

179 THE PRINTWORKS - PLANNING CONDITION 12 (LANDSCAPE) RESPONSE

Printworks, Tottenham High Road

Revision: 01

Date: 17.07.26

Project reference: 6056

File path: P:\Projects\6056\Documents\Reports\Planning condition 12 response (Printworks)\6056-WAL-ZZ-XX-SW-RP-D-0003.docx

1. Introduction

This design note has been prepared to discharge planning condition 12 (Landscape) part iii and iv, relating to 179 The Printworks, Tottenham High Road, planning reference HGY/2023/2306 in the London Borough of Haringey (LBH).

2. Planning Condition 12

The wording of planning condition 12 (Landscape) is as follows:

(a) The following external landscaping details of external areas and amenity areas shall be submitted to and approved in writing by the Local Planning Authority before the relevant works listed below commence:

- i) Hard surfacing materials;
- ii) Boundary treatments;
- iii) Any relevant SuDs features (as identified in the Drainage Strategy (HRW-BHE-PW-XX-RP-C1-0300, Revision P03), dated 16 August 2023);
- iv) A SuDS management and maintenance plan for the proposed SuDS features, detailing future management and maintenance responsibilities for the lifetime of the development;
- v) Minor artefacts/structures (e.g. furniture, refuse or other storage units, signs etc.);
- vi) Proposed and existing functional services above and below ground (e.g. drainage power, communications cables, pipelines etc. indicating lines, manholes, supports etc.);
- vii) Planting plans and a full schedule of species of new trees and shrubs proposed to be planted noting species, plant sizes and proposed numbers/densities where appropriate;
- viii) A planting management and maintenance / aftercare plan for the proposed planting, detailing future management and maintenance responsibilities for the lifetime of the development;
- ix) Any food growing areas and soil specification:

x) Written specifications (including cultivation and other operations) associated with plant and grass establishment; and

xi) Implementation programme.

(b) The external landscaping and SUDS features shall be delivered in accordance with the approved details, management and maintenance plan and implementation programme and maintained as such thereafter.

(c) Any trees or shrubs which die, are removed or become seriously damaged or diseased within five years from the completion of the landscaping works shall be replaced in the next planting season with the same species or an approved alternative as agreed in writing by the Local Planning Authority.

REASON: To ensure a satisfactory level of amenity, food growing opportunities, biodiversity enhancement and boundary treatments

3. Approved Flood Risk Assessment and Drainage Strategy

This document is to be read alongside the approved Flood Risk Assessment (Document Reference: WIE20265-100-R-1-3-1-FRA) for the development, prepared by Waterman Infrastructure & Environment Limited.

The proposed design has been developed in line with the above document and is supplemented by the responses outlined below.

4. Response to item I, ii, v, vi, vii viii, ix, x & xi

It should be noted that the items in section 4 are relating to the Landscape Architecture design and is not relevant to the below ground drainage design. Please refer to Landscape Architect for relevant information.

5. Response to item iii & iv

Item iii - Any relevant SuDS features (as identified in the Drainage Strategy (HRW-BHE-PW-XX-RP-C1-0300, Revision P03), dated 16 August 2023);

Please refer to **Appendix A** of this design note for the relevant SuDS features for the development.

Item iv - A SuDS management and maintenance plan for the proposed SuDS features, detailing future management and maintenance responsibilities for the lifetime of the development;

Please refer to **Appendix B** of this design note for the management and maintenance for installed drainage and SuDS elements within the scheme.

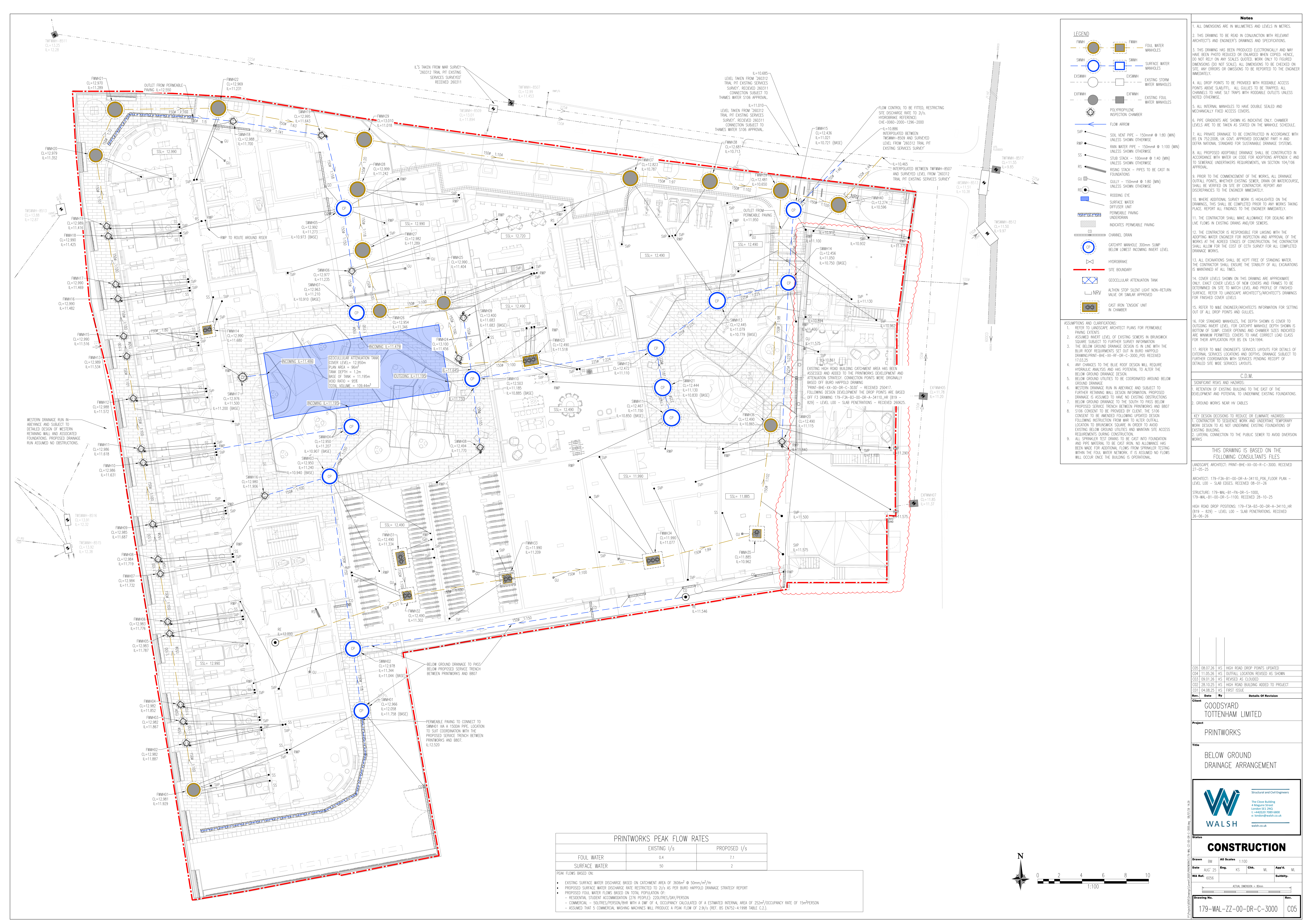
Prepared by	Kolbi Stahlecker	Civil Engineer
Checked by	Martin Lambert	Associate
Approved by	Andy Stanford	Director

