

Upper Brook Street Masterplan Williams / Alliance UBS Limited Utilities Life Sciences

**PROPERTY ALLIANCE GROUP /
MODA LIVING / WILLIAMS MOTOR CO (HOLDINGS)**

LIFE SCIENCES

UPPER BROOK STREET MASTERPLAN

MANCHESTER

UTILITY REPORT



KJ Tait

REVISION P02



Document History

SUITABILITY	REVISION	DATE	DETAILS	BY	CHKD
S2	P01	05 June 2023	First Issue	RT	BS
S2	P02	14 June 2023	New Cover & minor typo corrections	RT	BS



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1.0 INTRODUCTION

This report has been prepared by KJ Tait on behalf of Williams Motor Co (Holdings) and Alliance UBS Limited, to support a full planning application for a life sciences and purpose-built student accommodation (PBSA) development (hereafter referred to as the 'Proposed Development') on Phase Two of the Upper Brook Street Masterplan (hereafter referred to as the 'Site'). This report is concerned solely with the life-sciences/laboratory buildings.

The proposal would bring forward development on a previously developed site which is earmarked for commercial and PBSA uses in the Oxford Road Corridor Strategic Regeneration Framework Guidance (SRFG) endorsed by MCC in 2019. This application is accompanied by a comprehensive suite of technical documents, reports and plans.'

The Upper Brook Street (UBS) Laboratory buildings have been designed to be inherently flexible to adapt to a wide range of laboratory uses. The following document outlines the Utility strategy for this new Laboratory buildings project.

1.1 Site description

The Site extends to 2.13 hectares and is bounded by Upper Brook Street (UBS), Grosvenor Street and Kincardine Road with Inchley Road running through the centre. The site comprises the various former Williams Garage buildings and their associated car parking forecourts. These buildings are now vacant and are formed around the Grade II* listed 'Former Unitarian Chapel' (sits outside of the site boundary) which now operates as student accommodation.

The Site is identified for redevelopment within the Oxford Road Corridor Strategic Regeneration Framework Guidance (SRFG) with mixed commercial uses, purpose built student accommodation, and high-density development identified as being a priority for the UBS site.

1.2 Development description Life Sciences

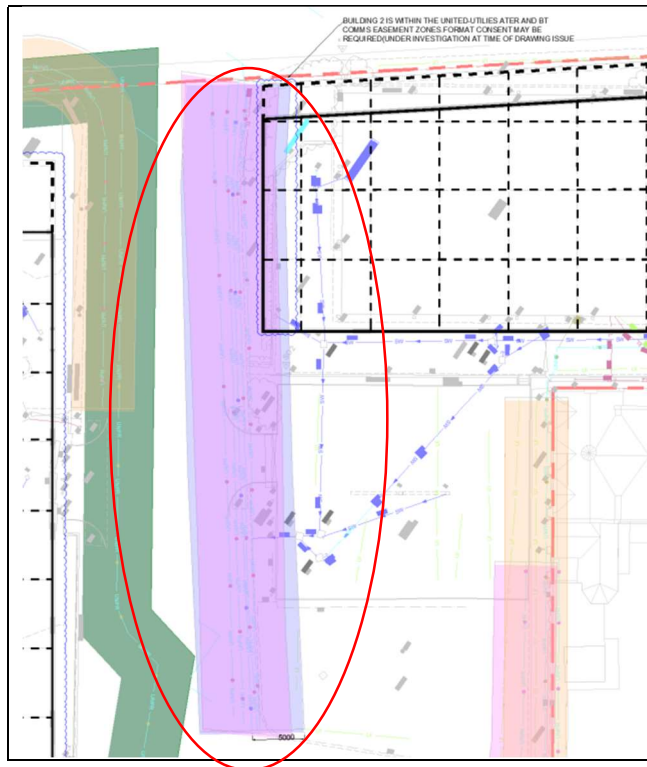
The proposed buildings will provide approximately 45,874sq.m of combined laboratory and office space along with a ground floor publicly accessible café and medical facility. The buildings will also house conference space alongside secure cycle store and cycle changing. The massing is split into three buildings surrounding the proposed public square and retaining Grade II* listed 'Former Unitarian Chapel' and the buildings will range from 4 to 9 storeys in height

1.3 Purpose of the Planning Utility Report

This report is to describe an outline of the utility services requirement for the buildings and how this will be delivered to each building.

2.0 EXISTING SITE UTILITY SERVICES

The below information has been extracted from the utility information obtained from Utility record information and a ground-radar survey of the services within the redline boundary of the site.

