

Standard construction hazards that a competent contractor would be aware of have not been identified on this drawing. Any risks not immediately apparent are identified within the CDM Residual Risk Register.

LEGEND

SVP - SOIL VENT PIPE  
WVP - WASTE VENT PIPE  
WP - WASTE PIPE  
AV - AIR ADMITTANCE VALVE  
RE - ROOFING EYE

EXISTING ABOVE GROUND DRAINAGE PIPEWORK, FITTINGS, BRACKETS, FLOWS AND ANCHLARY ITEMS TO BE DECOMMISSIONED AND STRIPPED BACK TO THE CONNECTION TO BELOW GROUND DRAINAGE SYSTEM WHERE EXISTING CONNECTIONS ARE TO NOT BE UTILISED AS PART OF THE NEW INSTALLATION. THE CONNECTIONS ARE TO BE SUITABLY SEALED AND CAPPED.

NOTES

- THIS DRAWING SHOWS THE DESIGN PROPOSAL FOR A WORKSTAGE 4 TECHNICAL DESIGN LEVEL OF DETAIL AND COMPLETENESS AS DEFINED BY BSRIA 800 2014. ALL QUANTITIES AND LOCATIONS ARE BASED ON GENERIC EQUIPMENT SELECTIONS AND SHALL BE CONFIRMED AND FULLY COORDINATED AS PART OF THE CONSTRUCTION STAGE DESIGN ACTIVITIES.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTATED OTHERWISE.
- PIPEWORK SHALL BE ADEQUATELY SUPPORTED IN THE RUNNING LENGTH USING PROPRIETARY CLIPS, BRACKETS & SUPPORT SYSTEMS.
- PIPELINES PASSING THROUGH A FIRE RATED ELEMENT OF CONSTRUCTION SHALL INCLUDE A SUITABLY RATED FIRE COLLAR.
- ROOFING ACCESS POINTS SHALL BE PROVIDED IN VERTICAL PIPEWORK AT GROUND LEVEL AND EVERY 3RD STOREY LOCATED 1500mm ABOVE P/E.
- ROOFING ACCESS POINTS SHALL BE PROVIDED IN THE ENDS OF HORIZONTAL SOL AND WASTE PIPEWORK AND AT CHANGES IN PIPE DIRECTION.
- INCLUDE PROPRIETARY WATERLESS TRAPS AT RELIEF VALVE TUNDRISH WASTE PIPE AND CONDENSATE DISPOSAL PIPE CONNECTIONS INTO THE AIR PIPE SYSTEM.
- SVPS NOT ROUTED TO ABOVE ROOF LEVEL SHALL INCLUDE A PROPRIETARY AIR ADMITTANCE VALVE ASSEMBLY.
- SVPS WHICH EXIT THE BUILDING THROUGH THE ROOF SHALL BE FITTED WITH A SUITABLE WEATHER FLASHING AND PROPRIETARY PIPE TERMINAL/SPUD SCREEN.
- WASTE PIPEWORK AND FITTINGS SHALL BE IN PUSH-JOINTED PVC-U PIPE, SIZES < 40mm DIA.
- SOL PIPEWORK AND FITTINGS SHALL BE PUSH-JOINTED PVC-U PIPE, SIZES > 40mm DIA.



P04	22.09.23	SUITABLE FOR TENDER	RC	RE
P03	20.08.23	STAGE 4 REVIEW	BM	RE
P02	02.06.23	UPDATED TO ARCHITECTS COMMENTS AND LAYOUTS	LC	RP
P01	31.03.23	PRELIMINARY ISSUE	JW	RE
REV	DATE	DESCRIPTION	DRAWN	APP



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Project:  
ELSECAR: FORGING AHEAD

Title  
MECHANICAL ENGINEERING SERVICES  
EXISTING ABOVE GROUND DRAINAGE SYSTEM  
BUILDINGS 20 & 21  
GROUND FLOOR

Architect

PURCELL

Client

BARNESLEY MBC

Subsidiary: Code Description

D2 FOR TENDER

Revision:	Scale:	TGA Proj No:	Stage:
P04	1:100	8193	4

Drawing Reference:

