ALDI STORE – HAREFIELD ROAD, UXBRIDGE

DRAINAGE STATEMENT

Introduction

This drainage statement has been prepared in support of a planning application to London Borough of Hillingdon for the conversion of existing retail units to form a new Aldi food store. Planning permission Ref. 16299/R/93/0504 was approved on 14th January 1994 at the Former Wickes and Halfords, Harefield Road, UB8 1JS for the following:

"Redevelopment of site with two units for non-food retail purposes including service and access from Warwick Place and public access via Harefield Road"

Following this, planning permission Ref. 16299/APP/2024/32 was approved on 23rd December 2024 under S96a of the Town and Country Planning Act 1990 (as amended).

The following amendment to the description of the development was approved:

"Redevelopment of the site for purposes including service and access from Warwick Place and public accesses via Harefield Road"

Concurrently, planning permission Ref. 16299/APP/2023/3691 was also approved on 23rd December 2024 under Section 73 of the Town and Country Planning Act 1990 (as amended) in relation to the variation of a condition following the grant of planning permission Ref. 16299/R/93/0504 by Hillingdon Council. The application was approved with the following description of development:

"Variation of Condition 7 (Landscape Scheme), Condition 10 (Accessible Car Parking), Condition 11 (Car Parking), Condition 13 (Materials), Condition 17 (Hours of Delivery), and Condition 23 (Use of Site) of planning permission reference 16299/R/93/0504, dated 14.01.94 ('Redevelopment of site with two units for non-food retail purposes including service and access from Warwick Place and public access via Harefield Road'), to allow for a change of operation and type of goods sold; amend hours of deliveries; reduce the number of car parking spaces; and amendments and reconfiguration to layout (no increase in floorspace)"

The purpose of these applications was to principally remove the restriction of non-food sales, along with associated works including revised delivery hours in order to optimise the prospects of securing tenants for the vacant units.

This report has been prepared in line with relevant legislation detailed below.

The Government laid a statutory instrument making the Lead Local Flood Authority (LLFA) a statutory consultee, and overseer of drainage matters for major planning applications, by adding the consultation requirement to Schedule 4 of the Development Management Procedure Order. This came into effect from 15 April 2015.

As such, both the Local Planning Authority (LPA) and LLFA in consultation are required to approve drainage schemes at planning stage, either during determination or by condition. In England, this is generally undertaken in line with published non-statutory standards (National Standards for Sustainable Drainage) as published by Defra, however individual LPAs and LLFAs are free to implement their own standards and requirements.

The objective of this report is to develop and assess drainage solutions for the proposed development, such that these meet the requirements of the NPPF. This report has been developed using current best practice, the aforementioned local standards and guidance, information from the EA, LBC Strategic Flood Risk Assessment (SFRA) 2017, the Non-Statutory Technical Standards for Sustainable Drainage: Practice Guidance, CIRIA C753 The SuDS Manual and site-specific requirements.

Site Summary

It is proposed to convert the existing retail units into an Aldi store at Harefield Road, Uxbridge, UB8 1JS. The existing site currently has accompanying car parking bays and service yard. Refer to Appendix A for the Site Location Plan.

The nearest existing public Thames Water foul and surface water sewers are located within Harefield Road, and are both 225mm in diameter. Refer to Appendix B for the Existing Sewer Plan & Topographic Survey. The closest watercourse to the site is Frays River 155.00m to the northwest of the site on the opposite side of the Magistrates Court and Riverbank apartment block.

There are a number of existing private surface water and foul drains within the site boundary which serve the existing buildings and car park area. It is understood that the current foul drainage discharges into the sewer via an existing lateral foul drain to the west of the site, and the existing storm drainage discharges into an existing surface manhole also to the west of the site. The site has a total area of approximately 0.932ha and the impermeable areas will remain the same as part of the development.

Surface Water Drainage Strategy

- It is proposed to utilise the existing drainage system retaining the existing arrangement. As the building and external areas are to remain the same, there are no alternations proposed to the existing surface water network thus maintaining the existing condition and design. Some minor remedial works are proposed which only includes the replacement of damaged/worn drainage channels.
- Refer to Appendix C for the Proposed Drainage Layout Drawing.
- No surface water drainage will be offered for adoption.
- The design of the private drainage will be developed in accordance with Current Building Regulations Approved Document H.

