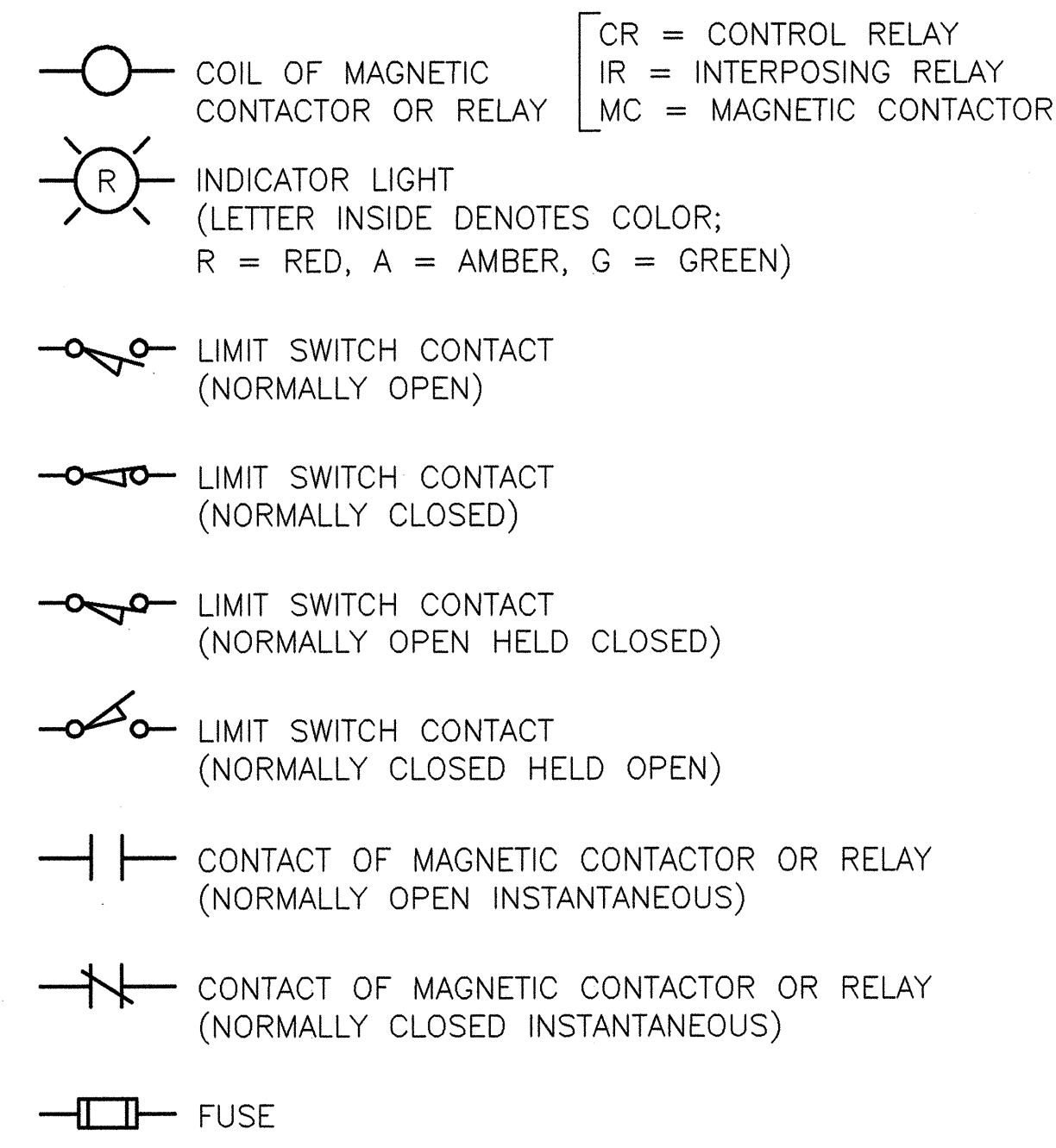
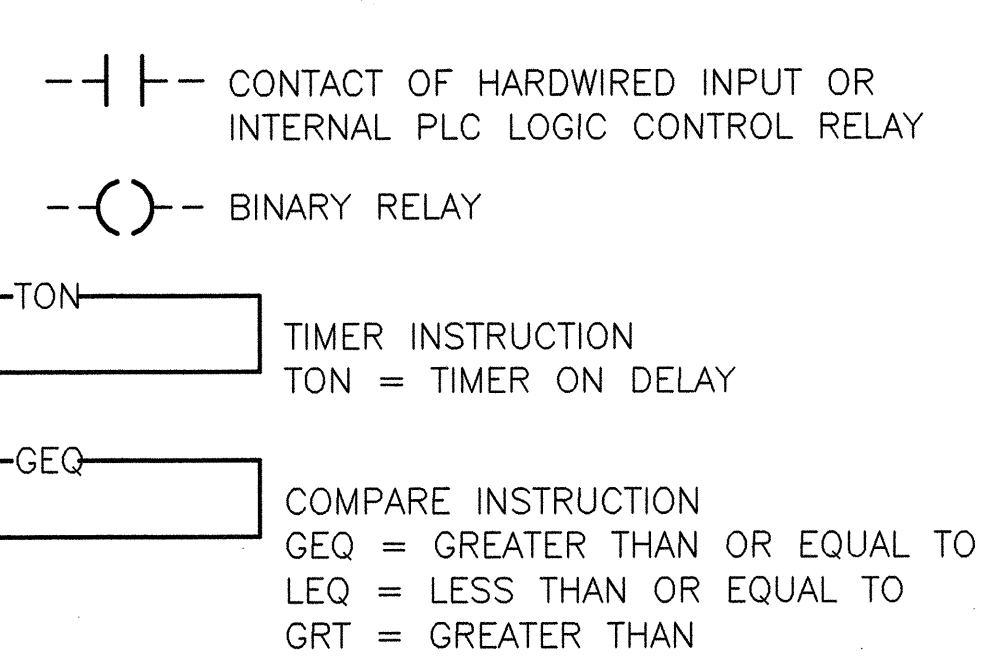