Project-Originator-Zone-Level-Type-Role-Classification-Number

EFAS-TGA-20-00-DR-M-52001

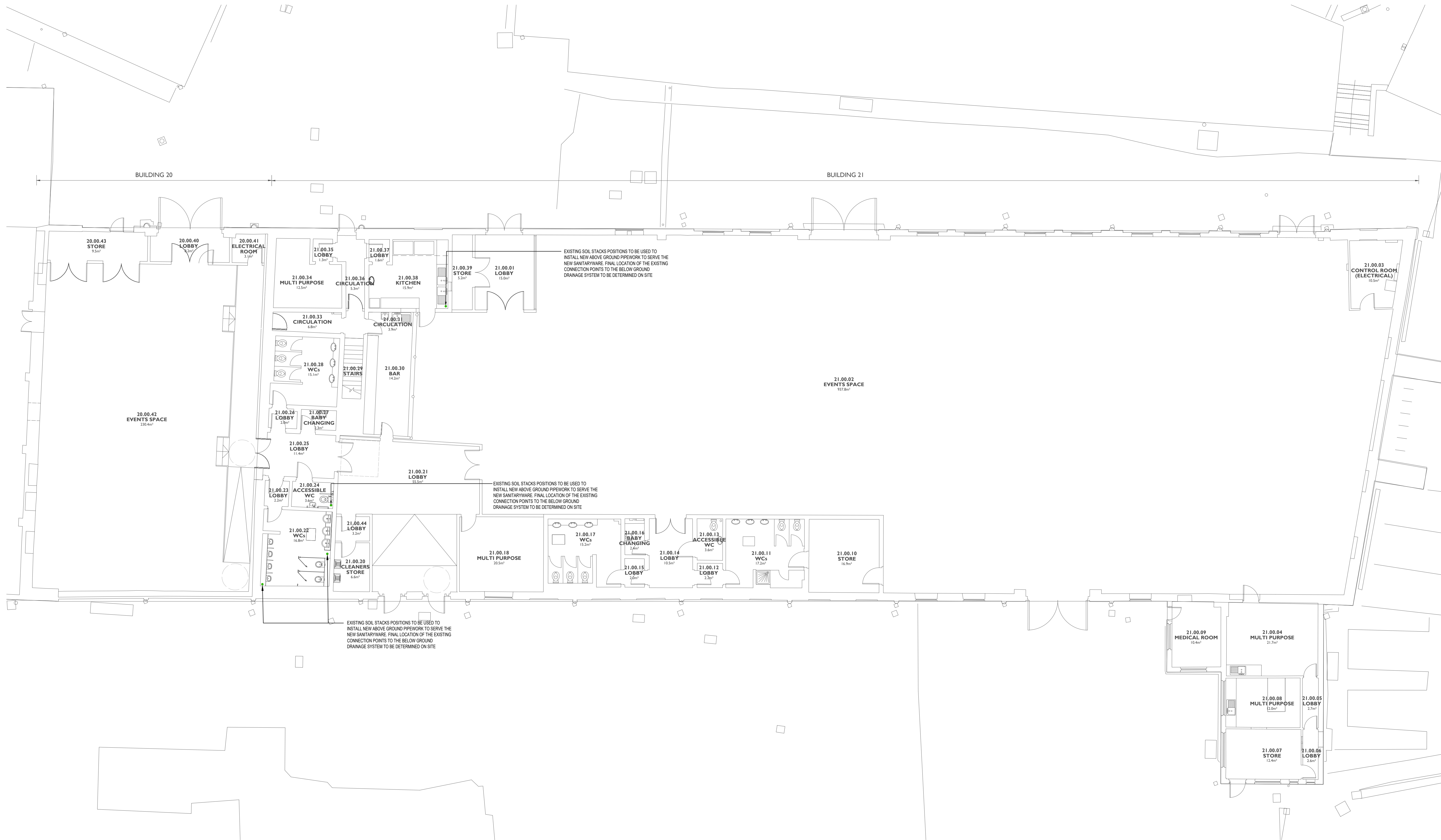
Standard construction hazards that a competent contractor would be aware of have not been identified on this drawing. Any risks not immediately apparent are identified within the CDM Residual Risk Register.

LEGEND

SVP - SOIL VENT PIPE  
WVP - WASTE VENT PIPE  
WP - WASTE PIPE  
AV - AIR ADMITTANCE VALVE  
RE - ROOFING EYE

NOTES

1. THIS DRAWING SHOWS THE DESIGN PROPOSAL FOR A WORKSTAGE 4 TECHNICAL DESIGN LEVEL OF DETAIL AND COMPLETENESS AS DEFINED BY BSRIA 800: 2019. ALL QUANTITIES AND LOCATIONS ARE BASED ON GENERIC EQUIPMENT SELECTIONS AND SHALL BE CONFIRMED AND FULLY COORDINATED AS PART OF THE CONSTRUCTION STAGE DESIGN ACTIVITIES.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTATED OTHERWISE.
3. PIPEWORK SHALL BE ADEQUATELY SUPPORTED IN THE RUNNING LENGTH USING PROPRIETARY CLIPS, BRACKETS & SUPPORT SYSTEMS.
4. PRELIMED PASSING THROUGH A FIRE RATED ELEMENT OF CONSTRUCTION SHALL INCLUDE A SUITABLY RATED FIRE COLLAR.
5. ROOFING ACCESS POINTS SHALL BE PROVIDED IN VERTICAL PIPEWORK AT GROUND LEVEL AND EVERY 3RD STOREY. LOCATED 150mm ABOVE FFL.
6. ROOFING ACCESS POINTS SHALL BE PROVIDED IN THE ENDS OF HORIZONTAL SOL AND WASTE PIPEWORK AND AT CHANGES IN PIPE DIRECTION.
7. INCLUDE PROPRIETARY WATERLESS TRAPS AT RELIEF VALVE TUNDRISH WASTE PIPE AND CONDENSATE DISPOSAL PIPE CONNECTIONS INTO THE AIR PIPE SYSTEM.
8. SVPS NOT ROUTED TO ABOVE ROOF LEVEL SHALL INCLUDE A PROPRIETARY AIR ADMITTANCE VALVE ASSEMBLY.
9. SVPS WHICH EXIT THE BUILDING THROUGH THE ROOF SHALL BE FITTED WITH A SUITABLE WEATHER FLASHING AND PROPRIETARY PIPE TERMINAL BIRD SCREEN.
10. WASTE PIPEWORK AND FITTINGS SHALL BE IN PUSH JOINTED PVC-U PIPE. SIZES < 40mm DIA.
11. SOL PIPEWORK AND FITTINGS SHALL BE PUSH JOINTED PVC-U PIPE. SIZES > 40mm DIA.



P04	22.09.23	SUITABLE FOR TENDER	MS	RN
P03	20.08.23	STAGE 4 REVIEW	BM	RE
P02	02.06.23	UPDATED TO ARCHITECTS COMMENTS AND LAYOUTS	LC	RP
P01	31.03.23	PRELIMINARY ISSUE	JW	RE
REV	DATE	DESCRIPTION	DRAWN	APP



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Project:  
ELSEGAR: FORGING AHEAD

Title:  
MECHANICAL ENGINEERING SERVICES  
PROPOSED ABOVE GROUND DRAINAGE SYSTEM  
BUILDINGS 20 & 21  
GROUND FLOOR

Architect:

PURCELL

Client:

BARNESLEY MBC

Subsidiary: Code Description  
D2 FOR TENDER

Revision:	Scale:	TGA Proj No:	Stage:
P04	1:100	8193	4

Drawing Reference:

Project-Originator-Zone-Level-Type-Role-Classification-Number

EFAS-TGA-20-00-DR-M-52002



Standard construction hazards that a competent contractor would be aware of have not been identified on this drawing. Any risks not immediately apparent are identified within the CDM Residual Risk Register.

LEGEND

OTS - ORIGIN TO BELOW

OTB - ORIGIN FROM ABOVE

EXISTING DOMESTIC HOT AND COLD WATER SERVICES, INCLUDING LOCAL WATER HEATERS, PREWORK MARKING, PREWORK BRANCHES, BRACKETS, PIPES AND ANCHORAGE ITEMS TO BE DECOMMISSIONED STRIPPED OUT AND REMOVED.

