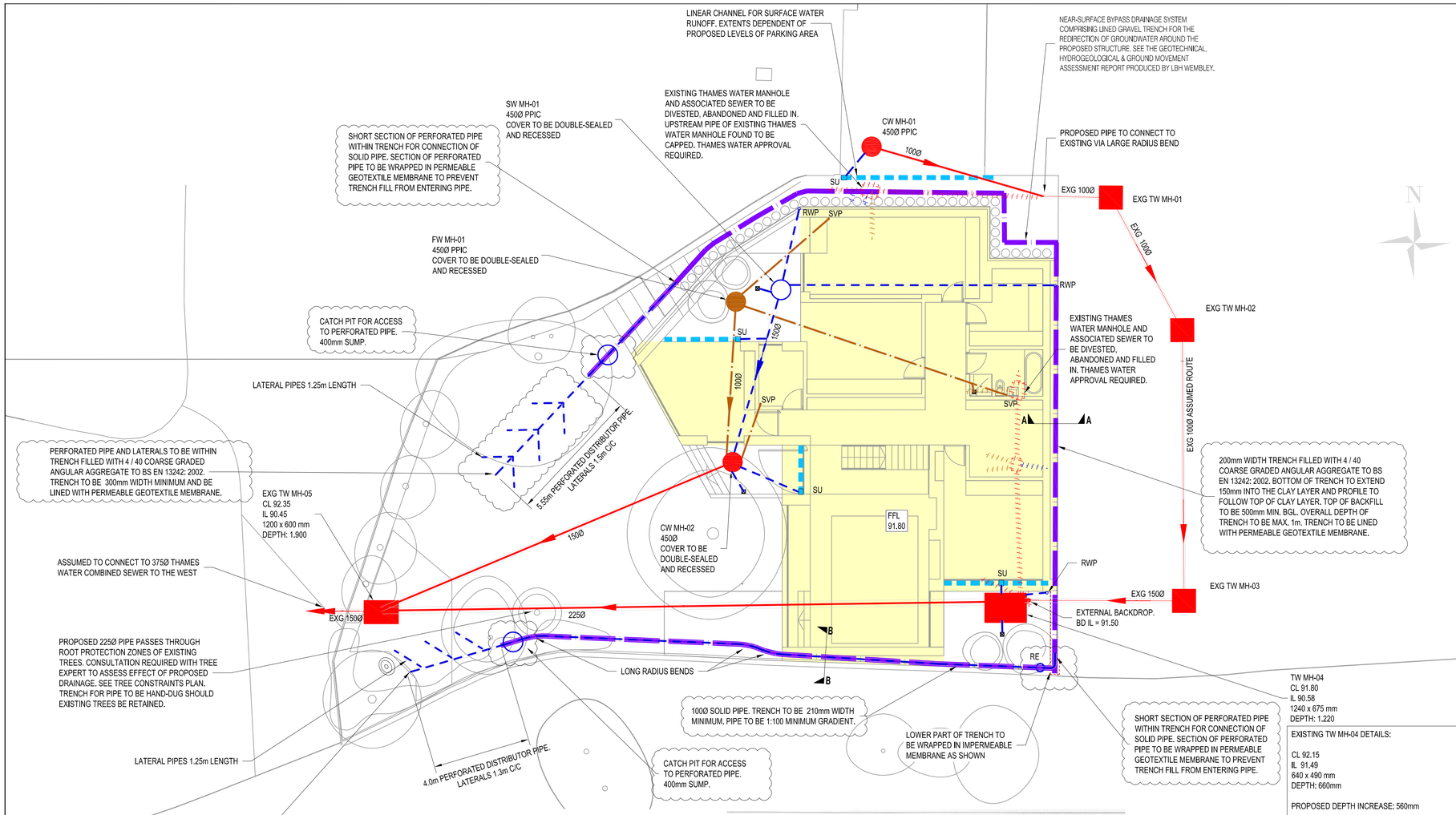


SURFACE WATER DRAINAGE STRATEGY.

TOTAL EXISTING HARDSTANDING AREA: 345m2.
TOTAL PROPOSED HARDSTANDING AREA: 375m2.

