

Duluth, Missabe and Iron Range Railway Company



Time Table No. 89

EFFECTIVE

Saturday, January 1, 1966

12:01 A. M.

CENTRAL STANDARD TIME

FOR THE GOVERNMENT OF EMPLOYEES ONLY

F. W. OKIE
President

D. B. SHANK
Vice Pres. & General Manager

E. W. ANDERSON
Superintendent

C. F. KENNIGER
Asst. Superintendent

M. C. NOLDEN
Asst. Superintendent

Duluth, Missabe and Iron Range Railway Company



Time Table No. 89

EFFECTIVE

Saturday, January 1, 1966

12:01 A. M.

CENTRAL STANDARD TIME

FOR THE GOVERNMENT OF EMPLOYEES ONLY

F. W. OKIE
President

D. B. SHANK
Vice Pres. & General Manager

E. W. ANDERSON
Superintendent

C. F. KENNIGER
Asst. Superintendent

M. C. NOLDEN
Asst. Superintendent

INDEX

M. O. HOSETH, Trainmaster
 G. E. McCALL, Trainmaster
 M. M. MORRISON, Trainmaster
 F. E. SOUTHGATE, Trainmaster
 R. E. GODMARE, Ass't. TM & Trav. Engr.
 D. L. JOHNSON, Ass't. TM & Trav. Engr.
 K. R. OJARD, Ass't. TM & Trav. Engr.
 R. E. JOHNSON, Chief Train Dispatcher

	Page
Bulletin Books, location of.....	19
Crossovers, location.....	45
General Instructions.....	32 thru 44
Biwabik	44
Iron Range Division.....	43
Missabe Division.....	36
Mitchell District.....	42
Proctor Yard, Hill and Ore Docks	36-37
Steelton Hill, Steelton and Interstate Branch	39 thru 42
Two Harbors Yard.....	44
Virginia District.....	42
Handling of Explosives, Inflammable and Poison Gas Materials.....	29 thru 32
Map	24 and 25
Medicine Cases, location.....	45
Medical, location of Company Staff.....	46
Regulations of R.R.s operating within cities and villages	34 thru 37
Restrictions—Certain class engines, wreckers and other equipment	27
Safety and Plant Protection	45
Siding Capacity.....	20 thru 26
Signals	19
Special Instructions.....	19 thru 46
Speed of Trains—General.....	27-28
Iron Range Division.....	28
Missabe Division.....	28
Speed Table.....	47
Subdivisions	4 thru 18
Superiority of Trains.....	19
Stretchers—location of.....	45
Train Register Exceptions.....	19

MISSABE DIVISION

DULUTH TO HIBBING

North Bound		South Bound		Time Table No. 89 January 1, 1966 STATIONS	Telegraph Call
Rule 6A	Station Numbers	Distance from Missabe Jct.			
DRBIOKXV	0		DULUTH		D M
	2	2.30	MISSABE JCT.	} Automatic Block to MP 1.7	M A
ORBZKDX	10	7.11	PROCTOR		K S
YX	12	8.78	ELWOOD	} Automatic Block	
	17	10.75	ADOLPH		
DV	22	14.20	MUNGER		
	24	20.97	SAGINAW		
	28	22.40	GRAND LAKE		R A
	31	26.10	BURNETT		
	31	28.73	CULVER		
U	31	28.73	COLERAINE JCT.		
YR	34	31.38	ALBORN		
	34	32.32			
	39	36.69	BIRCH		
	43	41.19	PAYNE		
	47	45.05	KELSEY		
	51	49.07	SAX		
	53	53.07	FENS		
	58	55.64	ZIM		
Y	59	58.96	FAIRLANE		
	59	58.96	FORBES		
	63	60.14	KEENAN		
J	65	60.85	NORTH KEENAN		
	66	63.46	IRON JCT.	} C.T.C.	} J C
DZJKY	68	65.67	WOLF		
JY	C3	68.18	MACON		
	C6	72.49	SHERWOOD		
YR	C11	76.67	WILPEN		
	C14	79.48	EMMERT		M C
DBOXKYR	C14	79.79	MITCHELL		
	C14	80.34	N. MITCHELL	} Automatic Block	} Automatic Block
	C14	81.00	R. R. Crossing		
J	C14	81.23	RUBY JCT.		
	C15	81.41	BROOKLYN		
	C16	82.46	NO. HIBBING		
	M1	82.29	HIBBING		A C

D. M. & I. R. Trains are governed by Northern Pacific, Duluth and Superior Terminals Time Table, Signals, Rules and Instructions between Duluth and Missabe Junction.
D. M. & I. R. Trains are governed by G. N. Ry. Time Table, Signals, Rules and Instructions between North Mitchell and Hibbing.

MISSABE DIVISION

North Bound **ALBORN TO COLERAINE-BOVEY** South Bound

		Time Table No. 89 January 1, 1966		STATIONS		Telegraph Call
North Bound	South Bound	Station Numbers	Distance from Colairne Junction			
Rule 6A						
YR		34	.0	ALBORN		
		E2	.38	COLE		
		E3	2.82	MANEY		
		E4	3.56	PROSIT		
		E11	4.55	AERIE LAKE		
			10.98	MEADOWLANDS		
		E13	13.90	ELMER		
		E20	20.39	TOIVOLA		
		E22	23.35	HULL JCT		
		E29	29.81	SILICA		
		E35	35.89	NOYES		
		E40	39.97	PENGILLY		
			42.96	R. R. Crossing		
			43.36	R. R. Crossing		
		E43	43.80	CALUMET		C A
V		E45	44.69	MARBLE		
			48.01	HOLMAN JCT		
I			49.21	TACONITE JCT		N I
YRKIO		E49		TACONITE		
		F1	49.80			
		E49	49.21	TACONITE JCT		
		E52	52.21	COLERAINE-BOVEY		V Y

Automatic Block

Automatic Block

D. M. & I. R. Trains are governed by G. N. Ry. Time Table, Signals, Rules and Instructions between Calumet and Coleraine-Bovey, and except as otherwise provided are dispatched by G. N. Ry.

MISSABE DIVISION

WOLF TO VIRGINIA

North Bound

South Bound

Rule 6A		Station Numbers	Distance from Wolf	STATIONS	Time Table No. 89 January 1, 1966	Telegraph Calls
JZKDY ↓	YJ	68	.0	WOLF	.....	.....
↓	I	B1	1.0	MT. IRON JCT. D. W. & P. Interlocker	.....	.....
↓	J	B3	2.91	LARGO JCT.	.....	.....
YKXBDVJ		B4	3.40	THUNDERBIRD	.....	.....
↓		B5	4.65	RAINY JCT.	.....	.....
YKBOX		B7	6.40	VIRGINIA	.....	.....
						R J V R

8

IRON JUNCTION to EVELETH

North Bound

South Bound

Rule 6A		Station Numbers	Distance from Iron Junction	STATIONS	Time Table No. 89 January 1, 1966	Telegraph Calls
JZKDY ↓	66	.0	.....	IRON JCT.	.....	J C
↓	A1	2.15	.....	SPRUCE JCT.	.....	.....
↓		3.91	.....	R. R. Crossing	.....	.....
↓		4.25	.....	SNOWDEN JCT.	.....	.....
Y	Z9	4.84	.....	EVELETH	.....	V

9

SPRUCE JUNCTION to SPARTA JUNCTION

North Bound

South Bound

Rule 6A		Station Numbers	Distance from Spruce	STATIONS	Time Table No. 89 January 1, 1966	Telegraph Calls
.....	A1	.0	.....	SPRUCE JCT.	.....	.....
.....	A5	2.77	.....	DAVIS	.....	.....
.....	Z5	4.30	.....	SPARTA JCT.	.....	.....

MISSABE DIVISION

WOLF TO MT. IRON

North Bound South Bound

Rule 6A	Station Numbers	Distance from Wolf	STATIONS	Time Table No. 89 January 1, 1966	Telegraph Calls
Y	68	.0	} CTC	} CTC	
	75	5.99	} CTC	} CTC	M R

KEENAN CUT OFF

North Bound South Bound

Rule 6A	Station Numbers	Distance from Keenan	STATIONS	Time Table No. 89 January 1, 1966	Telegraph Calls
JY	65	.0	} CTC	} CTC	
		3.57	} CTC	} CTC	
J	C6	8.05	} CTC	} CTC	

SHERWOOD TO EMMERT

North Bound South Bound

Rule 6A	Station Numbers	Distance from Wilpen	STATIONS	Time Table No. 89 January 1, 1966	Telegraph Calls
J	C6	.0	} CTC	} CTC	
	G3	3.26	} CTC	} CTC	
	G4	3.74	} CTC	} CTC	
	G3	3.26	} CTC	} CTC	
J	G5	4.49	} CTC	} CTC	
	G6	6.22	} CTC	} CTC	
J	YD61	9.18	} CTC	} CTC	
	YD60	9.65	} CTC	} CTC	
JT	YD59	12.23	} CTC	} CTC	

D. M. & I. R. trains are governed by G. N. Ry. Time Table, Signals, Rules and Instructions between G. N. Buhl Jct. and Emmert and except as otherwise provided are dispatched by D. M. & I. R. Ry. between G. N. Buhl Jct. and Fraser and dispatched by G. N. Ry. between Fraser and Emmert. No train orders required between Fraser and Emmert but verbal understanding must be obtained from G. N. dispatcher at Kelly Lake.