NOTES

- THIS DRAWING SHOWS THE DESIGN PROPOSAL FOR A WORKSTAGE 4 TECHNICAL DESIGN LEVEL OF DETAIL AND COMPLETENESS AS DEFINED BY BIMA R03 2019. ALL QUANTITIES AND LOCATIONS ARE BASED ON GENERIC EQUIPMENT SELECTIONS AND SHALL BE CONFIRMED AND FULLY COORDINATED AS PART OF THE CONSTRUCTION STAGE DESIGN ACTIVITIES.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTATED OTHERWISE.
- PREWORK SHALL BE ADEQUATELY SUPPORTED IN THE RUNNING LENGTH USING PROPRIETARY CLIPS, BRACKETS & SUPPORT SYSTEMS.
- ALL EQUIPMENT, VALVES AND OTHER ACCESSORIES SHALL BE FULLY ACCESSIBLE.
- PIPELINES PASSING THROUGH A FIRE RATED ELEMENT OF CONSTRUCTION SHALL INCLUDE A SUITABLY RATED FIRE COLLAR.
- ALL DOMESTIC APPLIANCES AND ITEMS OF SANITARYWARE SHALL INCLUDE A J-TURN TERMINAL ISOLATING VALVE.
- WHITE GOODS AND OTHER DOMESTIC APPLIANCES SHALL INCLUDE A SINGLE CHECK VALVE AT THE POINT OF CONNECTION TO THE APPLIANCE.
- PREWORK SHALL BE IN FRATHERN OPVC PLASTIC.
- ALL WASH HAND BASINS SHALL INCLUDE A TMV2 COMPLIANT THERMOSTATIC MIXING VALVE, SET TEMPERATURE TO 41°C.
- THERMOSTATIC MIXING VALVES SHALL INCLUDE A SINGLE CHECK VALVE ON HOT AND COLD WATER CONNECTIONS.
- ALL PIPELINES SHALL INCLUDE THERMAL INSULATION AND A VAPOUR BARRIER IN THE RUNNING LENGTH.
- THERMAL INSULATION SHALL BE CONTINUOUS THROUGH SUPPORTS AND OVER PIPE FITTINGS.
- VALVES, STRAINERS, AND OTHER PIPELINE ACCESSORIES SHALL INCLUDE PROPRIETARY TIE-ON INSULATED JACKETS.
- PIPELINES SHALL INCLUDE SERVICE IDENTIFICATION DIRECTION OF FLOW LABELLING.



P04	22.09.23	SUBMITAL FOR TENDER	RC	RE
P03	20.08.23	STAGE 4 REVIEW	BM	RE
P02	02.06.23	UPDATED TO ARCHITECTS COMMENTS AND LAYOUTS	LC	RP
P01	31.03.23	PRELIMINARY ISSUE	JW	RE
REV	DATE	DESCRIPTION	DRAWN	APP



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Project:  
ELSEGAR: FORGING AHEAD

Title:  
MECHANICAL ENGINEERING SERVICES  
EXISTING DOMESTIC WATER SERVICES  
BUILDINGS 20 & 21  
GROUND FLOOR

Architect:  
PURCELL

Client:  
BARNESLEY MBC

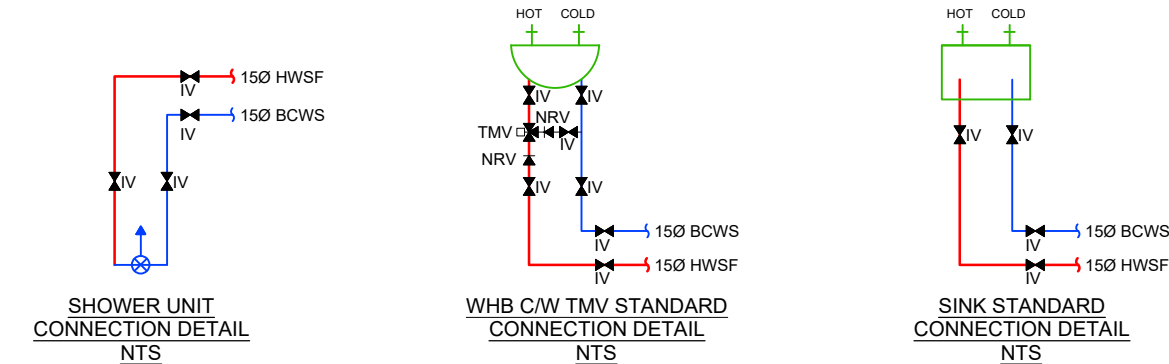
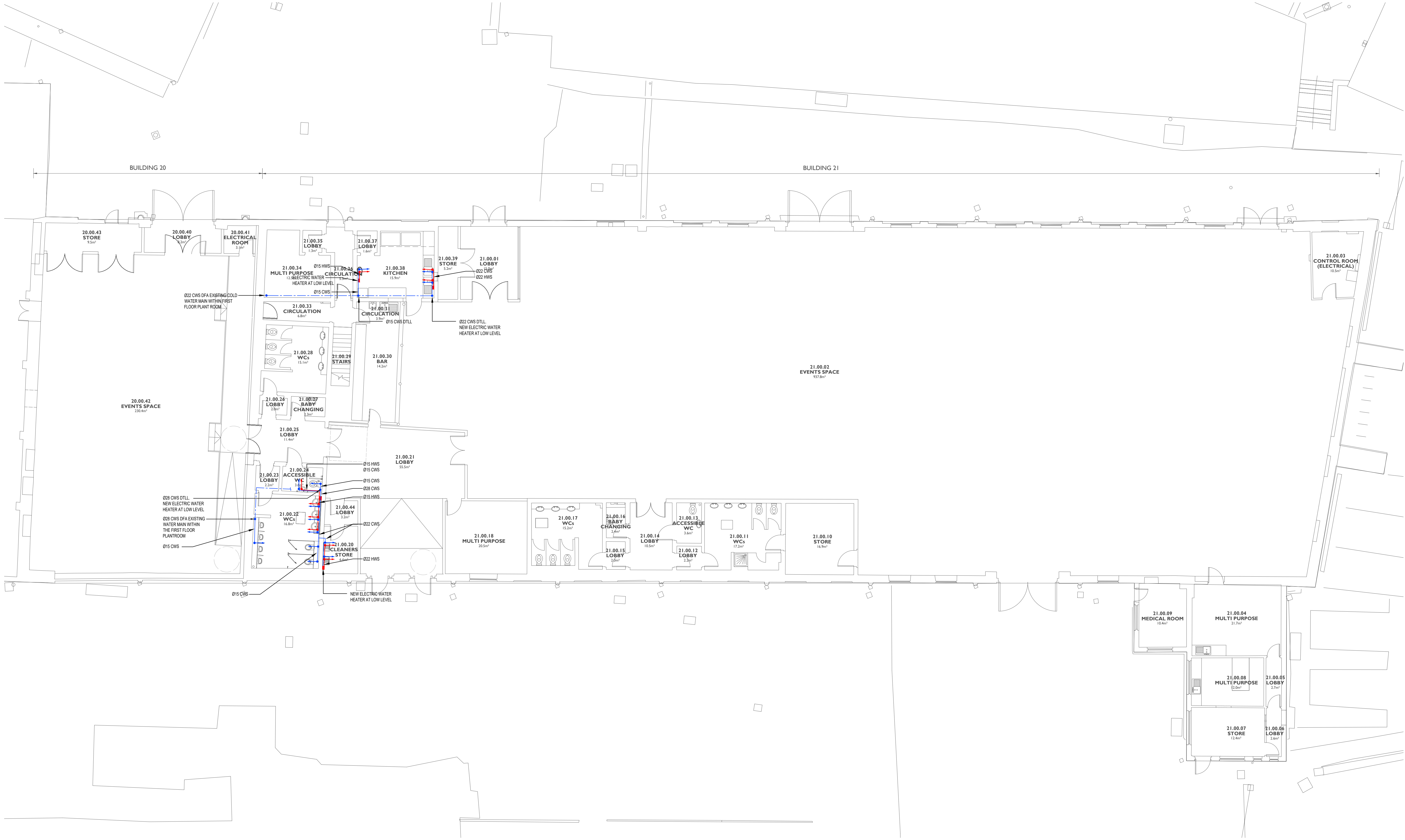
Subsidiary: Code Description  
D2 FOR TENDER

