



Corporate Safety Notice

DATE: October 28, 2022
TO: All Employees
FROM: Don Eccleston, Deputy Chief Safety Officer – Regulatory Compliance
SUBJECT: LIRR Operational Control of Grand Central Madison Territory

On or about November 14, 2022, LIRR will assume full operational control of all tracks within the Grand Central Madison (GCM) territory inclusive of the Grand Central Madison Tunnels, Station, and Midday Storage Yard. While construction activities will be ongoing, the territory is subject to all regulatory requirements and industry standards including both Occupational Safety and Health Administration (Title 29 Labor) and Federal Railroad Administration (Title 49 Transportation) Regulations. Your adherence to these mandates is required at all times. As employees continue to familiarize themselves with the new territory, this Corporate Safety Notice highlights important safety information applicable to both daily operations and emergencies. The following is to be used for informational purposes and does not supersede any existing rules or special instructions. If you have questions, I can be reached at (516) 369-8885 (deccles@lirr.org) or contact Mark Elliott at (516) 523-7536 (mellio@lirr.org).

Railroad Communications:

Rule 701 – A working radio is one with an adequate power source, free of mechanical malfunctions, that can both transmit and receive communications to and from the railroad's control center (Movement Bureau or Block and/or Interlocking Stations) from any location within the system. Block and interlocking stations are equipped with Channel 1 or Channel 3 as specified on the station pages of the current timetable. The designated channel will permit a train to communicate with the Block Operator controlling the track on which it is operating. In addition, each channel will provide for communications between trains.

Rule 702 – Each radio and all primary and redundant wireless communication equipment shall be tested as soon as practicable to ensure that the equipment functions as intended **prior to departure from a terminal**. The following are exceptions to the testing requirement:

- Crew Equipment turns – When a crew turns with its equipment and the working radio and communications redundancy are functioning as intended.
- Crew Change Points – At any point where crews change equipment and a face-to-face verbal exchange of information between crews indicates that the working radio and communications redundancy are functioning as intended.

The occupied controlling locomotive in a train must be equipped with a working radio. To allow for possible radio failure enroute, the train also must have a form of redundant working wireless communications upon departure from a terminal. A communication redundancy means a working radio on another locomotive in the consist or other means of working wireless communication.

GCT 1803-A Radio Test – Initial Departure Prior to departing from an initial terminal, engineers must direct the radio test to the Block Operator. Except as indicated below, the information must be directed to the appropriate contact. The radio test from an initial terminal must include the leading engine number and the number of cars in the trains consist

GCT 100-L-3 Grand Central Tunnels – The Grand Central Terminal tunnels, located between Harold and the east end of Plaza Interlocking, consist of 3 separate tunnels, designated as Tunnel A-Track 1, Tunnel B/C-track 3, and Tunnel D-Track 2. Tunnel LL-Track LL is the lead track located between Plaza Interlocking and Midday Storage Yard. There are 2 tunnels between Plaza Interlocking and GCT 5 Interlocking designated Track 1 and Track 2. Tracks leading to the Lower Level GCT between GCT 5 Interlocking and GCT 4 Interlocking are designated Track 1 and Track 2. Tracks leading to the Upper Level GCT between GCT 5 Interlocking and GCT 3 Interlocking are designated Track 3 and Track 4. The entire territory is approximately 3.75 miles in length and falls under the jurisdiction and authority of the Movement Bureau. Bench walls run the full length of the tunnels.

Train Operations are coordinated through the Train Operations Center (TOC) which is comprised of Transportation Supervision, Block Operator (GCC), Stationmaster, Yardmaster, Usher, and Engineering personnel. A Stationmaster and Block Operator are on duty to support train movement at all times, unless otherwise provided, and will be **contacted via Radio Channel 1** or the following telephone numbers:



Location	Telephone Number
TOC Stationmaster	(631) 861-7518
GCC – Block Operator	(631) 861-7514 or 7515
Location	Radio Channel
TOC and GCC	1
Movement Bureau	2

RWP Tunnel Procedures:

Due to previous Good Faith Challenges, the following rules are in effect in the underground portion of the Atlantic Branch between Dunton and Atlantic Terminal and the Grand Central Branch between Harold and Grand Central Madison – including station and tail tracks. Working limits must be established prior to entering the tunnel area. **Foul time or track out-of-service are the only acceptable forms of RWP in this area as there is no suitable place to clear.** The use of tunnel niches as a place to clear is prohibited. Train approach warning(watchmen/lookout) should only be used for adjacent track protection. It is prohibited for Roadway Workers to clear between two tracks. When clearing, the Predetermined Place of Safety (PPOS) must be within the gage of the track on which working limits have been established. Working Limits must be established when walking on bench walls to and from access locations and while performing any tasks inside the tunnels. Stations Department employees performing spray wash or other functions requiring RWP protection on platforms may utilize Train Approach Warning (Watchman/Lookout) as their means of protection. These tasks are limited to only tasks performed on the platform and is prohibited at track level.

