

MECHANICAL SERVICES

EQUIPMENT SCHEDULE

FOR

CARRICK-ON-SHANNON

COMMUNITY SCHOOL

AT

CO LEITRIM

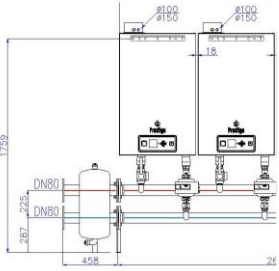
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DATE: July 2026
REF: 2860/M/ES/01

SCHEDULE REF.	EQUIPMENT DETAILS
A	Boilers
B	Boiler Flues
C	Pumps
D	Radiators
E	Sanitary Ware (Provided by builder) Contractor to take possession of same & install.
F	Heat Recovery Units
G	Fans
H	Grilles
I	External Wall Louvres
J	TMVs (Thermostatic Mixing Valves)
K	Meters
L	Control Valve
M	Fire Fighting Equipment
N	Gas Water Heater
O	Gas Detection
P	Cold Water Storage Tank
Q	Radiant Panel

BOILER SCHEDULE 1 of 1				PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'A' SIG: FC CHECKED: NOK
REF No.	SERVICE	Flow rate per boiler	Duty	COMMENTS
BLR01 & 2	Type: 2 No LPG fired condensing boilers to be provided in a cascade (TL3 Arrangement) on mounting frame. The LTHW generation system shall come as a complete package including boilers; pump connection sets, interconnecting pipework, isolation valves, gauges & accessories, fully automated controls, cascade boiler frame and controller. Boilers/Cascade controller to come complete with Modbus connections and accessories for BMS integration. Temperature: 75/55°C 	1.43	60kW/unit	Components: Gas fired condensing boiler Cascade rotation-controlled boilers c/w automatic modulation. Duty – 60 kw Seasonal Efficiency – 95.90% External Finish – Acrylic painted steel plate – Munsell 5Y 6/1. Electrical Supply – 230v, 50Hz single phase Low NOx Annual Emission Levels of ≤24mg/kWh (dry, 0 % oxygen) (Class 6). Hydrogen 20% - Certified Heat exchanger with plasma polymerisation surface ensuring minimal cleaning. All parts to be serviceable from the front. Energy Management System (EMS) controls Fully modulating 18 to 100% (5:1). Working pressure 3 bar. Noise level 52 dB(A) @ 1m. 1 No. Modular Boiler 3-way Frame kit c/w flow, return headers into a low loss header and Gas pipe header. 1x MCM module c/w an outside sensor for link to BMS. 1 No inline Strainer. Manufacturer Boiler Test Pressure 10 Bar Working pressure 4 Bar. 70kg lift weight. Water content 5 ltrs. Sensors etc. 2½" switch System flow sensor controller External sensor Internal sensor Thermal Insulation Safety Valve (3bar) Header pipework to be factory insulated. All pipework to be labelled with function and direction of flow. Weather compensation control Strainer: Magnaclean filter

BOILER & HOT WATER HEATER FLUE SCHEDULE 1 of 1		PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'B' SIG: FC CHECKED: NOK
BOILER FLUE BF / 01	The boilers shall have twinned flues connected to a dedicated flue arrangement with flue header and condensate drain connection. Contractor shall extend the condensate to a soak box containing lime scale chippings prior to draining to a gully. The flue shall be terminated within a propriety cowl. The flue shall be twin wall insulated stainless steel suitable for LPG application. The flue shall be fitted with adequate supports, offsets, tee's, condensate to drain and termination unit. The flue diameter shall be to suit the boiler flue header connection.	
GAS FIRED WATER HEATER – FLUE BF / 02	The water heater shall be a dedicated flue with a condensate drain connection. Contractor shall extend the condensate to a soak box containing lime scale chippings prior to draining to a gully. The flue shall be terminated within a propriety cowl. The flue shall be twin wall insulated stainless steel suitable for LPG application. The flue shall be fitted with adequate supports, offsets, tee's, condensate to drain and termination unit. The flue diameter shall be 150/200mm (without/with insulation) to suit the water heater flue connection.	

