

### COMPANY SURGEONS

*Dr. Roscoe C. Webb, Chief Surgeon.....	Minneapolis, Minn.
*Dr. Ernest R. Anderson, Asst. Chf. Surg.....	Minneapolis, Minn.
*Dr. F. J. Savage .....	St. Paul, Minn.
Dr. G. D. Brand .....	St. Paul, 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. Leroy J. Larson .....	Bagley, Minn.
*Dr. Einar W. Johnson .....	Bemidji, Minn.
Dr. T. P. Groschupf .....	Bemidji, Minn.
Dr. Wm. T. Nygren .....	Braham, Minn.
Dr. W. W. Will .....	Bertha, Minn.
Dr. L. H. Hedenstrom .....	Cambridge, Minn.
Dr. John D. VanValkenburg .....	Floodwood, Minn.
Dr. C. E. Norberg .....	Cloquet, Minn.
Dr. Gordon C. MacRae .....	Duluth, Minn.
*Dr. C. H. Coombs .....	Cass Lake, Minn.
Dr. E. P. Zorn .....	Erskine, Minn.
Dr. Chas. S. Donaldson .....	Foley, Minn.
*Dr. G. M. Erskine .....	Grand Rapids, Minn.
Dr. J. L. McLeod .....	Grand Rapids, Minn.
*Dr. B. S. Adams .....	Hibbing, Minn.
Dr. Clarence Jacobson .....	Hibbing, Minn.
Dr. R. L. Christie .....	Long Prairie, Minn.
Dr. C. J. Henry .....	Milaca, Minn.
Dr. J. E. Henry .....	Milaca, Minn.
Dr. C. S. Bossert .....	Mora, Minn.
Dr. H. P. Dredge .....	Sandstone, Minn.
*Dr. H. W. Goehrs .....	St. Cloud, Minn.
Dr. G. H. Goehrs .....	St. Cloud, Minn.
*Dr. J. F. DuBois .....	Sauk Center, Minn.
Dr. E. N. Peterson .....	Virginia, Minn.
Dr. H. B. Ewens .....	Virginia, Minn.
*Dr. Luther F. Davis .....	Wadena, Minn.
Dr. O. F. Ringle .....	Walker, Minn.

\*Designates also Examining Surgeon.

### OPHTHALMIC SURGEONS

(Eye Doctors)

Dr. Frank E. Burch .....	St. Paul, Minn.
Dr. Edward P. Burch .....	St. Paul, Minn.
Dr. C. N. Spratt .....	Minneapolis, Minn.
Dr. John E. Power .....	Duluth, Minn.
Dr. T. J. Doyle .....	Superior, Wis.
Dr. Roger T. Thompson .....	Superior, Wis.
Dr. W. T. Wenner .....	St. Cloud, Minn.

W. J. HAYNES,  
Chief Dispatcher.

W. C. JONES,  
Chief Dispatcher.

W. H. RUMMEL,  
Trainmaster.

R. W. DOWNING,  
Trainmaster.

R. H. SHOBER,  
Trainmaster.

W. ANDREWS,  
Assistant Superintendent.

# GREAT NORTHERN RAILWAY COMPANY

## MESABI DIVISION TIME TABLE 61

EFFECTIVE 12:01 A. M.

CENTRAL TIME

Sunday, June 3, 1951

C. O. HOOKER, Superintendent.

T. A. JARROW, General Manager.

J. B. SMITH, General Superintendent Transportation.

2 WESTWARD

FIRST SUBDIVISION

Station Numbers	Car Capacity		SECOND CLASS				FIRST CLASS			Distance from Duluth	Time Table No. 61.		Telegraph Calls
	Sidings	Other Tracks	413	421	411	407	35	19	23		Effective June 3, 1951	STATIONS	
			Daily	Daily	Daily	Daily	Daily Ex. Sunday	Daily	Daily				
J 139							L 9.30Pm A 9.36Pm	L 4.30Pm A 4.36Pm	L 8.00Am A 8.06Am	2.29	DULUTH BRIDGE SWITCH	DU	

TRAINS BETWEEN ELEVATOR STATION AND DULUTH TERMINAL DEPOT WILL BE GOVERNED BY NORTHERN PACIFIC, DULUTH AND SUPERIOR TERMINALS TIME TABLE.

J 136	Yard	5217					9.45	4.45	8.15	3.16	ELEVATOR STATION	
J 131		36								4.13	SUPERIOR	BY
										5.31	25th ST.	
										8.29	CENTRAL AVE.	

FIRST CLASS TRAINS BETWEEN CENTRAL AVE. TOWER AND DULUTH TERMINAL DEPOT WILL BE GOVERNED BY NORTHERN PACIFIC, DULUTH AND SUPERIOR TERMINALS TIME TABLE.

Station Numbers	Sidings	Other Tracks	L 11.30Pm	L 10.50Pm	L 10.30Pm	L 10.15Pm	L 9.55Pm	L 4.53Pm	L 8.23Am	Distance from Duluth	STATIONS	Telegraph Calls
J 139	Yard	297	11.35	10.58	10.37	10.22	9.58	4.56	8.26	8.60	CENTRAL AVE. TOWER	SU
J 125			A 11.45Pm	A 11.10Pm	10.44	10.29	A 10.03Pm	4.59	8.29	9.41	M. ST. P. & S. S. M. R. R. CROS'G.	
J 121	95	7			10.59	10.44			8.36	10.38	SAUNDERS	B
J 113	127	5			11.13	10.58		5.12	8.44	13.21	BOYLSTON	
J 109	70	5			11.28	11.13			8.51	18.46	DEDHAM	
J 108	139	3			11.58	11.33		5.23	9.00	24.63	FOXBORO	BO
J 99		4			12.06Am	11.38			9.05	29.94	HOLYOKE	
J 96		34			12.13	11.43			9.10	36.67	NICKERSON	NS
J 91	110	14			12.25	11.53		5.34	9.18	40.58	DUQUETTE	
J 82	135	24			12.40	12.05Am		5.41	9.29	43.12	KERRICK	K
J 76		382			1.00	12.25		5.48	9.39	48.87	BRUNO	UN
J 67		16			1.30	12.55		5.49	9.49	57.25	ASKOV	RD
	144	16			1.57	1.17		5.58	9.50	63.11	SANDSTONE	NA
J 59	167	6			2.16	1.37		6.07	10.00	71.93	HINCKLEY	H
GA54	16	4			A 2.17Am	1.38		6.08	10.01	72.30	HINCKLEY TOWER	HT
GA49	107	32				1.50		6.17	10.14	80.14	BROOK PARK	BK
GA43	59	35				2.02		6.22	10.21	80.54	BROOK PARK JCT.	
GA40		19				2.21			10.26	85.96	HENRIETTE	
GA88		80				2.27			10.30	91.37	GRASSTON	
GA83	104	120				2.37		6.31	10.37	96.66	BRAHAM	RA
GA27		55				2.49			10.44	100.06	STANCHFIELD	
GA21	99	49				3.01		6.41	10.53	102.57	GRANDY	
GA15		20				3.13			11.00	107.46	CAMBRIDGE	CG
GA 9	99	18				3.25		6.51	11.05	113.10	ISANTI	IS
G 18					A 3.40Am			A 6.56Pm	A 11.11Am	119.13	BETHEL	BE
										125.28	CEDAR	
										131.23	ANDOVER	
										136.90	COON CREEK JCT.	CN

TRAINS BETWEEN COON CREEK JUNCTION AND NORTH TOWN WILL BE GOVERNED BY NORTHERN PACIFIC TIME TABLE.

TRAINS BETWEEN NORTH TOWN AND ST. PAUL WILL BE GOVERNED BY TWIN CITY TERMINALS TIME TABLE.

							A 7.45Pm	A 11.59Am		159.91	ST. PAUL	
			.15	.20	3.47	5.25	.33	2.26	3.11		Time Over Subdivision	
			18.4	16.3	18.6	25.2	24.0	56.3	48.0		Average Speed Per Hour	

Westward trains are superior to eastward trains of the same class.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

FIRST SUBDIVISION

EASTWARD 3

Time Table No. 61.

Effective June 3, 1951

STATIONS	Distance from St. Paul	FIRST CLASS				SECOND CLASS			SIGNS
		36	24	20	414	408	412		
		Daily Ex. Monday	Daily	Daily	Daily	Daily	Daily		
DULUTH	159.91	A 7.15Am	A 11.58Am	A 7.45Pm				RKDNXB	
BRIDGE SWITCH	157.62	L 7.08Am	L 11.52Am	L 7.39Pm					
TRAINS BETWEEN ELEVATOR STATION AND DULUTH TERMINAL DEPOT WILL BE GOVERNED BY NORTHERN PACIFIC, DULUTH AND SUPERIOR TERMINALS TIME TABLE.									
ELEVATOR STATION	156.75								
SUPERIOR	155.78	s 7.00	s 11.43	s 7.30				RKP WBCXO PX	
25th ST.	154.60								
CENTRAL AVE.	151.62								
FIRST CLASS TRAINS BETWEEN CENTRAL AVE. TOWER AND DULUTH TERMINAL DEPOT WILL BE GOVERNED BY NORTHERN PACIFIC, DULUTH AND SUPERIOR TERMINALS TIME TABLE.									
CENTRAL AVE. TOWER	151.31	A 6.48Am	A 11.33Am	A 7.19Pm	A 3.33Am	A 2.50Am	A 5.33Am	RIDNPXJ	
M. ST. P. & S. M. R. R. CROSS'G	150.50							I	
SAUNDERS	149.58	6.45	11.30	7.16	3.27	2.45	5.27	RIDNPXJ	
BOYLSTON	146.70	L 6.41Am	11.27	7.13	L 3.20Am	2.35	5.20	IPJ	
DEDHAM	141.45		f 11.19			2.24	5.00	P	
FOXBORO	135.28		f 11.10	7.01		2.12	4.40	PW	
HOLYOKE	129.97		f 11.03			2.02	4.20	P	
NICKERSON	123.24		f 10.54	6.51		1.50	4.00	NPW	
DUQUETTE	119.33		f 10.49				3.36		
KERRICK	116.79		f 10.44			1.40	3.30	DP	
BRUNO	111.04		s 10.37	6.41		1.30	3.05	DP	
ASKOV	102.66		s 10.27	6.34		1.15	2.30	DP	
SANDSTONE	96.80		s 10.20	s 6.28		407-411 1.00	407-411 2.00Am 11.20Pm	BRDNPT WXCIO DP	
HINCKLEY	87.98		s 10.10			12.05	10.58	DNPI	
HINCKLEY TOWER	87.61		10.09	6.15		12.03Am	10.56		
BROOK PARK	79.77		s 10.00	6.07		11.39	10.41	RDNPI	
BROOK PARK JCT.	79.37		9.59	6.06		11.38	L 10.40Pm	IPWJ	
HENRIETTE	73.95		s 9.54			11.24		P	
GRASSTON	68.54		s 9.47	5.57		11.09		P	
BRAHAM	63.25		s 9.41	5.52		10.54		DP	
STANCHFIELD	59.85		s 9.36			10.43		P	
GRANDY	57.34		s 9.32			10.37		P	
CAMBRIDGE	52.45		s 9.25	s 5.43		10.23		DNP	
ISANTI	46.81		s 9.15			10.08		DP	
BETHEL	40.78		s 9.07	5.34		9.52		DPW	
CEDAR	34.63		f 8.58			9.35		P	
ANDOVER	28.68		f 8.51	5.24		9.20		P	
COON CREEK JCT.	23.01		L f 8.46Am	L 5.19Pm		L 9.00Pm		JRDNPI	
TRAINS BETWEEN COON CREEK JUNCTION AND NORTHTOWN WILL BE GOVERNED BY NORTHERN PACIFIC TIME TABLE.									
TRAINS BETWEEN NORTHTOWN AND ST. PAUL WILL BE GOVERNED BY TWIN CITY TERMINALS TIME TABLE.									
ST. PAUL	23.01		L 8.00Am	L 4.30Pm					
Time Over Subdivision		.34	3.12	2.26		.13	5.50	6.53	
Average Speed Per Hour		23.4	42.8	56.3		23.6	21.9	12.2	