Yours Sincerely,

Martin Lambert BEng (Hons) CEng MICE
Associate

Appendix A

SuDS Features and Details



LEGEND

FMH FOUL WATER MANHOLES

SWM SURFACE WATER MANHOLES

EXM EXISTING STORM WATER MANHOLES

EXFM EXISTING FOUL WATER MANHOLES

PVC POLYPROPYLENE INSPECTION CHAMBER

FLOW ARROW

SVP SOIL VENT PIPE - 150mm Ø 1.80 (MN) UNLESS SHOWN OTHERWISE

RWP RAIN WATER PIPE - 150mm Ø 1.100 (MN) UNLESS SHOWN OTHERWISE

SS STUB STACK - 100mm Ø 1.40 (MN) UNLESS SHOWN OTHERWISE

RS RISING STACK - PIPES TO BE CAST IN FOUNDATIONS

GU GULLY - 150mm Ø 1.80 (MN) UNLESS SHOWN OTHERWISE

RC ROOFING EYE

SWF SURFACE WATER DIFFUSER UNIT

PERMEABLE PAVING UNDERGRAN

INDICATES PERMEABLE PAVING

CD CHANNEL DRAIN

CP CATCHPIT MANHOLE 300mm SUMP BELOW LOWEST INCOMING INVERT LEVEL

HYDROBARK

SITE BOUNDARY

GEOCELLULAR ATTENUATION TANK

ALTON STOP SILENT LIGHT NON-RETURN VALVE OR SIMILAR APPROVED

CAST IRON TENSION UNIT IN CHAMBER

ASSUMPTIONS AND CLARIFICATIONS:

- REFER TO LANDSCAPE ARCHITECT PLANS FOR PERMEABLE PAVING EXTENTS
- ASSUMED INVERT LEVEL OF EXISTING SEWERS IN BRUNSWICK SQUARE SUBJECT TO FURTHER SURVEY INFORMATION
- THE BELOW GROUND DRAINAGE DESIGN IS IN LINE WITH THE BLUR ROOF REQUIREMENTS SET OUT IN BURD HAPPOLD DRAWING/PRINT-BHE-XX-RF-DR-C-3000_POS RECEIVED 17.03.25
- ANY CHANGES TO THE BLUE ROOF DESIGN WILL REQUIRE HYDRAULIC ANALYSIS AND HAS POTENTIAL TO ALTER THE BELOW GROUND DRAINAGE DESIGN
- BELOW GROUND UTILITIES TO BE COORDINATED AROUND BELOW GROUND DRAINAGE
- WESTERN DRAINAGE RUN IN ABEYANCE AND SUBJECT TO FURTHER RETAINING WALL DESIGN INFORMATION, PROPOSED DRAINAGE IS ASSIGNED TO HAVE NO EXISTING OBSTRUCTIONS
- BELOW GROUND DRAINAGE TO THE SOUTH TO PASS BELOW PROPOSED SERVICE TRENCH BETWEEN PRINTWORKS AND BB07
- STUB CONSENT TO BE PROVIDED BY CLIENT, THE STUB CONSENT TO BE AMENDED FOLLOWING UPDATED DESIGN
- FOLLOWING INSTRUCTION FROM MAR TO ALTER OUTFALL LOCATION TO BRUNSWICK SQUARE IN ORDER TO AVOID EXISTING BELOW GROUND UTILITIES AND MAINTAIN SITE ACCESS REQUIREMENTS DURING CONSTRUCTION
- ALL SPRINKLER TEST DRAINS TO BE CAST INTO FOUNDATION AND PIPE MATERIAL TO BE CAST IRON, NO ALLOWANCE HAS BEEN MADE FOR ADDITIONAL FLOWS FROM SPRINKLER TESTING WITHIN THE FOUL WATER NETWORK, IT IS ASSURED NO FLOWS WILL OCCUR ONCE THE BUILDING IS OPERATIONAL

NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS IN METRES
- THIS DRAWING TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND SPECIFICATIONS
- THIS DRAWING HAS BEEN PRODUCED ELECTRONICALLY AND MAY HAVE BEEN PHOTO REDUCED OR ENLARGED WHEN COPIED, HENCE, DO NOT RELY ON ANY SCALES QUOTED. WORK ONLY TO FIGURED DIMENSIONS (DO NOT SCALE). ALL DIMENSIONS TO BE CHECKED ON SITE. ANY ERRORS OR OMISSIONS TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
- ALL DROP POINTS TO BE PROVIDED WITH RODDABLE ACCESS POINTS ABOVE SLAB/FTL. ALL GULLIES TO BE TRAPPED. ALL CHANNELS TO HAVE SILET TRAPS WITH RODDABLE OUTLETS UNLESS NOTED OTHERWISE.
- ALL INTERNAL MANHOLES TO HAVE DOUBLE SEALED AND MECHANICALLY FIXED ACCESS COVERS.
- PIPE GRADIENTS ARE SHOWN AS INDICATIVE ONLY. CHAMBER LEVELS ARE TO BE TAKEN AS STATED ON THE MANHOLE SCHEDULE.
- ALL PRIVATE DRAINAGE TO BE CONSTRUCTED IN ACCORDANCE WITH BS EN 752:2008, UK GOVT. APPROVED DOCUMENT PART H AND DEFRA NATIONAL STANDARD FOR SUSTAINABLE DRAINAGE SYSTEMS.
- ALL PROPOSED ADAPTABLE DRAINAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH WATER UK CODE FOR ADOPTIONS APPENDIX C AND TO SEWERAGE UNDERMAYERS REQUIREMENTS, VIA SECTION 104/106 APPROVAL.
- PRIOR TO THE COMMENCEMENT OF THE WORKS, ALL DRAINAGE OUTFALL POINTS, WHETHER EXISTING SEWER, DRAIN OR WATERCOURSE, SHALL BE VERIFIED ON SITE BY CONTRACTOR, REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- WHERE ADDITIONAL SURVEY WORK IS HIGHLIGHTED ON THE DRAWINGS, THIS SHALL BE COMPLETED PRIOR TO ANY WORKS TAKING PLACE. REPORT ALL FINDINGS TO THE ENGINEER IMMEDIATELY.
- THE CONTRACTOR SHALL MAKE ALLOWANCE FOR DEALING WITH LIVE FLOWS IN EXISTING DRAINS AND/OR SEWERS.
- THE CONTRACTOR IS RESPONSIBLE FOR LIAISING WITH THE ADJOINING WATER ENGINEER FOR INSPECTION AND APPROVAL OF THE WORKS AT THE AGREED STAGES OF CONSTRUCTION, THE CONTRACTOR SHALL ALLOW FOR THE COST OF GOV SURVEY FOR ALL COMPLETED DRAINAGE WORKS.
- ALL EXCAVATIONS SHALL BE KEPT FREE OF STANDING WATER, THE CONTRACTOR SHALL ENSURE THE STABILITY OF ALL EXCAVATIONS IS MAINTAINED AT ALL TIMES.
- COVER LEVELS SHOWN ON THIS DRAWING ARE APPROXIMATE. EXACT COVER LEVELS OF NEW COVERS AND FRAMES TO BE DETERMINED ON SITE TO MATCH LEVEL AND PROFILE OF FINISHED SURFACE. REFER TO LANDSCAPE ARCHITECT'S/ARCHITECT'S DRAWINGS FOR FINISHED COVER LEVELS.
- REFER TO MAE ENGINEER/ARCHITECTS INFORMATION FOR SETTING OUT OF ALL DROP POINTS AND GULLIES.
- FOR STANDARD MANHOLES, THE DEPTH SHOWN IS COVER TO OUTGOING INVERT LEVEL. FOR CATCHPIT MANHOLE DEPTH SHOWN IS BOTTOM OF SUMP. COVER OPENING AND CHAMBER SIZES INDICATED ARE MINIMUM PERMITTED. COVERS TO HAVE CORRECT LOAD CLASS FOR THEIR APPLICATION PER BS EN 124:1994.
- REFER TO MAE ENGINEER'S SERVICES LAYOUTS FOR DETAILS OF EXTERNAL SERVICES LOCATIONS AND DEPTHS. DRAINAGE SUBJECT TO FURTHER COORDINATION WITH SERVICES PENDING RECEIPT OF DETAILED SITE WIDE SERVICES LAYOUTS.

C.D.M.

1. SIGNIFICANT RISKS AND HAZARDS:

- RETENTION OF EXISTING BUILDING TO THE EAST OF THE DEVELOPMENT AND POTENTIAL TO UNDERMINE EXISTING FOUNDATIONS.