PUMP SCHEDULE 1 of 1		PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'C' SIG: FC CHECKED: NOK			
		FLOW (kg/s)	PRESSURE (kPa)	TYPE	DUTY & STD. BY Y/N
PUMP REF No.	SERVICE				
P1	General Accommodation LTHW Circulation Pump	2.2	60	Glandless CVVT variable speed drive	Y
P2	Hot water secondary return pump. Pump & flexible connections to be WRAS approved.	0.5	40	Bronze Single Phase	N
P3	SEN Accommodation LTHW Circulation Pump	0.5	60	Glandless CVVT variable speed drive	Y
P4	Cold Water Booster Pump – Submersible Type Pump (Internal to the CWST)	1.96	2.4Bar	WRAS approved for potable services	Y
Note: Unless otherwise noted CVCT denotes Constant Volume Constant Temperature CVVT denotes Constant Volume Variable Temperature					

RADIATOR SCHEDULE				PROJECT: Carrick-on-Shannon, Community School Co. Leitrim	
1 of 1				JOB No. 2860	
				REF No. SCHEDULE 'D'	
				SIG: FC CHECKED: NOK	
REF No.	No. OFF	DESCRIPTION	CONN. SIZE (mm)	SIZE L x H (mm)	LOAD (W)
RAD 01	Refer to drawing	Double Panel Double Fin	15mm	600 x 600	543
RAD 02	Refer to drawing	Double Panel Double Fin	15mm	700 x 600	634
RAD 03	Refer to drawing	Double Panel Double Fin	15mm	800 x 600	724
RAD 04	Refer to drawing	Double Panel Double Fin	15mm	900 x 600	815
RAD 05	Refer to drawing	OMITTED	OMITTED	OMITTED	OMITTED
RAD 06	Refer to drawing	Double Panel Double Fin	15mm	1400 x 600	1268
RAD 07	Refer to drawing	Double Panel Double Fin	15mm	1600 x 600	1448
RAD 08	Refer to drawing	Double Panel Double Fin	15mm	2000 x 600	1811
RAD 09	Refer to drawing	Double Panel Double Fin	15mm	2400 x 600	2173

Radiators to have minimal wall thickness of not less than 1.5mm.

For radiator material quality refer to specification.

For radiators with TRVs refer to drawings.

SANITARY WARE (CONTRACTOR TO TAKE POSSESSION OF AND INSTALL SAME)			PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'E' SIG: FC CHECKED: NOK
1 of 3			
REF. No.	ITEM	DESCRIPTION	INFO.
SAN 01	WC Suite	Take possession and install water closet suite complete with associated fittings / accessories all as detailed within architect's schedule. 100mm waste connection into SVP/upstand 20mm overflow to be fitted and extend to outside.	Contractor shall co-ordinate soil pipework and sanitary ware connections with the main contractor to ensure total integration within the building structure. All pipework and wastes to be concealed within the structure where possible or boxed in. Served with 15mm CWS c/w ball valve
SAN 02	Wash Hand Basin	Take possession and install wash hand basin complete with associated fittings / accessories all as detailed within architect's schedule. Waste pipe to be installed as per drawings.	Contractor to supply and fit thermostatic mixing valve. All pipework and wastes to be concealed within the structure where possible or boxed in. Served with 15mm CWS & 15mm HWS c/w ball valves
SAN 03	Sink	Take possession and install sink complete with 38mm Ø waste pipe & trap to SVP/upstand Drinking water tap (MWS) to be labelled 'Drinking Water'	All pipework and wastes to be concealed within the structure where possible or boxed in. Served with 15mm MWS, 15mm CWS, 15mm HWS & 15mm HWSec c/w TMV & ball valves.
SAN 04	Double Sink	Take possession and install sink complete with 38mm Ø waste pipe & trap to SVP/upstand. Drinking water tap (MWS) to be labelled 'Drinking Water'.	All pipework and wastes to be concealed within the structure where possible or boxed in. Served with 15mm MWS, 15mm CWS, 15mm HWS & 15mm HWSec c/w TMV & ball valves.
SAN 05	Science Lab Sink	Take possession and install sink complete with 38mm Ø waste pipe & trap to SVP/upstand.	All pipework and wastes to be concealed. Served with 15mm CWS c/w ball valves. Exposed water services pipework to be chrome plated.
All soils & waste services to be fire stopped. Please refer to fire engineers report for fire compartmentation drawings. Locations of fire stopping shown on wastes schematics for clarity and location/quantity is subject to change by the fire engineer. Please refer to soils and wastes drawings for sanitary ware quantities.			