Westward trains are superior to eastward trains of the same class.  
SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

## 4 WESTWARD

## SECOND SUBDIVISION

## EASTWARD

Station Numbers	Car Capacity		SECOND CLASS			Time Table No. 61.			SECOND CLASS		
	Sidings	Other Tracks	(306)	411	Distance from Brook Park Jct.	Effective June 3, 1951		SIGNS	(305)	412	Distance from St. Cloud
			Daily Ex. Sun.			Daily	Daily Ex. Sun.		Daily		
						STATIONS					
J54	8			L 2.17Am	5.00	BROOK PARK JCT.	59.63	JPWI	A 10.40Pm		
J48	58			2.30	10.87	5.00 QUAMBA	54.63	P	10.25		
J41	89	81		2.44	18.48	5.87 MORA	48.76	DP	10.10		
J34	19			3.02	25.31	7.56 OGILVIE	41.20	DP	9.50		
				3.18		6.88 BOCK	34.32	P	9.32		
J28	90	71		L 11.35Am	30.53	5.22 MILACA	29.10	BRDPX	A 10.55Am	9.20	
				A 11.40Am	31.17	0.64 MILACA JCT.	28.46	PJW	L 10.50Am	9.05	
J25	33			4.00	33.82	2.65 FORESTON	25.81	P	8.55		
J18	30			4.13	39.54	5.72 OAKS	20.09	P	8.41		
J17	11			4.20	42.34	2.77 RONNEBY	17.32	P	8.33		
J14	89	43		4.26	44.62	2.31 FOLEY	15.01	DP	8.25		
J10	33			4.36	48.87	4.25 PARENT	10.76	P	8.15		
					58.09	9.22 N. P. RY. CROSSING	EA 1.54	DNPIX			
G63				5.05	58.30	0.21 EAST ST. CLOUD	1.33	X	7.40		
75	Yard	1390		A 5.20Am	59.63	1.33 ST. CLOUD	DX 0.00	RKDNW BCXYO	L 7.30Pm		
				.05	3.03	Time Over Subdivision			.05	3.10	
				10.0	19.2	Average Speed Per Hour			10.0	18.8	

Westward trains are superior to eastward trains of the same class, except No. 316 is superior to No. 315 between Milaca Jct. and Milaca.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

## WESTWARD

## THIRD SUBDIVISION

## EASTWARD 5

Station Numbers	Car Capacity		SECOND CLASS		FIRST CLASS		Distance from Duluth	Time Table No. 61.			Telegraph Calls	Distance from Cass Lake	SIGNS	FIRST CLASS		SECOND CLASS	
	Sidings	Other Tracks	413	421		35		Effective June 3, 1951						36		414	
			Daily	Daily		Daily Ex. Sunday		STATIONS						Daily Ex. Monday		Daily	
J125			L 11.45Pm	L 11.10Pm		L 10.03Pm	13.21				149.40	PI	A 6.41Am		A 3.20Am		
Y251	99	2	12.01Am	11.20		f 10.11	19.18				143.49	P	f 6.33		3.10		
Y249			12.15	11.35			23.01				8	DNPI	6.27		3.00		
							26.85					IP					
Y236	85	10	12.35	12.01Am		s 10.37	32.92				A	DNPWI	s 6.15		2.35		
Y232						f 10.43	36.19					P	f 6.07		2.20		
Y229		260	1.05	12.15		s 10.51	38.89				KN	PXR	s 6.02		2.15		
Y213	89	76	1.55	1.20		s 11.18	55.38				BN	JDNPW CXY	s 5.39		1.40		
Y205		8				f 11.30	63.23					P	f 5.28		1.10		
Y200		12	2.20	1.35		f 11.39	67.85					P	f 5.21		1.00		
Y195		56	2.30	1.45		s 11.52	73.20				OD	DP	s 5.14		12.45		
Y189			2.41	2.00		f 12.01Am	79.29					P	f 5.04		12.30		
Y182		11	2.57	2.10		f 12.10	85.80					P	f 4.56		12.15Am		
Y178		78	3.05	A 2.20Am		s 12.22	89.76				WA	JDNPW YI	s 4.49		11.59		
Y172		7	3.14			s 12.33	95.23					P	s 4.40		11.30		
	200		3.20				98.64					PI	4.35		11.20		
Y166		6	3.26			f 12.45	101.64					P	f 4.31		11.15		
Y161	96	175	3.36				106.22				GU	JPWYI DNP	4.25		11.05		
Y159		271	3.46			s 1.15	109.27				GR	DNXP	s 4.20		10.50		
Y156	123	11	4.08			s 1.27	114.17					P	s 4.08		10.35		
Y145	42	96	4.39			s 1.53	123.59				RI	DNPWXC	s 3.56		10.15		
Y138	70	16	5.00			f 2.07	130.62					P	f 3.45		9.50		
Y125	69	22	5.29			s 2.31	143.53				BA	DP	s 3.30		9.25		
Y118	123	8	5.49			f 2.44	151.07					P	f 3.20		9.00		
							153.11					I					
Y106	Yard	690	A 6.20Am			A 3.02Am	162.62				CS	RKDNPB WCYXO	L 3.07Am		L 8.30Pm		
			6.35 22.7	3.10 24.1		4.59 30.0							3.34 41.9		6.50 21.8		

Westward trains are superior to eastward trains of the same class.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

**6 WESTWARD**

**FOURTH SUBDIVISION**

Station Numbers	Car Capacity		THIRD CLASS			SECOND CLASS		FIRST CLASS			Distance from Cass Lake	Time Table No. 61.		Telegraph Calls
	Sidings	Other Tracks	559	(136) 133	(106) 107	105	35	Effective June 3, 1951						
								STATIONS						
			Daily Ex. Sun.	Daily Ex. Sun.	Daily Ex. Sun.	Daily Ex. Sun.	Daily Ex. Mon.							
Y106	Yard	690	L 7.30Am		L 10.49Am	L 7.54Am	L 3.07Am <sup>36</sup>			0.76	CASS LAKE	CS		
Y101		15	7.43		A 10.53Am	f 8.00	f 3.12		4.13		K LINE JCT.			
Y 96	69	10	7.56			f 8.07	f 3.18		9.75		FARRIS			
Y 90	70	188	8.05			A 8.15Am	s 3.30		15.27		ROSBY			
Y 84	70	10	9.15				s 3.40		21.51		N. P. RY. CROSSING			
Y 78		26	9.45				s 3.50		27.55		BEMIDJI	BM		
Y 72	69	27	10.05				s 4.00		33.75		WILTON	N		
Y 65	75	48	11.10 <sup>660</sup>				s 4.10		40.45		SOLWAY	SO		
Y 58	101	27	11.45				f 4.23		47.77		SHEVLIN	VN		
Y 52	70	23	12.15Pm				s 4.32		53.79		BAGLEY	BY		
Y 45	70	115	12.50				s 4.45		60.83		EBRO	RO		
Y 37	70	35	1.15				s 5.00		68.41		LENGBY	G		
Y 31	72	37	1.45				s 5.14		74.45		FOSSTON	FO		
Y 24	71	34	2.05				s 5.28		81.16		McINTOSH	MO		
Y 18		8	2.50				s 5.38		86.74		M. ST. P. & S. S. M. R. R. CROSSING			
Y 17			2.54		L f 8.10Pm		f 5.40		87.84		ERSKINE	RS		
Y 12	70	29	3.07		f 8.19		f 5.48		92.68		MENTOR	MT		
Y 6		88	3.27		f 8.30		f 5.57		99.36		DUGDALE			
A298	Yard	418	A 3.45Pm		A 8.40Pm		A 6.05Am		102.56		TILDEN JCT.	ON		
									104.93		N. P. RY. CROSSING			
											CROOKSTON YARD	CA		

**TRAINS BETWEEN CROOKSTON YARD AND CROOKSTON WILL BE GOVERNED BY DAKOTA DIVISION TIME TABLE.**

					A 8.45Pm				A 6.10Am	106.91	1.98 CROOKSTON
		8.15		.30		.04	.21	2.58			Time Over Subdivision
		12.7		34.1		11.5	43.6	35.2			Average Speed Per Hour

Westward trains are superior to eastward trains of the same class, except No. 108 is superior to No. 105 and No. 106 is superior to No. 107 between K Line Jct. and Cass Lake.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

**FOURTH SUBDIVISION**

**EASTWARD 7**

**Time Table No. 61.**

Effective June 3, 1951

STATIONS	Distance from Crookston	FIRST CLASS			SECOND CLASS		THIRD CLASS			SIGNS
		36	106	(105) 108	(135) 134	560				
		Daily Ex. Mon.	Daily Ex. Sun.	Daily Ex. Sun.	Daily Ex. Sun.	Daily Ex. Sun.	Daily Ex. Sun.			
CASS LAKE.....	106.91	A 3.02Am	A 10.25Am	A 7.44Am			A 3.15Pm			BRDNKW CXPYO
0.76 K LINE JCT.....	106.15			L 7.41Am						JXY
3.37 FARRIS.....	102.78	f 2.57	f 10.17				3.05			P
5.62 ROSBY.....	97.16	f 2.51	f 10.08				2.50			P
4.69 N. P. RY. CROSSING.....	92.57									I
0.93 BEMIDJI.....	91.64	s 2.42	L 10.00Am				2.40			BRDNPWX
6.24 WILTON.....	85.40	s 2.26					2.05			DP
6.04 SOLWAY.....	79.36	s 2.16					1.40			DP
6.20 SHEVLIN.....	78.16	s 2.06					1.05			DP
6.70 BAGLEY.....	66.46	s 1.56					12.15Pm			DPWX
7.32 EBRO.....	59.14	f 1.43					559 11.45			DP
6.02 LENGBY.....	58.12	s 1.34					11.15			DP
7.04 FOSTON.....	46.08	s 1.21					10.45			DPWCX
7.58 McINTOSH.....	38.50	s 1.07					10.05			DP
5.73 M. ST. P. & S. S. M. R. R. CROSSING.....	32.77									IP
0.81 ERSKINE.....	32.46	s 12.57					9.40			DPW
6.71 MENTOR.....	25.75	s 12.46					8.40			DP
5.58 DUGDALE.....	20.17	12.38					8.20			P
1.10 TILDEN JCT.....	19.07	f 12.36				A f 8.38Am	8.15			RDPIJ
N. P. RY. CROSSING.....										
4.84 BENOIT.....	14.23	f 12.30				f 8.28	8.00			P
6.68 BURWELL.....	7.55	f 12.21				f 8.16	7.40			P
3.20 N. P. RY. CROSSING.....	4.35									I
2.37 CROOKSTON YARD.....	1.98	L 12.14Am				L 8.05Am	L 7.30Am			RNWCYX BPO
<b>TRAINS BETWEEN CROOKSTON YARD AND CROOKSTON WILL BE GOVERNED BY DAKOTA DIVISION TIME TABLE.</b>										
1.98 CROOKSTON.....		L 12.09Am				L 8.00Am				BRDNKX
Time Over Subdivision		2.48	.25	.03		.33	7.45			
Average Speed Per Hour		37.5	36.6	15.9		31.0	13.5			

Westward trains are superior to eastward trains of the same class, except No. 108 is superior to No. 105 and No. 106 is superior to No. 107 between K Line Jct. and Cass Lake.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

## 8 WESTWARD

## FIFTH SUBDIVISION

## EASTWARD

Station Numbers	Car Capacity		THIRD CLASS		FIRST CLASS		Distance from Sauk Center	Time Table No. 61.				Telegraph Calls	SIGNS	FIRST CLASS		THIRD CLASS		
	Sidings	Other Tracks	523		105			Effective June 3, 1951						RDN WCXB	106	524	Daily Ex. Sun.	Daily Ex. Sun.
			Daily Ex. Sun.	Daily Ex. Sun.	STATIONS				Daily Ex. Sun.	Daily Ex. Sun.								
117		195			L 2.30Am		0.00	SAUK CENTRE				AU		A 4.00Pm				

TRAINS BETWEEN PARK RAPIDS JCT. AND SAUK CENTRE WILL BE GOVERNED BY DAKOTA DIVISION TIME TABLE.