Metro-North Fire Brigade

In the event of an emergency within the Grand Central Terminal and Grand Central Madison Facilities, LIRR employees may encounter members of Metro-North's Grand Central Terminal Fire Brigade. Some of the responsibilities of the Fire Brigade are listed below:

<p>Metro-North GCT Fire Brigade</p> 	<ul style="list-style-type: none">▪ Provide emergency medical response▪ Notify occupants of any decision to evacuate, relocate, and/or shelter-in-place▪ Activate and staff the Incident Command Post (ICP) and coordinate with internal and external stakeholders and agencies▪ Control and extinguish small fires prior to the arrival of FDNY personnel▪ Work closely with responding FDNY firefighters as subject matter experts on building characteristics▪ Coordinate assistance to building occupants requiring evacuation assistance▪ Mitigate hazardous conditions as capable within the scope of training and equipment availability <p>*GCT Fire Brigade Staff are uniformed employees. They are certified New York State Emergency Medical Technicians (EMTs) who will assist with emergencies within the Grand Central Madison facility.</p>
<p>Long Island Rail Road Fire Marshals (OFM)</p> 	<ul style="list-style-type: none">▪ LIRR OFM staff will conduct initial and periodic refresher training to maintain the state of readiness of LIRR staff and tenants.▪ Supervise and train GCM staff and tenants regarding Area Warden roles and responsibilities.▪ Review evacuation routes and evacuation assembly points.▪ In coordination with GCM stakeholders, perform semi-annual drills.▪ Work closely with responding FDNY firefighters as subject matter experts on building characteristics▪ Coordinate assistance to LIRR employees and GCM tenants requiring evacuation assistance.▪ Report missing persons or persons requiring evacuation assistance to the Building Evacuation Supervisor (BES) or first responders.

ACCESS/EGRESS VENTILATION SHAFTS

GCT 100-L-3 Grand Central Tunnels

Ventilation shafts are located in the Grand Central Tunnels as follows:

Name	Location
Lead Track	MP 3.72 on Lead Track ONLY
Queens Plaza	west end Plaza Interlocking
23 rd Street	MP 2.83
12 th Street	MP 2.59
59 Vernon Blvd	MP 2.39
Roosevelt Island	MP 2.03
FDR	MP 1.81
2 nd Avenue	MP 1.52
55 th Street	MP 0.93
49 th Street	End of Grand Central Madison platform
45 th Street	West end of Grand Central Madison platform
38 th Street	Located west end Tail Tracks Grand Central Madison

- All shafts are accessible from the bench walls. However, they are not to be **utilized as a prime means of egress**.
- Conventional staircases are accessible from the bench walls of all Grand Central Tunnels allowing emergency access/egress between the tunnel and street at all shaft locations.
- All shaft locations are also equipped with an overhead vent system with high capacity fans capable of exhaust or supply. The fans are controlled by SCADA System Operator located in the GCT TOC who can be reached at (631) 861-7521.

CROSS PASSAGEWAYS

Cross passageways connect **adjacent tracks** at the following locations:

MP 0.09	MP 0.19	MP 0.25 (Upper Level)
MP 0.27 (Lower Level) MP 0.80	MP 1.07	MP 1.07
MP 1.20	MP 1.35	MP 1.63

These locations are identified by white signs with blue border at the top as shown below:



Communication Safety Stations (CSS)

Communication Safety Stations are located on the tunnel walls at intervals not exceeding one tenth (1/10) of a mile in length on the bench wall side of each tunnel. **They are identified by a blue light.** The Communication Safety Stations have the following features:

- Emergency Quick Connect Communication
- Telephone (Accessible to TOC and Movement Bureau as well as local calling to any area code)
- Quick Connect to Power Director
- Third Rail Disconnect
- Portable Fire Extinguisher

In addition to CSS there are also **Tunnel Emergency Telephones** located throughout each tunnel. These emergency telephones are not equipped with the enhanced features described for Communication Safety Stations.

CSS OPERATION – The Communication Safety Stations have direct telephone connections to GCT TOC Block Operator (GCC). When a CSS is used to contact TOC or Power Director, the CSS's identity will be indicated on the receiving unit at either of those offices. The features and operation of the CSS's are as follows:

Exterior of CSS with door panel closed

- A large button is depicted on the left side of the phone labeled **"PUSH IN CASE OF EMERGENCY."** When pressed, this button will direct-dial GCC TOC. Between Plaza Interlocking and Harold Interlocking this will simultaneously dial GCT TOC and PSCC. When on Lead Track between Plaza Interlocking and Midday Storage Yard, this will simultaneously dial GCT TOC and Midday Storage Yard. This button does not require the CSS access door to be opened and will automatically place the phone into Speaker Phone operation. Use the phone in Speaker Mode, or if ambient noise overwhelms the use of the speaker, open the door panel and lift the handset off the cradle to talk. When calling GCT TOC, identify who you are, what train or vehicle, location, and nature of emergency.

****Below the phone module there is a button labeled "DC" – see **Removal of Power** section**

Interior of CSS with door-panel open, from top to bottom

- A Touch Tone Key Pad for telephone dialing.
- A Button labeled **"POWER DIRECTOR"** – When pressed, it will direct-dial the LIRR Power Director.
- A telephone handset on cradle. The telephone handset must be used with any feature actuated when the CSS door panel is opened.

REMOVAL OF POWER:

In case of emergency, DC power may be locally de-energized from the CSS by pressing the "Power Director" and "DC" buttons simultaneously. By depressing both buttons, the third rail power within the section will be de-energized and an instantaneous audio connection to the LIRR Power Director will be established. Depressing the DC trip pushbutton without pressing the Power Director button will not trip any breakers.

If a tunnel emergency requires further assistance for removal of third rail the following procedure must be used:

1. Notify GCC - TOC.
2. Identify yourself, give location, and nature of the emergency.

MILE POST MARKERS – White reflectorized mile post signs **indicating distance from Grand Central Madison** have been installed in the Grand Central Tunnels spaced **not more than 550 feet apart**. Signs are placed on the tunnel walls. The number above the line represents the track, the numbers below the line indicate hundredths of a mile.