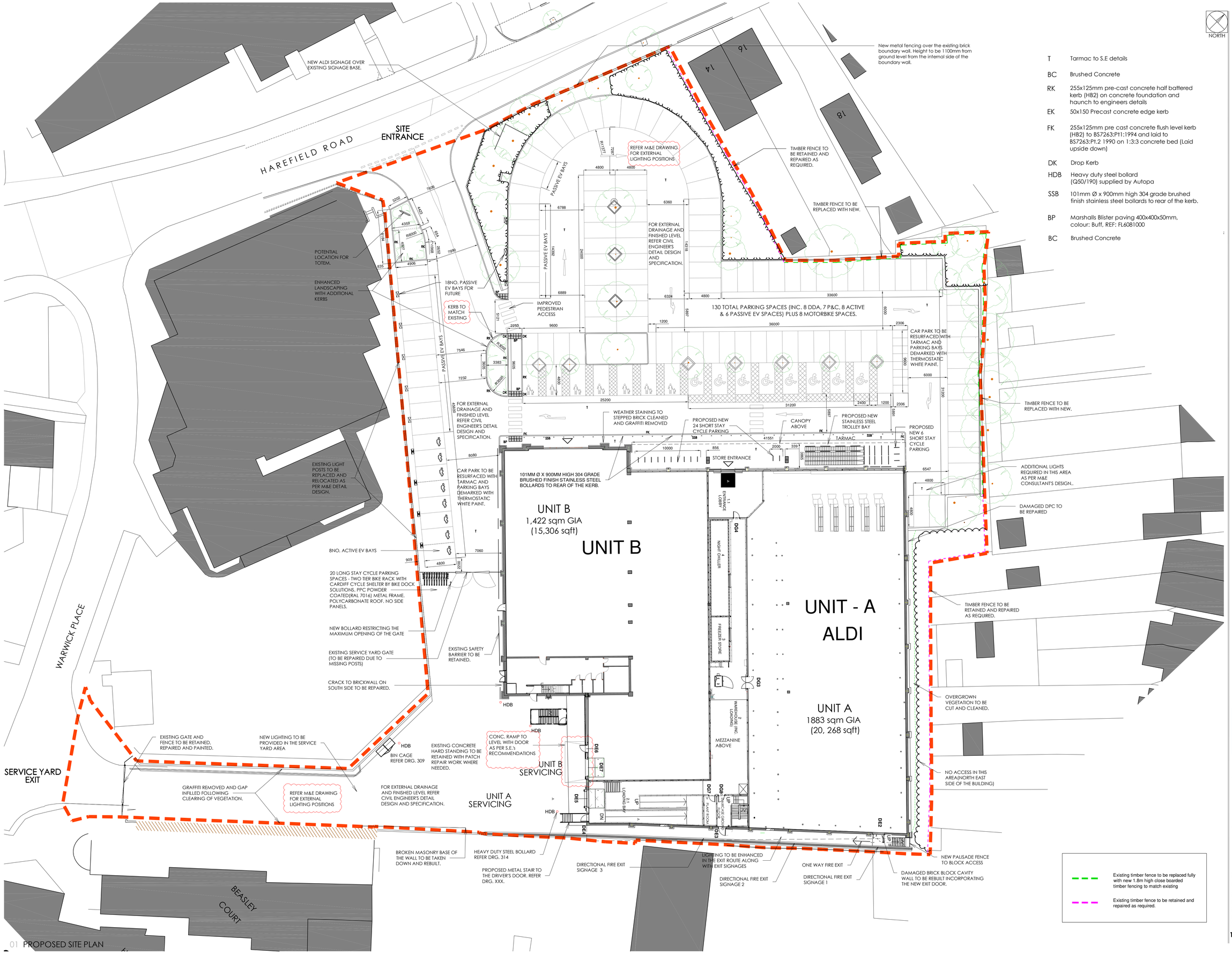
Foul Water Drainage Strategy

- There are existing foul drains on site which serve the existing building and discharge to public foul sewer in Harefield Road via the private retail park foul drainage network.
- It is proposed to connect the new foul drainage, which is to serve the chiller/freezer condensates and new welfare facilities, into the existing private foul water manhole in front of the existing unit.
- A pumped foul system is required to connect the proposed foul drainage due to the shallow manhole invert level.
- No site drainage will be offered for adoption.
- The design of the private drainage will be developed in accordance with Building Regulations Approved Document H.

Operation and Maintenance

All private drainage will be maintained by Aldi Stores Ltd. Refer to Appendix D for the Operation and Maintenance Manual.

