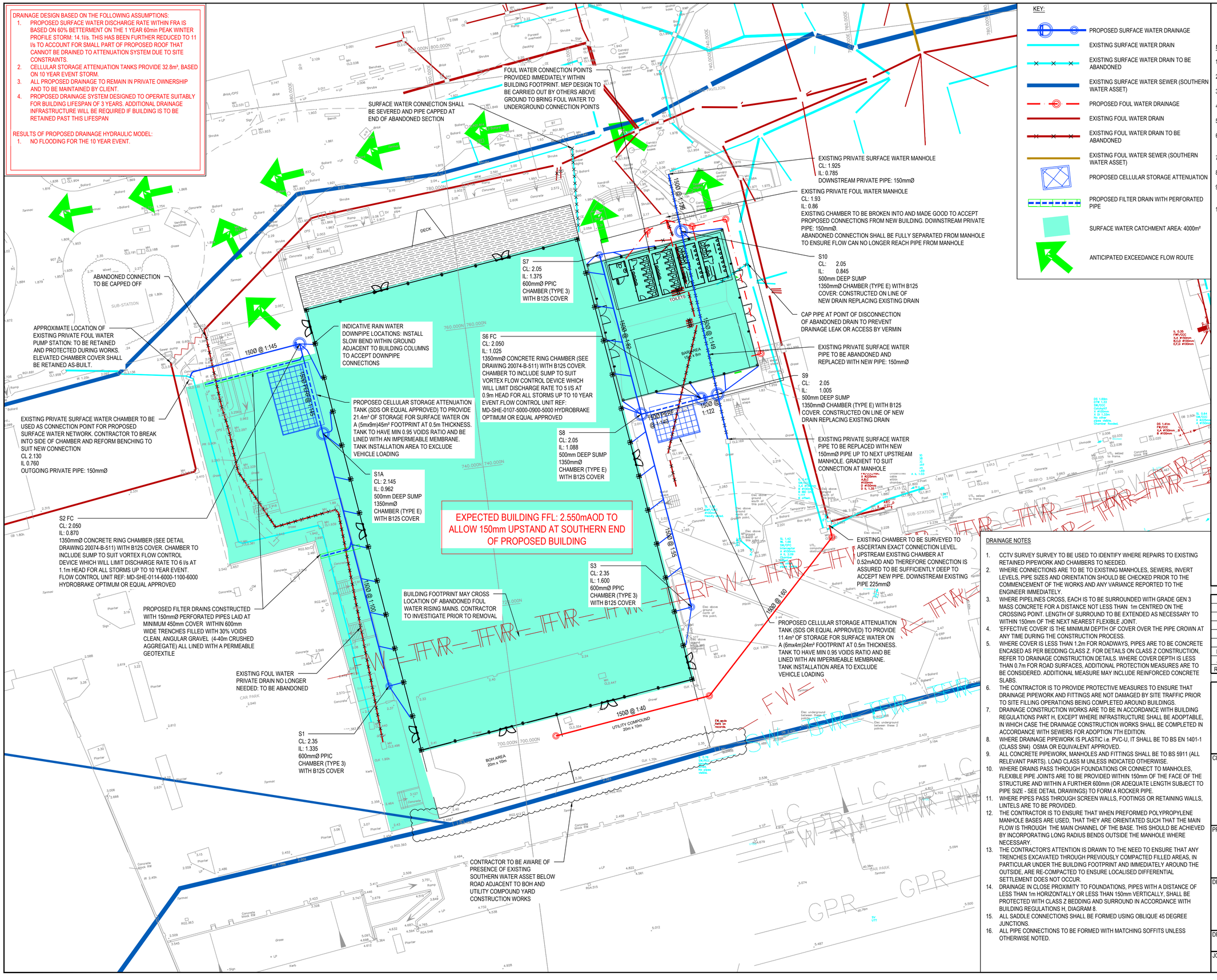
DRAINAGE DESIGN BASED ON THE FOLLOWING ASSUMPTIONS:

1. PROPOSED SURFACE WATER DISCHARGE RATE WITHIN FRA IS BASED ON 60% BETTERMENT ON THE 1 YEAR 60min PEAK WINTER PROFILE STORM: 14.1l/s. THIS HAS BEEN FURTHER REDUCED TO 11 l/s TO ACCOUNT FOR SMALL PART OF PROPOSED ROOF THAT CANNOT BE DRAINED TO ATTENUATION SYSTEM DUE TO SITE CONSTRAINTS.
2. CELLULAR STORAGE ATTENUATION TANKS PROVIDE 32.8m³, BASED ON 10 YEAR EVENT STORM.
3. ALL PROPOSED DRAINAGE TO REMAIN IN PRIVATE OWNERSHIP AND TO BE MAINTAINED BY CLIENT.
4. PROPOSED DRAINAGE SYSTEM DESIGNED TO OPERATE SUITABLY FOR BUILDING LIFESPAN OF 3 YEARS. ADDITIONAL DRAINAGE INFRASTRUCTURE WILL BE REQUIRED IF BUILDING IS TO BE RETAINED PAST THIS LIFESPAN

