THESE DRAWINGS AND DOCUMENTS ARE INDICATIVE DESIGN INTENT FOR FULL CONTRACTOR DESIGN AND INSTALL THE SYSTEMS DESCRIBED ARE TO BE DESIGNED AND INSTALLED BY THE DESIGN / INSTALL CONTRACTOR COORDINATE DESIGN AND INSTALL WITH SHOPFITTING REQUIREMENTS. ALLOW FOR GOOD MAINTENANCE ACCESS CONDUCT ALL WORKS IN ACCORDANCE WITH HEALTH & SAFETY DIRECTIVES, GOOD PRACTICE, INDUSTRY STANDARDS THE CONTRACTOR SHALL SUBMIT INSURANCE AND RAMS TO THE CLIENTS AGENT PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SITE SET UP, SITE SAFETY, NOISE AND DUST CONTROL. NOISY WORKS OUT OF OFFICE HOURS

DESIGN, SUPPLY, INSTALL, COMMISSION AND SET TO WORK, 5 kW (Min). DAIKIN OR MITSUBISHI LES AIR SOURCE, R32 INVERTER DRIVEN, DUCTED AC UNIT - AS INDICATED

INSTALL NEW CORRECTLY SIZED REFRIGERANT PIPE WORK - DO NOT REUSE THE EXISTING PIPE WORK IT IS AGED AND CONTAMINATED

CONTRACTOR SURVEY SITE AND PROPOSE SAFE ACCESSIBLE CONDENSER LOCATION + ROUTE REFRIGERANT PIPES = CONTROLS CABLES + POWER SUPPLY etc DESIGN & INSTALL CONDENSATE DRAIN TO FOUL WATER DRAINAGE

INSTALL LOCAL TIME CLOCK CONTROLLER

ALL DX PIPE WORK TO BE RUN & SUPPORTED ON TRAY WORK

INSTALL + TEST BY APPROVED MANUFACTURER PARTNER INSTALLER

PROVIDE 7 YEAR WARRANTY + O&M + RECORD DRAWINGS

DESIGN AND SUPPLY INSULATED DUCTWORK & AIR DIFFUSION SYSTEM SELECT SUITABLE SIZED SLOT AIR DIFFUSERS.

DO NOT CAUSE DRAUGHT OR AIR MOVEMENT OF THE FEATURE CHANDELIER

DESIGN & INSTALL ADEQUATE RETURN AIR PROVISION - AS INDICATED

DESIGN AND INSTALL ADEQUATE SAFE MAINTENANCE ACCESS PROVISION CONTRACTOR TO COORDINATE THE HVAC SERVICES WITH CEILING DETAIL & CEILING CONSTRUCTION , LIGHTING POWER SUPPLY -

DESIGN & INSTALL TESTED AND CERTIFIED ELECTRICAL POWER SUPPLY TO EXTERNAL CONDENSER + INDOOR UNIT DESIGN & INSTALL - LOW NOISE - 6 kW ELECTRIC OVER-DOOR AIR CURTAIN & CONTROLS - TO COMPLY WITH DESIGN GUIDES AND COMPLIANCE REQUIREMENTS. ALLOW FOR ELECTRICAL POWER & LOCAL CONTROLLER

SURVEY & ACCESS PIPE & CABLE ROUTES TO/FROM ROOF PLANT DECK DO NOT REUSE EXISTING (CONTAMINATED) REFRIGERANT PIPE WORK INSTALL NEW CORRECTLY SIZED REFRIGERANT INSULATED PIPE WORK / SUPPORT WORK / BRACKETRY VACCUM & PRESSURE TEST PIPEWORK TEST AND CERTIFY THE INSTALLATIONS INSTALL NEW CORRECTLY SIZED POWER CABLES + CONTROL CABLES PROVIDE 1 YEAR DEFECTS PERIOD / WARRANTY AS PER SCOPE OF WORKS DOCUMENTATION + O&M + RECORD DRAWINGS

CREED CONDENSER PLANT TO BE PROVIDED WITH IDENTIFICATION PLATES

MECH AC POWER :
DAIKIN RXYSA-AV1 EXTERNAL UNIT TO PLANT DECK (**CONTRACTOR TO CONFIRM No REQUIRED**)
PROVIDE NEW POWER SUPPLY CABLE(S) / IP RATED EXTERNAL ISOLATOR(S) ETC FROM UNIT DIST. BOARD TO EXTERNAL PLANT DECK - RUN ON / IN CONTAINMENT.