Appendix A: Site Plan



01 PROPOSED SITE PLAN

T	Tarmac to S.E details
BC	Brushed Concrete
RK	255x125mm pre-cast concrete half battered kerb (HB2) on concrete foundation and haunch to engineers details
EK	50x150 Precast concrete edge kerb
FK	255x125mm pre cast concrete flush level kerb (HB2) to BS7263:Pt1:1994 and laid to BS7263:Pt.2 1990 on 1:3:3 concrete bed (Laid upside down)
DK	Drop Kerb
HDB	Heavy duty steel bollard (Q50/190) supplied by Autopa
SSB	101mm Ø x 900mm high 304 grade brushed finish stainless steel bollards to rear of the kerb.
BP	Marshalls Blister paving 400x400x50mm, colour: Buff, REF: FL6081000
BC	Brushed Concrete

NORTH

This drawing has been based on ordnance survey mapping and the following drawings:

0 2.5 5 7.5 10 12.5m
SCALE 1:250

Rev	Date	Description	Drawn	Chk'd
P01	19.04.24	Preliminary	DH	SB
P02	10.05.24	Preliminary	SB	SB
P03	21.06.24	Preliminary(Parking layout amended, feats added)	SB	IDC
C01	26.07.24	Tender Issue	SB	IDC
C02	04.09.24	Tender Issue - Revised.	SB	IDC
C03	18.09.24	Extension removed. Mezzanine retained in unit B.	SB	IDC
C04	08.11.24	Revised Tender Issue post structural survey	SB	IDC

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3 St John's North, Wakefield, WF1 3QA
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READING - T. 0118 950 7700
101 London Road, Reading, RG1 5BY
LONDON - T. 020 7409 1215
10 Gees Court, St Christopher's Place, London, W1U 1JJ

Client
ALDI STORES LIMITED | SHEPPEY REGION

Project Title
Proposed Development

Aldi Uxbridge
Harefield Road
UB8 1JS

Drawing Title
Proposed Site Plan

Drawn	Checked	Scale @A1	BIM Status	Date
DH	SB	1:250	S1	04.2024

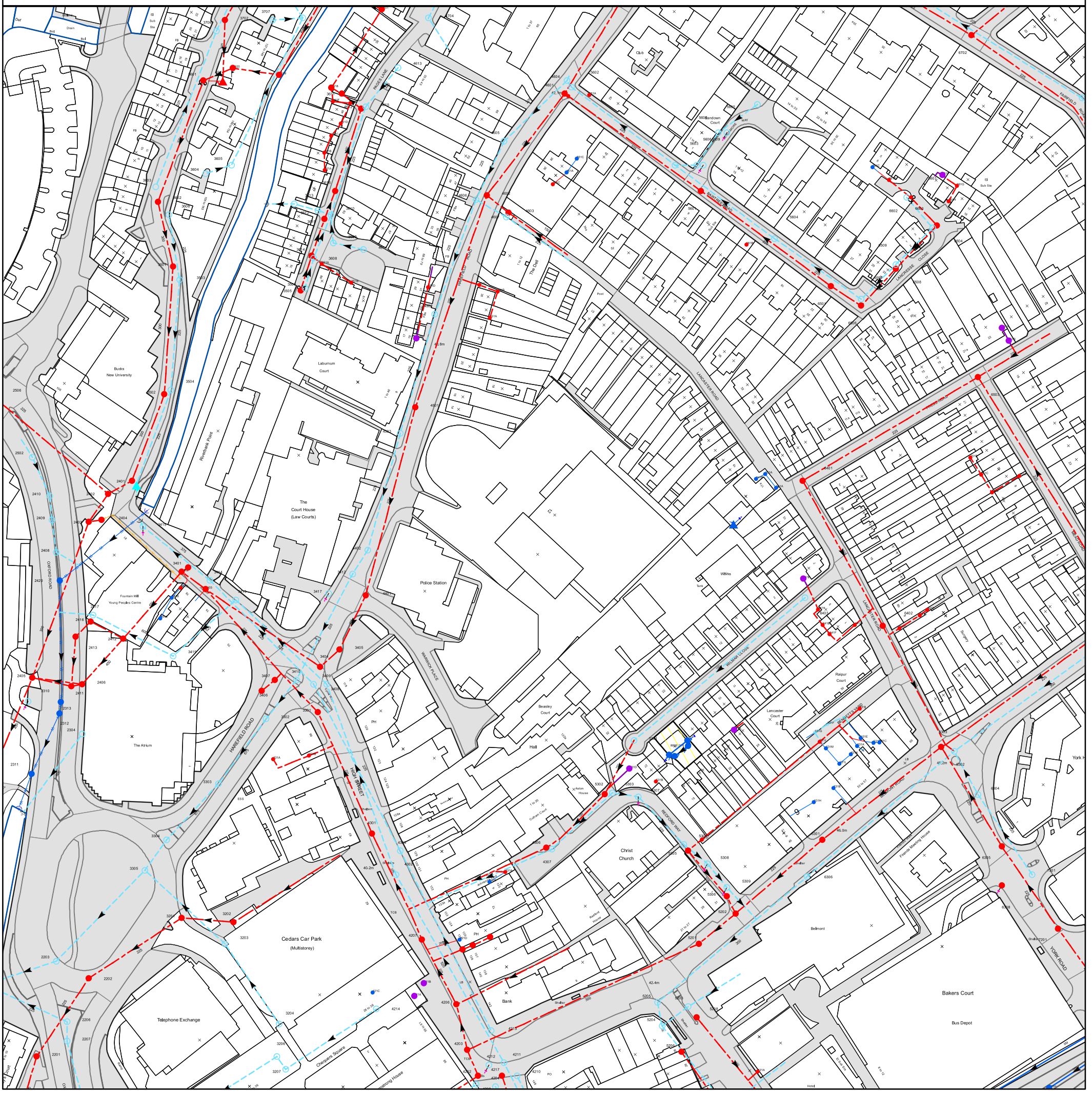
Drawing Status	Rev.	THP Project No.
D2	C04	16401-1