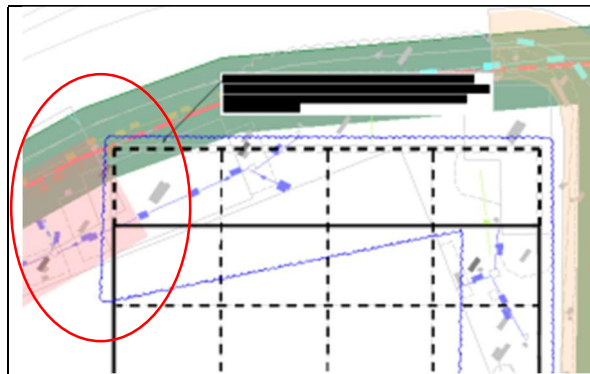


Water

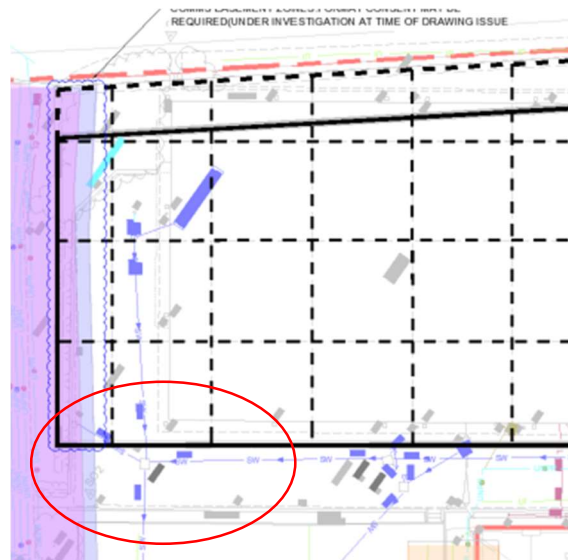
There is a United Utilities easement zone in between Building 1 and Building 2.

Services feeding the existing buildings will be disconnected.

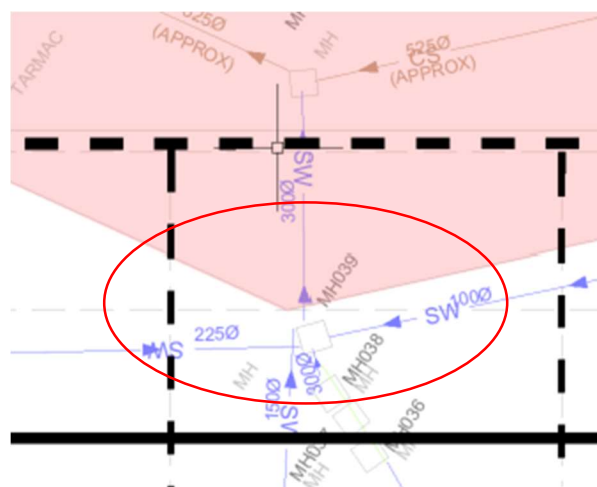
New cold water connections are required for the new buildings.



Building 1



Building 2



Wastewater

Building 1:

There is manhole with existing 150mm dia. connection on Kincardine Road side.

Drainage plans are still to be developed, but it is envisaged this will form the point of connection for Buildings 1 & possible the residential developments to the north too.

Building 2:

There is manhole with existing 150mm dia. connection near chapel.

This may form part of the drainage connection for Building 1 & 2.

Building 3:

There are manholes with existing 300mm dia. connection on both Kincardine Road and Upper Brook Street side.

Building 3 deliberately sets back at ground level on the Kincardine Rd side to retain access to this manhole and this will likely form the point of connection for building 3.



 Building 3	The manholes on the Upper-Brook-Street side will also form the point of connection for B3.
	Electrical There is a sub-station near the chapel. This will be retained for chapel use, and possibly also serve site temporary connections for E.g. Tower-cranes and site services during construction to avoid the use of generators. TBC once site loads are known.
	Communication Networks Existing BT connections are from Upper Brook Street side There are also Comms services in Kincardine Road which will form the resilient comms connections necessary for modern high-tech businesses and wired-score rating.



3.0 Proposed Utility Services

Utility diversions are required due to the new locations to the proposed buildings. We have radar-survey information, but digging of slit trenches is recommended to understand the extend of diversion works required – especially around new vehicular access where site levels may need to be reduced.

A pre-demolition utility survey, including Ground Penetrating Radar (GPR) has been requested to identify where the existing services to site are located, GPR scan has been completed within the red-line boundary (see appendix 1.)