			L 2.50Am		L 2.33Am	0.16		0.16	PARK RAPIDS JCT.		JP		A 3.55Pm		A 1.10Pm	
						0.68		0.52	N. P. Ry. CROSSING		I					
K-10		5	3.15		2.51	10.40		9.72	LITTLE SAUK				3.33		12.40	
K-14		15	3.24		2.58	13.86		3.46	ROUND PRAIRIE				3.26		12.25	
K-18	39	52	4.15		3.10	18.60		4.74	LONG PRAIRIE	NE	D		3.15		12.05Pm	
K-24		46	4.45		3.25	26.46		7.86	BROWERVILLE	VI	D		2.54		11.30	
K-32		31	5.05		3.36	31.84		5.38	CLARISSA	RU	D		2.42		11.05	
K-36	34	32	5.28		3.46	36.53		4.69	EAGLE BEND	GD	D		2.31		10.45	
K-44		27	5.48		4.05	44.04		7.51	BERTHA	BR	D		2.16		10.05	
K-48		27	6.06		4.14	48.07		4.03	HEWITT	HW	D		2.04		9.45	
K-56		52	6.41		4.34	56.21		8.14	WADENA	WD	D		1.49		8.45	
						56.44		0.23	N. P. Ry. CROSSING		I					
K-60		28	7.01		4.44	60.53		4.09	LEAF RIVER				1.35		8.15	
K-70	23	30	7.44		5.08	70.46		9.93	SEBEKA	SK	DW		1.18		7.44	
K-79		27	8.25		5.27	79.19		8.73	MENAHGA	MH	D		12.58		7.01	
K-91	30	116	9.20		5.24 6.08	91.19		12.00	PARK RAPIDS	J	DX		12.35		10.5 6.08	
K-98		15	9.40		6.21	97.76		6.57	DORSET				12.17		5.36	
K-103		29	10.10		6.32	103.09		5.33	NEVIS	N	D		12.07Pm		5.21	
K-109		27	10.55		6.45	109.32		6.23	AKELEY	AY	D		11.54		5.01	
K-119		32	11.34		7.02	118.84		9.52	WALKER	K	D		11.34		4.15	
						120.94		2.10	N. P. Ry. CROSSING							
K-124		15	12.50Pm		7.13	124.21		3.27	LEECH LAKE				11.20		3.50	
K-131		12	1.15		7.25	130.93		6.72	WILKINSON				11.08		3.34	
					A 7.41Am	139.64		8.71	K LINE JCT.		JXY		L 10.53Am			

TRAINS BETWEEN K LINE JCT. AND CASS LAKE WILL BE GOVERNED BY FOURTH SUBDIVISION SCHEDULES.

Y-106	Yard	690	A 1.50Pm		A 7.44Am	140.40		0.76	CASS LAKE	CS	BRKDN WCXPYO	L 10.49Am		L 3.10Am	
			11.00 12.88		5.08 27.2				Time Over Subdivision Average Speed Per Hour			5.02 27.7		10.00 14.0	

Westward trains are superior to eastward trains of the same class.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.



**WESTWARD SIXTH SUBDIVISION EASTWARD**

Station Numbers	Car Capacity		SECOND CLASS		Distance from Elk River	Time Table No. 61. Effective June 3, 1951	Telegraph Calls	SIGNS	SECOND CLASS	
	Sidings	Other Tracks		305						306
G-28			L	8.52Am	0.00	ELK RIVER	ER	JRD NW	A	1.37Pm

**TRAINS BETWEEN N. P. RY. JCT. AND ELK RIVER WILL BE GOVERNED BY N. P. RY. TIME TABLE.**

Station Numbers	Car Capacity	Distance from Elk River	Time Table No. 61. Effective June 3, 1951	Telegraph Calls	SIGNS
H-11	23	L 8.54Am	0.74 N. P. Ry. JCT. 9.49 ZIMMERMAN	WR I	A 1.25Pm
H-20	29 103	9.25	10.23 8.93 PRINCETON	CT DX	1.00
H-24	4	10.05	19.16 4.20 LONG'S SIDING		12.30
H-29	9	10.20	23.86 5.22 PEASE	EA	12.10Pm
		10.38	28.58 3.98 MILACA JCT.	JP	11.55
		A 10.50Am	32.56		L 11.40Am

**TRAINS BETWEEN MILACA JCT. AND MILACA WILL BE GOVERNED BY SECOND SUBDIVISION SCHEDULES.**

Station Numbers	Car Capacity	Distance from Elk River	Time Table No. 61. Effective June 3, 1951	Telegraph Calls	SIGNS
J-28		A 10.55Am	0.63 MILACA	MU	RDPB WX
		1.56 16.4	Time Over Subdivision Average Speed Per Hour		1.45 18.1

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SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

**SEVENTH SUBDIVISION 9 WESTWARD EASTWARD**

Station Numbers	Car Capacity		Distance from Allouez	Time Table No. 61. Effective June 3, 1951	Telegraph Calls	SIGNS
	Sidings	Other Tracks				
YA 26	Yard	9113	2.76	Double Track .....ALLOUEZ..... 3.34 ..... BRIDGE A-9..... 0.91 ..... SAUNDERS.....	BJ	RKPWC OYXIB I
J 130	Yard	297	4.25		B	JPXIDN

Westward trains are superior to eastward trains of the same class.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

**WESTWARD EIGHTH SUBDIVISION EASTWARD**

Station Numbers	Car Capacity		Distance from Brookston	Time Table No. 61. Effective June 3, 1951	Telegraph Calls	Distance from Kelly Lake	SIGNS
	Sidings	Other Tracks					
Y 213	89	70		BROOKSTON	BN	50.33	JDNPW CXY
YD 4		19	5.21	5.21 ARLBERG		45.12	P
YD 11	65	2	11.20	5.99 BADEN		39.13	P
YD 21	74	2	21.10	9.90 DUMBLANE		29.23	PW
YA 5		17	31.07	9.97 CASCO		19.26	P
YA12		16	37.88	0.81 ONEGA		12.45	P
			43.84	5.96 D. M. & I. R. Ry. CROSSING		6.40	I
YA19		17	44.65	0.81 RILEY		5.68	P
YB25 1/2	Yard	1329	50.33	5.68 KELLY LAKE	KY		BRKDNP OJWCYX

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SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

**WESTWARD NINTH SUBDIVISION EASTWARD**

Station Numbers	Car Capacity		Distance from Chisholm	Time Table No. 61. Effective June 3, 1951	Telegraph Calls	Distance from Kelly Lake	SIGNS
	Sidings	Other Tracks					
YC 1		55		CHISHOLM	CM	11.52	DPX
			.54	.54 CHISHOLM JCT.		10.98	J
				1.22 D. M. & I. R. Shenango Yd. Jct.		9.76	J
			2.38	.62 ST. CLAIR JCT.		9.14	J

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SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

## 10 WESTWARD

## TENTH SUBDIVISION

## EASTWARD

Station Numbers	Car Capacity		FIRST CLASS		Distance from Virginia	Time Table No. 61. Effective June 3, 1951	STATIONS	Telegraph Calls	Distance from Swan River	SIGNS	FIRST CLASS		SECOND CLASS	
	Siding	Other Tracks	75 D.M. & I.R. 1	Daily							76 D.M. & I.R. 2	422	Daily	Daily
YC17	Yard	102			0.47	VIRGINIA	VA	50.76	RDPXY					
					1.00	D. W. & P. RY. CRESCENT AVE. CROSSING		50.29	I					
					1.20	D. M. & I. R. RY. CROSSING		49.78	I					
					1.20	D. W. & P. RY. VIRMOUNT CROSSING		49.56						
					7.51	LUCKNOW WATER TANK		43.25						
					9.70	D. M. & I. R. RY. CROSSING		41.06						
YC7	45				10.11	LUCKNOW		40.65	PWX					
					11.86	D. M. & I. R. SHERWOOD JCT.		38.90	JX					
YC5½	20	54			12.08	BUHL	BU	38.68	DPX					
					13.00	D. M. & I. R. FRAZER YARD		37.76	PX					
	35				15.41	ELBERN SIDING		35.35	PX					
					15.96	ST. CLAIR JCT.		34.80	JPX					
					16.35	D. M. & I. R. WILPEN JCT.		34.41	JPX					
YD59	Yard	127			19.09	EMMERT TOWER		31.67	PWIX					
					19.80	D. M. & I. R. RY. CROSSING								
					19.80	NORTH MITCHELL		30.96	PXI		A 1.22Pm			
					20.58	RUBY JCT.		30.18	JPX		1.19			
					21.63	HIBBING		29.13	RDPX		L 1.15Pm			
		142			22.21	SCRANTON MINE CROSSING		28.55	IX					
YB25½	Yard	1329			25.31	KELLY LAKE	KY	25.45	BRKDNP WCXYJO			A 3.40Am		
YB15	62				36.13	BENGAL		14.63	P			3.10		
YB6	63				44.59	GOODLAND		6.17	P			2.40		
Y178		72			50.76	SWAN RIVER	WA		JDNP WYI			L 2.20Am		
					.8									
					13.7									
					Time Over Subdivision Average Speed Per Hour									
					.7					14.6				
					1.20					19.0				

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SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

## WESTWARD

## ELEVENTH SUBDIVISION

## EASTWARD

Station Numbers	Car Capacity		FIRST CLASS		Distance from Kelly Lake	Time Table No. 61. Effective June 3, 1951	STATIONS	Telegraph Calls	Distance from Gunn	SIGNS	FIRST CLASS			
	Siding	Other Tracks	87 D.M. & I.R. 3	Daily							88 D.M. & I.R. 4	Daily		
YB 25½	Yard	1329				KELLY LAKE	KY	31.32	BRKDNP WCXYJO					
YD 64		18			4.02	KEEWATIN	KW	27.30	DPX					
YD 69	90				4.86	MOORE		26.46	PX					
YD 74		386			9.59	NASHWAUK	N	21.73	DPWX					
	27				11.47	KEVIN		19.44	P					
YD 80		406			16.19	CALUMET	CU	15.18	JDPWX		A 1.26Pm			
YD 82		3			17.08	MARBLE	RB	14.24	DPX		1.24			
					20.58	HOLMAN JCT.		10.74	JPI		1.17			
YD 86					21.60	TACONITE JCT.	NI	9.72	JP		1.15			
						DANUBE			P					
YD 88		56			23.43	BOVEY	BY	7.89	DP		1.07			
YD 89		19			24.24	COLERAINE	CR	7.08	DP		L 1.05Pm			
		300			25.56	CANISTEO		5.76	PWXY					
Y 161	100	193			31.32	GUNN	GU		JPWYI					
					Time Over Subdivision Average Speed Per Hour									
					.23					.21				
					21.0					23.0				

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SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 11 THROUGH 19.