2. GROUND WORKS NEAR HV CABLES

KEY DESIGN DECISIONS TO REDUCE OR ELIMINATE HAZARDS:

- CONTRACTOR TO SEQUENCE WORK AND UNDERTAKE TEMPORARY WORK DESIGN TO AS NOT UNDERMINE EXISTING FOUNDATIONS OF EXISTING BUILDING
- LATERAL CONNECTION TO THE PUBLIC SEWER TO AVOID OVERFLOW WORKS

THIS DRAWING IS BASED ON THE FOLLOWING CONSULTANTS FILES

LANDSCAPE ARCHITECT: PRINT-BHE-XX-00-R-C-3000, RECEIVED 27-05-25

ARCHITECT: 179-F34-B1-00-DR-A-34110_F00_FLOOR PLAN - LEVEL L00 - SLAB EDGES, RECEIVED 08-01-26

STRUCTURE: 179-WAL-B1-FN-DR-S-1000, 179-WAL-B1-00-DR-S-1100, RECEIVED 28-10-25

HIGH ROAD DROP POSITIONS: 179-F34-B3-00-DR-A-34110_HR (B19 - B29) - LEVEL L00 - SLAB PENETRATIONS, RECEIVED 28-05-26

PRINTWORKS PEAK FLOW RATES		
	EXISTING l/s	PROPOSED l/s
FOUL WATER	0.4	7.1
SURFACE WATER	50	2

- PEAK FLOWS BASED ON:
- EXISTING SURFACE WATER DISCHARGE BASED ON CATCHMENT AREA OF 3606m² @ 50mm/m²/hr
 - PROPOSED SURFACE WATER DISCHARGE RATE RESTRICTED TO 2/l/s AS PER BURD HAPPOLD DRAINAGE STRATEGY REPORT
 - PROPOSED FOUL WATER FLOWS BASED ON TOTAL POPULATION OF:
 - RESIDENTIAL STUDENT ACCOMMODATION (276 PEOPLE): 220LITRES/DAY/PERSON
 - COMMERCIAL - SOLITRES/PERSON/HR WITH A DWF OF 4, OCCUPANCY CALCULATED OF A ESTIMATED INTERNAL AREA OF 252m²/OCCUPANCY RATE OF 15m²/PERSON
 - ASSUMED THAT 5 COMMERCIAL WASHING MACHINES WILL PRODUCE A PEAK FLOW OF 2.9/l/s (REF. BS EN752-4:1998 TABLE C.2).

WALSH

Structural and Civil Engineers

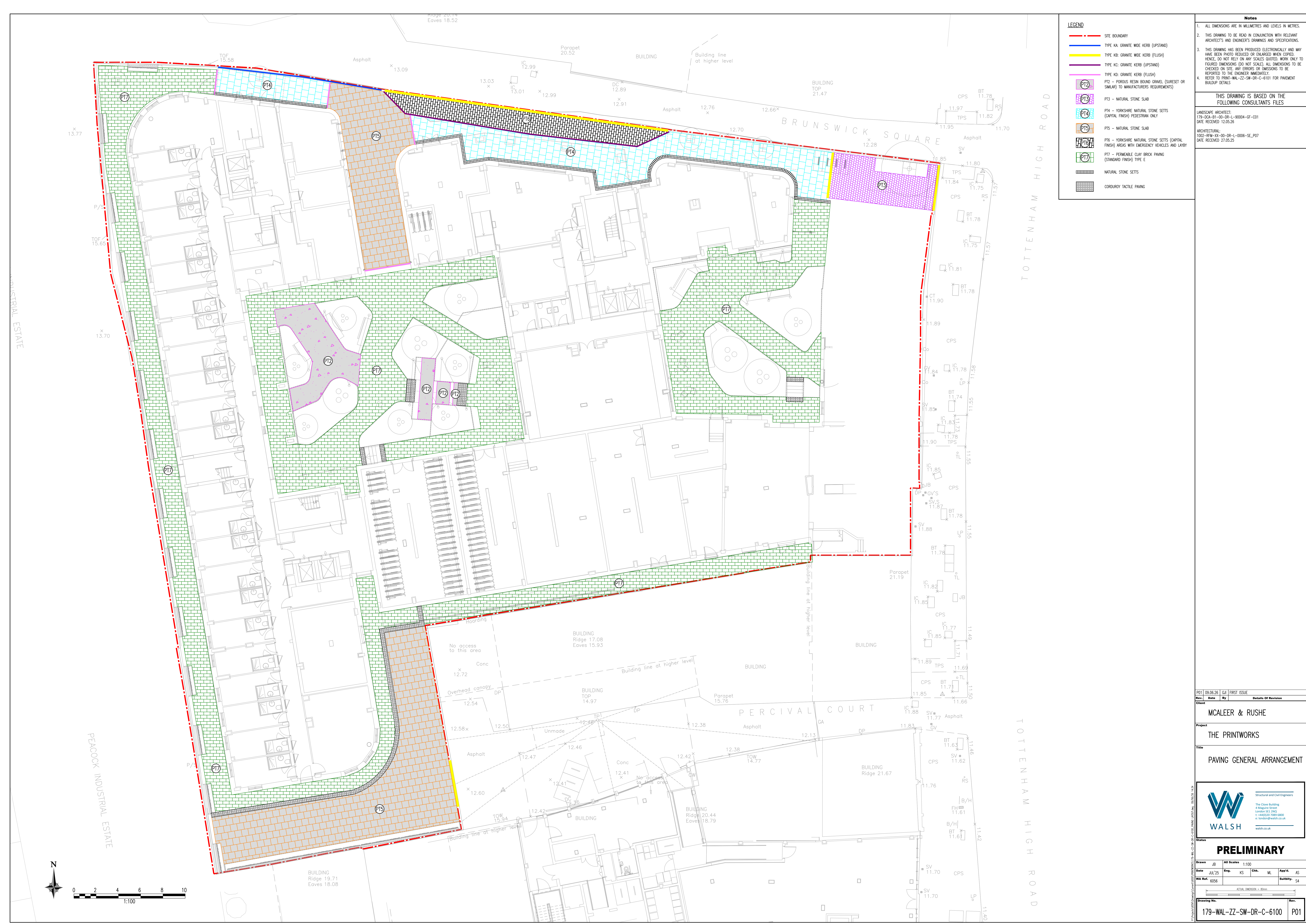
The Clove Building
4 Maple Street
London SE1 2ND
t: +44(0)20 7888 6800
e: london@walsh.co.uk
www.walsh.co.uk

CONSTRUCTION

Drawn	EM	AS Scale	1:100	App'd	ML
Date	AUG '25	Eng.	KS	Chk.	ML
WA Ref.	6056			Subst.	

ACTUAL DIMENSIONS - 80mm

Drawing No.	179-WAL-ZZ-00-DR-C-3000	Rev.	C05
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LEGEND

- SITE BOUNDARY
- TYPE KA: GRANITE WIDE KERB (UPSTAND)
- TYPE KB: GRANITE WIDE KERB (FLUSH)
- TYPE KC: GRANITE KERB (UPSTAND)
- TYPE KD: GRANITE KERB (FLUSH)
- TYPE KE: GRANITE KERB (SURESET OR SIMILAR) TO MANUFACTURERS REQUIREMENTS
- PT2 - POROUS RESIN BOUND GRAVEL (SURESET OR SIMILAR) TO MANUFACTURERS REQUIREMENTS
- PT3 - NATURAL STONE SLAB
- PT4 - YORKSHIRE NATURAL STONE SETTS (CAPITAL FINISH) PEDESTRIAN ONLY
- PT5 - NATURAL STONE SLAB
- PT6 - YORKSHIRE NATURAL STONE SETTS (CAPITAL FINISH) AREAS WITH EMERGENCY VEHICLES AND LAWAY
- PT7 - PERMEABLE CLAY BRICK PAVING (STANDARD FINISH) TYPE E
- NATURAL STONE SETTS
- COROUROY TACTILE PAVING