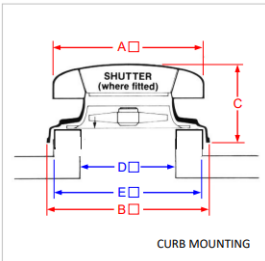
SANITARY WARE (CONTRACTOR TO TAKE POSSESSION OF AND INSTALL SAME) 2 of 3			PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'E' SIG: FC CHECKED: NOK
REF. No.	ITEM	DESCRIPTION	INFO.
SAN 06	Art Room Sink	Take possession and install sink complete with 38mm Ø waste pipe & trap to SVP/upstand.	All pipework and wastes to be concealed. Served with 15mm CWS c/w ball valves. Exposed water services pipework to be chrome plated.
SAN 07	Science Room Prep Sink	Take possession and install sink complete with 38mm Ø waste pipe & trap to SVP/upstand.	All pipework and wastes to be concealed. Served with 15mm CWS c/w ball valves. Exposed water services pipework to be chrome plated.
SAN 08	Disabled WC	Install water closet suite complete with associated fittings / grab rails /accessories all as detailed within architect's schedule and indicated on the drawings. 100mm waste connection into SVP/upstand 20mm overflow to be fitted and extend to outside. W/C Cistern to be labelled 'Warning - Rain Water Harvesting System – Water not for human consumption'	Contractor shall co-ordinate soil pipework and sanitary ware connections with the main contractor to ensure total integration within the building structure All pipework and wastes to be concealed within the structure where possible or boxed in. Served with 15mm CWS c/w ball valve
SAN 09	Disabled Wash Hand Basin	Install wash hand basin complete with associated fittings /taps/ accessories all as detailed within architect's schedule and indicated on the drawings. Waste pipe to be installed as per drawings.	Contractor to supply and fit thermostatic mixing valve for each wash hand basin. All pipework and wastes to be concealed. Served with 15mm CWS & 15mm HWS c/w ball valves
SAN 10	Fume Cupboard	Take possession and install fume cupboard complete with 32mm Ø waste pipe & trap to SVP/upstand	All pipework and wastes to be concealed within the structure where possible or boxed in. Served with 15mm MWS, 15mm CWS, 15mm HWS & 15mm HWSec c/w TMV & ball valves.
SAN 11	Disabled Shower	Install shower complete with associated fittings / accessories all as detailed within architects' schedule. Waste connection into SVP/up stand as detailed on drawings.	All pipework and wastes to be concealed. Served with 15mm CWS & 15mm HWS c/w ball valves. Exposed water services pipework to be chrome plated.
SAN 12	Drinking Fountain	Take possession and install Drinking Fountain complete with associated fittings / accessories all as detailed within architect's schedule. Waste pipe to be installed as per drawings.	Contractor to supply and fit thermostatic mixing valve. All pipework and wastes to be concealed within the structure where possible or boxed in. Served with 15mm MWS c/w ball valves.
SAN 13	Floor Gully	Trapped 200mm x 200mm shower floor gully. Manufactured by Wade. Finish: stainless stell	Set to suit floor finish i.e. centred on tiles as per architects details