GCT 1163 Overhead / Close Clearance

CLOSE CLEARANCE exists at various locations. Employees are cautioned, and so instructed, not to extend head or limbs outside of cab windows or open side body doors on either side of a moving train. All personnel are prohibited from riding on or about the side ladders of moving equipment.

GCT 1167-E Tracks Other Than Main Tracks Equipped with Third Rail – DC Electrified Operation

Grand Central Madison Station Tracks 201, 202, 203 204 and 301, 302, 303, 304

Grand Central Terminal T202, T203, T302, T303



Grand Central Branch Speeds

	No. 4 Track		No. 2 Track		No. 1 Track		No. 3 Track	
	Psgr	Frt	Psgr	Frt	Psgr	Frt	Psgr	Frt
GRAND CENTRAL TERMINAL BRANCH								
ALL TRACKS GRAND CENTRAL TERMINAL STATION, INCLUDING THE TAIL TRACKS & GCT 1, 2, 3 & 4 INTERLOCKINGS	15 MPH							
Between:								
GCT 3/4 & GCT 5	30		30		30		30	
Westerly limits GCT 5 to easterly limits GCT 6	45		45		45		45	
GCT 6 to easterly limits Plaza	60		60		60		60	
Plaza & Harold			45		45		45	
Plaza & Midday Yard	15							

GCT 1038-E – TRACK CAR SPEED RESTRICTION:

MAS for Track Cars on all tracks in GCB territory is **15 MPH**.

SI 1038-E – Through crossovers and turnouts, and over highway and railroad crossings speed is **5 MPH**

Grand Central Madison Territory

Includes the underground GCM territory which spans from Grand Central Madison to Harold Interlocking.

The GCM territory is accessed through 3 tunnel/tracks (A, B/C, D) at Harold Interlocking and one lead tunnel/track (LL) to Midday Storage Yard (Mid-8).

The 4 tunnel/tracks (A, B/C, D, LL) then merge in Plaza Interlocking into 2 tunnel/tracks GCB-1 and GCB-2.

The 2 tunnel/tracks GCB-1 and GCB-2 then traverse from Plaza Interlocking underneath the MTA subway line continuing under the East River and Roosevelt Island.

The 2 tunnel/tracks then enter Manhattan where they are split into 4 tunnel/tracks – GCB-1 and GCB-2 (lower level); GCB-3 and GCB-4 (upper level).

Upon entering GCM the 4 tunnel/tracks are then split into 8 tracks for the Upper and Lower Level Passenger Terminals.

LIRR TOC (Train Operations Center) – Tower is located at GCM Mezzanine Level and controls GCT-1 through 6 and Plaza Interlocking.

Grand Central Madison – includes 4 levels for the LIRR

LIRR Main Concourse Level – 1 level below the Metro-North Railroad tracks

LIRR Mezzanine Level – Several levels below LIRR Main Concourse and in between the Upper Level and Lower Level Terminals

Upper and Lower Level Terminals:

Upper Level Terminal – 2 passenger platforms and 4 tracks (Tracks 201-204)

Lower Level Terminal – 2 passenger platforms and 4 tracks (Tracks 301-304)

GCT-5 Interlocking

Located east of Grand Central Terminal

Interlocking is used to merge GCB-1 and GCB-2 to 4 tunnel/tracks (2 upper/2 lower) leading into GCT

Upper Level Tunnel/Tracks – GCB-3/GCB-4

Lower Level Tunnel/Tracks – GCB-1/GCB-2

GCT-6 Interlocking

Located between GCT-5 and Plaza
2 tracks run through the interlocking (GCB-1 and GCB-2) with an X track for cross over movements