3.1 Incoming HV Electrical Supply

According to Electricity North West Limited's (ENWL's) reply, there is insufficient Low Voltage (LV) power supply to the site. So a new 33kV High Voltage (HV) power shall be fed from a ENWL's sub-station at Longsight Grid 10004 which is approximately 1.2km away from the site. The 33kV sub-station with necessary switch rooms, utility meter and circuit breakers to be built inside Building 1 on Ground floor and it will be owned by Landlord.

From this 33kV sub-station, 3x separate 6.6 kV three phase LV power feeds will be taken to new LV sub-stations in each building and will terminate into the adjusted LV switchrooms. This will be a local private utility network operated by the developer (who will be the Building Network Operator or BNO).

3.2 Data and Telephony

For every building, 2no. points of entry (POE) with universal communications chamber at different sides to be provided. New fibre connections from at least 2 services providers will be provided for data and communications.

Traditional copper telephone lines will be required for connections to the fire alarm, security systems and lift. Connection from BT is required.

3.3 Main Water Supply

New incoming mains connection will be required to the development. The water pipework from the mains point of connection shall be taken up to the site boundary, then from the site boundary to 3 buildings and utility meters will be located within each buildings.

Fire hydrants locations will be required – these are TBC once the site infrastructure beyond the redline has been surveyed and co-ordination with landscaping features has been decided.

3.4 Drainage

There are existing storm water manholes with connections near each building.

Further foul water connection will be required to the development and connection shall be taken up to the site boundary, then connect to 3 buildings. Attenuation of rainwater is likely to be required which will be below-ground and developed in the next design stage post-planning. WSP are undertaking the detailed drainage design.



4.0 New connections, disconnection and diversions

The GPR scan does not show full details in the site and there are unproven services within site boundary. Further ground investigation is required to pinpoint the type, location and depth of the buried underground services.

Table 1 New connections

Services	Connection
Water	- New connection for each building required.
Drainage	- Reconnection to existing storm water manholes - New foul water connection to the site required – envisaged from existing manholes. - WSP are undertaking the detailed drainage design.
Electricity	- HV: 33kV power fed from ENWL - LV: 6.6kV power fed from building 1 33kV sub-station to 3 building's own sub-station
Comms	- New fibre connections from at least 2 services providers - New copper telephone connection from BT

Table 2 Disconnections

Services	Connection
Water	- Disconnect existing connections and services to existing buildings.
Drainage	
Electricity	
Comms	
Gas	

Table 3 Diversions

Services	Connection
Gas	- There is an intermediate pressure gas main in Inchley Road which has a 6.6m easement zone (3m each side of a 600mm pipe). We understand this is to be re-located for the adjoining PBSA residential scheme within Kincardine road as it encroaches into the current easement zone. - There are no plans to connect to or divert the gas main for the Life-science development, but landscape design will have the liaison with Cadent who operate the gas network to agree planting within the easement zone (shown in green).



<table border="1"> <tr><td>Water</td></tr> <tr><td>Drainage</td></tr> <tr><td>Electricity</td></tr> <tr><td>Comms</td></tr> </table>	Water	Drainage	Electricity	Comms	- To be confirmed after further underground services investigation. Especially with respect to reduced site levels around vehicle access.
Water					
Drainage					
Electricity					
Comms					

5.0 Health and Safety Considerations

The project team to investigate ground contamination and asbestos report to be provided prior demolition.

A GPR scan has been completed (appendix 1) to identify the location and depth of services and that this has indicated utility disconnection / removal works are required. And utility services diversion works may be required based on further underground services investigation.

Existing utility services shall be disconnected and made safe prior to works commencing. Unless retained for site use, following careful safety assessment. Which should be include consideration of back-flow prevention.

Where existing electrical services are present and are being worked on safe isolation procedures should be carried out and protective devices removed and/or locked off and suitable notices in place prior to works commencing.



6.0 APPENDIX 1 GPR SCAN

(Refer Drawing UBS-KJT-ZZ-XX-DR-ME-7201)

This shows the existing site services (within the red-line boundary) and the proposed new building foot-prints, with no alterations to services.

THIS DRAWING SHOWS EXISTING SERVICES AND
EASEMENTS WITH THE PROPOSED FOOTPRINTS
OF THE EXISTING BUILDINGS

BUILDING 1 PARTIALLY COVERS THE SEWER EASEMENT ZONE
AT GROUND FLOOR LEVEL, BUT WE WILL STRIP-BACK THE SEWER
TO THE MAN-HOLE WHICH SHOULD REDUCE THE EASEMENT
ZONE TBC BY WSP.

