

MAXIMUM CLEARANCES

Note—Limit of load measurements based on 52 ft. car with 42 ft. truck centers.
 Heights and widths in table allow 6 inch clearance.

Height of center of gravity above top of rail not to exceed 84 inches.

SUBDIVISION	Height Above Top of Rail																				Governing Structure					
	21'-0"	20'-0"	19'-6"	19'-0"	18'-6"	18'-0"	17'-6"	17'-0"	16'-6"	16'-0"	15'-6"	15'-0"	14'-6"	14'-0"	13'-6"	13'-0"	12'-6"	12'-0"	11'-6"	11'-0"		10'-6"	10'-0"			
13th Sub.—West Side Line, St. Paul West Bound. East Bound.	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	1'-0"	1'-0"	1'-0"	2'-0"	2'-0"	3'-0"	3'-0"	3'-0"	3'-0"	4'-0"	4'-0"	4'-0"	4'-0"	5'-0"	5'-0"	5'-0"	6'-0"	6'-0"	6'-0"	Westminster Street Tunnel
13th Sub.—East Minneapolis to White Bear Lake via Trout Brook and Gloser	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	Trout Brook Jct.—Soo Line Over Crossing and Raymond Ave. Bridge
13th Sub.—19th Ave. South to 1st Street North, Minneapolis	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	First Street So. and Hennepin Ave. Over Crossings

‡Load 12'-0" wide can be handled via westward yard lead to east end of Yard B under Soo Line O.H. Br. at Northtown to height of 19'-5" with 3" clearance. *C.P. Br. Assiniboine River, Winnipeg.

Loads up to 12'-0" wide between 21'-0" and 0'-6" above top of rail may be handled on the following subdivisions:
 2nd Sub.—Staples to Dilworth
 3rd Sub.—Carlton to Cloquet

Loads in excess of measurements given above may be handled only upon message authority obtained from Division Superintendent or Terminal Superintendent, copy of which must accompany the movement.

7th Sub.—Key West to Sherack
 8th Sub.—Little Falls to Morris

9th Sub.—Brainerd to Big Falls
 9th Sub.—Funkley to Kelliher

J. G. HEIMSJO, Asst. Supt. | **M. C. McELROY,** Trainmaster | **L. M. BARRAN,** Trainmaster | **W. W. HARPER,** Trainmaster | **J. D. SELLS,** Trainmaster | **R. L. BEEM,** Trainmaster-Roadmaster | **S. O. ERICKSON,** Chief Dispatcher, Minneapolis

H. J. WALTERS, Asst. Supt. | **E. L. NOLAN,** Trainmaster | **J. A. BLACK,** Trainmaster | **G. E. TRENARY,** Trainmaster | **S. R. HALL,** Trainmaster | **J. E. ROSS,** Chief Dispatcher, Duluth

NORTHERN PACIFIC RAILWAY COMPANY

St. Paul Division

Special Instructions No. 1

In Effect at 12:01 A. M. Central Standard Time

Wednesday, March 1, 1967

These Instructions constitute a part of the Time Table currently in effect.

Employes whose duties are in any way affected by the Time Table must have a copy of The Current Special Instructions and Current Time Table with them on duty.

R. K. MOSSMAN, Superintendent

W. L. WOOD, Terminal Superintendent, Duluth

D. H. KING, General Manager.

E. S. ULYATT, General Superintendent of Transportation.

V. B. HUSSEY, Superintendent, C&NW Ry.

ALL SUBDIVISIONS.

1. Speed Restrictions—	Maximum Speeds Permitted
Passenger trains	75 MPH.
Passenger trains within yard limits Duluth-Superior terminal	Restricted Speed
“A”, “AA”, “B”, “BB”, “BL” Manifest Trains and Time Freight 631	60 MPH.
Other freight and mixed trains	50 MPH.

The above speeds are subject to the restrictions of maximum speeds in miles per hour as shown by zones under each subdivision.

All trains and engines, except as otherwise specified:

Through crossovers, turnouts and gantlets, except where fixed signals provide otherwise	15 MPH.
Handling pile drivers 26-33 inclusive	40 MPH.
Handling other pile drivers, wrecking cranes, locomotive cranes and similar equipment	30 MPH.
Handling 4-wheel scale test cars and scale test car 254	35 MPH.
	} Main Line
	} Branch Lines
Handling air dump cars 89000 to 89059 series	35 MPH.
Picking up train orders from operators	30 MPH.
Handling dead diesel-electric engines other than NP and tenant lines	35 MPH.
Handling loaded ore cars	40 MPH.
Handling unpeeled pulpwood in open top cars	35 MPH.
Handling empty DMIR ore cars.....	45 MPH.

Diesel-electric engines—	Handling trains	Running light
No. 99	50 MPH.	50 MPH.
No. 100	40 MPH.	40 MPH.
100 series except No. 100	60 MPH.	60 MPH.
200 and 300 series except Nos. 244, 245, 260, 263 and 267	65 MPH.	65 MPH.
Nos. 244, 245, 260, 263 and 267.....	75 MPH.	65 MPH.
400, 600 and 700 series.....	45 MPH.	45 MPH.
500, 501 and 552-569 incl. except 556	65 MPH.	65 MPH.
No. 525	60 MPH.	60 MPH.
Nos. 550, 551 and 556	75 MPH.	65 MPH.
Nos. 800-803	60 MPH.	60 MPH.
850-860 series	65 MPH.	65 MPH.
900, 6000 and 7000 series	65 MPH.	65 MPH.
5400 series	55 MPH.	55 MPH.
6500, 6600, 6700 series	75 MPH.	65 MPH.
2500, 2800 and 3600 series	70 MPH.	65 MPH.
2500, 2800 and 3600 series through all turn outs, except where signaling permits higher speed	12 MPH.	12 MPH.

Diesel-electric motor cars in service or being towed—
Cars B-30, B-31, B-32, B-40, B-41 and B-42 75 MPH.

Diesel-Electric Engines Handled Dead in Train—Diesel-Electric engines or units may be handled dead in trains. The speed of such trains must not exceed the authorized operating speed specified for such engines or units.

When handling diesel-electric single units, road-switcher engines and switch engines dead in a freight train, they shall be separated from the engine handling the train and each other by at least one freight car. This does not apply to diesel-electric road engines of two or more units coupled in multiple.

All diesel-electric engines or units handled dead in freight trains must be placed on head end of train within ten cars of road engine handling train, this to insure that brakes will release properly.

When handling diesel-electric units dead in train, bridge, speed and other restrictions must be observed, same as when in operating condition.

When road passenger diesel units are coupled in multiple with road freight or road switcher units, the road passenger units must be trailing to avoid danger of sliding wheels on the freight or road switcher units due to excessive brake cylinder pressure. The speed restrictions for freight and road switcher units must be observed to avoid damage to traction motors.

If the units of a consist are of different gear ratio, the engine must not be operated at speeds exceeding that of the unit having the lowest maximum permissible speed. Also, the overload short time rating of any unit in the consist must not be exceeded.

When two, Four-Unit diesel-electric engines are used to double-head freight trains, the leading engine only will apply power to start train, or to make backup movement with cars.

2. Heavy Cars—Cars heavier than the following not permitted without authority of Superintendent:

Cars under 35 feet long	220,000 lbs.
Cars over 35 feet long	263,000 lbs.

89 foot long bulkhead flat cars loaded to 263,000 lbs. may be coupled together and handled in trains with the following restrictions:

The car adjacent to such flat car or block of such flat cars must not exceed 177,000 lbs. The engine must be separated from such car.

Handle these cars in a block without uncoupling within the combined block except in an emergency or bad order situation.

3. Train inspection.

When blowing snow or other conditions restrict visibility to the point that proper running inspection can not be made, freight trains will reduce speed to the extent required, stopping if necessary, to make such train inspection. Train crews will avail themselves of service stops to comply with the foregoing. Conductor will determine frequency of such inspections, dependent on visibility conditions, avoiding unnecessary delay to trains.

4. Rule 3(C) of the Consolidated Code of Operating Rules is amended as follows: Employes governed by Time Service Rules must not wear wrist watches while on duty unless such watches are of an approved type.

5. Rule 7(A), 4th Paragraph of the Consolidated Code of Operating Rules is modified 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 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.

6. Rule 10(H) When it is known in advance there will not be a flagman at yellow signal, per Rule 10(H), the following form of train order is authorized and will be issued when requested by foreman in charge:

ACCOUNT MEN AND EQUIPMENT ON (EASTWARD, WESTWARD, OR MAIN) TRACK BETWEEN (MILE POST LOCATIONS) BETWEEN (STATION) AND (STATION) FROM (TIME) M UNTIL (TIME) M ALL TRAINS ON (EASTWARD, WESTWARD, OR MAIN) TRACK MUST APPROACH AND PROCEED THROUGH THIS TERRITORY AT RESTRICTED SPEED PREPARED TO STOP MAINTAINING A CAREFUL LOOKOUT FOR HAND SIGNALS RESTRICTED SPEED MUST NOT BE EXCEEDED UNLESS FOREMAN IN CHARGE VERBALLY AUTHORIZES A DIFFERENT SPEED.

Foreman in charge of work must notify Chief Dispatcher in writing, furnishing location, time, and date such protection is desired.

When train order is issued, foreman will be given copy of such order if practicable. If not practicable, he will be verbally advised when train order is in effect.

Yellow flags must be placed one and one-half (1½) miles from outer work limits.

When this train order is in effect, trains must approach and proceed through this territory at restricted speed maintaining a careful lookout for signals and be prepared to stop at red signal.

Restricted speed must not be exceeded unless foreman in charge of work verbally authorizes a different speed.

A green signal will be displayed to the right of each track at limit of restriction, but train may resume speed in advance of green signal when verbally authorized by foreman.

The above wording is a modification of Rule 10(H). The fore-

man may display a red signal anytime he requires its use account impassable track and trains will be governed by Rule 10(G).

(Note) The last sentence in the order would allow use of radio if desired to increase speed through limits.

Consolidated Code Rules Nos. 205 and 206 are modified to permit use of rubber stamp and printed train order forms as follows: When rubber stamp and printed train order forms are used for issuance of train order form shown under this item, Train Dispatchers, after recording form in train order book with stamp, are required to write and transmit only train order number, address, track designation, mile post locations, stations and time limits. In addition, date will be transmitted when necessary. Train order operators using printed form for such train orders are required to copy and repeat only that portion transmitted by the Train Dispatcher.

7. Flashing type lamps may be used as markers provided they are of the approved type. When this type of marker is used on rear of train, Rules 19 and D-19 are modified and Rule 19(E) of the Consolidated Code will not apply as indicated in the following:

Rule 19. By night, marker lamps lighted, displaying red to the rear except when train is clear of main track in non-automatic Block Signal territory, green will be displayed to the rear.

Rule D-19. By night, when train is turned out against the current of traffic, marker lamps lighted must display green to the rear on the side next to the main track on which the current of traffic is in the direction train is moving and red to the rear on the opposite side.

Rule 19(E). Does not apply in CTC or Automatic Block Signal Territory, and following train will be governed by signal indication.

8. Rule 200—Lights will not be displayed on train order signals on the 5th, 6th, 7th, 8th and 9th subdivisions. Trains will be governed by the day indication of these train order signals.
9. The second paragraph, Page 145 of the Consolidated Code of Operating Rules, which concerns the location of advance warning signs, is cancelled, and the following applies:

Except on branch lines and as otherwise provided in the Special Instructions, advance warning signs, as far as feasible, are located 5,280 feet in advance of the reduce speed signs. On branch lines, except as otherwise provided in the Special Instructions, advance warning signs are, as far as feasible, located approximately 3000 feet in advance of the reduce speed signs. The numerals on both signs indicate in miles per hour the maximum speed permitted from the reduce speed sign to another reduce speed limit, or to a sign indicating a higher speed or to a resume speed sign.

