



DO NOT SCALE DRAWINGS

Revision/	Description/Description	Date/Date
3	ISSUED FOR CONSTRUCTION	16/03/11
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Client/client
TRANSPORT CANADA PROGRAMS GROUP

EDMONTON, ALBERTA

Project title/Titre du projet
CHURCHILL AIRFIELD LIGHTING SYSTEM REPLACEMENT

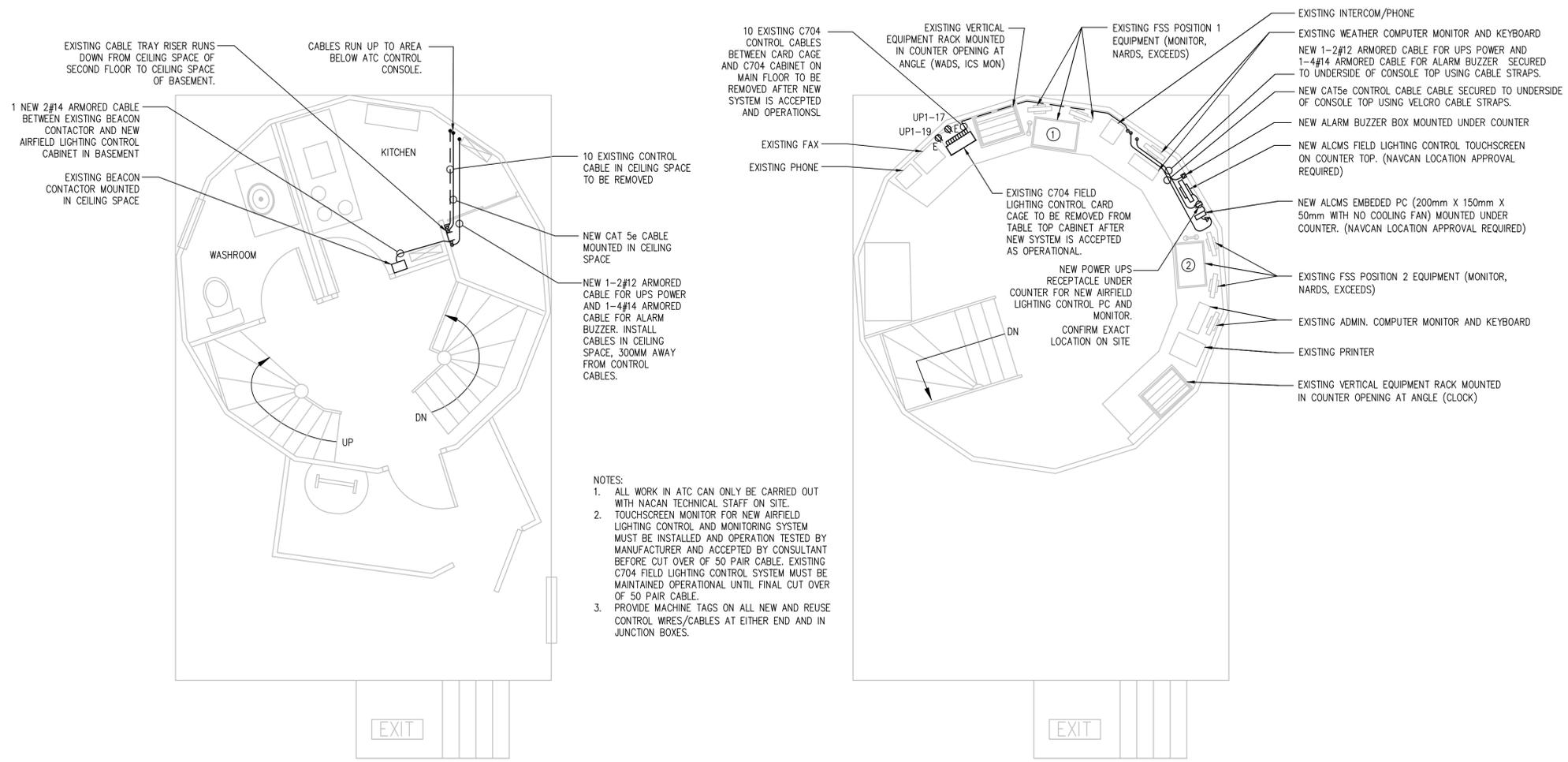
CHURCHILL, MANITOBA

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Drawing title/Titre du dessin
AIR TRAFFIC CONTROL (ATC) TOWER AIRFIELD LIGHTING CONTROL EQUIPMENT LAYOUT SECOND AND THIRD FLOOR PLANS

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1 TOWER SECOND LEVEL
E-4 1:50

2 TOWER THIRD LEVEL
E-4 1:50

- NOTES:
- ALL WORK IN ATC CAN ONLY BE CARRIED OUT WITH NACAN TECHNICAL STAFF ON SITE.
 - TOUCHSCREEN MONITOR FOR NEW AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM MUST BE INSTALLED AND OPERATION TESTED BY MANUFACTURER AND ACCEPTED BY CONSULTANT BEFORE CUT OVER OF 50 PAIR CABLE. EXISTING C704 FIELD LIGHTING CONTROL SYSTEM MUST BE MAINTAINED OPERATIONAL UNTIL FINAL CUT OVER OF 50 PAIR CABLE.
 - PROVIDE MACHINE TAGS ON ALL NEW AND REUSE CONTROL WIRES/CABLES AT EITHER END AND IN JUNCTION BOXES.

- PLC CONTROL LOGIC NOTES:
- PLC TO HAVE MANUAL OVERRIDE (PASS CODE PROTECTED FOR MAINTENANCE STAFF ONLY) TO ALLOW EQUIPMENT AT BOTH ENDS OF THE RUNWAY TO OPERATE SIMULTANEOUSLY.
 - PROVIDE 2 SEPARATE DRY CONTACTS FOR SIGNAL TO RVR WHEN BRIGHTNESS B4 AND B5 ARE SELECTED AND RUNWAY LIGHTS ARE ON.

