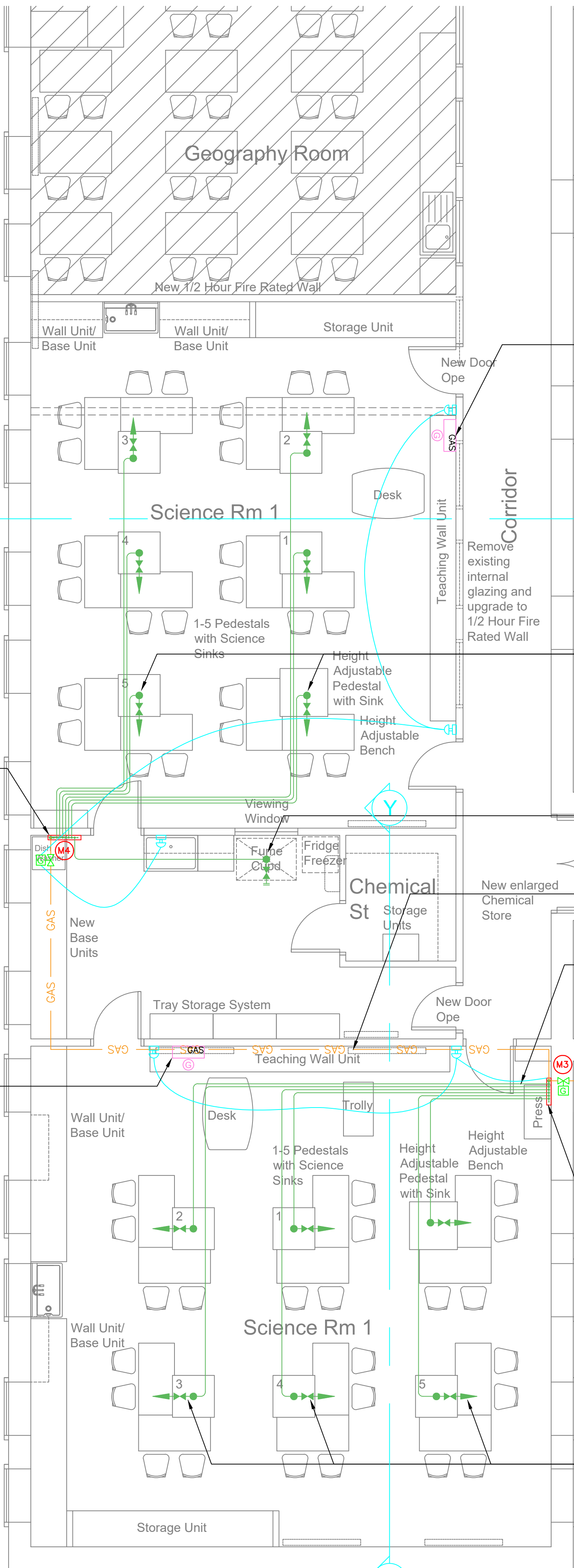


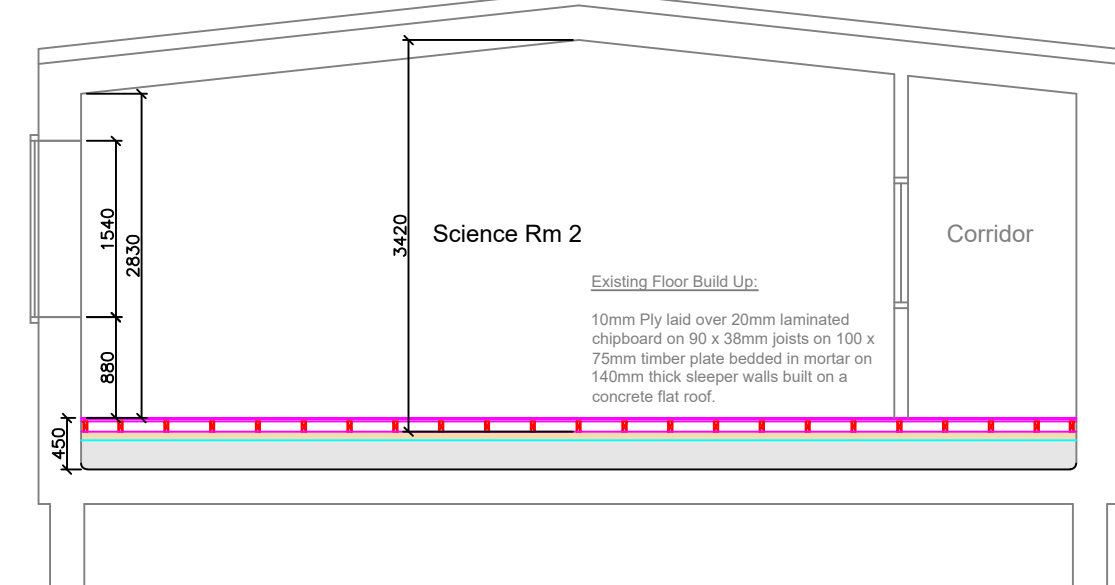