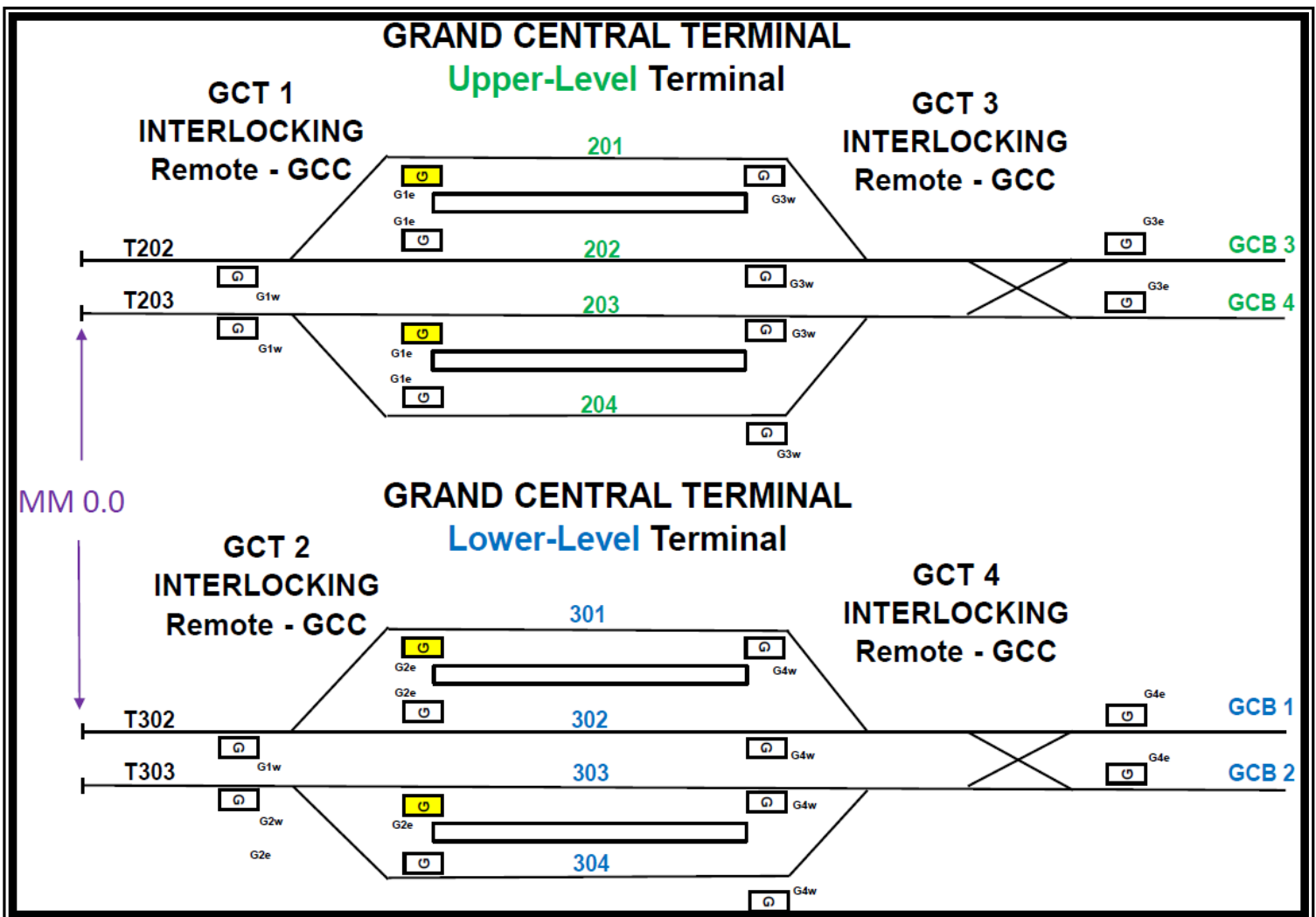
Plaza Interlocking

Located at the easterly limit of the new territory
Provides access to the following tunnel/tracks:
Track LL – Midday Lead Track
Track A – Harold
Track B/C – Harold
Track D – Harold

