

# NORTHERN PACIFIC RAILWAY COMPANY

## LAKE SUPERIOR DIVISION

# TIME

# 51

# TABLE

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

**SUNDAY, JUNE 15, 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

SECOND SUB-DIVISION  
(MAIN LINE)

EASTWARD

THIRD CLASS		SECOND CLASS	FIRST CLASS					TIME TABLE No. 51 June 15, 1924 Succeeding No. 50-B.					FIRST CLASS					THIRD CLASS			
719	727	623	65	63	57	59	55	STATIONS		58	56	60	64	66	728	720					
Way Freight	Way Freight	Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Telegraph Offices and Calls		Passenger	Passenger	Passenger	Passenger	Passenger	Way Freight	Way Freight					
Ex. Sun.	Ex. Sun.	Daily	Daily	Daily	Daily	Daily	Daily	DU DULUTH 8.3 DN		Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Ex. Sun.					
			L 11.30PM	L 2.00PM	L 7.30PM	L 9.10AM	L 7.00AM	WCO	WB	0.0	DU	DULUTH	DN	147.5	A 8.35AM	A 6.08PM	A 10.10PM	A 6.00PM	A 6.30AM		

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

		10.50PM	12.15AM	2.31AM	8.00PM	9.35AM	7.30AM	WY	67	8.8	AJ	CENTRAL AVE.	DN	139.2	800	A 8.10AM	A 5.38PM	A 9.46PM	A 5.24PM	A 5.40AM			
								X			G. N. Crossing Interlocked	2.4	Track Connection										
		11.00	12.22	2.34	8.05	9.39	7.36		69	10.7	Interstate Ry. Interlocked	POKEGAMA 5.0	Track Connection	136.8	80	f 8.05	f 5.34	9.42	5.21	5.34			
		11.20	12.35	2.40	8.16	9.48	7.47		74	15.7	WG	ANTON 2.7		131.8	44	f 7.56	f 5.25	9.34	5.16	5.23			
		11.31	12.44	2.44	8.22	9.53	7.52		78	18.4	G. N. Crossing Interlocked	STATE LINE 1.7		129.1		f 7.52	f 5.20	9.31	5.12	5.17			
		11.38	12.49	2.47	8.26	9.56	7.55		79	20.1		BARKER 3.0		127.4	42	f 7.48	f 5.17	9.28	5.09	5.13			
		11.50PM	12.56	2.51	8.32	10.01	8.07		82	23.1	WQ	WRENSHALL 4.4	DN	124.4	80	f 7.42	f 5.12	9.23	5.06	5.06			
	L 9.25AM	12.05AM	A 1.08AM	A 2.56PM	8.41	10.09	8.16	WY	86	27.5	UN	CARLTON 4.9	DN	120.0		f 7.35	f 5.05	9.17	L 5.01PM	L 4.56AM		A 1.05PM	
		12.60						X			Interlocked	Third Sub-division Crossing											
	f 9.40	1.10			f 8.51	10.18	8.26		91	32.4		IVERSON 4.8		115.1	79	f 7.27	f 4.54	9.10				f 12.46	
	s 10.00	1.30			s 9.02	10.27	8.35	Y	96	37.2	SA	SAWYER 6.5	D	110.3	80	f 7.18	f 4.45	9.02				s 12.26PM	
	f 10.20	1.45			f 9.17	10.38	8.47		102	43.7		CORONA 5.4		103.8	80	f 7.07	f 4.33	8.51				f 11.59AM	
	s 10.38	2.00			s 9.30	10.47	8.57	W	108	49.1	CM	CROMWELL 6.1	DN	98.4	70	f 6.57	f 4.23	8.42				s 11.39	
	s 10.47				s 9.43	10.58	9.09		114	55.2	WT	WRIGHT 6.1	D	92.3	79	f 6.46	f 4.12	8.32				s 11.15	
	s 11.08	2.16			s 9.56	11.08	9.21		120	61.3	TK	TAMARACK 4.0	D	86.2	71	f 6.35	f 4.01	8.22				s 10.53	
	s 11.40	2.31			s 10.05	11.15	9.28		125	65.3		GRAYLING 5.2		82.2	80	f 6.28	f 3.54	8.15				s 10.31	
	f 11.57AM	2.41			f 10.16	11.24	9.38	YWC	129	70.5	MG	McGREGOR 4.0	DN	77.0	E 70 W80	f 6.19	f 3.45	8.07				s 10.00	