INCREASE IN TOTAL HARDSTANDING AREA: 30m2.

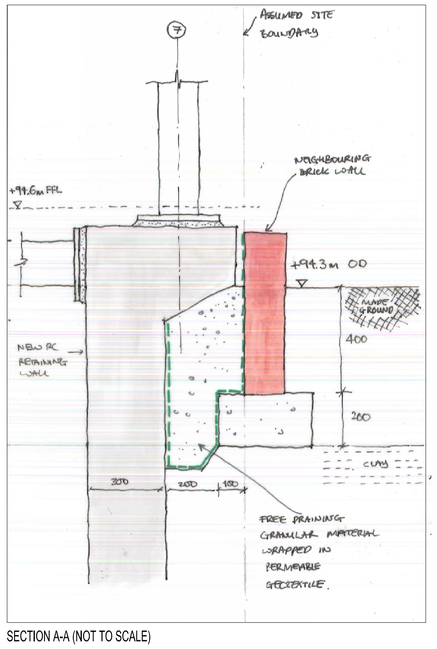
THE INCREASE IN HARDSTANDING AREA IS MITIGATED BY THE SuDS PROPOSALS:

- 60m2 OF GREEN ROOF AREA

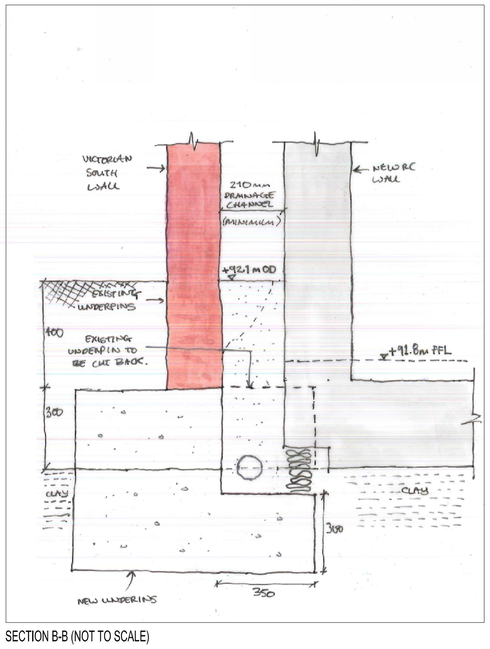
THE STRUCTURE AND RETAINING WALLS WILL BE PROTECTED FROM GROUND WATER FLOW OCCURRING AS A RESULT OF AN INTERMITTENT PERCHED WATER TABLE AT THE BASE OF THE MADE GROUND BY A NEAR-SURFACE BYPASS DRAINAGE SYSTEM. THIS SYSTEM WILL CONSIST OF A TRENCH FILLED WITH OPEN GRADED STONE SITUATED WITHIN THE MADE GROUND LAYER, AS WELL AS A TRENCH CONTAINING A SOLID PIPE. THIS SYSTEM WILL DIRECT THE GROUNDWATER TO THE GARDEN, WHERE IT WILL BIFURCATE VIA PERFORATED PIPES AS SHOWN.

SEE SECTIONS AA AND BB FOR DETAILS OF THE BYPASS SYSTEM.

SEE THE HYDROGEOLOGICAL, GEOTECHNICAL & GROUND MOVEMENT ASSESSMENT PRODUCED BY LBH WEMBLEY FOR DETAILS OF THE GROUNDWATER CONDITIONS OF THE SITE.



SECTION A-A (NOT TO SCALE)



SECTION B-B (NOT TO SCALE)

DRAINAGE NOTES

1. THE LOCATION AND LEVEL OF EXISTING DRAINAGE CONNECTIONS AND EXISTING SERVICES IS TO BE CHECKED PRIOR TO COMMENCEMENT OF DRAINAGE WORKS. ANY VARIANCE TO THE DETAILS ON THIS DRAWING AND THE SCHEDULE IS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

2. THE DESIGN IS BASED ON THE INFORMATION AVAILABLE ON THE DATE OF ISSUE FROM OTHER PARTIES (EG. ARCHITECT AND M & E ENGINEER). IT IS SUBJECT TO CHANGE RESULTING FROM UPDATES TO THE AVAILABLE INFORMATION FROM OTHERS.