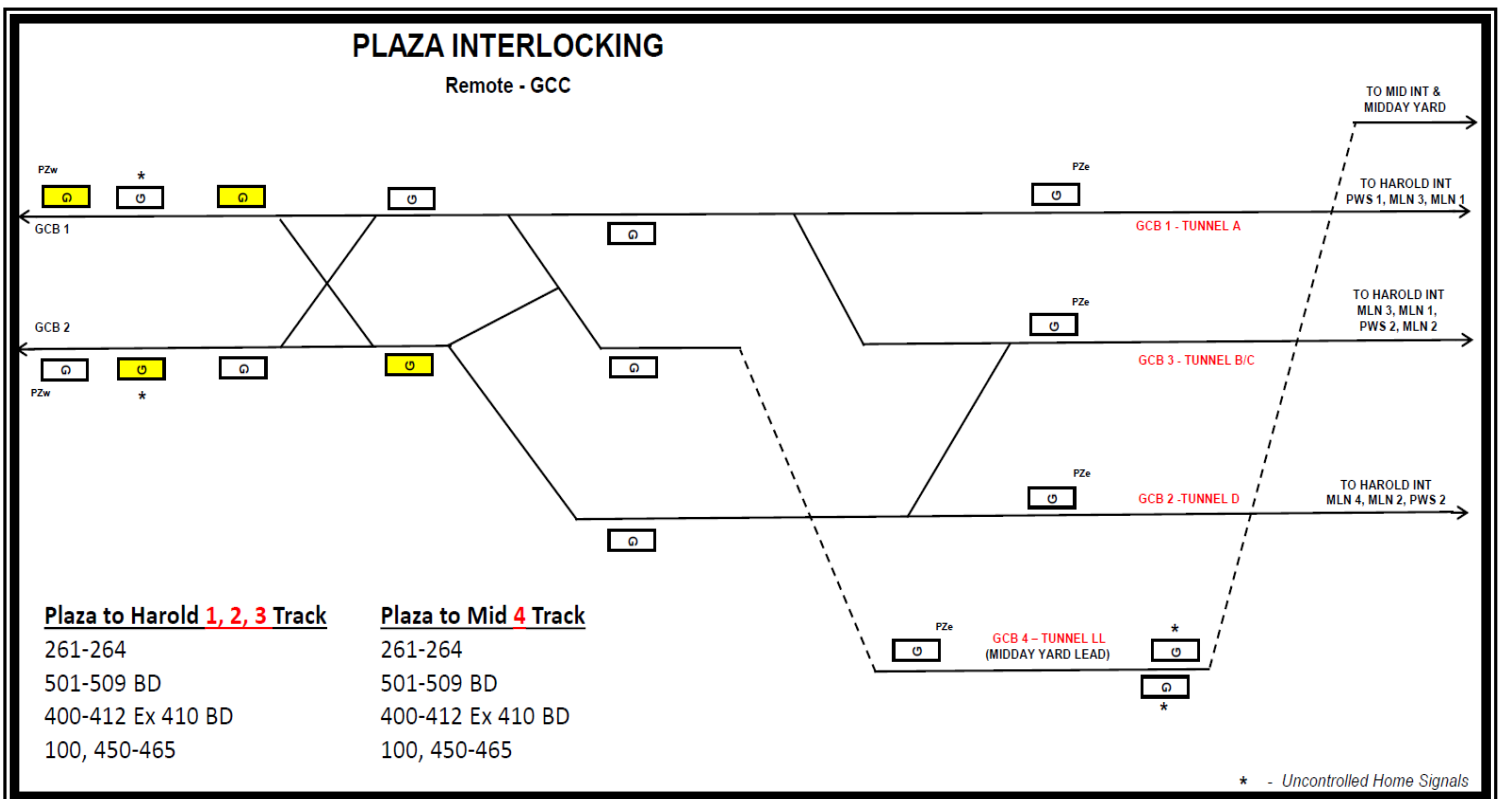
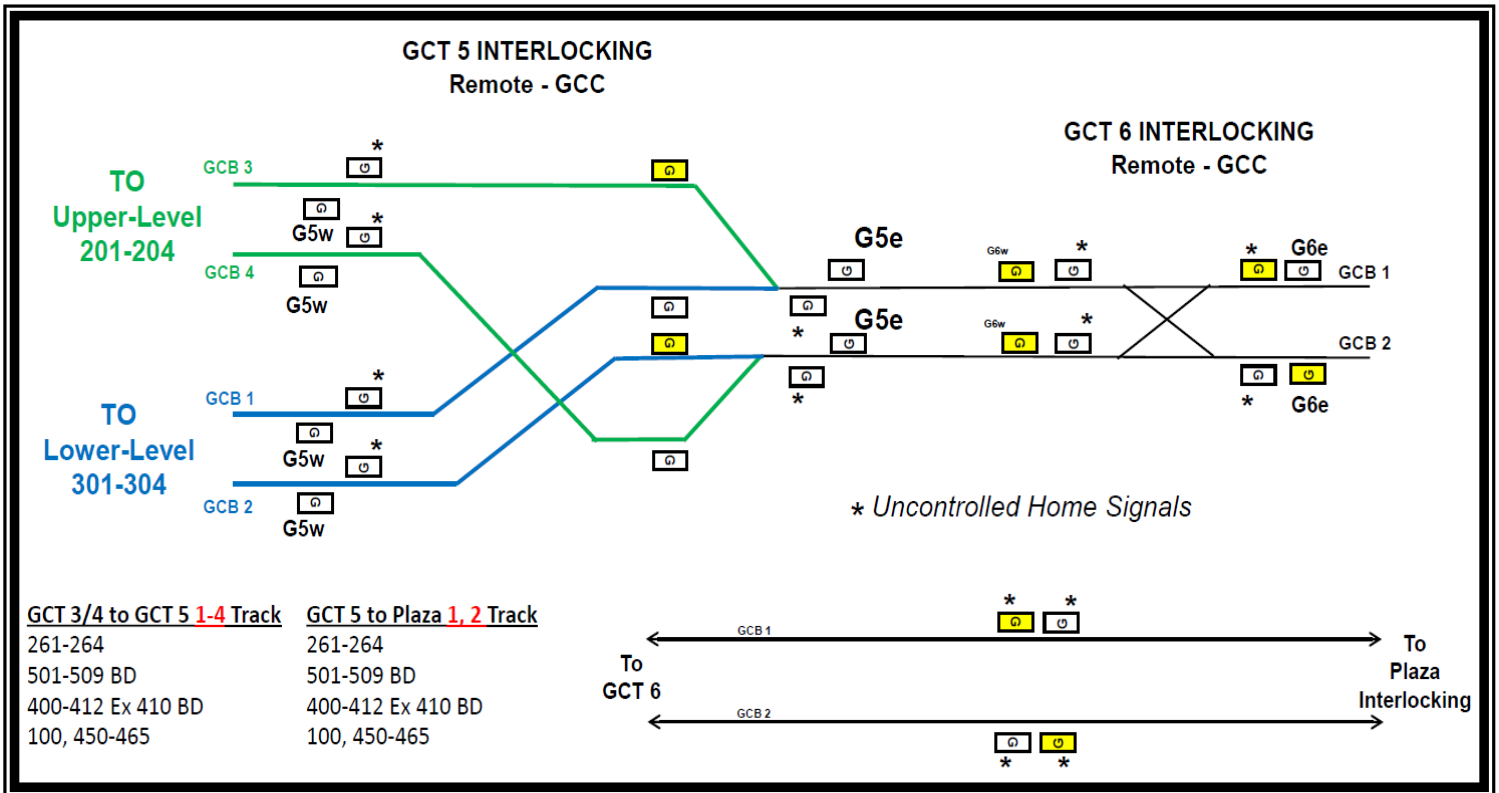
Midday Storage Yard

Yard is controlled from the Midday Storage Yard Services Building (MYSB)
Mid-7 and Mid-8 provide access to Plaza Interlocking via the LL Tunnel
West side of Midday Storage Yard (Mid-1) leads to the Arch Street Shop and Lumber Yard Tracks

