

PLOTS NT02-04 NEW TOWN, VICTORIA NORTH FULL PLANNING APPLICATION

Fire Statement NT04

April 2023

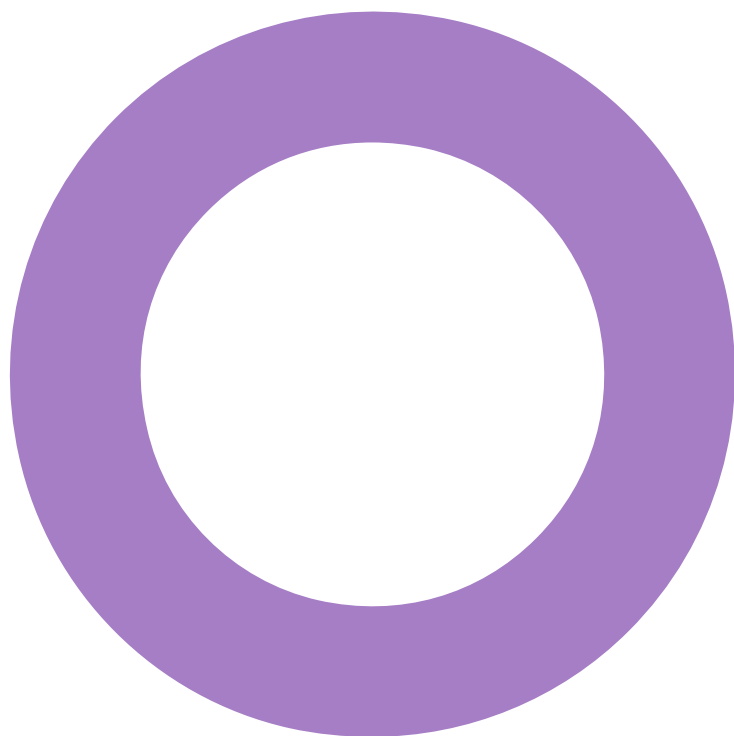


Far East
Consortium

NT04.
Manchester.
Far East Consortium.

FIRE ENGINEERING
GATEWAY ONE PLANNING STATEMENT

REVISION 03 – 18 APRIL 2023



Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
00	31/03/2023	NT04 Gateway One Planning Statement	MeH/ ShB	SB	SB
01	06/04/2023	Updated to reflect design team comments	MS	SB	SB
02	14/04/2023	Updated hydrant plant	ShB	SB	SB
03	18/04/2023	Minor update to development description	ShB	SB	SB

This document has been prepared for Far East Consortium only and solely for the purposes expressly defined herein. We owe no duty of care to any third parties in respect of its content. Therefore, unless expressly agreed by us in signed writing, we hereby exclude all liability to third parties, including liability for negligence, save only for liabilities that cannot be so excluded by operation of applicable law. The consequences of climate change and the effects of future changes in climatic conditions cannot be accurately predicted. This report has been based solely on the specific design assumptions and criteria stated herein.

Project number: 19/22683
Document reference: REP-1922683-5A-MeH-2023 04 18-NT04 Gateway one-Rev03.docx

Contents.

Audit sheet.	2
Introduction.	4

Fire Statement form.	5
Appendix A – Architectural Plans.	9

Introduction.

This fire strategy planning statement has been prepared for Far East Consortium who are submitting a full planning application for the development of the NT04 mixed-use premise on Dantzic Street. The plans showing the site layout are provided in Appendix A of this document.

The intention of this fire safety statement is to address the main fire safety principles and provide an overview of the requirements and recommendation that the scheme will meet.

Fire Statement form.