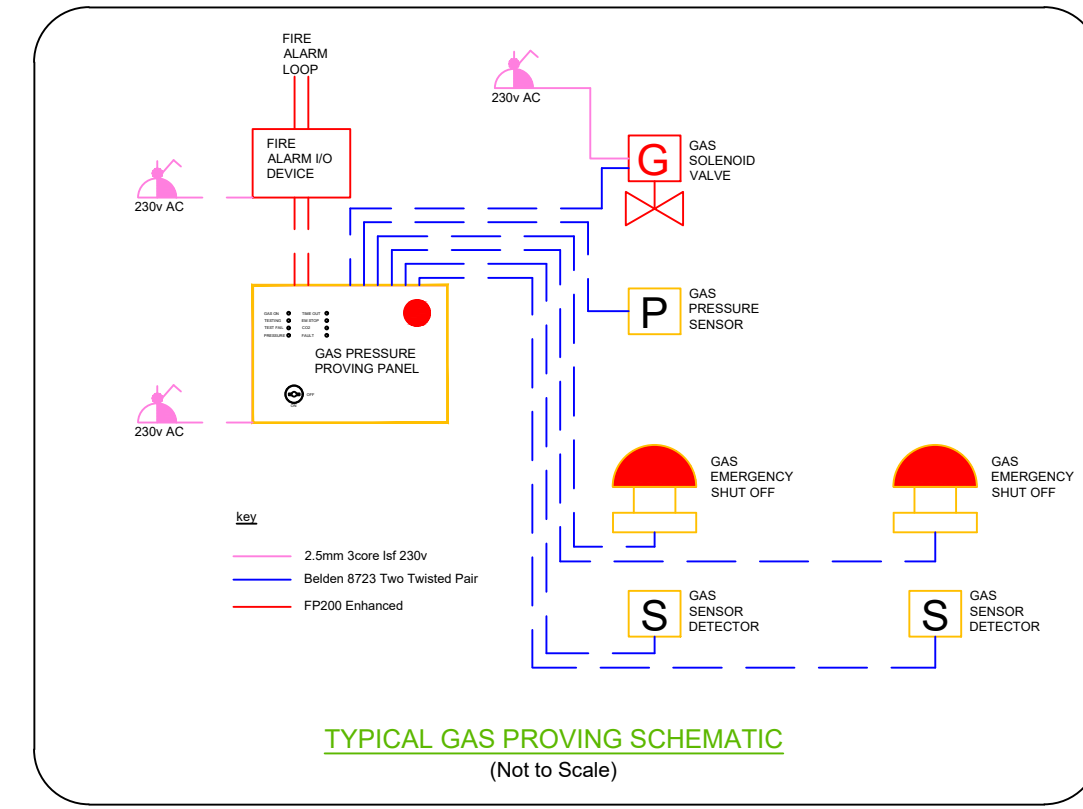
