



COMPANY SURGEONS

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

*Designates also Examining Surgeon.

OPHTHALMOLOGISTS (Eye Doctors)

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

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

Scanned from the Dean Ogle Collection

GREAT NORTHERN RAILWAY COMPANY

MESABI DIVISION

TIME TABLE 91

EFFECTIVE 12:01 A.M.

CENTRAL STANDARD TIME

Sunday, October 31, 1965

R. H. HEMMESCH, Superintendent.

R. N. WHITMAN, General Manager.

H. J. SURLS,
General Superintendent Transportation.

Printed in U.S.A.

2 WESTWARD

FIRST SUBDIVISION

EASTWARD

| Station Numbers | Car Capacity | | SECOND CLASS | | FIRST CLASS | | Distance from Duluth | Time Table No. 91 | | | Telegraph Calls | Distance from St. Paul | SIGNS | FIRST CLASS | | SECOND CLASS | |
|-----------------|--------------|--------------|--------------|----------|-------------|----------------------------|----------------------|-------------------|--------|--------|-----------------|------------------------|-------|-------------|-------|--------------|-------|
| | Siding | Other Tracks | 407 | 19 | 23 | Effective October 31, 1965 | | | 24 | 20 | | | | 408 | | | |
| | | | | | | STATIONS | | | | | | | | | Daily | Daily | Daily |
| 05001 | | 82 | | L 4.45Pm | L 7.30Am | | DULUTH | DU | 159.97 | RKDNXB | A 11.45Am | A 7.45Pm | | | | | |
| | | | | A 4.51Pm | A 7.36Am | 2.37 | BRIDGE SWITCH | | 157.60 | | L 11.39Am | L 7.39Pm | | | | | |

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

| Station Numbers | Car Capacity | Second Class | First Class | Distance from Duluth | Station | Distance from St. Paul | Signs | First Class | Second Class |
|-----------------|--------------|--------------|-------------|----------------------|------------------|------------------------|--------|-------------|--------------|
| 05005 | | s 5.00 | s 7.45 | 3.23 | ELEVATOR STATION | 156.74 | | | |
| | | | | 4.22 | SUPERIOR | 155.75 | RKPBXO | s 11.30Am | s 7.30 |
| | Yard 5689 | | | 5.41 | 25TH ST. | 154.56 | PX | | |
| 05008 | 82 | | | 8.40 | CENTRAL AVE. | 151.57 | V | | |

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

| Station Numbers | Car Capacity | Second Class | First Class | Distance from Duluth | Station | Distance from St. Paul | Signs | First Class | Second Class |
|-----------------|--------------|--------------|-------------|----------------------|--------------------|------------------------|----------|-------------|--------------|
| 05010 | Yard 297 | L 9.30Pm | L 5.08Pm | 8.67 | CENTRAL AVE. TOWER | SU 151.30 | RIDNPXJ | A 11.17Am | A 7.13Pm |
| | | 9.34 | 5.11 | 10.37 | SAUNDERS | B 149.60 | VRIDNPXJ | 11.15 | 7.11 |
| 05013 | | 9.42 | 5.14 | 13.43 | BOYLSTON | | PJ | 11.12 | 7.08 |
| 06112 | 127 10 | 10.19 | 5.27 | 24.71 | FOXBORO | | P | f 11.00 | 6.56 |
| 06100 | 139 3 | 10.49 | 5.38 | 36.74 | NICKERSON | NS 123.23 | NP | 10.50 | 6.46 |
| 06096 | 4 | | f 8.26 | 40.65 | DUQUETTE | | P | f 10.46 | |
| 06094 | 12 | 11.00 | f 8.29 | 43.18 | KERRICK | K 116.79 | DP | f 10.43 | 11.16 |
| 06088 | 110 14 | 11.08 | f 8.35 | 48.93 | BRUNO | | P | f 10.36 | 11.08 |
| 06080 | 185 25 | 11.20 | s 8.43 | 57.31 | ASKOV | RD 102.66 | DP | s 10.26 | 6.30 |
| 06074 | 134 158 | 11.28 | s 6.03 | 63.17 | SANDSTONE | NA 96.80 | DNPWX | s 10.17 | s 6.24 |
| 06065 | 22 | 11.48 | s 9.02 | 71.99 | HINCKLEY | H 87.98 | DP | s 10.07 | 10.31 |
| 06064 | 146 16 | 11.49 | 6.14 | 72.36 | HINCKLEY TOWER | HT 87.61 | DNPIV | | 6.14 |
| 06057 | 167 8 | 12.02Am | f 9.10 | 80.21 | BROOK PARK | | P | f 9.59 | 10.17 |
| 06056 | | 12.03 | 6.23 | 80.54 | BROOK PARK JCT. | | PJ | 9.58 | 6.06 |
| 06051 | | | f 9.16 | 86.01 | HENRIETTE | | P | f 9.53 | |
| 06046 | 107 28 | 12.21 | s 9.21 | 91.45 | GRASSTON | | P | s 9.48 | 9.59 |
| 06040 | 59 32 | 12.29 | s 9.26 | 96.72 | BRAHAM | RA 63.25 | DP | s 9.43 | 5.52 |
| 06037 | 15 | 12.34 | f 9.29 | 100.15 | STANCHFIELD | | P | f 9.38 | 9.46 |
| 06034 | 27 | 12.39 | f 9.35 | 102.64 | GRANDY | | P | f 9.35 | 9.40 |
| 06029 | 104 128 | 12.47 | s 6.46 | 107.52 | CAMBRIDGE | CG 52.45 | DNP | s 9.28 | s 5.43 |
| 06024 | 65 | 12.55 | s 9.52 | 113.17 | ISANTI | IS 46.80 | DP | s 9.17 | 9.24 |
| 06018 | 97 45 | 1.04 | f 9.58 | 119.19 | BETHEL | BE 40.78 | DP | f 9.08 | 5.34 |
| 06012 | 17 | 1.13 | f 10.04 | 125.34 | CEDAR | | P | f 9.02 | 9.04 |
| 06006 | 82 18 | 1.21 | f 10.09 | 131.03 | ANDOVER | | P | f 8.57 | 5.24 |
| 00448 | | A 1.30Am | A 7.11Pm | 136.99 | COON CREEK JCT. | CN 22.98 | JRDNPIV | Lf 8.52Am | L 5.19Pm |