Revision:	Scale:	TGA Proj No:	Stage:
P04	1:100	8193	4

Drawing Reference:  
Project-Originator-Zone-Level-Type-Role-Classification-Number  
EFAS-TGA-20-00-DR-M-53001

Standard construction hazards that a competent contractor would be aware of have not been identified on this drawing. Any risks not immediately apparent are identified within the CDM Residual Risk Register.

- LEGEND
- PIPEWORK AT LOW LEVEL
  - PIPEWORK AT HIGH LEVEL
  - CWS - COLD WATER SERVICED
  - DTL - DROP TO LOW LEVEL
  - RFB - RISE FROM BELOW
  - RFA - RISE TO ABOVE
  - RTOV - RISE TO CEILING VOID
  - DTB - DROP TO BELOW
  - DFA - DROP FROM ABOVE
- NOTES
- THIS DRAWING SHOWS THE DESIGN PROPOSAL FOR A WORKSTAGE 4 TECHNICAL DESIGN LEVEL OF DETAIL AND COMPLETENESS AS DEFINED BY BSRIA B6:2018. ALL QUANTITIES AND LOCATIONS ARE BASED ON GENERIC EQUIPMENT SELECTIONS AND SHALL BE CONFIRMED AND FULLY COORDINATED AS PART OF THE CONSTRUCTION PHASE DESIGN ACTIVITIES.
  - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTATED OTHERWISE.
  - PIPEWORK SHALL BE ADEQUATELY SUPPORTED IN THE RUNNING LENGTH USING PROPRIETARY CLIPS, BRACKETS & SUPPORT SYSTEMS.
  - ALL EQUIPMENT, VALVES AND OTHER ACCESSORIES SHALL BE FULLY ACCESSIBLE.
  - PIPELINES PASSING THROUGH A FIRE RATED ELEMENT OF CONSTRUCTION SHALL INCLUDE A SUITABLE RATED FIRE COLLAR.
  - ALL DOMESTIC APPLIANCES AND ITEMS OF SANITARYWARE SHALL INCLUDE A 1/2" TURN TERMINAL ISOLATING VALVE.
  - WHITE GOODS AND OTHER DOMESTIC APPLIANCES SHALL INCLUDE A SINGLE CHECK VALVE AT THE POINT OF CONNECTION TO THE APPLIANCE.
  - PIPEWORK SHALL BE IN FRATHERM CPVC PLASTIC.
  - ALL WASH HAND BASINS SHALL INCLUDE A TWO COMPLYANT THERMOSTATIC MIXING VALVE. SET TEMPERATURE TO 41°C.
  - THERMOSTATIC MIXING VALVES SHALL INCLUDE A SINGLE CHECK VALVE ON HOT AND COLD WATER CONNECTIONS.
  - ALL PIPELINES SHALL INCLUDE THERMAL INSULATION AND A VAPOUR BARRIER IN THE RUNNING LENGTH.
  - THERMAL INSULATION SHALL BE CONTINUOUS THROUGH SUPPORTS AND OVER PIPE FITTINGS.
  - VALVES, STRAINERS AND OTHER PIPING ACCESSORIES SHALL INCLUDE PROPRIETARY TIE-ON INSULATED JACKETS.
  - PIPELINES SHALL INCLUDE SERVICE IDENTIFICATION DIRECTION OF FLOW LABELLING.