BUILDING 2 IS WITHIN THE UNITED UTILITIES ATER AND BT
COMMS EASEMENT ZONES. FORMAL CONSENT MAY BE
REQUIRED UNDER INVESTIGATION AT TIME OF DRAWING ISSUE

BUILDING 3 IS CLEAR OF THE SEWER EASEMENT ZONE AT
GROUND-FLOOR LEVEL BUT THE OVERHANG DOES COVER THE SEWER
TBC BY WSP

BT EASEMENT WILL DISAPPEAR ONCE THE
BT SERVICE TO EXISTING BUILDING IS REMOVED

BUILDING 1 IS WITHIN THE CADENT (GAS) EASEMENT
ZONE. THIS WILL REQUIRE FORMAL CONSENT FROM
CADENT TO CONSTRUCT MAY REQUIRE E.G. SHEET PILING
OF BASEMENT WALLS IN LIEU OF BATTER-BACK CONSTRUCTION

LEGEND:

- SW STORM WATER SEWERS
- PW FOUL WATER SEWERS
- WM WATER MAIN
- GM GAS MAIN
- EL ELECTRIC CABLES
- DUCT CABLE DUCTING
- BT (UNDERGROUND) CABLE TV
- CCTV CLOSED CIRCUIT TV
- UNIDENTIFIED FEATURE
- UP UNIDENTIFIED PIPE
- UC UNIDENTIFIED CABLE
- UNPR UNPROVEN FEATURE
- SW END OF TRACE
- LATERAL CONNECTIONS
- EXTENT OF SURVEY BY SURVEY OPERATIONS LTD.
- CONNECTIVITY BETWEEN CHAMBERS FROM CCTV REPORT
- COVER POSITION FROM CCTV REPORT - NOT SURVEYED ON TOPOGRAPHICAL SURVEY.

EASEMENT ZONES

- UNITED UTILITIES EASEMENT - FOUL WATER SEWERS - 5m EASEMENT
- UNITED UTILITIES EASEMENT - WATER MAIN - 5m EASEMENT
- CADENT EASEMENT - GAS MAIN - REFER TO LAYOUT FOR EASEMENT REQUIREMENTS
- ENWL EASEMENT - ELECTRIC CABLES - ASSUMED 3m - TBC WITH ENWL
- BT / VIRGIN / COMMS EASEMENT - COMMS CABLES - ASSUMED 3m - TBC WITH PROVIDERS

2. Formal Consent

Cadent's assets are either located in an easement agreed with the landowner at the time of installation, or within the highway. As the required arrangements for working in an easement and working in the highway differ, this section describes the specific requirements for these two areas.

Any documents handed to contractors or other individuals undertaking work (e.g. farmers, local authorities etc.), on site by Cadent, shall be signed for and adhered to by the site. All personnel working on site shall be made aware of the potential hazards of working near gas assets and the actions they should follow in case of an emergency.

2.1 Within an easement

The promoter of any works (see Section 13) within an easement shall provide Cadent with details of the proposed works, including a risk assessment and method statement of how the work is intended to be carried out. Work shall not commence in an easement strip until formal written consent has been provided by Cadent. This will include details of Cadent's protection requirements, contact telephone numbers and the emergency telephone number. On acceptance of Cadent's requirements, the promoter of the works shall give Cadent at least 14 days' notice before commencing work on site.

Where clearance to proceed has been granted directly from the system, for example, if your works only affect low pressure assets (operating at less than 75 mbar), but the asset concerned is within an easement, the promoter of the works shall contact the network Plant Protection Officer for formal written consent.

In addition to formal written consent, an easement crossing agreement (deed of indemnity) may be required. This shall be discussed with the Cadent Plant Protection Officer prior to the commencement of the works.

