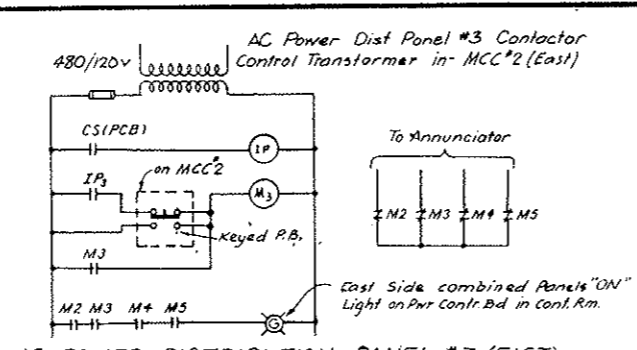
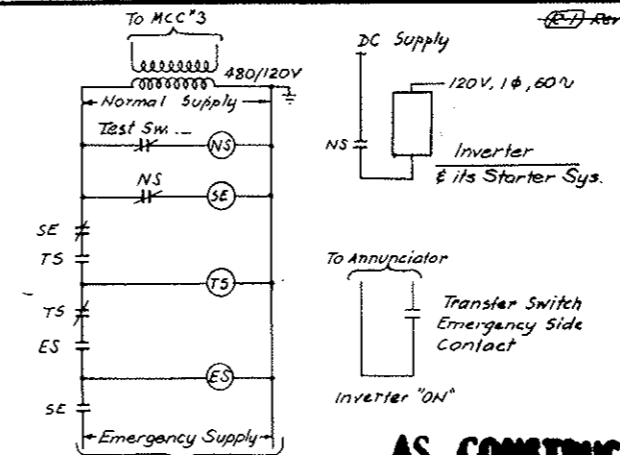


EMERGENCY GENERATOR 480V BREAKER #116 CONTROL
 Typical for breaker #12, #13, #14, #15, #17 & #18
 Except: omit relays or contacts marked *, they are only for Emergency Generator Breaker #118, 47, 27, 81 & 81-27X are located in Emergency Generator Control Board.
 Key interlock switches only for breaker #118.



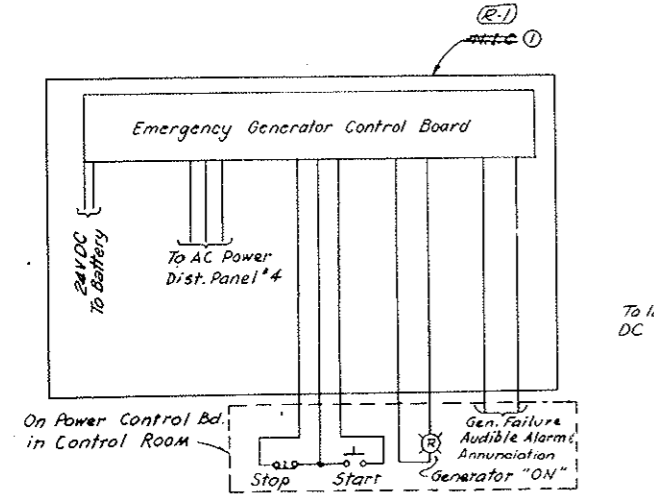
AC POWER DISTRIBUTION PANEL #3 (EAST) RESET SYSTEM & COMBINED IND. LIGHT
 (Typical for Panels #2, #4 & #5)
 Similar Control for West Panels Except Remote Control & Indication over Sup'v. Equip't



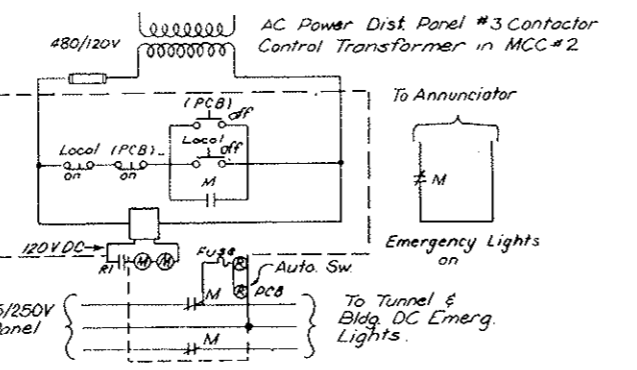
CO SYSTEM NORMAL EMERG. AUTO TRANSFER SWITCH
 (Mechanically Held)
 Circuit Shown as Normal Supply on

AS CONSTRUCTED
REVISED DATE Oct. 26, 1973

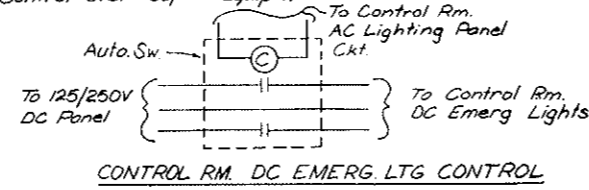
- LEGEND:**
- 27 - Undervoltage Relay
 - 47 - Reverse Phase Relay
 - 52 - AC Circuit Breaker
 - 52a - Aux. Sw. - Open when breaker is open
 - 52b - Aux. Sw. - Close when breaker is open
 - 81 - Frequency Relay
 - (81-27)X - Aux. Relay for 27 & 81 (Time delay closing)
 - CS - Control Switch
 - CS-C - Control Switch (Closing)
 - CS-T - Control Switch (Tripping)
 - CS-C - Control Switch with Key
 - IP - Panel interposing Relay with 4 Contacts each one on one Panel Reset Circuit.
 - M2, M3 - Contactors for Panels #2, #3, #4 & #5
 - ES - Emergency Source Supervising Relay
 - NS - Normal Source Supervising Relay
 - SE - Source Selector Relay
 - TS - Transfer Switch Operating Solenoid
 - Local - On MCC or on the board containing the equipment.
 - Remote - On "Power Control Board" in Control Room
 - 67 - AC Directional overcurrent Relay
 - 52C - Breaker Closing Relay
 - 52T - Trip Coil
 - PCB - Power Control Board in Control Room



