



COMPANY SURGEONS

*Dr. Abbott Skinner, Chf. Med. Officer.....	St. Paul, Minn.
*Dr. Hugo F. Schroeckenstein, Asst. to Chf. Med. Officer	St. Paul, Minn.
*Dr. Darrell E. Westover	St. Paul, Minn.
*Dr. John F. Alden	St. Paul, Minn.
*Dr. Ernest R. Anderson.....	Minneapolis, Minn.
*Dr. Victor E. Ekblad	Superior, Wis.
Dr. Milton Finn	Superior, Wis.
Dr. Fred Johnson.....	Superior, Wis.
Dr. E. G. Stack	Superior, Wis.
Dr. Raymond J. Spurzem	Anoka, Minn.
Dr. Wm. T. Nygren.....	Braham, Minn.
Dr. G. E. Larson.....	Cambridge, Minn.
Dr. Gordon C. MacRae.....	Duluth, Minn.
*Dr. C. H. Coombs.....	Cass Lake, Minn.
Dr. R. W. Brockway.....	Grand Rapids, Minn.
*Dr. John B. Evensta.....	Grand Rapids, Minn.
Dr. Clarence Jacobson	Hibbing, Minn.
*Dr. John J. Muller.....	Hibbing, Minn.
Dr. R. L. Christie.....	Long Prairie, Minn.
Dr. Paul J. Keith	Milaca, Minn.
Dr. E. G. Hubin.....	Sandstone, Minn.
*Dr. G. H. Goehrs	St. Cloud, Minn.
*Dr. V. E. Neils	St. Cloud, Minn.
*Dr. E. J. Schmits	St. Cloud, Minn.
*Dr. Julian F. DuBois, Jr.....	Sauk Centre, Minn.
*Dr. John C. Grant	Sauk Centre, Minn.
Dr. E. N. Peterson	Virginia, Minn.
*Dr. Charles J. Mock	Virginia, Minn.
*Dr. Luther F. Davis.....	Wadena, Minn.
Dr. O. F. Ringle	Walker, Minn.

*Designates also Examining Surgeon.

OPHTHALMOLOGISTS (Eye Doctors)

Dr. Richard C. Horn.....	Minneapolis, Minn.
Dr. Malcolm A. McCannel	Minneapolis, Minn.
Dr. John E. Power, Jr.	Duluth, Minn.
Dr. T. J. Doyle	Superior, Wis.
Dr. Roger T. Thompson.....	Superior, Wis.
Dr. W. T. Wenner.....	St. Cloud, Minn.

W. T. SLOAN, Asst. Superintendent.
 J. CHRISTIANSON, Chief Dispatcher.
 C. W. HAMMER, Chief Dispatcher.
 A. Q. FORD, Master Mechanic.
 J. A. LEHN, Trainmaster.
 R. D. NELSON, Trainmaster.
 M. L. PURDY, Traveling Engineer.
 B. M. KUNSMAN, Traveling Engineer.

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GREAT NORTHERN RAILWAY COMPANY

MESABI DIVISION

TIME TABLE 94

EFFECTIVE 12:01 A.M.

CENTRAL STANDARD TIME

Thursday, June 1, 1967

W. S. BYRNE, Superintendent.

R. N. WHITMAN, General Manager.

H. J. SURLS,
General Superintendent Transportation.

Printed in U.S.A.

2 WESTWARD

FIRST SUBDIVISION

EASTWARD

Station Numbers	Car Capacity		SECOND CLASS		FIRST CLASS		Distance from Duluth	Time Table No. 94 Effective June 1, 1967 STATIONS	Telegraph Calls	Distance from St. Paul	SIGNS	FIRST CLASS		SECOND CLASS	
	Sidings	Other Tracks	407	19	23	24						20	408		
														Daily	Daily

05001		290			5.10Pm	7.30Am		DULUTH	DU	159.96	RKOYB	A 11.45Am	A 8.50Pm		
					A 5.16Pm	A 7.36Am	2.37	BRIDGE SWITCH		157.59		11.39Am	8.44Pm		

TRAINS BETWEEN ELEVATOR STATION AND DULUTH TERMINAL DEPOT ARE GOVERNED BY NORTHERN PACIFIC, LAKE SUPERIOR DIVISION TIME TABLE

05005					s 5.25	s 7.45	3.23	ELEVATOR STATION		156.73					
	Yard	5689					4.22	SUPERIOR		155.74	RKPYFZQ	s 11.30	s 8.35		
							5.41	25TH ST.		154.55	PY				
05008		32					8.40	CENTRAL AVE.		151.56					

FIRST CLASS TRAINS BETWEEN CENTRAL AVE. TOWER AND DULUTH TERMINAL DEPOT ARE GOVERNED BY NORTHERN PACIFIC, LAKE SUPERIOR DIVISION TIME TABLE