SANITARY WARE (CONTRACTOR TO TAKE POSSESSION OF AND INSTALL SAME) 3 of 3			PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'E' SIG: FC CHECKED: NOK
REF. No.	ITEM	DESCRIPTION	INFO.
SAN 14	Dishwasher	Install dish washer complete with associated fittings / accessories all as detailed within architect's schedule. Waste connection into SVP / up stand as per drawings.	All pipework and wastes to be concealed. Served with 15mm CWS c/w ball valves.
SAN 15	Washing Machine	Install Kitchen Appliance (washing machine / dishwasher) complete with associated fittings / accessories all as detailed within architect's schedule and indicated on the drawings. Waste connection into SVP / up stand as per drawings.	All pipework and wastes to be concealed. Served with 15mm CWS c/w ball valve.
SAN 16	Indoor Unit	Install indoor unit complete with associated fittings / accessories all as detailed within architect's schedule. Waste connection into SVP / up stand as per drawings.	All pipework and wastes to be concealed.
All soils & waste services to be fire stopped. Please refer to fire engineers report for fire compartmentation drawings. Locations of fire stopping shown on wastes schematics for clarity and location/quantity is subject to change by the fire engineer. Please refer to soils and wastes drawings for sanitary ware quantities.			

HEAT RECOVERY UNIT SCHEDULE 1 of 1		PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'F' SIG: CH CHECKED: NOK
REF No.	No. OFF	DESCRIPTION
HRU 01	Duty 100 l/s @ 1.60 (W/(l/s)) L x W x H – 1960mm x 957mm x 399mm	 (Typical MVHR Unit)
HRU 02	Duty 168 l/s @ 1.25 (W/(l/s)) L x W x H – 2230mm x 1113mm x 459mm	
HRU 03	Duty 200 l/s @ 1.10 (W/(l/s)) L x W x H – 2553mm x 1280mm x 576mm	
HRU 04	Duty 248 l/s @ 1.30 (W/(l/s)) L x W x H – 2553mm x 1280mm x 576mm	
HRU 05	Duty 256 l/s @ 1.30 (W/(l/s)) L x W x H – 2553mm x 1280mm x 576mm	
HRU 06	Duty 264 l/s @ 1.35 (W/(l/s)) L x W x H – 2553mm x 1280mm x 576mm	
Unit handing for each unit to be confirmed with this office prior to ordering. Minimum Heat Exchanger Efficiency – 85%. Specific fan power of any unit to be <1.0 w/(l/s). Units to be ERP compliant. All heat recovery units are to operate at <35dB at 1m. Proposed units exceeding 35dB are to be matched with suitable attenuators at no additional cost to the contract.		