WILPEN TO CHISHOLM

North Bound South Bound

Rule 6A	Station Numbers	Distance from Wilpen	STATIONS	Time Table No. 89 January 1, 1966	Telegraph Calls
JYX	C11	.0	} CTC	} CTC	
		1.28	} CTC	} CTC	
		2.20	} CTC	} CTC	
		2.54	} CTC	} CTC	
		1.99	} CTC	} CTC	
		2.36	} CTC	} CTC	
		2.97	} CTC	} CTC	
		4.22	} CTC	} CTC	
	D4	4.65	} CTC	} CTC	

MISSABE DIVISION

MITCHELL TO EAST MORRIS

North Bound		South Bound	
Rule 6A	Station Numbers	Distance from Mitchell	Time Table No. 89 January 1, 1966
STATIONS		STATIONS	
BDOXK	C14		MITCHELL
		.25	LONGYEAR
		.53	SPRAY
		1.10	EAST MORRIS
			M C
			Telegraph Calls

HULL RUST BRANCH

North Bound		South Bound	
Rule 6A	Station Numbers	Distance from Panama	Time Table No. 89 January 1, 1966
STATIONS		STATIONS	
X	J15	.0	PANAMA
X	J16	.95	CRUSHER JCT.
		.75	RUST CRUSHER
X	J16	.95	CRUSHER JCT.
X	J17	1.06	RUST
			Telegraph Calls

SPIRIT LAKE BRANCH

North Bound		South Bound	
Rule 6A	Station Numbers	Distance from Adolph	Time Table No. 89 January 1, 1966
STATIONS		STATIONS	
YX	12	.0	ADOLPH
	R7	4.53	NEVADA
V	R10	7.83	BREWER
	R11	11.17	STEELTON
XZBDKYOR		14.23	RIVERSIDE JCT.
		15.34	72nd AVE. W. JCT.
		15.97	Crossing—N. P. Conn.
		16.97	Crossing—N. P. Conn.
		17.00	Crossing—Soo Conn.
BIOKXRV	2	19.31	MISSABE JCT.
			M A
			Telegraph Calls

INTERSTATE BRANCH

North Bound		South Bound	
Rule 6A	Station Numbers	Distance from Steelton	Time Table No. 89 January 1, 1966
STATIONS		STATIONS	
XZBDKYOR	R11	.0	STEELTON
V	R16	4.33	Inter-POKEGAMA locker N. P. Ry.
V	R18	6.38	SAUNDERS
V	R19	8.20	Inter-AMBRIDGE locker Soo Line
V	R23	11.85	SOUTH ITASCA
			S N
			Telegraph Calls

IRON RANGE DIVISION

North Bound South Bound

ALLEN JCT. TO VIRGINIA

	Rule 6A	Station Numbers	Distance from Allen Jct.	STATIONS	Telegraph Calls
	JX	N72	.0	ALLEN JCT.	
	Y	N74	1.14	WYMAN	
	Y	X5	4.53	COLBY	} CTC
	Y	X8	7.74	AURORA	

			15.28	EMBARRASS SPUR	
			14.33	HECTOR	
BKXYRD	X15		13.01	BIWABIK	} CTC
J	X18		16.61	McKINLEY	
	Z1		17.42	JONES JCT.	
	Z3		19.13	PETTIT	
	Z4		20.14	GILBERT	
J	Z5		21.44	SPARTA JCT.	
BKXYR	Z8		24.37	FAYAL	
			25.13	SNOWDEN JCT.	CTC
	Z9		25.72	EVELETH	V
			25.13	SNOWDEN JCT.	CTC
BKXYR	Z8		24.37	FAYAL	} CTC
	Z10		24.85	R. R. Crossing	
J	B3		26.09	LEONIDAS	
	B4		27.64	LARGO JCT.	
	B5		27.95	THUNDERBIRD	
BKVXYJ	B5		29.38	RAINY JCT.	R J
BKXYR	B7		31.13	VIRGINIA	V R

IRON RANGE DIVISION

MCKINLEY TO GILBERT AND MARISKA

North Bound	South Bound		
Station Numbers	Distance from Allen Junction	Mileage Between Stations	Time Table No. 89 January 1, 1966
X18	16.61	.0	STATIONS
X19	17.64	1.03	McKINLEY
X21	19.36	1.72	CORSICA
X23	21.45	2.09	GILBERT
	22.89		MARISKA
			UNION
			G I
			Telegraph Calls

WALES TO FOREST CENTER

North Bound

South Bound

Rule 6A	Station Numbers	Distance from Wales	Time Table No. 89 January 1, 1966
YRJ	N44	0	STATIONS
V	W7	7.06	WALES
	W11	11.05	MCNAIR
	W12	11.67	NORSHOR JCT
	W13	13.81	JORDAN
	W18	18.81	AVOY
	W25	25.79	WHYTE
	W31	31.96	JAYSEE
	W37	37.70	ISABELLA
Y	W41	41.41	KELLY
	W42	42.21	SAWBILL JCT
	W44	43.71	SAWBILL
	W49	49.61	MARTIN SIDING
			FOREST CENTER

SPECIAL INSTRUCTIONS

A Southward trains are superior to Northward trains of the same class.

B Location of Bulletin Books: Trainmen's Room Ore Docks, Duluth; Yard Office Steelton; Yard Office "Hole" Missabe Junction; Trainmen's Room, Yard Trainmen's Room, Yard Office and Roundhouse Proctor; Yard Office Taconite Junction; Dispatcher's Office Iron Junction; Yard Office Rainy Junction; Trainmen's Room and Roundhouse Virginia; Yard Office Mitchell; Depot and Roundhouse Endion; Trainmen's Room Depot; Yard Office "Diamonds" Two Harbors; Yard Office and Roundhouse Biwabik; Yard Office Fayal; Depot Ely.

C RULE AMENDMENTS

Rule 3 (C) Amended:

Employees governed by Time Service Rules must not wear wrist watches while on duty unless such watches are of approved type. The following wrist watches are approved: Ball, Official RR Standard Model 1604-B; Elgin, B. W. Raymond Model, Accutron, RR Approved Model; Hamilton Electric, Model 505. The above must have a non-expanding band.

Rule 7 (A)—Paragraph four amended to read as follows:

When backing or pushing a train or cars, the disappearance from view of trainmen or light by which signals are given, must be regarded as a stop signal except when leading car is equipped with angle cock above drawbar, a back-up air brake hose or pipe and whistle in charge of a trainman.

Rule 19 Amended:

ReflectORIZED markers of the prescribed color are authorized for use on all cabooses.

Rule 83 (B) & 267 Amended:

Trains or engines originating in yards adjacent to C.T.C. limits may enter C.T.C. limits without Clearance Form A when the governing signal permits entrance thereto and when authorized orally by the Dispatcher at Iron Junction.

Rule 83 (B)—Does not apply at initial stations except during hours that Telegraphers are on duty.

Rule 103—Paragraph four amended to read as follows:

While pushing cars over crossings, except when the leading car is equipped with a back-up air brake hose, angle cock above drawbar, or pipe and whistle in charge of a trainman.

D-151 Amended. On double track, trains must keep to the left unless otherwise provided.

D TRAIN REGISTER EXCEPTIONS:

Extra trains will not register at intermediate points.

During the ore shipping season, crews operating between Proctor and points on the Interstate Branch will register by Card Form 1015 at Steelton.

During ore shipping season all trains will register by Card Form 1015 at Taconite Junction.

All trains on Wales Branch will register at Wales.

E List of Sidings and Spurs, Lengths and Ore Car Capacity

NAME OF TRACK	Side	Track Length	Usable Length Track Feet	Ore Car Capacity
MISSABE DIVISION				
Main Line				
Adolph Oil Spur.....	East	666	466	18
Coons Siding.....	West	1663	1263	50
Coons Gravel Pit Spur.....	West	2778	2578	103
Coons No. 1 Load Track Gravel Pit.....	West	1432	1032	41
Coons No. 2 Load Track Gravel Pit.....	West	1032	632	25
Coons Tail Track Gravel Pit.....	West	603	403	16
Saginaw S.E. Wye to D. & N.E.....	East	2165	2015	80
Saginaw S.W. Wye to D. & N.E.....	West	1973	1823	72
Grand Lake Spur.....	East	603	453	18
Burnett Siding.....	East	2574	2274	90
Alborn Yard Main Lead.....	West	4288	3988	159
Alborn Yard Track No. 2.....	West	2013	1713	68
Alborn Yard Track No. 1.....	West	1798	1498	59
Alborn Yard Back Track.....	West	490	340	13
Alborn Siding.....	East	5882	5582	235
Alborn Stock Chute Track.....	East	300	156	6
Payne Spur.....	East	896	746	29
Kelsey Spur.....	East	522	372	14
Schappi Spur.....	West	689	534	21
Fens Spur.....	West	610	466	18
Zim Set Out Spur.....	East	387	237	9
Zim Log Spur.....	West	641	491	19
Forbes Spur.....	West	797	647	25
Iron Junction No. 4 Track.....	East	1041	891	35
Wolf-Hibbing Set Out Track.....	West	1534	1384	55
Wolf Set Out Track.....	East	1959	1559	62
Mountain Iron Siding at Wolf.....	East	3583	3183	127
Biwabik Branch				
Iron Junction No. 1 Siding.....	East	3340	3040	121
Iron Junction No. 3 Track.....	West	1070	770	30
Spruce Set Out Track.....	West	5957	1428	57
Spruce Siding.....				
Lower 60 Cars				
Middle 60 Cars				
Upper 53 Cars				
No. 1 Siding 60 Cars				
Biwabik Siding.....		5876	5476	219
Keenan Cut-Off				
Kirk Spur.....	West	462	312	12
Superior Branch				
Sherwood Siding.....	West	3512	3112	124
Wilpen Coliseum Spur.....	West	5372	5222	208
Buhl Branch				
Buhl Coach Track.....	East	594	294	11