10. Rule 519 of the 1959 edition of the Consolidated Code of Operating Rules will not apply on the Northern Pacific Railway. The following rule governs: "Unless otherwise provided, in automatic block signal territory, when a train or engine has been stopped by a signal governing movement through or over a spring switch, and signal continues to display the Stop-indication, after complying with Rule 104(B), movement may be made as provided by Rules 501(A)2 and S-509(B)."

11. Rule 607—Emergency signals are not used at interlockings or drawbridges operated by the Northern Pacific Railway.

12. Cars will not be handled behind light-weight observation cars except in emergency or when so authorized by the Superintendent. In such cases passengers shall not be permitted to pass between such cars while train is in motion due to the unprotected opening.

Diesel-electric motor cars, when handled dead in freight trains, must be behind caboose.

Four-wheel scale test cars must be handled in local freight trains when available and excessive delay will not result.

Exception: If local service is not immediately available these cars may be handled in dead freights which must be governed by speed restrictions for the handling of four-wheel scale test cars shown under Item 1. All scale test cars must be placed immediately ahead of caboose.

Air dump cars, series 89000-89059, will be handled only in work trains and local trains when available. If local trains not avail-

able, cars may be handled on the rear of other trains at a speed not to exceed 35 MPH.

All log flats in series 117002-117892 and certain company service and outfit cars in series 200000-207999 must not be handled in time freights or in trains where pusher service is used. When handled on other freight trains, they must be placed on the rear end and the speed of such trains must not exceed 50 MPH.

INSTRUCTIONS FOR HANDLING PILE DRIVERS, CRANES, DERRICKS, SHOVELS, OR SIMILAR EQUIPMENT OF THE SWINGING OR PIVOTING TYPE, ARE AS FOLLOWS:

- (a) When such equipment is moved on its own wheels, it shall be prepared and carded in accordance with current A.A.R. Loading Rules unless some condition exists which prevents those requirements being complied with.
- (b) Such equipment that is geared for self-propulsion shall have the driving gears disconnected or removed.
- (c) Such equipment that is Company-owned that requires speed to be restricted shall be covered by a message to the train crew stating the maximum speed permitted.
- (d) The above named equipment with the exception of pile drivers 26 through 33 inclusive when properly prepared and carded may be moved at normal freight train speeds unless there is some condition that prevents it, and in that event the maximum permitted speed shall be noted on the waybill. When not prepared and carded shall be handled at speeds not to exceed 30 MPH.

13. Precautions must be taken on double track to prevent accidents from swinging doors or other loose construction attached to cars or engines. **Trains handling logs must stop when being met or passed by passenger trains.**

14. Roller bearing failures on cars or engines equipped with roller bearing boxes may be due to lack of oil or grease. If the box is not blazing, the oil plug in the cover should be removed and heavy oil added and plug replaced. Oil must never be added to a box that is blazing. Grease lubricated roller bearing boxes have grease plugs locked with a metal strap which must be cut off with chisel before plug can be removed. In cases of a hot box, oil should be added and the plug replaced, train should proceed at reduced speed and care exercised until it is apparent the box is running cool.

15. Spring Switches—

Instructions for operation of spring switches are posted at or near the spring switch and must be complied with.

Unless otherwise specified, the normal position of spring switches is for main track.

When the target of a spring switch shows "red" to an approaching train or engine, a trailing point movement actuating the spring switch points must not be made.

Normal indication of siding signal is STOP. If siding signal does not clear on approach of train, movement must be governed by instructions posted at the switch.

16. Duluth-Superior Terminals—

Yard Limits.

All tracks between yard limit signs located at:

East D. M. & I. R. Junction

Mile Post 145+1432, West of West Duluth Jct.

Mile Post 9+3632, West of Central Ave. on Fourth Subdivision

Mile Post 61+1331, East of Allouez on Eleventh Subdivision will be operated as one yard.

- (a) First class trains will observe Rule 93 the same as is required of second and inferior class, extra trains and engines. Second and inferior class, extra trains and engines may run ahead of first class trains which are five minutes or more late without train order authority, avoiding delay to such trains to the greatest practicable extent.
- (b) Extra trains and engines may move in either direction on single track and with the current of traffic on double track without train order or double track clearance authority, except between 72nd Ave. West and New Duluth.
- (c) The D. T. Ry. main track is the northmost track between the Hanna Coal Dock crossing and connection with Grassy

Point main track. All switches leading from this track, when not in use, will be left lined for D. T. Ry.

- (d) All trains and engines using D. T. Ry. main track from connection of Missabe coal dock to east end of Zenith Furnace Company's lead, on Grassy Point line, will move in both directions at restricted speed, expecting to find the D. T. Ry. main track occupied.
- (e) D. T. Ry. connection, located at east end of Zenith Furnace Company's lead, Grassy Point line, will be considered a railroad crossing. Trains and engines using this connection will come to a full stop and make sure that track is clear before proceeding.
17. **At Duluth**—City ordinance prohibits blocking street crossings at 1st Ave. East and 5th Ave. West for more than 5 minutes; or of any other crossing for more than 10 minutes. Engine whistle will not be used between 3rd Ave. East and 5th Ave. West, or between 14th Ave. West and 85th Ave. West (except 85th Ave. West) except as an alarm or warning, or to signal towerman, to call for semaphore signals, as a safety precaution in backing cars or engines, or as a signal in testing air brakes. No engine or train will run within the city without having bell ringing while in motion, and approaching any street or avenue. Westbound freight trains made up in Bridge Yard departing via Third Subdivision will proceed onto Westward main track through Eighteenth Avenue Crossover. Switch tender at Garfield Ave. will line switches after departure of train.
18. **Minneapolis-St. Paul Terminal Area**—Within yard limits all transfer runs occupying main track, must display a red flag by day and in addition a red light by night on the rear end of the rear car, except when a caboose is used marker lamps displaying red lights to the rear must be used by day and night. The presence or absence of a red flag or a red light will not relieve the approaching train of responsibility for collision where limited to restricted speed, either by speed restrictions or Rule 93. In case of collision, the responsibility will ordinarily rest with the approaching train.
19. The City ordinances of St. Paul and Minneapolis prohibit the unnecessary use of the engine whistle.
20. **Bulletin Stations**—
St. Paul, Telegraph Office at Union Depot, CMStP&P Yard and Roundhouse.
St. Paul Third St. Switch Tender's Shanty.
Mississippi Street, Roundhouse and Yard Office.
SE Mpls. 25th Ave., Yard Office.
East Minneapolis, Yard Office.
Minneapolis, N. P. Freight Yard, Yard Office, Passenger Station.
Northtown, Yard Office, D Yard and 43rd Ave., Roundhouse.
Little Falls, Passenger Station.
Staples, Passenger Station, Yard Office, Roundhouse.
Lake Park, Passenger Station.
Dilworth, Yard Office, Roundhouse.
Fargo, Conductors' Room.
Brainerd, Passenger Station.
Wahpeton, Passenger Station.
East Grand Forks, Passenger Station.
Ashland—Soo Line Passenger Station.
Duluth—Union Depot, Fifth Avenue Yard Office, Rices Point North and South End Yard Offices and Roundhouse, West Duluth Yard Office.
Superior—Superior Yard Office. Soo Line Yard and Roundhouse. Great Northern Yard Office and Roundhouse.
Carlton—Passenger Station.
Ironton—Passenger Station.
North Bemidji—Yard Office and Roundhouse.
International Falls—Passenger Station and Roundhouse.
21. **Standard Time Clocks**—
St. Paul, Telegraph Office Union Depot, Mississippi Street Roundhouse and Yard Office.
Minneapolis, Dispatchers Office.
Northtown, Telegraph Office.
Little Falls, Telegraph Office.
Staples, Passenger Station, Yard Office, Roundhouse.
Dilworth, Telegraph Office.

Fargo, Conductors' Room.
East Grand Forks, Passenger Station.
Pembina, Telegraph Office.
Duluth—Union Depot, Rices Point Yard Office and Round House.
Carlton—Passenger Station.
Brainerd—Passenger Station.
North Bemidji—Yard Office.
International Falls—Passenger Station.

22. **Watch Inspectors**—
St. Paul—A. Lindahl, C. J. & H. W. Anderson, Northern Time Service.
Minneapolis—Buchkosky, Oscar P. Gustafson Co., Kavchar Jewelry.
Stillwater—Peder Gaalaas.
Anoka—Downing Jewelry Store.
St. Cloud—Weber Jewelry Co.
Little Falls—E. V. Wetzel.
Staples—C. E. La Bonte, Imgrund's Jewelry.
Morris—Ernest A. Kellenberger.
Grand Forks—Wiley Co.
Fargo—Crescent Jewelry Co.
Bemidji—Norden Jewelers
Lindman's
Brainerd—Bud's Repair Shop, 214 So. 7th Street.
Carlton—Schrafters Jewelry.
Cloquet—T. W. Alaapa.
Duluth—Erwin Moen, 1908 W. Superior.
Nold Jewelers, 414 N. Central.
Security Co., Inc., 307 W. Superior St.
Superior—Peters' Jewelry, 1220 Tower Ave.

23. Pulpwood loaded on open top cars, but not in accordance with Open Top Car Loading Rules, may be handled only in accordance with the following requirements:

SPEED OF TRAINS HANDLING SUCH LOADS WILL NOT EXCEED 20 MPH.

Such loads shall not be moved in a train until inspected by the conductor who will determine that they are not overloaded or improperly loaded and are safe to move without loss of lading. Trains handling such loaded cars must not meet or be passed by trains, except work trains, between stations on opposite track of double track; must be standing when met or passed by passenger trains on opposite track at stations and if practicable must be standing when met or passed by freight trains on opposite track, but if not practicable will move at restricted speed. When meeting or passing work trains between stations one train must be standing when practicable.

Conductors will notify dispatchers when such loaded cars are to be handled in their trains and secure train orders that trains, except work trains, on opposite track will be held at next station until their trains have arrived. Such loaded cars must be handled between stations only during daylight hours except in case of emergency, and when running between stations, a trainman must be stationed on the rear platform of the caboose to watch for pulpwood that may be lost from cars and obstruct the opposite track. In case of such obstruction prompt action must be taken to protect trains on the opposite track.

The foregoing requirements will not apply to pulpwood loaded in gondola cars, properly secured with side protection of wire mesh or boards in accordance with Open Top Car Loading Rules.

24. Limits of Centralized Traffic Control (CTC) are identified by roadway signs indicating the beginning and end of CTC territory.

ST. PAUL UNION DEPOT & MINNESOTA TRANSFER

The Consolidated Code of Operating Rules, Edition of 1959, in addition to the following instructions will govern 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 timetable, or train order, but subject to prescribed signals and rules or special instructions.

The limits of The Saint Paul Union Depot Company 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 round-house, 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 Saint Paul Union Depot Company is for information only. Employees 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 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.

(e) Under Rule 15, the use of torpedoes is prohibited.

SUPERIORITY OF TRAINS

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

MOVEMENT OF TRAINS

(g) Within the limits of The Saint 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 switchtenders. No train or engine may foul any track or puzzle switch without authority of hand signals from switchtenders in control of such movements, except that short interior switching movements may be made through crossovers connecting shed tracks when authorized by train director.

(h) 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.

(i) When indicated by the ringing of the bell, flashing of headlight, hand or light signal that a train or engine is ready to move, the switchtender in charge of the shed track on which the movement is standing will handle as follows: at west end of station the switchtender will control the movement by hand or light signal; at the east end of station the switchtender will inform the train director, who will route the movement by instructions over the public address system. Switchtenders will be governed by these instructions, relaying such instructions by hand or light signal to the next switchtender 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.