05010	Yard	299		9.30Pm	5.35Pm	7.53Am	8.67	CENTRAL AVE. TOWER	CTC	SU	151.29	RICPYJX	A 11.17Am	A 8.20Pm	A 12.12Am
				9.34	5.38	7.55	10.37	SAUNDERS	ABS	B	149.59	RICPYJQX	11.15	8.18	12.08
05013				9.42	5.41	7.58	13.43	BOYLSTON	CTC		146.53	PXJ	11.12	8.15	12.02Am
06112	125	10		10.19	5.54	8.10	24.71	FOXBORO	ABS		135.25	P	11.00	8.03	11.44
06100	137	3		10.49	6.05	8.22	36.74	NICKERSON	CTC	NS	123.22	OPQ	10.50	7.53	11.26
06094		12		11.00	f 8.29	43.18	43.18	KERRICK	ABS	K	116.78	OP	f 10.43		11.16
06088	108	14		11.08	f 8.35	48.92	48.92	BRUNO	CTC		111.04	P	f 10.36		11.08
06080	135	25		11.20	s 8.43	57.31	57.31	ASKOV	ABS	RD	102.65	OP	s 10.26	7.36	10.56
06074	148	174		11.28	s 6.30	s 8.53	63.17	SANDSTONE	CTC	NA	96.79	OPWY	s 10.17	s 7.30	10.46
06065		19		11.48	s 9.02	71.92	71.92	HINCKLEY	ABS	H	88.04	OP	s 10.07		10.31
06064	146	16		11.49	f 9.11	80.54	80.54	HINCKLEY TOWER	CTC	HT	87.60	CPIQ	f 9.58	7.12	10.30
06056	160	8		12.03Am	f 9.16	86.01	86.01	BROOK PARK	ABS		79.42	PJ	f 9.58	7.12	10.16
06051					f 9.16	86.01	86.01	HENRIETTE	CTC		73.95	P	f 9.53		
06046	107	32		12.21	s 9.21	91.45	91.45	GRASSTON	ABS		68.51	P	s 9.48	6.57	9.59
06040	57	36		12.29	s 9.26	96.72	96.72	BRAHAM	CTC	RA	63.24	OP	s 9.43	6.52	9.51
06037		19		12.34	f 9.29	100.15	100.15	STANCHFIELD	ABS		59.81	P	f 9.37		9.46
06034	30			12.39	s 9.33	102.64	102.64	GRANDY	CTC		57.32	P	s 9.33		9.40
06029	104	145		12.47	s 9.45	107.52	107.52	CAMBRIDGE	ABS	CG	52.44	OPQ	s 9.23	s 6.43	9.32
06024		69		12.55	s 9.52	113.17	113.17	ISANTI	CTC	IS	46.79	OP	s 9.14		9.24
06018	95	49		1.04	f 9.58	119.19	119.19	BETHEL	ABS	BE	40.77	OP	f 9.07	6.34	9.14
06006	97	13		1.21	7.35	10.09	131.09	ANDOVER	CTC		28.87	P	8.57	6.24	8.55
00448				A 1.30Am	A 7.40Pm	A 10.15Am	136.99	COON CREEK JCT.	ABS	CN	22.97	JRCPI	8.52Am	6.19Pm	8.45Pm

TRAINS BETWEEN COON CREEK JUNCTION AND NORTHTOWN ARE GOVERNED BY NORTHERN PACIFIC TIME TABLE

TRAINS BETWEEN NORTHTOWN AND ST. PAUL ARE GOVERNED BY TWIN CITY TERMINALS TIME TABLE

00427				A 8.30Pm	A 11.00Am	159.96	22.97	ST. PAUL				8.10Am	5.30Pm		
				4.00	2.30	2.45		Time Over Subdivision				2.53	2.31	3.27	
				32.1	55.4	49.5		Average Speed Per Hour				47.6	54.5	37.2	

Westward trains are superior to eastward trains of the same class, except on DOUBLE TRACK or in CTC TERRITORY.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 5 THROUGH 10.

WESTWARD

SECOND SUBDIVISION

EASTWARD 3

Station Numbers	Car Capacity		Distance from Duluth	Time Table No. 94				Telegraph Calls	SIGNS
	Sidings	Other Tracks		Effective June 1, 1967					
			STATIONS						
05013			13.43	DOUBLE TRACK	BOYLSTON.....	ABS	PJX		
05019	96	2	19.21		5.78 DEWEY.....			P	
05023			23.09		3.85 STATE LINE TOWER.....		S	CPIX	
05029		81	29.14		0.05 ALFORD.....			P	
05033	83	10	33.01		3.87 CARLTON.....		A	CPIX	
05039		243	38.97		5.08 CLOQUET.....		KN	OPYX	
05055	127	85	55.45		16.43 BROOKSTON.....			JPTWQX	
05063	176	4	63.31		7.86 PAUPORES.....			P	
05073	185	45	73.27		9.00 FLOODWOOD.....		OD	OP	
05079	173	3	79.37		0.10 ISLAND.....			P	
05090	186	19	89.83		10.46 SWAN RIVER.....			PQ	
05099	187		98.78		8.05 PHILBIN.....			P	
05106	133	176	106.30		7.52 GUNN.....			JTPY	
05109	90	320	109.34		3.04 GRAND RAPIDS.....		GR	OYPWQ	
05113	46	31	118.04	8.70 SEYTON.....		PY			
05116	120	9	114.82	1.78 COHASSET.....		P			
05124	133	188	123.60	8.78 DEER RIVER.....	RI	OPY			
05131	68	17	130.70	7.10 BALL CLUB.....		P			
05144	67	22	143.60	12.90 BENA.....	BA	OP			
05151	120	10	151.15	7.55 SCHLEY.....		P			
05153			153.21	2.08 SOO JCT.....		JP			
05163	Yard	551	162.69	9.48 CASS LAKE.....	CS	ZBJRC KWYPTQ			

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 5 THROUGH 10.

4 WESTWARD THIRD SUBDIVISION EASTWARD

Station Numbers	Car Capacity		Distance from Sauk Centre	Time Table No. 94 Effective June 1, 1967 STATIONS	Telegraph Calls	SIGNS
	Sidings	Other Tracks				
09105			0.36	PARK RAPIDS JCT.	JPY	
53018	40	64	18.58	LONG PRAIRIE	NE	O
53026		55	26.44	BROWERVILLE	VI	O
53032		35	31.82	CLARISSA	RU	O
53036	34	33	36.51	EAGLE BEND	GD	O
53044		27	44.02	BERTHA	BR	O
53056		60	56.19	WADENA	WD	OA
53070	24	28	70.44	SEBEKA	SK	OW
53079		27	79.17	MENAGA	MH	O
53091	31	118	91.17	PARK RAPIDS	J	O
53103		31	103.07	NEVIS	N	O
53T09		27	109.32	AKELEY	AY	O
53119		34	118.83	WALKER		
			120.92	N. P. RY. CROSSING		U
05163	Yard	551	140.38	CASS LAKE	CS	JBRK CWYZ PTFQ

WESTWARD FIFTH SUBDIVISION EASTWARD

Station Numbers	Car Capacity		Distance from Elk River	Time Table No. 94 Effective June 1, 1967 STATIONS	Telegraph Calls	SIGNS	SECOND CLASS 306 Daily Ex. Sun.
	Siding	Other Tracks					
00485			7.20Am	ELK RIVER	ER	JROW	A 11.25Am