FAN SCHEDULE 1 of 1			PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'G' SIG: FC CHECKED: NOK	
FAN REF No.	Quantity	SERVICE	FLOW (l/s)	TYPE
EF 01	Refer to drawings	W/C Extract Fan In-line mixed flow duct fan to be low noise <30dBA. Attenuation to be provided to reduce room noise to NR35	06 - 30	Fan to be controlled as detailed on the drawings.
EF 02	Refer to drawings	Chemical Room Extract Fan In-line mixed flow duct fan to be low noise <30dBA. Attenuation to be provided to reduce room noise to NR35	40	Extract fan c/w temperature control and external wall louver.
EF 03	Refer to drawings	DCC Room In Line Extract Fan c/w backdraft shutter	75	Extract fan c/w temperature control and external wall louver.
EF 04	Refer to drawings	Science Lab Extract Fan In-line mixed flow duct fan to be low noise <30dBA. Attenuation to be provided to reduce room noise to NR35	250	Extract fan c/w temperature control and external wall louver. Variable speed control.
EF 05	Refer to drawings	Home Economics Bifurcated Stainless steel inline Extract Fan c/w backdraft shutter.	600	Provide proprietary stainless steel domestic style canopy over each cooker with integral fan and grease filter. Fan to have 3 speed controller.
Maximum acceptable dBA from fans shall be no more than 35dBA at 1 meter. Fans to be supplied with attenuators to reduce room noise level to below 30dBA. ALL EQUIPMENT TO BE CONFIRMED BY THESE OFFICES PRIOR TO ORDERING 1) The specified ESP is based on a pressure drop of 30Pa through attenuator and excludes other fan components. 2) The Contractor shall reconfirm the fan ESP at shop drawing stage, prior to ordering the fan. The Contractor shall submit fan pressure drop calculations accordingly for the approval of the Engineer. The required Fan and motor shall be provided at no additional cost. 3) The Contractor shall provide a specification compliance statement. 4) The Contractor shall complete an acoustic review of the fans in accordance with the specification to select silencers to achieve the specified internal and external noise requirements. 5) All equipment shall be selected in strict compliance with EN 13779. 6) External mounted fans shall be provided with the supplier's standard high grade weatherproof finish that shall be suitable for the climatic conditions experienced.				

GRILLE SCHEDULE 1 of 1				PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'H' SIG: FC CHECKED: NOK				
REF No.	No. OFF	DESCRIPTION	NECK SIZE (mm x mm)	FLOW (l/s)	THROW (m)	THROW PATT.	NR	PLENUM SPIGOT SIZE
EG 01	Refer to drawings	White Circular Diffuser c/w OBD. Typical Example: Gilberts GRC 150	100 Dia.	6-20	-	-	35	None
EG 02	Refer to drawings	Stainless Steel, Domestic style canopy c/w grease filter	150 Dia.	60	-	-	35	None
EG 03	Refer to drawings	White Square Diffuser c/w OBD. Egg Crate	250 x 250	125	-	-	35	None
SG 01	Refer to drawings	White Circular Diffuser c/w OBD and plenum box.	100 Dia.	20-60			35	None

EXTRACT WALL LOUVRE SCHEDULE 1 of 1				PROJECT:	Carrick-on-Shannon, Community School Co. Leitrim	
				JOB No.	2860	
				REF No.	SCHEDULE 'I'	
				SIG: FC	CHECKED: NOK	
REF No.	No. OFF	FLOW RATE (l/s)	DESCRIPTION	SIZE (mm) (LxH)	VEL (m/s)	FREE AREA (%)
EWL 01	Refer to drawing	6-40	Extract/Supply Louvre – Galvanized Steel	150 x 150	2.5	70 %
EWL 02	Refer to drawing	250	Extract Louvre – Galvanized Steel	400 x 400	2.5	70 %
EWL 03	Refer to drawing	600	Home Economics Extract Louvre – Galvanized Steel	1400 x 250	2.5	70 %
EWL 04	Refer to drawing	-	Passive High Level Plant Louvre – Galvanized Steel	350 x 350	2.5	50 %
EWL 05	Refer to drawing	-	Passive Low Level Plant Louvre – Galvanized Steel	400 x 400	2.5	50 %
EWL 06	Refer to drawing	80	HRU 01 Fresh Air & Exhaust Louvre – Galvanized Steel	250 x 250	2.5	70 %
EWL 07	Refer to drawing	168	HRU 02 Fresh Air & Exhaust Louvre – Galvanized Steel	350 x 350	2.5	70 %
EWL 08	Refer to drawing	200	HRU 03 Fresh Air & Exhaust Louvre – Galvanized Steel	350 x 350	2.5	70 %
EWL 09	Refer to drawing	248	HRU 04 Fresh Air & Exhaust Louvre – Galvanized Steel	400 x 400	2.5	70 %
EWL 10	Refer to drawing	256	HRU 05 Fresh Air & Exhaust Louvre – Galvanized Steel	400 x 400	2.5	70 %
EWL 11	Refer to drawing	264	HRU 06 Fresh Air & Exhaust Louvre – Galvanized Steel	400 x 400	2.5	70 %
RC 01	Refer to drawing	80	Tank Roof Ventilation Cows 	490 x 490 x 310 (A x B x C)	2.5	-

Notes:

Wall louvres to Architects RAL number.