(j) 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 800 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.

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

(l) Vestibule doors are to remain closed when trains are pulling or backing into the Saint Paul Union Depot Company until the train comes to a complete stop.

(m) Track 21, St. Paul Union Depot Company, will be governed by red light located under train shed and above Track 21 so as to safeguard all employes working in and about cars being unloaded on this track.

When inbound cars are to be placed on this track or empty cars pulled off this track, Switch Foreman will get a hold of the St. Paul Union Depot Mail Foreman located in the vicinity of Track 21 to have red light extinguished and arrange to have all employes notified that the cars may be moved or coupled into and the movement will not be made until the red light is extinguished.

FIRST SUBDIVISION.

(MAIN LINE)

- Speed Restrictions—**

Zone—Between	Maximum Speeds Permitted
First St. North and Northtown	30 MPH.
Northtown and Staples	
Against the current of traffic on double track—	
Freight trains	49 MPH.
Passenger trains	59 MPH.
- Bridge and Engine Restrictions—**

At Northern States Power Co., Riverside Plant. Engines are not permitted on trestle bridges.
- Close Clearances—**

At Minneapolis Passenger Station—
Elevator shafts on tracks 3, 5, 7 and 11 at both ends of the depot shed are close clearance, enginemen must use care when passing.
Steps on lightweight passenger equipment will not be lowered to down position until train reaches train shed tracks account insufficient clearance in puzzle switches. Train conductor will advise brakemen, coach attendants, Pullman conductors and porters.
Dome cars will not be placed or operated on Track 1 account close clearance existing on east end of that track.
At Minneapolis, between Plymouth Ave. North and Broadway Street North, the side clearance along the Omaha delivery track adjoining the main track and between the Omaha delivery and receiving tracks is not sufficient to permit men riding on side of cars at all points.
Northtown, east end D yard, short side clearance between tracks 2 and 3 for distance of two hundred (200) feet from lead. Cars must not be left standing on track 2 within the above distance from lead and all employes should avoid standing between tracks 2 and 3 at that point when cars are moving on both tracks.
- Between First Street North and Northtown—**

Passenger extras, transfers and light engine movements may run ahead of delayed first class trains without train order authority; conductors and switch foremen and engineers of light engines will inform themselves through Yard Master, or Train Dispatcher Minneapolis, as to how late first class trains will be and avoid delaying them.
- At First Street North, after stop is made, all eastward trains and light engines must receive proceed signal from G. N. switch tender before proceeding.**
- At 14th Avenue Interlocking:**

The Soo Line Junction switch and the main to main crossover at 14th Avenue are equipped with dual control switch machines controlled by the Soo Line train dispatcher at Shoreham. A direct telephone to the Soo Line dispatcher is provided in the west entrance of the steel bungalow at the junction.
If communication with the Soo Line dispatcher fails, emergency release push buttons are provided in a steel cabinet mounted on the exterior west wall of the steel bungalow. Instructions for operation under emergency conditions when communication has failed are posted on the inside of the door of the steel instrument cabinet.
Diamond Iron Works Spur:
Switch for the Diamond Iron Works Spur is located 352 feet west of the westerly limits of the 14th Avenue North interlocking in the eastward track. This switch and the derail in the spur track south of the Soo Line tracks are equipped with electric switch locks under the control of the Soo Line dispatcher.
- At Mulberry Jct., a telephone is located on pole adjacent to wye track. Conductors, switch foremen and engineers of light engines before entering Line A must call train dispatcher, Minneapolis, on telephone, and ascertain if all first-class trains due have passed.**
- At Northtown, switchtender territory extends from Soo Line overhead bridge to three hundred ten (310) feet east of Thirty-third Avenue N. E. overhead bridge. Eastward trains moving from eastward track to Line A are not governed by Stop sign**

located east of Soo Line overhead bridge.

Time applies at switchtender's territory.

Automatic block Stop signal located at switch tenders territory may be operated by the operator at train order office to indicate Stop when a movement against the current of traffic on the westward track is to be made to that point. Trains stopped by this signal will be governed by instructions of the switch tender or may use telephone located in old yard office to obtain necessary information.

9. At Coon Creek, eastward home signal of interlocking is connected with the train order signal and will display Approach signal when train order signal is displayed as stop signal or 19 order signal.

The crossover is exclusively Great Northern track and must not be used by Northern Pacific trains unless permission is secured from the Chief Dispatcher or in an emergency.

10. At Elk River, Trains from Great Northern Princeton Line must not enter First Subdivision until authority is received from the Train Dispatcher.

Second and inferior class and extra trains from Great Northern Princeton Line may run as eastward extra trains with the current of traffic Elk River to Northtown without train order authority.

11. Spring Switches—

Northtown—west end of running track connecting with westward track, not equipped with facing point lock.

12. At Staples, Second Subdivision instructions govern.

13. Switches equipped with electric switch locks:

At Little Falls—

Creamery Spur switch.
East and West switch of house track.
East end of standpipe crossover.
West end of crossover near east leg of wye.
East end of crossover near west leg of wye.
East and West leg of wye.

At Darling—

East and West switch of storage track.

At Staples—

East leg of wye on North main track.
Switch to pulpwood spur on South main track.

14. Yard Limits—

First Street North, Minneapolis, to Yard Limit Sign west of Northtown.

15. Register Stations—

Minneapolis Passenger Station.
Northtown.
Coon Creek for G. N. Mesabi Division trains.
Elk River for G. N. Princeton Line trains.
Little Falls for trains originating or terminating.
Staples.

16. Register Exceptions—

At Northtown, first class trains, passenger extras and G.N. trains will register by Form 608.
At Coon Creek and Elk River, G. N. Mesabi Division and Princeton Line trains will register by Form 608.

17. Clearance Exceptions—

Passenger extras originating, must secure clearance at Minneapolis passenger station.
At First Street North, N. P. Freight Yard, and 14th Ave. North, clearance not required.
At Coon Creek, eastward G. N. Mesabi Division first class trains will not require clearance if train order signal indicates proceed.
At Elk River, Rule 83(B) does not apply.
At St. Cloud, eastward G. N. trains will obtain clearance at G. N. passenger station.

In CTC Territory, Rule 83(B) will not apply when so authorized by the train dispatcher and train and engine movements will be authorized by signal indication.

SECOND SUBDIVISION.

(MAIN LINE)

1. Speed Restrictions— Maximum Speeds Permitted

Zone—Between Staples and Dilworth.

Against the current of traffic on double track—

Freight trains49 MPH.
Passenger trains59 MPH.

At Wadena, trains and engines will not exceed a greater rate of speed than is reasonable and proper, having due regard to the conditions then existing.

At Detroit Lakes, all trains will move over street crossings at reasonable speed and with due care.

2. At Staples—

Westward trains arriving Staples on the time of westward first class trains are authorized to proceed on the westward main track within yard limits if the westward interlocking signal located at end of CTC limits indicates proceed.

Trains or yard engines desiring to occupy the westward main track on the time of delayed westward first class trains must receive verbal authority from yardmaster. Yardmaster must receive such authority from train dispatcher.

3. At Wadena, the track south of the eastward track, between the connection to the eastward track and the first crossover to the eastward track, is designated as eastward siding.

4. At Detroit Lakes, the following whistle signals will be used to call for route through the interlocking Soo Line crossing;

Through main track movements1 long.
Reverse movements on main track.....2 short, 1 long.
Main track to diverging route1 short, 1 long.
Diverging route to main track.....1 long, 1 short.

To avoid continuous operation of highway crossing signals, when stopping for station work, westward freight trains shall stop to leave the train east of the east switch of the crossover east of Washington Ave., and eastward freight trains shall stop to leave train west of signal 2104.

5. At Richards Spur, close clearance at new loading chute on both spur tracks.

6. At Manitoba Jct.—

Trains from Sixth Subdivision must not enter Second Subdivision until authority is received from the train dispatcher.

Second and inferior class and extra trains from Sixth Subdivision may run as eastward extra trains with the current of traffic Manitoba Jct. to Lake Park without train order authority.

7. Switches equipped with electric locks:

At Manitoba Jct.
East leg of wye.
West leg of wye.
East and west end of crossover.

8. Yard Limits—

Tracks between yard limit signs east of LaBelle and west of Lake Park operated as one yard.

9. At Dilworth, Fargo Division instructions govern.

10. Register Stations—

Staples, Dilworth.
Lake Park for trains originating or terminating.

11. Register Exceptions—

At Dilworth, through passenger trains will register by Form 608.

12. Clearance Exceptions—

At Manitoba Jct.—
Rule 83(B) does not apply.

THIRD SUBDIVISION.

(MAIN LINE)

1. **Speed Restrictions—**

Zone—Between	Maximum Speeds	Permitted
	Freight	Passenger
Garfield Ave. and West Duluth Jct.	30 MPH.	30 MPH.
Over 21st Ave. West Crossing.....	15 MPH.	15 MPH.
West Duluth Jct. and MP 143 (between Short Line Park and West Duluth Jct.)	50 MPH.	60 MPH.
MP 143 and MP 135 (Brownell).....	25 MPH.	45 MPH.
MP 135 and MP 129 (West end Carlton yard)	50 MPH.	60 MPH.
Curve 129 between 1585 feet and 3227 feet east of MP 129	35 MPH.	35 MPH.
MP 129 and MP 11 (White Bear Lake)	50 MPH.	75 MPH.
White Bear Lake and St. Paul	50 MPH.	60 MPH.
	All Trains	
Cloquet and MP 4 (west of Scanlon)	15 MPH.	
MP 4 (west of Scanlon) and Carlton.....	30 MPH.	
At Carlton, over double slip switch within interlocking; through movements via Third Subdivision.....	30 MPH.	
Other movements	15 MPH.	
At Rush City thru city limits passenger trains.....	50 MPH.	
At White Bear Lake—All trains approach and move over 4th St., at restricted speed.		
At St. Paul, between East 7th Street and 3rd Street....	15 MPH.	
At Gloster, westward trains over end of siding hard-throw switch	15 MPH.	
2. **Bridge and Engine Restrictions—**
NP cranes 45 to 48 incl. or other wrecking cranes 250 tons or heavier, over bridge 6 at Cloquet.....15 MPH.
3. **At Garfield Ave.—**Normal position of junction switches will be for Third Subdivision.
Trains will stop not less than two hundred (200) feet from Junction switches and not proceed until route is clear.
4. **At Nineteenth Ave. West—**Trains using the Dick tracks must not block crossing.
5. **At Twenty-first Ave. West—**Telephone at crossover—Eastward trains call yard (3 rings) for route when necessary.
6. **At West D. M. & I. R. Jct. Interlocking—**Trains will call for route as follows:
 - o o o Martins track to D. M. & I. R. yard.
 - o o o D. M. & I. R. yard to Martins track.
 - o o o— Martins track to westward main.
 - o o o o Martins track to D. T. main.
 - o o o o D. T. main to Martins track
 - o Westward main to D. M. & I. R. yard.
 - o D. M. & I. R. yard to eastward main.
 - o o o Eastward Main to Martin's track.
 - — Through main track movements.
7. **At West Duluth Jct.—**
Yard engines will use west leg of wye and Fond du Lac line but will not leave cars on these tracks.
Switch at end of double track is dual control. Normal position is for the westward track.

To secure a restricting proceed interlocking indication, as per Rule 601-F, Figure (3), at the Westward Dwarf Signal, covering reverse movements on eastward track, engines or trains moving eastward through the dual control switch must, before reversing direction, clear the track circuit, the east end of which is located just east of the switch leading to the new Western Brass Company near 61st Ave. West.
8. **At Carlton—**Fourth Subdivision Instructions govern.
9. **At Carlton—**Advance-warning sign of 45 MPH. governing eastward movements, located at the Great Northern Tower, is only 1200 feet in advance of the Reduce Speed sign account junction with the Fourth Subdivision.