Project No.	Originator	Volume	Level	Type	Role	Number
16401-1	THPR	XX	00	DR	A	(90)02

Appendix B: Existing Sewer Plan & Topographic Information

Based on the Ordnance Survey Map with the sanction of the Controller of H.M Stationary Office License Number 10019345

CDWS/CDWS Standard/2023_4834527



The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified before any works are undertaken. Crown copyright Reserved

Scale:	1:1791
Width:	500m
Printed By:	Skrishna1
Print Date:	07/06/2023
Map Centre:	505487,184468
Grid Reference:	TQ0584SW

Comments:

CDWS/CDWS Standard/2023_4834527

NB: Level quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no Survey information is available.

REFERENCE	COVER LEVEL	INVERT LEVEL
3614		
3608		
3612		
3702	34.32	31.89
4501	40.68	35.48
4219		
4606	41.44	40.18
6402		
2403	33.83	31.5
2417		
3304	35.99	33.37
3504	34.35	32.98
3501	34.54	32.64
4203	40.74	37.72
5203		
5609		
3207		
5302	42.01	41.15
6308		
4604	42.08	40.56
4307	41.41	40.71
6604		
3404	39.41	34.98
3613		
3302	38.41	35.23
3505		
3506		
2402	33.73	31.63
3412	40.39	39.39
4614		
5206	42.25	39.9
4704		
6301	45.64	42.05
6303	48.33	46.28
4302	40.47	33.34
4303	40.37	37.42
5306	43.97	41.13
4220		
6507		
3303	36.98	34.24
4210	40.65	38.97
4217	40.76	37.65
5205	42.23	39.96
3604		
3706	34.33	32.66
4605	41.83	40.34
3707		
3206		
4402	40.71	39.46
4306	41.42	40.5
2412		
4214		
2207	33.97	32.27
5601	45.45	42.95
5604	47.83	46.6
2203	33.45	32.11
2413		
5202	43.8	40.32
4218		
2406	34.52	33.2
3401	35.62	32.27
4204	40.72	39.29
6601		
3405	40.17	35.18
2206	34.01	32.24
3618		
2405	34	30.64
2201	32.78	31.94
421C		
2313		
2311		
641F		
431A		
3615		
5204		
2410	33.79	32.2
5308		
5602	42.36	41.34
2408	34.05	31.82
6403		
4207	40.57	38.17