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

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

| Station Numbers | Car Capacity | Second Class | First Class | Distance from Duluth | Station | Distance from St. Paul | Signs | First Class | Second Class |
|-----------------|--------------|--------------|-------------|----------------------|------------------------|------------------------|-------|-------------|--------------|
| 00427 | | A 8.00Pm | A 11.00Am | 159.97 | ST. PAUL | | | L 8.10Am | L 4.30Pm |
| | | 4.00 | 2.26 | | Time Over Subdivision | | | 2.52 | 2.26 |
| | | 32.1 | 56.3 | | Average Speed Per Hour | | | 47.9 | 56.3 |
| | | | 2.45 | | | | | | 3.27 |
| | | | 49.5 | | | | | | 37.2 |

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

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 8 THROUGH 11.

WESTWARD

SECOND SUBDIVISION

EASTWARD 3

| Station Numbers | Car Capacity | | Distance from Duluth | Time Table No. 91 | | | | Telegraph Calls | SIGNS |
|-----------------|--------------|--------------|----------------------|----------------------------|--|--|----|-----------------|-------|
| | Sidings | Other Tracks | | Effective October 31, 1965 | | | | | |
| STATIONS | | | | | | | | | |
| 05013 | | | 13.43 | | | | | | |
| 05019 | 99 | 2 | 19.21 | | | | | | |
| 05023 | | | 23.09 | | | | S | DNPI | |
| 05029 | | 45 | 29.14 | | | | | P | |
| 05033 | 85 | 10 | 33.01 | | | | A | DNPI | |
| 05039 | | 239 | 38.97 | | | | KN | DPXV | |
| 05055 | 129 | 95 | 55.45 | | | | | JPYW | |
| 05063 | 187 | 8 | 63.31 | | | | | P | |
| 05073 | 193 | 46 | 73.27 | | | | OD | DP | |
| 05079 | 182 | 3 | 79.37 | | | | | P | |
| 05090 | 195 | 19 | 89.83 | | | | | P | |
| 05099 | 196 | | 98.78 | | | | | P | |
| 05106 | 142 | 178 | 106.30 | | | | | JYPX | |
| 05109 | 92 | 263 | 109.34 | | | | GR | DNXPW | |
| 05113 | 49 | 30 | 113.04 | | | | | PX | |
| 05115 | 123 | 9 | 114.23 | | | | | P | |
| 05124 | 135 | 96 | 123.60 | | | | RI | DPX | |
| 05131 | 71 | 15 | 130.70 | | | | | P | |
| 05144 | 69 | 22 | 143.60 | | | | BA | DP | |
| 05151 | 123 | 4 | 151.15 | | | | | P | |
| 05153 | | | 153.21 | | | | | JPV | |
| 05163 | Yard | 545 | 162.69 | | | | CS | BJRDN KWXPYO | |

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

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 5 THROUGH 11.

4 WESTWARD THIRD SUBDIVISION EASTWARD

| Station Numbers | Car Capacity | | Distance from Sauk Centre | Time Table No. 91 Effective October 31, 1965 | STATIONS | Telegraph Calls | SIGNS |
|-----------------|--------------|--------------|---------------------------|----------------------------------------------------|--------------------|------------------------|-------|
| | Sidings | Other Tracks | | | | | |
| 09105 | | | 0.14 | | PARK RAPIDS JCT. | JPX | |
| 53018 | 39 | 63 | 18.58 | | LONG PRAIRIE | NE D | |
| 53026 | | 53 | 26.44 | | BROWERVILLE | VI D | |
| 53032 | | 31 | 31.82 | | CLARISSA | RU D | |
| 53036 | 34 | 32 | 36.51 | | EAGLE BEND | GD D | |
| 53044 | | 27 | 44.02 | | BERTHA | BR D | |
| 53056 | | 52 | 56.19 | | WADENA | WD DIV | |
| 53070 | 23 | 30 | 70.44 | | SEBEKA | SK DW | |
| 53079 | | 27 | 79.17 | | MENAHGA | MH D | |
| 53091 | 30 | 116 | 91.17 | | PARK RAPIDS | J D | |
| 53103 | | 29 | 103.07 | | NEVIS | N D | |
| 53109 | | 27 | 109.32 | | AKELEY | AY D | |
| 53119 | | 32 | 118.81 | | WALKER | V | |
| | | | 120.92 | | N. P. RY. CROSSING | U | |
| 05163 | Yard | 545 | 140.38 | | CASS LAKE | CS JBRK DNWX PYO | |

WESTWARD FIFTH SUBDIVISION EASTWARD

| Station Numbers | Car Capacity | | Distance from Elk River | Time Table No. 91 Effective October 31, 1965 | STATIONS | Telegraph Calls | SIGNS |
|-----------------|--------------|--------------|-------------------------|----------------------------------------------------|-----------|-----------------|-----------|
| | Siding | Other Tracks | | | | | |
| 00465 | | | 0.00 | | ELK RIVER | ER | JRDN W |