10. **At Cloquet—**D.&N.E. engines may use main track between D.&N.E. connection at Broadway St. 200 feet east of passenger station and west end of yard.

Trains and yard engines must stop at the Northwest Paper Mill crossing (East Cloquet), and protect crossing by flagman.

Movements over Arch Street crossing, West of passenger station, must be protected by flagman.

Derails located near East end of Great Northern tracks No. 1 and No. 2, are not provided with derail signs.

11. **At Hinckley—**

Cars must not be left on No. 1 yard track.

Trains must not block highway crossing one-half mile west of passenger station, and South First Street Crossing more than five (5) minutes.

Foot crossing east of passenger station must not be blocked with cars.

At Interlocking—trains will call for route as follows:

For Through Main Track Movement:	—
For Movement from Main Track to Sidings:	—o
For Movement from Sidings to Main Track:	o—
For Movement between yard and eastward siding:	oo

12. **At White Bear Lake—**

Eastward trains making stop at the passenger station must stop with engines or cars west of "Crossing Signal Restart" sign located on south side of track 100 feet west of Fourth Street crossing.

Cars must not be left on siding within 300 feet of Fourth Street crossing.

Normal position of east switch of crossover at Ramaley Avenue will be lined for through movement on siding.

Eastward extra trains picking up in New Yard will cut off far enough west of Ramaley Avenue so as not to foul the ringing section of the automatic crossing signals on that avenue.

When trains will be delayed more than ten (10) minutes, crossings must be opened promptly.

13. **At Gloster—**

Siding is east of Depot.

Run around track west of Depot has capacity for 12 cars.

Eastward trains waiting for a meet will stay west of signal 44 at Gloster and west of Larpenteur Avenue.

A "STOP" sign for westward trains via Soo Line is placed on the Northern Pacific-Soo Line connection 500 feet east of Soo Line main track switch. If train orders or clearance received when stop is made authorizes movement onto Soo Line main track, train may proceed.

Westward trains enroute to Mississippi Street required to wait at the stop board in excess of 2 minutes for clearance prior to entering Soo Line main track and whose trains are clear of the main track, will extinguish head light.

To avoid unnecessary operation of crossing signals and gates at County Road B, section of track between crossing signal start signs should be occupied only when necessary.

14. **At M&D Jct.—**Normal position of east switch of wye will be lined for through movement on siding.

15. **Between 3rd Street and Claymont—**

Westward freight trains will be governed by the following instructions on the grade between Claymont and 3rd Street, St. Paul:

Engineer controlling train must adjust feed valve on engine to obtain 90 pounds brake pipe pressure following the stop for grade crossing at Gloster. Train to be stopped at Claymont for turning up retaining valves and making a brake pipe test. Engineer to sound one blast of whistle to advise trainmen that brakes are fully applied for test.

Retaining valve handles must be turned up to the low pressure position (horizontal) as follows:

Trains of 1000 tons or less, no retainers.

Trains of over 1000 tons and up to 4000 tons, use 15 retainers and as many more as engineer requests.

Trains of over 4000 tons, use 15 retainers and 1 additional retainer for each 100 tons in excess of 4000 tons and as many more as engineer requests.

Retainers to be turned up on head portion of train beginning at the engine and not turned down until stop has been made at 3rd Street.

16. **East of 4th St. Bridge**, all westward trains using crossover to eastward main track will stop and proceed upon signal from 3rd Street Switchtender. Trains moving against the current of traffic on eastward main track will approach crossover expecting to find it in use.

17. **At 3rd Street, St. Paul**, crossing with C. B. & Q. R. R. is single track.

The N. P. Ry. and C. B. & Q. R. R. joint tracks between 3rd Street and Division Street are operated under yard rules. All train and engine movements, including first class trains over these tracks are controlled by switchtenders at 3rd Street and operator at Division Street and no train or engine may move over these tracks except as controlled by switchtenders at 3rd Street and Operator at Division Street. Eastward movements will only be made on proceed signal from switchtenders at 3rd Street and westward movements will be governed by interlocking signals operated from Division Street.

Switch indication lights have been installed to indicate position of switch points for the crossover between the East Side Line and No. 4 Depot lead. These switch indicator lights are located at each end of the crossover and display indications in both directions.

When crossover is lined for parallel moves, an indication of red over green is displayed.

When crossover is lined for crossover moves, an indication of red over yellow is displayed.

The red indication is displayed when switch points are open or not properly locked. Movements over these switches must then be made only after switchtender has inspected the switches.

All train and engine movements, including first class trains over these tracks, are controlled by switchtenders at Third Street. Movements will only be made on proceed signal from switchtenders.

18. **Signal Overlap**—

At Sturgeon Lake—Westward trains holding main track to meet an eastward train will stop before reaching signal overlap sign west of passenger station, to avoid giving approaching train three stop signals.

At Forest Lake—Eastward trains holding main track to meet a westward train will stop before reaching signal overlap sign east of passenger station, to avoid giving approaching train three stop signals.

19. **Spring Switches**—West Duluth Jct., at junction of Third and Tenth Subdivisions, normal position for Tenth Subdivision main track. Not equipped with facing point lock.

Pine City, west switch of siding, with facing point lock equipped for switch key signal operation.

20. **Retaining Valves**—On freight trains retaining valves must be used on grades Brownell to MP 143. Handles to be turned up to low pressure (horizontal) position, beginning at head end of train, as follows:

Trains of 8000 tons or over—20 retainers.

Trains of 6000 tons or over—16 retainers.

Trains of 4000 tons or over—10 retainers.

Trains of less than 4000 tons—No retainers unless requested by engineman.

All retaining valves will be turned down between MP 143 and West Duluth Jct.

21. **Yard Limits**—

3rd Street Yard St. Paul to yard limit sign east of Gloster.

22. **Close Clearances**—

St. Paul Yard, overhead bridge at Omaha crossing, and tunnels under 7th Street, located 700 feet east of Third Street, will not clear a man on side of car. Minnehaha and Reaney Street bridges, opposite Hamm's Brewery, will not clear a man on top of car.

23. **Register Stations**—

Carlton.

Cloquet.

St. Paul—Telegraph Office at Union Depot.

Gloster.

White Bear Lake—For trains to or from the Stillwater Line.

Miss. Street Yard Office—For trains originating or terminating. Milwaukee Pig's Eye Yard.

24. **Register Exceptions**—

At Carlton trains register by Form 608.

A check of register on Form 602 may be issued by operator when authorized by train dispatcher, either instead of or in addition to train order check, at Carlton.

At Gloster, trains will register by Form 608. Operators will deliver orders and clearances to trains passing through the wye at English Street Highway Crossing.

25. **Clearance Exceptions**—

Trains originating at Garfield Ave., West DM&R Jct., DW&P Jct., and West Duluth Jct. will not require clearance.

At Carlton: all trains secure clearance except trains enroute Cloquet will not require a clearance.

At Cloquet trains will not require clearance.

At 3rd Street, C.M.St.P.&P. trains starting will be governed by clearance furnished at C.M.St.P.&P. Yard. N.P. trains will be governed by clearance furnished at Union Depot.

At Miss. Street Yard, N.P. trains via Soo Line to Gloster will secure clearance at Miss. Street Tower.

FOURTH SUBDIVISION.

(MAIN LINE)

1. Speed Restrictions— Zone—Between	Maximum Speeds Permitted	
	Freight	Passenger
East D. M. & I. R. Jct., and Garfield Ave.	30 MPH.	30 MPH.
Garfield Ave. and Central Ave.....	40 MPH.	55 MPH.
At Superior—Over switches at Belknap St. and C&NW Conn. all trains		15 MPH.
Central Ave. and Anton.....	50 MPH.	65 MPH.
Anton and State Line Both Tracks,....	50 MPH.	60 MPH.
Against the current of traffic	49 MPH.	59 MPH.
State Line and MP 20	30 MPH.	30 MPH.
MP 20 and MP 28 (Carlton)	50 MPH.	65 MPH.
Deerwood and Ironton	40 MPH.	40 MPH.
MP 28 and MP 143 (Staples)	45 MPH.	55 MPH.
At Brainerd, over public crossings all trains		10 MPH.

First class trains—

Between east switch of north siding (east of car shop) and Ninth Subdivision connection at 8th St.20 MPH.

Between Ninth Subdivision Junction at 8th Street and Ninth Subdivision Junction at west end of yard there is no superiority of trains. All trains and engines must move within these limits at Restricted Speed.

At Aitkin, through village30 MPH.

At Carlton, over double-slip switch within interlocking; through movements via Fourth Subdivision30 MPH.

Other movements15 MPH.

2. Bridge and Engine Restrictions—

Over Bridge 2, St. Louis Bay20 MPH.
 Over Bridge 9 just west of Central Ave.....20 MPH.
 Avoid using automatic brakes on bridge, except in emergency.
 Engines not permitted on Middleton Coal Dock Trestle, and over Under-Track unloading pocket on Coke Track at Hanna Mine.

Over Bridge 119 at Brainerd:

Wrecking cranes 45-48 incl.15 MPH.
 Cars under 35 feet long and weighing between 177,000 and 220,000 pounds when coupled in groups of two or more20 MPH.

3. At Garfield Ave.—Normal position of junction switches will be for Third Subdivision.

Trains will stop not less than two hundred (200) feet from junction switches and not proceed until route is clear.

Unless otherwise instructed, Westward freight trains made up in Bridge Yard, departing via Fourth Subdivision, will use Fourth Subdivision Eastward main track from connection just East of Garfield Ave. to the Minnesota Drawbridge.

Before this movement may be started, Switchtender at Garfield Ave. will contact Drawbridge Operator; if Drawbridge Operator OK's the movement, train may proceed on Eastward main track, and when Drawbridge Operator gives the approval it will be understood that Drawbridge Operator will not permit any Eastward train on Eastward track until freight train has passed Minnesota Drawbridge.

4. At Rices Point—Spring switch not equipped with either spring switch target or facing point lock is located on roundhouse lead about 1200 feet south of sand tower. Target indication—

Yellow—Straight track.
 Green—Roundhouse lead.

Normal position of switches designated below is as follows:

South End Rices Point Yard,
 switch from B to C yard lead
 (top switch)when lined for B yard lead;
 No. 26 and 31 crossovers on Hump
 (A Yard)when lined for Hump (A Yard) lead;
 No. 26 and 31 crossovers on Load
 (B Yard) leadwhen lined for Load (B Yard) lead.

North End Rices Point Yard,
 switch off outside lead for
 lead to C Yardwhen lined for Load (B Yard) lead;
 Crossover switch on inside lead.....when lined for inside lead;
 Crossover switch off outside lead....when lined for outside lead.

Roundhouse, hand throw switches No. 2 and No. 4 from the outgoing roundhouse trackswhen lined for lead.
 Crossover switches from yard tracks to main track must be set for yard tracks when not in use, except where otherwise provided.

5. At Rices Point Interlocking—Westward dwarf signal located between Hump (A Yard) Lead and Load (B Yard) Lead at West end of Yard governs movements to Westward track and crossover to Eastward track and movements to West end of Hump (A Yard) Lead. Normal position of east switch of crossover from Hump (A Yard) Lead to westward track is for westward track, and must be kept lined and locked in this position when not in use.

Push-button on mast of eastward home signal. If home signal indicates Stop, push-button should be operated, and movement governed by signal indication.

Trains will call for route as follows:

For through main track movements	—
Eastward track to westward track	o & oo
Eastward track to yard	o & ooo
Yard to westward track	ooo & oo
Yard to eastward track	ooo & o
Westward track to eastward track	oo & o
Westward track to yard	oo & ooo

6. Between Bridge Switch and Elevator Station, St. Louis River Bridge—

Interlocking home signal on Eastward track West of Minnesota Draw governs movements to Northern Pacific track and to C&NW track.