	s 12.18PM	3.30			s 10.25	11.31	9.45	X			Soo Line Crossing Interlocked	Track Connection										s 9.33	
	f 12.53	3.45			f 10.35	11.39	9.54		133	74.5		LANSFORD 4.8		73.0	70	f 6.12	f 3.38	8.00				f 9.16	
	s 1.15	4.03			f 10.48	11.49	10.05		138	79.3	KY	KIMBERLY 5.8	D	68.2	80	f 6.04	f 3.30	7.52				s 8.58	
	f 1.39	4.23			s 11.01	11.59AM	10.17	WX	144	85.1		ROSSBURG 6.0		62.4	80	f 5.54	f 3.20	7.43				f 8.36	
	s 2.05	4.45			f 11.11	12.07PM	10.26		150	91.1	KN	AITKIN 4.8	DN	56.4	E 74 W77	f 5.43	f 3.09	7.33				s 8.12	
	f 2.25	5.03			s 11.23	12.16	10.37	XY	155	95.9		CEDAR LAKE 5.6	Track Connection	51.6	79	f 5.35	f 3.00	7.25				f 7.54	
	s 2.45	5.20			f 11.32	12.23	10.44	W	160	101.5	DO	DEERWOOD 4.0	DN	46.0	80	f 5.25	f 2.50	7.16				s 7.33	
	s 2.50-50	5.25-58			f 11.44PM	12.32	10.54		165	105.5		KLONDYKE 5.5		42.0	80	f 5.18	f 2.43	7.09				f 7.18	
	f 3.09	5.43			f 12.01AM	12.44	11.08	WCO	170	111.0		LOERCH 7.2		36.5	80	f 5.09	f 2.33	7.00				f 6.57	
	f 3.32	6.00			f 12.16AM	12.49	11.16	TYX	177	118.2	B	BRAINERD 4.4	DN	29.3	E 95	f 4.56	f 2.20	6.48				L 6.30AM	
	L 7.00AM	A 4.01PM	6.30		f 12.26	12.56	11.23		181	122.6	M. & I. Ry.	BAXTER 5.6	Track Connection	24.9	80	f 4.43	f 2.00	6.41				A 11.42AM	
	f 7.17	7.00			f 12.39	1.05	11.33		187	128.2		SYLVAN 3.4		19.3	80	f 4.33	f 1.49	6.32				f 11.23-55	
	f 7.39	7.15			s 12.47	1.10	11.39		191	131.6	PG	PILLAGER 5.0	D	15.9	80	f 4.27	f 1.42	6.26				s 10.56	
	s 7.52	7.26			f 12.58	1.18	11.48		196	136.6		WHEELOCK 3.7		10.9	80	f 4.18	f 1.31	6.18				f 10.20	
	f 8.12	7.41			s 1.06	1.24	11.55AM	W	199	140.3	MO	MOTLEY 4.1	DN	7.2	E 80 W80	f 4.12	f 1.24	6.12				s 10.10	
	s 8.26	7.55			f 1.17	1.31	12.03PM		203	144.4		HAYDEN 3.1		3.1	80	f 4.05	f 1.16	6.05				f 9.43	
	f 8.42	8.10			A 1.25AM	A 1.35PM	A 12.10PM	WCO	207	147.5	SO	STAPLES	DN	0.0		L 4.00AM	L 1.10PM	L 6.00PM				L 9.30AM	
	A 8.55AM	A 8.30AM						TYX															
	Ex. Sun.	Ex. Sun.	Daily	Daily	Daily	Daily	Daily									Daily	Daily	Daily	Daily	Daily		Ex. Sun.	Ex. Sun.
	1.55	6.04	8.50	.53	.25	5.10	3.55									4.05	4.18	3.46	.23	.44		5.46	2.12
	15.2	15.0	15.7	21.7	46.0	26.9	35.5									34.0	32.3	36.9	50.0	26.2		15.7	13.3

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 5, 7 AND 8.







THIRD SUB-DIVISION (MAIN LINE)

EASTWARD

Summary table for TIME TABLE No. 51, June 15, 1924. Includes columns for First Class (80, 78, 68, 76, 72, 64, 62, 66), Second Class (628), and Third Class (722, 724, 728). Also includes STATIONS, Telegraph Offices and Calls, and Distance from Duluth.

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. Lv. White Bear 7.11 a. m. Ar. Bald Eagle 7.14 a. m. Daily except Sunday. Lv. Bald Eagle 2.35 p. m. Ar. White Bear 2.42 p. m. Daily except Saturday and Sunday. Lv. White Bear 5.42 p. m. Ar. White Bear 5.48 p. m. Daily except Saturday and Sunday.