ALL SUBDIVISIONS

1. Omitted.

2. SPEED RESTRICTIONS GENERAL.

(a) Where Automatic Block and Interlocking Rules and Signal Indications require movement at RESTRICTED SPEED, such movement must be made prepared to stop short of train, obstruction, or switch not properly lined and on the lookout for broken rail or anything that may require the speed of a train to be reduced; but not exceeding 15 MPH or as much slower as necessary; and where conditions require the movement must be controlled so stop can be made in time to avoid accident.

(b) Maximum permissible speed of passenger and freight trains, except Streamliners, will be designated by distinctive reflectorized roadway signs set in an upward angle of 45 degrees. Except as directly affected by speed restrictions prescribed below and other speed restrictions covered by Item No. 2 under individual Subdivisions, the 45 degree signs prescribe the speed territories and the numerals thereon indicate in miles per hour the maximum permissible speed which will govern until the next territory is reached.

When the movement is from a higher to a lower speed territory the 45 degree sign is located approximately one mile from the point where the lower speed becomes effective. When the movement is from a lower to a higher speed territory, the 45 degree sign is located at the point where speed may be increased.

When operating against the current of traffic in double track territory, trains must not exceed the maximum permissible speed prescribed by the 45 degree sign with the current of traffic. This does not modify Rule 93.

When the 45 degree sign has two sets of figures, the numerals preceded with letter "P" apply to passenger trains, except Streamliners, and letter "F" to freight trains.

(c) When passenger trains are handled by steam freight engines or when freight cars, except cars equipped with steel wheels, air signal and steam heat lines are handled in passenger trains, the train will not exceed maximum permissible speed for freight trains in territory operated.

(d) Speed shown on Speed Limit Plate on engines must not be exceeded.

(e) Steam engines backing up .....	20 MPH
Steam engines in forward motion running light or with caboose only .....	35 MPH
Diesel and Electric engines, light or with caboose only .....	50 MPH
Trains handling steam derricks, pile drivers, ditchers, cranes, steam shovels, dozers, etc., on Main Lines .....	25 MPH
except on 6 degree curves or sharper, and on Branch Lines .....	15 MPH
Trains handling ore cars or air dump cars loaded with ore or gravel, and scale test cars, on Main Lines .....	30 MPH
except on 6 degree curves or sharper, and on Branch Lines .....	20 MPH
Unless conditions require a further speed restriction, trains or engines moving against the current of traffic on double track through interlockings .....	15 MPH
Trains or engines moving on main routes actuating points of spring switches .....	35 MPH
Trains or engines moving in facing point direction at spring switches without facing point lock .....	25 MPH
Trains or engines through No. 20 turnouts at:.....	35 MPH
Saunders .....Crossover switches between eastward and westward main tracks.	
Boylston .....Crossover switches between eastward and westward main tracks.	
Dedham .....East and west siding switch.	
Askov .....East and west siding switch.	
Hinckley Tower.....East and west siding switch.	
Brook Park .....East and west siding switch.	
Brook Park Jct.....Junction switch to 2nd Subdivision.	
Grasston .....East and west siding switch.	
Coon Creek Jct.....Junction switch to 1st Subdivision.	
Coon Creek .....Crossover switches between N. P. and G. N. main tracks.	

Brookston .....	Crossover switches between eastward and westward main tracks.
	Junction switch to 8th Subdivision.
Swan River .....	End of double track.
	Junction switch to 10th Subdivision.
Philbin .....	East and west siding switch.

Trains or engines through No. 15 turnouts at: ..... 25 MPH Central Ave.

Tower .....	Crossover switches between eastward and westward main tracks.
Saunders .....	Junction switch to 7th Subdivision.
Boylston .....	Junction switch to 3rd Subdivision.
Bridge A-9 .....	End of double track.
Bridge 29 .....	East and west switch of gantlet.
Gunn .....	Junction switch to 3rd Subdivision.
Gunn Yard .....	Junction switch to 11th Subdivision.

Trains or engines through all other turnouts..... 15 MPH

(f) Open cars loaded with poles, piling, lumber, timber, pipe or other lading which might shift, shall be handled as far as possible in pole trains or local trains. Except at points where it is necessary to classify trains, such cars should be placed as close as possible to the head end of the train but shall not be placed immediately next to Diesel or Electric engines, or immediately next to caboose, occupied outfit or passenger cars. These commodities must not be placed in trains at such locations as will conflict with the rules governing the handling of explosives, inflammables or acids.

In double track territory, engineers on trains containing such cars must at all times use extreme care to avoid slack running in or out when passing or being passed by other trains.

On single track, trains containing such cars must be at stop when on siding or adjacent track when meeting or being passed by other trains, except when there are more cars than siding will hold, it is permissible for such train to pull by other train at restricted speed.

3. MOVEMENT OF ENGINES DEAD IN TRAINS.

Class O and larger engines will be placed not to exceed 15 cars behind road engine. In electrified zone only class R engines will be handled on head end, all others near rear.

Class F-8 and smaller engines will be placed next ahead of caboose.

Diesel and Gas-Electric engines 2300-2341 must be handled on rear of train.

Not less than five cars will be placed between all engines.

Trains handling Great Northern steam engines dead in train with side rods on both sides will not exceed 40 MPH; and without side rods will not exceed 10 MPH.

Trains handling foreign line steam engines with side rods on both sides will not exceed speed designated by Superintendent; and without side rods will not exceed 10 MPH.

Engines that have any of the truck or driving wheels removed will not be moved in a train without authority of Superintendent.

Trains handling Electric, Diesel and Gas-Electric engines in tow dead in train will not exceed following speeds:

Engine Number	Maximum Speed
1 to 23-75 to 170-253 to 258-262 to 264-272 to 277-	
301 to 310-400 to 456 .....	50 MPH
50 .....	35 MPH
175 to 227-600 to 653 .....	65 MPH
250, 251-260, 261-266 to 270-350 to 365-500 to 512....	75 MPH
252 & 259-265-300 .....	45 MPH
2300 to 2324 .....	50 MPH
2325 to 2341 .....	60 MPH
5000 to 5008-B .....	45 MPH
5010 to 5019 .....	55 MPH

4. Under Rule 2, watches that have been examined and certified to by a designated inspector must be used by train dispatchers and yardmen.

5. 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.

6. When operating snow machines in non-block signal territory no train should be permitted to follow closer than a station apart,

when that cannot be done they will be blocked not less than thirty minutes apart.

7. After severe blizzard or dirt storm, employes on first train over road must exercise care to avoid accident caused by striking drift without first having drifts faced with hand shovels, cutting in far enough to get beyond the hard snow and giving a perpendicular wall to strike against instead of slope or wedge-like shape. When operating snow dozer, conductor in charge will ride in the dozer.  
On snow and dirt dozers every precaution must be taken to see that cage, flangers and wings clear all obstacles when in service and are properly secured when in through trains, and dozers properly turned. Hand screws must be tightened to raise flanger on dozers as high as possible before making a back-up movement, and must not be released until the dozing work is actually to start. Hand screws holding the cage on dozers must be tightened or chains otherwise fastened except when dozer has air in cylinders and is attended by an employe.
8. Loaded dump cars should not be handled on double track after dark, but if necessary to do so, close watch must be kept by trainmen and if a car dumps its load, train must be stopped and protection afforded on the opposite track.
9. Trains 1, 2, 3, 4, 7, 8, 11, 12, 19, 20, 23 and 24 carry 100 ft. of steam hose in two 50 ft. lengths equipped with standard Vapor and engine steam dome connections for emergency use in event of steam failure on train engine and non-steam train line engine furnished to handle train. In case of steam line failure on a car, connect both hoses together to run around such car so can be taken to first terminal, using combination standard Vapor and steam dome connections attached to reel. Car must be drained before proceeding.
10. Unless otherwise provided, when passenger trains are operated against current of traffic on double track or through sidings, conductors shall notify Railway Postal Clerks, trains shall stop at points where U. S. Mail is usually picked up and Conductors are responsible for delivery of mail to Postal car.
11. Conductors will report by wire, all flat spots on wheels of passenger cars. Any cars having flat spots on wheels of more than two and one-half inches long must be set out.
12. Due to limited overhead clearance at tunnels and structures, employes are warned to keep off top of cars of extreme height and width when handled in trains and yards, also such standing cars in electrified zone, except in emergency. In absence of previous advice on such cars, wire proper officer for instructions.
13. The Railway Company is responsible for proper handling of perishable freight on road and at points where Western Fruit Express Company do not maintain representatives. Conductors on trains handling perishable freight will ascertain from way-bills class of service required and light or extinguish heaters and manipulate vents in accordance with current instructions provided for handling perishable freight issued by the National Perishable Freight Committee.
14. Placarded loaded tank cars moving in through freight trains must be placed not less than 6th car from engine or caboose; cars placarded "Explosives", "Inflammable", or "Corrosive Liquids", not less than 16th car from road engine, one car from helper engine and 11 cars from caboose. These cars may be handled second car from engine or caboose in local trains. These cars must not be placed in trains next to each other, next to refrigerators equipped with gas burning heaters, stoves or lanterns, or flat cars loaded with logs, poles, lumber, pipe, rails, iron, steel, and gondola cars with such lading higher than ends, or cars of similar lading that is liable to shift. Carload express shipments of explosives, sealed and placarded, may be handled on passenger trains; LCL shipments may be made in so-called peddler car with messenger in charge when such car is assigned to the handling of express and baggage exclusively, provided shipments are accompanied by authorized representative of United States Government while on trains. Terminals or pick-up points enroute must furnish conductor and engineer Form 250 showing consecutively location in train of all cars placarded "Explosives". At points other than terminals where crews change notice will be transferred from crew

to crew.

Further details governing handling of Explosives, Inflammable and Corrosive Liquids may be found in I.C.C. Regulations.

15. Gas-Electric engines must not be fueled while occupied by passengers, or coupled to cars occupied by passengers.
16. The normal position of a spring switch with facing point lock is identified by a color light type signal displaying a "lunar white" light for train or engine movements in a trailing point direction and for movements in facing point direction when conditions require.  
The normal position of a spring switch without facing point lock is identified by a triangular yellow target on switch stand with letter "S" in black, and "lunar white" light in switch lamp in place of green light displayed in both directions through or over the switch.  
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.