Application information	
1. Site address line 1	202 Dantzic Street
Site address line 2	
Site address line 3	
Town	Manchester
County	Greater Manchester
Site postcode (optional)	M4 4NL
2. Description of proposed development including any changes of use (as stated on the application form).	Full planning application proposing the demolition of existing buildings and structures and erection of a phased residential led mixed use development comprising residential (use class C3 and C2), flexible non-residential floorspace comprising commercial, business, service and community uses (Use Classes E, F and Sui Generis); residential amenity space including within a clubhouse building, with associated car and cycle parking, hard and soft landscaping, improvement works to Dantzic Street, and associated engineering works.
3. Name of persons completing the fire statement (as section 15), relevant qualifications and experience. Guide: no more than 200 words	Steve Buckley, CEng, MIFireE - Director Megan Halliwell, MPhys (Hons), IFE Affiliate Member – Principal Fire Engineer Shahista Butt, MEng (Hons), IFE Affiliate Member – Graduate Fire Engineer
4. State what, if any, consultation has been undertaken on issues relating to the fire safety of the development; and what account has been taken of this. Guide: no more than 200 words.	Informal consultation has been undertaken with Manchester City Council Building Control (MCC) and Greater Manchester Fire and Rescue Service (GMFRS). The main points of discussion are as follows: - BS 9991 (2015) is to be utilised across the Redbank detailed plots (NT02, NT03 and NT04), however, the following elements of the draft BS 9991 are to be incorporated: - Evacuation lifts and associated protected lobbies - Secondary power supplies provided via separate routes. - Buildings on sloping sites should be taken on a case by case basis. Where the lowest storey is more than 1.2m below the highest ground adjacent to the outside walls, with windowless rooms, the level should be treated as a basement. - GMFRS agreed that the fire-fighting lift can be dual-purpose as an evacuation lift. The design team are seeking further engagement with MCC BC and GMFRS in relation to the updated BS 7671 wiring Regulations with regard to provision of cables within protected escape routes.
5. Site layout plan with block numbering as per building schedule referred to in 6. (Consistent with other plans drawings and information submitted in connection with the application)	
The site layout plan is provided in Appendix A.	

The principles, concepts and approach relating to fire safety that have been applied to the development									
6. Building schedule									
a. Block no. as per site layout plan above	b. Block height (m) Number of storeys excluding those below ground levels Number of storeys including below ground level	c. proposed use (one per line)	d. location of use within block by storey	e. standards relating to fire safety approach applied	f. balconies	g. external wall systems	h. approach to evacuation	i. automatic suppression	j. accessible housing provided
Tower 1	72m 23 (Mezzanine, Upper Ground, Levels 1-21) 24 (Lower Ground, Mezzanine, Upper Ground, Levels 1-21)	Residential flats, maisonettes, studios Shop Car parking	Residential flats, maisonettes, studios (Mezzanine, Upper Ground, Levels 1-22) Shop – Lower Ground Car Parking – Lower Ground	BS 9991 BS 9999	Class A2-s1, d0 or better	Class A2-s1, d0	Simultaneous (Ancillary, shop, car parking) Stay put (residential flats, maisonettes, studios)	Yes – residential sprinklers, full Yes – Commercial sprinklers, full (car park and shop)	None
Tower 2	83.8m 27 (Upper Ground, Levels 1-26) 28 (Mezzanine, Upper Ground, Levels 1-26)	Residential flats, maisonettes, studios	Residential flats, maisonettes, studios (all levels)	BS 9991	Class A2-s1, d0 or better	Class A2-s1, d0	Simultaneous (Ancillary) Stay put (residential flats, maisonettes, studios)	Yes – residential sprinklers, full	None
Mid-rise	23.6m 7 (Mezzanine, Upper Ground, Levels 1-5) 8 (Lower Ground, Mezzanine, Upper Ground, Levels 1-5)	Residential flats, maisonettes, studios Shop Car parking	Residential flats, maisonettes, studios (all levels) Shop – Lower Ground Car Parking – Lower Ground	BS 9991 BS 9999	Class A2-s1, d0 or better	Class A2-s1, d0	Simultaneous (Ancillary, shop, car parking) Stay put (residential flats, maisonettes, studios)	Yes – residential sprinklers, full Yes – Commercial sprinklers, full (car park and shop)	None
7. Specific technical complexities Explain any specific technical complexities in terms of fire safety (for example green walls) and/or departures from information building schedule above. Guide: no more than 500 words Due to the sloping nature of the site, the Lower Ground of Tower 1 falls under the definition of a basement in accordance with BS 9991. However, all rooms at the Lower Ground floor are provided with doors and windows to external air which will provide a means of ventilation to the building. As such, it is proposed to treat the Lower Ground as a normal Ground floor level. Therefore, both stairs are permitted to connect to the ancillary accommodation. The apartment layouts are provided with open-plan kitchen/living areas within inner room bedrooms. The dimensions of these apartments exceed the 8m x 4m recommended limit given in BS 9991 where the kitchen are not enclosed. There are instances where the kitchen hobs are located in close proximity to the escape route from a bedroom and, therefore, a CFD assessment is to be undertaken.									