3. THE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE NBS SPECIFICATIONS, ASSOCIATED MANHOLE SCHEDULE AND STANDARD DRAINAGE DETAIL DRAWINGS WHERE APPLICABLE.

4. THE POSITIONS OF FOUL AND SURFACE WATER DRAINAGE POINTS ARE INDICATIVE ONLY. REFER TO THE ARCHITECTS DRAWINGS FOR SETTING OUT DETAILS.

5. MANHOLES, SEWERS, LATERAL CONNECTIONS ETC AND ANY OTHER PART OF THE WORKS INTENDED FOR ADOPTION UNDER A SECTION 104 AGREEMENT OR GULLIES ETC INTENDED FOR ADOPTION AS HIGHWAY DRAINAGE ARE TO BE CONSTRUCTED IN ACCORDANCE WITH SEWERS FOR ADOPTION 6TH EDITION (OR LATEST) AND TO THE APPROVAL OF THE WATER AND HIGHWAY AUTHORITIES.

6. UNADOPTED FW AND SW DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT BUILDING REGULATIONS, BS EN752 AND BS EN12056.

7. DRAINS ARE TO BE CONSTRUCTED USING FLEXIBLY JOINTED VITRIFIED CLAY PIPES TO BS EN 295-1 SUPER STRENGTH SPECIFICATION (EG HEPWORTH SUPERSLEVE OR SIMILAR APPROVED) OR UPVC BUILDING DRAINAGE SYSTEM PIPEWORK TO BS 4660 AND BS EN1401-1, BEDDED AND BACKFILLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND THE SPECIFICATIONS UNLESS OTHERWISE SPECIFIED.

8. ALL SOIL CONNECTIONS UNDER BUILDINGS TO BE 100mm DIA LAID AT A MINIMUM GRADIENT OF 1/40 UNLESS NOTED OTHERWISE AND SHOULD BE RODDABLE FROM GROUND LEVEL.

9. ALL RWP CONNECTIONS TO BE 100mm DIAMETER AND TO BE LAID AT A MINIMUM GRADIENT OF 1/80 UNLESS NOTED OTHERWISE AND SHOULD BE RODDABLE FROM ABOVE GROUND LEVEL.

10. RAINWATER DOWN PIPES TO CONNECT TO A DRAIN VIA A REST BEND OR BE CONNECTED DIRECT TO A TRAPPED GULLY OR P TRAP ON A COMBINED SYSTEM, WHERE INTERNAL RWP'S OCCUR THESE MUST BE CONNECTED TO A 'P' TRAP WITH RODDABLE ACCESS ABOVE FLOOR LEVEL.

11. CHANNEL DRAINS TO BE ACO M100D 0.0 WITH SUMP UNIT OR SIMILAR APPROVED. GRATING TO BE IN ACCORDANCE WITH ARCHITECT OR LANDSCAPE ARCHITECT SPECIFICATION.

12. IN CASES OF IN SITU CONCRETE FLOOR SLABS, DRAINS ARE TO BE CAST INTEGRAL WITH THE SLAB WHERE PIPE COVER TO THE CROWN IS LESS THAN 300mm. - NOTE SPECIAL PROVISIONS APPLY TO BASEMENT FLOOR SLABS - SEE DETAILED DRAINAGE AND STRUCTURAL DRAWINGS. CONCRETE ENCASEMENT TO BE REINFORCED AS PER DRAINAGE DETAIL.

13. IN CASES OF SUSPENDED FLOORS WHERE A VOID OF 300mm OR MORE EXISTS BELOW FLOOR DRAINS ARE TO BE SUSPENDED USING A PROPRIETORY HANGER SYSTEM OR CAST INTEGRAL WITH THE FLOOR.

14. WHERE DRAINS PASS THROUGH FOUNDATIONS OR OTHER RIGID STRUCTURES A LINTEL OR SLEEVE IS TO BE USED AND PROVISION FOR FLEXIBILITY IS TO BE MADE USING ROCKER PIPES.