REFERENCE	COVER LEVEL	INVERT LEVEL
3409	39.43	37.06
3301	39.38	37.07
3203		
3605		
6702	51.11	48.09
4209		
4202		
2202		
2416		
3502	34.25	32.38
3606	34.72	33.31
3419		
3202		
3408	39.57	32.74
5208	42.72	41.34
3204		
3609		
5303	42.01	41.51
4601	42.17	36.55
3415		
3305	34.48	31.42
6302	48.19	44.94
5307	42.44	41.24
3410	38.93	36.49
3406	38.54	35.64
3708		
2404	33.91	31.56
7201	48.41	47.2
4612		
4401	40.53	35.23
5304	43.58	
5607	46.75	46.15
6501	48.12	45.77
3417	40.24	38.75
4613		
4503	39.9	38.61
5605	46.65	45.95
6401	46.91	45.61
3601	35.13	33.73
4603	42.07	40.76
6603		
6306	45.08	42.6
5603	44.85	43.77
3414		
4211	40.74	33.87
3413	36.63	32.38
3407	38.4	35.38
2401		
6304	48.49	46.76
6508		
6602		
5608		
5201	42.98	39.58
5606		
7606	53.39	52.39
7301	48.69	47.22
2304	34.72	31.91
4212		
4213	40.72	39.12
3201		
4602	41.45	36.15
4502	40.67	39.84
3616		
3611		
2411	34.66	30.74
2310	34.18	32.46
2502	33.79	32.16
2409		
2420		
2312		
431B		
641H		
3602	34.68	32.83
6305	48.5	46.75
4615		
3603	33.64	33.19
4607	42.08	41.34
6503	49.92	46.93
5301		
531A		
6509		

CDWS/CDWS Standard/2023_4834527

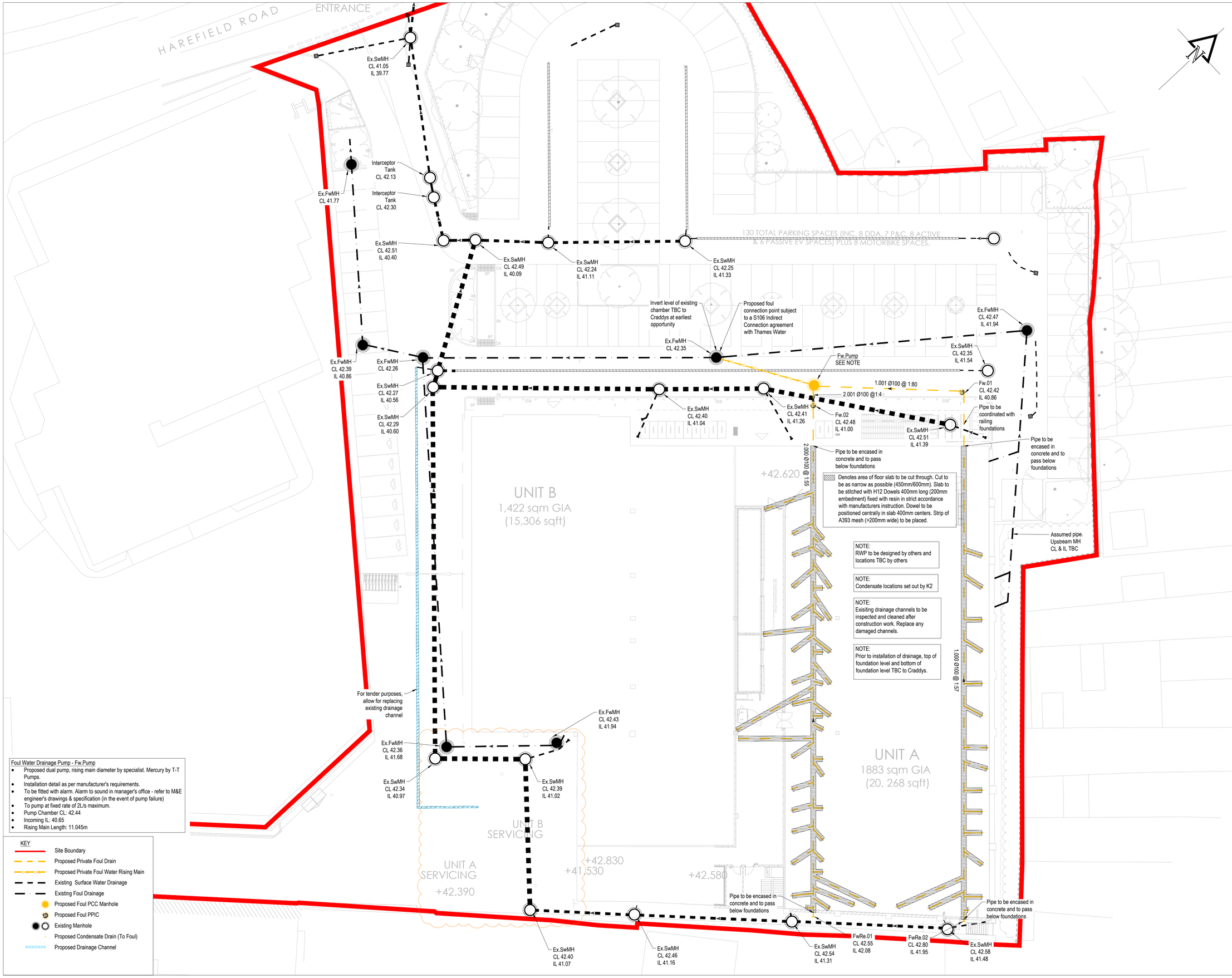
NB: Level quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no Survey information is available.