TRAINS BETWEEN N. P. RY. JCT. AND ELK RIVER ARE GOVERNED BY N. P. RY. TIME TABLE

Station Numbers	Car Capacity	Distance from Elk River	Time Table No. 94 Effective June 1, 1967 STATIONS	Telegraph Calls	SIGNS
51818	30 117	7.22Am 8.35	N. P. RY. JCT.	I	11.15Am
51828	20	9.10	PRINCETON	O	10.20
07418	91 73	9.20Am 9.30Am	PEASE MILACA	MU	OJPY
		2.00 16.6	Time Over Subdivision Average Speed Per Hour		1.55 17.3

WESTWARD SIXTH SUBDIVISION EASTWARD

Station Numbers	Car Capacity		Distance from Brookston	Time Table No. 94 Effective June 1, 1967 STATIONS	Telegraph Calls	SIGNS
	Sidings	Other Tracks				
05055	127	85	0.00	BROOKSTON		JPTWQ
52811	136	4	11.35	BADEN		P
52325	136	5	24.09	FERMOY	CTC	P
52338	135	11	37.93	ONEGA		P
52401			50.32	KELLY LAKE	KY	BRKOP JWYQ

WESTWARD FOURTH SUBDIVISION EASTWARD

Station Numbers	Car Capacity		Distance from Dormer Jct.	Time Table No. 94 Effective June 1, 1967 STATIONS	Telegraph Calls	SIGNS
	Sidings	Other Tracks				
52432			0.00	DORMER JCT.		PY
52427			2.04	SHERWOOD JCT.		JY
52426	80	59	2.26	BUHL		PY
			3.18	FRAZER YARD		PY
52418			6.18	ST. CLAIR JCT.		JPY
52416			6.53	WILPEN JCT.		JPY
52412	Yard	149	8.71	EMMERT		PIY
52409			10.67	RUBY JCT.	DBL TRK.	JPYX
52408		144	11.66	HIBBING	ABS	AC PYX BRKOPQ WYTJ
52401			15.34	KELLY LAKE	CTC	KY
52354	99	129	19.36	KEEWATIN		KW OPY
52363		613	24.93	NASHWAUK		NK OPYQ
52373		383	31.53	CALUMET		CU JOPYQ
52375			35.92	HOLMAN JCT.	ABS	JPI
52376			36.94	TACONITE JCT.		NI JP
52377		56	38.77	BOVEY		BY OPY
52382		309	41.53	CANISTEO		PYTQ
05106	133	176	46.77	GUNN		JPTY

WESTWARD SEVENTH SUBDIVISION EASTWARD

Station Numbers	Car Capacity		Distance from Brook Park Jct.	Time Table No. 94 Effective June 1, 1967 STATIONS	Telegraph Calls	SIGNS
	Sidings	Other Tracks				
06057			0.00	BROOK PARK		JP
07438		60	11.72	MORA		OP
07431		45	18.82	OGILVIE		OP
07418	88	73	30.92	MILACA		OJPY
07404		49	45.01	FOLEY		O
07392		194	58.48	EAST ST. CLOUD		CPIY

Westward trains are superior to eastward trains of the same class on the Fifth Subdivision.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 5 THROUGH 10.

ALL SUBDIVISIONS

1. SPEED RESTRICTIONS GENERAL.

The following speed limits apply to trains and engines operating under the conditions outlined, unless rules or conditions require a further reduction:

50 MPH—Diesel engines light or with caboose only.

35 MPH—Trains or engines on main routes, actuating the points of spring switches;

Trains or engines thru No. 20 turnouts at following locations:

SaundersCrossover	BrookstonJct.
BoylstonCrossover	BrookstonEnd Dbl. Trk.
AskovSiding	PauporesSiding
Hinckley Tower.....Siding	FloodwoodSiding
Brook ParkSiding	IslandSiding
Brook Park Jct.....Jct.	Swan RiverSiding
GrasstonSiding	PhilbinSiding
Coon Creek Jct.....Jct.	BadenSiding
Coon CreekCrossover	FermoySiding
BrookstonCrossover	OnegaSiding
Bridge 29Gantlet	

30 MPH—On Main lines, when handling following equipment in trains, not in actual service but on own wheels, derricks, cranes, pile drivers, Jordan spreaders, shovels, wedge plows, scale test car, also ore cars series 80000 thru 95039, Taconite ore cars 95500-95719, and air dump cars X-2000 thru X-2096, X-7000 thru X-7049 when such cars are loaded with ore or gravel.

25 MPH—Trains handling logs on flat cars not equipped with permanent steel side stakes; trains or engines moving in facing point direction at spring switches without facing point lock;

Trains or engines thru No. 15 turnouts at following locations:

Cent. Ave. Tower...Crossover	BoylstonJct.
SaundersJct.	GunnJct.
Br. 1.3End Dbl. Trk.	

20 MPH—Trains handling the following equipment on Branch Lines or on 6 degree or sharper curves of Main Lines: scale test car, ore cars series 80000 thru 95039, air dump cars X-2000 thru X-2096, X-7000 thru X-7049 when such cars are loaded with ore or gravel.

15 MPH—Trains handling the following equipment on Branch Lines or on 6 degree or sharper curves of Main Lines: derricks, cranes, pile drivers, Jordan spreaders, shovels and wedge plows.

Trains or engines moving thru interlockings against the current of traffic on double track.

Trains or engines thru all other turnouts, except equilateral turnouts, and those shown previously in this item.

1(a). Rule 240-W of the Consolidated Code of Operating Rules is modified to permit handling Great Northern cars 60276 thru 60279, 61500 thru 61524 and 61000 thru 61009 in passenger trains at passenger train speeds.

2. MOVEMENT OF DIESEL UNITS DEAD IN TRAINS.

Engine 2350 must be handled on rear of freight or mixed trains.

Diesel engines 1 through 195 are not equipped with alignment control couplers and when in tow in freight or mixed trains must be handled singly, not in groups, and not less than 5 cars or more than 15 cars from the road engine. Other diesel units when in tow dead in trains should not be in groups of more than 5 units. Such units may be handled next to road engine. Engines 550 through 599 must have coupler alignment control

lock blocks in 'DOWN' position when such units are used in multiple operation.