Alborn Branch

NAME OF TRACK	Side	Track Length	Usable Length Track Feet	Ore Car Capacity
Kalman Log Spur.....	East	332	182	7
Meadowlands Siding.....	East	1824	1524	60
Elmer Siding.....	West	7556	7156	286
Elmer Spur.....	East	623	473	18
Toivola Spur.....	East	1204	1054	42
Hull Junction Siding No. 1.....	East	774	474	18
Hull Junction Siding No. 2.....	West	2173	1873	74
Silica Siding.....	West	3343	3043	121
Silica Coal Spur.....	East	747	597	23
Noyes Siding.....	West	3746	3446	137
Pengilly Siding.....	West	1930	1530	61
Pengilly-Peerless Spur.....	West	1096	896	35
Rhude Media Spur.....	West	878	678	27
Hull Rust Branch				
Panama Spur.....	East	1454	1304	52
Williams Spur.....	East	906	706	28
Spirit Lake Branch				
Nevada Siding.....	East	2809	2509	100
Brewer Siding.....	West	921	621	24
N.P. Connection Short Line Park.....	East	320	170	6
Interstate Branch				
Oliver Spur.....	West	777	507	20
Pokegama Siding.....	West	3766	3616	144
Saunders Siding Soo Connection.....	East	1594	1444	57
Saunders Siding, Main Line.....	West	2687	2287	91
Track No. 4 Gt. Nor. Saunders Yard		2194		
Track No. 5 Gt. Nor. Saunders Yard		2068		
Track No. 6 Gt. Nor. Saunders Yard		1700		
Track No. 7 Gt. Nor. Saunders Yard		2245		
Track No. 8 Gt. Nor. Saunders Yard		2952		
Ambridge Connection to Soo Line.....	West	2048	1898	75
Peyton Siding.....	East	1083	783	31
South Itasca Set Out Track.....	West	1721	1421	56
South Itasca Connection to Omaha	East	2451	2301	92
IRON RANGE DIVISION				
Main Line				
Trianon Spur.....	West	772	622	24
Lakeview Siding.....	East	911	611	24
Lester Park Spur.....	West	406	256	10
Lakewood Siding.....	West	3624	3324	133
Lakewood Powder Spur.....	West	228	78	3
Clifton Siding.....	West	1022	722	28
French River Siding.....	West	719	419	16
Palmers South Siding.....	West	885	685	27
Palmers North Siding.....	West	1978	1561	62
Knife River House Track.....	West	712	562	22
Larsmont Spur.....	East	406	256	10
Marbles—West Siding.....	West	2806	2506	100
Marbles—East Siding.....	East	1730	1430	57

Main Line—Cont'd

NAME OF TRACK	Side	Track Length	Usable Length Track Feet	Ore Car Capacity
Two Harbors New Yard Tracks.....				
S1		130	Cars	
S2		130	Cars	
S3		130	Cars	
S4		126	Cars	
S5		123	Cars	
S6		125	Cars	
S7		123	Cars	
S17		130	Cars	
S18		132	Cars	
S19		133	Cars	
S20		126	Cars	
S21		123	Cars	
Waldo Siding.....	East	1038	638	25
Waldo Passing Track.....	West	3192	2742	109
Campbell Spur.....	East	890	740	29
Highland Scale Track.....	East	9999	9399	376
Highland Scale Test Car Spur.....	East	277	127	5
Highland Passing Track.....	West	4216	3816	152
Wales Passing Track.....	West	9185	8379	335
Brimson No. 2 Pit Track.....	West	1402	1252	50
Brimson South Leg Wye.....	West	970	670	27
Brimson North Leg Wye.....	West	1203	903	36
Brimson Siding.....	East	2600	2300	92
Brimson Dock Track.....	East	392	242	9
Brimson No. 1 Pit Spur.....	East	1494	1344	53
Brimson No. 3 Pit Highline Track.....	East	941	791	31
Brimson No. 3 Pit Chute Track to Chute.....	East	1086	836	30
Brimson No. 3 Pit Chute Tail Track.....	East	1450	1375	55
Brimson No. 3 Pit Runaround Track — Center.....	East	1900	1500	60
Brimson No. 3 Pit Bank Track— Right —.....	East	1925	1500	60
Brimson Passing Track.....	West	5688	4798	191

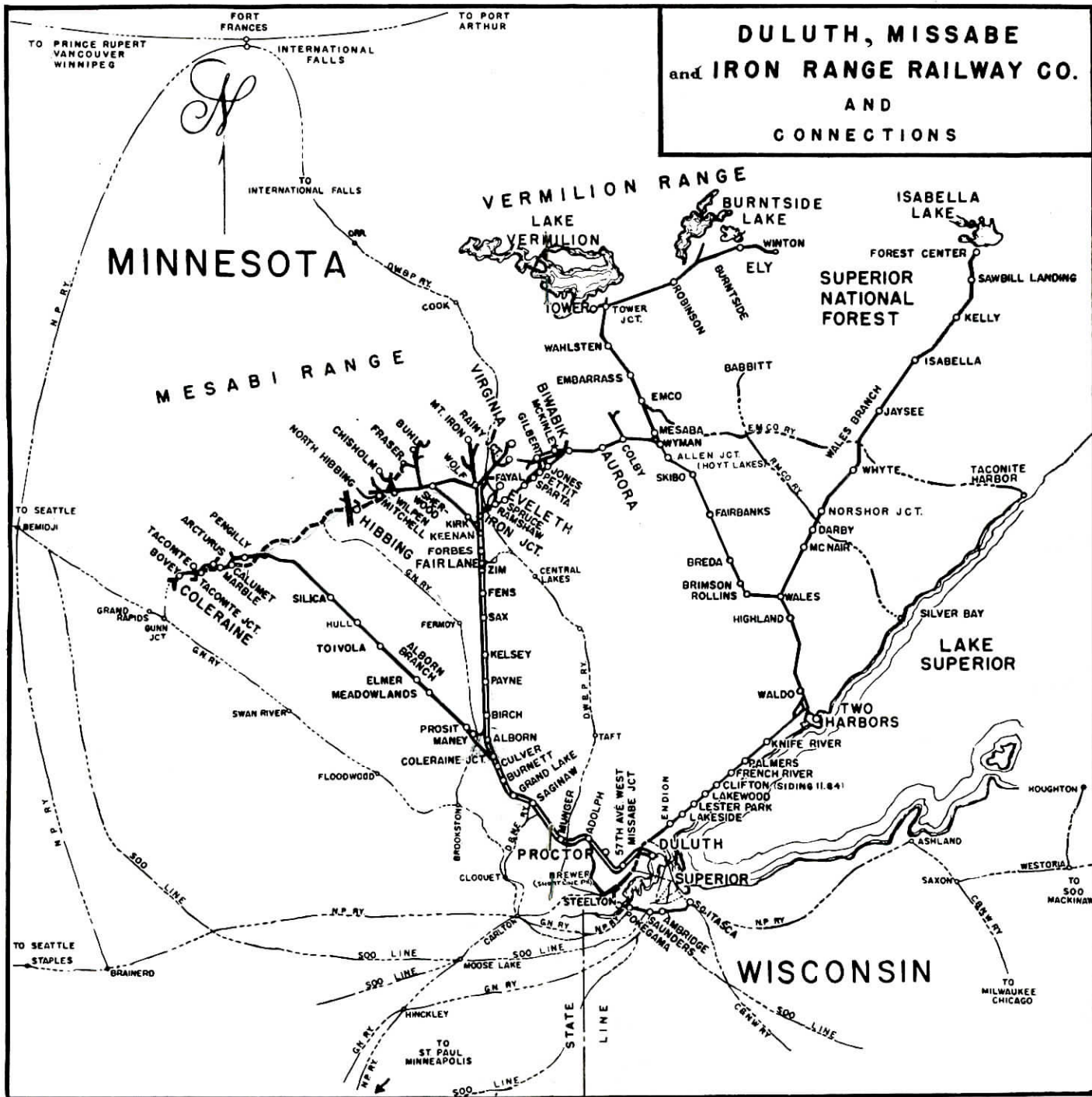
Main Line

Breda Siding.....	East	1500	1150	46
Fairbanks Dock Spur.....	West	566	416	16
Fairbanks Mill Spur.....	East	627	477	19
Fairbanks Passing Track.....	West	6954	6347	253
Skibo—West Spur.....	West	1026	876	35
Skibo Siding—North.....	East	1412	1112	44
Skibo No. 1 Pulp Track.....	East	1696	1396	55
Skibo No. 2 Pulp Track.....	East	1441	1141	45
Skibo Passing Track.....	West	1521	1121	44
Spur 68.6.....	East	566	416	16
Allen Junction Coal Dock Track.....	West	756	606	24
Allen Junction Track No. 4 Spur.....	West	600	400	16
Allen Junction Track No. 1.....	West	2373	1850	74
Allen Junction Track No. 2.....	West	1794	1594	63
Allen Junction Old Ely Main Line.....	East	4773	4473	178
Allen Junction Track No. 5.....	East	3185	2835	113
Allen Junction Track No. 6.....	East	1794	1444	57