Interlocking home signal on Westward track East of Elevator Station governs movements to Straight Main track and to Great Northern freight track.

Westward trains entering onto Minnesota Draw and Eastward trains entering onto Wisconsin Draw will be governed by signal at the approach and, if proceed signal is received, will not be required to stop. During period of open navigation on St. Louis River, westward trains will stop before entering onto Wisconsin Draw and eastward trains will stop before entering onto Minnesota Draw.

During closed season of navigation it will not be necessary for trains or engines to stop at either side of drawbridge when signals indicate "Proceed."

7. At Superior—City ordinance prohibits blocking any street crossing for more than 10 minutes, except in case of unavoidable breakdown.

8. At Central Ave.—No. 1 track will be used as siding. When setting out or picking up, trains must not block 58th Street, and Tower Avenue crossings.

9. At Anton and State Line—Time of all trains applies at end of double track.

10. At Carlton—

Interlocking—Trains will call for route as follows:

Fourth to Fourth "East & West":	oo & oo.
Fourth to Third "East & West":	oo & ooo.
Fourth to Loop Track "West":	oo & oooo.
Fourth to Cloquet Line "East":	oo & oooo.
Third to Third "East and West":	ooo & ooo.
Third to Fourth "East and West":	ooo & oo.
Third to Loop Track "West":	ooo & oooo.
Third to Cloquet Line "East":	ooo & oooo.
Cloquet Line to Fourth "West":	oooo & oo.
Cloquet Line to Third "West":	oooo & ooo.
Cloquet Line to Loop Track:	oooo & oooo.
Loop Track to Fourth "East":	oooo & oo.
Loop Track to Third "East":	oooo & ooo.
Loop Track to Cloquet Line "West":	oooo & oooo.
Lower yard lead to Fourth Subdiv. "East and West":	—o.
No. 9 Lead through Interlocking "East and West":	—.

Push button system controlling operation of lower arm of Fourth Subdivision Home Signal, Carlton Interlocking, has been installed to govern follow-up westward movements to either Fourth or Third Subdivisions. All follow-up movements will be governed by lower arm of Fourth Subdivision Home Signal as well as return movements to train after setting out in Carlton yard from Fourth Subdivision Main Track.

11. At McGregor—

At Interlocking—Trains will call for route as follows:

For Northern Pacific and Soo Line main tracks:	—
From Northern Pacific and Soo Line to West wye:	—o
Between Interchange Track and West wye:	oooo
To siding:	oo—

12. At Aitkin—Cemetery road crossing one mile west of this point must not be blocked in excess of ten (10) minutes, except in case of emergency, when it must be opened as soon as possible.

13. At Deerwood—Eastward trains use junction switch one and three-fourths miles east of passenger station; westward trains use crossover west of passenger station, unless otherwise authorized by train order.

Train order signal does not govern trains enroute or from Ironton.

14. At Ironton—Track must not be used beyond point 2400 feet west of Trommald Jct.

15. **At Brainerd**—Ninth Subdivision trains must stop before fouling Fourth Subdivision main track.

Trains No. 11 and 12 use inside track at passenger station. Connection with Ninth Subdivision at west end of yard is governed by automatic block signals.

City ordinance provides that crossings must not be blocked more than five (5) minutes by standing trains or cars. Shop crossings must not be blocked when employes are going to work at 7:00 AM and 1:00 PM. Westward trains stop clear of shop crossing 300 feet east of Thirteenth Street, and eastward trains either move a sufficient distance to clear City crossings or stop clear of First Street crossing, to make setouts or pickups. Trains must not block Oak Street Crossing near milk plant and must promptly clear crossings when coupling up in South Yard for movement.

16. **At Staples**, Second Subdivision instructions govern.
17. **Sidings**—
Aitkin, north siding is westward; south siding is eastward.
Brainerd, No. 1 Track in New Yard is Siding.

18. **Signal Overlap**—
Kimberly & Woodbury—Trains holding main track to meet an opposing train taking siding will stop before reaching signal overlap sign, about middle of siding, to avoid giving approaching train two stop signals.

19. **Spring Switches**—Superior, at west end of Brewery Lead, normal position for main track. Not equipped with facing point lock.
Anton, at end of double track, normal position for westward track, equipped with facing point lock.
Carlton, east switch of north siding equipped with facing point lock. Not equipped for switch key operation.
Woodbury, east switch of siding with facing point lock, equipped for switch key operation.
Kimberly, west switch of siding with facing point lock, equipped for switch key operation.
Deerwood, at junction to Ironton, one and three-fourths miles east of passenger station, normal position for through movement to Loerch, equipped with facing point lock.
Indications displayed by two-position color light signal controlling spring switch indicate only if points of the spring switch are in proper adjustment.

20. **Retaining Valves**—Sawyer to Pokegama.
Eastward freight trains having tonnage less than 70 tons per brake are not required to use retaining valves.

Eastward freight trains having tonnage exceeding 70 tons per brake, before passing Sawyer, shall have retaining valves positioned in slow blow-down position (45° above horizontal) on one-fifth of the total number of cars in train, commencing at the head end, when engine does not have dynamic brake in effective operation on all units or engine is not equipped with brake pipe maintaining feature in operating condition.

Eastward freight trains having tonnage exceeding 70 tons per brake are not required to use retaining valves when engine has dynamic brake in effective operation on all units or engine is equipped with brake pipe maintaining feature in operating condition.

All retaining valves will be turned down where first stop is made, at either Pokegama, Central Avenue or Hill Avenue.

On eastward freight trains from Sawyer to Superior (Central Ave. or Hill Yard), the feed valve shall be adjusted to 90 pounds brake pipe pressure prior to departure Sawyer, except on trains which have less than 50 tons per brake.

21. **Derail Switches**—At approach to Minnesota Draw from Duluth. At Superior—Winter St. just opposite freight house.

22. **Register Stations**—
Duluth Union Depot for trains arriving at or departing from Fifth Ave. Yard or Union Depot, Rice's Point Yard Office for other trains.
Central Ave.

Carlton
Deerwood—For trains to or from Ironton.
Ironton.
Brainerd—For trains originating or terminating at Brainerd. Staples.

23. **Register Exceptions**—At Central Ave. and Carlton trains register by Form 608.

At Central Avenue when no telegrapher on duty all regular trains, except Great Northern trains unless otherwise instructed, will register in train register located in switchman's room east of depot office.

A check of register on Form 602 may be issued by operator when authorized by train dispatcher, either instead of, or in addition to, train order check, at Central Ave. and Carlton.

At Deerwood, when operator on duty, trains will register by Form 608.

At Duluth first class trains arriving may register by Form 608, using tube at foot of east stairway for delivery to operator in "DU" office.

24. **Clearance Exceptions**—At Carlton, all trains secure clearance. Trains originating at East D.M.I.R. Jct. Garfield Ave., Rices Point (Yard), Bridge Switch, Elevator Station, C&NW Conn. and Belknap St. will not require clearance.
At Central Ave. eastward trains will not require clearance if train order signal is in the proceed position. Westward Great Northern trains enroute to Great Northern tracks, at the Interlocking, not governed by train order signal.

FIFTH SUBDIVISION. (FERGUS FALLS BRANCH)

1. **Speed Restrictions**—
Zone—Between
Maximum Speeds Permitted
- | | |
|--|---|
| Wadena and Mile Post 21 | 40 MPH. |
| Mile Post 21 and Wahpeton | 35 MPH. |
| Wahpeton and Milnor | 45 MPH. |
| Over State Highway No. 18 crossing, Wyndmere | 25 MPH. |
| Milnor and Oakes | 30 MPH. |
| Fairview Jct. and Great Bend | 15 MPH. |
| Handling coal, Wadena Jct. to Fergus Falls | 25 MPH. |
| Over public crossings within corporate limits— | |
| At Fergus Falls | 12 MPH. |
| At Wahpeton | 25 MPH. |
| At Oakes | 10 MPH. |
| | Diesel Engine Units and cars
in excess of 248,000 lbs. |
| Mile Post 55 and Wahpeton | 20 MPH. |
| Milnor and Oakes | 20 MPH. |
| Trains handling wrecking cranes 41 to 48 inc..... | 20 MPH. |
2. **Bridge and Engine Restrictions**—
Wrecking cranes 45 to 48 incl. over bridges15 MPH.
3. **At Wadena**, track south of the eastward track, between the connection to eastward track and the first crossover to the eastward track, is designated as a siding.
Before occupying second subdivision main track, all trains will call the operator by telephone for information as to other train movements and avoid delay to important trains, Second subdivision instructions govern.
4. **At Fergus Falls**, trains must stop not less than twenty-five (25) feet from G. N. crossing over Rosengren spur, and then send flagman ahead to protect the movement.
5. **Yard Limits**—
Tracks between yard limit signs east of Breckenridge and west of Wahpeton operated as one yard.

6. Register Stations—

Wadena, Oakes.

Wahpeton, for trains originating or terminating.

7. Between Fairview Jct. and Great Bend, trains will not require train order or clearance, and will be governed by Rule 93.

8. Unless otherwise provided, protection against following trains as required by Consolidated Code Rule 99, is not required on the Fifth Subdivision.

SIXTH SUBDIVISION.

(RED RIVER BRANCH)

1. Speed Restrictions— Maximum Speeds Permitted

Zone—Between	Freight	Passenger
Manitoba Jct. and Pembina.....	45 MPH.	55 MPH.
At East Grand Forks—over 4th Avenue		10 MPH.
Passenger trains over 9th Avenue crossing located at yard office		10 MPH.
At Grand Forks, over public crossings between passenger station and Highway 81 all trains.....		15 MPH.

2. Bridge and Engine Restrictions—

Wrecking cranes 45 to 48 incl. over bridges15 MPH.
except over Bridge 68.110 MPH.

Over Bridge 44 and 68.1

2500 series diesels and pile drivers 25 to 28 incl.30 MPH.

Cars under 35 ft. long weighing between 177,000 lbs. and 220,000 lbs. and cars over 35 ft. long weighing between 220,000 lbs. and 263,000 lbs.20 MPH.

3. Between Carthage Junction and Crookston, extra trains will run via Sixth Subdivision unless otherwise instructed by train order.

4. Yard Limits—

Tracks between yard limit signs east of East Grand Forks and west of Grand Forks operated as one yard.

Tracks between yard limit signs east of Crookston and west of Anglim operated as one yard.

5. At Grafton: Within yard limits, No. 13 and No. 14 have no superiority as conferred by timetable. Second class, inferior trains and engines will avoid delay to these trains to greatest extent practicable.

Time of first class trains applies at passenger station.

6. Between Pembina and Emerson Jct.—

Movements will be authorized by Clearance Canadian National Railway Form 728 or NP Form A issued by Operators at Emerson Jct. or Pembina. Operators at Emerson Jct. and Pembina will issue clearances only after a proper understanding with each other, and will maintain a complete record on prescribed form of all movements.

Trains or engines must receive Clearance C N Form 728 or NP Clearance Form A before entering the block. A train or engine must not be admitted into a block occupied by an opposing movement, and a positive block must be maintained on all movements.

7. Register Stations—

East Grand Forks, Carthage Jct. and Crookston (at G.N. Crossing), Meckinock and Pembina.

8. Register Exceptions—

At Carthage Jct., Crookston (at G. N. Crossing) and Meckinock trains will register only when directed to do so by train order.

9. Clearance Exceptions—At Crookston, Rule 83(B) does not apply.

At Manitoba Jct. Rule 83(B) does not apply.

At East Grand Forks all trains must secure clearance.

SEVENTH SUBDIVISION.