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

| Station Numbers | Car Capacity | | Distance from Elk River | Time Table No. 91 Effective October 31, 1965 | STATIONS | Telegraph Calls | SIGNS |
|-----------------|--------------|--------------|-------------------------|----------------------------------------------------|------------------------|-----------------|---------|
| | Siding | Other Tracks | | | | | |
| 51818 | 29 | 116 | 7.22Am | 0.74 | N. P. RY. JCT. | IV | 11.15Am |
| | | | 8.35 | 19.16 | PRINCETON | DX | 10.20 |
| 51828 | | 20 | 9.10 | 28.58 | PEASE | | 9.45 |
| 07418 | 90 | 71 | 9.20Am | 33.20 | MILACA | MU | DJPX |
| | | | 2.0 | | Time Over Subdivision | | 1.55 |
| | | | 16.60 | | Average Speed Per Hour | | 17.38 |

WESTWARD SIXTH SUBDIVISION EASTWARD

| Station Numbers | Car Capacity | | Distance from Brookston | Time Table No. 91 Effective October 31, 1965 | STATIONS | Telegraph Calls | SIGNS |
|-----------------|--------------|--------------|-------------------------|----------------------------------------------------|------------|-----------------|----------------|
| | Sidings | Other Tracks | | | | | |
| 05055 | 129 | 95 | 0.00 | | BROOKSTON | | JPYW |
| 52311 | 145 | 5 | 10.92 | | BADEN | | P |
| 52325 | 145 | 5 | 24.99 | | FERMOY | | P |
| 52338 | 144 | 5 | 39.88 | | OMEGA | | P |
| 52401 | | | 50.32 | | KELLY LAKE | CTC KY | BRKDNP JWYX |

WESTWARD FOURTH SUBDIVISION EASTWARD

| Station Numbers | Car Capacity | | Distance from Dormer Jct. | Time Table No. 91 Effective October 31, 1965 | STATIONS | Telegraph Calls | SIGNS |
|-----------------|--------------|--------------|---------------------------|----------------------------------------------------|----------------|-----------------|--------------------|
| | Sidings | Other Tracks | | | | | |
| 52432 | | | 0.00 | | DORMER JCT. | | PX |
| 52427 | | | 2.03 | | SHERWOOD JCT. | | JXV |
| 52426 | 80 | 60 | 2.26 | | BUHL | | PX |
| | | | 3.18 | | FRAZER YARD | | PXV |
| 52418 | | | 6.14 | | ST. CLAIR JCT. | | JPXV |
| 52416 | | | 6.61 | | WILPEN JCT. | | JPXV |
| 52412 | Yard | 150 | 9.19 | | EMMERT | | PIXV |
| 52409 | | | 10.75 | | RUBY JCT. | DBL TRK. ABS | JPXV |
| 52408 | | 139 | 11.73 | | HIBBING | ABS | AC PX BRKDNP |
| 52401 | | | 15.41 | | KELLY LAKE | CTC | KY WXYJ |
| 52354 | 115 | 127 | 19.43 | | KEEWATIN | | KW DPX |
| 52363 | | 651 | 25.00 | | NASHWAUK | | NK DPX |
| 52369 | | 375 | 31.60 | | MARBLE-CALUMET | | CU JDPXV |
| 52375 | | | 35.99 | | HOLMAN JCT. | ABS | JPI |
| 52376 | | | 37.01 | | TACONITE JCT. | | NI JPV |
| 52377 | | 56 | 38.84 | | BOVEY | | BY DPX |
| 52382 | | 800 | 41.60 | | CANISTEO | | PXY |
| 05106 | 142 | 178 | 46.84 | | GUNN | | JPYX |

WESTWARD SEVENTH SUBDIVISION EASTWARD

| Station Numbers | Car Capacity | | Distance from Brook Park Jct. | Time Table No. 91 Effective October 31, 1965 | STATIONS | Telegraph Calls | SIGNS |
|-----------------|--------------|--------------|-------------------------------|----------------------------------------------------|----------------|-----------------|-------|
| | Sidings | Other Tracks | | | | | |
| 06057 | | | 0.00 | | BROOK PARK | | JP |
| 07438 | | 59 | 11.72 | | MORA | MA | DP |
| 07431 | | 31 | 18.82 | | OGILVIE | GO | DP |
| 07418 | 90 | 71 | 30.92 | | MILACA | MU | DJPX |
| 07404 | | 38 | 45.01 | | FOLEY | | |
| 07392 | | 182 | 58.48 | | EAST ST. CLOUD | | DNPIX |

Westward trains are superior to eastward trains of the same class on the Third, Fourth, Fifth, Sixth and Seventh Subdivisions.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 5 THROUGH 11.

ALL SUBDIVISIONS

1. SPEED RESTRICTIONS GENERAL.

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

50 MPH—Diesel engines light or with caboose only.

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

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

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

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

25 MPH—Trains handling logs;
Trains or engines moving in facing point direction at spring switches without facing point lock;
Trains or engines thru No. 15 turnouts at following locations:

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

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

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

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

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

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

2. MOVEMENT OF ENGINES DEAD IN TRAINS.

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

Diesel engines 1 thru 196 or any road switcher unit not equipped with alignment control couplers must be towed as single units. On engines 550 thru 599, coupler alignment control lock blocks must be 'DOWN' when coupled in multiple unit operation.

Following road switcher engines are equipped with alignment control couplers: 227 thru 230; 550 thru 599 (lock blocks); 600 thru 699; 700 thru 734; 900 thru 915; 2000 thru 2035; 2500 thru 2523 and 3000 thru 3040.