RESULTS OF PROPOSED DRAINAGE HYDRAULIC MODEL:

1. NO FLOODING FOR THE 10 YEAR EVENT.



KEY:

- PROPOSED SURFACE WATER DRAINAGE
- EXISTING SURFACE WATER DRAIN
- EXISTING SURFACE WATER DRAIN TO BE ABANDONED
- EXISTING SURFACE WATER SEWER (SOUTHERN WATER ASSET)
- PROPOSED FOUL WATER DRAINAGE
- EXISTING FOUL WATER DRAIN
- EXISTING FOUL WATER DRAIN TO BE ABANDONED
- EXISTING FOUL WATER SEWER (SOUTHERN WATER ASSET)
- PROPOSED CELLULAR STORAGE ATTENUATION
- PROPOSED FILTER DRAIN WITH PERFORATED PIPE
- SURFACE WATER CATCHMENT AREA: 4000m²
- ANTICIPATED EXCEEDANCE FLOW ROUTE

20 0 20 40 60 80

100mm ON ORIGINAL DRAWING

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS AND LEVELS SHALL BE CHECKED ON SITE PRIOR TO ANY WORKS BEING PUT IN HAND.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE EXISTING STRUCTURE AT ALL TIMES DURING THE WORKS.
5. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND RELEVANT SPECIFICATIONS.
6. ANY DISCREPANCIES BETWEEN THE INFORMATION GIVEN SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AS SOON AS POSSIBLE.
7. ALL MATERIALS USED IN THE WORKS SHALL BE TO BRITISH STANDARDS OR OTHER APPLICABLE SPECIFICATIONS.
8. ALL WORK IS TO BE CARRIED OUT TO B.S. CODES OF PRACTICE AND IN ACCORDANCE WITH GOOD WORKMANSHIP PRACTICE.
9. ALL PROPRIETARY MATERIALS USED IN THE WORKS SHALL BE USED IN COMPLETE ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
10. ALL BURIED, SURFACE AND OVERHEAD SERVICE INFORMATION CONTAINED WITHIN THIS DRAWING IS SHOWN INDICATIVELY. THE SERVICES SHOWN MAY NOT REPRESENT THE ENTIRETY OF ALL SERVICES THAT MAY BE ENCOUNTERED. ALL SOURCE INFORMATION SHOULD BE REFERRED TO PRIOR TO UNDERTAKING WORKS ON SITE. CROUCH WATERFALL ACCEPT NO RESPONSIBILITY FOR OMISSIONS OR ERRORS IN THE POSITIONING OF THE SERVICES PRESENT ON SITE. REFER TO ALL RELATED ENGINEERING DRAWINGS, FORMS AND SPECIFICATIONS FOR FURTHER INFORMATION. REFER TO THE RESIDUAL/DESIGNERS RISK ASSESSMENT FOR ACTIONS TO MINIMISE AND MITIGATE RISK ASSOCIATED WITH KNOWN AND UNKNOWN SERVICES ON SITE

