

FILE PATH: Z:\CAD-Engineering - New (2011 & Newer)\Maine Projects\Franklin Towers (P664032801)_ISS Dwg\Original Dwg's & Calc's\FA_606.dwg

LAST SAVED BY: AUDELACRUZ

LAST PRINTED: 1/23/2018 1:30:05 PM

24" x 36" - A4/D Size

Channel	Description	Alarm Current	% Drop	Unit	Wire Length	Spare Current	Spare Voltage Drop
TLA3-1	FOURTEENTH FLOOR NOTIFICATION	1.140A	9.72%	19	804	62%	53%
TLA3-2	FIFTEENTH FLOOR NOTIFICATION	1.140A	10.08%	19	834	62%	51%
TLA3-3	SIXTEENTH FLOOR NOTIFICATION	1.200A	12.12%	20	924	60%	41%

ID/Bus Address	Device Type	PID	Setting	Custom Label (Max 40 Characters)	SWITCH SETTINGS								
					1	2	3	4	5	6	7	8	
TLA3-1-1	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1407	1-A3-1-1	X							ON
TLA3-1-2	ASTRB	4906-9256	15cd	FOURTEENTH FLR - EAST WING	1-A3-1-2	X							ON
TLA3-1-3	ASTRB	4906-9256	15cd	FOURTEENTH FLR - WEST WING	1-A3-1-3	X							ON
TLA3-1-4	ASTRB	4906-9256	15cd	FOURTEENTH FLR - WEST WING	1-A3-1-4	X							ON
TLA3-1-5	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1401	1-A3-1-5	X							ON
TLA3-1-6	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1403	1-A3-1-6	X							ON
TLA3-1-7	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1405	1-A3-1-7	X							ON
TLA3-1-8	ASTRB	4906-9256	15cd	FOURTEENTH FLR - WEST WING	1-A3-1-8	X							ON
TLA3-1-9	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1406	1-A3-1-9	X							ON
TLA3-1-10	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1404	1-A3-1-10	X							ON
TLA3-1-11	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1402	1-A3-1-11	X							ON
TLA3-1-12	ASTRB	4906-9256	15cd	FOURTEENTH FLR - WEST WING	1-A3-1-12	X							ON
TLA3-1-13	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1408	1-A3-1-13	X							ON
TLA3-1-14	ASTRB	4906-9256	15cd	FOURTEENTH FLR - EAST WING	1-A3-1-14	X							ON
TLA3-1-15	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1410	1-A3-1-15	X							ON
TLA3-1-16	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1414	1-A3-1-16	X							ON
TLA3-1-17	ASTRB	4906-9256	15cd	FOURTEENTH FLR - EAST WING	1-A3-1-17	X							ON
TLA3-1-18	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1411	1-A3-1-18	X							ON
TLA3-1-19	ASTRB	4906-9256	15cd	FOURTEENTH FLR - 1409	1-A3-1-19	X							ON
TLA3-1-20						X							ON

ID/Bus Address	Device Type	PID	Setting	Custom Label (Max 40 Characters)	SWITCH SETTINGS								
					1	2	3	4	5	6	7	8	
TLA3-2-1	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1507	1-A3-2-1	X							ON
TLA3-2-2	ASTRB	4906-9256	15cd	FIFTEENTH FLR - EAST WING	1-A3-2-2	X							ON
TLA3-2-3	ASTRB	4906-9256	15cd	FIFTEENTH FLR - WEST WING	1-A3-2-3	X							ON
TLA3-2-4	ASTRB	4906-9256	15cd	FIFTEENTH FLR - WEST WING	1-A3-2-4	X							ON
TLA3-2-5	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1501	1-A3-2-5	X							ON
TLA3-2-6	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1503	1-A3-2-6	X							ON
TLA3-2-7	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1505	1-A3-2-7	X							ON
TLA3-2-8	ASTRB	4906-9256	15cd	FIFTEENTH FLR - WEST WING	1-A3-2-8	X							ON
TLA3-2-9	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1506	1-A3-2-9	X							ON
TLA3-2-10	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1504	1-A3-2-10	X							ON
TLA3-2-11	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1502	1-A3-2-11	X							ON
TLA3-2-12	ASTRB	4906-9256	15cd	FIFTEENTH FLR - WEST WING	1-A3-2-12	X							ON
TLA3-2-13	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1508	1-A3-2-13	X							ON
TLA3-2-14	ASTRB	4906-9256	15cd	FIFTEENTH FLR - EAST WING	1-A3-2-14	X							ON
TLA3-2-15	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1510	1-A3-2-15	X							ON
TLA3-2-16	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1515	1-A3-2-16	X							ON
TLA3-2-17	ASTRB	4906-9256	15cd	FIFTEENTH FLR - EAST WING	1-A3-2-17	X							ON
TLA3-2-18	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1511	1-A3-2-18	X							ON
TLA3-2-19	ASTRB	4906-9256	15cd	FIFTEENTH FLR - 1509	1-A3-2-19	X							ON
TLA3-2-20						X							ON