REFERENCE	COVER LEVEL	INVERT LEVEL
3503	34.55	33.15
5309	44.02	40.87
4701		
451A		
451C		
561A		
341A		
3402		
561B		
631G		
631E		
631C		
531B		
641E		
631I		
631K		
631A		
351B		
631M		
641C		
3620		
641A		
4206	40.71	37.66
421B		
351A		
561C		
531D		
551A		
721H	40.11	38.38
651A		
361B		
361D		
361F		
451E		
661D		
661G		
421D		
651C		

REFERENCE	COVER LEVEL	INVERT LEVEL
3610		
6506		
341C		
451B		
4301	40.24	37.7
451D		
3403	35.94	34.39
341B		
631H		
631F		
631D		
631B		
331A		
331B		
631J		
531C		
5305	43.74	41.62
631L		
751A		
641D		
3619		
641B		
421A		
641I		
461C		
461A		
541A		
541B		
751B		
361A		
361C		
361E		
521A	42.86	41.24
661C		
661H		
661F		
641J		
651B		


505400E
505450E
505500E
505550E
184550N
184500N
184450N
184400N
N
Monitoring Well
Asphalt
Concrete
Shrubs
Block Paving
Ceiling2.40m
Ceiling2.47m
Ceiling2.45m
Ceiling2.50m
Ceiling2.55m
Ceiling2.60m
Ceiling2.65m
Ceiling2.70m
Ceiling2.75m
Ceiling2.80m
Ceiling2.85m
Ceiling2.90m
Ceiling2.95m
Ceiling3.00m
Ceiling3.05m
Ceiling3.10m
Ceiling3.15m
Ceiling3.20m
Ceiling3.25m
Ceiling3.30m
Ceiling3.35m
Ceiling3.40m
Ceiling3.45m
Ceiling3.50m
Ceiling3.55m
Ceiling3.60m
Ceiling3.65m
Ceiling3.70m
Ceiling3.75m
Ceiling3.80m
Ceiling3.85m
Ceiling3.90m
Ceiling3.95m
Ceiling4.00m
Ceiling4.05m
Ceiling4.10m
Ceiling4.15m
Ceiling4.20m
Ceiling4.25m
Ceiling4.30m
Ceiling4.35m
Ceiling4.40m

Appendix C: Proposed Drainage Layout



Foul Water Drainage Pump - Fw.Pump

- Proposed dual pump, rising main diameter by specialist. Mercury by T-T Pumps.
- Installation detail as per manufacturer's requirements.
- To be fitted with alarm. Alarm to sound in manager's office - refer to M&E engineer's drawings & specification (in the event of pump failure)
- To pump at fixed rate of 2L/s maximum.
- Pump Chamber CL: 42.44
- Incoming IL: 40.65
- Rising Main Length: 11.045m

KEY

- Site Boundary
- Proposed Private Foul Drain
- Proposed Private Foul Water Rising Main
- Existing Surface Water Drainage
- Existing Foul Drainage
- Proposed Foul PCC Manhole
- Proposed Foul PPIC
- Existing Manhole
- Proposed Condensate Drain (To Foul)
- Proposed Drainage Channel

REV	DATE	DESCRIPTION	DRW	CHK
C01	19.08.24	FIRST ISSUE	SI	AJP
C02	25.10.24	DRAINAGE UPDATED TO COORDINATE WITH LATEST SITE PLAN & EXTENSION REMOVED	SI	RSH

GENERAL NOTES

DRAWINGS AND SPECIFICATIONS: This drawing is to be read in conjunction with all relevant Architects, Engineers and Specialists drawings together with the specification.

BUILDING REGULATIONS AND WARRANTY PROVIDER APPROVALS: Please note that it is the responsibility of the Client/Main Contractor to ensure that Building Regulations and warranty provider (e.g. NHBC) approval of all design and construction details is achieved prior to construction on site.

DRAINAGE NOTES

DRAINAGE STANDARDS: All private drainage works shall be in accordance with Building Regulations Document Part H. All adoptable drainage works shall be in accordance with Sewerage Sector Guidance Appendix C : Design and Construction Guidance and statutory undertaker's requirements.