(RED LAKE FALLS AND SHERACK BRANCHES)

1. Speed Restrictions— Maximum Speeds Permitted

Zone—Between	Maximum Speeds Permitted
Tilden Jct. and Red Lake Falls Jct.	40 MPH.
Red Lake Falls Jct. to Carthage Jct.	20 MPH.
Key West and Sherack	15 MPH.

2. Bridge and Engine Restrictions—

Wrecking cranes 45 to 48 incl. over bridges15 MPH.

3. All N. P. extra trains running between Carthage Jct. and Tilden Jct. will obtain clearance at Red Lake Falls during assigned hours of telegraph service.

4. Register Stations—

G. N. Jct., Carthage Jct.

5. Clearance Exceptions—

At Carthage Jct., and Tilden Jct. clearance not required. At G. N. Jct., trains originating will be governed by clearance furnished at G. N. Station Red Lake Falls.

6. At Carthage Jct. Sixth Subdivision instructions govern.

EIGHTH SUBDIVISION.

(LITTLE FALLS AND DAKOTA BRANCH)

1. Speed Restrictions— Maximum Speeds Permitted

Zone—Between	Maximum Speeds Permitted
Little Falls and Flensburg	45 MPH.
Flensburg and Morris	30 MPH.
Flensburg and Morris Diesel Engine Units and cars in excess of 248,000 lbs.	20 MPH.
Trains handling wrecking cranes 41 to 48 inc.....	20 MPH.
At Grey Eagle, over grade crossings east of station.....	10 MPH.
At Sauk Centre within corporate limits	15 MPH.

2. Bridge and Engine Restrictions—

Wrecking cranes 45 to 48 incl. over bridges15 MPH.

3. At Little Falls, First Subdivision instructions govern.

4. At Glenwood, when trains do not promptly obtain the route through the interlocking, train or engine crews should observe as to whether or not light on the exterior of the sheet metal housing in the northeast corner of the crossing is illuminated, and if this light is illuminated, it indicates that the Soo Line Operator who handles the crossing wishes to talk with a member of the Northern Pacific crew either account of some emergency or because he is unable to clear the route for the train through the interlocking.

5. Register Stations—

Little Falls, Morris.

6. Unless otherwise provided, protection against following trains as required by Consolidated Rule 99, is not required on the Eighth Subdivision.

NINTH SUBDIVISION

(LITTLE FALLS TO INTERNATIONAL FALLS)

1. Speed Restrictions— Maximum Speeds Permitted

Zone—Between	Freight	Passenger
Little Falls and Brainerd	45 MPH.	55 MPH.
Brainerd and North Bemidji	40 MPH.	50 MPH.
North Bemidji and International Falls	35 MPH.	45 MPH.
At Brainerd, over public crossings all trains		10 MPH.

First class trains—

Between east switch of north siding (east of car shop) and Fourth Subdivision Junction at 8th St. 20 MPH.

Between Fourth Subdivision Junction at 8th Street and Fourth Subdivision Junction at west end of yard there is no superiority of trains. All trains and engines must move within these limits at Restricted Speed
All Trains

At Bemidji—Over public crossings at,
Carpenter Ave. 30 MPH.
Mill Park 20 MPH.
Skelly Oil 20 MPH.
Other public crossings 15 MPH.
Over public crossing 200 ft. west of MP 97, between
North Bemidji and Lavinia 30 MPH.
Funkley and Kelliher 15 MPH.

2. Bridge and Engine Restrictions—

Bridge 106, Little Falls—

Wrecking Cranes 41 to 44 incl. must be preceded and followed by a car weighing under 100,000 lbs.

Pile Drivers 26, 27 and 28 must have boom resting on idler car.

Cars under 35 feet long and weighing between 177,000 lbs. and 220,000 lbs. and cars over 35 feet long weighing between 220,000 lbs. and 263,000 lbs. except 89 foot flat cars must be preceded and followed by a car weighing under 177,000 lbs.

89 foot flat cars may be handled as given in All Subdivisions, Paragraph 2.

All trains 8 MPH.

NP cranes 45 to 48 incl. or other wrecking cranes
250 tons or heavier Not permitted

Bridge 59.1 over Leech Lake, all trains 15 MPH.

Diesel Electric Engines—2500, 2800 and 3600 series
over Bridge 94 at Bemidji 20 MPH.

Diesel Electric Engines—2500, 2800 and 3600 series
on Bridges 166 and 185 Not permitted

Bridge 166 Big Fork River and Bridge 185, Little Fork River:
All trains 10 MPH.

Over Bridge 94 at Bemidji, Pile Drivers 25 to 28 inclusive, cars under 35 feet long and weighing between 177,000 and 220,000 pounds when coupled in groups of two or more and cars over 35 feet long weighing between 220,000 and 263,000 pounds when coupled in groups of two or more 10 MPH.

Heavy car restrictions Bridges 166 and 185:

Cars under 35 feet long and weighing between 177,000 pounds and 220,000 pounds must be separated from each other and from engine by two cars over 40 feet long and weighing under 177,000 pounds. Cars over 35 feet long and weighing between 220,000 and 263,000 pounds must be preceded and followed by a car over 40 feet long and weighing under 177,000 pounds.

3. At Little Falls, First Subdivision Instructions Govern.

4. At Camp Ripley Junction, gate over track leading to Camp Ripley, about four hundred (400) feet west of the river bridge is equipped with switch lock, and must be kept closed and locked when not in use.

Train or engine movements across the joint railway-highway bridge must be made at restricted speed, and movement protected as prescribed by Rule 103.

5. At Camp Ripley, unloading platform along south track does not afford standard clearance from a point two hundred seventy (270) feet west of gasoline unloading pipe to end of platform.

6. At Brainerd, Ninth Subdivision first class trains will head in on inside track at passenger station.

Fourth Subdivision instructions govern.

Connection with Fourth Subdivision at west end of yard is governed by automatic block signals.

The signal governing movements from the Ninth to the Fourth Subdivision displays interlocking indication Rule 601A1 and will not display a proceed indication until the junction switch is properly lined and there are no conflicting train or engine movements in the Automatic Block Signal territory.

7. At Bemidji—The wye switch on the Bemidji Branch will be in normal position when lined for the east leg of the wye.

Within yard limit at Bemidji Tower, Bemidji, and North Bemidji, trains 11 and 12 will observe Operating Rule 93 the same as required of second class and inferior trains.

Tracks between yard limit sign east of Bemidji Tower, Bemidji, and yard limit sign west of North Bemidji, operated as one yard.

8. Bemidji Automatic Interlocking.

East leg of wye track switch equipped with an electric lock. Trains making westward movement via east leg of wye must stop within 100 feet east of westward home signal before lining switch.

9. At Big Falls—Track serving the National Pole & Treating Company must not be used beyond 1,510 feet from Highway No. 71 crossing. National Pole & Treating Company tracks may be used for switching cars to or from temporary pulpwood platform.

10. At International Falls—On K and S tracks all movements across Sixth Street must be protected.

Within Yard Limits Trains 11 and 12 will observe Operating Rule 93 the same as is required of second class and inferior trains.

11. Register Stations—

Little Falls, Brainerd, North Bemidji, International Falls, Funkley, Kelliher.

12. Register exceptions:

At Funkley: Trains will register only when so directed by train order.

13. Clearance exception: At North Bemidji, all trains must secure clearance.

At Brainerd, all trains must secure clearance.

TENTH SUBDIVISION.

(GRASSY POINT LINE)

1. Speed Restrictions—	Maximum Speeds Permitted	
	Freight	Passenger
West Duluth Jct. and Zenith Furnace	30 MPH.	30 MPH.
Zenith Furnace and L. S. T. & T. Ry. Jct.	40 MPH.	40 MPH.
At West Duluth Jct., around east leg of wye and passing Zenith Furnace Plant	Restricted Speed	
West Duluth Jct., and New Duluth	15 MPH.	15 MPH.

2. Bridge and Engine Restrictions—

NP cranes 45 to 48 incl. or other wrecking cranes
250 tons or heavier, over bridges.....15 MPH.

At Riverside—

Door over tracks entering shop building will not clear man on top of car.

3. At West Duluth Jct.—Normal position of switches on east leg of wye is for Tenth Subdivision main track. Third Subdivision special instructions govern.

4. Between West Duluth Jct. and Riverside—Between 72nd Ave. West and Riverside Jct., trains will run via D. T. Railway, and will be governed by D. M. & I. R. Railway Time Table and Special Instructions. Trains will secure D. M. & I. R. Clearance and train orders at Duluth Union Depot.

Transfers operating between 72nd Ave. West and New Duluth will be given train orders at Duluth Union Depot, cover-

ing Westward movement from 72nd Avenue West to Riverside Jct. via "DT" Line. On arrival at New Duluth, Conductor will call the Northern Pacific Chief Dispatcher at Duluth, advising estimated time the Transfer will be ready to depart New Duluth on return trip. To facilitate calling, a Northwestern Bell Telephone has been installed in a telephone booth, secured by switch lock, on the station building. This telephone booth must be kept locked at all times. Before departing New Duluth on return trip, Conductors will pick up orders covering return movement from Riverside Jct. to 72nd Ave. West in bill box, secured by a switch lock, located on station building at New Duluth.

5. **Clearance Exceptions—**

Trains originating at West Duluth Jct., Berwind Jct. L. S. T. & T. Ry. Jct. and New Duluth will not require clearance.

6. **Derails—**Winter St. just opposite freight house.

ELEVENTH SUBDIVISION.

(MAIN LINE)

1. **Speed Restrictions—**
- | Zone—Between | Maximum Speeds Permitted | |
|--|--------------------------|-----------|
| | Freight | Passenger |
| Ashland and Central Ave..... | 35 MPH. | 40 MPH. |
| Exception: On all curves between MP 12 and Allouez | 25 MPH. | 25 MPH. |
| Trains handling loaded ore cars..... | 20 MPH. | .... |
| Trains handling ore loaded in other than ore cars | 25 MPH. | .... |
| All trains and engines, 7th Ave. West to 22nd Ave. West, between MP 0 and 2, Ashland | 10 MPH. | .... |

2. **Bridge and Engine Restrictions:**

Wrecking cranes 45 to 48 inc. not permitted between Allouez and Ashland.

Wrecking Cranes 45 to 48 inc. in Duluth-Superior terminal

.....	15 MPH.
-------	---------

Bridge 0, Vaughn Avenue:

Bridge 5, Fish River:

Bridge 49, Middle River:

All trains

.....	25 MPH.
-------	---------

Bridge 37, Brule River:

Multiple unit diesels

.....	25 MPH.
-------	---------

Diesel Electric Engines, No.'s 2500, 2800 and 3600 series over Bridges 0, 5, 37, 48, 49 and 53.....

.....	20 MPH.
-------	---------

Heavy Car Restrictions:

Cars less than 35 feet long weighing between 177,000 and 220,000 pounds when coupled in groups of two or more on Bridges 0, 5, 37, 48, 49, 53

.....	10 MPH.
-------	---------

Pile Drivers 25 to 28 inclusive over Bridge 37

.....	20 MPH.
-------	---------

3. **At Ashland—**Normal position of main track switch just east of Seventh Ave., leading to the Soo Line, is for the Soo Line connection.

At Ellis Ave., all trains must stop in advance of crossing, and will proceed only after crossing is protected by a member of the crew.

4. **At Allouez—**Track No. 2 must not be used by ore trains.

5. **At East End—**Normal position of switch at end of double track is for westward trains.

6. **At Newton Ave.—**Between C&NW connection at Newton Ave. and East End, the westward track will be used as single track by eastward trains and engines entering at Newton Ave. and by westward trains and engines. Other eastward movements will be made on eastward track.

7. **At Hill Ave. Yard—**Ore trains arriving will stop to clear east end of arriving tracks.