P05	22.09.23	SUITABLE FOR TENDER	RC	RE
P04	05.09.23	STAGE 4 ISSUE	BM	RE
P03	05.06.23	ARCHITECTS COMMENTS INCORPORATED	LC	RE
P02	02.06.23	UPDATED TO ARCHITECTS COMMENTS AND LAYOUTS	LC	RP
P01	31.03.23	PRELIMINARY ISSUE	JW	RE
REV	DATE	DESCRIPTION	DRAWN	APP

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*A sustainable future... engineered.*

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Project:  
ELSEGAR: FORGING AHEAD

Title  
MECHANICAL ENGINEERING SERVICES  
PROPOSED DOMESTIC WATER SERVICES  
BUILDINGS 20 & 21  
GROUND FLOOR

Architect  
PURCELL

Client  
BARNESLEY MBC

Subsidiary: Code Description  
D2 FOR TENDER

Revision:	Scale:	TGA Proj No:	Stage:
P05	1:100	8193	4

Drawing Reference:  
Project-Originator-Zone-Level-Type-Role-Classification-Number  
EFAS-TGA-20-00-DR-M-53002

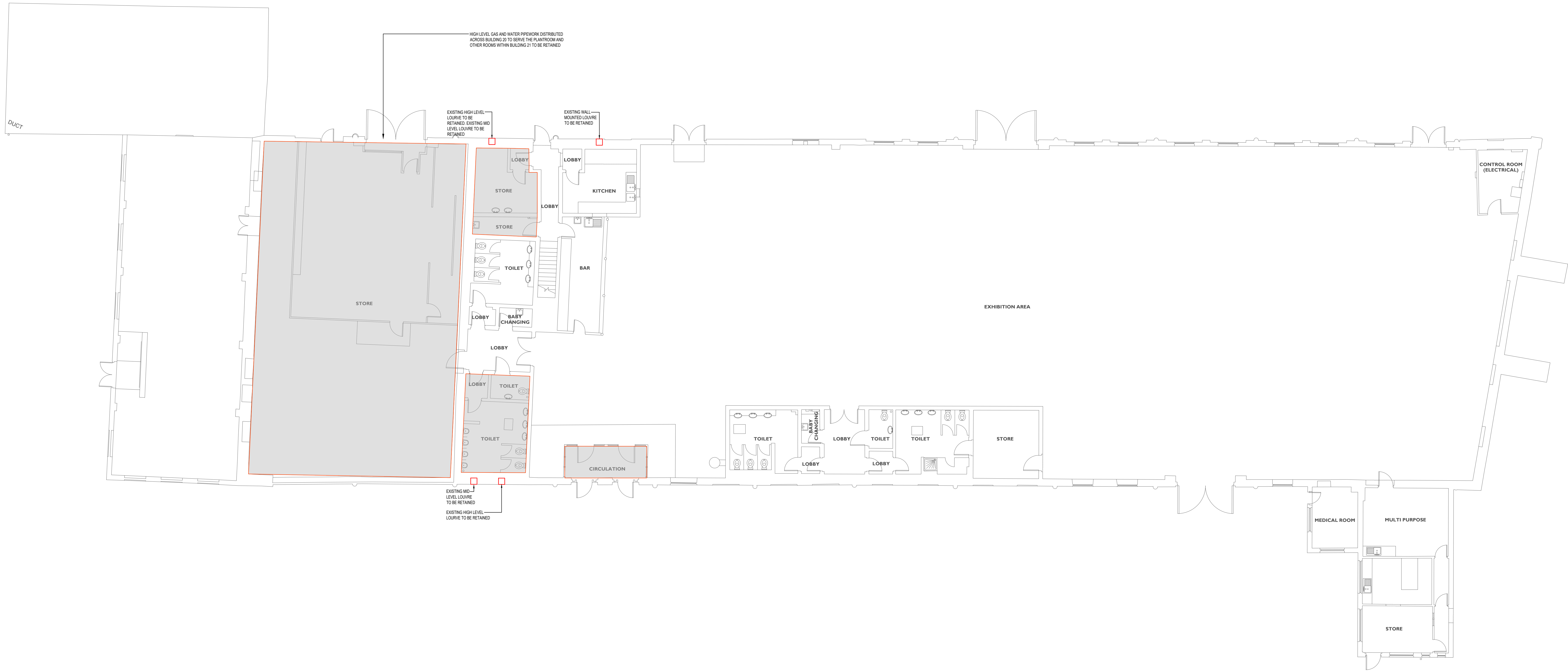


Standard construction hazards that a competent contractor would be aware of have not been identified on this drawing. Any risks not immediately apparent are identified within the CDM Residual Risk Register.

EXISTING HEATING, VENTILATION AND COOLING SYSTEM EMITTERS, PIPESWORK, DUCTWORK, BRACKETS, FIXINGS AND ACCESSORY ITEMS TO BE DECOMMISSIONED, STRIPPED OUT AND REMOVED.

NOTES

- THIS DRAWING SHOWS THE DESIGN PROPOSAL FOR A WORKSTAGE 4 TECHNICAL DESIGN LEVEL OF DETAIL AND COMPLETENESS AS DEFINED BY BESA B03 2018. ALL QUANTITIES AND LOCATIONS ARE BASED ON GENERIC EQUIPMENT SELECTIONS AND SHALL BE CONFIRMED AND FULLY COORDINATED AS PART OF THE CONSTRUCTION STAGE DESIGN ACTIVITIES.
- READ IN CONJUNCTION WITH ALL OTHER RELATED DESIGN INFORMATION INCLUDING BUT NOT LIMITED TO ARCHITECTURAL AND STRUCTURAL INFORMATION.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTATED OTHERWISE.
- VENTILATION DUCTWORK SHALL BE IN GALVANISED STEEL TO BESA SPECIFICATION D01H4.
- BENDS SHALL BE MEDIUM RADIUS. SQUARE BENDS SHALL INCLUDE TURNING VANES.
- SQUARE BENDS WITHOUT TURNING VANES SHALL NOT BE USED.
- GALVANISED STEEL DUCTWORK PASSING THROUGH FIRE RATED ELEMENTS OF CONSTRUCTION SHALL INCLUDE SUFFICIENTLY RATED FIRE DAMPERS IN ACCORDANCE WITH THE PUBLISHED FIRE STRATEGY.
- DUCTWORK SHALL BE ADEQUATELY SUPPORTED IN THE RUNNING LENGTH USING PROPRIETARY CLIPS AND BRACKETS.
- INCLUDE VOLUME CONTROL DAMPERS AND MOTORISED DAMPERS WHERE INDICATED ON THE DRAWINGS.
- ALL DAMPERS AND OTHER DUCTWORK ACCESSORIES SHALL BE ACCESSIBLE. INCLUDE ADEQUATELY SIZED ACCESS DOORS.
- THERMAL INSULATION SHALL BE CONTINUOUS IN THE RUNNING LENGTH, CONTINUOUS THROUGH SUPPORTS AND OVER FITTINGS.
- DUCTLINES SHALL INCLUDE DIRECTION OF FLOW AND SERVICE IDENTIFICATION LABELLING.



