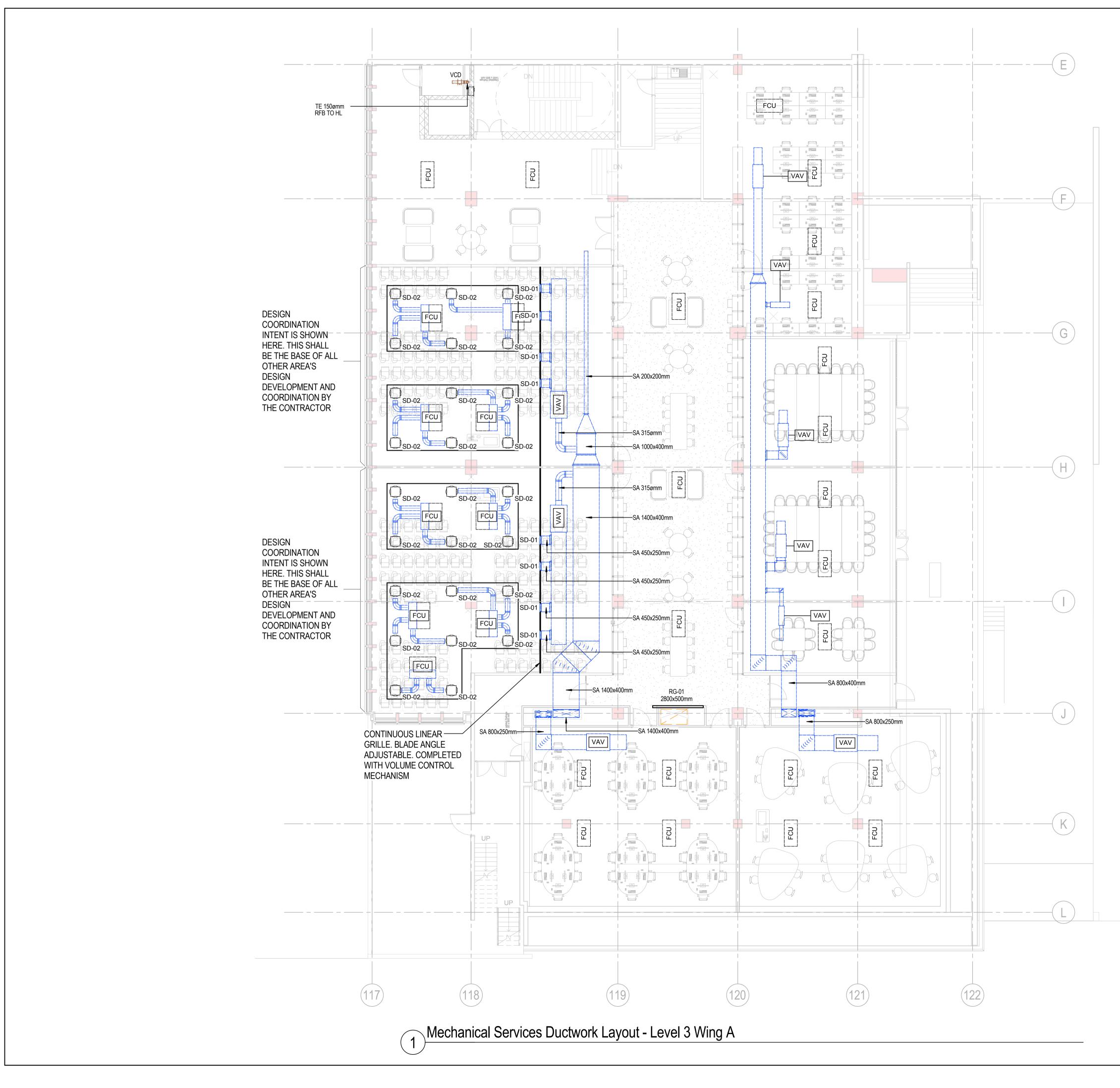
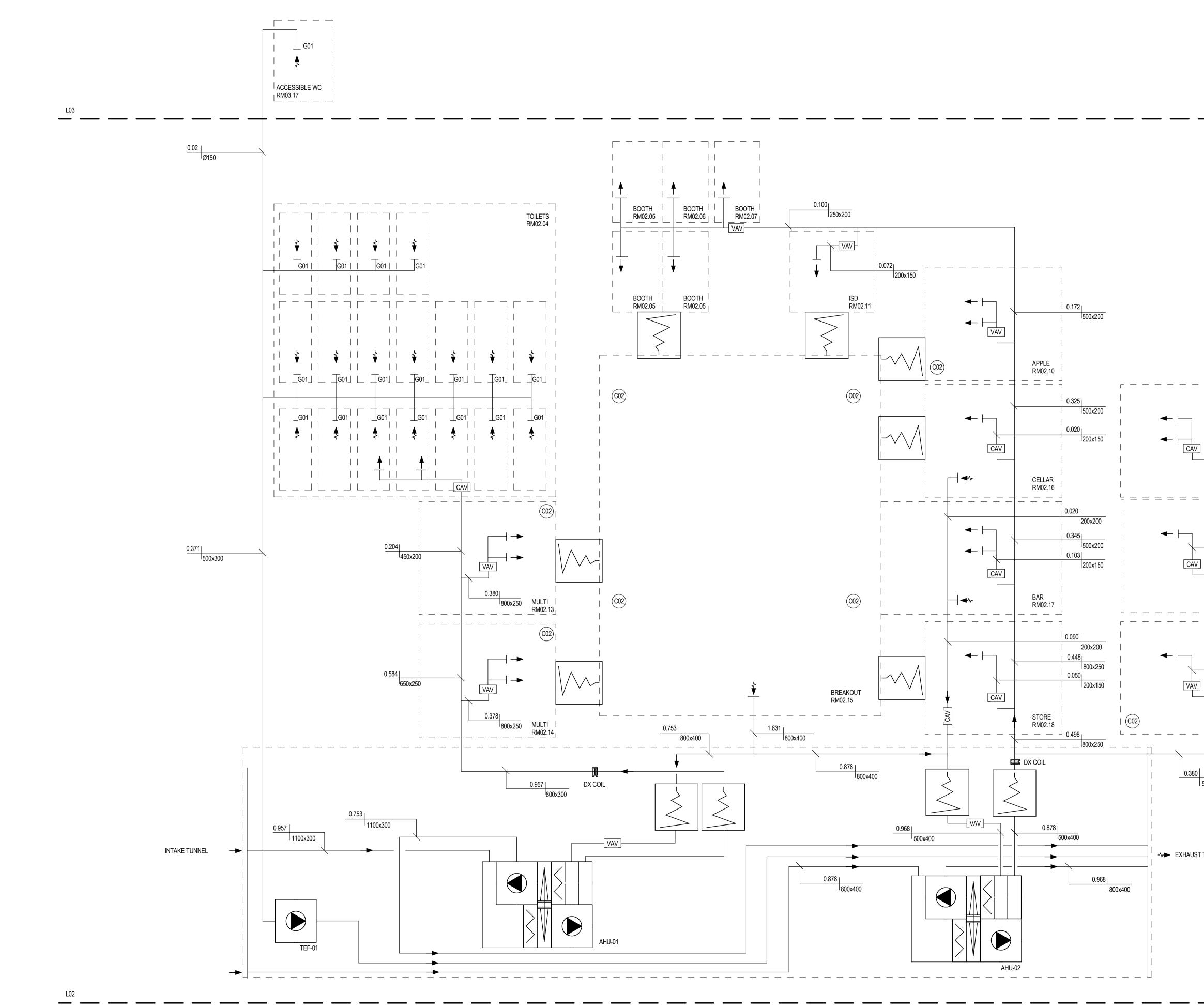


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TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING CONSTRUCTION. 1. WORKING AT HEIGHT 2. LIFTING HEAVY EQUIPMENT 3. WORKING ADJACENT TO POTENTIALLY LIVE SERVICES 4. HANDLING CHEMICAL PRODUCTS 5. WORKING IN CONFINED SPACES 6. PRESENCE OF ASBESTOS			
MAINTENANCE/CLEANING/OPERATION. 1. HANDLING CHEMICAL PRODUCTS 2. WORKING AT HEIGHT 3. WORKING ADJACENT TO POTENTIALLY LIVE SERVICES			
DECOMMISSIONING/DEMOLITION. 1. PRESENCE OF LIVE SERVICES 2. PRESENCE OF ASBESTOS 3. WORKING AT HEIGHT 4. LIFTING HEAVY EQUIPMENT 5. PRESENCE OF FLOOR OPENINGS 6. ALWAYS SAFELY ISOLATE BEFORE COMMENCING ANY WORKS Notes VENTILATION NOTES			
<ol> <li>THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DISCIPLINES, DRAWINGS, SCHEDULES AND SPECIFICATIONS, LEGENDS AND STANDARD DETAILS.</li> <li>THIS DRAWING IS COPYRIGHT AND SHALL NOT BE REPRODUCED WITHOUT PERMISSION.</li> <li>DIMENSIONS GOVERN ON ALL DRAWINGS AND DETAILS.</li> </ol>			
SHOULD ANY DISCREPANCIES I DRAWING AND ANY ASSOCIATE SPECIFICATIONS THIS SHOULD ATTENTION OF THE M&E BUILD CONSULTANT IMMEDIATELY. 4. UNLESS OTHERWISE STATED A	D DRAWINGS OR BE BROUGHT TO THE NG SERVICES		
<ul> <li>MILLIMETRES.</li> <li>5. DO NOT SCALE FROM THIS DRAWING.</li> <li>6. DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND OR PREFABRICATED.</li> <li>7. THIS DRAWING SHOULD ONLY BE USED FOR THE SPECIFIC SERVICES INTENDED.</li> <li>8. THIS DRAWING SHOWS THE DESIGN INTENT ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FULL CO- ORDINATION OF THE SERVICES INDICATED ON THIS AND ALL OTHER SERVICES DRAWINGS.</li> </ul>			
