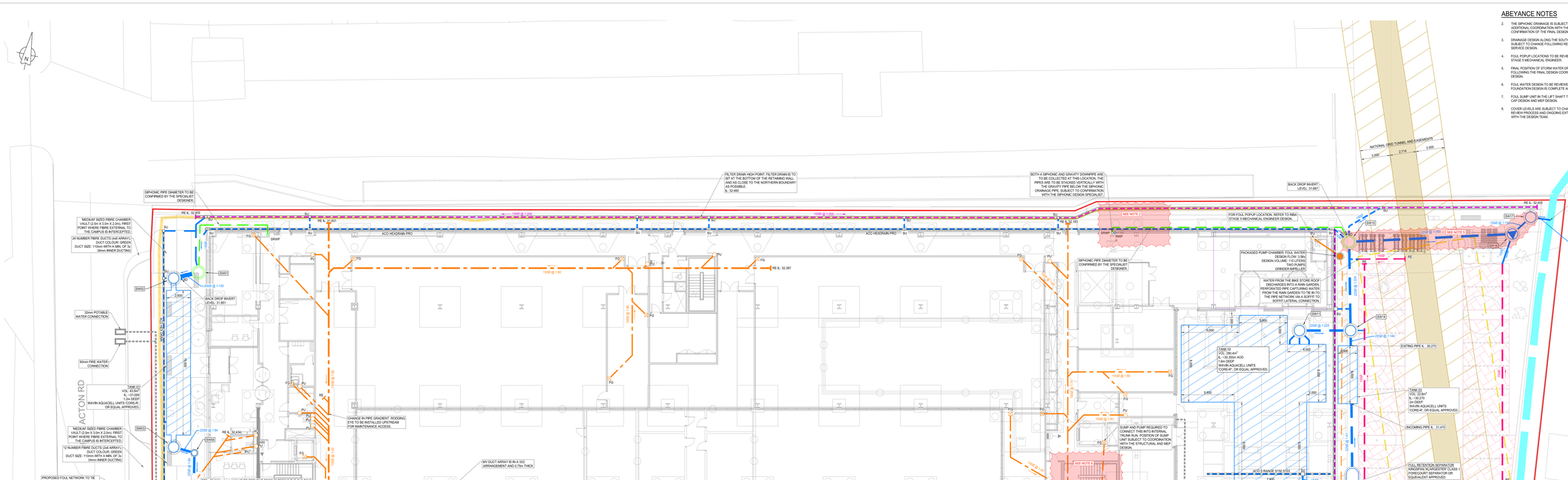

ABEYANCE NOTES

2. THE SIPHONIC DRAINAGE IS SUBJECT TO CHANGE FOLLOWING ADDITIONAL COORDINATION WITH THE FIRE SERVICE AND CONFIRMATION OF THE FINAL DESIGN FROM THE SPECIALIST.
3. DRAINAGE DESIGN ALONG THE SOUTHERN FACE OF THE BUILDING IS SUBJECT TO CHANGE FOLLOWING RECEIPT OF THE DETAILED MV SERVICE DESIGN.
4. FOUL POPUP LOCATIONS TO BE REVIEWED AND CONFIRMED BY RIBA STAGE 3 MECHANICAL ENGINEER.
5. FINAL POSITION OF STORM WATER DRAINAGE SUBJECT TO CHANGE FOLLOWING THE FINAL DESIGN COORDINATION WITH THE MOBILE CRANE DESIGN.
6. FOUL WATER DESIGN TO BE REVIEWED ONCE THE STARR CORE FOUNDATION DESIGN IS COMPLETE AND READY FOR COORDINATION.
7. FOUL SUMP LIMIT IN THE LIFT SHAFT TO BE COORDINATED WITH THE PILE CAP DESIGN AND MEP DESIGN.
8. COVER LEVELS ARE SUBJECT TO CHANGE FOLLOWING THE CLIENT REVIEW PROCESS AND ONGOING EXTERNAL DESIGN COORDINATION WITH THE DESIGN TEAM.

DESIGN NOTES

1. THIS DRAWING MUST BE READ ALONGSIDE THE COMBINED SERVICES LAYOUTS (REF LHR21-PIN-XX-SP-DR-C-2500 & LHR21-PIN-XX-SP-DR-C-2506), DRAINAGE CONSTRUCTION DETAILS (REF LHR21-PIN-XX-XX-DR-C-2400 TO 2403) & DRAINAGE LONG SECTIONS (REF LHR21-PIN-XX-XX-DR-C-2320 TO 2321).
2. THE DRAINAGE DESIGN IS SUBJECT TO CHANGE FOLLOWING ONGOING DETAILED DESIGN COORDINATION AND RECEIPT OF FINAL EXTERNAL SERVICES DESIGN.
3. ALL DRAINAGE POP UP LOCATIONS ENTERING THE FOUL NETWORK HAVE BEEN REFERENCED FROM THE DRAWING PREPARED FROM BLACK AND WHITE LAYOUT ZG616_LHR21-BWE-DC-SX-DR-A-002.
4. ALL PROPOSED FOUL WATER PIPEWORK IS BASED ON THE WAVIN AQUACELL PRODUCT RANGE. ALL ATTENUATION TANKS MUST BE INSTALLED USING THE WAVIN AQUACELL PRODUCT OR AN EQUIVALENT APPROVED PRODUCT. IF AN ALTERNATE CELLULAR STORAGE TANK PRODUCT IS PROPOSED, THE PRODUCT DETAILS AND SPECIFICATIONS MUST BE PASSED TO THE CIVIL ENGINEER FOR APPROVAL.