When towing diesel engines dead in trains the following speeds must not be exceeded:

MAXIMUM SPEED	ENGINE NUMBER
50 MPH.....	1 through 195
79 MPH.....	320 through 333, 350 through 375, 400 through 417, 500 through 512, 679, 680, 2350, 2500 through 2529, 3026 through 3040
65 MPH.....	All other diesel engine units

3. Except at points where it is necessary to classify trains, open cars loaded with poles, piling, lumber, timber, pipe, or other lading which might shift, should be placed as close as possible to the head end of train, but not next to engine, caboose, occupied outfit car, passenger car or another unprotected car containing commodities which might be subject to damage. Loaded trailer-on-flat cars and multi-level automobile cars are not included in this category. In double track territory, trains handling such cars must use extreme care to avoid slack running in or out when passing or being passed by other trains. In single track territory, trains handling such cars must be at stop when on siding or other track to meet or be passed by other trains, except when have more cars than siding will hold it is permissible for such trains to pull by each other at reduced speed. Loaded dump cars should not be handled on double track after dark, but if necessary to do so, close watch must be maintained by members of the crew, and if a car dumps its load, train must be stopped at once and protection provided as prescribed by the rules.

Great Northern tie flats in series X-4800 to X-4975 and X-4410, whether loaded or empty, must be handled on rear of train.

4. Brakemen with less than one year of experience should not be used as flagmen except in emergency, and then Superintendent will be notified by wire.

5. Rule 14 of the Consolidated Code of Operating Rules is modified by the following instructions on trackage of the Great Northern Railway Company:

In the absence of a red signal two miles beyond the yellow-red flag, train or engine must STOP and not proceed until a proceed signal given with a yellow flag or a yellow light is received, or verbal permission is received.

6. Trains departing from stations, either from siding or main track in trailing point movement actuating points of spring switches, a member of crew must observe indication of governing signal in opposite direction after rear end of train has passed through switch to ascertain if switch points return to normal position. If this signal indicates Stop and no immediate train movement or other cause is evident, report the fact to Superintendent from first available point of communication.

During and immediately following snow storms or violent wind storms, spring switches must be operated by hand and relined in normal position before heading out through switch in trailing point movement, actuating switch points, to insure switch is in proper operating condition.

7. Facing point locks on hand-operated switches are indicated by a six-inch yellow stripe painted on target staff. Be positive locking device is restored to normal position after using. A running switch must not be made through this type switch.

8. Regarding Rule 2 of the Consolidated Code of Operating Rules. Approved type wrist watches are:

Elgin, B. W. Raymond Model, 13/0 size, 23 jewels, Ball Official Standard wrist watch, 1604B, stainless steel, 13/0 Ligne, 21 jewels, Bulova Accutron Railroad Approved Model and Hamilton 505 R. R. Electric Special wrist watch, Bulova Model 23J.

9. Before picking up cars of peeled pulpwood from industry at any station, conductor must examine lading; if lading is not protected with woven wire to prevent sliding out on sides, or, when wire is not available, with boards and stakes, then car must not be moved from industry. The fact must be promptly reported by wire to the Superintendent.

If unpeeled pulpwood, end stakes must be placed vertically across both ends of car so as not to leave a gap or opening between the stakes. If car is loaded above the end stakes car must be refused and Supt. notified.

10. Whistle Signals for Routes at Junctions and Interlockings:

Routes	Whistles
Main Track.....	2 short, 1 long
Diverging route.....	2 long
Siding.....	4 short
Against current of traffic.....	1 long, 1 short

11. The Consolidated Code of Operating Rules, Edition of 1967, in addition to the following instructions will govern Great Northern employes while operating on Minnesota Transfer Railway Co. and St. Paul Union Depot Company trackage:

(a) All trackage of the Minnesota Transfer Railway Company is defined as a system of tracks within yard limits over which movements must be made at reduced speed and are not authorized by time table or train order, but subject to prescribed signals and rules, or special instructions.

The limits of the St. Paul Union Depot Co. property extend from connection with the Northern Pacific Ry. and Great Northern Ry. tracks at Third Street and connection with the CMStP&P-CB&Q R.R. tracks opposite depot roundhouse on the east, to connection with the CGW Ry. and CMStP&P R.R. tracks at Robert Street on the west.

(b) The time table of the St. Paul Union Depot Company is for information only. Employes of railroads using the tracks of this Company will be governed by current time table of their respective companies only as to arriving and departing time of trains.

(c) Where in the rules of the Consolidated Code reference is made to trains, such rules will also apply to yard movements and engines.

(d) Under Rule 10, the use of torpedoes is prohibited.

(e) Under Rule 11, burning fuseses must not be used except in case of emergency and then only when held in hand and must be extinguished before leaving.

THE FOLLOWING RULES APPLY ONLY ON THE ST. PAUL UNION DEPOT COMPANY:

(f) There is no superiority of trains within the limits of St. Paul Union Depot Company property.

(g) Within the limits of the St. Paul Union Depot Company property, trains and engines must move at reduced speed and must not exceed ten (10) miles per hour through crossovers, turnouts and puzzle switches.

The entrance to, and all movements on this property, will be made only on authority of hand signals from switch tenders. No train or engine may foul any track or puzzle switch without authority of hand signals from switch tenders in control of such movements, except that short interior switching movements may be made through crossovers connecting shed tracks when authorized by train director.

Any lead or track may be used for the make-up of trains on authority of train director. The movement of trains should be given preference.

(h) When indicated by the ringing of the bell, flashing of headlight, hand or light signal that a train or engine is ready to move, the switch tender in charge of the shed track on which the movement is standing will handle as follows: at west end of station the switch tender will control the movement by hand or light signal; at the east end of station the switch tender will inform the train director, who will route the movement by instructions over the public address system. Switch tenders will be governed by these instructions, relaying such instructions by hand or light signal to the next switch tender in the direction of the movement. Each must receive an acknowledgment before signalling the movement. Signals must not be acknowledged or acted upon unless the signal corresponds with instructions from the train director and is definitely understood.