<ol> <li>9. FINAL ACCESS AND SETTING OUT OF SERVICES SHALL BE AGREED BETWEEN THE ARCHITECT AND THE CONTRACTOR.</li> <li>10. THE PROJECT NOTES ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT TECHNICAL SPECIFICATIONS.</li> <li>11. WHERE MECHANICAL SERVICES PASS THROUGH FIRE COMPARTMENTATION CEILING VOIDS, FLOOR VOIDS AND STRUCTURAL WALLS THE CONTRACTOR SHALL SLEEVE/SEAL THE OPENING WITH AN ACOUSTIC AND FIRE SEALANT APPROVED BY THE ARCHITECT.</li> <li>12. THE CONTRACTOR SHALL REFER TO THE ARCHITECT'S DRAWINGS FOR DETAILS OF FIRE COMPARTMENTATION.</li> <li>13. ALL DAMPERS SHALL BE SITED AT FULLY ACCESSIBLE</li> </ol>			
<ol> <li>ALL DAMPERS SHALL BE SITED AT FULLY ACCESSIBLE LOCATIONS TO ENABLE EASY ACCESS FOR MAINTENANCE &amp; COMMISSIONING.</li> <li>ALL DAMPERS SHALL BE ACCOMPANIED WITH ACCESS PANELS IN DUCTWORK AT ACCESSIBLE LOCATIONS.</li> <li>ALL DUCTWORK SHALL BE PROVIDED WITH ACCESS PANELS AT REGULAR INTERVALS TO FACILITATE CLEANING.</li> <li>ALL BUILDER'S WORK DUCTS SHALL BE BUILT TO STRUCTURAL ENGINEER'S DETAIL</li> </ol>			
<ul> <li>STRUCTURAL ENGINEER'S DETAIL.</li> <li>17. ALL BUILDER'S WORK DUCTS SHALL HAVE A SMOOTH "FAIR FACED" FINISH.</li> <li>18. ALL DUCTWORK SHALL BE MANUFACTURED &amp; CONSTRUCTED IN ACCORDANCE WITH DW 144.</li> <li>19. FLEXIBLE DUCTWORK CONNECTIONS SHALL BE PROVIDED WHERE STRUCTURAL MOVEMENT JOINTS ARE PRESENT.</li> <li>20. FINAL NUMBER &amp; LOCATIONS OF GRILLES/DIFFUSERS ARE SUBJECT TO ARCHITECT'S FINAL LAYOUT AND SETTING OUT INFORMATION.</li> <li>21. WHERE SERVICES PENETRATE A FIRE BARRIER A SUITABLE FIRE DAMPER OR FIRE AND SMOKE DAMPER SHALL BE INSTALLED. FIRE SMOKE DAMPERS TO BE USED FOR PROTECTED LOBBY &amp; ESCAPE CORRIDOR COMPARTMENTATION. FIRE DAMPER CONTROL PANEL TO DE DROI</li> </ul>			
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P02     TENDER       P01     TENDER       Rev     Description	08/08/2017 11/04/2017 Date	LH LH Approved	
BUROHAPPOLD ENGINEERING			
London P W1T 1PD	Fel: +44 (0)2079 279 700 Fax: +44 (0)8707 874 145 Email: 035833@burohappold.com Web: www.burohappold.com		