The principles, concepts and approach relating to fire safety that have been applied to the development	
	In accordance with BS 9991, where a sprinkler protection system is provided in the building, the single direction travel distance within a residential common corridor should be limited to a maximum of 15m. There are instances where this distance is exceeded; however, these corridors will be provided with a mechanical ventilation system comprising of two smoke shafts (located at opposite ends of the corridor). A CFD modelling assessment will be required to demonstrate that the smoke ventilation system will operate as required Each building will be provided with a single firefighting shaft. It is noted that each building is greater than 900m² in area and therefore should each be provided with two firefighting shafts. However, it is proposed to only provide one in each building as all areas are reached within 60m of the main outlet on a route suitable for laying hose. A second stair will be provided in each of Towers 1 and 2 which will be constructed as a protected stair enclosure for means of escape. It is proposed for the commercial areas of Plot NT03 and the adjacent Plot NT04 to be served by a single sprinkler tank. The sprinkler system will be designed in accordance with BS EN 12845 and will be designed as an HHP3 system in accordance with LPC Sprinkler Rules.
8.	Issues which might affect the fire safety of the development Explain how any issues which might affect the fire safety of the development have been addressed. Guide: no more than 500 words As noted in Section 7, a CFD assessment will be undertaken at the design stage to demonstrate that the common corridor smoke ventilation systems will operate as required. In addition open-plan apartments will be assessed by a CFD assessment.
9.	Local development document policies relating to fire safety Explain how any policies relating to fire safety in relevant local development documents have been taken into account. Guide: no more than 500 words No specific local development documents relevant to fire safety are applicable. Therefore, the design will follow latest Building Regulations guidance documents.

Emergency road vehicle access and water supplies for firefighting purposes	
10.	Fire service site plan Explanation of fire service site plan(s) provided in 14. including what guidance documents have informed the proposed arrangements for fire service access and facilities? Guide: no more than 200 words Access to the site will be provided in accordance with BS 9991 and BS 9999. The Tower 1, Tower 2 residential buildings will each be provided with a fire fighting shaft including a wet rising main. The mid rise building will be provided with a firefighting shaft with a dry rising main. The inlets will be located on the face of the building within 18m and in sight of the fire service vehicle access point and outlets provided at every floor level. Access to the building is provided via Dulwich Street.
11.	Emergency road vehicle access Specify emergency road vehicle access to the site entrances indicated on the site plan Guide: no more than 200 words Fire Service access will be provided to the buildings via the site roadways. Tower 1 will be accessed via Travis Passage (Via Dantzic Street), with Tower 2 and the midrise building accessed via Dalton Street. provide access to the entrances to the firefighting cores on Towers 1 and 2 and within 18m of the main inlet on the mid-rise building. Commercial units are provided with perimeter access via Dantzic Street. Is the emergency vehicle tracking route within the site to the siting points for appliances clear and unobstructed? Tick one: yes ☒ no ☐
12.	Siting of fire appliances Guide: no more than 200 words Fire vehicle access will be provided with access to within 18m of the entrances where wet main are provided and within 18m of the entrances to the firefighting shafts with wet mains. Perimeter access will be provided with the commercial units from the adjacent roadway. This is shown in Appendix A.

Emergency road vehicle access and water supplies for firefighting purposes	
13. Suitability of water supply for the scale of development proposed Guide: no more than 200 words In accordance with BS 9991, hydrants should be provided within 90m of the Fire Service access route into the building, or for buildings provided with fire mains – within 90m of dry fire main inlets, and located on a ring main no more than 90m apart. The approximate locations of the existing hydrants are shown in Appendix A of this report. Nature of water supply:☐ open water- limited ☐ open water- unlimited ☒ hydrant- public ☐ hydrant- private ☐ tank supply Does the proposed development rely on existing hydrants and if so, are they currently usable / operable? yes☒ no ☐ don't know	
14. Fire Service site plan: provided as a separate plan☐ inserted in the form ☒ The swept path is included in Appendix A.	

Fire statement completed by	
15. Signature	
16. Date	18/04/2023

Appendix A – Architectural Plans.

This appendix contains the following information:

1. Site Plan with Blocks Named.
2. Proposed Main Inlet Location and Firefighting Shaft Entrance Locations.
3. Existing Hydrant Locations.
4. Swept Path analysis.

1. Block Plan

© Maccreanor Lavington Ltd.

Do not scale from this drawing. Verify all dimensions on site.
Drawing should be read in conjunction with information from all other design consultants and contractors. All drawings in digital format are for reference only, paper copies are available on request.