CONTRACTOR TO SURVEY / ACCESS REFRIGERANT PIPE ROUTE TO / FROM PLANT DECK. EXACT ROUTE TO BE AGREED DURING ON A SITE INSPECTION WITH PROJECT MANAGER - REQUIRES INTRUSIVE INSPECTION

MECHANICAL / HVAC DESIGN THE CONTRACTORS DESIGN MEP APPENDIX

CONTROLS

ALL MECHANICAL SERVICES CONTROLLERS SHALL BE LOCATED EITHER WITHIN THE MANAGER'S OFFICE OR S OFFICE OR WITHIN THE BACK OF HOUSE AREA SUCH THAT THEY ARE NOT VISIBLE FROM THE SHOP FLOOR WHEN THE BACK OF HOUSE DOOR FROM THE SHOP FLOOR IS OPENED. LAMINATED COPIES OF THE RELEVANT USER GUIDANCE SHALL BE MOUNTED ADJACENT TO EACH CONTROLLER SUCH THAT STAFF CAN OPERATE THE SYSTEMS IN THE CORRECT AND MOST EFFICIENT MANNER. ALL MECHANICAL SERVICES SHALL BE INTERLINKED WITH THE FIRE ALARM SUCH THAT WHEN A FIRE ALARM IS ACTIVATED ALL MECHANICAL SERVICES SHUT OFF. ALL SYSTEMS MUST RETURN TO THEIR PREVIOUS SETTINGS ONCE THE ALARM IS DEACTIVATED TO PREVENT THE NEED FOR BOUTIQUE STAFF TO RE-SETUP OPERATIONS OF THE EQUIPMENT.

SPACE HEATING AND COOLING INSTALLATION

DESIGN CRITERIA RETAIL UNITS: 22°C +/-2°C (WINTER), 24°C +/-2°C (SUMMER) BACK OF HOUSE:18°C DB MIN TENANT INTERNAL STORES: 16°C DB MINIMUM INTERNAL NOISE CRITERIA CONCOURSE: NR40 ENCLOSED RETAIL UNITS: NR38 EXTERNAL NOISE LIMITS ROOF MOUNTED PLANT: 65DBA. REAR OF UNIT MOUNTED PLANT: 65DBA DUCTWORK SIZING PRESSURE DROP: 1.2 PA/M MAIN DUCT: 5.0 M/SEC BRANCH DUCT: 4.0 M/SEC TERMINAL DUCT: 3.5 M/SEC 1.2 PA/M MAIN DUCT: 5.0 M/SEC BRANCH DUCT: 4.0 M/SEC TERMINAL DUCT: 3.5 M/SEC

INSTALL AND SET TO WORK A HEATING AND COOLING SYSTEM AS OUTLINED WITHIN THIS SPECIFICATION. ALL EXTERNAL CONDENSERS ARE TO BE LOCATED TO THE REAR OF THE UNIT IN A SERVICE AREA

ALL CONDENSERS SHALL BE MOUNTED ON A 'BIG FOOT' ANTI-VIBRATION MOUNTING SYSTEM. BIG FOOT ANTI-VIBRATION MOUNTING SYSTEM. ANTI-VIBRATION MOUNTING SYSTEM.

NO SURFACE DISCHARGE OF CONDENSATE ETC. SHALL BE ALLOWED. THE CONDENSERS SHALL BE SUBJECT TO THE INSTALLATION OF A CONDENSATE DRIP TRAY INSTALLED BELOW. THE TRAY SHALL BE NO LESS THAN 50MM LONGER ON EACH SIDE THAN THE OVERALL FOOTPRINT OF THE CONDENSER AND NO LESS THAN 50MM IN HEIGHT. THE CONDENSATE SHALL DISCHARGE VIA GRAVITY INTO A LOCAL DRAIN POINT WHERE POSSIBLE. ALL CONDENSATE PIPEWORK SHALL BE SECURED TO THE BUILDING'S FABRIC TO THE POINT OF DISCHARGE.

DOOR AIR CURTAIN THE BRAND SHALL INSTALL AN OVER DOOR AIR CURTAIN TO ALL PUBLIC ENTRANCES TO MEET THE FOLLOWING CRITERIA: GRILLE WIDTH: 20MM WIDER THAN THE DOOR OPENING. 20MM WIDER THAN THE DOOR OPENING. AIR VOLUME: 3200 M3/HR PER 2M LENGTH AT HIGHEST FAN SETTING. 3200 M3/HR PER 2M LENGTH AT HIGHEST FAN SETTING. DISCHARGE VELOCITY: 7.0M/S AT HIGHEST FAN SETTING. 7.0M/S AT HIGHEST FAN SETTING. NOISE LEVEL: 62 DB(A) @ 3M AT HIGHEST FAN SETTING. 62 DB(A) @ 3M AT HIGHEST FAN SETTING. ALL AIR CURTAINS ARE TO BE AMBIENT, WITH NO HEATING ELEMENT. DOOR CURTAINS ARE TO BE FULLY RECESSED TYPE, INSTALLED DIRECTLY ABOVE THE FANLIGHTS, WITHIN THE MAXIMUM MOUNTING HEIGHT QUOTED BY THE SUPPLIER. THE SUPPLY GRILLE POSITION SHALL BE NOT GREATER THAN 50MM FROM THE INTERNAL FACE OF THE DOOR OPENING TO THE LEADING EDGE OF THE SUPPLY GRILLE.

No.	Description	Date