ABOVE GROUND DRAINAGE: RWP/SVP drainage positions shown on Craddys drawings, upon which the below ground drainage is designed, are based upon the positions provided to us by the Architect and these are to be set out on the Architect's floor plans unless agreed otherwise. If above ground drainage positions change then Craddys will need to be informed of these changes in writing and the changes in position clearly noted or highlighted on a drawing, i.e. using revision clouds, with relevant CAD files provided to Craddys below ground drainage drawings to be updated. Note that should these changes occur following Craddys issue of Construction status drawings then there is a risk of the contractor undertaking abortive works..

LAYING DRAINAGE. It is recommended that all drains be laid starting from the downstream connection to the existing network and working upstream to and through the new development. Surface water drainage to be laid at 1:80 minimum unless noted otherwise (UNO). Foul drainage to be laid at 1:40 minimum UNO.

DRAINAGE PIPE SIZES: All private foul water drains to be 100mm diameter UNO; all private surface water drains to be 150mm diameter UNO.

MANHOLE COVER LEVELS: All manhole & inspection chamber cover levels are to be adjusted to suit the proposed finished surface levels. If the cover levels proposed in the drainage schedules vary from proposed surface level by more than 100mm, Contractor to notify Craddys.

PIPE MATERIAL: All private and adoptable drainage pipes less than 500mm diameter to be class SN8 Plastic. Pipes to be laid in 3m lengths.

PPIC: All PPIC's to be orientated such that the main discharge passes through the main/middle branch. Additionally all foul PPIC's to be orientated such that a toilet or bathroom soil stack connects to the middle/main branch.

C D M : SIGNIFICANT HAZARDS

THE FOLLOWING HEALTH AND SAFETY HAZARDS ARE IDENTIFIED BY THE DESIGNER AS ABNORMAL IN PURSUANCE OF THE CURRENT CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS.

RISKS DURING CONSTRUCTION:

- DEEP EXCAVATIONS: Deep excavations may become unstable such that side walls collapse without warning. Adequate propping & shoring to be provided commensurate with site conditions and depth of excavations.
- EXISTING SERVICES: Refer to existing services information provided by contractor. Contractor to carry out further surveys/CAT scans to confirm exact location of services prior to excavations.
- EXISTING FOUL & SURFACE WATER DRAINS: There are existing live drains that serve the previous site. Contractor to provide all the necessary safe-guarding measures & ensure that operatives are aware of this during construction.

OPERATION / MAINTENANCE RISKS:

- PUMP: Refer to manufacturers recommendations.

RISKS DURING DEMOLITION/DECOMMISSIONING/DISMANTLING/ALTERATIONS:

- No abnormal risks have been identified relating to this design element.

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY COMPETENT & ADEQUATELY RESOURCED CONTRACTOR(S) TO SAFE SYSTEMS OF WORK.

Client
ALDI - Aldi Stores Ltd.

Project Title
ALDI STORE

Project Address
HAREFIELD ROAD
UXBRIDGE

Drawing Title
PROPOSED DRAINAGE GENERAL ARRANGEMENT

Job No.	Originator	Zone	Level	Type	Role
60206	CDY	XX	XX	DR	C

System Classification	Drawing No.	Suitability	Revision
Ss_50_35_00	0050	A4	C02

Drawn	Checked	Date	Scale	Size
SI	AJP	19.08.24	1:200	A1

Approved	Craddys Job#
RAG	60206

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www.craddys.co.uk

REV	DATE	DESCRIPTION	DRW	CHK
C01	19.08.24	FIRST ISSUE	SI	AJP
C02	25.10.24	DRAINAGE UPDATED TO COORDINATE WITH LATEST SITE PLAN & EXTENSION REMOVED	SI	RSH

Private Foul Inspection Chamber Schedule								
MH Ref.	Cover & Invert Level (m)	Depth (m)	MH Size (mm)	MH Type	Cover Size (mm)	Cover Grade	Eastings	Northings
Fw.01	CL = 42.42 IL = 40.86	1.56	Ø450	Type D	450Ø or 450x450	D400	505502.619	184514.228
Fw.02	CL = 42.48 IL = 41.00	1.48	Ø450	Type D	450Ø or 450x450	B125	505491.826	184500.499

FOUL PIPELINE SCHEDULE							
Pipe Code	U/S Manhole Ref	D/S Manhole Ref	Diameter (mm)	Length (m)	Gradient	Material	Bedding
1.000	FwRe.02	Fw.01	100	61.96	1:57	Plastic	Class "S"
1.001	Fw.01	Fw.Pump	100	16.54	1:80	Plastic	Class "S"
2.000	FwRe.01	Fw.02	100	59.69	1:55	Plastic	Class "S"
2.001	Fw.02	Fw.Pump	100	1.52	1:4	Plastic	Class "S"

NOTE:
All silt traps to have sump depth of 0.5m. This has not been reflected on the schedules. See Drainage Details drawing for more information.