Main Line—Cont'd

NAME OF TRACK	Side	Track Length	Usable Length Track Feet	Ore Car Capacity
Mesaba South Siding.....	East	1903	1603	64
Mesaba Team Track.....	East	868	568	22
Mesaba No. 1 Siding.....	West	2772	2172	86
Mesaba No. 2 Siding.....	West	1893	1593	63
Emco No. 2 Interchange Track.....	West	2485	2185	85
Emco No. 1 Main Line.....	East	1075	775	31
Emco No. 1.....	East	932	632	25
Emco No. 2.....	East	917	617	24
Emco Additive Siding.....	East		1837	73
Emco Additive Spur.....	East		500	20
Hinsdale Siding.....	East	2027	1727	69
Embarrass—Potato Whse. Spur.....	West	589	439	17
Embarrass—South Siding.....	East	2344	2044	81
Embarrass—House Track.....	East	518	368	14
Embarrass—Industry Spur.....	East	1885	1585	63
Embarrass—Dock Track.....	West	657	457	18
Athens Siding.....	East	3056	2756	110
Wahlsten Spur.....	West	530	330	13
Rivers Spur.....	West	501	301	12
Tower Jct. No. 1 Ely Extension.....	West	2538	2238	89
Tower Jct. No. 2 Ely Extension.....	West	1686	1236	49
Tower Jct. No. 3 Ely Extension.....	West	1509	1209	48
Murray Spur.....	East	626	426	17
Robinson South Siding.....	West	1065	765	30
Robinson North Siding.....	West	2284	1984	79
Burntside Lake Spur (Wolf Lake Spur).....	West	485	335	13
Burntside Lake Spur Siding.....	West	1175	875	35
Burntside Lake Spur Siding Tail Track.....	West	839	739	29
Western Mesaba Branch				
M.P.&L. Siding—Mile X 3.3.....	West	7075	6475	259
M.P.&L.—North of Road Crossing.....	West	4092	3692	147
M.P.&L.—South of Road Crossing.....	West	2983	2633	105
M.P.&L. Empty Track.....	West	2610	2310	92
M.P.&L. Load Track.....	West	2610	2310	92
Running Track (Between Legs of Colby Wye).....	East	3630	3330	133
Colby Yard—South Leg.....	East	4577	4177	167
Colby Yard—North Leg.....	East	1947	1647	65
Colby Yard Track No. 1.....	East	4917	4617	184
Colby Yard Track No. 2.....	East	4906	4406	176
Colby Yard Track No. 3.....	East	4707	4207	168
Colby Yard Track No. 4.....	East	4515	4015	160
Colby Yard Track No. 5.....	East	4313	3813	152
Colby Yard Track No. 6.....	East	4018	3718	148
Colby Yard Stub Track.....		847	597	23
Stephens Mine Tail Tracks No. 1 thru No. 6.....				41
Stephens Mine Oil Spur (Ramp).....		732	532	21
Stephens Mine Storage Track.....		632	332	13
Old North Bound Main Line No. End Aurora MP X9 North of Crossover		2457	2057	82

**DULUTH, MISSABE
and IRON RANGE RAILWAY CO.
AND
CONNECTIONS**



Western Mesaba Branch—Cont'd.

NAME OF TRACK	Side	Track Length	Usable Length Track Feet	Ore Car Capacity
Old North Bound Main Line No. End				
Aurora MP X9 South of Crossover		2290	2090	83
McKinley House Track.....		1465	1015	40
Corsica Siding.....		2286	1936	77
Hercules Powder Spur MP X22.....		551	351	14
Mariska Siding MP X23.....	West	2140	1740	69
Mariska Washing Plant Siding				
MP Z1.....	East	791	491	19
Gilbert Yard Track No. 1.....	East	2271	1871	74
Gilbert Yard Track No. 2.....	East	2153	1853	74
Gilbert Yard Track No. 3.....	East	2154	1754	70
Gilbert Yard Spur.....	East	368	218	8
Largo Siding.....	East	2585	1985	79

Wales Branch

Wales Team Track.....	East	385	235	9
Wales Stock Chute Track.....	East	489	339	13
Wales Yard No. 1 Siding.....	West	1829	1429	57
Wales Yard No. 2 Siding.....	West	1829	1429	57
McNair Spur—Mile W 7.06.....	East	1610	1460	58
Norshore Jct. Reserve Mining Co.				
Interchange Track.....	East	2455	2105	83
Reserve Mining Company Siding.....	East	902	662	26
Jordan Siding.....	West	2009	1709	68
Avoy Siding.....	West	2327	2027	81
Avoy Loading Spur.....	West	745	595	23
Whyte Spur—Mile W 17.74.....	West	1317	1167	46
Whyte Spur—Mile W 17.98.....	West	2527	2377	95
Whyte Siding.....	West	1670	1270	50
J. C. Siding—Mile W 25.8.....	West	1773	1473	58
Isabella Siding.....	East	1965	1665	66
Isabella Dock Spur.....	East	914	764	30
Hallet Constr. Co. Spur.....	West	1206	1056	42
Kelly Siding Mile W 37.7.....	East	2783	2483	99
Sawbill Siding—Mile W 42.....	West	2055	1755	70
Sawbill Landing N.W. Paper Track				
(Left).....	East	1341	1191	47
Sawbill Landing Dock Track				
(Center).....	East	1294	1144	45
Sawbill Landing North Star Track				
(Right).....	East	1477	1327	53
Martin Siding—Mile W 44.....	East	1980	1680	67
Forest Center Roundaround Track				
to Road Crossing.....	West	1095	845	33
Forest Center Pocket Track.....		1059	759	29
Forest Center No. 1 Track.....		1643	1493	59
Forest Center No. 2 Track.....		2013	1863	74
Forest Center No. 3 Track.....		1985	1735	69
Forest Center No. 4 Track.....		1972	1822	72
Forest Center Mill Spur.....		1328	1178	47

F Restrictions certain class engines:

Engine Classes	Numbers	Weight on Drivers Thousand Lbs.
Diesel Locomotives		
RS-1, RS-2, RS-3, RS-4, RS-6	101 to 193	350 to 400

Mitchell District

Hibbing Coal Dock, engine not permitted on dock.
Chisholm Coal Dock, engine not permitted on dock.

Virginia District

No engine permitted on Village Coal Dock, Mountain Iron.

Coleraine District

Engines not permitted on following docks:
Bovey Coal Dock
Casper Media Dock

Iron Range Division

Engines not permitted on following docks:
City Coal Dock, Ely
Zenith Mine Dock, Ely

G Restrictions wreckers and other equipment:

Wrecker X-7, stationed at Proctor, must not be placed on any track restricted for movement of engines. In the operation of locomotive cranes and other machines with movable parts on track, employes must see that booms or other movable parts are adjusted to clear any overhead or side obstructions.

H Speed of trains:

Speed approaching Junctions and Yards—all trains must reduce speed approaching Junctions and Yards, and will be governed by provisions of Transportation Rule 93 when entering and passing through Yard Limits.

Except as otherwise provided, Maximum Speed of Engines and Any Portion of Ore and Freight Trains Passing Through Home Signal Limits of Interlocking Plants is Twenty-Five (25) Miles Per Hour. No Increase in Maximum Speed Stated is Permitted.

	MPH
Passenger extras, unless otherwise provided.....	59
Passenger and extra passenger trains, backing up	
on straight track.....	25
on curves.....	15
Unscheduled trains-Northbound except Main Line	
MP 38 to MP 62.....	30*
Main Line, MP 38 to MP 62.....	35*
Alborn Branch, MP E-1 to E-33.....	35*
Unscheduled trains-Southbound except Main Line	
MP 62 to MP 38.....	25*
Main Line, MP 62 to MP 38.....	30*
Alborn Branch, MP E-33 to E-1.....	30*

	MPH
Back-up movements—with cars.....	20
Entering a switch, except otherwise provided.....	15
Over any track scale, weighing or otherwise.....	4
Handling wrecking cranes, pile drivers, locomotive cranes and similar equipment.....	30
Signal territory, when entering switches and turnouts	
First Avenue East, Duluth.....	4
City of Virginia-Public Crossings.....	6
Road crossing south of Eveleth Station.....	4

Missabe Division

Home signal limits-Emmert, Ramshaw, Shelton.....	20
Entering east scale track, Proctor.....	20
Crossover south of Iron Junction Depot.....	15
Missabe Division trains, through crossover at Mile Z5 Sparta Junction.....	20
Woodbridge Bridge.....	10
Meadowlands.....	33
Village Limits—Hibbing.....	15
Highway No. 169 crossing—Taconite Junction.....	15
Proctor or Steelton hill, ore or freight trains must not exceed.....	25
Ore dock approach.....	20
Ore dock crossover.....	15
75th Avenue West and western end of Northern Pacific track at Hulett Avenue.....	15
Between 70th and 75th Ave., West Duluth on S. L. Line	
Steelton Wye.....	10
St. Louis River Bridge.....	6
Village Limits of Oliver.....	15

Iron Range Division

Between Endion and 62nd Avenue East, Duluth	
Freight.....	25
Passenger extra.....	20
Between Wahlsten and Ely, Passenger Extras only....	45
Highland and Waldo Southbound ore and freight trains	25*
Waldo and Two Harbors Southbound ore and freight trains.....	20*
Entering main Lead to New Yard Two Harbors.....	18
Between MP N-97 and MP N-95, ore and freight trains southbound must not exceed.....	35
Between Colby and Wyman, Southbound ore and freight trains.....	35

Speed of trains must not exceed twenty (20) miles per hour through switch leading to Old Southbound Main, Mile X-9, North of Aurora

Wales Branch.....	30
21st Avenue East, Duluth.....	4
Highway No. 35, Miller Mine Spur.....	20
Highway No. 35, St. James Mine Spur.....	20
Jackson Street, Aurora.....	4
Southward Main from Ely Main and trains entering Ely Main at south Wyman.....	25
Central Avenue, Ely, Crossing South of Depot.....	4
MP N-117½ between Ely and Winton.....	4

*A five mile per hour tolerance for operating flexibility will be permitted.

Instructions Governing the Handling of Explosives, Inflammable and Poison Gas Materials.

A. PLACARDS ON CARS. A car requiring car certificates and "Explosives," "Dangerous," "Dangerous-Class D Poison," "Poison Gas," or "Caution—Residual Phosphorous" placards under the provisions of this part shall not be transported unless such freight car is at all times placarded and certificated as required by this part. Placards and car certificates lost in transit shall be replaced at next inspection point and those not required shall be removed.

(1) At points where trains are inspected, cars placarded "Explosives" and adjacent cars shall be inspected; such cars shall continue in movement only when inspection shows them to be in condition for safe transportation.

SWITCHING CARS CONTAINING EXPLOSIVES OR POISON GAS OR PLACARDED TRAILERS ON FLAT CARS.

A car placarded "Explosives" or placarded "Poison Gas" or any flat cars carrying a placarded trailer shall not be cut off while in motion. No car moving under its own momentum shall be allowed to strike any car placarded "Explosives" or placarded "Poison Gas" or any flat car carrying a placarded trailer nor shall any such car be coupled into with more force than is necessary to complete the coupling.