Single unit diesel engines, or multiple unit groups (When such groups consist of road freight, road passenger, or engines with alignment control couplers), when towed dead in freight trains, are to be handled not less than five (5) cars nor more than fifteen (15) cars behind the road engine. There should not be more than five (5) units in a group. Additional such units or groups of units must be separated by not less than five (5) cars. When towing diesel engines dead in trains the following speeds must not be exceeded:

| MAXIMUM SPEED | ENGINE NUMBER |
|---------------|-------------------------------------------------------------------------------|
| 50 MPH..... | 1 thru 10, 14 thru 16, 24 thru 28, 75 thru 162, 165 thru 170 |
| 79 MPH..... | 350 thru 375, 500 thru 512, 679, 680, 2350, 2509 thru 2523 and 3026 thru 3040 |
| 65 MPH..... | All other diesel engine units |

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

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

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

5. Due to limited overhead clearance at tunnels and structures, employees are warned to keep off top of cars of extreme height and width when handled in trains and yards, except in emergency. In absence of previous advice on such cars, wire proper officer for instructions.

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

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

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

8. Rule 2 of the Consolidated Code of Operating Rules is modified for Great Northern Railway Company employees to the extent that a watch certificate form is no longer required. Watches of employees will be inspected by Division Officers, Rules Examiners and other designated officers.

Rule 3(C) of the Consolidated Code of Operating Rules is amended as follows: Employees governed by time service rules must not wear wrist watches while on duty unless such watches

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

9. Regarding Consolidated Code Rule 103. In addition to complying with the provisions of this rule, members of a crew will be governed by the following: When an engine, with or without cars, is about to move over a public crossing not protected by a watchman, by gates or by crossing signals in operation, a member of the crew must be on the ground at the crossing to provide protection. Exception—in the movement of a through yard transfer or of a light engine being handled only by hostlers, it is not necessary for a member of the crew to be on the ground at the crossing.
10. Employees are prohibited from riding or walking on the roof of any moving car except when absolutely necessary in the passing of signals, and then only when they place themselves near the middle of the car.
11. Modifying Rules 7 (A) and 12 of the Consolidated Code of Operating Rules: When movement being made is controlled by hand, flag, or lantern signals, the employes involved will give or relay such signals directly to the engineer. The last paragraph of Rule 7 (A) of the Consolidated Code of Operating Rules is revised as follows: When backing or pushing a train, engine, or cars in response to hand or light signals from a trainman, the disappearance from view of the trainman giving such signals or of his light by which such signals are given, must be regarded as a stop signal, except when movement is under control of a trainman on the leading car that is equipped with back-up air brake hose or pipe.
12. 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.
13. 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 |
14. The Consolidated Code of Operating Rules, Edition of 1959, in addition to the following instructions will govern Great Northern employes while operating on Minnesota Transfer Railway Co. and St. Paul Union Depot Company trackage:
 - (a) All trackage of the Minnesota Transfer Railway Company is defined as a system of tracks within yard limits over which movements must be made at restricted speed and are not authorized by time table or train order, but subject to prescribed signals and rules, or special instructions.
The limits of the St. Paul Union Depot Co. property extend from connection with the Northern Pacific Ry. and Great Northern Ry. tracks at Third Street and connection with the CMStP&P-CB&Q R.R. tracks opposite depot roundhouse on the east, to connection with the CGW Ry. and CMStP&P R.R. tracks at Robert Street on the west.
 - (b) The time table of the St. Paul Union Depot Company is for information only. Employes of railroads using the tracks of this Company will be governed by current time table of their respective companies only as to arriving and departing time of trains.
 - (c) Where in the rules of the Consolidated Code reference is made to trains, such rules will also apply to yard movements and engines.
 - (d) Under Rule 15, the use of torpedoes is prohibited.
 - (e) Under Rule 11, burning fuses must not be used except in case of emergency and then only when held in hand and must be extinguished before leaving.

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

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

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

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

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

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

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

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

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

FIRST SUBDIVISION

(Main Line)

1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

| Between | Passenger | Freight |
|--------------------------------------|-----------|---------|
| Central Ave. Tower and Boylston..... | 75 MPH | 50 MPH |
| Boylston and Foxboro..... | 60 MPH | 40 MPH |
| Foxboro and Coon Creek Jet..... | 79 MPH | 60 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 |
| Long lead, west end Sandstone Yard..... | 15 MPH |

3. TRAIN REGISTER EXCEPTIONS.

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

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

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

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

5. RESTRICTED CLEARANCES.

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

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

7. SPEED TEST BOARDS.

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

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

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

8. CROSSOVERS ON DOUBLE TRACK.

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

9. SPRING SWITCHES WITH FACING POINT LOCK.

| | |
|------------------------|------------------------|
| Nickerson siding | Cambridge siding |
| Askov siding | Bethel siding |
| Grasston siding | |

Normal position is for main track.

10. SPRING SWITCHES WITHOUT FACING POINT LOCK.

Superior, east switch of Eastward and Westward incoming tracks. Normal position is for incoming tracks and all other roundhouse lead switches, when not in use, must be left lined for roundhouse lead.

Elevator "X", east and west of car unloader on unloading track. Normal position of switch west of unloader is for unloading track.

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

11. DRAGGING EQUIPMENT DETECTOR INDICATOR.

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

12. MANUAL INTERLOCKINGS.

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

When the route is properly lined for a with-the-current-of-traffic movement from Coon Creek to Minneapolis, the signal aspect displayed on Signal 135.1, Westward approach signal on single main track east of Coon Creek, will be yellow over green. (CMStP&P Rule 240E, Figure 1, Page 104 in the Consolidated Code of Operating Rules). The indication of this signal means approach next signal prepared to proceed on diverging route.

13. AUTOMATIC INTERLOCKINGS.

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

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

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

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

SECOND SUBDIVISION

(Main Line)

1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

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

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

2. SPEED RESTRICTIONS.

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

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

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

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

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

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

4. Eastward approach signal to end of double track, Brookston, is a double aspect signal indicating yellow over green.

When route is properly lined for eastward train to proceed from single main track to eastward main track of double track, this aspect will be named: "Approach diverging route" and indications will be "Approach next signal prepared to proceed on diverging route".