Notes

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THIS DRAWING IS BASED ON THE FOLLOWING CONSULTANTS FILES

LANDSCAPE ARCHITECT:
179-DCA-B1-00-DR-L-90004-GF-001
DATE RECEIVED 12.05.26

ARCHITECTURAL:
1002-RHN-W-00-DR-L-0006-SE_P07
DATE RECEIVED 27.05.25

Rev.	Date	By	Details Of Revision
P01	09.06.26	GAJ	FIRST ISSUE

Client
MCALDER & RUSHE

Project
THE PRINTWORKS

Title
PAVING GENERAL ARRANGEMENT

WALSH
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e: london@walsh.co.uk
walsh.co.uk

Status
PRELIMINARY

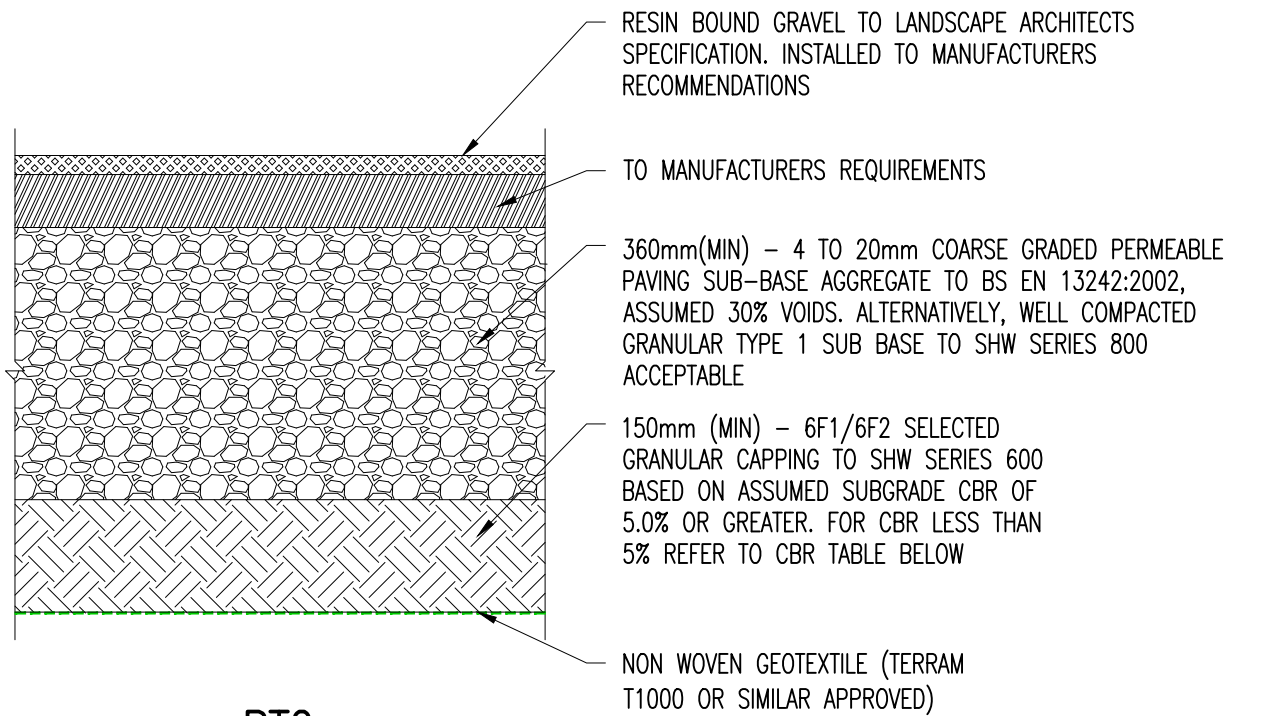
Drawn	AD	Scale	1:100				
Date	AUG 25	Eng.	KS	Chk.	ML	App'd.	AS
WA Ref.	6056			Subsity.	S4		

Drawing No.
179-WAL-ZZ-SW-DR-C-6100

Rev.
P01

SPECIFIED BY LANDSCAPE ARCHITECT/SUPPLIER
SPECIFIED BY WALSH

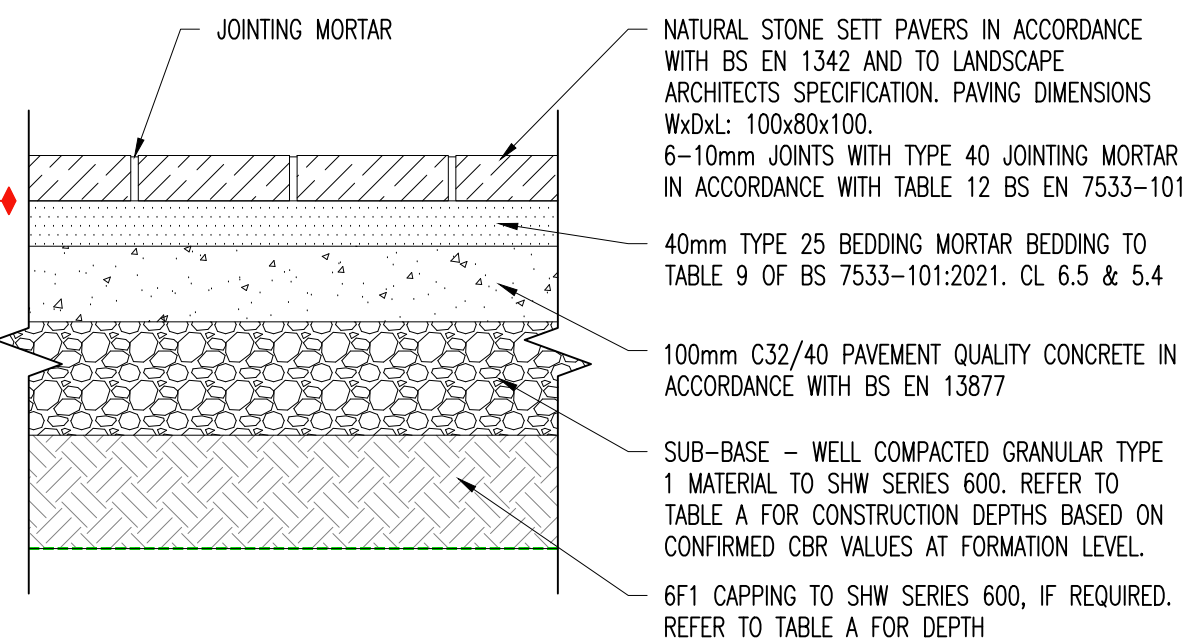
CBR (%)	CAPPING (mm)
1%	600
2%	350
3%	250
4%	200



PT2 POROUS RESIN BOUND GRAVEL (SURESET OR SIMILAR) TO MANUFACTURERS REQUIREMENTS)