ITEM	DESCRIPTION	TOUCHSCREEN BUTTONS	DETAIL NOTES	DISPLAY ON/OFF CONDITION ON RUNWAY LAYOUT GRAPHIC	DISPLAY SELECTION CONDITION ON PUSHBUTTON GRAPHIC
1	MEDIUM INTENSITY RUNWAY 07/25 EDGE LIGHTS	ON OFF	ON OR OFF (RWY 07/25 CCR)	YES	ON/OFF
2	BRIGHTNESS SELECT ION IF RUNWAY 07/25 IF IS ON	B1 B2 B3	SELECT ONE BRIGHTNESS BUTTION (FOR RWY 07/25 CCR), ENABLED IF RUNWAY 07/25 IS SELECTED IN LINE ITEM 1		B1/B2/B3
3	RUNWAY 07/25 END APPROACH SELECTION	07 END 25 END OFF	ENABLES ONLY APPROACH LIGHTING AT ONE END OF THE RUNWAY TO BE ACTIVE AT ONE TIME OR TURN ALL OFF		07/25/OFF
4	PAPI 07/25	ON OFF	ON OR OFF (PAPI 07 CCR OR 25 CCR), ONLY PAPI AT ONE END WILL TURN ON (AS SELECTED IN LINE ITEM 3)	YES	ON/OFF
5	BRIGHTNESS SELECTION IF PAPI 07/25 IS ON	B1 B2 B3	SELECT ONE BRIGHTNESS BUTTION (FOR PAPI 07 OR 25 CCR), ENABLED IF PAPI 07/25 IS SELECTED IN LINE ITEM 4		B1/B2/B3
6	RTL 25	ON OFF	ON OR OFF (RTL CONTACTOR) ENABLED ONLY IF RUNWAY END 25 IS SELECTED IN ITEM 3	YES	ON/OFF
7	HIGH INTENSITY RUNWAY 15/33 EDGE LIGHTS	ON OFF	ON OR OFF (RWY 15/33 CCR#1 AND CCR#2)	YES	ON/OFF
8	BRIGHTNESS SELECT ION IF RUNWAY 15/33 IF IS ON	B1 B2 B3 B4 B5	SELECT ONE BRIGHTNESS BUTTION (FOR RWY 15/33 CCR'S), ENABLED IF RUNWAY 15/33 IS SELECTED IN LINE ITEM 8. (SEE PLC CONTROL LOGIC NOTE 2)		B1/B2/B3/B4/B5
9	RUNWAY 15/33 END APPROACH SELECTION	15 END 33 END OFF	ENABLES ONLY APPROACH LIGHTING AT ONE END OF THE RUNWAY TO BE ACTIVE AT ONE TIME OR TURN ALL OFF		15/33/OFF
10	PAPI 15	ON OFF	ON OR OFF (PAPI 15 CCR), PAPI WILL ONLY TURN ON ONLY IF RUNWAY END 15 IS SELECTED (AS SELECTED IN LINE ITEM 10)	YES	ON/OFF
11	BRIGHTNESS SELECTION IF PAPI 15 IS ON	B3 B4 B5	SELECT ONE BRIGHTNESS BUTTION (FOR PAPI 15 CCR), ENABLED IF PAPI 15 IS SELECTED ON IN LINE ITEM 11		B3/B4/B5
12	SSALR 33 STEADY BURNING LIGHTS	ON OFF	ON OR OFF (SSALR STEADY CCR) LINE ITEM 10 MUST BE ON 33 END	YES	ON/OFF
13	BRIGHTNESS SELECT ION IF SSALR 33 STEADY IF IS ON	B1 B2 B3 B4 B5	SELECT ONE BRIGHTNESS BUTTION (FOR SSALR 33 STEADY CCR), ENABLED IF RUNWAY 15/33 IS SELECTED IN LINE ITEM 13		B1/B2/B3/B4/B5
14	SSALR 33 STROBE LIGHTS	ON OFF	ON OR OFF (SSALR STROBE CCR) CAN ONLY GO ON IF SSALR 33 STEADY (LINE ITEM 13) IS ON	YES	ON/OFF
15	BRIGHTNESS SELECTION FOR SSALR 33 STROBE LIGHTS	B1 B1 B2 B3 B3	BRIGHTNESS TO AUTOMATICALLY FOLLOW SSALR 33 STEADY BRIGHTNESS BUT CAN BE INDEPENDENTLY ADJUSTED IF NEEDED		B1/B2/B3/B4/B5
16	RTL 15	ON OFF	ON OR OFF (RTL CONTACTOR) ENABLED ONLY IF RUNWAY END 15 IS SELECTED IN ITEM 10	YES	ON/OFF
17	MEDIUM INTENSITY TAXIWAY A, B, C EDGE LIGHTS	ON OFF	ON OR OFF (TAXI A,B,C CCR)	YES	ON/OFF
18	ROTATING BEACON	ON OFF	ON OR OFF CONTROLLING CONTACTOR IN ATC	YES	ON/OFF
19	DE-ICING AREA FLOODLIGHTS	ON OFF	ON OR OFF CONTROLLING CONTACTOR IN FEC	YES	ON/OFF
20	IPU RUNNING	SILEN CE	ALARM INDICATION ON TOUCHSCREEN - IPU RUNNING	YES	RUNWAY LIGHTING ON IPU POWER
21	FEC FIRE ALARM	SILEN CE	ALARM INDICATION ON TOUCHSCREEN - FEC FIRE ALARM	YES	FEC FIRE ALARM

3 PLC CONTROL LOGIC
E-4 NTS