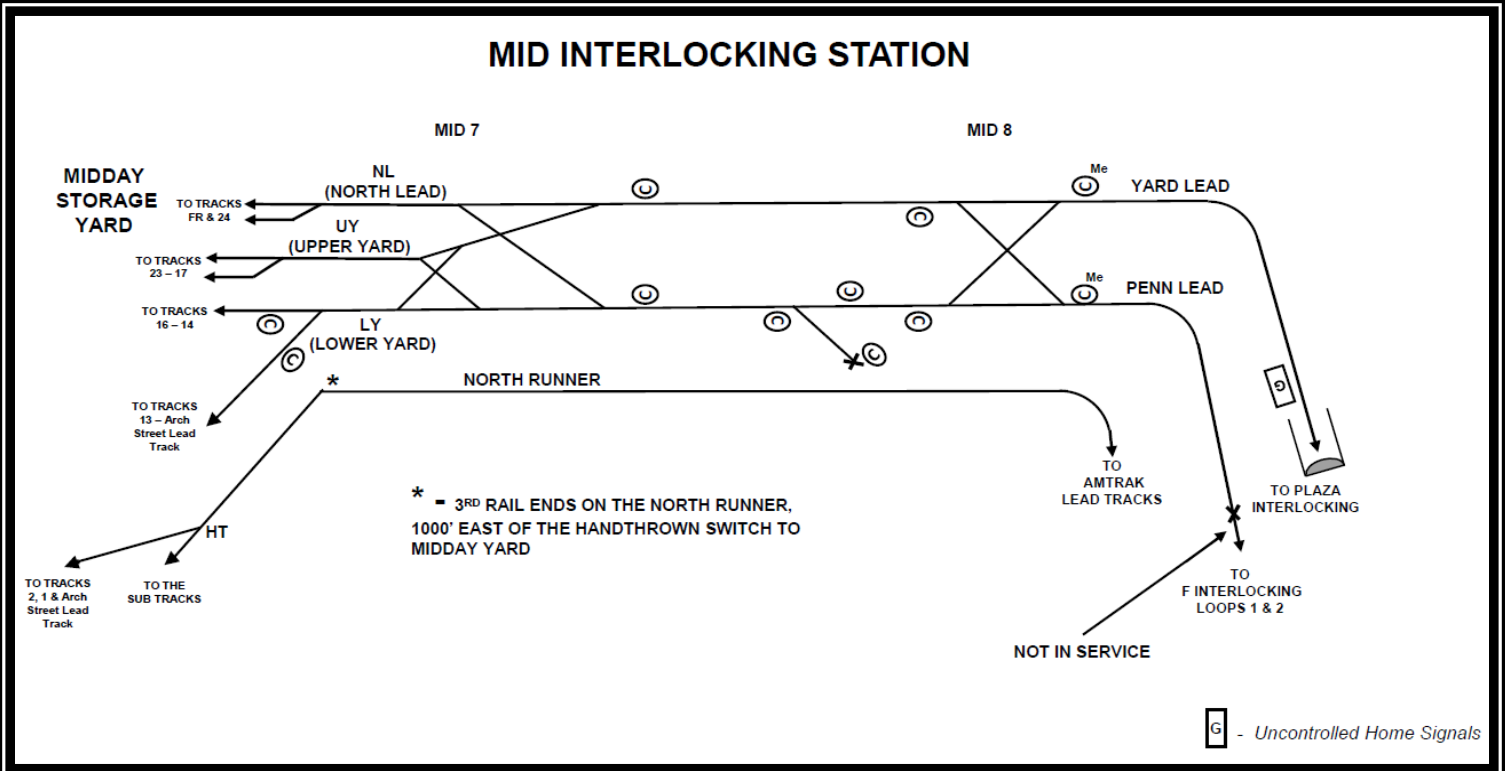
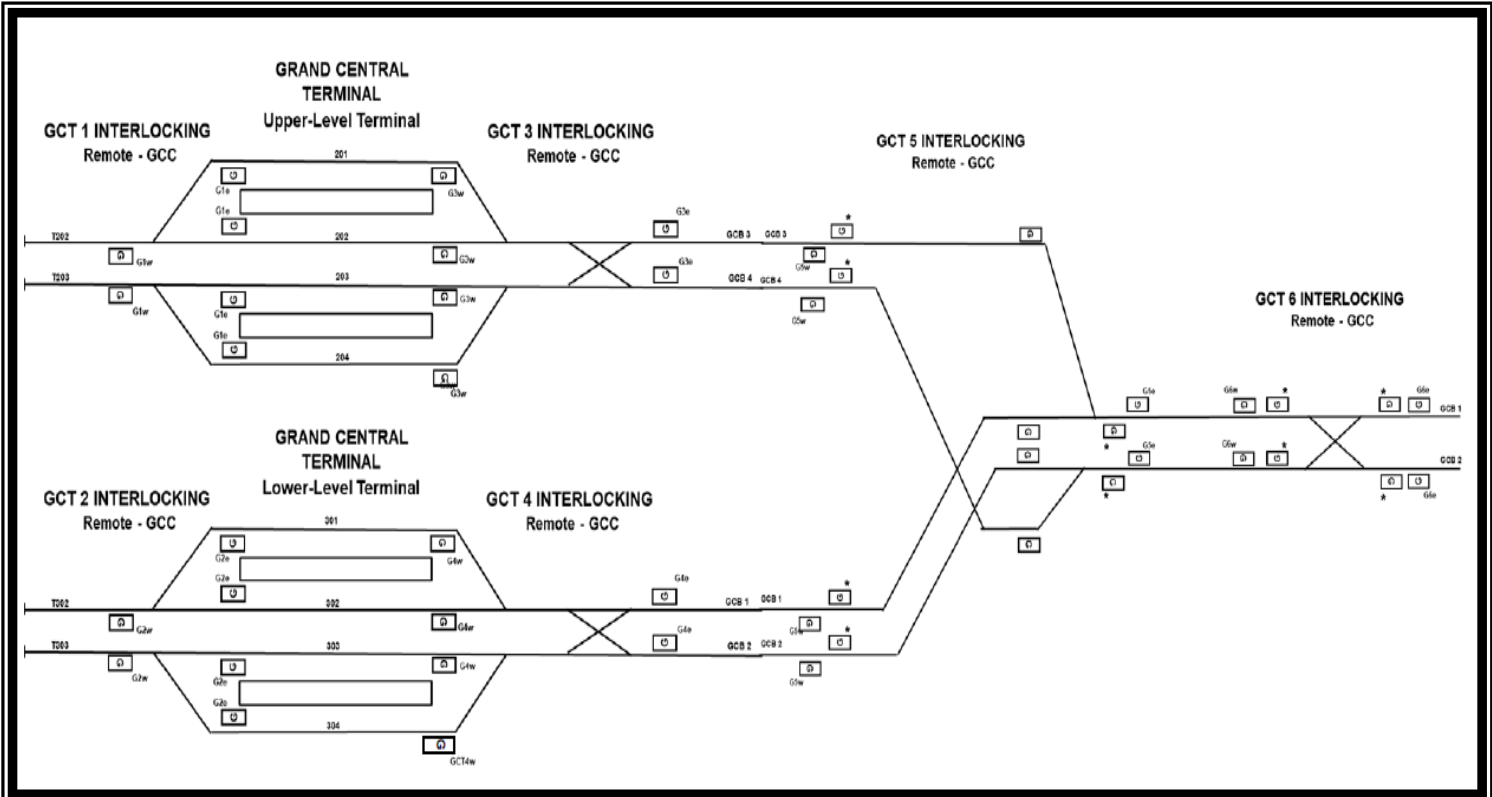
Physical Characteristics Training Aids