ID/Bus Address	Device Type	PID	Setting	Custom Label (Max 40 Characters)	SWITCH SETTINGS								
					1	2	3	4	5	6	7	8	
TLA3-3-1	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1607	1-A3-3-1	X							ON
TLA3-3-2	ASTRB	4906-9256	15cd	SIXTEENTH FLR - EAST WING	1-A3-3-2	X							ON
TLA3-3-3	ASTRB	4906-9256	15cd	SIXTEENTH FLR - WEST WING	1-A3-3-3	X							ON
TLA3-3-4	ASTRB	4906-9256	15cd	SIXTEENTH FLR - WEST WING	1-A3-3-4	X							ON
TLA3-3-5	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1601	1-A3-3-5	X							ON
TLA3-3-6	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1603	1-A3-3-6	X							ON
TLA3-3-7	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1605	1-A3-3-7	X							ON
TLA3-3-8	ASTRB	4906-9256	15cd	SIXTEENTH FLR - WEST WING	1-A3-3-8	X							ON
TLA3-3-9	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1606	1-A3-3-9	X							ON
TLA3-3-10	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1604	1-A3-3-10	X							ON
TLA3-3-11	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1602	1-A3-3-11	X							ON
TLA3-3-12	ASTRB	4906-9256	15cd	SIXTEENTH FLR - WEST WING	1-A3-3-12	X							ON
TLA3-3-13	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1608	1-A3-3-13	X							ON
TLA3-3-14	ASTRB	4906-9256	15cd	SIXTEENTH FLR - EAST WING	1-A3-3-14	X							ON
TLA3-3-15	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1610	1-A3-3-15	X							ON
TLA3-3-16	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1616	1-A3-3-16	X							ON
TLA3-3-17	ASTRB	4906-9256	15cd	SIXTEENTH FLR - EAST WING	1-A3-3-17	X							ON
TLA3-3-18	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1611	1-A3-3-18	X							ON
TLA3-3-19	ASTRB	4906-9256	15cd	SIXTEENTH FLR - 1609	1-A3-3-19	X							ON
TLA3-3-20	ASTRB	4906-9256	15cd	SIXTEENTH FLR - ELEVATOR MACHINE RM	1-A3-3-20	X							ON
TLA3-3-21						X							ON

Starting Voltage:		29vdc
Min. Device Voltage:		23 vdc
Allowable % Drop:		20.7%
Primary Wire Gauge:		14ga
Home Run Wire Gauge:		14ga
Wire Res. Per Ft. @ 75 Celsius:		0.003070
Wire Res. Per Ft. @ 75 Celsius:		0.003070