#### INDICATORS AT SPRING SWITCHES.

A Switch Indicator, consisting of a single yellow light unit (normally dark) and a switch-key-controller mounted on an iron mast located at clearance point of a siding, must be operated by a member of the crew who, together with engineer, must observe and be governed by its indication before fouling main track or making movement from siding to main track through a spring switch in automatic signal territory, unless the movement is made immediately after an opposing train has passed the switch, and Automatic Signal at leaving end of siding indicates "Proceed".

If Indicator displays a yellow light when switch-key-controller is operated, train or engine movement to main track may be made immediately in accordance with train rights and operating rules. Display of yellow light must continue until leading wheels have passed clearance point.

If Indicator does not display a yellow light when switch-key-controller is operated, train or engine movement to main track may be made in accordance with train rights and operating rules, after operating spring switch by hand; waiting three minutes and taking every precaution to provide proper protection.

To operate Switch Indicator, insert switch key in controller and turn clockwise toward "R", hold a few seconds, and remove key. If yellow light is displayed and intended movement is not made, insert switch key in controller and turn counter-clockwise toward "N" to restore signal system to normal condition to avoid delay to trains on main track.

Switch-key-controller must never be operated toward "N" after having been operated toward "R" if intended movement to main track is to be made.

17. DRAGGING EQUIPMENT DETECTOR INDICATOR consists of a single white light unit (normally dark) with circular background mounted on signal or other mast. When white light is displayed, train must be stopped and inspected for dragging equipment. Notify Superintendent from first available point of communication.
18. 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.
19. Under Rule 24, engine number only will be displayed in indicators on engines so equipped. This will also apply when our engines are operating over Northern Pacific tracks. Between Klamath Falls and Chemult, Southern Pacific Rules will govern.

20. Rule 204 (A) prescribes that copies of train orders will be furnished the rear trainman, such orders will only be furnished on trains designated.

Nos. 1, 2, 3, 4, 7, 8, 9, 10, 28, 29, 30 and sections thereof; also, extra passenger train whether operated as a section of regular train or as a passenger extra.

21. Air hose on Diesel and Electric engines must be hooked up in hose fastener when not in use.

22. Before leaving any engine terminal enginemen will make proper tests and inspections of water glasses, gauge cocks, water column and injectors, and will not leave the terminal unless all these are in proper working order.

Should enginemen on steam engines find that the water is not in sight in water glasses, and if water cannot be raised to bottom gauge cock or water glass by opening throttle, on oil burning engines the fire must be extinguished immediately and on coal burning engines the fire must be knocked out or smothered to the extent there will be no damage done to the crown sheet. If water can be raised to the bottom gauge cock or water glass, the water level should be built up by use of the pump, or injector, or both.

Should the low water alarm whistle blow, on any engine so equipped, enginemen will immediately ascertain where the water level is in the boiler by blowing out water glasses and water column, and being sure that water glass mounting valves are open and if water cannot be raised to the bottom gauge cock or water glass by opening throttle, enginemen will be governed by instructions in the preceding paragraph.

23. **ON ENGINES, PASSENGER, FREIGHT AND ORE CARS EQUIPPED WITH ROLLER BEARINGS, EMPLOYEES WILL BE GOVERNED AS FOLLOWS:**

Roller bearing failures on cars or engines equipped with roller bearings in the journal boxes may be due to lack of oil. If the box is not blazing, this oil plug in the cover should be removed and engine or valve oil added. Oil must never be added to a box that is blazing. After the oil has been added and plug replaced, the train should proceed at reduced speed and care exercised until it is apparent that the box will run cool. If fire develops in roller bearing box on any equipment, it must be closely watched, train moved slowly, and Superintendent notified from first available point of communication, who will prescribe for the movement.

Some engines and cars equipped with roller bearings have heat indicators or stench bombs inserted in the housing of boxes which release a strong pungent odor in the event of excessive journal box temperatures. When this odor is detected train must be stopped at once and box located. Compare the temperature of this box with the other boxes on the same engine or car, check the oil level, and if there is no evidence of overheating, train may proceed, but if the box is overheating, proceed only as instructed in the preceding paragraph.

Ore cars equipped with roller bearings have box cover painted orange, four inch white stripe full length of car beneath stencilled name, "GREAT NORTHERN", and "TIMKIN ROLLER BEARINGS" stencilled in black across center of white stripe.

Cars or engines equipped with roller bearings must not be allowed to stand alone, even on level track, without brakes adequately applied.

24. **OSCILLATING EMERGENCY RED HEADLIGHT** will be immediately displayed by day or night when a train is disabled or stopped suddenly by an emergency application of air brakes or when engineer and conductor find it necessary to stop train due to some defect which might cause accident, over-running clearance point at meeting and waiting points, end of double track or junction.

Engineer of an approaching train observing display of emergency red headlight must stop before passing and be governed by conditions existing. If operating on adjacent track, ascertain and if safe for passage, then proceed at restricted speed until train is passed.

**OSCILLATING EMERGENCY RED REAR END LIGHT** is of two types—Automatic Control-Portable Manual Control—and except as otherwise provided, must be displayed by day or night each time train stops or is running at speed less than 18 MPH. Automatic Control type automatically functions in this manner. However, when train running at speed above 18 MPH and moving under circumstances in which it might be overtaken by another train or engine and during foggy and stormy weather, light may be operated manually with emergency switch and employes to afford other protection prescribed by rule.

**THE USE OF EMERGENCY RED HEADLIGHT AND REAR END LIGHT DOES NOT IN ANY WAY RELIEVE ENGINEMEN AND TRAINMEN FROM RESPONSIBILITY OF COMPLYING WITH RULES 99 AND 102.**

Emergency red rear end light must be extinguished: when standing at origin and terminus stations of train run; when switching being performed from rear; when on siding to be passed by another train; and, when another train operating on adjacent track is approaching from rear, but not until it is known such train is not on same track.

Portable light must be removed before coupling to rear of such car.

Oscillating white light on engines will be displayed in addition to standard headlight governed by Rules 17 and 17(B). In case of headlight failure it can be used as emergency headlight or as a focus light by push button control if desired.

Enginemen and trainmen on trains and engines equipped with oscillating emergency red lights must familiarize themselves with the operation of the lights.

25. Rule D-97 is in effect on this division.
26. 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.

27. 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

## 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	50 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 restricted speed not exceeding .....	20 MPH
Bridge 14.2, Boylston, .....	Passenger 35 MPH
M, N, O, P, Q, R, S.....	Freight 10 MPH
Bridge 22.2, Foxboro, R .....	20 MPH

3. **TRAIN REGISTER EXCEPTIONS.**

All trains register by ticket at Central Ave. Tower, Saunders, Brook Park, Coon Creek Jct., also Sandstone, except trains originating and terminating at that point.

Eastward freight trains will throw off register check at Saunders giving all information called for in train register except arrival and tie up.

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

(a) At Boylston, Brook Park Jct., 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. Second class and extra trains will use double track with the current of traffic without train orders or clearance between 25th Street, Superior, and Central Avenue Tower where they will receive train orders or clearance.
7. Hinckley, automatic block signal 72.1 governing westward trains, is located on left hand side of main track about 500 feet west of depot.
8. **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.
9. **CROSSOVERS ON DOUBLE TRACK.**
- |                          |                          |
|--------------------------|--------------------------|
| <b>Facing Point</b>      | <b>Trailing Point</b>    |
| Saunders, east crossover | Central Ave.             |
| Boylston                 | Saunders, at tower.      |
|                          | Saunders, west crossover |

10. **SPRING SWITCHES WITH FACING POINT LOCK.**  
Dedham, east and west siding switch.  
Nickerson, east and west siding switch.  
Askov, east and west siding switch.  
Grasston, east and west siding switch.  
Cambridge, east and west siding switch.  
Bethel, east and west siding switch.  
Normal position is for main track.
11. **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.
12. **MANUAL INTERLOCKINGS.**
- |                    |       |                               |
|--------------------|-------|-------------------------------|
| Central Ave. Tower | ..... | N. P. Ry. crossing            |
| Saunders           | ..... | junction with 7th Subdivision |
| Hinckley Tower     | ..... | N. P. Ry. crossing            |
| Coon Creek Jct.    | ..... | junction with N. P. Ry.       |
13. **MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.**
- |                 |       |   |
|-----------------|-------|---|
| Boylston        | ..... | junction with 3rd Subdivision                             |
| Brook Park      | ..... | east siding switch  |
| Brook Park Jct. | ..... | west siding switch and junction switch to 2nd Subdivision |
| Hinckley Tower  | ..... | west siding switch  |
| Sandstone       | ..... | east and west yard switch                                 |
- Boylston:  
Switches electrically controlled by the operator at Saunders.  
Interlocking Rules Nos. 601A to 671 inclusive, with special attention directed to Rules Nos. 628(A), 628(B), 663(A), 663(B), 663(C), supplemented by the following, govern in the use of this Interlocking.
- A proceed indication, Rule 601(B) Fig. 2 or Rule 601C Fig. 2, displayed to eastward trains or engines by the governing eastward home signal at the Boylston Interlocking confers authority regardless of class to proceed, **WITH THE CURRENT OF TRAFFIC ONLY.**

When a train or engine is stopped by a Stop-indication of a home signal and no immediate conflicting train or engine move-

ment is evident, trainman shall proceed to telephone and communicate with the signalman at Saunders Interlocking and be governed by his instructions. Instructions for hand operation of dual control switches are posted in the telephone booth. In case of failure of means of communication, train and engine movements must be made in accordance with train rights and operating rules.

**FOR MOVEMENT AGAINST THE CURRENT OF TRAFFIC, BOYLSTON TO SAUNDERS ON WESTWARD MAIN TRACK ONLY:**

A "Proceed on secondary route" indication, Rule 601D Fig. 1, displayed to eastward trains or engines by the governing eastward home signal at Boylston Interlocking confers authority to **USE THE WESTWARD TRACK** from Boylston to the governing eastward low home signal at Saunders.

Rule 511 governs in the use of the west crossover at Saunders. The west switch of this crossover is equipped with an electric switch lock and instructions for its use are posted in the "Lock Box".

14. **AUTOMATIC INTERLOCKINGS.**  
73rd St., .....MStP&SSM. RR. Crossing
15. **SWITCH INDICATOR.**  
Saunders, located at east switch of crossover on westward main track. Instructions for operation of indicator posted in adjacent box.