DRAINAGE NOTES

1. CCTV SURVEY SURVEY TO BE USED TO IDENTIFY WHERE REPAIRS TO EXISTING RETAINED PIPEWORK AND CHAMBERS TO NEEDED.
2. WHERE CONNECTIONS ARE TO BE TO EXISTING MANHOLES, SEWERS, INVERT LEVELS, PIPE SIZES AND ORIENTATION SHOULD BE CHECKED PRIOR TO THE COMMENCEMENT OF THE WORKS AND ANY VARIANCE REPORTED TO THE ENGINEER IMMEDIATELY.
3. WHERE PIPELINES CROSS, EACH IS TO BE SURROUNDED WITH GRADE GEN 3 MASS CONCRETE FOR A DISTANCE NOT LESS THAN 1m CENTRED ON THE CROSSING POINT. LENGTH OF SURROUND TO BE EXTENDED AS NECESSARY TO WITHIN 150mm OF THE NEXT NEAREST FLEXIBLE JOINT.
4. 'EFFECTIVE COVER' IS THE MINIMUM DEPTH OF COVER OVER THE PIPE CROWN AT ANY TIME DURING THE CONSTRUCTION PROCESS.
5. WHERE COVER IS LESS THAN 1.2m FOR ROADWAYS, PIPES ARE TO BE CONCRETE ENCASED AS PER BEDDING CLASS Z. FOR DETAILS ON CLASS Z CONSTRUCTION, REFER TO DRAINAGE CONSTRUCTION DETAILS. WHERE COVER DEPTH IS LESS THAN 0.7m FOR ROAD SURFACES, ADDITIONAL PROTECTION MEASURES ARE TO BE CONSIDERED. ADDITIONAL MEASURE MAY INCLUDE REINFORCED CONCRETE SLABS.
6. THE CONTRACTOR IS TO PROVIDE PROTECTIVE MEASURES TO ENSURE THAT DRAINAGE PIPEWORK AND FITTINGS ARE NOT DAMAGED BY SITE TRAFFIC PRIOR TO SITE FILLING OPERATIONS BEING COMPLETED AROUND BUILDINGS.
7. DRAINAGE CONSTRUCTION WORKS ARE TO BE IN ACCORDANCE WITH BUILDING REGULATIONS PART H, EXCEPT WHERE INFRASTRUCTURE SHALL BE ADOPTABLE, IN WHICH CASE THE DRAINAGE CONSTRUCTION WORKS SHALL BE COMPLETED IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION.
8. WHERE DRAINAGE PIPEWORK IS PLASTIC i.e. PVC-U, IT SHALL BE TO BS EN 1401-1 (CLASS SN4) OSMA OR EQUIVALENT APPROVED.
9. ALL CONCRETE PIPEWORK, MANHOLES AND FITTINGS SHALL BE TO BS 5911 (ALL RELEVANT PARTS). LOAD CLASS M UNLESS INDICATED OTHERWISE.
10. WHERE DRAINS PASS THROUGH FOUNDATIONS OR CONNECT TO MANHOLES, FLEXIBLE PIPE JOINTS ARE TO BE PROVIDED WITHIN 150mm OF THE FACE OF THE STRUCTURE AND WITHIN A FURTHER 600mm (OR ADEQUATE LENGTH SUBJECT TO PIPE SIZE - SEE DETAIL DRAWINGS) TO FORM A ROCKER PIPE.
11. WHERE PIPES PASS THROUGH SCREEN WALLS, FOOTINGS OR RETAINING WALLS, LINTELS ARE TO BE PROVIDED.
12. THE CONTRACTOR IS TO ENSURE THAT WHEN PREFORMED POLYPROPYLENE MANHOLE BASES ARE USED, THAT THEY ARE ORIENTATED SUCH THAT THE MAIN FLOW IS THROUGH THE MAIN CHANNEL OF THE BASE. THIS SHOULD BE ACHIEVED BY INCORPORATING LONG RADIUS BENDS OUTSIDE THE MANHOLE WHERE NECESSARY.
13. THE CONTRACTOR'S ATTENTION IS DRAWN TO THE NEED TO ENSURE THAT ANY TRENCHES EXCAVATED THROUGH PREVIOUSLY COMPACTED FILLED AREAS, IN PARTICULAR UNDER THE BUILDING FOOTPRINT AND IMMEDIATELY AROUND THE OUTSIDE, ARE RE-COMPACTED TO ENSURE LOCALISED DIFFERENTIAL SETTLEMENT DOES NOT OCCUR.
14. DRAINAGE IN CLOSE PROXIMITY TO FOUNDATIONS, PIPES WITH A DISTANCE OF LESS THAN 1m HORIZONTALLY OR LESS THAN 150mm VERTICALLY, SHALL BE PROTECTED WITH CLASS Z BEDDING AND SURROUND IN ACCORDANCE WITH BUILDING REGULATIONS H, DIAGRAM 8.
15. ALL SADDLE CONNECTIONS SHALL BE FORMED USING OBLIQUE 45 DEGREE JUNCTIONS.
16. ALL PIPE CONNECTIONS TO BE FORMED WITH MATCHING SOFFITS UNLESS OTHERWISE NOTED.

PLANNING

REV	AMENDMENT	DRN	CHK	APP	DATE
B	AMENDED FOR LLFA COMMENTS	RP	RP	MGB	29/01/2021
A	ISSUED FOR LLFA COMMENT	RP	RP	MGB	24/01/2021

Crouch Waterfall
Suite 5.01
Network House
Basing View
Basingstoke
RG21 4HG

Tel 01256 479203
office@crouchwaterfall.co.uk

CROUCH WATERFALL

CLIENT

BOURNE LEISURE

PROJECT TITLE

BUTLINS BOGNOR TEMPORARY VENUE

DRAWING TITLE

PROPOSED DRAINAGE LAYOUT SHEET 1

DRAWN	CHK	APP	DATE	SCALE
RP	RP	MGB	JAN '21	1:250 AT A1

JOB NUMBER	DRAWING NUMBER	REVISION
20074G	500	B

ARUN DISTRICT COUNCIL 8R/92/DP/L