Civic Hall Management Committee 27th January 2021

Report author: Janet Wheeler



Progress report on the Civic Hall heating

Background

Following the concerns over the excessively high heating bills and the on-going costs of maintaining the Civic Hall boilers – a decision was taken to enter into a management agreement with Controlco. Controlco specialise in the operation of BMS (Business Management System) – the software that allows control of the boilers and the distribution of heating throughout the Civic Hall.

Detailed consideration

One of the key requests to Controlco was to integrate the software from the old Windows 7 laptop – now unsupported – and get the software transferred onto our new Windows 10 system. Controlco worked with MFG to make this happen the first week in January.

In addition to this work, our management contract allows for two physical visits per year (Winter and Summer) to ensure that the software is working correctly with the physical boiler and to optimum capability.

The aim is to achieve comfortable room temperatures which can be easily adjusted according to the activity. The aim is also to ensure an efficient heating system which is as cost effective as possible for this large public building.

The attached two reports gives the Committee the detail of what was carried out during this first visit. In addition, Controlco spent another day this week continuing to monitor and adjust the software and another more detailed report will follow. They now have a log of every adjustment that has been carried out on the heating dating back to 2013 – in a bid to fully understand what has been done to the software in the past.

There is evidence of the boiler controls being manually over-ridden on multiple occasions and creating an imbalance which puts undue stress on the physical boiler. The detail is in the report and the next report will clarify the work of this engineer.

Recommendation

- That the Committee notes the above considerations and agrees that such a policy will be more difficult to administer than the funds it may raise.
- That the Committee gives permission for the Town Clerk to review our energy tariff in a bid to save some money. It has now been clarified that because the Civic Hall is part of Didcot Town Council – the tariff the hall was due to join in April 2023 is void and we will be able to re-negotiate for the best possible rate.

Delegated authority

Under Standing Order 100, the administration of the Civic Hall is delegated to this standing Committee.

Legal and risk Implications

The Council is required to arrange for the proper administration of its financial affairs: this will include regular reporting.

The Accounts and Audit Regulations require local councils to ensure that financial management is adequate and effective and have a sound system of internal control.

Janet Wheeler Town Clerk

Job Number /	Reference:	CM-2130801	Site Report		Job Complete?	ΥΥ
Customer:	Didcot Civic Hall				Revisit Required?	N
Site Address:	Britwell Road, Didcot,	OX11 7JN				
Brief Outline C	Of Works:			1916	4	TM
Boiler Panel Pl	PM visit				contr changing bm	
Date:	changing bms for good 07.01.21 Engineer: Fionn O'Shea					

Description Of Work Carried Out:

- (1) No drawings available
- (2) CB15 & CB16 are tripped or isolated within the Panel. Cannot determine their function due to a lack of drawings so have left them isolated and informed the client of this
- (3) Emergency Stop button at Plantroom entrance actibvates the safety circuit closing the Gas Solenoid as expected
- (4) Connected sensors reading live values with the exception of Hall area room sensor. Plantroom sensors and outside sensor checked and calibrated for acuracy
- (5) Civic Hall & New Extension Heating System Pump had been manually overridden with software. Reset back to automatic control.
- (6) New Extension manual override on Panel selector switch reset back to automatic control
- (7) Civic Hall, New Extension & Council Offices Heating valves had all been manually overridden from within software. Checked that they were responsive through the full range and that they were being controlled correctly by their relevant control loops before reverting them back to automatic control
- (8) Lower overall temperature observed in the New Extension Room temperature than the other 2 area. Setpoints for the VT Heating are in line with the other 2 VT Heating Systems
- (9) VT Heating sytems are performing in line with optimisation settings within BMS strategy and controlling the system effectively to variable setpoint
- (10) Checked Temperature and CO2 control loops aon connected areas from Main Controller. All equipment modulating correctly to setpoint adjustment of temperature and CO2 values
- (11) Hall area however looks to have a disconnected or faulty sensor as the reading is consistently showing a -30 deg C substitution value and causing a constant Minimum Limit alarm to be present. This temperature value is calling for constant heating of this area. Further investigation required
- (11) Frost settings checked as active when required and correctly activating connected Heating Plant
- (12) HWS system had been set to not come on for more than an hour on Tuesdays. Rest to activate as per weekly schedule
- (13) Boiler system running well and adhering to setpoint adjustment and frost settings. Boiler 1 only had been manually overridden to output at 100%. Reverted back to automatic modulation
- (14) Pressurisation Units Running without fault and maintaining 1.5 bar system pressures
- (15) Kitchen Supply and Extract Fans indicate that the Extract Fan is isolated locally during service visit
- (16) System backup taken following setpoint resetting and time schedule changes
- (17) Cleared alarms in Main Controller in Boiler Room. Boiler Panel running under automatic control. AHU Panels 2 & 3 show evidence of manual overrides present. To be reverted back to automatic control on next service visit if possible once checked

Date:	Start Time	Finish Time	Travel Time	Total Hours	Engineers Present
07.01.21	14.00	17.00	1.50	4.50	FO
Customers Name:		Signature:			
Position Held:			Date:		

Job Number /	Reference:	MW-201202	Site Report	Job Complete?	Υ	
Customer:	Didcot Civic Hall	•		Revisit Required?	N	
Site Address: Brief Outline (Britwell Road, Didcot, Of Works:	OX11 7JN			MT	
Management	Station software reloa	d & BMS upgrade s	controlco changing bms for good			
Date:	07.01.21	Engineer:	Fionn O'Shea			

Description Of Work Carried Out:

- (1) Checked Main Controller software via scanning locally. No errors found
- (2) No Panel drawings available for project. Took a record of all mechanical drawings available
- (3) Took full archive. Saving of simulation settings not possible
- (4) Network connection to Main Controller is via client network connection. Connection between AHU 1 & AHU2 Controllers and Main Controller is a twin cable serial bus connection
- (5) Investigated possibility of connecting future Blue ID Sub Controllers 2 & 3 for AHU 1 & 2 to the client network via IP. AHU1 (located in the basement) has no local network point to connect to though there are some in an adjacent room. AHU2 is located outside with the same communication configuration
- (6) Set up TC Vision management station access from Main Office. As there is a dedicated computer for TC Vision but no account set up for maintenance personel I added access for 2 users via TC Vision from this management station. All controllers visible and
- (7) Adjusted alarm settings to clarify relevant alarms. AHU1 & 2 Panels have intermittent comms issues but are visible from the head end. Deselected Modem and Communication messages at the request of the client as the AHU systems are both live and the Message Centre was impossible to interrogate effectively in TC Vision as it was set up
- (8) Completed client run through for clearing alarms from TC Vision
- (9) TC Vision installation and Priva project file for the system left on Shared Documents drive on Management station computer

Date:	Start Time	Finish Time	Travel Time	Total Hours	Engineers Present
07.01.21	8.30	14.00	1.50	6.50	FO
\$400,000,000 to \$1,000,000 to \$1,000,000 to \$1,000,000					
Customers Nam	ne:		Signature:		
Position Held:			Date:		