL SURGEONS

- DR. J. W. JESION, Room 320, Genl. Office Bldg., St. Paul. Tel. Ceder 2340.
 St. Paul Car Foreman's Office (s).
 St. Paul 4th Street Yard Office (s).
 St. Paul Mississippi St. Round House (s).
 St. Paul Como Shops (s).
 St. Paul Fourth Street Freight Station (s).
- DR. I. C. McDONALD, 601 Syndicate Bldg., Minneapolis.
- DR. R. R. CRAMNER, 601 Syndicate Bldg., Minneapolis.
- DR. C. A. UNDINE, 636 Syndicate Bldg., Minneapolis.
 E. Minneapolis (s).
 Minneapolis Car Foreman's Office (s).
 Minneapolis Tool Car (s).
 Minneapolis Northtown Transfer (s).
- DR. J. H. McCLANAHAN, White Bear (s).
- DR. T. S. McCLANAHAN, White Bear.
- DR. W. R. HUMPHRY, Stillwater.
 Wyoming (s).
- DR. J. A. POIRIER, Forest Lake.
- DR. C. W. PAULSON, North Branch.
- DR. A. J. STOWE, Rush City (s).
- DR. A. O. FLOM, Chisago City.
- DR. E. I. BUNKER, Grantsburg.
- DR. E. L. STEPHAN, Hinckley (s).
- DR. F. R. WALTERS, Moose Lake.
- DR. O. S. WATKINS, Carlton.
- DR. J. D. GILBERT, Carlton (s).
- DR. J. F. DIXON, Carlton.
- DR. JAMES FLEMING, Cloquet (s).
- DR. C. S. KNOX, 219 Albany Block, East End, Superior.
- DR. W. H. SCHNELL, 28 Columbia Bldg., Superior.
- DR. F. C. SARAZIN, 28 Columbia Bldg., Superior.
 Superior Freight Station (s).
 Central Avenue (s).
 East End Station (s).
- DR. A. J. BRADEN, 400 Lyceum Bldg., Duluth.
- DR. C. M. SMITH, 400 Lyceum Bldg., Duluth.
- DR. C. L. HANEY, Sloan Bldg., Duluth.
- DR. O. E. HEIMARK, Sloan Bldg., Duluth.
- DR. GEO. C. DOYLE, Sloan Bldg., Duluth.
 Duluth Yard Office at Rice's Point (s).
 Dock 2, Duluth (s).
 Dock 6, Duluth (s).
 Duluth Union Depot (s).
 Tool Car, Duluth (s).
 West Duluth (s).
- DR. M. S. HOSMER, Ashland, Wis. (s).
- DR. F. G. JOHNSON, Iron River, Wis.
- DR. T. R. SPEARS, Washburn, Wis.
- DR. N. L. KLOVE, Wright, Minn.
- DR. B. W. KELLY, Aitkin, Minn. (s).
- DR. S. S. SHANNON, Ironton, Minn.
- DR. B. I. DERAUF, Brainerd, Minn.
- DR. G. I. BADEAUX, Brainerd, Minn.
 Brainerd Shops (s).
 Brainerd Passenger Station (s).
- DR. F. H. ALLEN, Staples (s).
- DR. F. H. KNICKERBOCKER, Staples.

SPECIALISTS

- DR. A. C. HEATH, Nose and Throat, 339 Lowry Bldg., St. Paul.
- DR. L. A. NELSON, Oculist and Aurist, 734 Lowry Bldg., St. Paul.
- DR. H. S. CLARK, Oculist and Aurist, 616 Syndicate Bldg., Minneapolis.
- DR. F. N. KNAPP, Oculist and Aurist, 100 Sherman Bldg., Duluth.
- DR. C. G. NORDIN, Oculist and Aurist, Brainerd.

NOTES

SURGEONS will attend when called upon officially, to all cases of accident occurring to employes or passengers. In cases of sickness it is the intention to limit medical service to the locality or town where a surgeon resides, unless some urgent necessity exists, for which distinct official authority must be had in accordance with established regulations.

RAILWAY OFFICIALS are required to call on the nearest authorized surgeons whenever practicable, when surgical or medical services are needed. When such are accessible, the Association will not be responsible for bills for medical services rendered by any other physician. In the event of a sudden emergency, arising from accident, if necessary proper surgical aid should be procured until the arrival of a regularly appointed surgeon, when the case should be placed in his charge, and in no case should the service of any but an authorized company surgeon be continued at the expense of the Railway Company or of the Association after such surgeon is able to assume charge of the case.

BOARD AND NURSING are furnished only at our own hospital. We are not responsible for bills incurred elsewhere unless specially authorized or approved by the Chief Surgeon, and then only in critical cases of injury or illness occurring in the discharge of duty.

SPEED TABLE.

Time Per Mile	Miles	
	Mins.	Secs. Hour
1	..	60
1	1	59
1	2	58
1	3	57.1
1	4	56.2
1	5	55.3
1	6	54.5
1	7	53.7
1	8	52.9
1	9	52.1
1	10	51.4
1	12	50
1	15	48
1	20	45
1	25	42.3
1	30	40
1	40	36
1	45	34.3
1	50	32.7
2	..	30
2	10	27.6
2	15	26.6
2	20	25.7
2	30	24
2	40	22.5
2	45	21.8
2	50	21.2
3	..	20
3	9	19
3	20	18
3	31	17
3	45	16
4	..	15
5	..	12
6	..	10
7	30	8
10	..	6

TONNAGE RATING FREIGHT ENGINES.