(1) When transporting a car placarded "Explosives" in terminals, yards, side tracks, or sidings, such cars shall be separated from the engine by at least one nonplacarded car.

(2) Closed cars placarded "Explosives" shall have doors closed before they are moved.

SWITCHING OF CARS CONTAINING DANGEROUS ARTICLES.

In switching operations where use of hand brakes is necessary, a placarded loaded tank car, or a draft which includes a placarded loaded tank car shall not be cut off until the preceding car or cars clear the ladder track and the draft containing the placarded loaded tank car, or a placarded loaded tank car shall in turn clear the ladder before another car is allowed to follow.

(1) In switching operations where hand brakes are used, it shall be determined by trial that a car placarded "Dangerous" or that car occupied by a rider in a draft containing a car placarded "Dangerous" has its hand brakes in proper working condition before it is cut off.

PLACEMENT OF FREIGHT CARS CONTAINING EXPLOSIVES IN YARDS, ON SIDINGS, OR SIDETRACKS.

Cars placarded "Explosives" shall be so placed that they will be safe from all probable danger of fire. Freight cars placarded "Explosives" shall not be placed under bridges or overhead highway crossings, nor in or alongside of passenger sheds or stations except for loading or unloading purposes.

NOTICE TO CREWS OF CARS CONTAINING EXPLOSIVES IN FREIGHT TRAINS OR MIXED TRAINS.

At all terminals or other places where trains are made up by crews other than road crew accompanying the outbound movement of cars, the railroad shall execute a con-

secutively numbered notice showing the location in the freight train or mixed train of every car placarded "Explosives." A copy of such notice shall be delivered to the train and engine crew and a copy thereof showing delivery to the train and engine crew shall be kept on file by the railroad at each point where such notice is given. At points where train or engine crews are changed, the notice shall be transferred from crew to crew.

(B) POSITION IN FREIGHT TRAIN OR MIXED TRAIN OF CARS CONTAINING EXPLOSIVES.

In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" shall, when length of train permits, be placed not nearer than the sixteenth car from both the engine or occupied caboose, except:

(1) When the length of freight train or mixed train will not permit it to be so placed, it shall be placed near the middle of the train.

(2) When transported in a freight train made up in "blocks" or classifications, a car placarded "Explosives" shall be placed near the middle of the "block" or classification in which moving, but not nearer than the sixth car from both the engine or occupied caboose.

(3) When transported in a freight train or a mixed train performing pickup and/or setoff service, it shall be placed not nearer than the second car from both the engine or occupied caboose, except as provided in paragraph (1) of this section.

(C) SEPARATING CARS PLACARDED "EXPLOSIVES" FROM OTHER CARS IN TRAINS.

In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" must not be handled next to:

(1) Occupied passenger car; except as provided in paragraph (E) of this section.

(2) Occupied combination car; except as provided in paragraph (E) of this section.

(3) Any car placarded "Dangerous" or "Dangerous-Class D Poison."

(4) Engine.

(5) Any car placarded "Poison Gas."

(6) Wooden underframe car.

(7) Loaded flat car, except that cars carrying trailers or containers placarded "EXPLOSIVES" as authorized by the regulations in this chapter may be coupled to each other. (Note: Flat cars equipped with permanently attached ends of rigid construction shall be considered as open-top cars. See subparagraph (8) of this paragraph.)

(8) Open-top car when any of the lading protrudes beyond the car ends or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends.

(9) Car equipped with automatic refrigeration or any other apparatus utilizing an open-flame light or an internal combustion engine in its operation.

(10) Car containing lighted heaters, stoves, or lanterns.

(11) Car loaded with live animals or fowl, occupied by an attendant.

(12) Occupied caboose, except as provided in paragraph (1) of this section.

(D) POSITION IN TRAIN OF LOADED PLACARDED TANK CAR.

In a freight train or a mixed train, except a train consisting entirely of placarded loaded tank cars and as provided in paragraph (1) of this section, a placarded loaded tank car shall, when the length of the train permits, be not nearer than the sixth car from the engine, occupied caboose or passenger car.

(1) When the length of the freight train or mixed train will not permit it to be so placed, it shall be not nearer than the second car from the engine, occupied caboose or passenger car.

(2) When transported in a freight train engaged in "pickup" or "setoff" service, a placarded loaded tank car shall be not nearer than the second car from both engine or occupied caboose.

(E) SEPARATING LOADED TANK CARS PLACARDED "DANGEROUS" FROM OTHER CARS IN TRAIN.

In a freight train or mixed train either standing or during transportation thereof, a placarded loaded tank car must not be handled next to:

(1) Occupied passenger car, other than cars occupied by gas handlers and authorized personnel accompanying shipment.

(2) Occupied combination car, other than cars occupied by gas handlers and authorized personnel accompanying shipment.

(3) Any car placarded "Explosives."

(4) Engine or occupied caboose, (except when train consists only of placarded loaded tank cars.)

(5) Any car placarded "Poison Gas."

(6) Wooden under-frame car.

(7) Loaded flat car, other than specially equipped cars in trailer-on flat car service or flat cars loaded with trucks or trailer bodies which are secured by means of a device designed and permanently installed for that purpose and of a type generally accepted for handling in interchange between railroads. (Note: Flat cars equipped with permanently attached ends of rigid construction shall be considered as open-top cars. See Subparagraph (8) of this paragraph.)

(8) Open-top car when any of the lading protrudes beyond the car ends or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends.

(9) Car equipped with automatic refrigeration or any other apparatus utilizing an open-flame light or an internal combustion engine in its operation.

(10) Car containing lighted heaters, stoves, or lanterns, except when occupied by gas handlers or authorized personnel accompanying shipment.

(11) Car loaded with live animals or fowl, occupied by an attendant.

(12) Occupied caboose, (except when train consists only of placarded loaded tank cars.)

J General

1. Passenger extras will not exceed speed of thirty (30) miles per hour over protected crossings, except the crossing at Culver on the Missabe Division, and Erie Mine Crossing at M.P. 78.5 on the Iron Range Division.

2. Under no circumstances will any siding crossover switch be left lined for the Main Line. After movement has been completed, siding crossover switch must be lined and locked for the siding.

3. Before making reverse movements over Grade Crossings protected by automatic signals, trains must proceed beyond sign or battery box. This is necessary to start signals to operate for reverse movement.

Exception is made at 40th Avenue West crossing, Duluth, on southward track, as connection of crossing control circuit with Signal 36-L provides restart of starting signals for southward movement.

Manual control knobs for automatic highway crossing signals are located on relay cases or on the signals and are equipped with covers locked with a switch lock. The letters "MANUAL CONTROL" are painted on boxes to indicate their location. Where more than one main line track is protected, controls are provided for each track adjacent thereto and for clearing crossings on that track only.

To temporarily clear highway signals, unlock the switch lock, raise cover, operate control. When control is released, the signals will return to normal position. When control is no longer needed, re-cover and lock with switch lock.

Unnecessary occupation of track circuits of automatic signals by trains, engines or cars is prohibited.

When protecting highway crossings, giving signals other than stop signals to highway traffic is prohibited.

State Law provides that highway grade crossings shall not be blocked for more than ten (10) minutes. Trains must be operated to prevent violations.

4. When Flagman is not on duty at First Avenue East crossing, Duluth, crossing must be hand flagged whether movement is being shoved or pulled over crossing.

5. When handling cars loaded with wire mesh, cars must be shoved to coupling. Under no circumstances will these cars be kicked or dropped while switching.

6. In C.T.C. territory, where hand operated switches not equipped with electric locks are located, trains will not be permitted to clear Main Line at that point and track will not be used for meeting or passing of trains. Switch will not be restored to normal position while track is being used.

7. The practice of making flying switches or dropping cars over street crossings within any Incorporated Village or City on our railroad is prohibited. When handling cars over such street crossings they must be attached to the locomotive.

8. In the movement of rails loaded on flat cars, these cars must not be "Kicked" in switching, but must be handled with locomotives attached.

9. Conductors must notify Yardmasters when cars are discovered at load or exchange tracks, which have been damaged by Mining Company employes. Yardmaster will arrange for immediate joint inspection of cars by Mining Company representatives and our Car Department supervisors before cars are moved.

10. Railway company employes must not drop cars under loading pockets at mines where cars are handled by Mining Company Car Riders.

11. Where oil or charcoal heaters are applied in the bunkers, or body of refrigerator cars, and are to be serviced, these heaters should be removed from the bunkers or body of cars and lighted before being replaced in car.

When heaters in bunkers are to be serviced, a hook should be used to reach down in the bunker and remove heater and also to replace heaters. If hook is not available, as a matter of safety, two men should be present when entering bunker or body of car to remove heater for servicing.

When a placard on cars show heaters are lighted, hatches or doors must be opened for at least 15 minutes before car is entered.

12. All fires must be promptly reported by wire to the Chief Engineer, the General Claim Agent and the Roadmaster. If it is evident that any fire was started by a locomotive, the same report must be wired to the Chief Mechanical Officer, giving the number of the locomotive. As soon as any fire is extinguished, full report must be made on the proper form and sent to the Roadmaster.

13. Fusees will not be used for hand signals except in foggy or inclement weather.

14. In all yards, when removing yard hose used to pump up trains, trainmen will place hose alongside of rail instead of throwing between tracks. This to eliminate stumbling hazard.

15. Two locomotive tenders have been equipped with a steam generator. These cars must not be kicked or dropped, and all switch movements must be made with cars coupled to locomotive.

Steam generator car must be placed on head end of train when handling between terminals.

16. The sides of work equipment cars with wooden underframes are stencilled — "When in transit this car must be located at rear of train."

Care must be exercised when switching with these cars.

17. Train and enginemen should use extreme care in train movements from sidings and branch lines, to main line, to prevent serious accidents due to shifted loads, etc.

18. Racor run-through switch stands, which are painted yellow for identification, have been installed at various points.

It is permissible to run through this switch in trailing-point movements when switches are cleaned of snow.