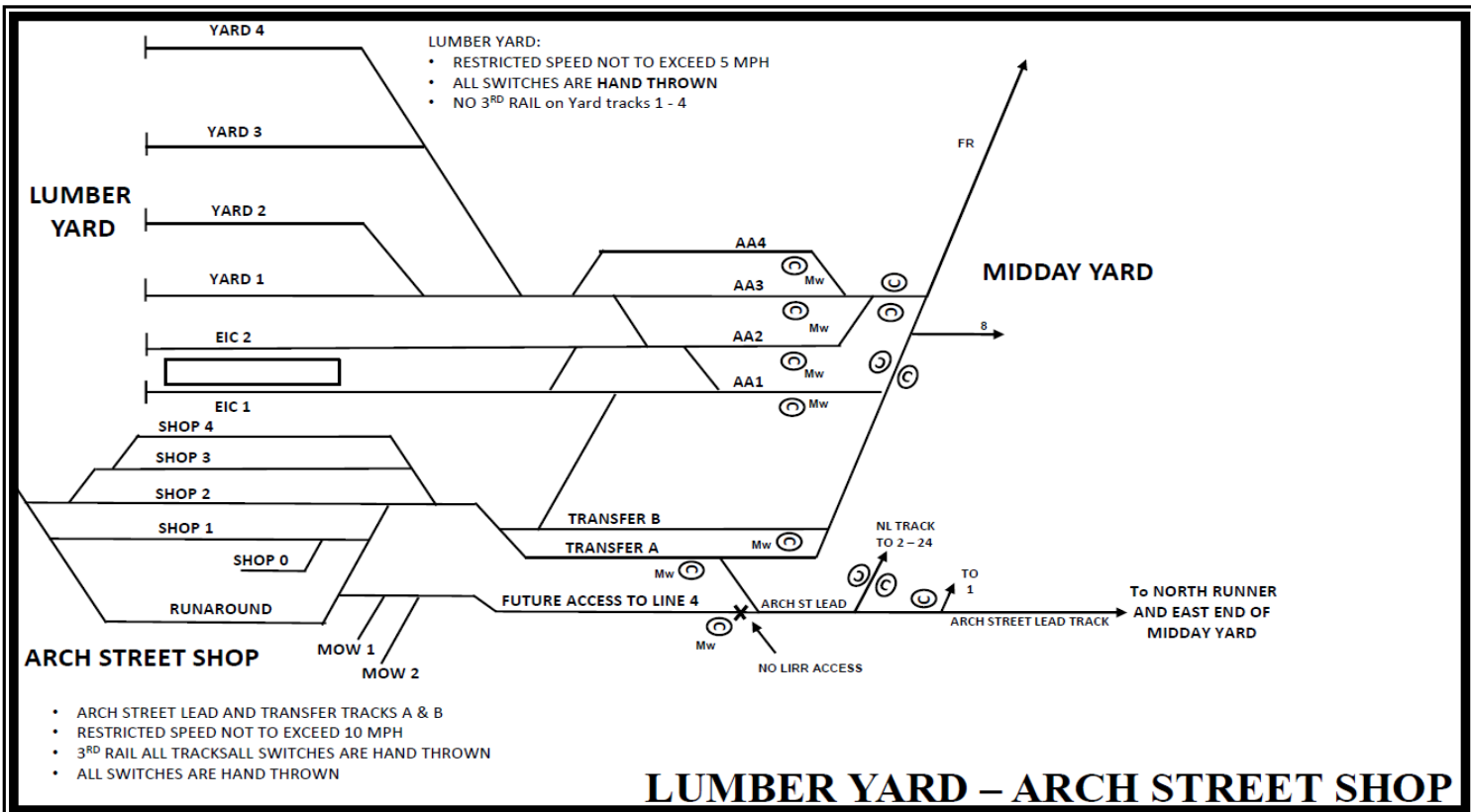
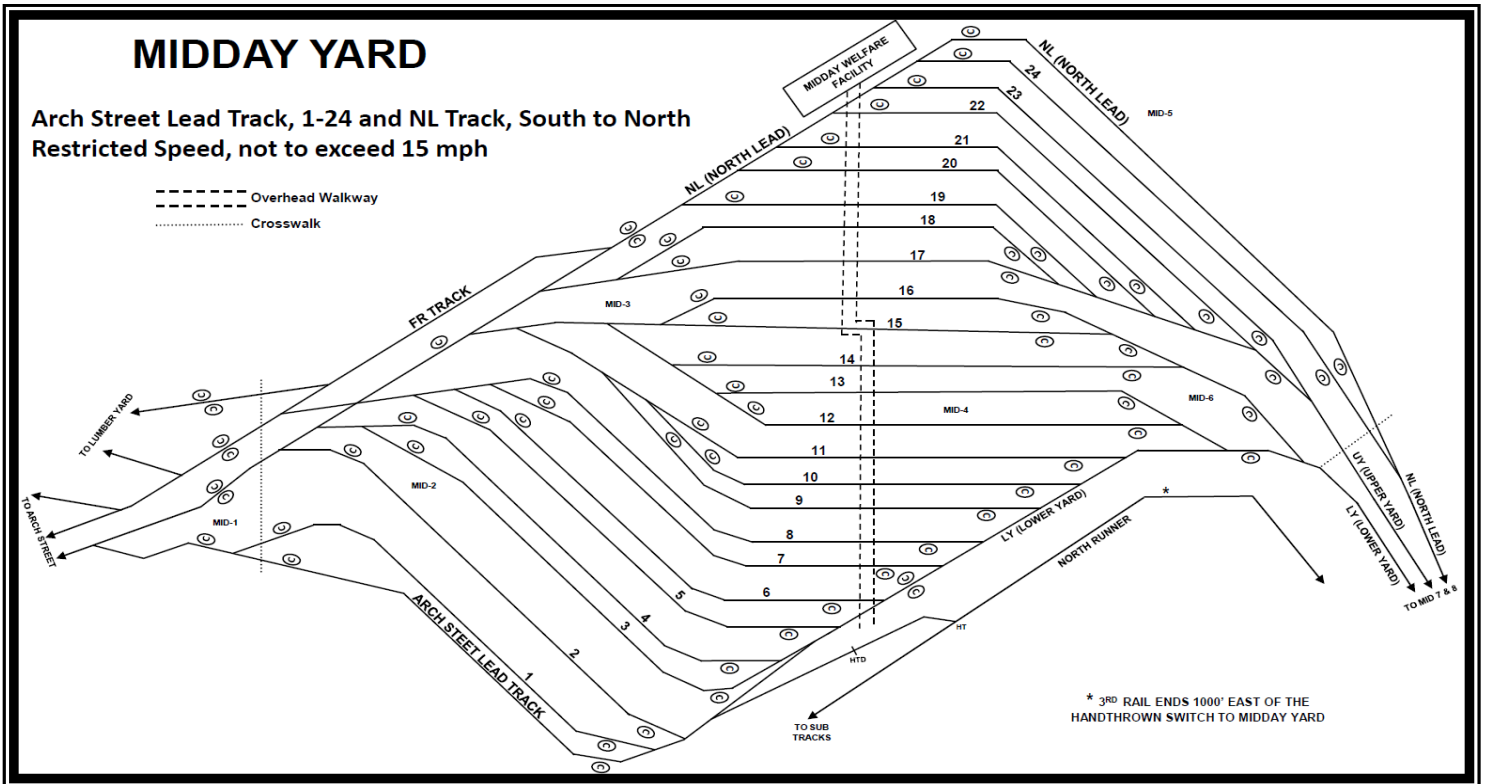
Physical Characteristics Training Aids