N.B. MINIMUM OF 450mm OF NON-FROST SUSCEPTIBLE MATERIAL REQUIRED
SCALE 1:10

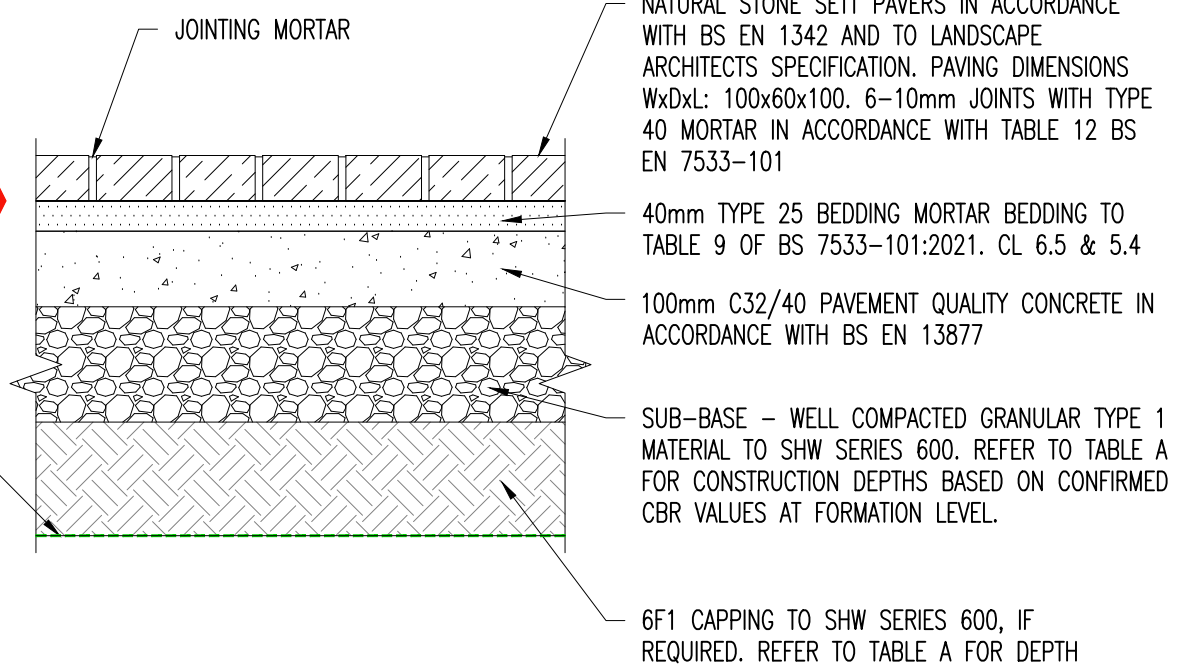
SPECIFIED BY LANDSCAPE ARCHITECT
SPECIFIED BY WALSH



PT3 NATURAL STONE SLAB

BS7533-101:2021 TRAFFIC CATEGORY 2 TABLE 2B TRAFFIC CATEGORY 5 (BOUND CONSTRUCTION)
SCALE 1:10

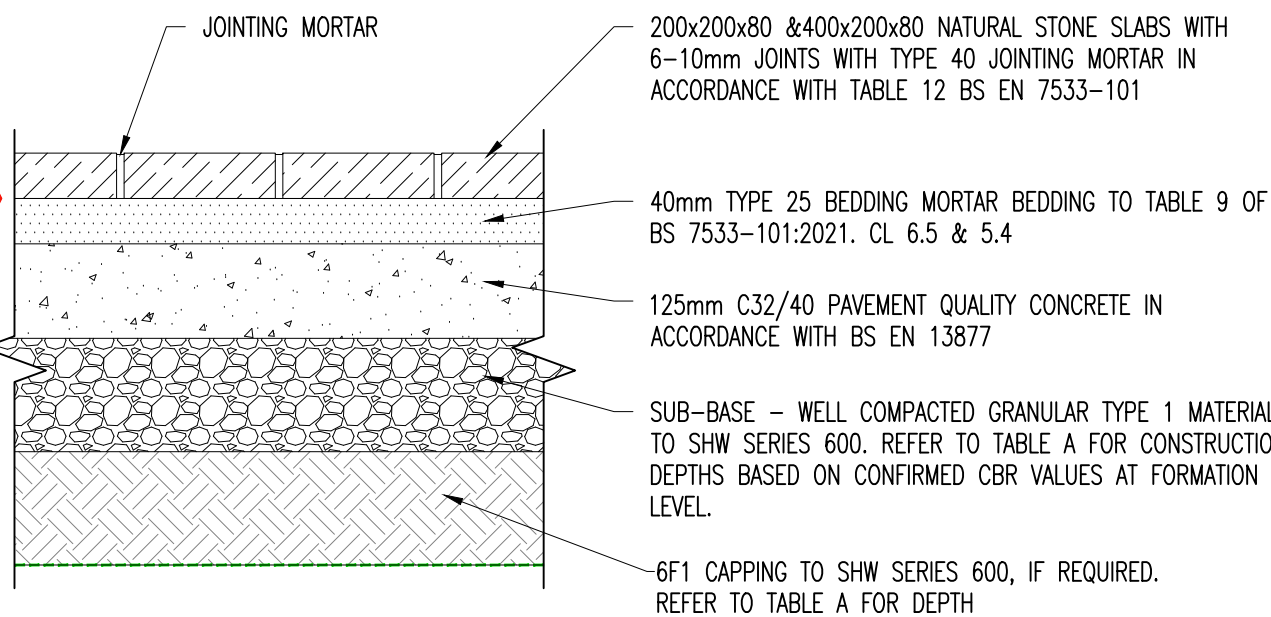
SPECIFIED BY LANDSCAPE ARCHITECT
SPECIFIED BY WALSH



PT4 YORKSHIRE NATURAL STONE SETTS (CAPITAL FINISH) PEDESTRIAN ONLY

BS7533-101:2021 TABLE 2B TRAFFIC CATEGORY 2 (UN-BOUND)
SCALE 1:10
N.B. MINIMUM OF 450mm OF NON-FROST SUSCEPTIBLE MATERIAL REQUIRED