19. Proctor is now the nearest available point where bad-order cars from northend can be repaired. Cars having become bad order at northend points may be moved from place where cars were first discovered to be bad order to this repair facility.

In the event of discovery of a defective car, which defect could contribute to an accident or personal injury, such condition should be reported immediately to the Chief Dispatcher for advice on special handling.

20. Crews approaching Biwabik will identify themselves by radio when in the vicinity of McKinley.

21. Placards with instructions of safe method to enter cars will be posted on the doors of refrigerator cars which are cooled by dry ice.

22. Under "Forms of Train Orders" in the Consolidated Code of Operating Rules, the instructions pertaining to giving copies of the order sent to Work Extra to all Extra Trains, do not apply when ONLY Example (1) of Form D-H is issued to Work Extra.

23. When making cut on loads at mine load track, train crews must leave at least two (2) car lengths above derrails and sufficient hand brakes will be set to prevent movement of car or cars on each track. Properly securing the brakes on the FIRST GROUP of cars is of utmost importance.

REGULATIONS GOVERNING RAILROADS OPERATING IN THE FOLLOWING CITIES OR VILLAGES

VILLAGE OF CHISHOLM

Section 1: No railroad shall run a locomotive or train of cars within the Village limits without having and ringing a bell of sufficient size at all times when in motion and approaching any street or avenue.

Section 3: No railroad shall make any flying switch or make or unmake trains, or kick or shunt any car upon or across any public street.

VILLAGE OF BUHL

Section 855:01 Warning Bell: No railroad company or corporation, or their agents employes, shall run a locomotive or train of cars within the limits of the Village of Buhl, without having and ringing a bell of sufficient size at all times while so in motion and approaching any street or avenue.

VILLAGE OF HIBBING

Section 1: Any railroad that shall run a locomotive or train of cars within the Village limits shall have thereon a bell of sufficient size and shall ring the same when in motion and approaching any street, avenue or highway crossing.

Section 2: No railroad company or any employe of any railroad company or corporation or any person whatsoever shall blow or cause to be blown a whistle on any locomotive at any crossing or in any railroad yard within said Village except as an alarm in case of fire or to warn persons or animals on the track of immediate danger.

Enginemen operating locomotives between 5th Avenue West, Hibbing and Ruby Junction, must comply with the provisions of this Ordinance. At other points when engine whistle is used, enginemen will moderate the sound of the whistle to meet the requirements only.

Section 5: No railroad shall make any flying switch over any highway crossing within the village limits.

CITY OF VIRGINIA

Section 1: That no railroad company or corporation of their agents or employes shall run a locomotive or train of cars within the limits of the City of Virginia, Minnesota, without having thereon a bell of sufficient size and at all times when so in motion and approaching any street or avenue, ring the same.

Section 2: No railroad company or any employe of any railroad company or corporation or any other person whatsoever shall blow or cause to be blown a whistle on any locomotive at any crossing or in any railroad yard within said City, except as an alarm in case of fire or to warn persons or animals on the track in immediate danger.

Enginemen operating locomotives within the limits referred to must comply with provisions of this Ordinance, but will be permitted to use whistle signal in starting and completing air brake tests and in calling for signal in Interlocking Plant. They will modulate the sound of the whistle to meet the requirements only.

Section 4: No railroad company or corporation shall make a flying switch over any crossing in any yard within the City or cause any locomotive to stand pumping air within 100 feet of any highway crossing or kick any cars within the limits of the City.

VILLAGE OF OLIVER

Section 1: No railroad train or locomotive shall sound its whistle within the limits of this village.

CITY OF DULUTH

Section 42-1. Bell to be rung while train in motion:

No railroad company or corporation or their agents or employes shall run a locomotive or train of cars within the City without having a ringing bell of sufficient size at all times while so in motion and approaching any street or avenue.

Section 42-2. Blowing of locomotive whistle within certain limits:

No railroad company or corporation or employes of any railroad or corporation shall blow the whistle of a locomotive at any point between Fifth Avenue West and Third Avenue East in the City, at any point between Eighty-fifth Avenue West and Fourteenth Avenue West in the City or any point between Fortieth Avenue East and Sixtieth Avenue East in the City, except as an alarm in case of fire or as a warning to any person or an object upon or in dangerous proximity to the track; provided, that such whistle may be blown in a modified or modulated tone to signal tower men, to call for semaphore signals, as a safety precaution in backing cars or locomotives, or as a signal in testing air brakes.

Section 42-5. Obstruction of Streets:

No railroad company, any conductor, engineer, yard or trackmaster or other agent or employe of such company or any person whatsoever shall obstruct or cause to be obstructed any public street or highway with any locomotive, cars, freight, goods, wares or merchandise or in any way obstruct the clear and free passage for vehicles or foot passengers over any street or avenue in the City for a period longer than ten minutes, with the exception of those

two certain railroad crossings located at Fifth Avenue West and First Avenue East, respectively, which two railroad crossings shall not be obstructed for a period exceeding five minutes. Such allowable obstruction by any railroad company shall terminate immediately upon the giving of a proper warning of the approach of any fire, police or ambulance vehicle. No such person or company shall make, cause or allow to be made any flying switch or make or unmake trains upon or across any such public street.

MISSABE DIVISION — ROAD

1. Northbound road extras going to Mitchell with instructions to yard train at Mitchell, must stop and line Spring Switch south of Emmert, by hand, before pulling through. Switch must be lined back to normal position after movement is completed.

2. Electrically controlled lock on the north switch to Scale Track, Proctor, operates as follows:

When only one track is occupied, the switch can be set for the unoccupied track and locked, after which the switch cannot be returned to the occupied track.

Trainmen must always close and lock door of the switch lock because failure to restore lock lever to normal or locked position holds signal at STOP. Switch lock door cannot be closed with the lock lever in the unlocked position.

Ore trains of 180 cars or less which are to move over Scale will not move from Signal 11.8 at Carson, except on signal indication Green or Yellow. Green will indicate that track is clear to Scales and Yellow will indicate that track is clear to Bridge 10-A. Ore trains of 181 cars or more will move into Scales on Green indication only on Signal 11.8 at Carson.

3. During the ore shipping season, Crews returning from the Plummer Mine must obtain information concerning conflicting movements, by calling Operator at Taconite Jct.

4. Great Northern Railway has installed a telephone at Oil Spur Switch, Coleraine.

Crews returning from Oil Spur must call Great Northern Dispatcher regarding conflicting movements before fouling Main Line.

PROCTOR YARD, HILL AND ORE DOCKS

1. Combustible material must not be spotted within 50 feet of the Linde Air Products Company Cascade Unit, Proctor Car Shop.

2. When switching at north end of Car Shops, Proctor, switches will be unlocked at 11:00 AM and 4:00 PM and crews will not do any switching until 11:05 AM and 4:05 PM respectively. When necessary to switch north end of Car Shop during working hours, the Yard Office will notify the Car Shop and the Car Shop Foreman will unlock switches and station himself at the doors of the north end of the shops to warn men working in or outside shops. Cars must not be kicked in on any of these tracks at any time. In placing cars at the north end of shops, they must not be left closer than three car lengths from the doors.

Trainmen will couple up all cars on the car shop floor before moving them out of shop. A trainman must be stationed at outside and inside of doors and be in position to pass signals. A trainman must precede cars as they are pushed through shop.

3. Crews setting out cars in C, D, E and F Yards, Proctor, must not foul any lead tracks in these yards without instructions of the Yardmaster.

4. Yardmasters at Proctor, issuing instructions to hill conductors during foggy weather and at night, for setting out empties, will designate on the instructions if there are cars on the track or tracks on which the crew is to set out empties, but need not state where they are located nor number of cars on the track. When setting out empties, trainman must have personal knowledge of condition of track on which cars are to be placed.

5. When cars are handled on Tracks 2, 3 and 4 at the Machine Shop, Proctor, they must be shoved with the engine attached and air cut in.

6. Crews in Proctor Yard using crossover from 1-C to 2-C will see that switches of crossover are left set for 1-C and 2-C unless otherwise instructed by Yardmaster.

7. Night hill crews and other crews setting out empties in Proctor Yard will when weather conditions require, shove all cuts of 25 cars or more with engine attached with use of air brakes. Automatic brakes must be used when handling 15 or more cars.

8. Trains in transit Proctor to Ore Dock No. 6, Duluth, with foreign-line ore cars must stop clear of dock approach and turn down retainers before proceeding in on low lead.

9. Train order signal indications at Proctor do not govern the operation of trains that terminate at Proctor on their northbound movement.

10. Crews in hill transfer service must display markers as prescribed by Rule 19.

11. Yard crews enroute from Proctor to Adolph Spur will proceed through the Scale Lead, but must first ascertain from the Dispatcher whether there are trains between Saginaw and Ore Scales. Should there be any trains between Saginaw and Ore Scales, the movement must be postponed.

After receiving information that there are no trains between Saginaw and the Ore Scales, and yard crew is delayed between Yard and Ore Scales, another check with Dispatcher must be made at the Scales.

12. Whenever a Hill Train is stopped by a Red Block at 40th Avenue West, Duluth, the engineer must without delay contact the General Foreman at the Ore Docks.

13. Trains and engines entering Dock No. 5 will use the West Lead and trains leaving Dock No. 5 will use the East Lead.

Trains and engines entering Dock No. 6 will use the East Lead and leaving Dock No. 6 will use the West Lead.

INSTRUCTIONS FOR OPERATING ELECTRICALLY LOCKED SWITCH — DOCK No. 4

The electric lock on the switch leading to Dock No. 4 storage track may be operated in the following manner:

General Foreman will notify the Operator that movement is to be made into Dock No. 4 storage tracks when leaving Missabe Junction and/or Ore Docks.

Operator will give instructions whether the switch may be left open for the return movement or be locked up after locomotive enters.