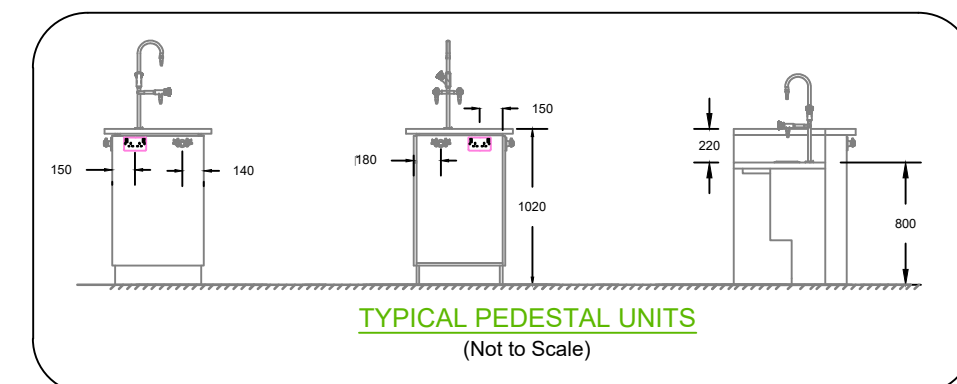
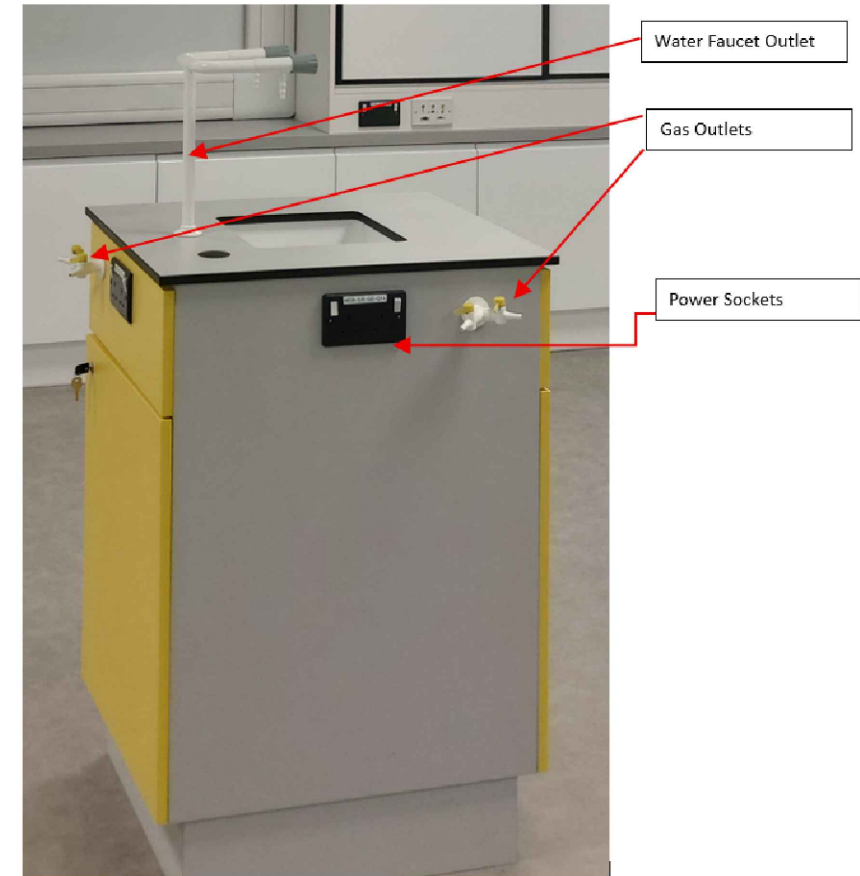