GENERAL NOTES

1. DO NOT SCALE THIS DRAWING. WORK ONLY TO FIGURED DIMENSIONS.
2. FOR ALL RELEVANT NOTES, REFER TO STRUCTURAL AND CIVIL ENGINEERING PERFORMANCE SPECIFICATION.
3. ALL DISCREPANCIES TO BE REPORTED TO 'PINNACLE CONSULTING ENGINEERS IMMEDIATELY.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CIVIL, STRUCTURAL, ARCHITECTS AND SUBCONTRACTORS DRAWINGS AND DETAILS.
5. THIS DRAWING IS TO BE PRINTED IN COLOUR.
6. EXISTING SITE AND LEVEL INFORMATION TAKEN FROM RAMBOLL TOPOGRAPHICAL SURVEY DRAWING R4M-XX-SS-DR-SV-00001' AND 'R4M-XX-00-DR-V-00002' DATED MARCH 2022.

LEGEND

- INDICATIVE SITE BOUNDARY
- EXISTING PUBLIC SURFACE WATER SEWER
- EXISTING PUBLIC FOUL WATER SEWER
- EXISTING PRIVATE FOUL WATER SEWER
- PROPOSED PRIVATE SURFACE WATER SEWER
- BD PROPOSED MANHOLE BACKDROP
- PROPOSED PRIVATE FOUL WATER SEWER
- PROPOSED PRIVATE FOUL/WATER RISING MAIN
- PROPOSED PRIVATE SURFACE WATER SEWER (SIPHONIC)
- PROPOSED PRIVATE SIPHONIC BREAK CHAMBER WITH A VENTED COVER
- PU PROPOSED FOUL POPUP
- FG PROPOSED FOUL GULLY
- RE PROPOSED FOUL RODDING EYE
- PROPOSED CHANNEL DRAIN
- PROPOSED FILTER DRAIN
- PROPOSED PETROL INTERCEPTOR
- PROPOSED ATTENUATION TANK (CELLULAR STORAGE)
- PROPOSED KERB DRAIN
- PROPOSED PRIVATE SURFACE WATER FLOW CONTROL CHAMBER
- G PROPOSED MOBILE CRANE PLATFORM
- PROPOSED SURFACE WATER GULLY
- PROPOSED PERMEABLE PAVING
- PROPOSED PERFORATED SURFACE WATER PIPE
- SHEET PILES
- RWP RAIN WATER DOWN PIPE
- SRWP SIPHONIC RAIN WATER DOWN PIPE
- RE PROPOSED PERFORATED PIPE RODDING EYE
- PROPOSED CHANNEL DRAIN WITH END CAP
- PROPOSED NATIONAL GRID TUNNEL AND EASEMENTS - APPROXIMATE POSITION

SCALE 1:100
0 1 2 3 4 5m
DIMENSIONS IN METRES

REV	DESCRIPTION	BY	Chkd APP	DATE
C01	ENTERPRISE'S SETTING OUT ADDED TO SCHEDULE	TWB	JJ	07.06.23
C02	UPDATED FOLLOWING GLENCAR REQUEST TO REMOVE FOUL WATER GULLIES	DG	NP	28.06.23
C03	UPDATED LAYOUT FOLLOWING BELOW COMMENTS AND DESIGN DEVELOPMENT.	RB	NP	14.08.23
P05	S5 - UPDATED FOLLOWING GLENCAR COMMENTS AND DESIGN DEVELOPMENT.	RB	JJ	13.07.23
P04	S5 - CLIENT REVIEW - UPDATED FOLLOWING GLENCAR COMMENTS	RB	BAYTR	30.06.23
P03	S5 - FOR INTERNAL REVIEW AND COMMENT	RB	RPJJ	16.06.23
P02	S5 - CLIENT REVIEW	JCR	ST	23.05.23
P01	ISSUED FOR INFORMATION	BR	CM	09.03.2023

CLIENT

Glencar

PROJECT

LHR21 DATA CENTRE

DRAWING TITLE

PROPOSED STORM WATER AND FOUL WATER DRAINAGE GENERAL ARRANGEMENT

PINNACLE CONSULTING ENGINEERS

PINNACLE HOUSE
BREWERY LANE,
BROADLAND GATE,
NORFOLK,
NR7 1QY
TELEPHONE: 01603 327 170
HELSINKI ■ COPENHAGEN ■ LONDON ■ DUBLIN ■ THE HAGUE ■ BRAMFORD

STATUS: CONSTRUCTION

SCALE @ A0	DATE	DRAWN BY	CHECKED	APPROVED
1:100	MAR '23	MH	RP	JJ

DRG NO: LHR21-PIN-XX-SP-DR-C-2300 REV: C03

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SURFACE WATER MANHOLE SCHEDULE