## SECOND SUBDIVISION

(Milaca Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**
- | Between                                 | Passenger | Freight |
|---|-----------|---------|
| Brook Park Jct. and East St. Cloud..... | 50 MPH    | 40 MPH  |
2. **SPEED RESTRICTIONS.**
- |   |        |
|---|--------|
| Bridge 46.3, Mora, R engines .....              | 20 MPH |
| Bridge 54.2, Quamba, R engines .....            | 20 MPH |
| Between Home Signals of Interlockings at: ..... | 20 MPH |
| Brook Park Jct.                                 |        |
| East St. Cloud.                                 |        |
3. **TRAIN REGISTER EXCEPTIONS.**  
Milaca, register only for trains originating and terminating.
4. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**  
(a) At Brook Park Jct., trains for which this point is initial station may proceed on authority of clearance under which such trains arrive.  
(b) At Milaca Jct., clearance under which Nos. 305 and 315 arrive will clear Nos. 316 and 306, respectively, at that point.
5. Mora, switch-key-controller located at Griswold Signals. When train or engine is stopped on main track within automatic approach control section of crossing signals and will not foul crossing, signals may be set clear for highway traffic by inserting switch key in controller and turn to right. After signals have been set clear, they may be changed to indicate "Stop" to highway traffic by inserting switch key in controller and turn to left.
6. Between St. Cloud and East St. Cloud trains will be governed as follows:  
Eastward trains to 2nd Subdivision must secure clearance at St. Cloud and must know before leaving there that route is clear at N. P. Ry. crossing, East St. Cloud.  
Westward trains from East Side Line will be governed by interlocking signal at N. P. Ry. Jct.  
Westward trains from 2nd Subdivision will be governed by interlocking signal at East St. Cloud.  
Operator East St. Cloud will secure authority from operator St. Cloud before clearing interlocking signal for westward trains.
7. **SPRING SWITCHES WITHOUT FACING POINT LOCK.**  
St. Cloud, east yard lead switch Eighth Ave.  
Normal position is for yard lead.  
Eastward trains on main track have preference over eastward trains on yard lead. When an eastward train on yard lead is

to move to main track while an eastward train on the main track is standing in the approach circuit, trainman shall operate push button "R" located on signal 746.

#### 8. MANUAL INTERLOCKINGS.

East St. Cloud ..... N. P. Ry. crossing

### THIRD SUBDIVISION

(Main Line)

#### 1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

Between	Passenger	Freight
Boylston and Floodwood .....	50 MPH	40 MPH
Floodwood and Cass Lake .....	55 MPH	45 MPH

#### 2. SPEED RESTRICTIONS.

Bridge 75.1, Floodwood, R engines .....	20 MPH
Grand Rapids, through city limits .....	15 MPH
Deer River, through city limits .....	15 MPH
Between Home Signals of Interlockings at: .....	20 MPH

Bridge 29, westward.  
Schley.

Cass Lake, on all tracks over footwalk crossing located just east of coaling station ..... 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. Engines must not be blown down within 100 feet of this crossing.

#### 3. TRAIN REGISTER EXCEPTIONS.

Saunders, all trains register by ticket.

Eastward freight trains will throw off a register check at Saunders giving all information called for in the train register except arrival and tie up.

Cloquet, register for trains 35 and 36 only.

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

At Boylston, trains for which this point is initial station may proceed on authority of clearance under which such trains arrive.

5. Double track extends between Boylston and Swan River, except gantlet over Bridge 29, which is governed by interlocking signals.

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

7. 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.

8. Brookston, special signal consisting of horn and yellow light is located north of westward main track just west of coaling station to inform crews of eastward ore trains from Casco and Gunn lines when carmen have completed inspection and train is in condition to proceed.

Carmen will operate horn and light by means of push button located on telegraph pole about 300 feet west of block signal 58.8 in accordance with the following code:

(a) One blast of horn and one flash of yellow light indicates train will not proceed until further instructed.

(b) Two blasts of horn and two flashes of yellow light indicate train from Gunn Line may proceed.

(c) Three blasts of horn and three flashes of yellow light indicate train from Casco Line may proceed.

9. Swan River, train orders and messages delivered by hoop to eastward trains will be delivered from the south or right hand side.

10. Philbin, siding must be used by eastward trains only, unless otherwise authorized by train order.

11. Grand Rapids, switch-key-controller located on depot. When train or engine is stopped on main track within automatic approach control section of crossing signals and will not foul crossing, signals may be set clear for highway traffic by inserting switch key in controller and turn to right. After signals have been set clear, they may be changed to indicate "Stop" to

highway traffic by inserting switch key in controller and turn to left.

12. 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.

13. Deer River, daily except Saturday, eastward freight trains will set out all cars destined Grand Rapids other than perishable and rush cars.

#### 14. 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 4 1/2 miles west of Island.

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

#### 15. CROSSOVERS ON DOUBLE TRACK.

##### Facing Point

State Line, west crossover  
Carlton, east crossover  
Cloquet, west crossover  
Brookston, east crossover  
Brookston, 1 mile west of  
Swan River, east crossover

##### Trailing Point

State Line, east crossover  
Carlton, west crossover  
Cloquet, east crossover  
Flint Pit  
Brookston, west crossover  
Mirbat  
Floodwood  
Swan River, west crossover

#### 16. SPRING SWITCHES WITH FACING POINT LOCK.

Brookston, east switch of crossover between main tracks.

Normal position is for main track.

west switch of crossover between main tracks.

Normal position is for crossover.

switch leading to Casco Line (8th Subdivision) from westward main track.

Normal position is for main track.

Swan River, end of double track.

Normal position is for eastward main track.

Philbin, east siding switch.

Normal position is for main track.

west siding switch.

Normal position is for siding.

Cass Lake, east yard switch.

Normal position is for main track.

Instructions governing operation of spring switches at Brookston:

Switch, Casco Line to storage track, is a hand operated switch. Normal position is for storage track. Reversing this switch for movement to Third Subdivision causes automatic block signals on both main tracks to indicate stop. Switch must not be lined for Third Subdivision while movement is being made between signals 57.9 and 58.0.

Block signal 58.0 located just west of the Casco line switch, between the Casco line and westward main track, governs eastward trains from Casco Line across westward main track, through the crossover, and the eastward main track.

Block signal 58.0 will display an approach indication within a few seconds after Casco Line—storage track switch is reversed for movement to Third Subdivision provided spring switches are in proper condition for movement to eastward main track and there is no conflicting train movement in the block on eastward or westward main tracks. If there is a conflicting movement approaching on either main track, the approach indication on signal 58.0 will not be displayed until a time interval of approximately two minutes has elapsed.

#### 17. SPRING SWITCHES WITHOUT FACING POINT LOCK.

Cass Lake, west crossover switch to roundhouse lead  
incoming roundhouse track  
outgoing roundhouse track

Normal position is for tracks named.

#### 18. DRAGGING EQUIPMENT DETECTOR INDICATOR.

Eastward trains, on signal 30.2 approximately one mile west of Bridge 29.

## 19. MANUAL INTERLOCKINGS.

State Line Tower ..... N. P. Ry. crossing  
 Carlton ..... N. P. Ry. crossing

## 20. MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.

Boylston ..... junction with 1st Subdivision  
 Swan River ..... crossover and junction with 10th Subdivision  
 Gunn ..... junction with 11th Subdivision  
 Boylston, switches electrically controlled by operator at Saunders. For further details see complete instructions on First Subdivision governing operation of this Interlocking.

## 21. AUTOMATIC INTERLOCKINGS.

Bridge 29 ..... gantlet  
 Philbin ..... east and west siding switch  
 Schley, 2.04 miles west of ..... MStP&SSM. RR. crossing  
 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.

Cranks for hand operation of smashboards are attached by chains to the mechanism.

If train moving against the current of traffic is stopped by dwarf signal, trainman will operate release located in release box nearest the dwarf signal, and if signal does not indicate proceed when release returns to normal position, trainman may flag train through gantlet making certain that smashboard at opposite end of gantlet is in the reverse position.

Philbin:

Interlockings at the east and west siding spring switches operate automatically for all movements, except westward movements to the siding at the east switch, and eastward movements to the main track at the west switch, which require hand operation of spring switch. Eastward trains on siding take preference over eastward trains on main track approaching east switch, and westward trains on main track take preference over westward trains on siding approaching west switch. For further information see instructions posted in push button boxes, located at eastward home signal at east switch, and at westward home signal at west switch.

## 22. SWITCH INDICATOR.

Cloquet, Switch Indicators, each consisting of a yellow light unit (normally dark) and a switch-key-controller mounted on an iron mast, located near the east yard switch and both ends of crossover between main tracks at east end of the yard, must be operated by a member of the crew, who, together with the engineer, must observe and be governed by their indications before lining switches, fouling main track, or making crossover movement from one main track to the other.

See further instructions posted on iron mast.

## FOURTH SUBDIVISION

(Main Line)

## 1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

Between	Passenger	Freight
Cass Lake and Crookston Yard .....	55 MPH	45 MPH

## 2. SPEED RESTRICTIONS.

Bemidji, through city limits .....	6 MPH
Between Home Signals of interlockings at: .....	20 MPH
Bemidji.	
Erskine, eastward.	
Crookston Yard.	

## 3. ENGINE RESTRICTIONS ON INDUSTRY TRACKS.

Q-1 engines on Land O'Lakes Spur, Fosston .....	5 MPH
Q-1 engines on MStP&SSM. RR. transfer track, Erskine .....	5 MPH

## 4. TRAIN REGISTER EXCEPTIONS.

Bemidji, Tilden Jct. and Crookston Yard, register only for trains originating and terminating at these stations, except Nos. 35 and 36 will register at Tilden Jct.

## 5. CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).

(a) At K Line Jct., clearance under which Nos. 105 and 107 arrive will clear Nos. 108 and 106, respectively, at that point.  
 (b) Mesabi Division clearance received at Crookston will clear train at Crookston Yard when train order signal indicates proceed.

## 6. SPEED TEST BOARDS.

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

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

Westward, between MP 87 and MP 86 approximately 3 miles west of Bemidji.

## 7. MANUAL INTERLOCKINGS.

Bemidji ..... N. P. Ry. crossing  
 Erskine ..... MStP&SSM. RR. crossing  
 Tilden Jct. .... N. P. Ry. crossing

## 8. AUTOMATIC INTERLOCKINGS.

Crookston Yard, 2.37 miles east of ..... N. P. Ry. crossing

## FIFTH SUBDIVISION

(Park Rapids Line)

## 1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

Between	Diesel or Gas-Electric		Steam	
	Passenger	Freight	Passenger	Freight
Park Rapids Jct. and				
Sebeka .....	35 MPH	30 MPH	35 MPH	30 MPH
Sebeka and K-Line Jct. ....	35 MPH	30 MPH	25 MPH	25 MPH

## 2. SPEED RESTRICTIONS.

Between Home Signals of Interlockings at: ..... 20 MPH  
 Park Rapids Jct.  
 Wadena.

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

(a) At K Line Jct., clearance under which Nos. 105 and 107 arrive will clear Nos. 108 and 106, respectively, at that point.  
 (b) Mesabi Division clearance received at Sauk Centre will clear train at Park Rapids Jct.

## 4. K Line Jct., normal position south wye switch is for west leg of wye.

## 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

## SIXTH SUBDIVISION

(Princeton Line)

## 1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

Between	Passenger	Freight
Elk River and Milaca Jct. ....	20 MPH	20 MPH

## 2. SPEED RESTRICTIONS.

Between Home Signals of Interlocking at Elk River.... 20 MPH

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

(a) Mesabi Division clearance received at Elk River will clear train at N. P. Ry. Jct.  
 (b) At Milaca Jct., clearance under which Nos. 305 and 315 arrive will clear Nos. 316 and 306, respectively, at that point.

## 4. SEMI-AUTOMATIC INTERLOCKINGS.

Elk River, 0.74 miles west of ..... N. P. Ry. Jct.  
 Complete instructions for operation of interlocking are located at "Release" box.