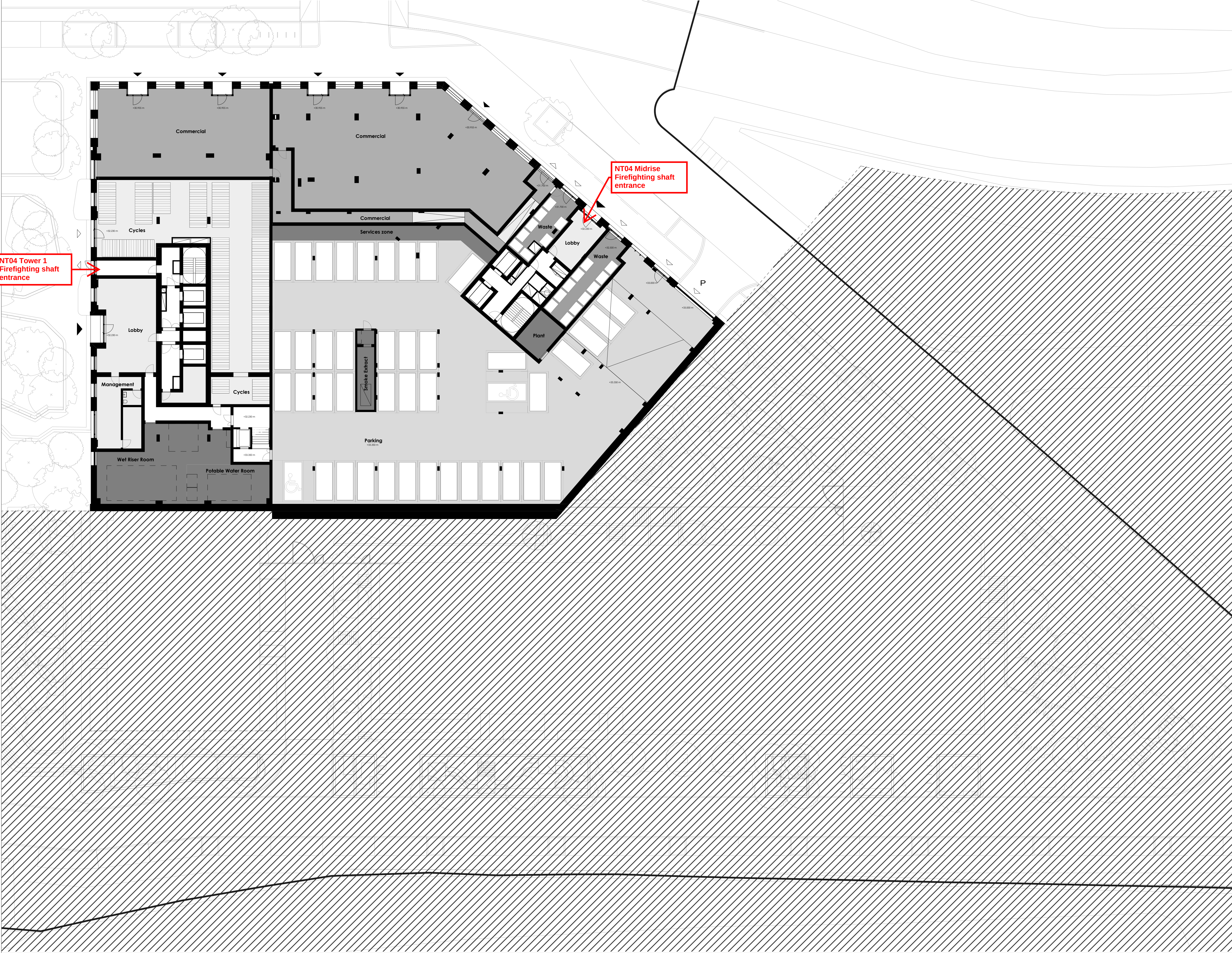


Legend

- Application boundary
- 1B-1P-1S
- 1B-2P-1S
- 2B-4P-1S
- 2B-4P-2S
- 3B-6P-1S
- 3B-6P-2S
- Amenity
- Commercial
- Cycles
- Lobby
- MEP
- Parking
- Private Amenity
- Waste



2. Proposed Main Inlet Location and Firefighting Shaft Entrance Locations.



© Maccreanor Lavington Ltd.

Do not scale from this drawing. Verify all dimensions on site. Drawing should be read in conjunction with information from all other design consultants and contractors. All drawings in digital format are for reference only, paper copies are available on request.