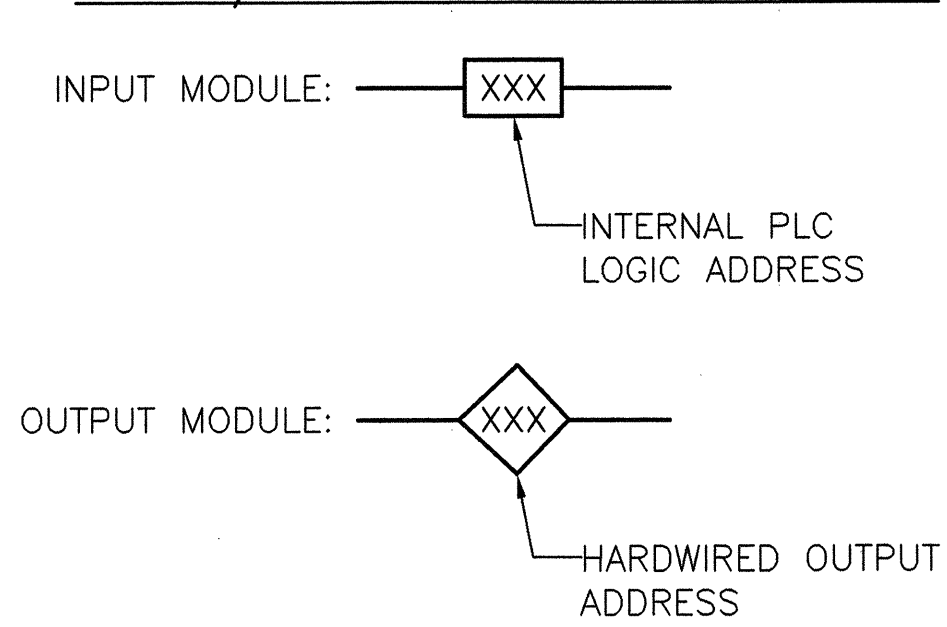
HARDWIRED SYMBOL LEGEND



INTERNAL PLC LOGIC SYMBOL LEGEND



PLC I/O ADDRESS ASSIGNMENT



GENERAL LEGEND

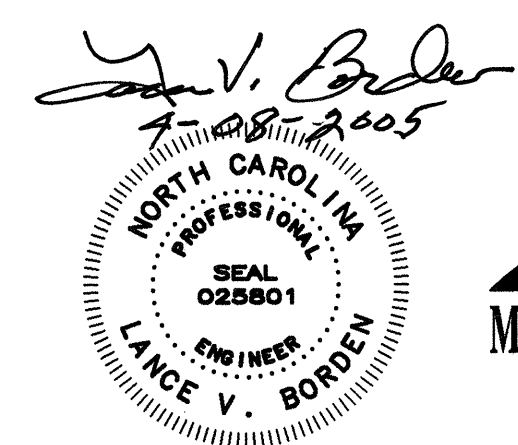
SYMBOL	DESCRIPTION
15KW	15KW GENERATOR
300KW	300KW GENERATOR
CP	CONTROL POWER
CR	CONTROL RELAY
CS	CONTROL SWITCH
DLK1	DRIVE EAST LOCKS
DLK2	DRIVE WEST LOCKS
GEQ	GREATER THAN OR EQUAL TO
I:	INPUT
IL	INDICATOR LIGHT
IR	INTERPOSING RELAY
LEB	LOWER EAST BARRIER
LEG	LOWER EAST GATE
LEQ	LESS THAN OR EQUAL TO
LS	LIMIT SWITCH
LWB	LOWER WEST BARRIER
LWG	LOWER WEST GATE
MC	MAGNETIC CONTACTOR
MDE1	MAIN DRIVE E1
MDE2	MAIN DRIVE E2
MDW1	MAIN DRIVE W1
MDW2	MAIN DRIVE W2
O:	OUTPUT
OL	OVERLOAD
PB	PUSH BUTTON
PLK1	PULL EAST LOCKS
PLK2	PULL WEST LOCKS
REB	RAISE EAST BARRIER
REG	RAISE EAST GATE
RMABE1	RELEASE EAST MACHINERY BRAKE 1
RMABE2	RELEASE EAST MACHINERY BRAKE 2
RMABW1	RELEASE WEST MACHINERY BRAKE 1
RMABW2	RELEASE WEST MACHINERY BRAKE 2
RMOBE	RELEASE EAST MOTOR BRAKE