15. BACKFILLING OF DRAIN TRENCHES ADJACENT TO BUILDING OR OTHER STRUCTURES IS TO BE IN ACCORDANCE WITH DIAGRAM 8 OF THE BUILDING REGULATIONS.

16. DRAINS WITHIN AREAS OF MADE GROUND TO BE CONSTRUCTED BY FIRST MAKING UP THE AREA TO APPROX. FINISHED LEVEL AND THEN EXCAVATING THROUGH THE FILL MATERIAL INTO UNDISTURBED GROUND. THE DRAIN TRENCH IS THEN TO BE BACKFILLED TO FORMATION LEVEL USING SUITABLE GRANULAR FILL MATERIAL WELL COMPACTED IN LAYERS NOT EXCEEDING 225mm.

17. ALL INTERNAL FLOOR DRAINS TO BE SPECIFIED BY THE ARCHITECT.

18. ANY PIPE OR GULLEY OR OTHER FITTING OR DUCT PENETRATING THE BASEMENT SLAB OR WALL IS TO BE WATERPROOFED USING HYDROPHILIC STRIPS OR PUDDLE FLANGES TO ENSURE A WATER TIGHT JOINT. CONCRETE SURROUND TO DRAINAGE PIPES AND FITTINGS MAY BE REQUIRED IN CERTAIN CASES - REFER TO DETAILED DRAINAGE DRAWINGS AND RELEVANT STRUCTURAL DETAILS.

19. EXISTING FOUNDATIONS AND RETAINING WALLS MUST NOT BE UNDERMINED BY NEW DRAINAGE RUNS UNLESS AGREED IN WRITING WITH THE STRUCTURAL ENGINEER. CONTRACTOR TO SUBMIT METHOD STATEMENTS AND TEMPORARY WORKS PROPOSALS TO THE STRUCTURAL ENGINEER FOR COMMENT PRIOR TO COMMENCEMENT OF WORKS.

20. ADOPTED SEWER DIVERSION PROPOSALS ARE SUBJECT TO APPROVAL FROM THAMES WATER.

This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.

Do not scale from this drawing.

LEGEND

- EXISTING/PROPOSED COMBINED MANHOLE
- PROPOSED FOUL MANHOLE
- PROPOSED SURFACE WATER MANHOLE
- EXISTING COMBINED WATER SEWER/DRAIN
- PROPOSED COMBINED WATER SEWER/DRAIN
- PROPOSED FOUL WATER SEWER/DRAIN
- PROPOSED SURFACE WATER SEWER/DRAIN
- FOUL WATER PIPE TO BE ABANDONED
- SURFACE WATER PIPE TO BE ABANDONED
- COMBINED WATER PIPE TO BE ABANDONED
- TRAPPED GULLY
- SS STUB STACK
- SVP SOIL VENT PIPE
- RWP RAIN WATER PIPE
- RE RODDING EYE
- LINEAR CHANNEL WITH SUMP UNIT AND FOUL AIR TRAP
- GRAVEL TRENCH
- GRAVEL TRENCH WITH SOLID PIPE AT BASE
- IMPERMEABLE MEMBRANE

NOT FOR CONSTRUCTION

rev	date	by	chk	description
P6	16.11.16	CSc	PCh	Changes as clouded
P5	14.10.16	CSc	PCh	Bypass drainage system
P4	11.10.16	CSc	PCh	Bypass drainage system
P3	10.06.16	CSc	PCh	Bypass drainage system
P2	10.06.16	CSc	PCh	Ommission of permeable paving
P1	03.06.16	CSc	PCh	Preliminary issue

elliottwood

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project

No. 4, The Hexagon
London, N6 6HR

drawing title

Proposed Below Ground
Drainage Strategy
Lower Ground Floor

scale (s)	date	drawn
1:100@A1, 1:200@A3	June 2016	CSc

project no.			drawing status.		
2150655			Preliminary		
originator.	zone.	level.	role.	drg no.	revision
EW	00	L-01	D	5000	P6