Trains weighing ore on automatic scale will move at about 3 MPH. Semaphore over scale house is operated by weighmaster, and engineers will be governed by its indications:

- Green: Proper speed.
- Yellow: Reduce speed.
- Red: Stop.

8. **At Central Ave.—**Normal position of switch at junction of Eleventh and Fourth Subdivisions, in Great Northern interlocking, is for Fourth Subdivision.

9. **Spring Switches—**Central Ave.—Normal position of spring switch at end of double track is for eastward trains. Normal position of spring switch at wye connection between Fourth and Eleventh Subdivisions is for direct route to Pokegama. These switches are governed by interlocking signals equipped for switch key signal operation. If use of switch key does not give "restricting signal", proceed according to rule. Not equipped with facing point lock.

10. **Register Stations—**

- Central Ave.
- Ashland, Soo Line Station.
- Superior, Soo Line 21st Street Yard Office.

11. **Register Exceptions—**At Central Ave. trains register by form 608. Eastward ore trains from Fourth Subdivision will not register. A check of register on Form 602 may be issued by operator when authorized by train dispatcher, either instead of, or in addition to, train order check.

12. **Clearance Exceptions—**

Ore trains from Fourth Subdivision will not require clearance at Central Ave.

Soo Line trains originating at Newton Ave. secure clearance at Soo Line Stinson Avenue Yard Office.

TWELTH SUBDIVISION.

BETWEEN EAST MINNEAPOLIS AND STILLWATER

1. **Speed Restrictions—**

Zone—Between	Freight and mixed Trains	

White Bear Lake and Stillwater	20 MPH.	.....
East Minneapolis and M. & D. Jct.	30 MPH.	.....
At White Bear Lake, all movements over State Highway No. 61	5 MPH.	.....
Approach and move over 4th St. crossing at Restricted Speed.	.....	.....

2. **Bridge and Engine Restrictions—**

Trains handling wrecking cranes 45 to 48 incl. or other wrecking cranes 250 ton or heavier over timber trestles... 15 MPH.

3. **At Minneapolis Broadway Street N. E.,** a "CROSSING SIGNAL START" sign has been placed at the beginning of the west-bound crossing signal start, which is located 550 feet east of the crossing. Trains and engines switching across the crossing will stop east of this sign and will not leave cars standing between this sign and the crossing.

4. **At White Bear Lake, New Yard,** Conductors on transfers moving via Minneapolis Branch will call train dispatcher Minneapolis, on telephone, immediately before departure.

5. **At M&D Jct.—**Normal position of east switch of wye will be lined for through movement on siding.

At East Minneapolis, normal position of east wye switch, east of Broadway crossing, will be for the Minneapolis Branch main track.

6. **At White Bear Lake—**

Third Subdivision instructions govern.

7. **From Summit to Stillwater,** retaining valves must be used. Engineer will determine minimum, and Conductor will use any additional number that he considers necessary.

8. **Register Stations—**

- East Minneapolis.
- White Bear Lake—For trains to or from the Stillwater Line. Stillwater.

9. **Register Exceptions—**

At Stillwater, conductors of trains and enginemen of light

engines will fill out register Form 608, covering their arrival and departure and will deliver to the operator at White Bear Lake.

10. Clearance Exceptions—

At M. & D. Jct. and East Minneapolis clearance not required.
At Stillwater, clearance not required.

THIRTEENTH SUBDIVISION.

BETWEEN 3RD AND 4TH STREETS, ST. PAUL AND
20TH AVENUE SOUTH, MINNEAPOLIS, LINE B,
BETWEEN ST. ANTHONY PARK JUNCTION AND NORTHTOWN

1. Speed Restrictions— Zone—Between	Freight and mixed Trains	Passenger Trains
Mississippi St. Tower and 7th St. (West Side line) and 3rd St. (East Side line)	15 MPH.	20 MPH.
Mississippi St. Tower and First St. North	35 MPH.	35 MPH.
Except Lafayette Ave. and 7th St. Bridge (West Side line)		All Trains 8 MPH.
23rd Ave. S. E. & 20th Ave. So. (Minneapolis)		25 MPH.
29th Ave. S.E. and 1st Ave. S.E. over crossings		20 MPH.
At Mississippi Street Interlocking		12 MPH.

2. Bridge and Engine Restrictions—

Trains handling wrecking cranes 45 to 48 or other wrecking cranes 250 ton or heavier over timber trestles and over the following bridges:
Bridge 7, Raymond Ave. and Bridge 7-1, Bayless Ave.
Line A 15 MPH.

3. At 3rd Street, St. Paul, crossing with C. B. & Q. R. R. is single track. Double track switch on East Side Line is protected by a derail and color light signal on eastward main track. All eastward trains picking up or setting out cars must leave their train west of the derail.

The N. P. Ry. and C. B. & Q. R. R. joint tracks between 3rd Street and Division Street are operated under yard rules. All trains and engine movements, including first class trains over these tracks are controlled by switchtenders at 3rd Street and Operator at Division Street and no train or engine may move over these tracks except as controlled by switchtenders at 3rd Street and Operator at Division Street. Eastward movements will only be made on proceed signal from switchtenders at 3rd Street and westward movements will be governed by interlocking signals operated from Division Street.

4. At Mississippi Street Interlocking—(Connection East and West Side Lines).

The train order signal at Mississippi St. tower is to govern Soo Line, Eastern Division outgoing trains exclusively.

All movements approaching on main track will be governed by the interlocking color light signal located 100 feet west of the Interlocking tower. This signal governs movements on eastward main track to 3rd Street, movements over turnout to 4th Street Yard, via west side line, and movements over crossover between the eastward and westward main tracks of east side line.

Use whistle for routes as follows:

West Side Line	Two long.
East Side Line	Three long.
Round House	Four long.
Diesel House	Five long.

All movements approaching on east side line will be governed by the interlocking color light signal located 500 feet east of Mississippi Street bridge. This signal governs movements on westward main track and movements to back lead of Mississippi Street Yard.

Use whistle signals for routes as follows:

Main Lines	One long.
Back Lead	Two long.

All movements approaching on west side line will be governed by the interlocking color light signal located 500 feet east of Mississippi Street bridge. This signal governs movements for westward main track and movements to back lead of Mississippi Street Yard.

Use whistle signals for routes as follows:

Main Lines	One long.
Back Lead	Two long.

All eastward movements out of east end of Mississippi Street yard will be governed by color light signal located 50 feet west of Mississippi Street Bridge.

Use whistle signals for routes as follows:

West Side Line	Two long.
East Side Line	Three long.

- At Soo Line Jct., Soo Line crews desiring to make reverse movements between Soo Line Jct. and switch of west leg of wye at Trout Brook Jct. before entering the main track will call operator at Mississippi Street Tower and ascertain if all first class trains due have passed, or if any transfers are moving over westward track, between Mississippi Street Tower and Soo Line Jct. Movement must then be protected as per Rule 99.
- At Como Ave. and Como Place. Crossings, where automatic electric signals are installed, engine whistles must not be sounded except to prevent accidents.
- At Union, all eastward and westward trains going to or coming from Great Northern Yard, must call operator St. Anthony Park Jct. on phone and obtain permission to cross over.
- At St. Anthony Park Junction Interlocking—
Enginemen will call for routes as follows:
Straight Main Line East or West (Line A).....One long.
Line A to Line B Westward trackTwo long.
Line A to Eastward track Line BThree long.
Line B to Line A Eastward trackOne long.
- At Eustis Street Yard, all trains must call St. Anthony Park Jct. operator on phone located on pole at old yard office location and obtain permission to cross over before fouling either the eastward or westward main track. In order to prevent cars running out over the derails at the west end of Eustis Street Yard, the hand brakes must in all cases be set with a club on the first six (6) cars from the west end of each track. Yard foremen will be held responsible for knowing this is done.
- Between Eustis Street and 25th Avenue S. E. engine bell will be kept ringing while engine is in motion.
- Line B, double track line (no automatic block signals), is a switching and alternate route between St. Anthony Park Jct. and Northtown, via East Minneapolis. All movements on these tracks are governed by the provisions of Rule 93.
- At Park Jct., when cars are set out in the Eastbound Yard, sufficient hand brakes must be set to prevent cars running out at west end. Also when trains or portions of trains are left standing on the main track while cars are being set out or picked up, air must first be set before cutting off engine or cars.
- Yard Limits—
3rd Street, St. Paul to 20th Avenue South, Minneapolis, including 3rd and 4th Street Yard, St. Paul.
- Close Clearances—
Account no clearance 89 foot bulkhead flat cars cannot be handled thru Westminster Street Tunnel on West Side line between 7th Street & Mississippi Street Tower.
Loaded tri- and bi-level cars must not be handled on Eastward track between Third Street and Mississippi Street, St. Paul.
At St. Paul, short clearances for man on side of car:

Lafayette Ave. bridge on East and West Side Lines, stone wall west of Lafayette Ave. bridge on East Side Line and stone wall along diagonal track, 4th Street Yard.

At St. Paul, tunnels on East and West Side Lines will not clear a man on side or top of car.

At Southeast Minneapolis, three overhead cranes are located on spur to Lewis Bolt and Nut Co. galvanizing plant. Employees must not ride on top of cars approaching or moving under the overhead trolley beams. Beams will not clear a man on top of box car or high load.

15. Register Stations—

St. Paul, Telegraph Office at Union Depot.

Mississippi Street Yard Office, for trains originating or terminating.

16. Clearance Exceptions—

At 7th Street, Mississippi Street Yard, Soo Line Jct., 6th Ave. South, 3rd Ave. North and First Street North, clearance not required.

17. Crossovers—

3rd Street, Mississippi Street, Maryland Street, Soo Line Jct., Chatsworth Street, Como, Union, St. Anthony Park Jct., Eustis Street, 27th Ave. South East, 18th Ave. South East, East end Mississippi River bridge, 19th Ave. South, 10th Ave. South, 8th Ave. South, 7th Ave. South, 6th Ave. South, 2nd Ave. North, 3rd Ave. North

18. Derail Switches—

St. Paul, East Side line, eastward track near 4th Street Bridge.

19. 20TH AVE. SOUTH TO 3RD AVE. NORTH IS YARD LIMIT TERRITORY AND THE FOLLOWING C&NW SPECIAL RULES GOVERN MAIN TRACK MOVEMENTS, SUPERSEDING ALL OTHER RULES AND INSTRUCTIONS INCONSISTENT THEREWITH.

All trains and engines must move at restricted speed between 3rd Avenue North and 20th Avenue South.

All trains, transfers and engines will register by register ticket at 3rd Avenue North.

At crossings with tracks of Minneapolis Eastern Railway Company between 1st and 2nd Streets South, Minneapolis, all trains and engines on Minneapolis Eastern tracks must stop and then proceed over these crossings under flag protection. All other trains and engines must approach these crossings expecting to find them occupied.

Trains and engines may use the main tracks between these points without protection when not on the time of first class trains, and may use main tracks on the time of first class trains after such trains are five (5) minutes late, protecting as prescribed by Rule 99. Switch engines must be prepared to clear main track without delay to regular trains and transfers.

Movements between 3rd Avenue North and 1st Street South will be governed by automatic block signals; the end of track section protected by automatic block signals is indicated by sign post reading, "END BLOCK". Signals are of the color light type, one light only should appear at any one time. A green light indicates track clear, proceed. A yellow light indicates Caution, approach next signal or end of block at restricted speed. A red light indicates STOP, train must be brought to a full stop before any part of the train or engine passes the signal and may then proceed.

Switches at Third Avenue North will be handled by switch tenders. All trains and engines must approach these switches at restricted speed and must not proceed until proceed signal has been received from the switch tender.

Between 3rd Avenue North and 20th Avenue South Passenger Train flagmen must ride outside on rear platform to be in position to get off and afford immediate flag protection. Conductors will see that flagmen comply with this rule.