(i) When backing, the back-up air brake valve on passenger trains must be operated by the conductor, except in the movement of empty equipment it may be operated by a competent trainman or yardman. When practicable, conductors must see that trainmen are stationed so hand or light signals may be used in case of any emergency. When backing a train, the engine brake valve must be in running position. An application of the brakes must be made with back-up air brake valve before starting and it must be known that the brakes are in operative condition. Movement must not be started until the proper signal is given. A running test must be made with the back-up air brake valve before the train has moved 300 feet. If the running test is not made within 300 feet the engineer must stop the train and ascertain cause. The speed of train must not exceed eight (8) miles per hour; and train must be under such control that it can be stopped short of train or obstruction, and short of bumping post on stub tracks.

(j) Headlights must be dimmed while on shed tracks.

12. Unless you can stop clear of public crossings in any town, you will arrange to cut at least one crossing. The law provides that railway employes responsible for blocking crossing more than five (5) minutes are subject to arrest and fine.

FIRST SUBDIVISION

(Main Line)

1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

Between	Passenger	Freight
Central Ave. Tower and Boylston.....	75 MPH	50 MPH
Boylston and Foxboro.....	60 MPH	40 MPH
Foxboro and Coon Creek Jct.....	79 MPH	69 MPH

2. SPEED RESTRICTIONS.

Duluth Terminal Bridge to G.N. Rices Point and G.N. connection to Seventh Ave. freight house, trains and engines at reduced speed not exceeding	20 MPH
Over wheel checker—Saunders	20 MPH
Long lead, west end Sandstone Yard	15 MPH

3. TRAIN REGISTER EXCEPTIONS.

All trains register by ticket at Central Ave. Tower and Coon Creek Jct.

4. CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).

(a) At Boylston, Brook Park, trains for which these points are initial stations may proceed on authority of clearance under which such trains arrive.

(b) Mesabi Division clearance received by first class trains and passenger extras at Minneapolis, and by other trains at Minneapolis Jct., will clear train at Coon Creek Jct. when train order signal indicates proceed.

5. RESTRICTED CLEARANCES.

Superior, bents under Fifteenth St. viaduct will not clear man on side of car or engine.

6. Hinckley, automatic block signal 72.1 governing westward trains, is located on left hand side of main track about 500 feet west of depot.

7. SPEED TEST BOARDS.

Engineers shall test speed of their trains passing following point as compared with Speed Table:

Westward, between MP 76 and MP 77 approximately 4 miles west of Hinckley Tower.

Eastward, between MP 77 and MP 76 approximately 3 miles east of Brook Park.

8. CROSSOVERS ON DOUBLE TRACK.

Facing Point	Trailing Point
Saunders, east crossover	Central Ave.
Boylston	Saunders, at Tower. Boylston

9. SPRING SWITCHES WITH FACING POINT LOCK.

Nickerson	siding	Cambridge	siding
Askov	siding	Bethel	siding
Grasston	siding		

Normal position is for main track.

10. SPRING SWITCHES WITHOUT FACING POINT LOCK.

Superior, east switch of Eastward and Westward incoming tracks.

Normal position is for incoming tracks and all other roundhouse lead switches, when not in use, must be left lined for roundhouse lead.

Elevator "X", east and west of car unloader on unloading track.

Normal position of switch west of unloader is for unloading track.

Normal position of switch east of unloader is for runaround track.

11. DRAGGING EQUIPMENT DETECTOR INDICATOR.

Eastward trains on Signal 16.8 between Boylston and Foxboro.
Westward trains on Signal 61.1 between Askov and Sandstone.

12. MANUAL INTERLOCKINGS.

Central Ave. Tower	N. P. Ry. crossing
Coon Creek Jct.	junction with N. P. Ry.

13. AUTOMATIC INTERLOCKINGS.

Superior	
73rd St.,	MStP&SSM. RR. Crossing

14. Arrange to stop No. 19 daily, except Sunday, at Hinckley at a point accessible to mail messenger so mail pouches can be placed in RPO car door.

15. Great Northern Transfers going to Great Northern Rices Point Yard will use C&NW track from bridge switch to switch in C&NW main track leading to new connection to Great Northern Rices Point Yard. Authority to use C&NW track will be given by clear signal at Minnesota Draw.

For movement from Great Northern Rices Point Yard to Superior, authority to use C&NW track must be obtained from Minnesota Draw by telephone—from phone located in booth just north of Birch Street between Great Northern and C&NW tracks—before leaving Rices Point Yard.

SECOND SUBDIVISION

(Main Line)

1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

Between	Freight
Boylston and Mirbat	40 MPH
Mirbat and Gunn	60 MPH
Gunn and Cass Lake	49 MPH

The maximum speed of trains handling empty ore cars is 50 MPH, 30 MPH for trains handling loaded ore cars.

2. SPEED RESTRICTIONS.

Between Home Signals of Interlockings at:..... 20 MPH
Bridge 29, westward.

Cass Lake, on all tracks over footwalk crossing located just west of mainline switch to roundhouse..... 8 MPH

Whistle signal must be sounded as prescribed by rule. Crossing must be cut immediately. When this crossing is blocked by coupling up train, trainmen must remain at the crossing to prevent pedestrians from crawling through the cars.

3. CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).

At Boylston, Brookston and Gunn, trains for which these points are initial stations may proceed on authority of clearance under which such trains arrive.

At Soo Jct., Soo Line Trains may proceed to Cass Lake without obtaining clearance Form A or train order authority which will be received at Cass Lake.

4. Main track switches to the following spur tracks located in CTC territory are not equipped with electric locks:

Mirbat, Wawina—(Rule 268(A) applies.)

5. SPEED TEST BOARDS.

Engineers shall test speed of their trains passing following point as compared with Speed Table:

Westward, between MP 86 and MP 87 approximately 4½ miles west of Island.

Eastward, between MP 87 and MP 86 approximately 2 miles east of Wawina.

6. Cloquet, derails located near east end storage tracks Nos. 1 and 2 are not provided with derail signs.

Cloquet, when setting out cars on either end of No. 1 track be sure cars are shoved down far enough to clear N. P. Ry. crossovers.

Cloquet, cars left on G.N. tracks must not be closer than 60 ft. each way from 10th Street crossing east of depot.

7. Grand Rapids, when setting out cars, eastward freight trains will stop and leave train west of west switch; westward trains will stop east of the first public crossing.