Louvre construction to be extruded Aluminium.

Louvres to come complete with anti-vermin / bird mesh wiring on the inside.

Louvres to come complete with flanged connection to suit connecting ductwork.

THERMOSTATIC MIXING VALVE SCHEDULE 1 of 1			PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'J' SIG: FC CHECKED: NOK
REF No.	No. OFF	DESCRIPTION	
TMV 01	Refer to drawing	Wash Hand Basin TMV3 Combi: c/w integral strainer, isolation valves. Pressure Class: PN10 Working Pressure: 1.5 Bar Media Temperature: 65°C Temperature Stability: $\pm 2^{\circ}\text{C}$ Connection: External Thread (G) 1" Compression fitting (CPF) Material Valve housing: Dezincification resistant brass, DZR Surface treatment: Nickel plated	

TMVs to mix the cold-water service with the hot water service to facilitate an outlet temperature of 42°C.
On no account shall TMVs be connected to the mains water system.
At project completion temperature checks of all outlets will be carried out by the mechanical contractor and documented in a report/schedule/certificate.
Below TMV3 shown is Manufactured by ESBE. TMVs shall be equal or approved.



Typical Image

METERS SCHEDULE 1 of 1			PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'K' SIG: FC CHECKED: NOK
REF No.	No. OFF	DESCRIPTION	SPECIFICATION
M 01	1	Mains Water Meter	Refer to electrical specification for details. Contractor to take possession and fit meter supplied by BMS supplier.
M 02	1	Gas Meter	Contractor to take BMS connection
M 03	1	Electric Meter	Refer to electrical specification for details. Contractor to take possession and fit meters supplied by BMS supplier.

CONTROL VALVES SCHEDULE 1 of 1		PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'L' SIG: FC CHECKED: NOK	
		REF No.	No. OFF
		DESCRIPTION	SPECIFICATION
CV 01		Class room / teaching space/ corridor control valve.	Range 2-port spring return motorised zone valve with an auxiliary switch c/w Modbus and display module. Unit to be installed as per manufacturers' instructions. Technical Data Voltage: 230Vac / 110Vac / 24Vac Power consumption: 6W Cable length: 1 metre, 5 core Fluid temperature : +5 to +80°C Max ambient temperature: +50°C Port A is normally closed when there is no power

Display module to have large digital display with back light and be flush mounted.

Unit to have modbus communication; 2 configurable (resistive / digital) inputs and 1 digital relay output.

FIRE EXTINGUISHER SCHEDULE 1 of 1		PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'M' SIG: FC CHECKED: NOK
UNIT REF No.	SERVICE	TYPE
-		Fire extinguishers kite marked to BSEN3 Installation to IS 291 Full CE approval and certified by BSI. Final Layout and positions to be confirmed with building control and fire officer's requirements prior to installation Equipment: • 6Lt Foam • 5Kg Co2 Ext. • 2Kg Co2 Ext. • 5Kg S/P Dry Powder. • 1.2/1.2 Fire Blanket • Pendant Fire Extinguishers • Ext. ID Signage