Architect       Hawkins\Brown         Project       UCL Institute of Education         Drg Title       Mechanical Services         Ductwork Layout       Level 2 Wing A			
Job No. 035833	Scale@A1 <b>1:100</b>	P. 11	
Drawing No. 20BW-BHE-WA-02-DR-M-X	X-2000	Revision P02	



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P02TENDERP01TENDERRevDescription	08/08/2017 11/04/2017 Date	LH LH Approved	
TENDER			
BUROHAPPOLD ENGINEERING			
London W1T 1PD	Fel: +44 (0)2079 279 700 Fax: +44 (0)8707 874 145 Email: 035833@burohappold.com Neb: www.burohappold.com		
Architect       Hawkins\Brown         Project       UCL Institute of Education         Drg Title       Mechanical Services         Ductwork Layout       Level 3 Wing A			
Job No. 035833	Scale@A1 <b>1:100</b>	Dentri	
Drawing No. 20BW-BHE-WA-03-DR-M-X	X-2000	Revision P02	



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ESTATES RM02.20 = = = = - 0.029 200x150	<ul> <li>Notes</li> <li>SCHEMATIC NOTES</li> <li>1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DISCIPLINES, DRAWINGS, SCHEDULES AND SPECIFICATIONS, LEGENDS AND STANDARD DETAILS.</li> <li>2. THIS DRAWING IS COPYRIGHT AND SHALL NOT BE REPRODUCED WITHOUT PERMISSION.</li> <li>3. DIMENSIONS GOVERN ON ALL DRAWINGS AND DETAILS. SHOULD ANY DISCREPANCIES BE FOUND WITH THIS DRAWING AND ANY ASSOCIATED DRAWINGS OR SPECIFICATIONS THIS SHOULD BE BROUGHT TO THE ATTENTION OF THE M&amp;E BUILDING SERVICES CONSULTANT IMMEDIATELY.</li> <li>4. UNLESS OTHERWISE STATED ALL DIMENSIONS ARE IN MILLIMETRES.</li> <li>5. DO NOT SCALE FROM THIS DRAWING.</li> <li>6. DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND OR PREFABRICATED.</li> <li>7. THIS DRAWING SHOWS THE DESIGN INTENT ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SPECIFIC SERVICES INTENDED.