Grand Rapids, at Hawkinson Addition Crossing MP 110, trains stopped to make set-outs at Grand Rapids must clear this crossing.

8. International Refinery, Alford, while switching, do not handle cars over drip pans with brakes set as sparks from brakes create a fire hazard.

Cabooses with fires in stoves not permitted on any of the plant tracks and crews working in the vicinity will refrain from smoking.

Tail hose located in telephone booth must be used on end of cuts shoved to Old No. 1 and Old No. 2 tracks with air coupled into it so that trainmen taking position on rear car of cut being shoved can control the movement over crossing immediately ahead of the unloading rack, as well as being able to stop cut of cars short of end of these two spur tracks.

9. CROSSOVERS ON DOUBLE TRACK.

Facing Point	Trailing Point
State Line, west crossover	State Line, east crossover
Cloquet, west crossover	Alford
Brookston, east crossover	Carlton, west crossover
	Cloquet, east crossover

10. SPRING SWITCHES WITH FACING POINT LOCK.

Cass Lake, east yard switch.

Normal position is for main track.

11. **DRAGGING EQUIPMENT DETECTOR INDICATOR.**
Eastward trains, on signal 80.2 approximately one mile west of Bridge 29.
Westward trains on Signal 28.1 approximately 1 mile east of Bridge 29.
12. **MANUAL INTERLOCKINGS.**
State Line Tower N. P. Ry. crossing
Carlton N. P. Ry. crossing
13. **AUTOMATIC INTERLOCKINGS.**
Bridge 29, 2.21 miles east of Alford.....gantlet
Bridge 29:
Release for westward route on westward track is located in release box at eastward home signal.
Release for eastward route on eastward track is located in release box at westward home signal.
Crank for hand operation of smashboards are attached by chains to the mechanism.
14. **CTC—SOO JCT. TO CASS LAKE.**
Telephones for communication with the control operator are located at the east end of CTC section and at the spring switch, east end of Cass Lake Yard, 1000 feet west of west end of CTC section. Westward Soo Line trains will call the operator at Cass Lake on phone for authority to enter G.N. main line. The following will govern in case of failure of communications: Soo Line crew will unlock switch and attempt to line for their movement. If switch will line and signal clears, this will be their authority to leave Soo Jct., and proceed to Cass Lake.
15. Before attempting to use the electric-locked switches at Gunn, a member of the crew must call the train dispatcher and obtain his permission. When through using the electric-locked switches, the train dispatcher must be notified immediately.
16. Engines or cars must not enter new shed at MP&L plant Cohasset account close clearance with infra red heaters.

THIRD SUBDIVISION (Park Rapids Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**
Between
Park Rapids Jct. and Cass Lake Freight
30 MPH
2. **SPEED RESTRICTIONS.**
Between Home Signals of Interlockings at:..... 20 MPH
Park Rapids Jct.
Wadena.
3. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
Mesabi Division clearance received at Sauk Centre will clear train at Park Rapids Jct.
4. The standard crossbuck grade crossing signs on Highway No. 371 one mile south of Wilkinson, Minn. have been removed. In the event of any train operation between Walker and Cass Lake train must stop and arrange for a trainman to protect the crossing preceding the movement over the crossing.
5. **AUTOMATIC INTERLOCKINGS.**
Park Rapids Jct., 0.52 miles west of N. P. Ry. crossing
Wadena, 0.23 miles west of N. P. Ry. crossing
6. Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on Third Subdivision, between Cass Lake and Park Rapids Jct. Form Z train order is not required on this subdivision. One train must not be permitted to follow another train until both trains have been instructed by train order to protect to the rear as prescribed by Rule 99.

FOURTH SUBDIVISION

(Gunn-Dormer Jct. Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**
Between
Gunn and Emmert Freight
Emmert and Dormer Jct. 45 MPH
80 MPH
 2. **SPEED RESTRICTIONS.**
Between Home Signals of Interlocking at:..... 20 MPH
Emmert.
- AT VIRGINIA.**
- (a) Between Home Signals of Interlockings at:..... 20 MPH
D. W. & P., Virmount Tower.
D. W. & P., Crescent Ave.
 - (b) Highway No. 53 crossing, 6th Avenue West, leading to Columbia Mine:
Trains must not exceed a speed of 10 MPH through the approach circuits of this crossing.
 - (c) Trains and engines must stop before passing over crossing U. S. Highway No. 53 leading to depot, and a member of crew on ground at the crossing will protect movement.
 - (d) Ninth Ave. and Fourth Street Crossing:
Trains and engines must stop before passing over crossing and a member of crew on ground at the crossing will protect movement.
3. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
At Kelly Lake, trains arriving from Sixth Subdivision (Casco Line) destined to Fourth Subdivision (Gunn Line) may proceed to Keewatin on authority of clearance under which such trains arrive.
 4. Between Calumet and Oil Spur, located 1.47 miles west of Bovey, main track will be used jointly by G.N. and DM&IR. Ry. and authority for train movements is controlled by G.N. Ry. and G.N. rules and Special Instructions will govern.
 5. Train order authority or clearance Form A not required for transfers originating at Bovey for movement between Taconite Jct. and Canisteo. Rule 93 of the Consolidated Code of Operating Rules will apply. Transfers must obtain permission from train dispatcher before occupying main track.
 6. Telephone in service at Buckeye, Canisteo and Danube Mines switch. Crews coming from Buckeye, Canisteo and Danube Mines will communicate with the dispatcher and know that way is clear on the main track before proceeding with train down the descending grade on both legs of the wye.
 7. Trains and engines will run with the current of traffic between Kelly Lake and Emmert without train or orders or clearance, and must keep to the left unless otherwise provided.
 8. Train and engine movements from main line on new Hull Crusher Spur over Kelly Lake road crossing must be protected by a member of the crew due to restricted view approaching this crossing.
 9. Main track Kelly Lake to Dormer Jct. is all yard limit and movements will be governed by Consolidated Code Rule 93. Train order authority or Clearance Form A is not required. Transfers will not be required to display markers Rule 19 or signals Rule 21.
Great Northern and DM&IR transfers must obtain permission of Great Northern dispatcher before occupying main track.
 10. Following from DM&IR Ry.:
Train orders are not required for movement on the Wilpen Branch between Wilpen and Chisholm and between Monroe Jct. and Monroe. Trains will operate under provisions of Rule 93. Crews will contact Yardmaster Mitchell District before making movement on this branch.
Train orders are not required for movement on the Pillsbury Branch. Trains will operate under Provisions of Rule 93.