GAS WATER HEATER SCHEDULE 1 of 1		PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'N' SIG: FC CHECKED: NOK			
		OPERATING PRESSURE (Bar)	PRIMARY FLOW (kg/s)	TEMPS (°C)	DUTY (kW)
WH01	Fully Condensing Hot Water Unit – LPG . 1 No. 35 Kw Water Heater with fully modulating pre-mix burner. Dimensions 1755 H x 708 D x 600 W Natural Gas flow rate – 3.64 m3/hr Efficiency – >93% NOx emission – 55 mg/kWh Storage capacity – 196L Weight (empty) – 177kg Hot outlet connection – 1" BSP Gas connection – ¾" BSP Electrical Requirements – 230V/1Ph/50Hz Sound power level - 62 LWA(db) Nominal flue gas temperature – 60°C Max outlet temperature – 87°C Maximum working pressure – 8.6Bar	3	3.8	60°C	35
Water Heater to be supplied by ACV or equal and approved: Water heater to come complete with BMS interface, unvented kit, and flue kit to suit plant room layout. Selected product must be WRAS approved.					

GAS DETECTION SCHEDULE 1 of 2		PROJECT:	Carrick-on-Shannon, Community School Co. Leitrim
		JOB No.	2860
		REF No.	SCHEDULE 'O'
		SIG: FC	CHECKED: NOK
	BOILER ROOM GAS LEAK DETECTION		
	Provide gas pressure proving system / gas detection to BS 1673 within the boiler room		
A	Two Channel Gas Leak Detection Control Unit. 230Vac 50Hz, Single Phase Supply. LED Indicators for:- Power On - Green, Gas On - Red, Emergency Stop Button - Yellow, Gas Leak Detector Panel is fitted with a Mute & Re-Set Button. IP65 Surface Mounted Enclosure.		
B	Automatic Gas Detection System (AGDS) sensors. Suitable for use with AGDS control panel, fully addressable. (LPG gas) advise at time of order.		
C	Electro-thermal link		
D	Gas Valve. Aluminium Construction with Connections BSP screwed, Tapping points to allow fitting of sender unit as described below, 240Vac (50Hz) Single Phase Supply, Gas Approved to EN161 / EN126, Size: 65mm		
E	Emergency Stop Button.		
	Gas detection and isolation system with Auto Reset Panel 1 x 65 mm Slam Shut Valve, 1 x Boiler room Panel, including emergency stop button Audible alarm inbuilt Low volts interface, inbuilt Fire Alarm connection inbuilt BMS connection inbuilt 4 x Gas Sensor LED status and alarm indications. Audible alarm. Approval CE 4x Thermal heat detectors, (reset type) 1 x Remote Emergency Stop 1 x CO FGS Carbon monoxide Sensor Approval CE 1 x Co indicator Panel Gas detection to provide coverage for 50m³ room volume		

GAS DETECTION SCHEDULE 2 of 2	PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2855 REF No. SCHEDULE 'O' SIG: FC CHECKED: NOK
HOME ECONOMICS & ENGINEERING ROOM GAS PROVING SYSTEM AND DETECTION SYSTEM Provide gas pressure proving system / gas detection to BS 1673 within the associated classrooms	
The Gas system shall include the following features: - Microprocessor control: Capable of accurately processing sensor signal for a range of combustible gases only in 0-100% LEL on its digital display. - Automatic Self Test: Capable of carrying out comprehensive self test routine to continuously monitor the systems performance. - Programmable a1 and a2 alarms: for gas presence indication. - On site calibration allows for accurate setting of gas sensors along with sensor drift reset facility. - Master Reset and Accept Button: Built in to allow for alarm cancellation and system reset. - Each Sensor shall be of the thermo-catalytic type with a fast response time and shall be easily calibrated with low drift and temperature compensation. - Gas System to have a master gas proving panel within office (Location to be agreed with school) c/w 24-hour time clock. All power supplies to gas proving systems to be controlled via this time clock. Science Room: Units to come c/w Gas Sensor, Gas Monitor, Alarm Sounder and battery back up. Systems to come c/w with two Emergency Stop buttons located in Science Room and Science Prep Room. One Automatic resetting 1 ¼" solenoid gas slam shut valve shall be installed on the incoming supply. The slam shut valve shall be wired to a 7 day time clock to allow after hours isolation of gas. Preparation Room: Unit to come c/w Gas Sensor, Gas Monitor, Alarm Sounder, and battery backup. Systems to come c/w with Emergency Stop button. One Automatic resetting ¾" solenoid gas slam shut valve shall be installed on the incoming supply. The slam shut valve shall be wired to a 7 day time clock to allow after hours isolation of gas. The system shall provide isolation for water and electricity connections. 	