## SEVENTH SUBDIVISION

(Allouez Line)

- MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**  

Between	Passenger	Freight
Saunders and Allouez .....	20 MPH	20 MPH
- SPEED RESTRICTIONS.**  
 Between Allouez and Saunders, all trains and engines will be governed by Rule 93.
- Double track extends between Allouez and east end Bridge A-9.
- Extra trains will use double track with current of traffic between Allouez and east end Bridge A-9, and also single track between east end Bridge A-9 and Saunders without train orders or clearance where they will receive train orders or clearance.
- Allouez Ore Docks, when doubling two tracks of empty cars, first pull track with the most cars down to clear then double the shorter track to it.  
 When coupling up a track of cars on the dock and there are cars on the outer end, set sufficient hand brakes, not less than two, on outer cars to hold slack before coupling into them.
- Allouez Ore Dock No. 4, engines moving on Tracks 1 and 2 or 3 and 4 must stop and know there is sufficient side clearance before passing each other.
- SPRING SWITCHES WITHOUT FACING POINT LOCK.**  
 Allouez, Roundhouse wye tracks,  
 Normal position west switch is for west leg of wye,  
 north switch is for east leg of wye,  
 east switch is for north coal chute track.
- MANUAL INTERLOCKINGS.**  
 Saunders .....junction with 1st Subdivision
- MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.**  
 Bridge A-9 .....End of double track.

## EIGHTH SUBDIVISION

(Casco Line)

- MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**  

Between	Passenger	Freight
Brookston and Kelly Lake .....	45 MPH	35 MPH
Bridge 59.3 and Curve 1.50 miles west of Brookston .....	15 MPH	15 MPH
- AUTOMATIC INTERLOCKINGS.**  
 Riley, 0.81 miles east of .....D. M. & I. R. Ry. crossing

## NINTH SUBDIVISION

(Chisholm Line)

- SPEED RESTRICTIONS.**  
 All trains will approach mining spurs at restricted speed.
- Between Chisholm Jct. and G. N. depot Chisholm, all trains and engines will be governed by 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. Eastward G. N. trains will secure clearance and orders from

Operator at Emmert who must obtain authority from DM&IR. before issuing.

Westward G. N. trains will secure clearance and orders from G. N. Operator at Chisholm who must obtain authority from DM&IR. before issuing.

## TENTH SUBDIVISION

(Swan River—Virginia Line)

- MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**  

Between	Passenger	Freight
Swan River and Emmert .....	45 MPH	35 MPH
Emmert and Virginia .....	35 MPH	30 MPH
- SPEED RESTRICTIONS.**  
 All trains, except first class, will approach mining spurs at restricted speed.  
 Hibbing, through city limits ..... 15 MPH  
 Between Home Signals of Interlockings at: ..... 20 MPH  
 Swan River, westward.  
 Hibbing.  
 North Mitchell.  
 Emmert Tower.  
 Virginia, D. W. & P., Virmount Tower.  
 D. W. & P., Crescent Ave.
- CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**  
 At North Mitchell, Ruby Jct., trains for which these points are initial stations may proceed without a clearance.
- Double track extends between Kelly Lake and Emmert Tower. Trains or engines moving in this territory must keep to the left unless otherwise provided.  
 Trains and engines will run with the current of traffic between Kelly Lake and Emmert Tower without train orders or clearance.
- Between Emmert Tower and DM&IR. Jct. east of Scranton Mine Crossing, G. N. double track will be used jointly by DM&IR. trains. G. N. rules and special instructions will govern.
- Hibbing, push button controls located on Griswold Signals at First, Third and Fifth Avenues east for manual control of crossing signals. Instructions covering use of push buttons are posted inside of box. Switch-key-controller located on north side of depot controls signals at Third Avenue east for Westward movements. When a train or engine making westward movement on westward main track is stopped between Fifth and Third Avenues east, and will not foul Third Avenue East, crossing signals may be set clear for highway traffic by inserting switch key in controller and turn to right. After signals have been set clear, they may be changed to indicate "Stop" for highway traffic by inserting switch key in controller and turn to left.
- Between Wilpen Jct., about 2 miles east of Emmert Tower and east end DM&IR. Fraser Yard, DM&IR. trains will use G. N. main track and be governed by G. N. rules and special instructions. Normal position of switches at both points is for G. N. main track. Before fouling main track, DM&IR crews must obtain G. N. clearance.

8. Susquehanna Shaft, necessary to shove all empties under the head frame, which will not clear a man on top or side of ore car. Electric lighted sign has been placed about ten feet from the shaft on each of the four tracks under the head frame reading as follows: "Trainmen do not operate past this point. By order of the Minnesota Railroad and Warehouse Commission. (Signed) Superintendent". Crews must stop before shoving under the head frame and brakemen will walk by the shaft to a point where they can give signals in shoving empties onto the tail tracks. Fill the north tail track through the crossover first, as an engine will not go over this crossover. Then fill the south tail track. Will be necessary to pull loads off the south load track before serving the shaft as there is no runaround.
9. Virginia, trains and engines must stop before passing over crossing U. S. Highway No. 53, and a member of crew on ground at the crossing will protect movement.
10. Virginia, trains or engines going beyond "Stop" sign at Columbia Mine must stop and examine clearance between cars under direct loading pocket and runaround track.

#### 11. CROSSOVERS ON DOUBLE TRACK.

<b>Facing Point</b>	<b>Trailing Point</b>
Hull Crusher	Mahoning
Ruby Jct.	Agnew
	Scranton
	Hibbing, east crossover
	Hibbing, west crossover
	North Mitchell

#### 12. SPRING SWITCHES WITHOUT FACING POINT LOCK.

Kelly Lake, west switch transfer cinder pit track,  
Normal position is for mallet cinder pit track.  
roundhouse wye tracks,  
Normal position east switch is for mallet cinder pit track,  
south switch is for east leg of wye.  
west switch is for west leg of wye.

#### 13. MANUAL INTERLOCKINGS.

Hibbing, 0.58 miles west of .....Scranton Mine crossing  
Emmert Tower .....D. M. & I. R. Ry. crossing  
Virginia, 0.47 miles west of .....D. W. & P. Ry. crossing  
1.20 miles west of .....D. W. & P. Ry. crossing

#### 14. MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.

Swan River .....crossover and junction with 3rd Subdivision.  
Hibbing, 0.29 miles west of .....D. M. & I. R. Ry. Jct.  
North Mitchell .....D. M. & I. R. Ry. Jct.

#### 15. SWITCH INDICATORS.

Kelly Lake, 2.23 miles east of, at Agnew-Hull Rust Mine Spur,  
Hibbing, 0.34 miles west of, at DM&IR. Ry. Scrap Iron Spur,  
Hibbing, 0.31 miles west of, at west switch of G. N. Ry. Industry Track.

Indicator, consisting of a single yellow light unit (normally dark) and a switch-key-controller, mounted on an iron mast located at the clearance point of the turnout, must be operated by a member of the crew who is to line the switch, and who, together with the engineer, must observe and be governed by its indication before fouling the main track or lining the main track switch. See further instructions posted on iron mast.

## ELEVENTH SUBDIVISION

(Gunn Line)

#### 1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

Between	<b>Passenger</b>	<b>Freight</b>
Kelly Lake and Gunn .....	45 MPH	35 MPH

#### 2. SPEED RESTRICTIONS.

All trains, except first class, will approach mining spurs at restricted speed.

Between Home Signals of Interlockings at..... 20 MPH  
Hill Annex Spur.  
Majorca Mine Spur.

3. Between Calumet and oil spur, Coleraine, main track will be used jointly by G. N. and DM&IR. Rys. and authority for train movements is controlled by G. N. Ry. and G. N. rules and Special Instructions will govern.

4. Danube Mine Spur, trains must stop not less than fifty (50) feet from grade crossing with blacktop highway. Two members of crew must go out on highway and flag automobile traffic each side of crossing until train movement over grade crossing is completed.

5. Automatic block signals of color light type are located at specified points and govern train and engine movements within station limits and approaches thereto.

At Keewatin, Nashwauk and Calumet, block signals govern movements in both directions, except Keewatin to Nashwauk signals are continuous for westward movements only; at Coleraine-Canisteeo, block signals govern only westward movements; at Moore, block signal located at east siding switch governs eastward movements to "End of Block" sign.

Block signal located at Mesabi Chief Mine spur normally displays indication, Rule 501 AA and governs movements from spur to main track; after lining switch, if no conflicting movement is evident on main track, movement may be made in accordance with signal indication after complying with Rule 513.

#### 6. SPRING SWITCHES WITH FACING POINT LOCK.

Nashwauk, west storage track switch.  
Calumet, west new yard switch.  
west old yard switch.  
Normal position is for main track.

#### 7. SPRING SWITCHES WITHOUT FACING POINT LOCK.

Kelly Lake, west wye switch,  
Normal position is for 11th Subdivision.

#### 8. SEMI-AUTOMATIC INTERLOCKINGS.

Calumet, 0.60 miles east of .....Hill Annex Spur  
Calumet, 0.73 miles east of .....Majorca Mine Spur  
Complete instructions for operation of electric lock and gates at semi-automatic interlockings are located at "Release" boxes.

#### 9. SWITCH INDICATORS.

Calumet, switch indicators consisting of a single yellow light unit (normally dark), with a clockwork release and a push button mounted on an iron mast located at the clearance point of the two yard spring switches, must be operated by a member of the train crew who, together with the engineer, must observe and be governed by its indication before fouling main track or making movement from yard track to main track through these spring switches.

Bennett Mine spur, indicator consisting of a single yellow light unit (normally dark) and a switch-key-controller, mounted on an iron mast located at the clearance point of the turnout, must be operated by a member of the crew who is to line the switch, and who, together with the engineer, must observe and be governed by its indication before fouling the main track or lining the main track switch.

See further instructions posted on iron mast at each point.

**WATCH INSPECTORS**

Yano Bros., 1121 Tower Avenue .....	Superior, Wis.
L. G. Howatt, 1425 Tower Avenue .....	Superior, Wis.
Herbert B. Christensen, Inc., 144 E. 5th Street.....	St. Paul, Minn.
Olson Jewelry Co., 211 East Hennepin Avenue .....	Minneapolis, Minn.
Oscar P. Gustafson Co., 410 Nicollet Avenue.....	Minneapolis, Minn.
Pomerleau & Son, 227 East Hennepin Avenue.....	Minneapolis, Minn.
K. K. Thompson .....	Cass Lake, Minn.
Barker Jewelry, 217 Third Street .....	Bemidji, Minn.
Paul E. Teske .....	Hibbing, Minn.
A. J. Vitter .....	Hibbing, Minn.
Weber Jewelry & Music Co., 714 St. Germain Street .....	St. Cloud, Minn.