Main time table grid showing departure and arrival times for various stations including WEST DULUTH JCT., SMITHVILLE, SHORT LINE PARK, BROWNELL, THOMSON, CARLTON, OTTER CREEK, ATKINSON, MAHTOWA, BARNUM, MOOSE LAKE, STURGEON LAKE, WILLOW RIVER, RUTLEDGE, FINLAYSON, GRONINGEN, FRIESLAND, HINCKLEY, MISSION CREEK, BEROUN, PINE CITY, ROCK CREEK, RUSH CITY, HARRIS, NORTH BRANCH, STACY, WYOMING, FOREST LAKE, GAREN, HUGO, BALD EAGLE, and WHITE BEAR. Includes columns for train numbers, directions, and times.

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 FOURTH SUB-DIVISION (CODA BRANCH) EASTWARD

Table for Fourth Sub-Division (Coda Branch) showing train schedules for Third Class (95, 96) and Time Table No. 51 (June 15, 1924). Includes stations like CODA, SLOW BRIDGE, BENA, and IRON RIVER.

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

WESTWARD SEVENTH SUB-DIVISION (TAYLORS FALLS BRANCH) EASTWARD

Table for Seventh Sub-Division (Taylors Falls Branch) showing train schedules for Second Class (725, 726) and First Class (77, 79, 91, 67, 76, 68, 78). Includes stations like TAYLORS FALLS YARD, FRANCONIA, SHAFERS, CENTRE CITY, LINDSTROM, CHISAGO CITY, and WYOMING.

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

WESTWARD FIFTH SUB-DIVISION (CLOQUET BRANCH) EASTWARD WESTWARD SIXTH SUB-DIVISION (GRANTSBURG BRANCH) EASTWARD

Table for Fifth Sub-Division (Cloquet Branch) showing train schedules for Second Class (99, 75, 97) and First Class (71, 73). Includes stations like CARLTON, SCANLON, and CLOQUET.

No. 97 is superior to No. 98. No. 71 is superior to No. 92. No. 99 is superior to No. 100. No. 73 is superior to 72. No. 75 is superior to 74.

Table for Sixth Sub-Division (Grantsburg Branch) showing train schedules for Second Class (735, 733) and Time Table No. 51 (June 15, 1924). Includes stations like GRANTSBURG, LIND SPUR, BENSON, ST. CROIX RIVER, and RUSH CITY.

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



WESTWARD

EIGHTH SUB-DIVISION  
(CUYUNA NORTHERN RAILWAY)

EASTWARD

Table with columns for Second Class (741, 739, 737), TIME TABLE No. 51 (June 15, 1924), and Second Class (738, 740, 742). Includes station names like DEERWOOD, IRONTON, SOO JUNCTION, C. M. L. JCT., and TROMMALD. Also includes columns for Water, Fuel, Stables, Turntables, Wyes and Yard Limits, Station Number, Distance from Deerwood, Distance from Trommald, and Car Capacity of Sidings.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION, EXCEPT  
No. 737 is superior No. 735. Special Instructions Pages 7 and 8. No. 739 is superior to No. 740.

SPECIAL INSTRUCTIONS.

FIRST SUBDIVISION.  
(MAIN LINE.)

- 1. At Ashland—Trainmen and Enginemen will familiarize themselves with the schedule of C. & N. W. and Omaha first class trains, when using main tracks.
2. 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:
3. Speed Restrictions—All trains, ten (10) miles per hour between 22nd Ave., West and 7th Ave., West, Ashland.
4. Register Stations—Central Avenue Passenger Station. Ashland Freight Office and C. & N. W. Ry. Passenger Station.
5. Derail Switches—Wentworth, Poplar, Wiehe, Maple, Tarter, Iron River.

SECOND SUBDIVISION.  
(MAIN LINE.)

- 1. At Brainerd—Connection with the Minnesota & International Railway just west of the Mississippi River Bridge is governed by automatic signals.
2. Pusher Districts—Central Avenue to Sawyer.
3. Double Track Switches—at Anton will be kept set and locked for westward track. Switch at State Line is handled from tower.
4. 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.

- 5. At Carlton—Eastward Freight Trains and light engines from the Second Sub-division will head in on North Siding.
6. 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.
7. 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.
8. Speed Restrictions—At Brainerd twelve (12) miles per hour between East Switch and Passenger Station.
9. 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.
10. At Loerch—Territory between Loerch and Omaha Mine is a part of Loerch Yard.
11. At Deerwood—Territory between Deerwood and Orelands is a part of Deerwood Yard.
12. Special Stops, Connections, Etc.—No. 57 will wait at Brainerd for No. 11.
13. Register Stations—Central Avenue Passenger Station. Carlton Telegraph Office. Brainerd Telegraph Office. Staples. Yard Office or Telegraph Office.

- 14. 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.

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

- 16. 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.

- 17. 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.

Table with columns: Commercial Spurs, Miles from Duluth, Car Capacity. Rows: Zenith Gravel Pit Spur (30.2, 30), Grass Twine Spur (72.6, 5).