Between St. Clair Jct. and Chisholm Jct. main track will be used jointly by G. N. and DM&IR Rys. and authority for train movements is controlled by DM&IR Ry. and DM&IR rules will govern.

11. Signal protection in service at Danube Mine Spur switch and crossover from Balkan Mining Company track to Danube Mine Tracks. Movements over this crossing will be governed by dwarf color-light signals, position of switches is for Balkan Mining Company and for G. N. Ry. track from Danube Mine to washing plant. Signals will clear automatically for Balkan Mining Company and for G. N. Ry. from Danube Mine to washing plant. To obtain signal to cross over the Balkan Mining Company track, G. N. Ry. trainmen should make sure there is no approaching conflicting movement, then line all three switches in the route to clear signal before proceeding. After crossover movement has been made, all three switches must be restored to normal position for Balkan Mining Company track and G. N. Ry. washing plant track.
12. Normal position of Gunn Line Switch at East leg of wye, Kelly Lake, will be for Fourth Subdivision.
13. **CROSSOVERS ON DOUBLE TRACK.**

Facing Point	Trailing Point
Hull Crusher	Mahoning
Ruby Jct.	Agnew
	Scranton
	Hibbing, east crossover
	Hibbing, west crossover
	North Mitchell
14. **SPRING SWITCHES WITH FACING POINT LOCK.**
 Keewatin—West end north storage track switch.
 Nashwauk—West north storage track switch.
 West south storage track switch.
 Butler Taconite Track—west end.
 Calumet, west new yard switch.
 Canisteo, west new yard switch.
 Normal position is for main track.
15. **SPRING SWITCHES WITHOUT FACING POINT LOCK.**
 Kelly Lake, west wye switch,
 Normal position is for 4th subdivision.
 Kelly Lake, end of double track,
 Normal position is for eastward track.
16. **SEMI-AUTOMATIC INTERLOCKINGS.**
 EmmertDM&IR. Ry. crossing
 Emmert, normal position of spring switch at west end of connection with DM&IR Ry. is lined for Great Northern track. Normal position of spring switch at south end of connection with DM&IR Ry. is lined for DM&IR track to Mitchell. Signal indications are displayed accordingly. If any route other than the above normal route is to be used, trains must stop at interlocking signal and desired route lined by hand. Signal should then clear in about one minute. If signal does not clear and no conflicting movement is evident, push-button release on interlocking signal should be operated to obtain signal indication.
 Calumet, 0.60 miles east of.....Hill Annex Spur
 Complete instructions for operation of electric lock and gates at semi-automatic interlocking are located at "Release" boxes.
17. **AT VIRGINIA.**
 G. N. Ry. trains to and from Virginia operate via D. M. & I. R. Ry. tracks between Emmert and Virginia.
18. **AUTOMATIC INTERLOCKINGS.**
 Virginia, 0.47 miles west of.....D. W. & P. Ry. crossing
 1.20 miles west of.....D. W. & P. Ry. crossing
19. Before attempting to use the electric-locked switches at Gunn, a member of the crew must call the train dispatcher and obtain his permission. When through using the electric-locked switches, the train dispatcher must be notified immediately.

FIFTH SUBDIVISION

(Princeton Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**

Between	Freight
Elk River and Princeton	45 MPH
Princeton and Milaca	20 MPH
2. **SPEED RESTRICTIONS.**
 Between Home Signals of Interlocking at Elk River.... 20 MPH
3. **SEMI-AUTOMATIC INTERLOCKINGS.**
 Elk River, 0.74 miles west of.....N. P. Ry. Jct.
4. Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on Fifth Subdivision, between N.P. Ry. Jct. and Milaca. Form Z train order is not required on this subdivision. One train must not be permitted to follow another train until both trains have been instructed by train order to protect to the rear as prescribed by Rule 99.

SIXTH SUBDIVISION

(Casco Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**

Between	Freight
Brookston and Kelly Lake	45 MPH
2. **DRAGGING EQUIPMENT DETECTOR INDICATOR.**
 Eastward Trains, on iron mast approximately 6400 feet east of Signal 62.2 about 2.5 miles west of Brookston.
3. Main track switches to the following spur tracks located in CTC territory are not equipped with electric locks:
 Rule 268(A) applies.

Arlberg

Casco

Onega

SEVENTH SUBDIVISION

(Milaca Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**

Between	Freight
Brook Park and East St. Cloud.....	40 MPH
2. **SPEED RESTRICTIONS.**
 Between Home Signals of Interlockings at:..... 20 MPH
 Brook Park.
 East St. Cloud.
3. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
 At Brook Park, trains for which this point is initial station may proceed on authority of clearance under which such trains arrive.
4. **MANUAL INTERLOCKINGS.**
 East St. Cloud.....N. P. Ry. crossing
5. Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on Seventh Subdivision, between Brook Park and East St. Cloud. Form Z train order is not required on this subdivision. One train must not be permitted to follow another train until both trains have been instructed by train order to protect to the rear as prescribed by Rule 99.