This signal aspect is governed by CMStP&P Railway Block and Interlocking Rule 240-E, Figure 1, Page 104 of the Consolidated Code of Operating Rules. This rule will apply to and govern Great Northern train and engine movements at this location. Any aspect other than yellow over green at this location will be governed by Great Northern signal and interlocking rules.

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

Mirbat
Wawina

Trains or engines using these tracks must keep main track switches open unless main track is occupied by engine or cars; in addition these tracks must not be used to meet or be passed by other trains or engines.

6. SPEED TEST BOARDS.

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

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

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

7. Cloquet, derails located near east end storage tracks Nos. 1 and 2 are not provided with derail signs.
Cloquet, when setting out cars on either end of No. 1 track be sure cars are shoved down far enough to clear N. P. Ry. cross-overs.
Cloquet, cars left on G.N. tracks must not be closer than 60 ft. each way from 10th Street crossing east of depot.
8. Grand Rapids, when setting out cars, eastward freight trains will stop and leave train west of west switch; westward trains will stop east of the first public crossing.
Grand Rapids, at Hawkinson Addition Crossing MP 110, trains stopped to make set-outs at Grand Rapids must clear this crossing.
9. Cass Lake, when switching movements are made over Highway 371 crossing just west of depot, engine or cars must not occupy crossing until gates are at stop for highway traffic.
10. International Refinery, Alford, while switching, do not handle cars over drip pans with brakes set as sparks from brakes create a fire hazard.
Cabooses with fires in stoves not permitted on any of the plant tracks and crews working in the vicinity will refrain from smoking.
Tail hose located in telephone booth must be used on end of cuts shoved to Old No. 1 and Old No. 2 tracks with air coupled into it so that trainmen taking position on rear car of cut being shoved can control the movement over crossing immediately ahead of the unloading rack, as well as being able to stop cut of cars short of end of these two spur tracks.
11. **CROSSOVERS ON DOUBLE TRACK.**

| | |
|----------------------------|----------------------------|
| Facing Point | Trailing Point |
| State Line, west crossover | State Line, east crossover |
| Cloquet, west crossover | Alford |
| Brookston, east crossover | Carlton, west crossover |
| | Cloquet, east crossover |
12. **SPRING SWITCHES WITH FACING POINT LOCK.**
Cass Lake, east yard switch.
Normal position is for main track.
13. **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.
14. **DRAGGING EQUIPMENT DETECTOR INDICATOR.**
Eastward trains, on signal 30.2 approximately one mile west of Bridge 29.
Westward trains on Signal 28.1 approximately 1 mile east of Bridge 29.
15. **MANUAL INTERLOCKINGS.**
State Line Tower N. P. Ry. crossing
Carlton N. P. Ry. crossing
16. **AUTOMATIC INTERLOCKINGS.**
Bridge 29, 2.21 miles east of Alford.....gantlet
Bridge 29:
Release for westward route on westward track is located in release box at eastward home signal.
Release for eastward route on eastward track is located in release box at westward home signal.
Cranks for hand operation of smashboards are attached by chains to the mechanism.
17. **CTC—SOO JCT. TO CASS LAKE.**
Telephones for communication with the control operator are located at the east end of CTC section and at the spring switch, east end of Cass Lake Yard, 1000 feet west of west end of CTC section. Westward Soo Line trains will call the operator at

Cass Lake on phone for authority to enter G.N. main line. The following will govern in case of failure of communications: Soo Line crew will unlock switch and attempt to line for their movement. If switch will line and signal clears, this will be their authority to leave Soo Jct., and proceed to Cass Lake.

18. Authority to use the electric-locked switches at Gunn must be given verbally to member of crew by train dispatcher.

THIRD SUBDIVISION

(Park Rapids Line)

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

| | |
|--------------------------------------|---------|
| Between | Freight |
| Park Rapids Jct. and Cass Lake | 30 MPH |
2. **SPEED RESTRICTIONS.**
Between Home Signals of Interlockings at:..... 20 MPH
Park Rapids Jct.
Wadena.
3. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
Mesabi Division clearance received at Sauk Centre will clear train at Park Rapids Jct.
4. Cass Lake, normal position south wye switch is for east 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
6. Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on Third Subdivision, between Cass Lake and Park Rapids Jct. Form Z train order is not required on this subdivision. If it becomes necessary to operate a following train when there is still a train on this subdivision, the train ahead must be notified to protect against the following train. If this is not practical, the following train must be notified to protect against the train ahead.

FOURTH SUBDIVISION

(Gunn-Dormer Jct. Line)

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

| | |
|-----------------------------|---------|
| Between | Freight |
| Gunn and Emmert | 45 MPH |
| Emmert and Dormer Jct. | 30 MPH |
2. **SPEED RESTRICTIONS.**
Between Home Signals of Interlocking at:..... 20 MPH
Emmert.
St. Paul Mine Spur, Third Avenue, Keewatin, trains will not exceed a speed of 12 MPH through the approach circuits of the signal system covering crossing signals for Highway No. 169.
Harrison Mine Spur, Naswauk, trains will not exceed a speed of 12 MPH northbound into the mine or 6 MPH southbound out of the mine through the approach circuits of the signal system covering crossing signals for Highway No. 169 crossing.
- AT VIRGINIA.**
(a) Between Home Signals of Interlockings at:..... 20 MPH
D. W. & P., Virmount Tower.
D. W. & P., Crescent Ave.
(b) Highway No. 53 crossing, 6th Avenue West, leading to Columbia Mine:
Trains must not exceed a speed of 10 MPH through the approach circuits of this crossing.
(c) Trains and engines must stop before passing over crossing U. S. Highway No. 53 leading to depot, and a member of crew on ground at the crossing will protect movement.
(d) Ninth Ave. and Fourth Street Crossing:
Trains and engines must stop before passing over crossing and a member of crew on ground at the crossing will protect movement.

3. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).** At Kelly Lake, trains arriving from Sixth Subdivision (Casco Line) destined to Fourth Subdivision (Gunn Line) may proceed to Keewatin on authority of clearance under which such trains arrive.
4. Between Calumet and Oil Spur, located 1.47 miles west of Bovey, main track will be used jointly by G.N. and DM&IR. Rys. and authority for train movements is controlled by G.N. Ry. and G.N. rules and Special Instructions will govern.
5. Train order authority or clearance Form A not required for transfers originating at Bovey for movement between Taconite Jct. and Canisteo. Rule 93 of the Consolidated Code of Operating Rules will apply. Transfers must obtain permission from train dispatcher before occupying main track.
6. Telephone in service at Buckeye, Canisteo and Danube Mines switch. Crews coming from Buckeye, Canisteo and Danube Mines will communicate with the dispatcher and know that way is clear on the main track before proceeding with train down the descending grade on both legs of the wye.
7. Block signal located at Mesabi Chief Mine spur normally displays indication, Rule 240(B) 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.
8. Trains and engines will run with the current of traffic between Kelly Lake and Emmert without train orders or clearance, and must keep to the left unless otherwise provided.
9. Between Emmert and DM&IR. Jct. east of Scranton, G. N. double track will be used jointly by DM&IR. trains. G. N. rules and special instructions will govern.
10. Between Wilpen Jct. and St. Clair Jct., and between Buhl and Dormer Jct., DM&IR trains will use G.N. main track jointly and be governed by G.N. rules and special instructions. Normal position of switches at Wilpen Jct., St. Clair Jct., and Dormer Jct., is for G.N. 4th Subdivision.
11. 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.
12. Train and engine movements from main line on new Hull Crusher Spur over Kelly Lake road crossing must be protected by a member of the crew due to restricted view approaching this crossing.
13. Main track Kelly Lake to Dormer Jct. is all yard limit and movements will be governed by Consolidated Code Rule 93. Train order authority or Clearance Form A is not required. Transfers will not be required to display markers Rule 19 or signals Rule 21.
Great Northern and DM&IR transfers must obtain permission of Great Northern dispatcher before occupying main track. On double track between Kelly Lake and Emmert trains and engines must keep to the left unless otherwise instructed.
14. Following from DM&IR Ry.:
Train orders are not required for movement on the Wilpen Branch between Wilpen and Chisholm and between Monroe Jct. and Monroe. Trains will operate under provisions of Rule 93. Crews will contact Yardmaster Mitchell District before making movement on this branch.
Train orders are not required for movement on the Pillsbury Branch. Trains will operate under provisions of Rule 93.
15. Signal protection in service at Danube Mine Spur switch and crossover from Balkan Mining Company track to Danube Mine Tracks. Movements over this crossing will be governed by dwarf color-light signals, displaying indication Figure 6 of Rule 240-A or Figure 4 of Rule 240-H except eastward color-light signal for Balkan Mining Company will display Figure 3 of Rule 240-A or Figure 2 of Rule 240-H, all of the Consolidated Code. Normal position of switches is for Balkan Mining Company and for G. N. Ry. track from Danube Mine to washing plant. Signals will clear automatically for Balkan Mining Company and for G. N. Ry. from Danube Mine to washing plant. To obtain signal to cross over the Balkan Mining Company track, G. N. Ry. trainmen should make sure there is no approaching conflicting movement, then line all three switches in the route to clear signal before proceeding. After crossover movement has been made, all three switches must be restored to normal position for Balkan Mining Company track and G. N. Ry. washing plant track.
16. Normal position of Gunn Line Switch at East leg of wye, Kelly Lake, will be for Fourth Subdivision.
17. **CROSSOVERS ON DOUBLE TRACK.**
- | | |
|---------------------|-------------------------|
| Facing Point | Trailing Point |
| Hull Crusher | Mahoning |
| Ruby Jct. | Agnew |
| | Scranton |
| | Hibbing, east crossover |
| | Hibbing, west crossover |
| | North Mitchell |
18. **SPRING SWITCHES WITH FACING POINT LOCK.**
Nashwauk, west north storage track switch.
west south storage track switch.
Calumet, west new yard switch.
Canisteo, west new yard switch.
Normal position is for main track.
19. **SPRING SWITCHES WITHOUT FACING POINT LOCK.**
Kelly Lake, west wye switch,
Normal position is for 4th subdivision.
Kelly Lake, end of double track,
Normal position is for eastward track.
20. **SEMI-AUTOMATIC INTERLOCKINGS.**
EmmertDM&IR. Ry. crossing
Emmert, normal position of spring switch at west end of connection with DM&IR Ry. is lined for Great Northern track. Normal position of spring switch at south end of connection with DM&IR Ry. is lined for DM&IR track to Mitchell. Signal indications are displayed accordingly. If any route other than the above normal route is to be used, trains must stop at home signal and desired route lined by hand. Signal should then clear in about one minute. If signal does not clear and no conflicting movement is evident, push-button release on home signal should be operated to obtain signal indication.
Calumet, 0.60 miles east of.....Hill Annex Spur
Complete instructions for operation of electric lock and gates at semi-automatic interlocking are located at "Release" boxes.
21. **AT VIRGINIA.**
G. N. Ry. trains to and from Virginia operate via D. M. & I. R. Ry. tracks between Emmert and Virginia.
22. **AUTOMATIC INTERLOCKINGS.**
Virginia, 0.47 miles west of.....D. W. & P. Ry. crossing
1.20 miles west of.....D. W. & P. Ry. crossing
23. Authority to use the electric-locked switches at Gunn, Minnesota, must be given verbally to member of crew by train dispatcher.