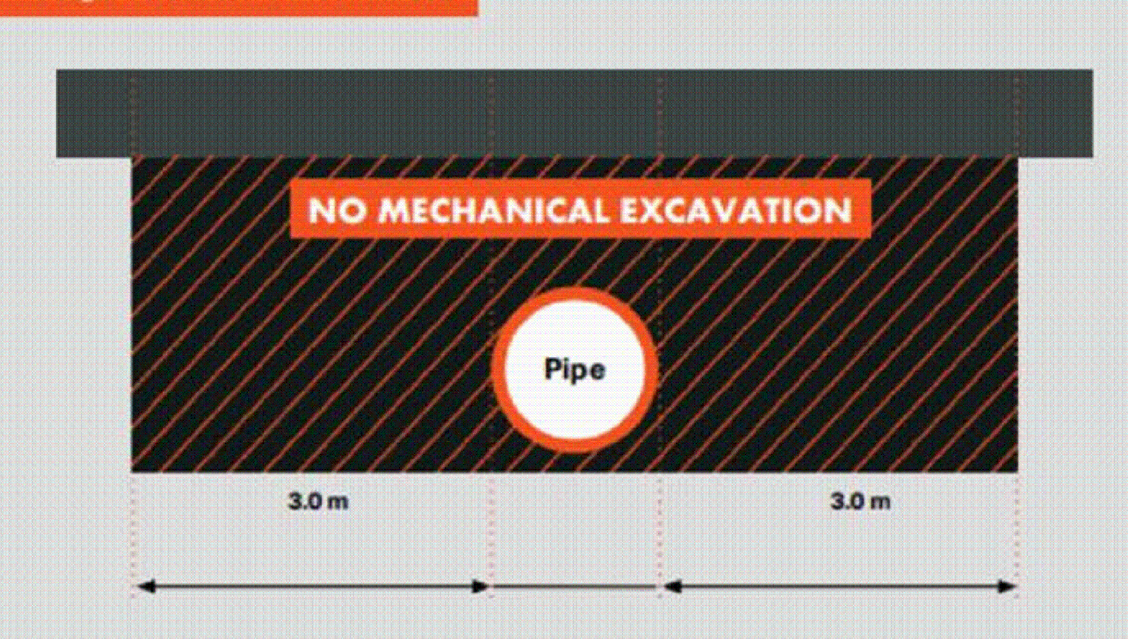
The width of an easement is dependent on a number of factors and is mainly dependent on the operating pressure, pipeline material and diameter as these factors influence safe working requirements and building proximity distances. Easement details should be registered at Land Registry however if you are unsure please liaise with your network Plant Protection Officer.

Below is a list of our standard easement widths, however, some easements may vary:

Pressure tier/ Material	Diameter	Easement Width (total)
HP Steel	900mm, 1060mm, 1200mm (36", 42", 48")	24.4m (80')
HP Steel	750mm and 600mm (30" & 24")	18.3m (60')
HP Steel	Up to and including 450mm (18")	12.2m (40')
HP RTP	Determined on a case by case basis	
IP Steel	All sizes	6m plus pipe diameter