COLD WATER STORAGE TANK SCHEDULE 1 of 1			PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'P' SIG: FC CHECKED: NOK
REF No.	SERVICE	CAPACITY (LITRES)	DETAILS
T 01	Cold Water Storage Tank: Tank to be a sectional GRP tank manufactured to Format 30, for the storage of potable water. Tank to be supplied with submersible pump with automatic shut off.	3760L	2150mm x 2150mm x 1000mm high Dimensions.
Tanks to be provided with drip/condensation trays. Overflows to be provided to tanks and drip trays. Tank to be supplied with submersible pump All vents, warning pipes, overflows, shall have mesh screens of maximum 0.65mm x 0.65mm holes to protect contents.			

RADIANT PANEL SCHEDULE 1 of 1			PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'Q' SIG: FC CHECKED: NOK			
			REMOTE HEAD SENSOR LOCATION	LTHW TEMP (°C)	OUTPUT (kW)	MAXIMUM OPERATING PRESS(Bar)
REF No.	SIZE L X W	CONN. SIZE (mm)				
RP 01	3590 x 595	15	(REFER TO DRAWINGS) Allow for 5m of remote lead from the valve to the sensor.	80 - 70	0.63	6.0

PERFORMANCE SPECIFICATION:

The Radiant Panels shall meet the following criteria:-

- Flat panel finish
- Coated in Anti-Bacterial paint
- Manufactured to ensure all outputs are in accordance with EN14037
- Outputs quoted/written in literature must be EN14037 compliant
- Insulation must be closed cell and outputs quoted as complete with insulation
- No metal to metal contact to prevent bio-metallic reaction
- Median for heat transfer of copper tube to metal plate must be graphite to ensure over 90% conductivity
- Pipework must be 10mm to lower inertia
- There must be less than 2mm deflection within the Radiant Panel
- Chain hangers with adjustment to ensure panel will not sag
- Hangers must be installed as per the Radiant supplier's specification to ensure no deflection
- Anti-deflection profile to be incorporated within the panel
- Special flexible connections to be utilised when connecting pipe work to panels.

Pressurisation Unit 1 of 1			PROJECT: Carrick-on-Shannon, Community School Co. Leitrim JOB No. 2860 REF No. SCHEDULE 'R' SIG: FC CHECKED: NOK
REF No.	SERVICE	CAPACITY (LITRES)	DETAILS
PU 01	Floor Standing enclosed digital pressurisation unit. - Powder coated enclosure - Break tank with type AB air gap fluid Cat 5 - Anti-seize pump - Flood detection	200L	- Low water level sensor - 5x volt free contacts: 1x boiler interlock, 1x common fault & 3x programmable outputs
Max working pressure = 3.0			Bar Boiler power = 600kW Max Temp = 80°C

Additional Notes Cabinet Overall Dimensions 470* (width) x 832 (height) x 332 (depth)

*-Allow additional 35mm width for connections.

Weight: 39 kg (empty)

Connections: Inlet: ½" BSP (Male)

Outlet: ¾"

Mains: 3-core cable (1/2")

Tank Capacity (actual): 17.5 litres

Features: Non-return valve

Isolating Valve (between tank and pump)

Corrosion resistant brass/copper/plastic pipework

Pump Details: Maximum Pressure 3.0 bar (@ 0.1 l/min flow)

Electrical: 230v 50Hz, 1 phase

Full Load Current: 3.94 A

1 No Vertical expansion vessel with replaceable Butyl rubber membrane to suit