Proposed Floor Plan

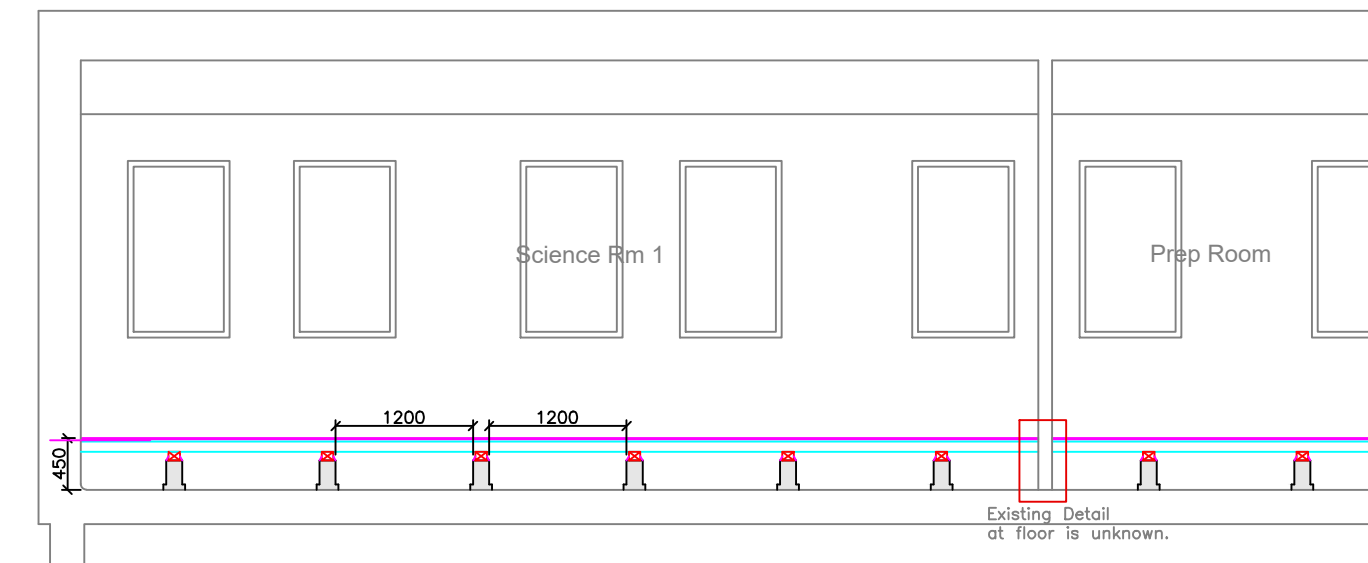
MANIFOLD SCHEDULE			
REF.	LOCATION	SERVICE	No. of PORTS
M01	PREP ROOM	MWS	6
M02	PREP ROOM	CWS	8
M03	SCIENCE ROOM	GAS	6
M04	SCIENCE ROOM	GAS	6

- ABBREVIATIONS**
- DS - DISCHARGE STACK
 - VP - VENT PIPE
 - C/S - CEILING SPACE
 - HWS - HOT WATER SUPPLY
 - HWSR - HOT WATER SEC RETURN
 - CWS - COLD WATER SUPPLY
 - MWS - MAINS WATER SUPPLY
 - TMV - THERMOSTATIC MIXING VALVE
 - DOC - DRAIN OFF COCK
 - RV - REGULATING VALVE
 - IV - ISOLATING VALVE
 - TA - TO ABOVE
 - TB - TO BELOW
 - RTA - RISE TO ABOVE
 - RFB - RISE FROM BELOW
 - DTB - DROP TO BELOW
 - DFA - DROP FROM ABOVE
 - DTLL - DROP TO LOW LEVEL
 - RTLH - RISE TO HIGH LEVEL
 - FFL - FINISHED FLOOR LEVEL