Cadent
Your Gas Network

Figure 1. Excavation restrictions



S2-P02	21/04/2023	FOR INFORMATION	JA	BS
S2-P01	##/03/2023	FOR INFORMATION	JA	BS
SUIT-REV	DATE	DESCRIPTION	DRN	CHK

FOR INFORMATION

KJ Tait

PROPERTY ALLIANCE GROUP
NEW BUILD
UPPER BROOK STREET

MECHANICAL & ELECTRICAL SERVICES
SITE PLAN
PROPOSED BUILDINGS ON EXISTING SERVICES

DESIGNED BY BS	DRAWN BY JA
KJT JOB No. NE2422	1:250 @ A1
UBS-	KJT-XX-XX-DR-ME-7201 S2-P01



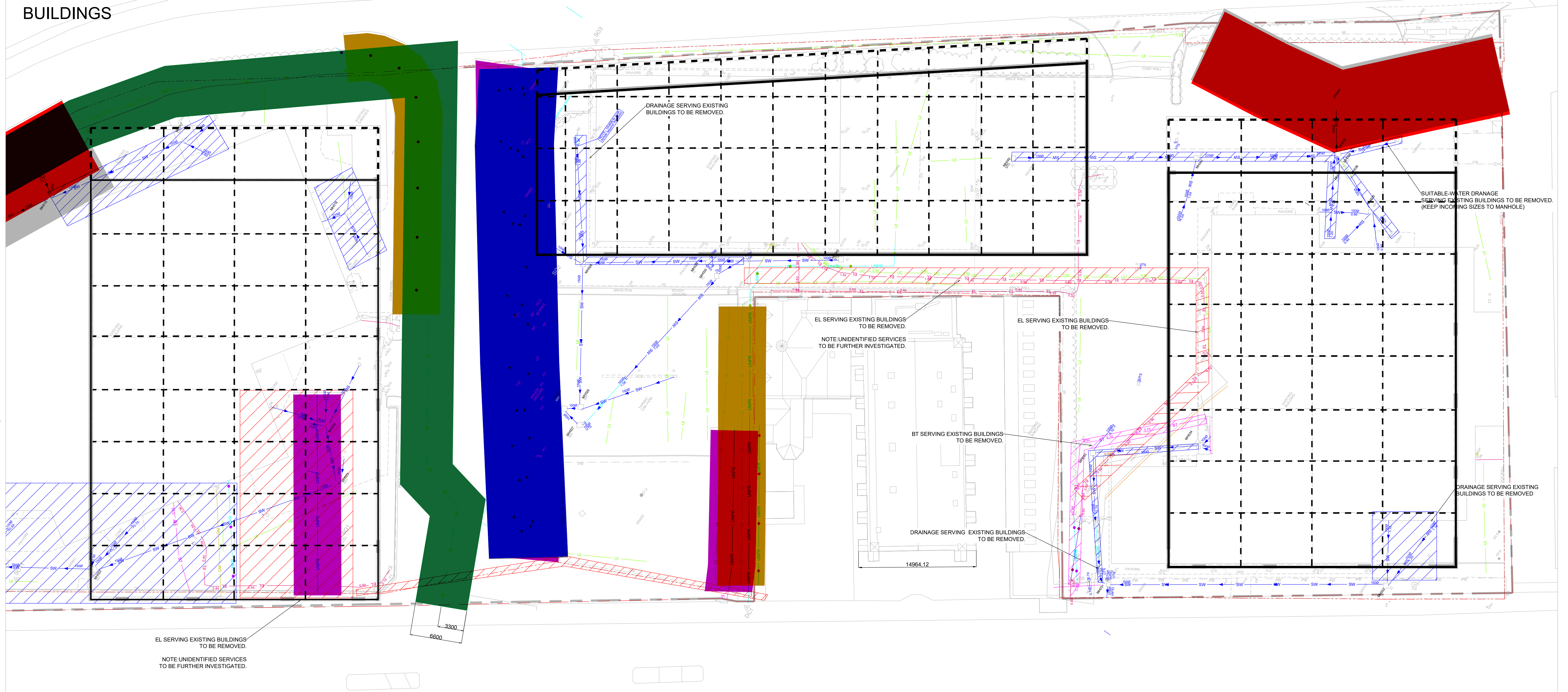
7.0 APPENDIX 2 UTILITY ENABLING WORKS

(Refer Drawing UBS-KJT-ZZ-XX-DR-ME-7202)

This shows the existing site services (within the red-line boundary) and the proposed disconnection of all services serving the existing buildings which are proposed to be removed.

The footprints of the existing buildings are shown.

THIS DRAWING SHOWS THE SERVICES TO BE
REMOVED AS ENABLING WORKS/DURING
DEMOLITION PRIOR TO CONSTRUCTION OF NEW
BUILDINGS



NOTES:
DO NOT SCALE FROM THIS DRAWING
1.

LEGEND:

- SW - STORM WATER SEWERS
- FW - FOUL WATER SEWERS
- WM - WATER MAIN
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- SW - END OF TRACE
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- EXTENT OF SURVEY BY SURVEY OPERATIONS LTD.
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- SW - COVER POSITION FROM CCTV REPORT - NOT SURVEYED ON TOPOGRAPHICAL SURVEY.

EASEMENT ZONES

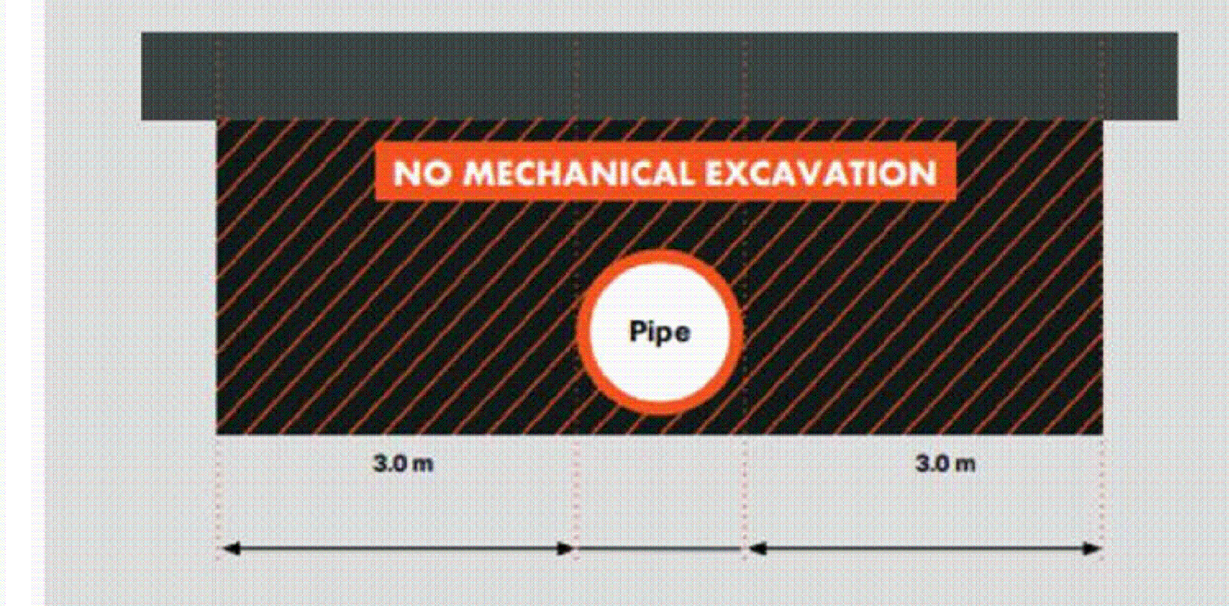
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Figure 1. Excavation restrictions