If caboose is carried by train making this movement, it should be set out or dropped into one of the storage tracks, not to be used in their movement, and be picked up on the outbound movement.

A restricted speed signal indication will be displayed to govern movement southward to the locked switch and the switch may then be hand operated as follows:

Remove padlock and open door of the switch lock.

Pull out the black knob, to its stop.

Indicator should then show UNLOCKED. If not, call General Foreman over radio.

When the indicator shows UNLOCKED the crank handle may be moved to left, to its stop.

The switch may then be hand operated.

When this switch is being hand operated for a movement northbound or outbound, the dwarf signal on the cantilever mast cannot be CLEARED until the switch is positioned reverse.

Always close and padlock the door of the switch lock when through using the switch. To do this, the switch must be positioned normal and the lock crank must be restored to the full right position. Operator should be notified that the use of the switch is completed and that the lock is restored to normal.

The seal on the emergency release must not be broken except on instruction from the Operator. Signals governing all movements over the track where this switch is located can only display a STOP indication until this release is reset by the maintainer.

Hill Ore trains entering either dock will cut off their caboose between Signals 32 (L) and 26 (R) entering Dock No. 6, and Signals (L) and 26 (R) entering Dock No. 5, stopping caboose south of Signal 26 (R). When signal indication at crossover permits, caboose may be dropped.

Conductors of trains from Missabe Junction and engine-men in charge of movement of light engines from Missabe Junction or Dock engines from Fueling Station, must call operator giving destination before proceeding.

When Ore Dock Interlocker is out of service, call must be placed with Dispatcher.

Home Signal 28 (r), governing northward Main Line movements, display one Purple light on a bracket to indicate there is one track between the signal and the track which the signal governs.

Before departing from Ore Docks, Hill Conductors will advise General Foreman by radio or telephone at crossover, the number of cars and number of bad orders in train.

14. Crews doing work at 57th Avenue West must receive permission from Operator or the Dispatcher before making southward movement from 57th Avenue West to Collingwood Avenue.

Crews crossing over from northward to southward track to do work at 57th Avenue West must protect the movement as prescribed by the Rules.

Operation of Switch Locks in service on both Main Line crossovers located opposite the Polaris Plant, and north switch of crossover from southward track to Polaris Siding, will place Home Signal, Proctor, at STOP. THE SOUTH SWITCHES OF THE CROSSOVERS MUST NOT BE OPERATED UNTIL AFTER NORTH SWITCHES ARE UNLOCKED. IF THE SWITCH INDICATORS IN THE

LOCK BOX ON THE NORTH SWITCHES DISPLAY STOP INDICATION, THE SWITCH IS LOCKED AND CANNOT BE UNLOCKED UNTIL THE INDICATOR SHOWS CLEAR.

Before crossing over, all switches must be lined for the crossover movement.

After crossover movement has been completed, all switches must be restored to normal position, and lock levers must also be turned to normal position, doors closed and padlocked immediately. UNDER NO CIRCUMSTANCES WILL DISCONNECTING OF LOCKING APPARATUS BE PERMITTED.

Before any train in either direction crosses over at any point between Proctor and any point north of Main Line crossover at 40th Avenue West, permission must be received from the Operator or Dispatcher to do so.

15. The switch north of 57th Avenue West, Duluth Crushing Plant, leading to the pit, must be left set for the pit track when not in use when cars are stationed north of this switch.

16. Signal indication on Signal 7.2 (Call-on-light) at the south end of Proctor Yard will govern all trains and engines moving out of the south end of Proctor Yard and entering southward Main.

17. The following instructions will govern road trains and Proctor yard sorter crews when weighing at Proctor ore scales:

Green and Yellow	Slow Down
Yellow	Back Up
Red	Stop—wait for further signal indication.

After ore trains have arrived at Proctor ore scales they will start weighing as soon as Green light shows on v-dcut south of ore scales.

Sorters, moving rear end of trains to be weighed, to scales, will control their speed to continue over scales if Green light is illuminated.

STEELTON HILL, STEELTON YARD AND INTERSTATE BRANCH

1. Conductors of trains departing or arriving, Proctor Yard, over Spirit Lake Branch will report time of departure or arrival to Telegraph Operator at Proctor via radio thru Proctor Yard Office. Telegraph Operator will relay this information to Dispatcher, Iron Junction.

Before crossing over at Bridge 10-A crews from Steelton must call Proctor Yardmaster for information on northbound trains and be governed by instructions received from Yardmaster.

2. Southbound crews on Spirit Lake Branch may make air test and set retainers at Proctor.

Authorization to proceed from Nevada to Steelton must be obtained from Operator at Steelton. This authorization must not be given until it is known by Operator that Main Track is clear between Nevada Siding and south switch of crossover between Main Line and Middle Track at Steelton. Enginemen in charge of light engines must likewise secure permission from Operator at Steelton before proceeding past Nevada Siding.

Radio may be used to obtain this authorization, either by direct contact or relay thru Proctor Yard.

3. At Universal Atlas Cement Division Plant—Steelton.

Train and enginemen must protect themselves against close clearance at:

GYPSUM TRACK

LOADING SPOUT, TRACK No. 8, OPPOSITE SCALES

SACK PLATFORM, TRACK No. 9

COAL CHUTE, TRACK No. 5 SPUR

SHOP DOOR, TRACK No. 5

SCREEN OF UNLOADING DOCK, HIGHLINE

SWITCHING AT EAST SWAMP

Enginemen must blow one long blast of whistle, just before going over the hump, when handling cars on the highline. This is to warn men working about the bins that cars are being placed on the dock.

When placing cars on the HIGHLINE, cars must be shoved back and bled and hose parted before cars are spotted over the pockets.

4. At United States Steel—Duluth Works—Steelton.

When coupling locomotive to cars over pockets at USS Duluth Works Storage Dock, Steelton, no attempt must be made to connect air hoses after coupling engine to cars. Cars will be bled and will be handled off the dock without air.

RAIL FINISHING MILL—Protect themselves account close clearances.

EAST ROD MILL—Protect themselves account close clearances.

WEST ROD MILL—Protect themselves account close clearances. Engine or box cars must not go beyond doors.

WAUKEGAN BAY TRACK—Foot path from door on west side of POST DOCK building and road crossing must be cut at all times.

POST DOCK—Protect themselves account close clearances.

Sound siren inside door once before entering, sound siren two blasts when switching has been completed. Doors must be left as found, open or closed. When pulling cars from platform outside of Post Dock, Doors must be open before coupling onto cars. Spotting cars at platform outside Post Dock, doors need not be closed but car must be left sufficient distance from door to allow Duluth Works employes to close door. When no car is spotted at platform, doors must be closed by TRAINMEN.

MERCHANT MILL—Protect themselves account close clearances. Siren inside of entrance must be sounded once and answered by red flash before going in, two blasts to be sounded when switching has been completed, and red flash switch turned off.

SHIPPING TRACK—Road crossing directly opposite merchant mill shipping office must be kept cut at all times.

WIRE MILL—Protect themselves account close clearance of awning over loading platform on Track No. 4. Protect themselves account close clearance, Track No. 3. Do not go beyond third door on Track No. 3.

COAL, LIMESTONE AND ORE STORAGE DOCK—Protect themselves account close clearance of WINCH housings. When approaching dock, enginemen must sound one long blast of whistle. RED and GREEN Safety Lights have been installed on Bridge Cab above Material Storage Yard Trestle. These are to control movement of trains past Coal Bridges. Green light to proceed and Red light to stop. This is to protect against collision between Bridge Bucket and cars or locomotives. Bridge Operators control these lights and when working in vicinity of trestle will have their Red Light on. Locomotive whistle will be sounded for Dock and will be answered by Green Light. When bridge is idle or working in a location away from trestle, Green Light will be displayed. Shaking, jarring or bumping cars to assist in unloading is strictly prohibited. Rails must be entirely clear of coal, ore, limestone or other material before cars are moved to avoid derailment.

BLAST FURNACE—Protect themselves account close clearances.

Be governed by Duluth Works Bulletin below:

“One long blast of furnace whistle is a signal for a gas drill, and the gas rescue squad goes from No. 2 Power House to the Blast Furnace. Therefore, when approaching the Blast Furnace be listening for this Whistle and when you hear it, stop IMMEDIATELY and be sure that the squad is all across the track before proceeding. If you are on the crossing when whistle blows, stop and cut the crossing immediately. This Rule is vital and must be adhered to.”

BLAST FURNACE No. 1—After setting four (4) cars, two (2) on each track at SLAG PITS, any additional empties should be uncoupled and pulled back to clear foot path at end of SLAG PITS.

ORE THAW HOUSE—Protect themselves account close clearances.

Following instructions will govern train and engine crews placing ore in Duluth Works thaw house at Steelton: During SUMMER months, on instructions from Yardmaster, leave excess stall capacity outside of stall doors. During WINTER months, doors must be closed after ore has been placed inside house and no ore is to be left outside of door without instructions. All air must be cut in and hand brakes on two leading cars must be set before cars are shoved into stalls.

Stall Capacity with doors closed:

Stall No. 1 — 18 Cars	Stall No. 4 — 18 Cars
Stall No. 2 — 18 Cars	Stall No. 5 — 18 Cars
Stall No. 3 — 18 Cars	Stall No. 6 — 18 Cars

Any cars left outside of stall must be left clear of MAIN lead.

BLAST FURNACE No. 2—The west Cinder Pit Stub Track at No. 2 blast furnace is connected and goes through under furnace to dust catcher. There is very close clearance between girders supporting the structure. Extreme care must be used when switching is being performed at the Cinder Pits.

Except at Wire Mill, when switching cars at the Duluth Works, Steelton, cars must be shoved.

5. Soo Line bulletin reads: "The switches at both ends of the connection from the west end of the siding to Saunders DM&IR Ry. connection, are to be lined and locked for the siding.