P04	22.09.23	SUBMIT FOR TENDER	RC	RE
P03	20.08.23	STAGE 4 REVIEW	BM	RE
P02	02.06.23	UPDATED TO ARCHITECTS COMMENTS AND LAYOUTS	LC	RP
P01	14.04.23	PRELIMINARY ISSUE	DB	RE
REV	DATE	DESCRIPTION	DRAWN	APP



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Project:  
ELSEGAR: FORGING AHEAD

Title:  
MECHANICAL ENGINEERING SERVICES  
EXISTING HEATING, VENTILATION & AIR  
CONDITIONING SERVICES  
BUILDINGS 20 & 21  
GROUND FLOOR

Architect:

PURCELL

Client:

BARNESLEY MBC

Subsidiary: Code  
D2

Description  
FOR TENDER

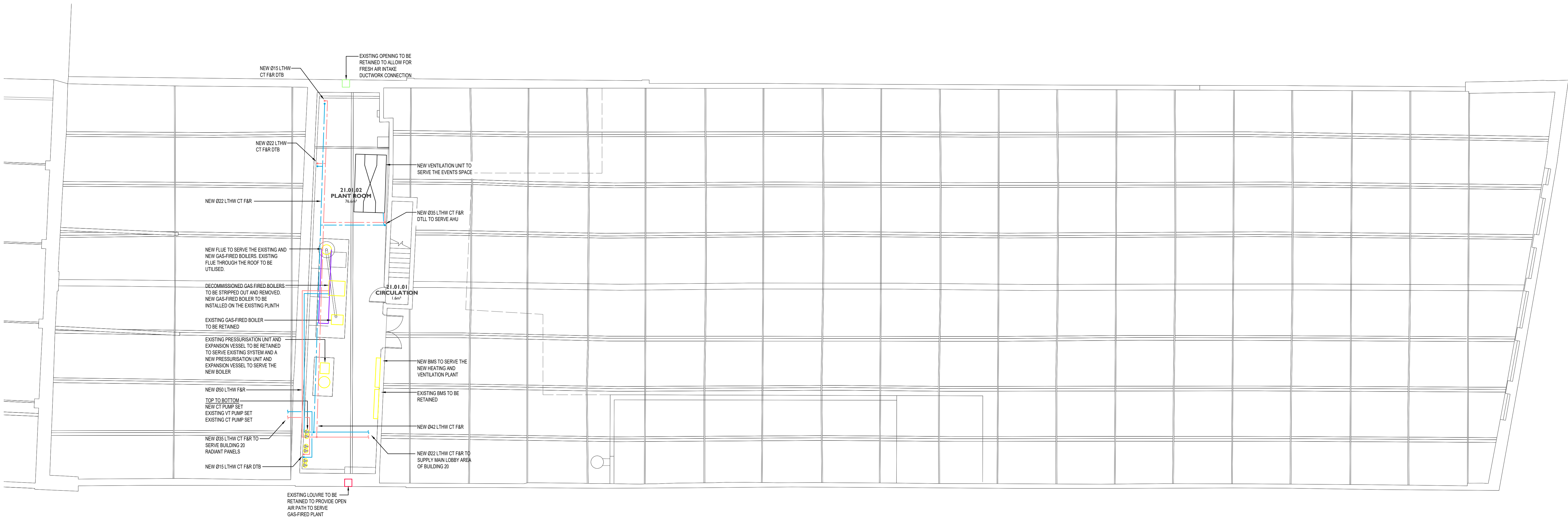
Revision:	Scale:	TGA Proj No:	Stage:
P04	1:100	8193	4

Drawing Reference:

Project-Originator-Zone-Level-Type-Role-Classification-Number

EFAS-TGA-20-00-DR-M-56001

- LEGEND
- RADIATOR
  - LOW SURFACE TEMPERATURE RADIATOR
  - PPEWORK IN FLOOR VOID
  - PPEWORK AT LOW LEVEL
  - PPEWORK AT HIGH LEVEL
  - DITL DROP TO LOW LEVEL
  - F&R FLOW & RETURN
  - LTHW LOW TEMPERATURE HOT WATER
- NOTES
- THIS DRAWING SHOWS THE DESIGN PROPOSAL FOR A WORKSTAGE 4 TECHNICAL DESIGN LEVEL. OF DETAIL AND COMPLETENESS AS DEFINED BY BSI BS 8546:2019. ALL QUANTITIES AND LOCATIONS ARE BASED ON GENERIC EQUIPMENT SELECTIONS AND SHALL BE CONFIRMED AND FULLY COORDINATED AS PART OF THE CONSTRUCTION STAGE DESIGN ACTIVITIES.
  - READ IN CONJUNCTION WITH ALL OTHER RELATED DESIGN INFORMATION INCLUDING BUT NOT LIMITED TO ARCHITECTURAL AND STRUCTURAL INFORMATION.
  - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTATED OTHERWISE.
  - THERMAL INSULATION SHALL BE CONTINUOUS IN THE RUNNING LENGTH, CONTINUOUS THROUGH SUPPORTS AND OVER FITTINGS.



PR2	22.08.23	SUITABLE FOR TENDER	RC	RE
PR1	25.08.23	STAGE 4 REVIEW	BN	RE
REV	DATE	DESCRIPTION	DRAWN	APP



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Project  
ELSECAR: FORGING AHEAD

Title  
MECHANICAL ENGINEERING SERVICES  
PROPOSED HEATING SERVICES  
BUILDING 20 & 21  
FIRST FLOOR

Architect  
PURCELL

Client  
BARNESLEY MBC

Suitability: Code Description  
D2 FOR TENDER

Revision:	Scale:	TGA Proj No:	Stage:
P02	1:100	8193	4

Drawing Reference:  
Project-Originator-Zone-Level-Type-Role-Classification-Number  
EFAS-TGA-20-01-DR-M-56001



Standard construction hazards that a competent contractor would be aware of have not been identified on this drawing. Any risks not immediately apparent are identified within the CDM Residual Risk Register.