- GENERAL GAS NOTES:-**
- CODES & STANDARDS**
- ALL GAS INSTALLATION WORK WITHIN THE SCIENCE CLASSROOM SHALL CONFORM TO THE LATEST EDITION OF IS 813 DOMESTIC GAS INSTALLATIONS.
 - IS 820 SHALL APPLY FOR BOILER INSTALLATION ETC. (NON DOMESTIC GAS INSTALLATIONS. N/A IN THIS INSTANCE)
 - WHERE DISCREPANCIES OCCUR BETWEEN DRAWINGS AND CODES, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
- MATERIALS**
- ALL ABOVE GROUND GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL UNLESS OTHERWISE NOTED. USE APPROVED PIPING MATERIALS SUITABLE FOR NATURAL GAS OR LPG.
 - NO GALVANIZED PIPE SHALL BE USED FOR GAS SYSTEMS.
 - ALL UNDERGROUND GAS PIPING SHALL BE COATED AND CATHODICALLY PROTECTED AS PER CODE.
 - ALL FLOOR VOID PIPING SHALL BE CONTINUOUS CORRUGATED STAINLESS STEEL TUBING (CSST) c/w YELLOW EXTERIOR PLASTIC COATING
- INSTALLATION REQUIREMENTS**
- ALL PIPING SHALL BE INSTALLED WITH PROPER CLEARANCES FROM ELECTRICAL SYSTEMS AND OTHER SERVICES.
 - MINIMUM CLEARANCE FROM COMBUSTIBLES AND PENETRATIONS THROUGH FIRE-RATED WALLS SHALL COMPLY WITH FIRE CODE AND BUILDING CODE REQUIREMENTS.
 - GAS PIPING SHALL NOT BE INSTALLED IN ELEVATOR SHAFTS, DUMBWAITER SHAFTS, OR OTHER UNPERMITTED SPACES.
 - ALL PIPING INSTALLED IN FLOOR VOIDS SHALL BE CONTINUOUS AND WITHOUT JOINTS.
- COORDINATION**
- CONTRACTOR SHALL COORDINATE ALL ROUTING WITH OTHER TRADES AND VERIFY EXACT LOCATIONS OF WALLS, CEILINGS, STRUCTURAL MEMBERS, HVAC, AND ELECTRICAL SYSTEMS BEFORE INSTALLATION.
 - NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO INSTALLATION.
 - GAS PIPING SHALL BE CONCEALED IN FINISHED AREAS WHEREVER POSSIBLE, AND ACCESSIBLE WHERE REQUIRED FOR MAINTENANCE.
 - LOW LEVEL MANIFOLDS SHALL BE FITTED WITH A SHALLOW VENTILATED CUPBOARD
- TESTING & INSPECTION**
- ALL GAS PIPING SHALL BE PRESSURE-TESTED IN ACCORDANCE WITH APPLICABLE CODES BEFORE BEING PLACED IN SERVICE.
 - LEAKS SHALL BE REPAIRED AND RETESTED BEFORE SYSTEM APPROVAL.
- LABELING & IDENTIFICATION**
- GAS PIPING SHALL BE PROPERLY LABELED WITH PIPE CONTENT (E.G., "NATURAL GAS" OR "LPG"), FLOW DIRECTION, AND PRESSURE RATINGS AT REGULAR INTERVALS AND AT ALL CHANGES OF DIRECTION, BRANCHES, AND PENETRATIONS.
 - USE COLOR-CODED PIPE MARKERS SHUT-OFF VALVES & ACCESS
 - SHUT-OFF VALVES SHALL BE INSTALLED AT ALL GAS EQUIPMENT/APPLIANCES AND SHALL BE ACCESSIBLE AND CLEARLY MARKED.
 - MAIN SHUT-OFF VALVES SHALL BE LOCATED AS REQUIRED BY CODE AND UTILITY REGULATIONS.
- VENTILATION & SAFETY**
- PROVIDE ADEQUATE VENTILATION FOR GAS EQUIPMENT ROOMS AS REQUIRED BY CODE.
 - WHERE LPG IS USED, ENSURE LOW-POINT LEAK DETECTION DUE TO HEAVIER-THAN-AIR CHARACTERISTICS.
- CONVERSION & PRESSURE REGULATION**
- VERIFY APPLIANCE AND EQUIPMENT COMPATIBILITY WITH NATURAL GAS OR LPG BEFORE INSTALLATION.
 - PRESSURE REGULATORS SHALL BE INSTALLED WHERE REQUIRED AND ACCESSIBLE FOR SERVICE.
- DRAWING INTERPRETATION**
- DIAGRAMMATIC PIPING LAYOUT: EXACT ROUTING SHALL BE DETERMINED IN THE FIELD AND COORDINATED WITH OTHER DISCIPLINES
- LIAISON BETWEEN THE ALL CONTRACTORS ON SITE**
- THE MAIN CONTRACTOR, THE MECHANICAL CONTRACTOR & THE ELECTRICAL CONTRACTOR SHALL REMAIN IN CONSTANT COMMUNICATION WITH EACH OTHER AND OTHER EMPLOYED SPECIALISTS/SUPPLIERS. THE MECHANICAL & ELECTRICAL CONTRACTORS MUST AGREE CO-ORDINATION ROUTES OF SERVICES AND PLACING OF PLANT AND EQUIPMENT ASSOCIATED WITH THE PROPOSED WORKS. SHOULD THERE BE ANY CLASHING OF SERVICES, THE MECHANICAL AND ELECTRICAL CONTRACTORS SHALL RELOCATE AND RESOLVE THE ISSUES AT THEIR OWN EXPENSE.
- THE MECHANICAL CONTRACTOR SHALL TIMEOUSLY INFORM THE ELECTRICAL CONTRACTOR OF ALL THEIR POWER AND CABLE REQUIREMENTS E.G. FOR THE VENTILATION FANS, THE CONTROLS INSTALLATIONS, ETC. LIKEWISE THE ELECTRICAL CONTRACTOR IS TO DETERMINE FROM THE MECHANICAL CONTRACTOR FINAL LOCATIONS OF ALL ITEMS OF MECHANICAL PLANT AND EQUIPMENT PRIOR TO FIRST FIX WORKS TO ABLIE INSTALLATION OF SUPPLIES TO CORRECT LOCATIONS.