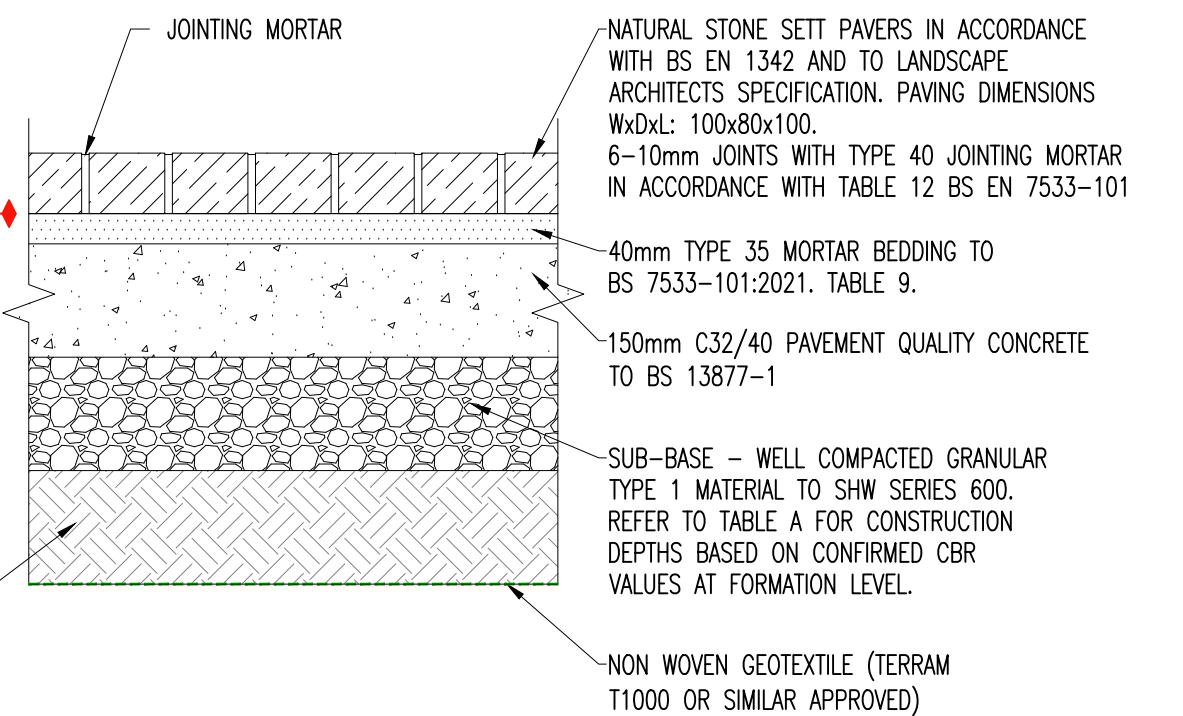
SPECIFIED BY LANDSCAPE ARCHITECT
SPECIFIED BY WALSH



PT5 NATURAL STONE SLAB

BS7533-101:2021 TRAFFIC CATEGORY 5 TABLE 2B TRAFFIC CATEGORY 5 (BOUND CONSTRUCTION)
SCALE 1:10

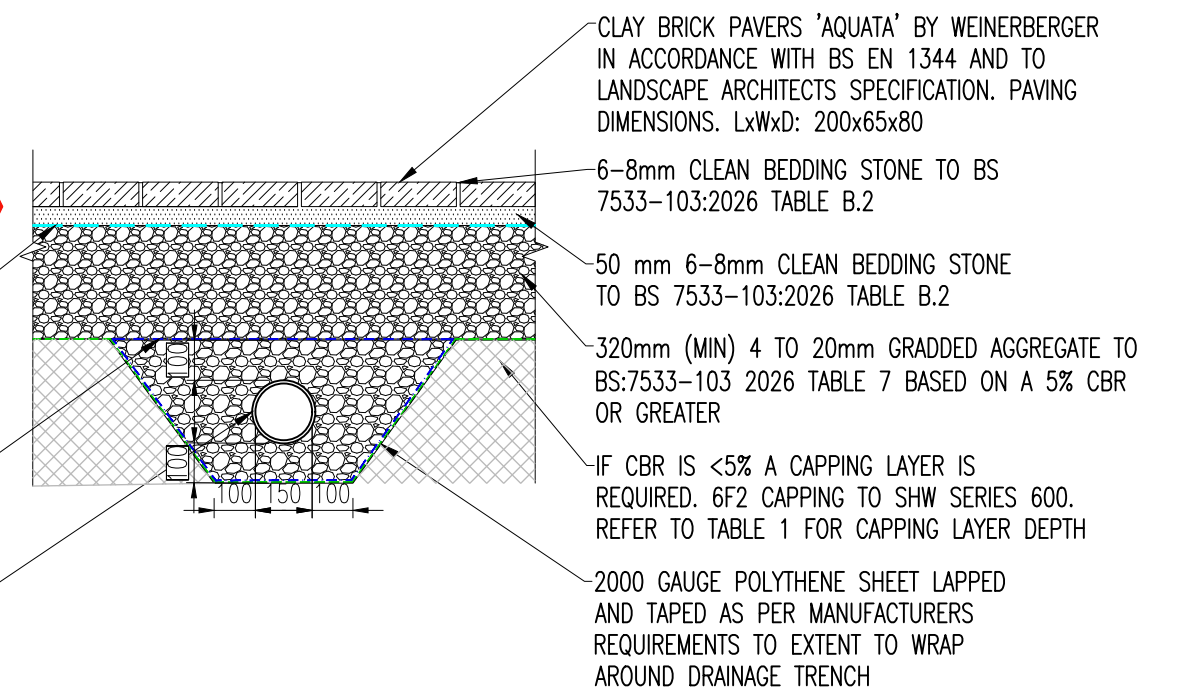
SPECIFIED BY LANDSCAPE ARCHITECT
SPECIFIED BY WALSH



PT6 YORKSHIRE NATURAL STONE SETTS (CAPITAL FINISH) AREAS WITH EMERGENCY VEHICLES AND LAYBY

BS7533-101:2021 TABLE 2B TRAFFIC CATEGORY 6 (BOUND)
SCALE 1:10
N.B. MINIMUM OF 450mm OF NON-FROST SUSCEPTIBLE MATERIAL REQUIRED

SPECIFIED BY LANDSCAPE ARCHITECT
SPECIFIED BY WALSH



PT7 PERMEABLE CLAY BRICK PAVING (STANDARD FINISH) TYPE E

BS7533-103:2026 TABLE 5, TRAFFIC CATEGORY 4 (SYSTEM C)
N.B. MINIMUM OF 450mm OF NON-FROST SUSCEPTIBLE MATERIAL REQUIRED
SCALE 1:10

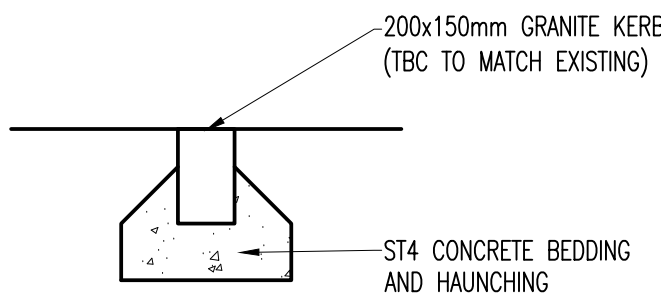
TABLE 1	
CBR (%)	CAPPING (mm)
>2.5 %	SUBGRADE IMPROVEMENT
2.5%	300
3%	225
4%	150

N.B. CAPPING DEPTH FOR BUILD UPS
WITH CBR VALUE OF <5%

CONCRETE GRADES & CONSISTENCY CLASS					
USAGE	DESIGN CHEMICAL CLASS				
	DC-1	DC-2	DC-3	DC-4	DC-5
CONCRETE FOR KERB/CHANNEL/EDGING FOUNDATIONS, RECESS AND HAUNCHING	GEN1/ST2 (S1)	FND2 (S1)	FND3 (S1)	FND4 (S1)	ASK ENGINEER

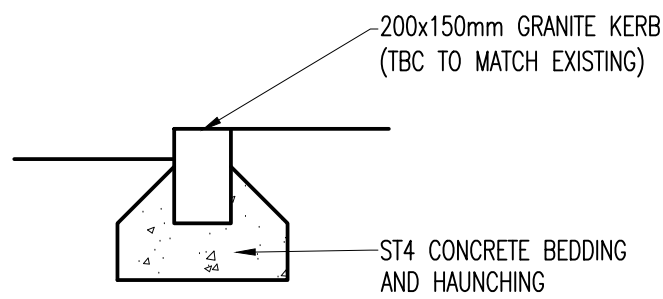
TABLE A: BUILD UPS SUBJECT TO CONSTRUCTION TRAFFIC		
CBR (%)	SUB BASE / CAPPING (mm)	SUB BASE ONLY (mm)
2.5%	200 / 450	360
3.0%	150 / 450	280
4.0%	150 / 350	230
5.0%	150 / 300	200
>10%	150 / 250	160

N.B. TOTAL NON FROST SUSCEPTIBLE BUILDUP DEPTH TO BE 450mm (MIN)
TABLE A : FOUNDATION THICKNESS BASED ON BS 7533-101:2021 TABLE 16 & 17