- LEGEND**
- RADIATOR
  - LOW SURFACE TEMPERATURE RADIATOR
  - PIPEWORK IN FLOOR VOID
  - PIPEWORK AT LOW LEVEL
  - PIPEWORK AT HIGH LEVEL
  - DITL DROP TO LOW LEVEL
  - FAR FLOW & RETURN
  - LTHW LOW TEMPERATURE HOT WATER

**NOTES**

- THIS DRAWING SHOWS THE DESIGN PROPOSAL FOR A WORKSTAGE 4 TECHNICAL DESIGN LEVEL OF DETAIL AND COMPLETENESS AS DEFINED BY BSRIA RSE 2016. ALL QUANTITIES AND LOCATIONS ARE BASED ON GENERIC EQUIPMENT SELECTIONS AND SHALL BE CONFIRMED AND FULLY COORDINATED AS PART OF THE CONSTRUCTION STAGE DESIGN ACTIVITIES.
- READ IN CONJUNCTION WITH ALL OTHER RELATED DESIGN INFORMATION INCLUDING BUT NOT LIMITED TO ARCHITECTURAL AND STRUCTURAL INFORMATION.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTATED OTHERWISE.
- THERMAL INSULATION SHALL BE CONTINUOUS IN THE RUNNING LENGTH, CONTINUOUS THROUGH SUPPORTS AND OVER FITTINGS.



P05	20.09.23	UPDATED PIPE SIZES	BM	RE
P04	22.09.23	SUITABLE FOR TENDER	RC	RE
P03	20.08.23	STAGE 4 REVIEW	JW	RE
P02	02.06.23	UPDATED TO ARCHITECTS COMMENTS AND LAYOUTS	LC	RP
P01	14.04.23	PRELIMINARY ISSUE	JW	RE
REV	DATE	DESCRIPTION	DRAWN	APP



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Project:  
ELSEGAR: FORGING AHEAD

Title:  
MECHANICAL ENGINEERING SERVICES  
PROPOSED HEATING SERVICES  
BUILDINGS 20 & 21  
GROUND FLOOR

Architect:

PURCELL

Client:

BARNESLEY MBC

Subsidiary: Code Description  
D2 FOR TENDER

Revision: Scale: TGA Proj No: Stage:  
P05 1:100 8193 4

Drawing Reference:  
Project-Originator-Zone-Level-Type-Role-Classification-Number  
EFAS-TGA-20-00-DR-M-56002

Standard construction hazards that a competent contractor would be aware of have not been identified on this drawing. Any risks not immediately apparent are identified within the CDM Residual Risk Register.

- LEGEND
- SUPPLY DIFFUSER
  - EXTRACT GRILLE
  - VOLUME CONTROL DAMPER
  - EXTRACT FAN
  - HEAT RECOVERY UNIT
  - GENERAL SUPPLY
  - GENERAL EXTRACT
  - FRESH AIR INTAKE
  - EXHAUST AIR
- NOTES
- THIS DRAWING SHOWS THE DESIGN PROPOSAL FOR A WORKSTAGE 4 TECHNICAL DESIGN LEVEL OF DETAIL AND COMPLETENESS AS DEFINED BY BERA BOX 2018. ALL QUANTITIES AND LOCATIONS ARE BASED ON GENERIC EQUIPMENT SELECTIONS AND SHALL BE CONFIRMED AND FULLY COORDINATED AS PART OF THE CONSTRUCTION STAGE DESIGN ACTIVITIES.
  - RECORD IN CONJUNCTION WITH ALL OTHER RELATED DESIGN INFORMATION INCLUDING BUT NOT LIMITED TO ARCHITECTURAL AND STRUCTURAL INFORMATION.
  - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTATED OTHERWISE.
  - VENTILATION DUCTWORK SHALL BE IN GALVANISED STEEL TO BESA SPECIFICATION D1444.
  - BENDS SHALL BE MEDIUM RADIUS. SQUARE BENDS SHALL INCLUDE TURNING VANES.
  - SQUARE BENDS WITHOUT TURNING VANES SHALL NOT BE USED.
  - GALVANISED STEEL DUCTWORK, PASSING THROUGH FIRE RATED ELEMENTS OF CONSTRUCTION SHALL INCLUDE DUTY RATED FIRE DAMPERS IN ACCORDANCE WITH THE PUBLISHED FIRE STRATEGY.
  - DUCTWORK SHALL BE ADEQUATELY SUPPORTED IN THE RUNNING LENGTH USING PROPRIETARY CLIPS AND BRACKETS.
  - INCLUDE VOLUME CONTROL DAMPERS AND MOTORISED DAMPERS WHERE INDICATED ON THE DRAWINGS.
  - ALL DAMPERS AND OTHER DUCTWORK ACCESSORIES SHALL BE ACCESSIBLE. INCLUDE ADEQUATELY NOTED ACCESS DOORS.
  - THERMAL INSULATION SHALL BE CONTINUOUS IN THE RUNNING LENGTH, CONTINUOUS THROUGH SUPPORTS AND OVER FITTINGS.
  - DUCTLINES SHALL INCLUDE DIRECTION OF FLOW AND SERVICE IDENTIFICATION LABELLING.