FIFTH SUBDIVISION

(Princeton Line)

1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

| Between | Freight |
|-------------------------------|---------|
| Elk River and Princeton | 45 MPH |
| Princeton and Milaca | 20 MPH |

2. SPEED RESTRICTIONS.

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

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

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

4. SEMI-AUTOMATIC INTERLOCKINGS.

Elk River, 0.74 miles west of..... N. P. Ry. Jct.

5. Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on Fifth Subdivision, between N.P. Ry. Jct. and Milaca. Form Z train order is not required on this subdivision. If it becomes necessary to operate a following train when there is still a train on this subdivision, the train ahead must be notified to protect against the following train. If this is not practical, the following train must be notified to protect against the train ahead.

SIXTH SUBDIVISION

(Casco Line)

1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

| Between | Freight |
|--------------------------------|---------|
| Brookston and Kelly Lake | 45 MPH |

2. DRAGGING EQUIPMENT DETECTOR INDICATOR.

Eastward Trains, on iron mast approximately 6400 feet east of Signal 62.2 about 2.5 miles west of Brookston.

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

Arlberg

Casco

Onega

Trains or engines using these tracks must keep main track switches open unless main track is occupied by engine or cars; in addition these tracks must not be used to meet or be passed by other trains or engines.

SEVENTH SUBDIVISION

(Milaca Line)

1. MAXIMUM PERMISSIBLE SPEED FOR TRAINS.

| Between | Freight |
|------------------------------------|---------|
| Brook Park and East St. Cloud..... | 40 MPH |

2. SPEED RESTRICTIONS.

| | |
|------------------------------------------------|--------|
| Bridge 46.8, Mora | 20 MPH |
| Bridge 54.2, Quamba..... | 20 MPH |
| Between Home Signals of Interlockings at:..... | 20 MPH |
| Brook Park. | |
| East St. Cloud. | |

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

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

4. MANUAL INTERLOCKINGS.

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

5. Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on Seventh Subdivision, between Brook Park and East St. Cloud. Form Z train order is not required on this subdivision. If it becomes necessary to operate a following train when there is still a train on this subdivision, the train ahead must be notified to protect against the following train. If this is not practical, the following train must be notified to protect against the train ahead.

SPEED TABLE

| Time Per Mile | | | Time Per Mile | | |
|---------------|------|----------------|---------------|------|----------------|
| Min. | Sec. | Miles Per Hour | Min. | Sec. | Miles Per Hour |
| | 46 | 78.3 | 1 | 18 | 46.2 |
| | 47 | 76.6 | 1 | 20 | 45.0 |
| | 48 | 75.0 | 1 | 22 | 43.9 |
| | 49 | 73.5 | 1 | 24 | 42.9 |
| | 50 | 72.0 | 1 | 26 | 41.9 |
| | 51 | 70.6 | 1 | 28 | 40.9 |
| | 52 | 69.2 | 1 | 30 | 40.0 |
| | 53 | 67.9 | 1 | 33 | 38.7 |
| | 54 | 66.7 | 1 | 36 | 37.5 |
| | 55 | 65.5 | 1 | 39 | 36.4 |
| | 56 | 64.3 | 1 | 42 | 35.3 |
| | 57 | 63.2 | 1 | 45 | 34.3 |
| | 58 | 62.1 | 1 | 50 | 32.7 |
| | 59 | 61.0 | 1 | 55 | 31.8 |
| | 0 | 60.0 | 2 | — | 30.0 |
| 1 | 1 | 59.0 | 2 | 10 | 27.7 |
| 1 | 2 | 58.1 | 2 | 20 | 25.7 |
| 1 | 3 | 57.1 | 2 | 30 | 24.0 |
| 1 | 4 | 56.3 | 2 | 40 | 22.5 |
| 1 | 5 | 55.4 | 3 | — | 20.0 |
| 1 | 6 | 54.5 | 3 | 30 | 17.1 |
| 1 | 7 | 53.7 | 4 | — | 15.0 |
| 1 | 8 | 52.9 | 5 | — | 12.0 |
| 1 | 9 | 52.2 | 6 | — | 10.0 |
| 1 | 10 | 51.4 | 7 | — | 8.6 |
| 1 | 12 | 50.0 | 8 | — | 7.5 |
| 1 | 14 | 48.6 | 9 | — | 6.7 |
| 1 | 16 | 47.4 | 10 | — | 6.0 |