**SPEED TABLE**

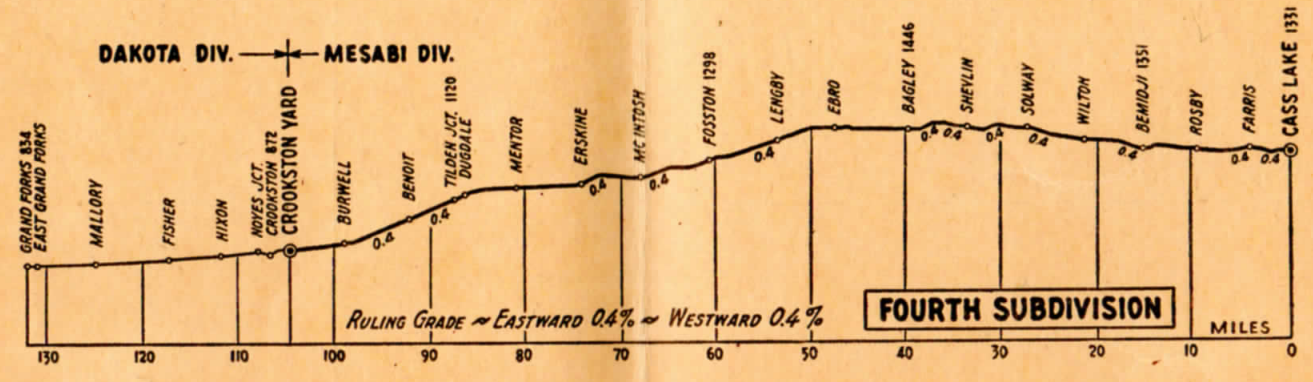
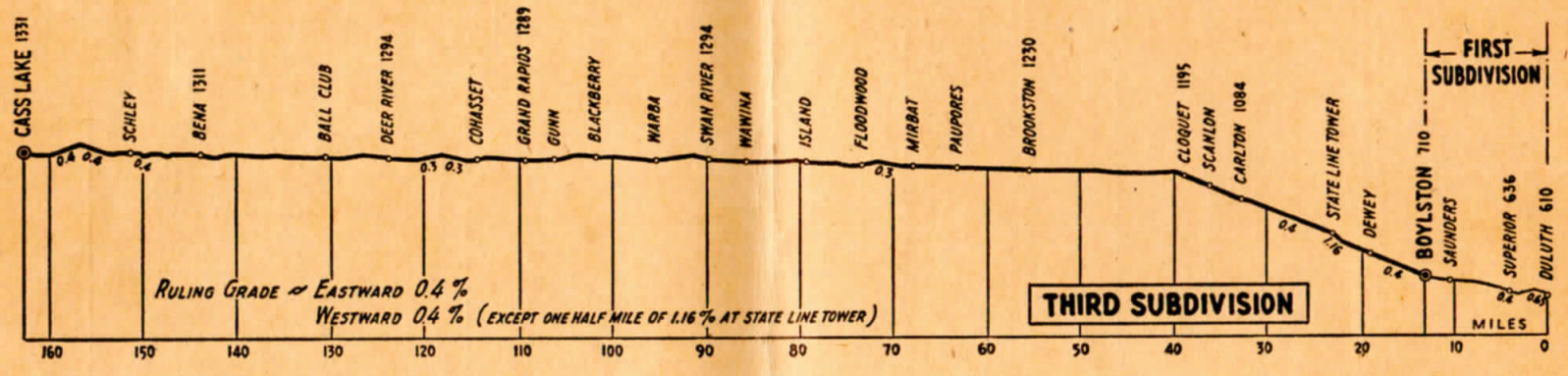
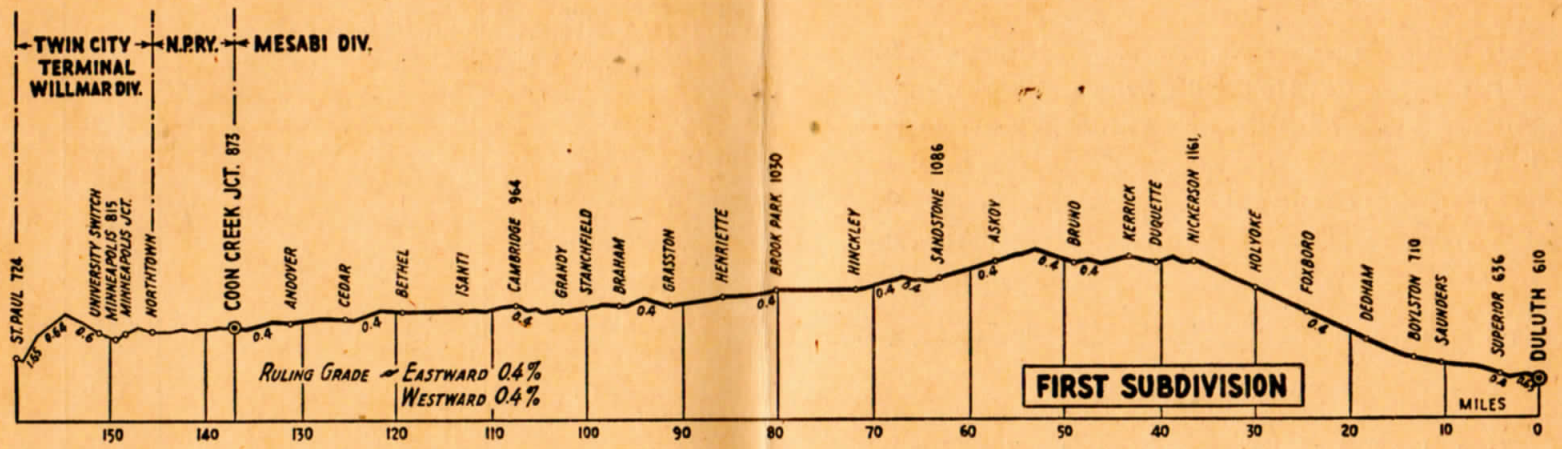
Time Min.	Per Mile Sec.	Miles Per Hour	Time Min.	Per Mile Sec.	Miles Per Hour
	40	90.0	1	12	50.0
	41	87.8	1	14	48.6
	42	85.7	1	16	47.4
	43	83.7	1	18	46.1
	44	81.8	1	20	45.0
	45	80.0	1	22	43.9
	46	78.3	1	24	42.9
	47	76.6	1	26	41.9
	48	75.0	1	28	40.9
	49	73.5	1	30	40.0
	50	72.0	1	33	38.7
	51	70.6	1	36	37.5
	52	69.2	1	39	36.4
	53	67.9	1	42	35.3
	54	66.6	1	45	34.3
	55	65.4	1	50	32.7
	56	64.2	1	55	31.3
	57	63.1	2	—	30.0
	58	62.0	2	10	27.7
	59	61.0	2	20	25.7
1	0	60.0	2	30	24.0
1	1	59.0	2	40	22.5
1	2	58.0	3	—	20.0
1	3	57.1	3	30	17.1
1	4	56.2	4	—	15.0
1	5	55.3	5	—	12.0
1	6	54.5	6	—	10.0
1	7	53.7	7	—	8.5
1	8	52.9	8	—	7.5
1	9	52.1	9	—	6.7
1	10	51.4	10	—	6.0

**Business Tracks not shown as stations on Time Table**

Name	Location	Capacity Cars	Switch Opens
<b>First Subdivision</b>			
Rural Coop. Power Ass'n Spur	2.40 miles east of Cambridge..	6	E
Federal Prison Farm Spur	1.00 miles east of Sandstone..	13	W
<b>Second Subdivision</b>			
R. E. A. Oil Spur.....	0.5 miles east of Milaca.....	3	W
Propane Gas Spur.....	1.0 miles east of Mora.....	6	W
<b>Third Subdivision</b>			
Lindsay Pit.....	2.0 miles west of Carlton....	70	E
Flint Pit.....	1.77 miles east of Brookston..	120	E
Hartley's Spur.....	1.02 miles west of Island.....	3	E
Webster Lumber Co.....	5.26 miles west of Schley.....	13	E
Cohasset Mill & Lumber Co.	0.50 miles east of Cohasset...	9	E
Chippewa Wood Processing Spur.....	0.123 miles east of Deer River	16	W
<b>Fourth Subdivision</b>			
Benoit Pit.....	2.00 miles west of Benoit.....	157	W
<b>Fifth Subdivision</b>			
Raboin's Spur.....	2.56 miles west of Wilkinson..	9	E
Redwood Rendering Co.....	1.50 miles west of Long Prairie	35	E
Land O'Lakes Creamery Spur	0.60 miles west of Sebeka.....	19	W
Peters Meat Products Spur..	0.41 miles west of Long Prairie	10	W
<b>Tenth Subdivision</b>			
Grant Mine Oil Spur.....	0.67 miles west of Buhl.....	6	W
Coal Spur.....	2.46 miles east of Buhl.....	3	E
Newcombs Oil Spur.....	1.00 miles east of Hibbing....	4	E
Oil Track.....	1.31 miles east of Hibbing....	18	E & W
Douglas Shop Spur.....	2.00 miles east of Emmert....	9	W
<b>Eleventh Subdivision</b>			
Minn. Power & Light Spur..	1.00 miles east of Nashwauk..	15	E
Oil Spur.....	0.50 miles west of Coleraine..	35	W

**MINE SPURS**

Name	Location	Switch Opens
Stevenson, Lambertson, Carmi..	0.52 miles east Kelly Lake.....	W
Mahoning, So. Agnew, Pacific Isle	0.72 miles east Kelly Lake.....	W
Hull Crusher.....	1.6 miles east Kelly Lake.....	W
Morton.....	1.84 miles east Kelly Lake.....	E
No. Agnew.....	2.1 miles east Kelly Lake.....	W
Seranton.....	2.43 miles west North Mitchell..	W
Susquehanna, Weggum.....	0.71 miles west North Mitchell..	E
Webb, Albany, Longyear.....	0.81 miles east North Mitchell..	E
Dunwoody.....	1.70 miles east North Mitchell..	W
Wilpen Jct.....	2.60 miles east Emmert.....	E
Chataco.....	0.76 miles west Chisholm.....	W
Elbern.....	2.87 miles west Buhl.....	W
Grant.....	1.21 miles west Buhl.....	W
Wabigon.....	0.25 miles west Buhl.....	W
Margaret.....	0.75 miles east Buhl.....	E
Wanless.....	1.4 miles east Buhl.....	E
Kinney, Helmar, Atkins, Wade.	2.94 miles east Buhl.....	E
Wacootah.....	3.33 miles west Virginia.....	E
Hanna, Pilot.....	2.64 miles west Virginia.....	E
Columbia.....	0.47 miles west Virginia.....	W
Bennett, Russell, Manners, Sec- tion 18.....	2.73 miles west Kelly Lake.....	E
St. Paul, Bennett, Shaft 2.....	0.25 miles east Keewatin.....	E
Sargent, Mississippi, St. Paul- Washer.....	0.34 miles east Moore.....	E
Chieftan.....	0.40 miles east Moore.....	E
Mesabi Chief Washer Aromac Perry.....	0.50 miles west Moore.....	W
Hoadley, York, Galbraith, Argonne	0.16 miles east Nashwauk.....	W
Hawkins.....	0.37 miles east Nashwauk.....	E
Harrison-Quinn.....	0.77 miles west Nashwauk.....	W
Kevin-Patrick.....	2.26 miles west Nashwauk.....	W
Majorca Draper Annex, Barbara Hill Annex Yard.....	0.73 miles east Calumet.....	W
Hill Annex Washer, Hill Trum- bull Washer.....	0.60 miles east Calumet.....	E
Hill.....	0.70 miles east Calumet.....	E
Danube, Holman.....	0.36 miles west Calumet.....	E
Arcturas.....	0.37 miles east Bovey.....	W
Rhude Siding Spur.....	0.25 miles east Holman Jct.....	W
Holman Pines.....	0.57 miles east Holman Jct.....	E
Greenway.....	1.83 miles east Bovey.....	E
Canisteo, Buckeye.....	2.80 miles east Gunn.....	W
	1.50 miles west Coleraine.....	W



Elevation.....175