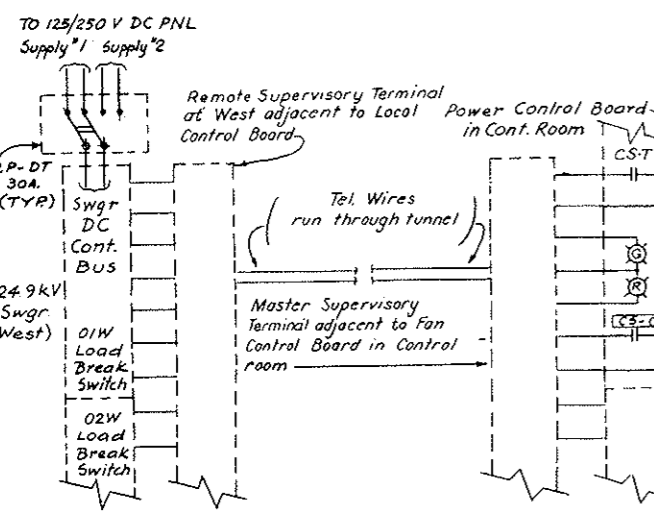
EMERGENCY GENERATOR AC-DC PWR SUPPLIES CONTROL & INDICATION



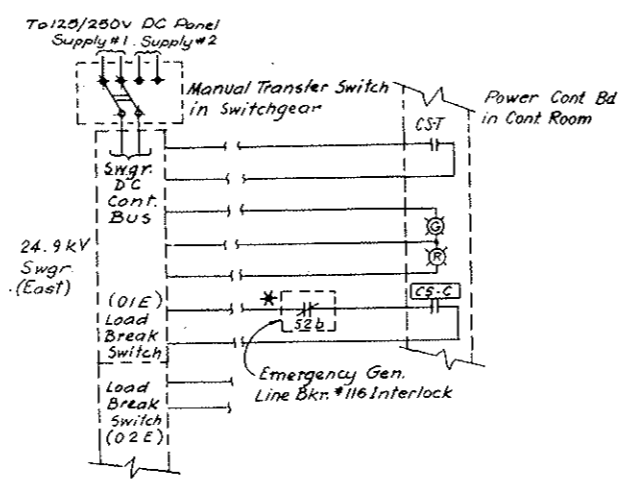
EAST BUILDING & HALF TUNNEL DC EMERGENCY LIGHTING CONTROL
 (Similar for West Bldg. & the other Half of the Tunnel, except Remote Control over Sup'v. Equip't)



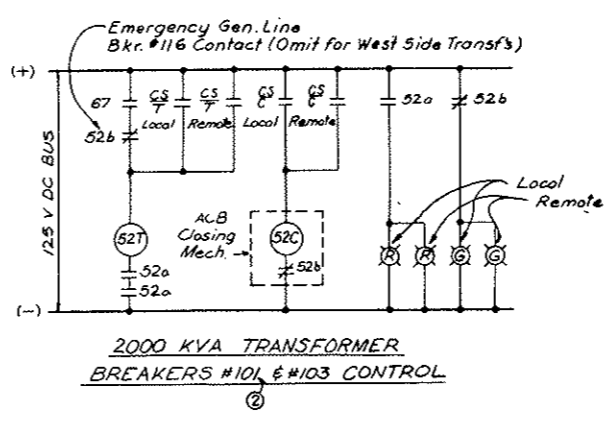
CONTROL RM. DC EMERG. LTG CONTROL



(01W) LOAD BREAK SWITCH CONTROL
 (02W), (03W) & (04W) Load Break Sw Control Similar



(01E) LOAD BREAK SWITCH CONTROL
 (02E), (03E), (04E) Load Break Sw Control Similar
 * Except: Omit 52b



NOTE A:
 Emergency Generator System, (Bid Item 100) Deleted, see W.O. M159-G Spec. 100-
 Emerg. Gen. Wiring N.I.G. but Conduit for Wiring is in this Contract, (Bid Item 107)

STATE OF COLORADO - DEPARTMENT OF HIGHWAYS STRAIGHT CREEK VEHICULAR TUNNEL PROJECT	
ELECTRICAL MISCELLANEOUS CONTROL & ELEMENTARY DIAGRAMS	
TIPPETTS - ABBETT - MCCARTHY - STRATTON ENGINEERS AND ARCHITECTS NEW YORK, N. Y.	
DESIGNED: N.A.S. DRAWN: S.J.E. CHECKED: D.H.D. SUBMITTED: [Signature]	RECOMMENDED: [Signature] APPROVED: [Signature]
NEW YORK, N. Y.	SCALE: NONE DATE: AUG. 1967