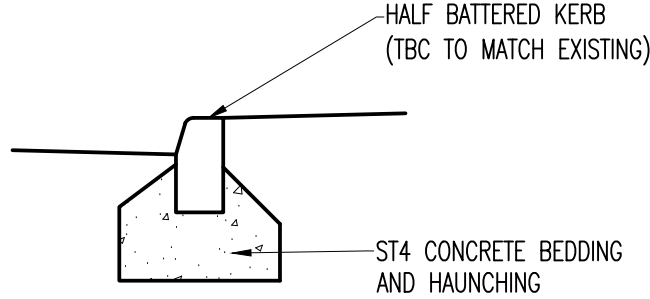
FLUSH GRANITE KERB E1

SCALE 1:20



DROPPED GRANITE KERBS E1

SCALE 1:20



HALF BATTERED KERB

SCALE 1:20

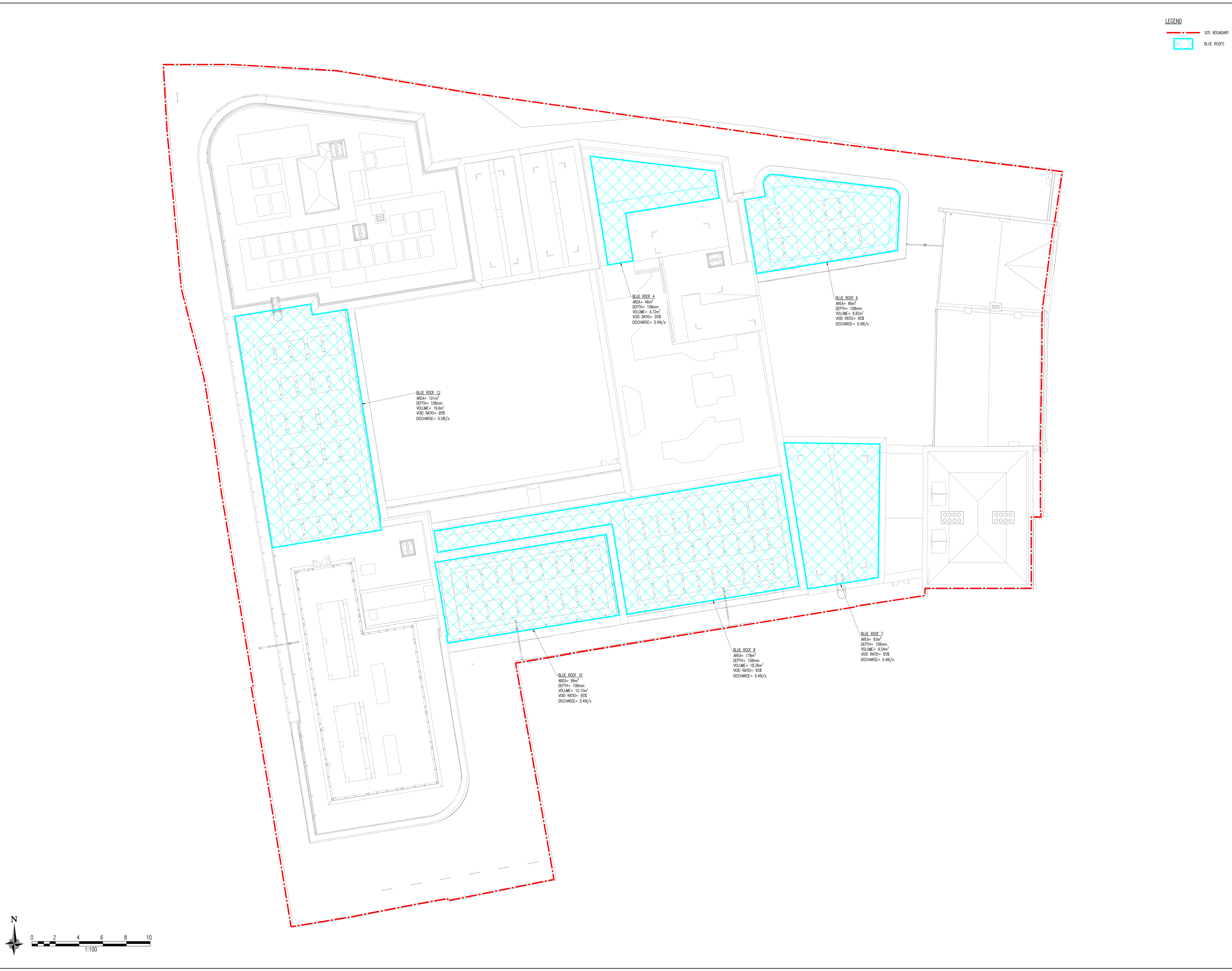
LOADING CATEGORIES (BASED ON BS 7533-101/2021)

1	PEDESTRIAN-ONLY AREAS, INCLUDING DOMESTIC APPLICATIONS
2	PEDESTRIAN AND CYCLE AREAS, DOMESTIC DRIVEWAYS
3	SMALL CAR PARKS SUBJECT TO CAR, LIGHT VAN AND MOTORCYCLE ACCESS
4	URBAN FOOTWAYS WITH NO PLANNED VEHICULAR OVERRUN. PEDESTRIAN AREAS USED BY LIGHT COMMERCIAL VEHICLES EMERGENCY VEHICLES AND MAINTENANCE VEHICLES
5	PEDESTRIAN AREAS SUBJECTED TO OCCASIONAL OVERRUN OF COMMERCIAL VEHICLES. CAR PARK RECEIVING OCCASIONAL COMMERCIAL VEHICULAR TRAFFIC.
6	ADOPTED HIGHWAYS AND COMMERCIAL/INDUSTRIAL DEVELOPMENTS USED BY A MODERATE NUMBER OF COMMERCIAL VEHICLES. PEDESTRIAN AREAS SUBJECT TO REGULAR OVERRUN OF COMMERCIAL VEHICLES. INDUSTRIAL PREMISES PETROL STATION FORECOURTS
7 8 9	ADOPTED HIGHWAYS AND COMMERCIAL/INDUSTRIAL DEVELOPMENTS USED BY A HIGH NUMBER OF COMMERCIAL VEHICLES.

NB: LOADING CATEGORY CRITERIA VARIES FOR DIFFERENT PARTS OF BS7533 AND THE ABOVE IS FOR GUIDANCE ONLY.

- Notes**
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 - ALL BINDER COURSES & ROADBASES TO BE BLINDED WITH ASPHALTIC GRIT PRIOR IF IT IS PROPOSED TO TRAFFIC THEM. (ALTERNATIVELY USE GRANITE AGGREGATE IN MACADAM MIX).
 - ALL DESIGNS BASED ON MIN. CBR OF 8%. REFER TO ENGINEER IF CBR < 8%.
 - ALL CARRIAGEWAY AND FOOTWAY PAVEMENTS TO HAVE MINIMUM 450mm DEPTH OF CONSTRUCTION FREE FROM FROST SUSCEPTIBLE MATERIAL.
 - DETAILS SHOULD NOT BE USED FOR ADOPTED ROADS AS HIGHWAY AUTHORITY OFTEN HAVE SPECIFIC REQUIREMENTS.
 - ALL SPOTS SHALL BE OVER EXCAVATED AND RE-FILLED WITH WELL COMPACTED 6F1/6F2 TO SHW SERIES 600.
 - REFER TO LANDSCAPE ARCHITECTS GA FOR PAVEMENT TYPES.
 - IF A CAPPING DESIGN IS NOT REQUIRED THEN THE NON WOVEN GEOTEXTILE TO BE LAID AT BASE OF FULL DEPTH PAVING FOUNDATION.
 - ALL CARRIAGEWAY AND FOOTWAY PAVEMENTS TO HAVE MINIMUM 450mm DEPTH OF CONSTRUCTION FREE FROM FROST SUSCEPTIBLE MATERIAL.

P01	09.06.26	GJI	FIRST ISSUE
Rev.	Date	By	Details Of Revision
Client			
MCALEER & RUSHE			
Project			
THE PRINTWORKS			
Title			
PAVING BUILD UP DETAILS			
Status			
PRELIMINARY			
Drawn	BM	A1 Scales	AS SHOWN
Date	JUL'25	Eng.	KS
WA Ref.	6056	Chk.	ML
		App'd.	AS
		Suitbilty.	S4
Drawing No.			
179-WAL-ZZ-SW-DR-C-6101			
Rev.			
P01			



LEGEND

--- SITE BOUNDARY

BLUE ROOFS

- Notes**
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4. BLUE ROOF EXTENTS HAVE BEEN TAKEN FROM BURD HAROLD DRAWING-PRINT-BHE-XX-RF-DR-C-3000_P05. ANY CHANGES TO THE BLUE ROOF DESIGN WILL REQUIRE HYDRAULIC ANALYSIS AND HAS POTENTIAL TO ALTER THE BELOW GROUND DRAINAGE DESIGN.