THIRD SUBDIVISION.  
(MAIN LINE.)

- 1. Pusher Districts—West Duluth to Otter Creek.
2. 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.
3. 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.
4. 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.
5. 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.
6. Speed Restrictions—Brownell to Smithville eastward freight trains must not exceed any one mile in two minutes and thirty seconds. Brownell to Short Line Park use twelve minutes. Short Line Park to Smithville use nine minutes.
7. 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.
8. Registering Stations—West Duluth Passenger Station. Carlton Telegraph Office. Hinkley Passenger Station. Wyoming. White Bear.
9. Register Exceptions—At Wyoming Eastward trains register 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.  
Friesland..... 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
Nolan's Spur.....	68.8	11

**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 733, 734, 735 and 736.

**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, Z-4 and heavier 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. N. A. YOUNG, Interne, N. P. B. A. Hospital, St. Paul.  
Dr. E. K. ENDRESS, Interne, N. P. B. A. Hospital, St. Paul.  
Dr. A. K. STRATTE, Interne, 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, 405 Yeates Bldg., Minneapolis.  
DR. R. R. CRAMNER, 601 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. 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. N. L. KLOVE, Wright, Minn.  
DR. B. W. KELLY, Aitkin, Minn. (s).  
DR. S. Z. KERLAN, McGregor, Minn.  
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).

**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
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 River to 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.

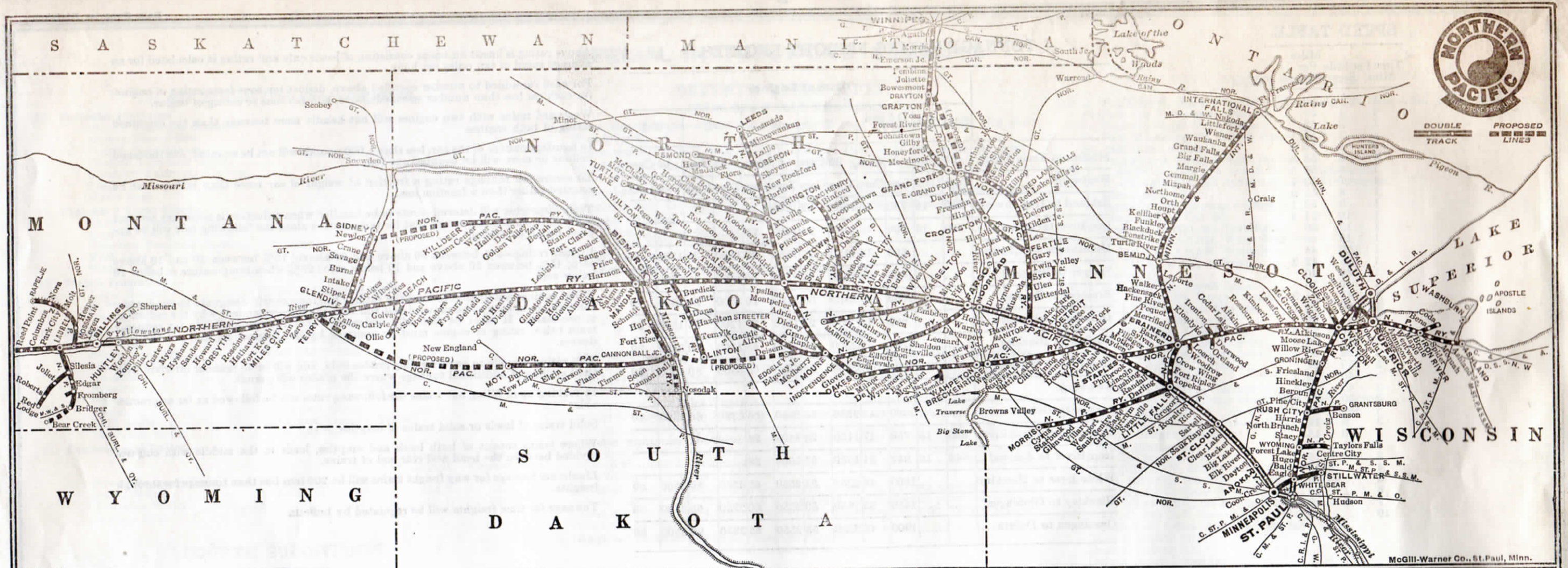
F. L. BIRDSALL,  
Trainmaster.

H. J. COUNCILMAN,  
Trainmaster.

A. S. CRITCHFIELD,  
Trainmaster.

F. E. POTTER,  
Chief Dispatcher.





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McGill-Warner Co., St. Paul, Minn.