RMOBW	RELEASE WEST MOTOR BRAKE
RWB	RAISE WEST BARRIER
RWG	RAISE WEST GATE
TMR	TIMER

LOGIC INPUT LEGEND

SYMBOL	DESCRIPTION	ADDRESS
15A	15KW GENERATOR POWER AVAILABLE	I:248
15GP	15KW GENERATOR POWER SUPPLYING LOAD	I:249
15NP	15KW GENERATOR NORMAL POWER SUPPLYING LOAD	I:247
300A	300KW GENERATOR POWER AVAILABLE	I:188
300GP	300KW GENERATOR POWER SUPPLYING LOAD	I:189
300NP	300KW GENERATOR NORMAL POWER SUPPLYING LOAD	I:187
BM	BUS MONITOR	I:153
CR-CP	CONTROL POWER	I:210
CS-CM (AUTO.)	CONTROL MODE - AUTOMATIC	I:115
CS-CM (MAN.)	CONTROL MODE - MANUAL	I:114
CS-EB (ON)	CONTROL POWER - ON	I:100
CS-EB (LOWER)	EAST BARRIER - LOWER	I:110
CS-EB (RAISE)	EAST BARRIER - RAISE	I:111
CS-EBTS (1)	EAST BRAKE TEST SELECT - 1	I:129
CS-EBTS (2)	EAST BRAKE TEST SELECT - 2	I:130
CS-EBTS (3)	EAST BRAKE TEST SELECT - 3	I:131
CS-EDS (NE)	EAST DRIVE SELECT - NORTHEAST	I:218
CS-EDS (SE)	EAST DRIVE SELECT - SOUTHEAST	I:219
CS-EG (LOWER)	EAST GATE - LOWER	I:106