S2-P02	21/04/2023	FOR INFORMATION	JA	BS
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FOR INFORMATION



PROPERTY ALLIANCE GROUP
NEW BUILD
UPPER BROOK STREET

MECHANICAL & ELECTRICAL SERVICES
SITE PLAN
ENABLING WORKS

DESIGNED BY BS
KJT JOB No. NE2422

DRAWN BY JA
1:250 @ A1

UBS- KJT-ZZ-XX-DR-ME-7202 S2-P02



8.0 APPENDIX 3 UTILITY ARRANGEMENT

(Refer Drawing UBS-KJT-ZZ-XX-DR-ME-7203)

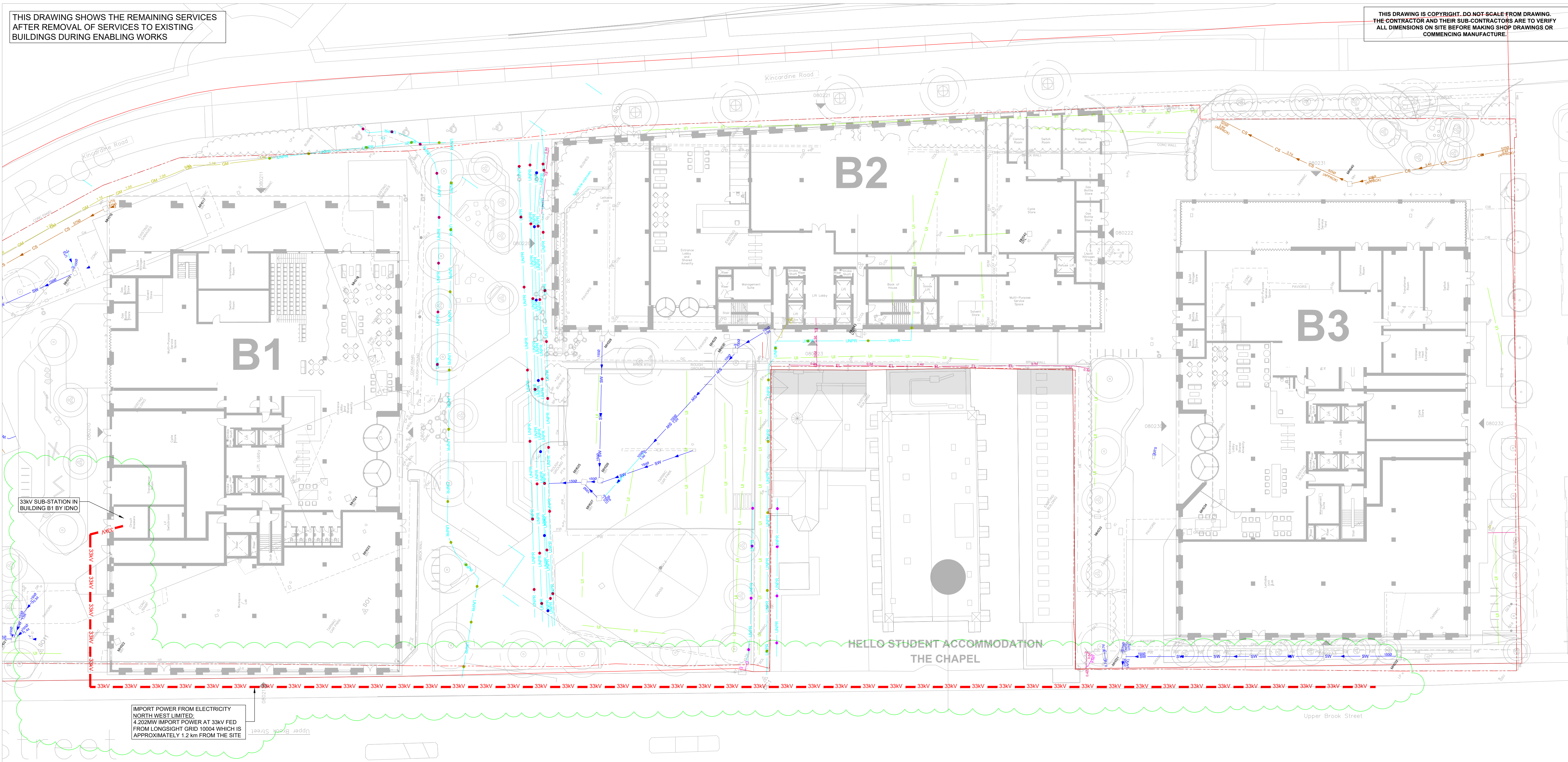
This shows the proposed site services (within the red-line boundary) with all services serving the existing buildings removed, so only retained existing services remain on the plan.