NOTE:
When plastic pipe work is used, it shall have a minimum nominal short-term ring stiffness of SN8 (foul) or SN6 (surface water) and be laid in maximum 3m lengths

GENERAL NOTES

DRAWINGS AND SPECIFICATIONS: This drawing is to be read in conjunction with all relevant Architects, Engineers and Specialists drawings together with the specification.

BUILDING REGULATIONS AND WARRANTY PROVIDER APPROVALS: Please note that it is the responsibility of the Client/Main Contractor to ensure that Building Regulations and warranty provider (e.g. NHBC) approval of all design and construction details is achieved prior to construction on site.

DRAINAGE NOTES

Refer to drawing: 60206-CDY-XX-XX-DR-C-0050

C D M : SIGNIFICANT HAZARDS

THE FOLLOWING HEALTH AND SAFETY HAZARDS ARE IDENTIFIED BY THE DESIGNER AS ABNORMAL IN PURSUANCE OF THE CURRENT CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS.

RISKS DURING CONSTRUCTION:
- Refer to drawing 60206-CDY-XX-XX-DR-C-0050

OPERATION / MAINTENANCE RISKS:
- Refer to drawing 60206-CDY-XX-XX-DR-C-0050

RISKS DURING DEMOLITION/DECOMMISSIONING/DISMANTLING/ALTERATIONS:
- Refer to drawing 60206-CDY-XX-XX-DR-C-0050

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY COMPETENT & ADEQUATELY RESOURCED CONTRACTOR(S) TO SAFE SYSTEMS OF WORK.

Client
ALDI - Aldi Stores Ltd.

Project Title
ALDI STORE

Project Address
HAREFIELD ROAD
UXBRIDGE

Drawing Title
PROPOSED DRAINAGE SCHEDULES

Job No.	Originator	Zone	Level	Type	Role
60206	CDY	XX	XX	DR	C

System Classification	Drawing No.	Suitability	Revision
Ss_50_35_00	0055	A4	C02

Drawn	Checked	Date	Scale	Size
SI	AJP	19.08.24	1:200	A1

Approved	Craddys Job#
RAG	60206

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Appendix D: Operation and Maintenance Manual

Aldi Store, Harefield Road, Uxbridge

OPERATION AND MAINTENANCE OF BELOW GROUND DRAINAGE SYSTEM

The following is a list of the drainage items which will require periodic maintenance and sets out how often they should be maintained to achieve their maximum design life. A brief description of how the maintenance should be carried out is provided. All maintenance should be carried out by suitably trained operatives using the correct equipment. These recommendations apply to the private drainage items within the development site (maintenance and operation of adoptable drainage is the liability of the adopting authority).

Gullies & Drainage Channels
Inspection and removal of debris from gully pot once a year (preferably in the spring after leaf fall in the autumn).

Drainage Pipes & Manholes
Inspect manholes for build up of silt and general debris (once a year, preferably in the spring after leaf fall in the autumn). If silt/debris is building up then clean with jetting lorry / gully sucker & inspect pipe – same may be required. If the pipes to be jetted are plastic then a high flow, low pressure setting should be used so that the pipes are not damaged. (Note: Manhole covers can be heavy and suitable lifting equipment / procedures should be used. Operatives should not enter manholes to carry out maintenance).

Unusual / Unresolved Problems
If the drainage system is still holding water following cleaning with a jetter, or the jetting of the system removes excessive amounts of debris this may indicate greater issues within the system. A CCTV survey is likely to be required and further advice should be sought by a drainage engineer.

Pumping Station
Inspect lifting chain or rope every six months as well as lifting the cover at the outfall manhole and check for normal flow. The cables, oil, mechanical seals, bearings and wearing parts should be checked annually. Oil and mechanical seals should be changed biannually. Every 5 years, as complete service should be carried out. If any damage to the pumping station, parts should be replaced. Jet clean rising main if any blockages. Operating current to be within rated current and power voltage variation to be within ±10% of the rated voltage.