CS-EG (RAISE)	EAST GATE - RAISE	I:107
CS-ER (BACKUP)	EAST RESOLVER - BACKUP	I:244
CS-ER (PRIMARY)	EAST RESOLVER - PRIMARY	I:243
CS-ETS (RED)	EAST TRAFFIC SIGNALS - RED	I:102
CS-L (EAST)	LEVELING - EAST	I:140
CS-L (WEST)	LEVELING - WEST	I:134
CS-SC (LOWER)	SPAN CONTROL - LOWER	I:125
CS-SC (RAISE)	SPAN CONTROL - RAISE	I:122
CS-SL (DRIVE)	SPAN LOCKS - DRIVE	I:118
CS-SL (PULL)	SPAN LOCKS - PULL	I:117
CS-SP (JOG)	SPEED - JOG	I:126
CS-SP (RUN)	SPEED - RUN	I:125
CS-WB (LOWER)	WEST BARRIER - LOWER	I:112
CS-WB (RAISE)	WEST BARRIER - RAISE	I:113
CS-WBTS (1)	WEST BRAKE TEST SELECT - 1	I:137
CS-WBTS (2)	WEST BRAKE TEST SELECT - 2	I:138
CS-WBTS (3)	WEST BRAKE TEST SELECT - 3	I:139
CS-WDS (NW)	WEST DRIVE SELECT - NORTHWEST	I:220
CS-WDS (SW)	WEST DRIVE SELECT - SOUTHWEST	I:221
CS-WG (LOWER)	WEST GATE - LOWER	I:108
CS-WG (RAISE)	WEST GATE - RAISE	I:109
CS-WR (BACKUP)	WEST RESOLVER - BACKUP	I:246
CS-WR (PRIMARY)	WEST RESOLVER - PRIMARY	I:245
CS-WTS (RED)	WEST TRAFFIC SIGNALS - RED	I:104
FTS	FOOT SWITCH	I:121
IR-FSNE	FULLY SEATED NORTHEAST	I:159
IR-FSNW	FULLY SEATED NORTHWEST	I:161
IR-FSSE	FULLY SEATED SOUTHEAST	I:158
IR-FSSW	FULLY SEATED SOUTHWEST	I:160
LS-EAXE (1A)	EAST AUXILIARY DRIVE CLUTCH - INTERLOCK	I:196
LS-EB (1A)	EAST BARRIER - LOWERED INDICATION	I:194
LS-EB (2A)	EAST BARRIER - TRAFFIC SIGNALS INTERLOCK	I:212
LS-EB (3A)	EAST BARRIER - RAISED INDICATION	I:195
LS-EG (3)	EAST GATE - TRAFFIC SIGNALS INTERLOCK	I:211
LS-EG (4)	EAST GATE - LOWERED INDICATION	I:190
LS-EG (5)	EAST GATE - RAISED INDICATION	I:191
LS-ESL1,2 (1)	EAST SPAN LOCK 1 & 2 - DRIVEN INDICATION	I:123
LS-ESL1,2 (2)	EAST SPAN LOCK 1 & 2 - PULLED INDICATION	I:119
LS-SC (4A)	SPAN CONTROL - FULLY OPEN STOP	I:156
LS-SC (5A)	SPAN CONTROL - OVERTRAVEL STOP	I:132
LS-SKE (1)	SKEW SWITCH EAST - CIRCUIT 1	I:230
LS-SKE (2)	SKEW SWITCH EAST - CIRCUIT 2	I:231
LS-SKE (3)	SKEW SWITCH EAST - CIRCUIT 3	I:232
LS-SKE (4)	SKEW SWITCH EAST - CIRCUIT 4	I:233
LS-SKE (5)	SKEW SWITCH EAST - CIRCUIT 5	I:234
LS-SKE (6)	SKEW SWITCH EAST - CIRCUIT 6	I:235
LS-SKW (1)	SKEW SWITCH WEST - CIRCUIT 1	I:236
LS-SKW (2)	SKEW SWITCH WEST - CIRCUIT 2	I:237
LS-SKW (3)	SKEW SWITCH WEST - CIRCUIT 3	I:238