Proposed new connections are then added as described in this report.

The ground-floor layouts of the existing buildings are used on these drawings shown so the precise point of connection can be seen.

THIS DRAWING SHOWS THE REMAINING SERVICES
AFTER REMOVAL OF SERVICES TO EXISTING
BUILDINGS DURING ENABLING WORKS

THIS DRAWING IS COPYRIGHT. DO NOT SCALE FROM DRAWING.
THE CONTRACTOR AND THEIR SUB-CONTRACTORS ARE TO VERIFY
ALL DIMENSIONS ON SITE BEFORE MAKING SHOP DRAWINGS OR
COMMENCING MANUFACTURE.



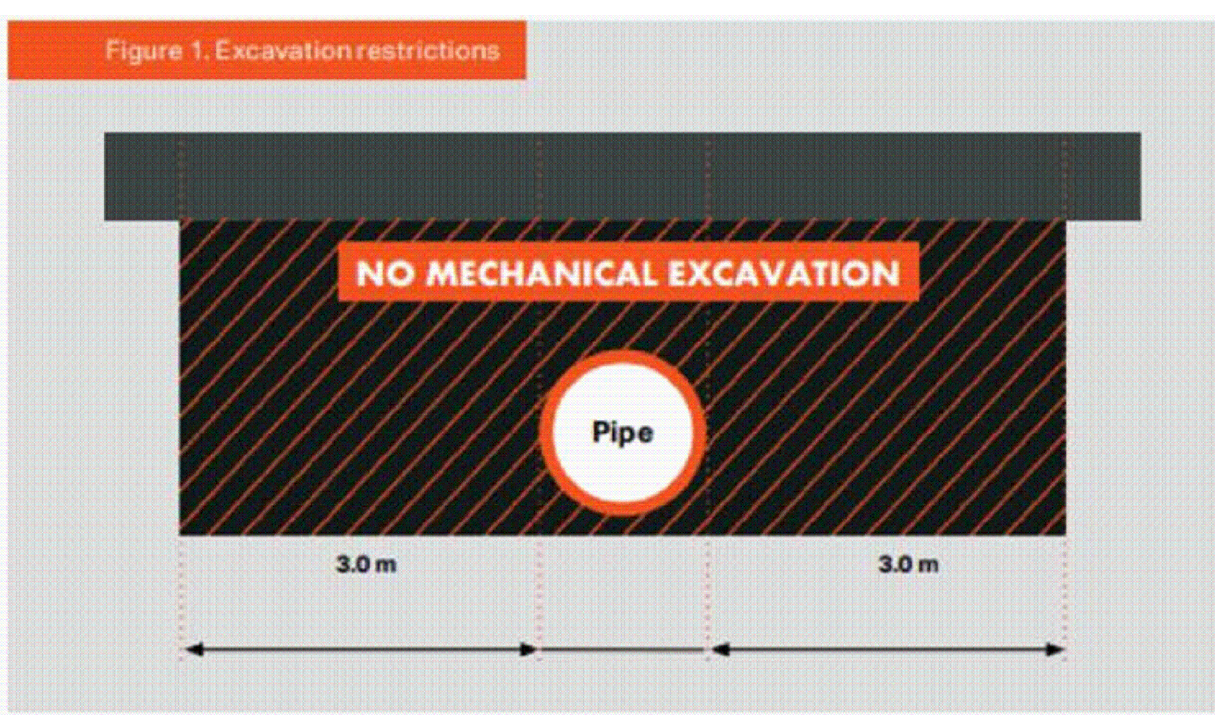
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S2-P03	05/06/2023	SITE PLAN UPDATED AND 33kV ROUTE ADDED WHERE CLOUDED.	MEH	RT
S2-P02	21/04/2023	FOR INFORMATION	JA	BS
S2-F01	12/03/2023	FOR INFORMATION	JA	BS
SUIT-REV	DATE	DESCRIPTION	DRN	CHK

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MECHANICAL & ELECTRICAL SERVICES
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1:250 @ A1

UBS- KJT-ZZ-XX-DR-ME-7202 S2-P03