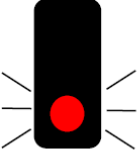

Physical Characteristics Training Aids



Physical Characteristics Training Aids



Physical Characteristics Training Aids

<h3><u>GCB Signals</u></h3>	
<p>299A</p>  <p>NAME: Proceed</p> <p>INDICATION: Proceed, governed by cab signal indications.</p> <p>NOTE: Indicates the next two (2) consecutive blocks are unoccupied.</p>	<p>299B</p>  <p>NAME: Reduced Proceed</p> <p>INDICATION: Proceed; governed by cab signal indications.</p> <p>NOTE: Indicates the next block is unoccupied.</p>
<p>298C</p>  <p>NAME: Stop and Proceed</p> <p>INDICATION: Stop, then proceed at Restricted Speed.</p>	<p>299D</p>  <p>NAME: Stop-signal</p> <p>INDICATION: Stop</p>

Fixed Signals Mid Interlocking

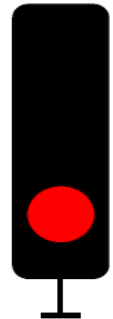
All signals in Mid Interlocking are 2 bulb color light low homes. They are capable of displaying 2 aspects:

-  Restricting
-  Stop Signal



NAME: Restricting

INDICATION: Proceed at Restricted speed



NAME: Stop-signal

INDICATION: Stop