LS-SKW (4)	SKEW SWITCH WEST - CIRCUIT 4	I:239
LS-SKW (5)	SKEW SWITCH WEST - CIRCUIT 5	I:240
LS-SKW (6)	SKEW SWITCH WEST - CIRCUIT 6	I:241
LS-WAXE (1A)	WEST AUXILIARY DRIVE CLUTCH - INTERLOCK	I:197
LS-WB (1A)	WEST BARRIER - LOWERED INDICATION	I:202
LS-WB (2A)	WEST BARRIER - TRAFFIC SIGNALS INTERLOCK	I:214
LS-WB (3A)	WEST BARRIER - RAISED INDICATION	I:203
LS-WG (3)	WEST GATE - TRAFFIC SIGNALS INTERLOCK	I:213
LS-WG (4)	WEST GATE - LOWERED INDICATION	I:192
LS-WG (5)	WEST GATE - RAISED INDICATION	I:193
LS-WSL1,2 (1)	WEST SPAN LOCK 1 & 2 - DRIVEN INDICATION	I:124
LS-WSL1,2 (2)	WEST SPAN LOCK 1 & 2 - PULLED INDICATION	I:120
MDE1-F	FAULT	I:226
MDE1-R	RUN	I:222
MDE2-F	FAULT	I:227
MDE2-R	RUN	I:223
MDW1-F	FAULT	I:228
MDW1-R	RUN	I:224
MDW2-F	FAULT	I:229
MDW2-R	RUN	I:225
OL-EB	EAST BARRIER	I:252
OL-EG	EAST GATE	I:250
OL-LK1	EAST SPAN LOCK	I:145
OL-LK2	WEST SPAN LOCK	I:146
OL-MABE1	EAST MACHINERY BRAKE 1	I:135
OL-MABE2	EAST MACHINERY BRAKE 2	I:136
OL-MABW1	WEST MACHINERY BRAKE 1	I:143
OL-MABW2	WEST MACHINERY BRAKE 2	I:144
OL-MOBE	EAST MOTOR BRAKE	I:133
OL-MOBW	WEST MOTOR BRAKE	I:141
OL-WB	WEST BARRIER	I:253
OL-WG	WEST GATE	I:251
PS-AS	ALARM SILENCE	I:154
PB-BBP	BARRIERS BYPASS	I:206
PB-BT	BRAKE TEST	I:128
PB-ES1	EMERGENCY STOP 1	I:101
PB-ES2	EMERGENCY STOP 2	I:254
PB-FOBP	FULLY OPEN BYPASS	I:215
PB-FR	FAULT RESET	I:242
PB-FSBP	FULLY SEATED BYPASS	I:127
PB-GBP	GATES BYPASS	I:204
PB-LDBP	LOCK DRIVEN BYPASS	I:217
PB-LPBP	LOCK PULLED BYPASS	I:216
PB-LT	LAMP TEST	I:157
PB-NS	NORMAL STOP	I:116
PB-SH	SIGNAL HORN	I:155



STATE OF NORTH CAROLINA			
DEPARTMENT OF TRANSPORTATION			
RALEIGH			
CAPE FEAR RIVER CROSSING			
WILMINGTON, NORTH CAROLINA			
CONTROL CIRCUIT LEGEND - 1			
DESIGNED	G.L. FASICK	DATE	APRIL, 2005
CHECKED	N.E. ALGER	DRAWING NO.	13 OF 53
DRAWN BY	R.L. REED	SCALE	NONE
DETAILED	R.L. REED	DATE	APRIL, 2005