THIS DRAWING IS BASED ON THE FOLLOWING CONSULTANTS FILES

ARCHITECTURAL:
PRINT-BHE-XX-RF-DR-C-3000
DATE RECEIVED: 17.04.25

BLUEROOF DESIGN
PRINT-BHE-XX-RF-DR-C-3000_P05
DATE RECEIVED: 17.03.25

Rev.	Date	By	Details Of Revision
C01	04.08.25	KS	FIRST ISSUE

Client

MCALEER & RUSHE

Project

THE PRINTWORKS

Title

BLUE ROOF LAYOUT



Structural and Civil Engineers
The Clove Building
4 Niagara Street
London SE1 2ND
t: +44(0)20 7069 6800
e: london@walsh.co.uk
walsh.co.uk

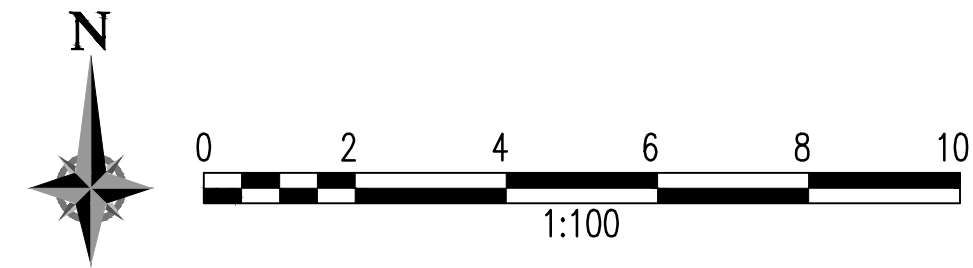
Status

CONSTRUCTION

Drawn	JB	AS Scale	1:100	App'd.	ML
Date	AUG' 25	Eng.	KS	Chk.	ML
WA Ref.	6056			Suitability	

ACTUAL DIMENSION = 80mm

Drawing No.	Rev.
PRINT-WAL-ZZ-RF-DR-C-3010	C01



Appendix B

Drainage and SuDS Management

Drainage & SUDS Maintenance Plan

Printworks, Tottenham High Road

The below list is not extensive and is to be read in conjunction with any specific inspection and maintenance requirements set by product manufacturers.

Table 1 – Below Ground Drainage Maintenance Tasks

Regular Maintenance	Frequency	Responsibility
The inspection of drainage channels, gullies, and sumps in manholes. All traps should be topped up with water where unused to prevent drying out.	Monthly. More regular in warm weather.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Inspect below ground drainage components from the surface, removing obstructions and silt, as necessary. Check there is no physical damage.	6 Monthly.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Regular sweeping or blowing or pavement to remove any debris that can clog.	Monthly.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Inspection of flow control device to identify any areas that are not operating correctly and clear out and debris from chamber.	Monthly for first 3 months then every 6 months.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Inspect inlet structures such as RWP's, channel drains, headwalls and gullies removing silt, as necessary. Check for any physical damage. Check for non-functioning components e.g. non-return flaps.	Monthly.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Inspect and identify any areas of pipework that is not operating correctly, undertake remedial works if required.	Monthly for first 3 months then annually.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Maintain vegetation to designed limits within the vicinity of all below ground drainage structures and pipes.	Annually or as required.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remove debris from catchment surface where it presents a risk to the performance of the below ground drainage system.	Monthly or as required.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Occasional Tasks	Frequency	Responsibility
Inspect drainage runs using CCTV technology and undertaking cleaning when required with a	Every 6-8 Years.	Privately Maintained by NHS Estate Management Appointed Specialist

high-powered jet cleaner.		Maintenance Contractor
Sweep and vacuum permeable pavement to prevent silt blockage.	As required.	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
Remove covers on inspection chambers and inspect, ensure that water is flowing freely and is unobstructed. Remove debris and silt as required.	Annually.	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
Remedial Work	Frequency	Responsibility
Monitor the effectiveness of areas of permeable paving, where water pools and does not infiltrate immediately advise Client of any remedial action required.	As required	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remedial works to be undertaken as necessary on below ground drainage systems following observations from regular and occasional maintenance tasks.	As required	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor

Table 2 – Below Ground Geocellular Attenuation Storage Tank Maintenance Tasks

Regular Maintenance	Frequency	Responsibility
Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then annually	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remove debris from the catchment surface (where it may cause risk to performance).	Monthly.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remove sediments from pre-treatment structures and/or internal forebays.	Annually, or as required	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remedial Work	Frequency	Responsibility
Repair/rehabilitate inlets, outlets, overflows, and vents.	As required	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
Inspect/check all inlets, outlets, vents, and overflows to ensure that they are in good	Annually	Privately Maintained by NHS Estate Management Appointed Specialist

condition and operating as designed.		Maintenance Contractor
Survey inside of tank for sediment build-up and remove if necessary.	Every 5 years or as required	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor

Table 3 – Permeable/Porous Block Paving Maintenance Tasks

Regular Maintenance	Frequency	Responsibility
Brushing and vacuuming (general sweep over whole surface).	Annually	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Occasional Tasks	Frequency	Responsibility
Stabilise and mow contributing and adjacent areas.	As required	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Removal of weeds (ideally through non-spray techniques e.g. glyphosate application).	As required	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remedial Work	Frequency	Responsibility
Remediate and landscaping which, through vegetation maintenance or soil slip, has been raised above pavement level (min 50mm).	As required	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost jointing material.	Annually	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
Rehabilitation of surface and upper structure by remedial suction sweeping.	Every 10-15 years or as required.	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
Initial inspection.	Monthly for three months after construction.	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Inspect for evidence of poor operations and/or weed growth.	Three monthly, 48hrs after large storms	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor

	and in the first six months.	Contractor
Inspect silt accumulation rates (use to define brushing frequency).	Annually	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
Monitor the effectiveness of areas of permeable paving, where water pools and does not infiltrate immediately advise Client of any remedial action required.	Annually	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
Monitor inspection chambers.	Annually	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor

Table 4 –Blue Roofs Maintenance Tasks

Regular Maintenance*	Frequency	Responsibility
Inspect all components including soil substrates, vegetation, irrigation systems, membranes and roof structure for proper operation, integrity of waterproofing and structural stability	Annually and after severe storms	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Inspect soil substrate for evidence of erosion channels and identify any sediment sources	Annually and after severe storms	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Inspect drain inlets to ensure unrestricted runoff from the drainage layer to the conveyance or roof drainage system	Annually and after severe storms	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Inspect underside of roof for evidence of leakage	Annually and after severe storms	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remove debris and litter to prevent clogging of inlet drains and interference with plant growth	Six monthly and annually or as required	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
During establishment (i.e. year one), replace dead plants as required	Monthly (but usually responsibility of manufacturer)	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
Post establishment, replace dead plants as	Annually (in	Privately Maintained by NHS Estate

required	autumn)	Management Appointed Specialist Maintenance Contractor
Occasional Tasks*	Frequency	Responsibility
Remove fallen leaves and debris from deciduous plant foliage	Six monthly or as required	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remove nuisance and invasive vegetation, including weeds	Six monthly or as required	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Mow grasses, prune shrubs and manage other planting as required – clippings should be removed and not allowed to accumulate	Six monthly or as required	Privately Maintained by NHS Estate Management Appointed Maintenance Contractor
Remedial Work*	Frequency	Responsibility
If erosion channels are evident, these should be established with extra soil substrate similar to the original material, and sources of erosion damage should be identified and controlled	As required	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
If drain outlet has settled, cracked or moved, investigate and repair as appropriate	As required	Privately Maintained by NHS Estate Management Appointed Specialist Maintenance Contractor
*Minimum required maintenance tasks. Refer to Specialist Product Provider’s Maintenance Plan for full requirements.		

- Special inspection and immediate appraisal may be required in the event of a structural accident, fire, flooding, reported structural distress or suspected inadequacy.
- It is recommended that in situations where an expected severe storm is to hit that all gullies, drainage channels and manhole sumps are cleared of any debris material.
- Refer to the manufactures of all attenuation & rainwater harvesting systems and flow control devices for their specific inspection regime requirements for their products.
- All inspections should be carried out by the appropriate persons and they should be confined space trained if entering below ground structures such as manholes or attenuation tanks.

Additional Maintenance Recommendations

The above is not an exhaustive list and is a guide on the minimum expected inspection to be undertaken on the below ground drainage and sustainable drainage features. Additional or more frequent inspections can be undertaken to ensure the below ground drainage network operates appropriately and is maintained to a level suitable to accommodate the peak design flows.

For all attenuation systems, proprietary treatment systems, backflow prevention devices and pumps the above maintenance plan is to be read in conjunction with any specific inspection and maintenance requirements set by product manufacturers.

Further specific maintenance guidance for SuDS features to enable continuous operational performance is available in the CIRIA SuDS Manual (C753).

In addition to the regular, occasional and remedial maintenance tasks the following site and special circumstances shall be considered, including: