

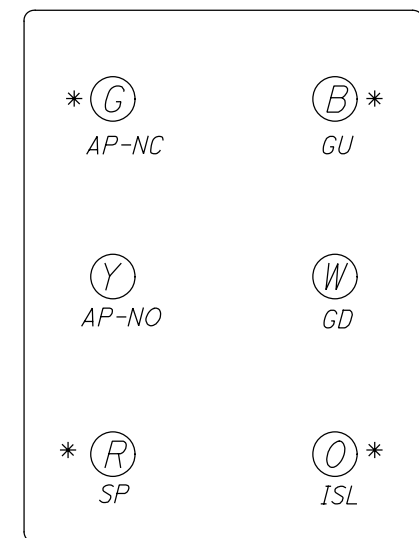
# PROCESSOR INTERFACE

## CONTROLLER UNIT CONNECTIONS

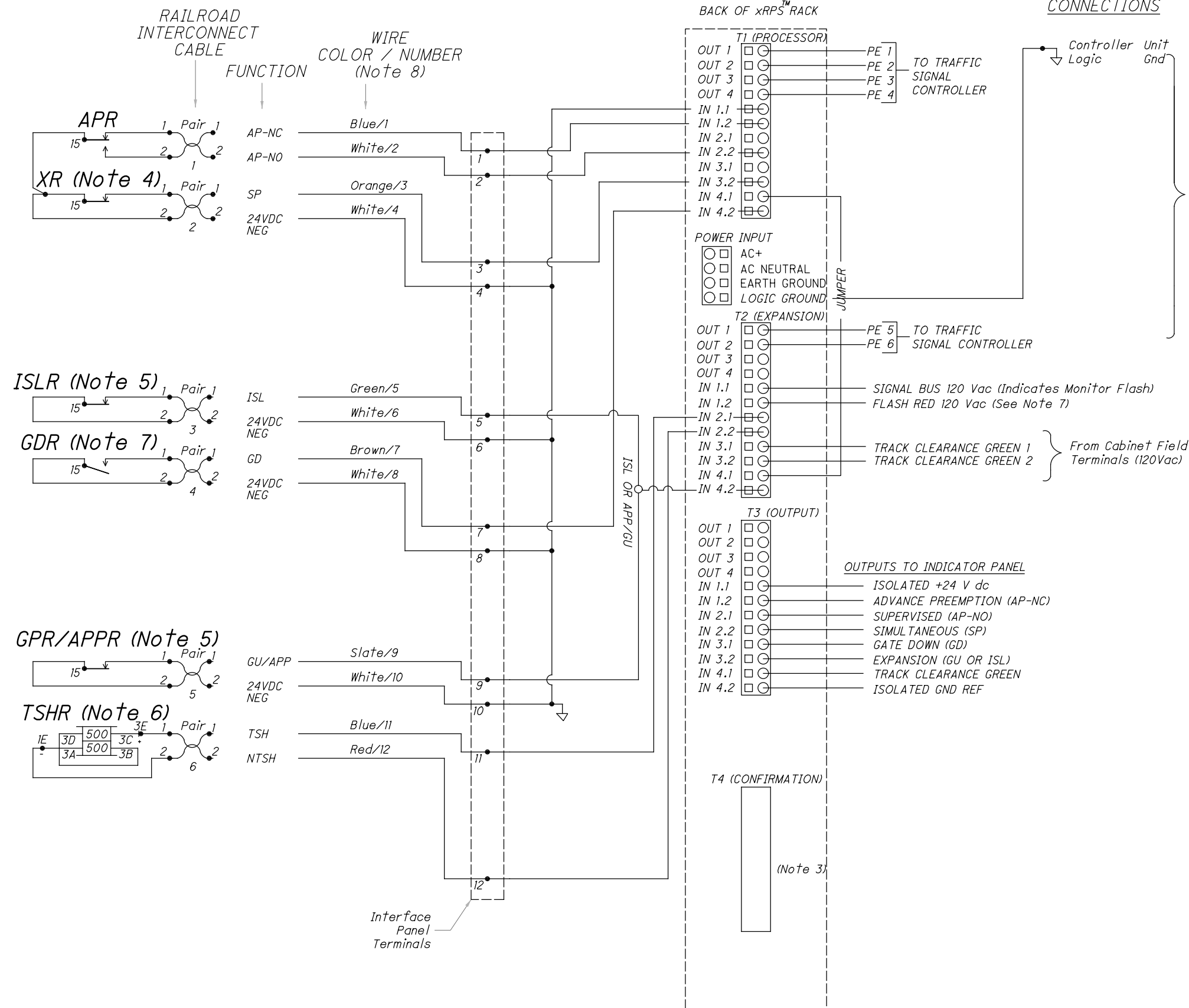
## NOTES:

- Unless specified otherwise in the Plans, install the PROCESSOR INTERFACE, as shown on page 1 of this drawing. It is the standard.
- The RELAY INTERFACE is an alternate method of construction to be used only when specified in the Plans.
- Provide xRPS Confirmation Module when specified in the Plans. Unless specified otherwise in the Plans, the confirmation light display will be as follows:
  - A. RRPE - all approaches flash 3 times over 600 ms followed by 600 ms off.
  - B. EVPE Selected Approach - steady ON.
  - C. EVPE Non-Selected Approach - 50% duty cycle, 1-second period flash.
- XR is not required when APR is used, unless required in the Plans for asserting a blackout sign, as per Note 7, or similar application, or if GDR is omitted. If XR is omitted, the 24 VDC NEG connection to the Railroad Interconnect Cable shall remain. When XR is omitted, wire White/4 shall be connected to the HEEL of APR.
- ISLR and GPR/APP are optional unless called for in the plans. If called for in the plans, the railroad shall connect the APPR (Advance Pederstian Preempt Relay) to be driven by the crossing controller motion detect output, providing the earliest possible notification to the traffic signal controller. The traffic signal controller then omits the PED phases indicated in the plans. See also Note 7.
- Use of TSHR by the railroad is optional. Active TSH and NTSH wires will be provided at the Interface Panel Terminals.
- Connect FLASH RED 120Vac to any controller phase field terminal RED that flashes red during Controller Flash.
- Label each wire with a number tag on each end of cable.