Business Tracks not shown as stations on Time Table

| Name | Location | Car Capacity | Switch Opens |
|----------------------------------------|--------------------------------------------|--------------|--------------|
| First Subdivision | | | |
| North Central Public Service Spur..... | 2.25 miles east of Coon Creek Jct..... | 7 | W |
| Old Colony Gas & Oil Co. Spur | 0.26 miles west of Andover.... | 10 | W |
| Rural Coop. Power Ass'n Spur | 2.42 miles east of Cambridge.. | 6 | E |
| Second Subdivision | | | |
| Lindsay Pit..... | 1.69 miles west of Carlton.... | 70 | E |
| Mirbat..... | 5.37 miles east of Floodwood.... | 12 | E |
| Wawina..... | 12.90 miles west of Floodwood | 11 | E |
| Cohasset Mill & Lumber Co.. | 0.37 miles east of Cohasset... 9 | | E |
| Minn. Power and Light Spur.. | 0.98 miles west of Cohasset... 106 | | E |
| Chippewa Wood Processing Spur..... | 0.13 miles east of Deer River.. | 16 | W |
| Webster Lumber Co..... | 5.26 miles west of Schley..... | 17 | E |
| Third Subdivision | | | |
| Little Sauk..... | 10.24 miles west of Park Rapids Jct..... | 5 | W |
| Peters Meat Products Spur... 10 | 0.40 miles west of Long Prairie | | W |
| Redwood Rendering Co..... 35 | 1.61 miles west of Long Prairie | | E |
| Midland Co-op. Spur..... 6 | 1.68 miles west of Long Prairie | | E |
| Hewitt..... 22 | 4.03 miles west of Bertha.... | | E & W |
| Land O'Lakes Creamery Spur.. 19 | 0.58 miles west of Sebeka.... | | W |
| Wilkinson..... 8 | 10.12 miles west of N.P. Ry. Crossing..... | | E & W |
| Fourth Subdivision | | | |
| Lucknow..... 45 | 1.97 miles east of Buhl..... | | E & W |
| Elbern Siding..... 39 | 3.45 miles west of Buhl..... | | E & W |
| Service Station Inc. Spur... 4 | 0.90 miles east of Hibbing.... | | E |
| Oil Track..... 18 | 1.42 miles east of Hibbing.... | | E & W |
| Douglas Shop Spur..... 9 | 2.18 miles east of Emmert.... | | W |
| Wacootah Storage Track... 25 | 3.67 miles west of Virginia.... | | E & W |
| Keewatin Saw Mill Spur... 14 | 1.92 miles west of Kelly Lake.. | | E |
| Mid-Range Builders Supply.. 7 | 0.15 miles east of Nashwauk.. | | W |
| Minn. Power & Light Spur... 15 | 1.09 miles east of Nashwauk.. | | E |
| Ryan and Gillis Spur..... 29 | 0.93 miles west of Kevin.... | | W |
| Marble Spur..... 5 | 0.88 miles west of Calumet... 5 | | W |
| Oil Spur..... 35 | 1.19 miles east of Canisteo... 35 | | W |
| Fifth Subdivision | | | |
| Zimmerman..... 15 | 9.50 miles west of N.P. Ry. Jct. | | E & W |
| Long's Siding..... 4 | 4.05 miles west of Princeton.. | | W |
| Sixth Subdivision | | | |
| Arlberg..... 17 | 5.42 miles west of Brookston.. | | E |
| Casco..... 36 | 5.84 miles west of Fermoy.... | | E |
| Seventh Subdivision | | | |
| Quamba..... 8 | 5.39 miles west of Brook Park | | E |
| Kanabec Hdwe. Co. Spur... 5 | 1.0 miles east of Mora..... | | W |
| Bock..... 12 | 6.88 miles west of Ogilvie.... | | W |
| R. E. A. Oil Spur..... 3 | 0.5 miles east of Milaca..... | | W |
| Foreston..... 29 | 3.29 miles west of Milaca.... | | E & W |
| Oaks..... 26 | 9.01 miles west of Milaca.... | | E & W |
| Parent..... 28 | 4.30 miles west of Foley..... | | E & W |

Mine Spurs

| Name | Location | Switch Opens |
|---------------------------------------------------------|-----------------------------------|--------------|
| Stevenson, Lamberton, Mahoning Concentrate, Warren..... | 0.53 miles east of Kelly Lake.... | W |
| Mahoning, N. Uno, Mahoning Grp IV, So. Agnew..... | 0.72 miles east of Kelly Lake.... | W |
| Hull Crusher..... | 1.80 miles east of Kelly Lake.... | W |
| Morton..... | 1.98 miles east of Kelly Lake.... | E |
| Alworth..... | 2.42 miles west of North Mitchell | W |
| Susquehanna, Weggum..... | 0.03 miles east of North Mitchell | E |
| Albany, Longyear..... | 0.81 miles east of North Mitchell | E |
| Dunwoody..... | 0.99 miles east of Emmert.... | W |
| Chataco..... | 0.74 miles west of Chisholm.... | W |
| Elbern..... | 2.87 miles west of Buhl..... | W |
| Grant..... | 1.22 miles west of Buhl..... | W |
| Wanless..... | 1.38 miles east of Buhl..... | E |
| Atkins, Wade..... | 0.68 miles east of Dormer Jct.... | E |
| Elliott Siding..... | 1.18 miles east of Dormer Jct.... | E & W |
| Enterprise..... | 0.83 miles west of Virginia.... | E |
| Bennett-Russell, Carlz..... | 2.57 miles west of Kelly Lake.. | E |
| St. Paul..... | 0.25 miles east of Keewatin.... | E |
| Mesabi Chief Washer, Aromatic, Perry, Mississippi..... | 2 01 miles west of Keewatin.... | W |
| O'Brien..... | 1.57 miles east of Nashwauk.... | W |
| Hawkins Fines..... | 0.37 miles east of Nashwauk.... | E |
| York..... | 0.15 miles east of Nashwauk.... | W |
| Hawkins (MacKilican)..... | 0.13 miles east of Nashwauk.... | E |
| Harrison, Harrison Fines..... | 0.78 miles west of Nashwauk.... | W |
| Patrick A, Patrick C..... | 2.26 miles west of Nashwauk.... | W |
| Hill Annex Creta..... | 1.38 miles east of Calumet.... | E |
| Hill Annex Washer..... | 0.60 miles east of Calumet.... | E |
| Hill Annex Fines, Hill Trumbull Washer..... | 0.69 miles east of Calumet.... | E |
| Hill Spur..... | 0.37 miles west of Calumet.... | E |
| Rhude Media Spur..... | 0.57 miles east of Holman Jct.... | E |
| Arcturas..... | 0.25 miles east of Holman Jct.... | W |
| Holman..... | Taconite Jct..... | W |
| Hunner..... | 0.83 miles west of Bovey..... | E |
| Canisteo, Danube..... | Canisteo..... | E & W |
| West Hill..... | 0.20 miles west of Canisteo.... | E |
| Jessie..... | 1.60 miles west of Canisteo.... | W |
| Greenway..... | 2.42 miles west of Canisteo.... | W |
| Tioga..... | 0.24 miles east of Seyton..... | W |

Page 12 (outside back cover) is blank.