Existing Section X-X



Existing Section Y-Y

NOTE:
ALL SERVICES TO RUN BETWEEN TIMBER JOISTS. JOISTS TO BE NOTCHED OUT WHERE REQUIRED (FOLLOWING AGREEMENT WITH ARCHITECT)

IPSUM ENGINEERS operate a Quality Assurance System to ISO 9001.

SERVICE INFORMATION ONLY TO BE TAKEN FROM THIS DRAWING.

Use figure dimensions - DO NOT SCALE FROM THIS DRAWING.

Where Architects details are shown on this drawing, these are indicative and reference should be made to the appropriate Architect's drawing.

Rev.	Date	Description	Eng.	App.

Drawing number.

PL-M54-001

Client.

SCOIL MHUIRE BUNCRANA

Architect.

AL ARCHITECTS LTD
OFFICE 8B
THE COURTYARD
LOWER MAIN STREET
LETTERKENNY
CO.DONEGAL

Project.

REFURBISHMENT OF SCIENCE ROOMS
SCOIL MHUIRE BUNCRANA
CO.DONEGAL

Service.

MECHANICAL

Drawing Status.

TENDER

Mechanical & Electrical Consulting Engineers

IPSUM CONSULTING ENGINEERS LIMITED,
Riverside Office Park, Unit 2B, Neil T. Blaney Road,
Letterkenny, County Donegal, Ireland
e-mail. donegaladmin@ipsumengineers.com
Web. www.ipsumengineers.com

Eng./CAD	CMcC	Checked.	RD
----------	------	----------	----

Title.

SCIENCE CLASSROOMS 1&2
SECOND FLOOR

GAS SERVICES LAYOUT

Scale(s).	1:50 @ A1	Date.	MAY.2026
-----------	-----------	-------	----------

Project Number.	6447	Revision.	T0
-----------------	------	-----------	----

Drawing number.

PL-M54-001