Class B Calculations										
Branch	Device #	From	Distance (Feet)	PID	Setting	Device Current at Device	Voltage Drop	Voltage at Device	% Vdrop	Wire Length
1	TLA3-1-1	PANEL	141	4906-9256	15cd	0.0600	1.140	0.987	28.013	Branch 1: 9.72%
1	TLA3-1-2	TLA3-1-1	32	4906-9256	15cd	0.0600	1.080	0.212	27.801	Branch 1: 804
1	TLA3-1-3	TLA3-1-2	36	4906-9256	15cd	0.0600	1.020	0.225	27.575	
1	TLA3-1-4	TLA3-1-3	32	4906-9256	15cd	0.0600	0.960	0.189	27.387	
1	TLA3-1-5	TLA3-1-4	18	4906-9256	15cd	0.0600	0.900	0.099	27.287	
1	TLA3-1-6	TLA3-1-5	27	4906-9256	15cd	0.0600	0.840	0.139	27.148	
1	TLA3-1-7	TLA3-1-6	36	4906-9256	15cd	0.0600	0.780	0.172	26.976	
1	TLA3-1-8	TLA3-1-7	18	4906-9256	15cd	0.0600	0.720	0.080	26.896	
1	TLA3-1-9	TLA3-1-8	16	4906-9256	15cd	0.0600	0.660	0.065	26.831	
1	TLA3-1-10	TLA3-1-9	37	4906-9256	15cd	0.0600	0.600	0.136	26.695	
1	TLA3-1-11	TLA3-1-10	34	4906-9256	15cd	0.0600	0.540	0.113	26.582	
1	TLA3-1-12	TLA3-1-11	34	4906-9256	15cd	0.0600	0.480	0.100	26.482	
1	TLA3-1-13	TLA3-1-12	35	4906-9256	15cd	0.0600	0.420	0.090	26.392	
1	TLA3-1-14	TLA3-1-13	16	4906-9256	15cd	0.0600	0.360	0.055	26.336	
1	TLA3-1-15	TLA3-1-14	36	4906-9256	15cd	0.0600	0.300	0.066	26.290	
1	TLA3-1-16	TLA3-1-15	37	4906-9256	15cd	0.0600	0.240	0.055	26.236	
1	TLA3-1-17	TLA3-1-16	16	4906-9256	15cd	0.0600	0.180	0.018	26.218	
1	TLA3-1-18	TLA3-1-17	17	4906-9256	15cd	0.0600	0.120	0.013	26.205	
1	TLA3-1-19	TLA3-1-18	37	4906-9256	15cd	0.0600	0.060	0.014	26.192	
1	PANEL	TLA3-1-19	149	RETURN		0.0000	0.000	0.000	26.192	

Starting Voltage:		29vdc
Min. Device Voltage:		23 vdc
Allowable % Drop:		20.7%
Primary Wire Gauge:		14ga
Home Run Wire Gauge:		14ga
Wire Res. Per Ft. @ 75 Celsius:		0.003070
Wire Res. Per Ft. @ 75 Celsius:		0.003070

Class B Calculations										
Branch	Device #	From	Distance (Feet)	PID	Setting	Device Current at Device	Voltage Drop	Voltage at Device	% Vdrop	Wire Length
1	TLA3-2-1	PANEL	156	4906-9256	15cd	0.0600	1.140	1.092	27.908	Branch 1: 10.08%
1	TLA3-2-2	TLA3-2-1	32	4906-9256	15cd	0.0600	1.080	0.212	27.696	Branch 1: 834
1	TLA3-2-3	TLA3-2-2	36	4906-9256	15cd	0.0600	1.020	0.225	27.470	
1	TLA3-2-4	TLA3-2-3	32	4906-9256	15cd	0.0600	0.960	0.189	27.282	
1	TLA3-2-5	TLA3-2-4	18	4906-9256	15cd	0.0600	0.900	0.099	27.182	
1	TLA3-2-6	TLA3-2-5	27	4906-9256	15cd	0.0600	0.840	0.139	27.043	
1	TLA3-2-7	TLA3-2-6	36	4906-9256	15cd	0.0600	0.780	0.172	26.871	
1	TLA3-2-8	TLA3-2-7	18	4906-9256	15cd	0.0600	0.720	0.080	26.791	
1	TLA3-2-9	TLA3-2-8	16	4906-9256	15cd	0.0600	0.660	0.065	26.726	
1	TLA3-2-10	TLA3-2-9	37	4906-9256	15cd	0.0600	0.600	0.136	26.590	
1	TLA3-2-11	TLA3-2-10	34	4906-9256	15cd	0.0600	0.540	0.113	26.477	
1	TLA3-2-12	TLA3-2-11	34	4906-9256	15cd	0.0600	0.480	0.100	26.377	
1										