</li> <li>8. THIS DRAWING SHOWS THE DESIGN INTENT ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FULL CO- ORDINATION OF THE SERVICES INDICATED ON THIS AND ALL OTHER SERVICES DRAWINGS.</li> <li>9. FINAL ACCESS AND SETTING OUT OF SERVICES SHALL BE AGREED BETWEEN THE ARCHITECT AND THE CONTRACTOR.</li> <li>10. THE PROJECT NOTES ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT TECHNICAL SPECIFICATIONS.</li> <li>11. WHERE ELECTRICAL SERVICES PASS THROUGH FIRE COMPARTMENTATION CEILING VOIDS, FLOOR VOIDS AND STRUCTURAL WALLS THE CONTRACTOR SHALL SLEEVESEAL THE OPENING WITH AN ACOUSTIC AND FIRE SEALANT APPROVED BY THE ARCHITECT.</li> <li>12. THE CONTRACTOR SHALL REFER TO THE ARCHITECT'S DRAWINGS FOR DETAILS OF FIRE COMPARTMENTATION.</li> <li>13. DRAWING HAS BEEN PRODUCED FROM INCOMPLETE RECORD INFORMATION AND VISUAL SITE SURVEYS. CONTRACTOR IS RESPONSIBLE FOR VALIDATING ACCURACY PRIOR TO WORKS.</li> <li>14. CONTRACTOR TO POVIDE SCHEDULE OF PROPOSED SERVICES ISOLATIONS PRIOR TO WORK COMMENCING.</li> <li>15. DRAWINGS ARE INDICATIVE ONLY AND ARE SHOWN FOR THE DESIGN INTERT AND THE DESIGN DURING HIS DESIGN PHASE.</li> </ul>
0.029 200x150 ESTATES	
RM02.21       0.058   200x200   0.322   200x150	
ESTATES RM02.22	P02 TENDER 08/08/2017 LH
	P01     TENDER     11/04/2017     LH       Rev     Description     Date     Approved
500x250	<b>TENDER</b> Status/Suitability of Drawing
TUNNEL	BUROHAPPOLD ENGINEERING
	LINGIINEEERIING           17 Newman Street         Tel: +44 (0)2079 279 700           London         Fax: +44 (0)8707 874 145           W1T 1PD         Email: 035833@burohappold.com           UK         Web: www.burohappold.com
<u>L02</u>	Architect     Hawkins\Brown       Project     UCL Institute of Education       Drg Title     Mechanical Services       Ventilation Schematics Wing A       Sheet 2
	Job No. Scale@A1 035833 NTS
	Drawing No. Revision 20BW-BHE-WA-XX-SC-M-XX-7001 P02