Business Tracks not shown as stations on Time Table

Name	Location	Car Capacity	Switch Opens
First Subdivision			
North Central Public Service Spur.....	2.30 miles east of Coon Creek Jct.....	7	W
Old Colony Gas & Oil Co. Spur.....	0.27 miles west of Andover....	11	W
Rural Coop. Power Ass'n Spur.....	2.42 miles east of Cambridge....	6	E
Duquette.....	2.53 miles east of Kerrick....	4	E
Cedar.....	5.75 miles east of Andover....	20	EW
Second Subdivision			
Lindsay Pit.....	1.69 miles west of Carlton....	70	E
Brookston Gravel Pit.....	0.10 miles west of Brookston....	80	E & W
Mirbat.....	5.37 miles east of Floodwood....	7	E
Wawina.....	12.79 miles west of Floodwood....	21	E
Cohasset Mill & Lumber Co. Spur.....	0.96 miles east of Cohasset....	9	E
Minn. Power and Light Spur.....	0.42 miles west of Cohasset....	121	E
Chippewa Wood Processing Spur.....	0.12 miles east of Deer River....	16	W
Webster Lumber Co.....	5.26 miles west of Schley....	16	E
Third Subdivision			
Little Sauk.....	10.02 miles west of Park Rapids Jct.....	5	W
Prairie Packing Co. Spur.....	0.40 miles west of Long Prairie....	10	W
Redwood Rendering Co.....	1.61 miles west of Long Prairie....	35	E
Midland Co-op. Spur.....	1.68 miles west of Long Prairie....	5	E
Hewitt.....	4.03 miles east of Bertha....	27	E & W
Land O'Lakes Creamery Spur.....	0.58 miles west of Sebeka....	19	W
Wilkinson.....	10.10 miles west of N.P. Ry. Crossing.....	8	E & W
Fourth Subdivision			
Lucknow.....	1.97 miles east of Buhl....	46	E & W
Elbern Siding.....	3.44 miles west of Buhl....	36	E & W
Service Station Inc. Spur.....	0.90 miles east of Hibbing....	4	E
Oil Track.....	1.42 miles east of Hibbing....	17	E & W
Douglas Shop Spur.....	2.18 miles east of Emmert....	9	W
Wacootah Storage Track.....	2.70 miles west of Virginia....	28	E & W
Keewatin Saw Mill Spur.....	1.92 miles west of Kelly Lake....	10	E
Mid-Range Builders Supply.....	0.15 miles east of Nashwauk....	7	W
Minn. Power & Light Spur.....	1.08 miles east of Nashwauk....	15	E
Ryan and Gillis Spur.....	3.01 miles west of Nashwauk....	30	W
Marble Spur.....	0.97 miles west of Calumet....	6	W
Oil Spur.....	1.19 miles east of Canisteo....	35	W
Fifth Subdivision			
Zimmerman.....	9.50 miles west of N.P. Ry. Jct....	23	E & W
Long's Siding.....	4.05 miles west of Princeton....	4	W
Sixth Subdivision			
Arlberg.....	5.42 miles west of Brookston....	19	E
Casco.....	5.84 miles west of Fermoy....	16	E
Seventh Subdivision			
Quamba.....	5.39 miles west of Brook Park....	7	E
Kanabec Hdwe. Co. Spur.....	0.96 miles east of Mora....	4	W
Bock.....	6.88 miles west of Ogilvie....	14	W
Rural Co-op. Power Ass'n Spur.....	0.49 miles east of Milaca....	3	W
Foreston.....	3.30 miles west of Milaca....	33	E & W
Oaks.....	9.14 miles west of Milaca....	30	E & W
Parent.....	4.30 miles west of Foley....	31	E & W

Mine Spurs

Name	Location	Switch Opens
Stevenson, Lamberton, Mahoning Concentrate, Warren.....	0.53 miles east of Kelly Lake....	W
Mahoning, N. Uno, Mahoning Grp IV, So. Agnew.....	0.72 miles east of Kelly Lake....	W
Hull Crusher.....	1.81 miles east of Kelly Lake....	W
Morton.....	1.98 miles east of Kelly Lake....	E
Alworth.....	2.42 miles west of North Mitchell	W
Albany, Longyear.....	0.82 miles east of North Mitchell	E
Dunwoody.....	0.58 miles east of Emmert....	W
Chataco.....	0.74 miles west of Chisholm....	W
Elbern.....	2.87 miles west of Buhl....	W
Grant.....	1.22 miles west of Buhl....	W
Wanless.....	1.38 miles east of Buhl....	E
Atkins, Wade.....	At Dormer Jct.....	E
National Taconite.....	2.47 miles west of Kelly Lake....	E
National Taconite.....	1.40 miles west of Keewatin....	W
Mesabi Chief Washer, Aromac, Perry, Mississippi.....	2.01 miles west of Keewatin....	W
O'Brien.....	1.58 miles east of Nashwauk....	W
York.....	0.16 miles east of Nashwauk....	W
Hawkins (MacKilican).....	0.13 miles east of Nashwauk....	E
Butler Taconite.....	0.68 miles west of Nashwauk....	E
Butler Taconite, Patrick.....	2.95 miles west of Nashwauk....	W
Hill Annex Creta.....	1.38 miles east of Calumet....	E
Hill Annex Washer.....	0.60 miles east of Calumet....	E
Hill Annex Fines, Hill Trumbull Washer.....	0.69 miles east of Calumet....	E
Hill Spur.....	0.37 miles west of Calumet....	E
Holman.....	Taconite Jct.....	W
Hunner.....	0.83 miles west of Bovey....	E
Canisteo, Danube.....	0.08 miles east of Canisteo....	E & W
West Hill.....	0.36 miles west of Canisteo....	E
Jessie.....	1.60 miles west of Canisteo....	W
Greenway.....	2.42 miles west of Canisteo....	W
Tioga.....	0.24 miles east of Seyton....	W

SPEED TABLE

Time Per Mile			Time Per Mile		
Min.	Sec.	Miles Per Hour	Min.	Sec.	Miles Per Hour
		46	1	18	46.2
		47	1	20	45.0
		48	1	22	43.9
		49	1	24	42.9
		50	1	26	41.9
		51	1	28	40.9
		52	1	30	40.0
		53	1	33	38.7
		54	1	36	37.5
		55	1	39	36.4
		56	1	42	35.3
		57	1	45	34.3
		58	1	50	32.7
		59	1	55	31.3
	0	60.0	2	—	30.0
1	1	59.0	2	10	27.7
1	2	58.1	2	20	25.7
1	3	57.1	2	30	24.0
1	4	56.3	2	40	22.5
1	5	55.4	3	—	20.0
1	6	54.5	3	30	17.1
1	7	53.7	4	—	15.0
1	8	52.9	5	—	12.0
1	9	52.2	6	—	10.0
1	10	51.4	7	—	8.6
1	12	50.0	8	—	7.5
1	14	48.6	9	—	6.7
1	16	47.4	10	—	6.0

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