"When trains or engines wish to enter the main line from either the siding or DM&IR Ry. connection, it will be necessary to line the main line switch in addition to the connection switch being used and then comply with Rule 511 and 516 before making a movement onto the main track."

DM&IR crews using these switches at Saunders will leave switches in the position called for in the above bulletin.

VIRGINIA DISTRICT

1. All switching and engine movements over street crossings on Chestnut Street, Second, Third, and Eighth Street South, on wye at Tenth Street, South, Eleventh Street, South and Fifth Avenue West, Virginia, must be stopped and crossing flagged.

2. When moving over crosswalk at Virginia Roundhouse, the engine bell must be ringing continuously. Locomotives and cars must pass over this crossing at restricted speed. At no time must caboose or cars be kicked over crossing. When moving engine from the go-out track, brakeman must flag this crosswalk.

Employes are using this walk at all times, day or night, and their safety is jeopardized by fast-moving locomotives at this critical location.

When Virginia Local pulls into Virginia Yard and blocks the crosswalk between the roundhouse and the street, they will make a cut of their train at this crosswalk unless the switch crew is on duty and prepared to take charge of the train.

MITCHELL DISTRICT

1. When making up road trains in Fraser Yard, not more than sixty-five (65) cars must be handled to a coupling.

2. A telephone has been installed in Box on Pole at Pierce Mine Junction, North Hibbing Main Line.

All crews moving over any portion of track between Ruby Junction and Pierce Mine Junction must obtain information concerning conflicting movements, by calling the Yardmaster at Mitchell via Radio or Telephone. After movement has been completed, Yardmaster must be so notified.

Train Orders will no longer be required and movements will be made under Operating Rule 93.

3. All train and engine movements over Grant Street Crossing, Hibbing, (adjacent to South Hibbing Freight House) must be stopped and crossing flagged.

IRON RANGE DIVISION — ROAD

1. All train or switch movements over crossing at Highway No. 169 and No. 1 at Tower, will be flagged by a trainman located on the City of Tower side, until movement has been completed.

2. Yard or road trains turning on wye at Tower Junction must protect against all extra trains. Information of southward movements must be obtained before occupying main track so that southward train movements will not be stopped or delayed.

3. Crossing Flagman has been removed by the C&NW at 5th Avenue West, Duluth. All movements over this crossing must be hand-flagged whether movement is being shoved or pulled over crossing.

4. In switching movements over protected crossings, cars should not be left standing in the track circuit except as necessary while switching movements are being made.

5. Trains leaving Colby Yard must not pull down to foul south end of yard tracks until signal is given to proceed.

6. All traffic originating on the Iron Range Division north of Allen Junction, including all points on the Western Mesaba Branch, destined for Cloquet, should be handled via the Missabe Division.

7. Employes working in Erie Mining Company Yard at EMCO will protect themselves against clearance of switch stands.

8. To insure proper operation of crossing gates at McKinley, crews leaving their train on the southward main line to work on the Mariska Branch, must leave cars north of Signal ZO.2.

After making pick-up and adding cars to train, engine must be north of approach signal and get a yellow signal before train proceeds.

9. Effective 7:01 AM, Tuesday, April 7, 1964, a track occupancy signal, located 741 feet north of the north house track switch at McKinley, will govern movements on the Mariska Line.

Signal will normally display a Green aspect; northbound train passing Green signal, sets signal to Red; signal will continue to display Red aspect until train passes over track circuit in a southward movement, at which time aspect will be restored to Green.

If cars are left on main line north of track occupancy signal, cars must be properly protected by trainmen.

The running track between southward home signal on running track, McKinley, and the track occupancy signal, will be used as per Rule 93, Consolidated Code of Operating Rules.

This signal arrangement is not intended to be operated under Block Signal Rules, and the Green aspect will indicate: "No train has preceded your movement into this track; therefore, no orders for your movement."

10. Employes will protect all movements over road crossings by flagging when working in Erie Mining Company Yard at EMCO.

TWO HARBORS YARD

1. All trains and light engines must move with caution approaching and passing stop gates opposite Universal Fiberglass Plant at Two Harbors.

2. When cars, either loaded or empty, are being handled to or from industrial tracks, east of safety switch, Two Harbors, or to or from the lower yard, Two Harbors, they must have air brakes in operation on all cars.

3. Engine going from lower yard go-out track to east end of No. 6 yard will use engine track under ore docks.

This track must not be used for movements in opposite direction except in case of emergency, and then only after movement is fully protected.

4. Train orders making meeting points with trains at Two Harbors must specify the point that trains will meet.

BIWABIK

1. Switch at mine end of St. James Wye at Aurora must be left set for north leg of Wye.

2. Southbound road or yard crews, will not pull out of Biwabik Yard while other crews are yarding trains at this location. After train is stopped in clear, southbound crews may proceed.

3. Trains leaving Biwabik Yard southbound via Turnout X-11.6 should contact Dispatcher before departure, unless Signal X-12.6 displays proceed indication per Rule 501-D1.

Yard crews using running track between Signal X-12.6 and MP X-11 shall contact Dispatcher before proceeding past signal X-12.6 when displaying stop and proceed indication.

4. When cars left south of automatic train order signal on Bangor Lead, Biwabik, protection must be provided to insure that there will be no opposing movements.

K Location of Crossovers

MISSABE DIVISION CROSSOVERS

Main Line			
M.P. X-Over	M.P. X-Over	M.P. X-Over	M.P. X-Over
1.5	14.4	32.5	55.6
1.6	19.8	33.9	60.1
2.4	20.7	36.0	60.8
7.0	22.5	41.7	63.4
7.1	26.2	44.6	63.8
9.9	32.2	49.2	66.0
11.1	32.4	53.1	
Virginia Branch			
B3.84	B4.2	B5.4	
B4.1	B4.7	B5.8	
Superior Branch			
C9.9	C10.4	C13.9	C15.5
	C11.5	C14.7	
Alborn Branch			
	42.8 G.N. Conn.		

IRON RANGE DIVISION CROSSOVERS

N72.6	X14.1	Z1.2
	X15.1	Z1.3
	X16.4	Z3.0
	X17.9	Z7.9
		Z8.03

L Medicine Cases

Cases containing medicine, bandages, first aid instructions, etc., are supplied in each engine, caboos and yard office.

Stretchers are provided in each caboos and yard office.

When seals on medical or stretcher cases are broken report must be made to Superintendent with the number of seal removed and of seal applied.

M Safety and Plant Protection

		Office	After Hours
R. M. Downes.....	Proctor	628-2283	722-1854
J. L. Rohweder.....	Proctor	628-2283	624-0777
G. B. Nutt.....	Proctor	628-2283	724-6893
A. C. Hanson.....	Proctor	628-2283	624-4390
R. G. King.....	Proctor	628-2283	724-1723
G. R. King.....	Virginia	741-9495	741-1536
E. A. Aspling.....	Two Harbors	834-2133	834-3819

N Company's Medical Service

DULUTH

Dr. H. J. Meyer, Chief Surgeon		624-3603
Residence		724-3430
West Duluth Clinic	4325 Grand Ave.	624-3603
Drs. Olson & Peterson	812 Med. Arts Bldg.	722-6655

PROCTOR

Proctor Clinic	225 Second St.	624-5795
Dr. F. H. Dickson	400 S. Ugstad Road	624-0773

TWO HARBORS

Community Health Ctr. & Clinic		
	10th Ave. & 4th St.	834-2171
	If no answer call	834-2211
Lakeview Memorial Hosp.	11th Ave. & 4th St.	834-2211

HIBBING

Mesaba Clinic	1814 E. 14th Ave.	262-3441
Morsman Clinic	2011 E. 3rd Ave.	263-3621
Hibbing General Hosp.	2025 E. 4th Ave.	263-7591

CHISHOLM

Mesaba Clinic	101 S.W. First Ave.	254-3316
---------------	---------------------	----------

GRAND RAPIDS

Itasca Clinic	355 River Road	326-6613
---------------	----------------	----------

VIRGINIA

East Range Clinic	6th Ave. & 9th St. N.	741-6244
	After 5 p.m. call Eveleth	741-9442
Lenont-Peterson Clinic	818 N. 9th St.	741-4292
Municipal Hospital	901 N. 9th St.	741-3340
Municipal Hospital Ambulance Service	115 N. 4th Ave.	741-1488
Morsman Clinic	518 1st Nat'l Bank	741-2633

EVELETH

East Range Clinic	Hayes St. and Grant Ave.	741-4994
	After 5 p.m. call	741-9442

GILBERT

Dr. E. R. Addy	107 Iowa Ave.	741-8900
----------------	---------------	----------

AURORA

East Range Clinic	405 W. 3rd Ave. N.	229-3100
	After 5 p.m. call Eveleth	741-9442
White Community Hosp.		229-2100

ELY

Ely Clinic	208 E. Chapman	365-3151
Ely Bloomenson Hosp.	328 W. Conan	365-3271
Ely-Winton Memorial Hosp.		365-4030
Dr. O. E. Snyder	35 So. 1st Ave. E.	365-3254

SPEED TABLE

Time Min.	Per Mile Sec.	Miles Per Hour
1	0	60.0
1	1	59.0
1	2	58.1
1	3	57.1
1	4	56.3
1	5	55.4
1	6	54.5
1	7	53.7
1	8	52.9
1	9	52.2
1	10	51.4
1	12	50.0
1	14	48.6
1	16	47.7
1	18	46.2
1	20	45.0
1	22	43.9
1	24	42.9
1	26	41.9
1	28	40.9
1	30	40.0
1	33	38.7
1	36	37.5
1	39	36.4
1	42	35.3
1	45	34.3
1	50	32.7
1	55	31.3
2	—	30.0
2	10	27.7
2	20	25.7
2	30	24.0
2	40	22.5
3	—	20.0
3	30	17.1
4	—	15.0
5	—	12.0
6	—	10.0
7	—	8.6
8	—	7.5
9	—	6.7
10	—	6.0