	Class of Engines											
	E 3 D 2-3		D 5 and S 10		T		W 4		W		W 3	
Maximum Train Limit.	65 Cars	70 Cars	99 Cars	99 Cars	99 Cars	99 Cars	99 Cars	99 Cars	99 Cars	99 Cars	99 Cars	99 Cars
Westward.	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars
Ashland to Iron River..	610	14	720	16	1000	22	1200	24	.....	.....	.....	.....
Iron Riverto Central Ave.	700	16	800	18	1100	24	1300	26	.....	.....	.....	.....
Duluth to Sawyer, 2nd S-d	.....	.....	800	18	1150	26	1350	28	1550	35	1800	40
Sawyer to Brainerd	.....	.....	1600	36	2300	52	2700	60	3100	70	3600	80
Brainerd to Staples	.....	.....	2000	45	2600	58	3100	70	3500	80	4000	80
Duluth to Carlton, 3rd S-d	.....	.....	600	14	950	21	1150	26	1200	25	1500	30
Carlton to Hinckley	.....	.....	1700	39	2300	52	2700	55	3100	70	3600	80
Hinckley to White Bear	.....	.....	2000	45	2600	58	3000	60	3500	80	4000	80
Eastward.												
Staples to Duluth	.....	.....	2000	42	2650	56	2950	66	3350	80	3800	80
Central Ave. to Iron River	650	15	750	17	1150	20	1400	24	.....	.....	.....	.....
Iron River to Ashland	840	19	940	21	1350	25	1600	28	.....	.....	.....	.....
White Bear to Hinckley	.....	.....	1900	46	2250	55	2550	65	3350	80	3500	80
Hinckley to Groningen	.....	.....	1450	35	1850	50	2250	60	2750	65	3300	80
Groningen to Duluth	.....	.....	1900	46	2250	55	2550	65	3350	80	3500	80

Above rating is based on trains consisting of loads only and rating is calculated for an average speed of ten miles per hour.

For each car added to number specified above, deduct ten tons from rating of engine; for each car less than number specified above, add ten tons to rating of engine.

Westward trains with two engines will not handle more tonnage than the combined rating of both engines.

In figuring tonnage of the car, less than 1,000 pounds will not be counted; one thousand pounds or more will be counted one ton.

To secure full tonnage rating a fraction of weight of car more than rating must be counted rather than a fraction less.

Train dispatcher will determine rate to be handled when reduction is necessary account of weather conditions, except that for temperature alone the following rule will be applied by all concerned:

Reduce rating—5% between 30 above and 20 above; 10% between 20 and 10 above zero; 15% between 10 above and 10 below zero; 25% when temperature is below 10 below zero.

When engines are unable to haul the rating, Engineman will designate to conductors the number of tons to be reduced and will wire the Superintendent why the reduction is necessary. It must be distinctly understood that the responsibility for reducing train below rating of engine must be assumed by the Engineman and not the conductor.

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

In making up or filling out trains the following rules will be followed as far as practicable:

Solid trains of loads or solid trains of empties.

Where trains consist of both loads and empties, loads in the middle with empties divided between the head and rear end of trains.

Maximum tonnage for way freight trains will be 200 tons less than tonnage for through freights.

Tonnage for time freights will be regulated by bulletin.

MAXIMUM CLEARANCES.

LIMIT OF LOAD MEASUREMENT.

	Height Above Top of Rail.																		
	1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7 ft. 6 in. Wide	8 ft. Wide	8 ft. 6 in. Wide	9 ft. Wide	9 ft. 6 in. Wide	10 ft. Wide	10 ft. 2 in. Wide	10 ft. 6 in. Wide	11 ft. Wide	11 ft. 6 in. Wide	Max. Height	Max. Width
First Sub-division, Ashland to East End	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	17'-5"	17'-5"	17'-2"	16'-7"	16'-2"	15'-9"	15'-3"	15'-1"	14'-9"	14'-3"	13'-9"	21'-0"	11'-6"
Second Sub-division, Duluth to Staples	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	18'-2"	18'-2"	17'-9"	17'-3"	16'-9"	16'-3"	15'-9"	15'-4"	15'-2"	14'-10"	14'-4"	13'-10"	21'-0"	11'-6"
Third Sub-division, Duluth to White Bear	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	18'-0"	17'-4"	16'-11"	16'-5"	16'-0"	15'-7"	15'-1"	14'-8"	14'-6"	14'-3"	13'-10"	13'-4"	21'-0"	11'-6"
Fourth Sub-division, Coda to Iron River	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	11'-6"
Fifth Sub-division, Carlton to Cloquet	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	11'-6"
Sixth Sub-division, Grantsburg to Rush City	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	11'-6"
Seventh Sub-division, Taylors Falls Yard to Wyoming	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	11'-6"
Eighth Sub-division, Deerwood to C. M. L. Mine	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	11'-6"

G. W. ATMORE,
Asst. Superintendent.

D. M. DRISCOLL,
Asst. Superintendent.

F. L. BIRDSALL,
Trainmaster.

H. J. COUNCILMAN,
Trainmaster.

A. S. CRITCHFIELD,
Trainmaster.

F. E. POTTER,
Chief Dispatcher.