P04	22.09.23	SUBMIT FOR TENDER	RC	RE
P03	20.08.23	STAGE 4	MS	RE
P02	02.06.23	UPDATED TO ARCHITECTS COMMENTS AND LAYOUTS	LC	RP
P01	14.04.23	PRELIMINARY ISSUE	JW	RE
REV	DATE	DESCRIPTION	DRAWN	APP



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Salvus House, Ayley Heads, Durham City, DH1 5TS.  
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Project:  
ELSEGAR: FORGING AHEAD

Title  
MECHANICAL ENGINEERING SERVICES  
PROPOSED VENTILATION  
BUILDINGS 20 & 21  
GROUND FLOOR

Architect  
PURCELL

Client  
BARNESLEY MBC

Subsidiary: Code Description  
D2 FOR TENDER

Revision:	Scale:	TGA Proj No:	Stage:
P04	1:100	8193	4

Drawing Reference:  
Project-Originator-Zone-Level-Type-Role-Classification-Number

EFAS-TGA-20-00-DR-M-57001

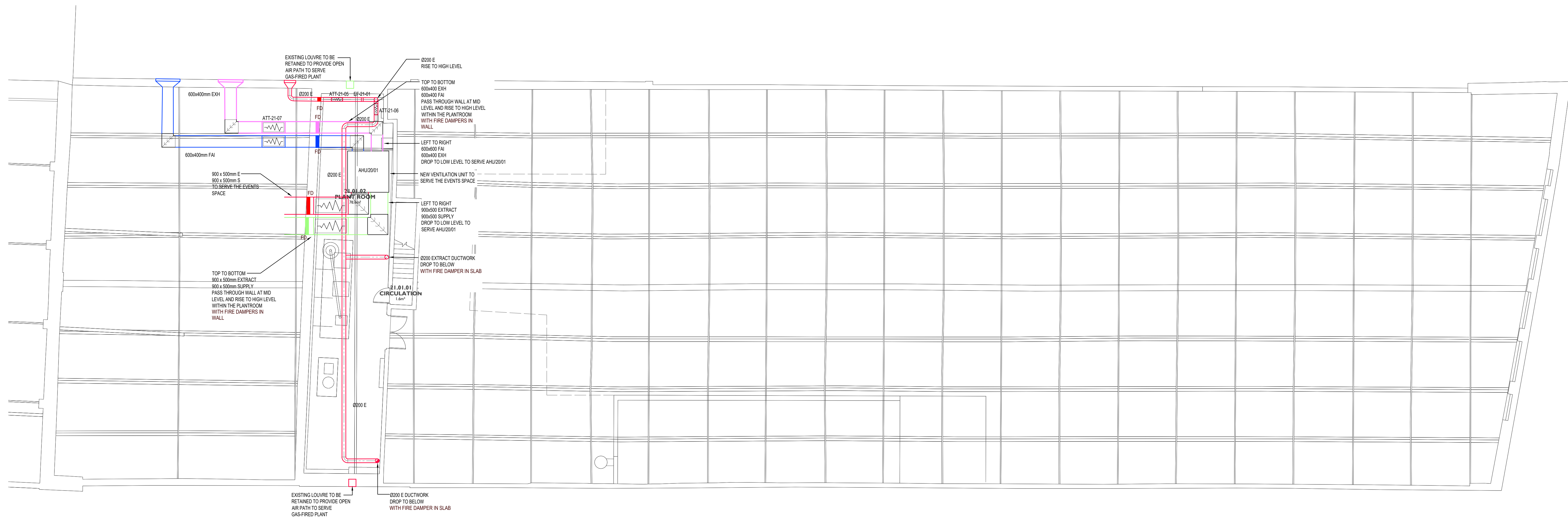


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Standard construction hazards that a competent contractor would be aware of have not been identified on this drawing. Any risks not immediately apparent are identified within the CDM Residual Risk Register.

## NOTES

1. THIS IS A STAGE 3 DRAWINGS AND PROVIDES A TYPICAL LAYOUT ONLY. REFER TO STAGE 3 REPORT FOR FURTHER INFORMATION.
2. READ IN CONJUNCTION WITH ALL OTHER RELATED DESIGN INFORMATION INCLUDING BUT NOT LIMITED TO ARCHITECTURAL AND STRUCTURAL INFORMATION.
3. DUCT SIZES AND EQUIPMENT SELECTIONS ARE PROVISIONAL AND WILL BE CONFIRMED IN STAGE 4.
4. VENTILATION DUCTWORK SHALL BE IN GALVANISED STEEL TO BESA SPECIFICATION DW144.
5. BENDS SHALL BE MEDIAN RADIUS. SQUARE BENDS SHALL INCLUDE TURNING VANES.
6. SQUARE BENDS WITHOUT TURNING VANES SHALL NOT BE USED.
7. GALVANISED STEEL DUCTWORK PASSING THROUGH FIRE RATED ELEMENTS OF CONSTRUCTION SHALL INCLUDE SUITABLY RATED FIRE DAMPERS IN ACCORDANCE WITH THE PUBLISHED FIRE STRATEGY.
8. DUCTWORK SHALL BE ADEQUATELY SUPPORTED IN THE RUNNING LENGTH USING PROPRIETARY CLIPS AND BRACKETS.
9. INCLUDE VOLUME CONTROL DAMPERS AND MOTORISED DAMPERS WHERE INDICATED ON THE DRAWINGS.
10. ALL DAMPERS AND OTHER DUCTWORK ACCESSORIES SHALL BE ACCESSIBLE. INCLUDE ADEQUATELY SIZED ACCESS DOORS.
11. THERMAL INSULATION SHALL BE CONTINUOUS IN THE RUNNING LENGTH, CONTINUOUS THROUGH SUPPORTS AND OVER FITTINGS.
12. OUTLINES SHALL INCLUDE DIRECTION OF FLOW AND SERVICE IDENTIFICATION LABELLING.



PK1	20.09.23	SUITABLE FOR TENDER	BM	RE
PK4	22.09.23	SUITABLE FOR TENDER	RC	RE
PK3	25.08.23	STAGE 4	MS	RE
PK2	02.08.23	UPDATED TO ARCHITECT'S COMMENTS AND LAYOUTS	LC	RP
PK1	14.04.23	PRELIMINARY ISSUE	JW	RE
REV	DATE	DESCRIPTION	DRAWN	APP



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Project

ELSECAR: FORGING AHEAD

Title

MECHANICAL ENGINEERING SERVICES  
PROPOSED VENTILATION LAYOUT  
BUILDING 20 & 21  
FIRST FLOOR

Architect

PURCELL

Client

BARNESLEY MBC

Suitability: Code Description  
D2 FOR TENDER

Revision:	Scale:	TGA Proj No:	Stage:
P05	1:100	8193	4

Drawing Reference:

Project-Originator-Zone-Level-Type-Role-Classification-Number

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