MANHOLE REF	APPROX. COVER LEVEL	INVERT LVL. OF OUTLET PIPE	APPROX. DEPTH (m)	EASTING	NORTHING	MANHOLE SIZE (mm)	COVER TYPE	REMARKS
SW01	32.861	31.868	0.892	520777.465	182994.886	1050	B125	VENTED MANHOLE FOR SIPHONIC BREAK
SW02	32.793	31.059	1.847	520775.096	182993.743	1050	B125	CELLULAR STORAGE CONNECTION. SEE DRAINAGE DETAILS REF: LHR21-PIN-XX-XX-DR-C-2400, CATCHPIT MANHOLE.
SW03	32.982	31.059	1.923	520778.726	182976.622	1050	B125	CELLULAR STORAGE CONNECTION. SEE DRAINAGE DETAILS REF: LHR21-PIN-XX-XX-DR-C-2400, CATCHPIT MANHOLE.
SW04	33.010	31.032	1.978	520780.952	182976.497	600	B125	INSPECTION CHAMBER
SW05	32.844	30.971	1.873	520781.938	182971.507	600	B125	INSPECTION CHAMBER
SW06	32.535	30.929	1.697	520783.309	182970.262	600	B125	INSPECTION CHAMBER
SW07	32.868	30.710	2.158	520826.760	182979.159	600	D400	INSPECTION CHAMBER
SW08	32.892	30.626	2.266	520842.544	182982.589	600	D400	INSPECTION CHAMBER
SW09	33.057	30.464	2.593	520873.110	182989.701	600	D400	INSPECTION CHAMBER
SW15	33.080	30.307	2.773	520853.264	182994.091	1050	E600	CATCHPIT MANHOLE. ALL MANHOLS PIPEWORK IS TO BE 150mm DIA.
SW11	33.130	30.283	2.848	520860.250	183012.889	1050	E600	ALL MANHOLS PIPEWORK IS TO BE 150mm DIA.
SW12	33.096	31.984	1.112	520895.156	183994.433	1050	E600	
SW13	33.130	31.631	1.504	520899.644	182995.394	1050	E600	CATCHPIT MANHOLE
SW14	33.331	30.219	2.772	520895.437	183014.051	1050	D400	CATCHPIT
SW15	32.969	30.218	2.751	520893.359	183020.954	1050	B125	VENTED MANHOLE FOR SIPHONIC BREAK. SIPHONIC DRAINAGE PIPE ENTERING FROM HIGH LEVEL.
SW16	33.235	30.105	3.130	520909.730	183027.298	1050	B125	FLOW CONTROL MANHOLE SET TO MAXIMUM OF 3.5 L/S.
SW17	33.510	30.086	3.422	520911.216	183029.436	1200	D400	1,200 dia Type 1B Manhole (B.10-B.11)

FOUL WATER MANHOLE SCHEDULE

MANHOLE REF	APPROX. COVER LEVEL	INVERT LVL. OF OUTLET PIPE	APPROX. DEPTH (M)	EASTING	NORTHING	MANHOLE SIZE (MM)	COVER TYPE	REMARKS
F01	33.102	31.829	1.273	520873.9003	182990.7027	600	D400	INCOMING PUMPED CONNECTION. INSPECTION CHAMBER.
F02	33.102	31.806	1.296	520873.0798	182990.0985	600	D400	INSPECTION CHAMBER.
F03	32.960	31.554	1.406	520853.4812	182982.8403	600	D400	INSPECTION CHAMBER.
F04	32.837	31.237	1.700	520795.6987	182974.0900	600	D400	INSPECTION CHAMBER.
F04A	32.856	31.362	1.594	520803.3787	182976.7218	1050	D400	1,200 dia Type2 (B.12)
F05	32.819	31.189	1.730	520763.6245	182973.5084	600	B125	600 dia Type3 (B.17b)
F06	32.692	31.091	1.601	520796.1988	182969.3694	600	B125	INSPECTION CHAMBER.
F07	32.634	31.016	1.618	520780.5806	182971.4242	1200	D400	NON-RETURN VALVE WITHIN MANHOLE CHAMBER. BACK DROP INVERT LEVEL: 32.341

INTERCEPTOR SCHEDULE

INTERCEPTOR REF	INLET DIAMETER (mm)	OUTLET DIAMETER (mm)	COVER LEVEL	INVERT LEVEL OF INLET PIPE	INVERT LEVEL OF OUTLET PIPE	SPECIFICATION	EASTING	NORTHING
PI01	225	225	33.053	30.382	30.332	BY-PASS SEPARATOR SPEL 'STORMSEPTOR CLASS 1 BY-PASS SEPARATOR MODEL: 25K CVSC' OR EQUIVALENT APPROVED.	520888.622	182993.594
PI02	225	225	33.130	31.715	31.665	FULL RETENTION SEPARATOR. KINGSPAN 'KLARGESTER' CLASS 1 FORECOURT SEPARATOR OR EQUIVALENT APPROVED.	520896.875	182998.787