20. SPECIAL INSTRUCTIONS FOR GREAT NORTHERN FAIR GROUNDS AUTOMATIC INTERLOCKING.

Signals for train movements in either direction on either track will not indicate Proceed unless gates are set and properly

locked against G. N. trains and the smash board on the route desired is in the Proceed position.

The derail on NP Industry Track is connected to and thrown by the switchstand.

When a train is stopped by a Home or Dwarf signal trainman will go to the crossing, unlock the release box and operate the release after making certain gates are set against G. N. trains.

21. SPECIAL INSTRUCTIONS FOR 18TH AVE. N. E. MINNEAPOLIS AUTOMATIC INTERLOCKING.

The signals for the G.N. tracks are color light type and for the N. P. track are semaphore type equipped with smashboards.

N. P. trains must Stop within one hundred (100) feet of the home signals and wait for two (2) minutes for time relay to operate before smashboards and signal will indicate Proceed.

If the smashboards do not clear and signal does not indicate proceed after two minutes have elapsed, and no train is approaching on an opposing line, trainman shall go to the crossing and operate the hand release. After operating release, wait two (2) minutes and if the automatic home signal does not indicate Proceed and no immediate crossing train movement is evident, the trainmen at the crossing, after placing themselves in position to flag any train movement on the conflicting line, may hand signal their train to proceed over the crossing.

A special track circuit in operation on the Mulberry Line within interlocking limits requires all train movements to be completed.

TONNAGE RATINGS PER DIESEL UNIT

ST. PAUL DIVISION		Unit Numbers								
		99-106 400-427 700-724 750 800-803	550-551 556 6500-6513 6550-6553 6600-6601	244-245 260-263 267 6000-6005 6051-6052 6700 Series	5400-5410 500-501 552-555 557-569 6007-6020 6050	200 Series Except 244, 245, 260, 263, 267 300 Series 7000 Series	2500 2800 3600 Series			
Subdivision	District	Ruling Grade	107-177	107-177	107-177	107-177	107-177	107-177	107-177	107-177
First Eastward	Staples to Little Falls.....	0.35	2400	2660	3480	4260	5590	5320	5320	6320
	Little Falls to Northtown.	0.50	2260	2990	3890	4790	6280	5980	5980	4980
First Westward	Northtown to Staples.....	0.50	1310	1730	2250	2770	3630	3460	3460	4980
	Dilworth to Staples.....	0.31	1850	2440	3170	3910	5130	4880	4880	6820
Second Westward	Staples to Lake Park.....	0.40	1850	2440	3170	3910	5130	4880	4880	5810
	Lake Park to Dilworth.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Third Eastward	White Bear Lake to Hinckley.....	.....	1260	1670	2170	2670	3500	3330	3330	5280
	Hinckley to Groningen.....	.....	1120	1480	1920	2360	3100	2950	2950	4640
Third Westward	Groningen to Carlton.....	.....	1620	2140	2790	3430	4500	4280	4280	5710
	Carlton to Duluth.....	.....	1440	1900	2480	3050	4000	3810	3810	4980
Third Westward	Duluth to Carlton.....	.....	790	1050	1360	1680	2050	2100	2100	3300
	Carlton to Hinckley.....	.....	1530	2020	2630	3240	4250	4050	4050	4980
Third Westward	Hinckley to White Bear Lake.....	.....	1800	2380	3100	3810	5000	4760	4760	6950

TONNAGE RATINGS PER DIESEL UNIT

ST. PAUL DIVISION		Unit Numbers								
		99-106 400-427 700-724 750 800-803	550-551 556 6500-6513 6550-6553 6600-6601	244-245 260-263 267 6000-6005 6051-6052 6700 Series	5400-5410 500-501 552-555 557-569 6007-6020 6050	200 Series Except 244, 245, 260, 263, 267 300 Series 7000 Series	2500 2800 3600 Series			
Subdivision	District	Ruling Grade	107-177	107-177	107-177	107-177	107-177	107-177	107-177	107-177
Fourth Eastward	Staples to Brainerd.....	.....	4070	5380	7000	8610	11300	10750	10750	16470
	Brainerd to Deerwood.....	.....	1660	2190	2850	3500	4600	4380	4380	6950
Fourth Westward	Deerwood to Central Ave.....	.....	2160	2860	3710	4570	6000	5710	5710	8630
	Duluth to Sawyer.....	.....	1020	1360	1760	2180	2660	2730	2730	3300
Fourth Westward	Sawyer to Brainerd.....	.....	1440	1900	2480	3060	4000	3810	3810	5800
	Brainerd to Staples.....	.....	1620	2140	2790	3430	4500	4280	4280	5800
Fifth Eastward	Oakes to Gwinner.....	0.48	1310	1730	2250	2770	3630	3460	3460	5120
	Gwinner to Wahpeton.....	0.17	2440	3230	4200	5170	6780	6450	6450	9300
Fifth Westward	Wahpeton to Henning.....	0.76	900	1190	1550	1900	2500	2380	2380	4020
	Henning to Staples.....	0.20	2440	3230	4200	5170	6780	6450	6450	8630
Fifth Westward	Staples to Wahpeton.....	0.85	1310	1730	2250	2770	3630	3460	3460	3750
	Wahpeton to Milnor.....	0.35	740	980	1280	1580	2070	1970	1970	6320
Fifth Westward	Milnor to Oakes.....	0.40	1310	1730	2250	2770	3630	3460	3460	5800

TONNAGE RATINGS PER DIESEL UNIT

ST. PAUL DIVISION

Unit Numbers

Subdivision	District	Ruling Grade	Unit Numbers						Car Limit
			99-106 400-427 700-724 750 800-803	550-551 556 6500-6513 6550-6553 6600-6601	244-245 260-263 267	5400-5410 500-501 552-555 557-569 6007-6020 6050	244-245 260-263 267	550-551 556 6500-6513 6550-6553 6600-6601		200 Series Except 244, 245, 260, 263, 267 300 Series 7000 Series	Car Limit
Sixth Eastward	Pembina to Mekinock.....	0.09	1850	2440	3170	3910	5130	4880	2500
	Mekinock to East Grand Forks...	.....	2440	3230	4200	5170	6780	6450	2800
	East Grand Forks to Lake Park..	0.51	1140	1500	1960	2410	3160	3010	4920
Sixth Westward	Lake Park to East Grand Forks..	0.68	1310	1730	2250	2770	3630	3460	4360
	East Grand Forks to Pembina....	0.17	2010	2660	3460	4260	5590	5320	9300
Eighth Eastward	Morris to Glenwood.....	1.17	650	860	1110	1370	1800	1710	2880
	Glenwood to Sauk Centre.....	0.60	1140	1500	1960	2410	3160	3010	4500
	Sauk Centre to Little Falls.....	1.17	650	860	1110	1370	1800	1710	2880
Eighth Westward	Little Falls to Sauk Centre.....	1.21	630	830	1080	1330	1740	1660	2800
	Sauk Centre to Morris.....	1.00	740	980	1280	1580	2700	1970	3300

TONNAGE RATINGS PER DIESEL UNIT

ST. PAUL DIVISION

Unit Numbers

Subdivision	District	Ruling Grade	Unit Numbers						200 Series Except 244, 245, 260, 263, 267 300 Series 7000 Series
			99-106 400-427 700-724 750 800-803	550-551 556 6500-6513 6550-6553 6600-6601	244-245 260-263 267	5400-5410 500-501 552-555 557-569 6007-6020 6050	244-245 260-263 267	550-551 556 6500-6513 6550-6553 6600-6601		200 Series Except 244, 245, 260, 263, 267 300 Series 7000 Series
Ninth Eastward	International Falls to Funkley...	.....	1010	1330	1730	2130	2800	2670	3280
	Funkley to No. Bemidji.....	.....	1850	2440	3170	3910	5130	4880	6000
	No. Bemidji to Brainerd.....	.....	1070	1410	1840	2260	2970	2830	4190
Ninth Westward	Brainerd to Little Falls.....	0.48	2010	2660	3460	4260	5590	5320	5120
	Little Falls to Brainerd.....	0.54	1310	1730	2250	2770	3630	3460	4760
	Brainerd to No. Bemidji.....	.....	750	990	1280	1580	2070	1970	3300
Eleventh Eastward	No. Bemidji to Northome.....	.....	950	1260	1630	2010	2640	2510	4640
	Northome to International Falls.	.....	1850	2440	3170	3910	5130	4880	6000
	Central Ave. to Iron River.....	.....	790	1050	1360	1680	2200	2100	3300
Eleventh Westward	Iron River to Ashland.....	.....	960	1260	1640	2020	2650	2525	3950
	Ashland to Central Ave.....	.....	790	1050	1360	1680	2200	2100	3300

This rating is made to govern ruling grades only, and will in no manner interfere with handling additional tonnage where grades will permit.

MAXIMUM CLEARANCES

Height of center of gravity above top of rail not to exceed 84 inches.

Note—Limit of load measurements based on 52 ft. car with 42 ft. truck centers.
Heights and widths in table allow 6 inch clearance.

SUBDIVISION	Height Above Top of Rail														Governing Structure		
	21'-0"	20'-0"	19'-0"	18'-0"	17'-0"	16'-0"	15'-0"	14'-0"	13'-0"	12'-0"	11'-0"	4'-0"	3'-0"	2'-0"		1'-0"	0'-6"
1st Sub.—1st Street North, Minneapolis to Northtown	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	Northtown "Soo Line" Over Crossing and Plymouth Ave. Bridge
1st Sub.—Staples	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	"Soo" Over Crossing at Northtown
3rd Sub.—Garfield Bear Lake	8'-10"	10'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	Bridges 131 and 62
3rd Sub.—White Street Jct., St. Paul	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	Minnehaha Ave. Over Crossing, St. Paul
4th Sub.—Garfield Ave. to Staples	9'-2"	11'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	St. Louis Bay Bridge
4th Sub.—Garfield DMIR Jct.	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	Lake Ave. Viaduct
6th Sub.—Manitoba Jct.—East Gr. Forks	8'-8"	10'-8"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	Bridges 26 and 68
6th Sub.—East Gr. Forks-Winnipeg	10'-3"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	Bridges 95 Red River of No.*

MAXIMUM CLEARANCES

Note—Limit of load measurements based on 52 ft. car with 42 ft. truck centers.
Heights and widths in table allow 6 inch clearance.

SUBDIVISION	Height Above Top of Rail														Governing Structure		
	21'-0"	20'-0"	19'-0"	18'-0"	17'-0"	16'-0"	15'-0"	14'-0"	13'-0"	12'-0"	11'-0"	4'-0"	3'-0"	2'-0"		1'-0"	0'-6"
7th Sub.—Tylden Jct.—Carhage Jct.	7'-7"	9'-11"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	Bridge 70 Red Lake River
9th Sub.—Big Falls to Internat'l Falls	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	Bridges 166 and 185
9th Sub.—Little Falls—Brainerd	9'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	Bridge 106 Miss. River
10th Sub.—JST&T Ry. Jct. to New Duluth	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	McCuen St. O.B. Bridge—Bridge 94-5
11th Sub.—Ashland to Central Ave.	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	Bridges 5, 46, 49, 53 and 62
12th Sub.—M. & D. Jct., Roseville to East Minneapolis Jct.	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	Near M.P. 8 "Soo Line" Over Crossing
12th Sub.—Stillwater to White Bear Lake	8'-4"	8'-7"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	Highway Over Crossing M.P. 10 and 1514
13th Sub.—3rd Street, St. Paul to 16th Ave. South, Minneapolis West Bound East Bound	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	Lafayette Ave. Bridge, Mississippi St. Over Crossing, Tunnels 1 & 2, and Raymond and Ave. Bridge