## INDICATOR PANEL (TYP)



\* DENOTES THAT INDICATION IS TYPICALLY LIT WHEN NO TRAIN IS PRESENT



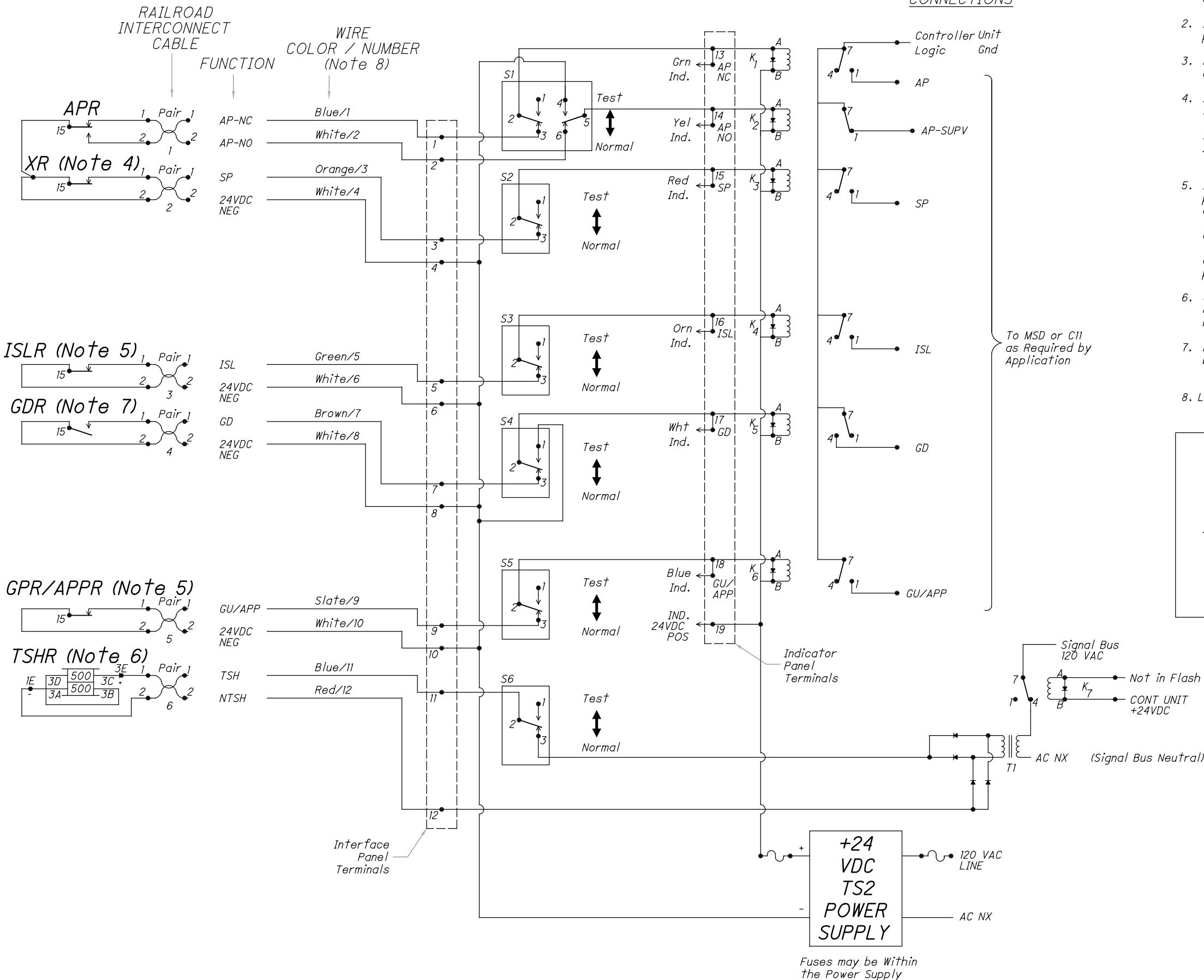
# RELAY INTERFACE

## CONTROLLER UNIT CONNECTIONS

### NOTES:

- Connections to relay pins 1 and 4 may be changed to accommodate specific controller units.
- Indicator panel to be provided for each railroad preemption interface panel.
- K7 is optional based on controller unit soft flash operation.
- XR is not required when APR is used, unless required in the Plans for asserting a blackout sign, as per Note 7, or similar application, or if GDR is omitted. If XR is omitted, the 24 VDC NEG connection to the Railroad Interconnect Cable shall remain. When XR is omitted, wire White/4 shall be connected to HEEL of APR.
- ISLR and GPR/APP are optional unless called for in the plans. If called for in the plans, the railroad shall connect the APPR (Advance Pederstian Preempt Relay) to be driven by the crossing controller motion detect output, providing the earliest possible notification to the traffic signal controller. The traffic signal controller then omits the PED phases indicated in the plans. See also Note 7.
- Use of TSHR by the railroad is optional. Active TSH and NTSH wires will be provided at the Interface Panel Terminals.
- For crossings not equipped with GDR, ISLR or XR may be used in place of GDR for the purpose of terminating Track Clearance Green (TCG).
- Label each wire with a number tag on each end of cable.

K1 - K7 = 788 XBX M4L-24D  
 Relay Socket = 70-463-1  
 Diodes = 1N4004  
 S1 = MTE 206 N  
 S2 - S6 = MTE 106 D  
 Interface Panel = WAGO #280-901 (or approved equal)  
 Terminal  
 T1 = Class 2 Transformer  
 10-12 VAC, 10-20 VA.  
 Hammond BC2DA (Typ.)



THIS DRAWING REPLACES TC-86.10 DATED 01-18-2019.

STANDARD ROADWAY CONSTRUCTION DRAWING

TC-86.10

RAILROAD PREEMPTION INTERFACE PANEL

OFFICE OF ROADWAY ENGINEERING

STATUS ENGINEER Duemmel

STATE OF OHIO DEPARTMENT OF TRANSPORTATION ADMINISTRATOR David L. Holstein

REVISION DATE 07-19-2019