- Legend**
- Application boundary
 - 1B-1P-1S
 - 1B-2P-1S
 - 2B-4P-1S
 - 2B-4P-2S
 - 3B-6P-1S
 - 3B-6P-2S
 - Amenity
 - Commercial
 - Cycles
 - Lobby
 - MEP
 - Parking
 - Private Amenity
 - Waste

2. Proposed Main Inlet Location and Firefighting Shaft Entrance Locations.

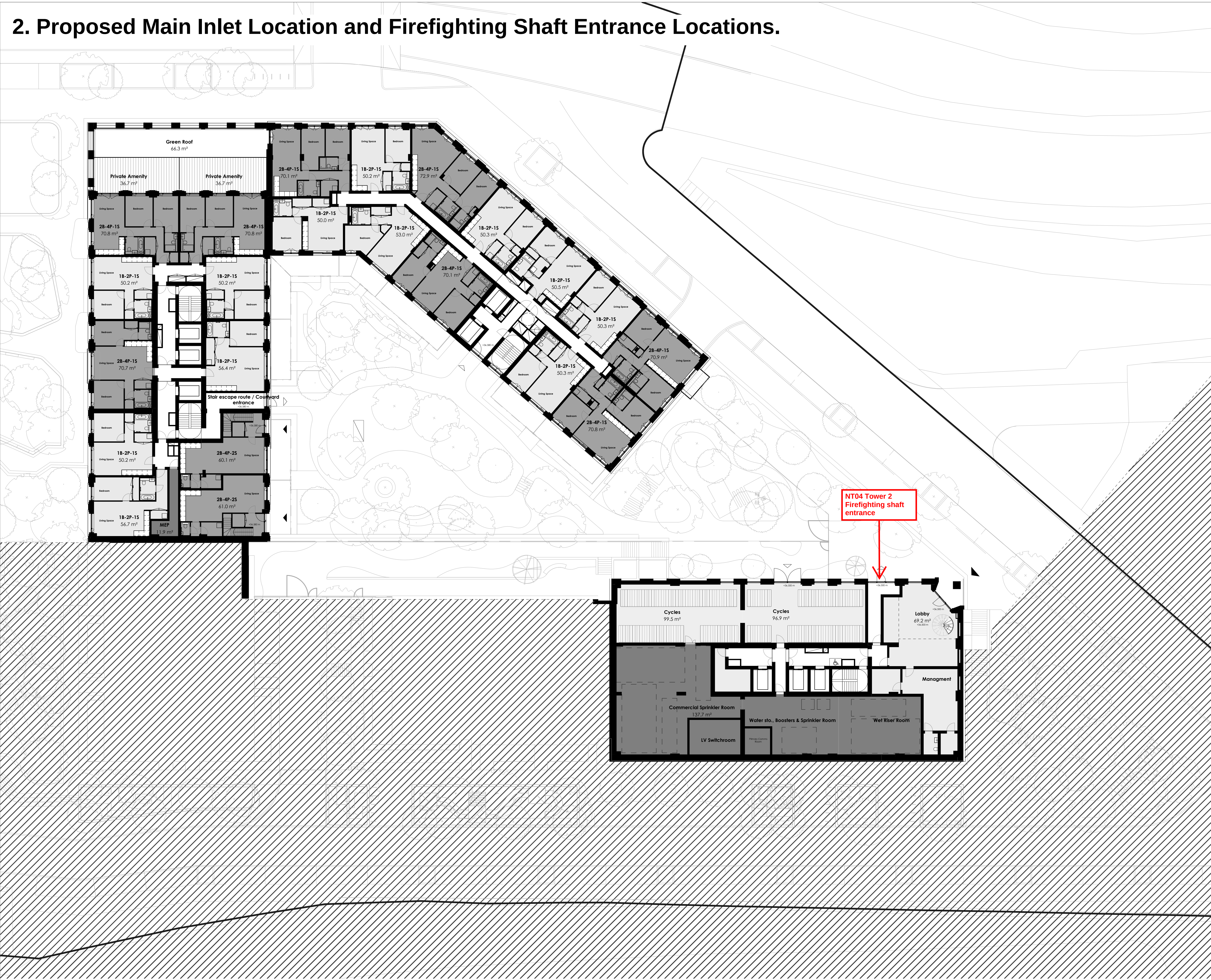
© Maccreanor Lavington Ltd.

Do not scale from this drawing. Verify all dimensions on site. Drawing should be read in conjunction with information from all other design consultants and contractors. All drawings in digital format are for reference only, paper copies are available on request.

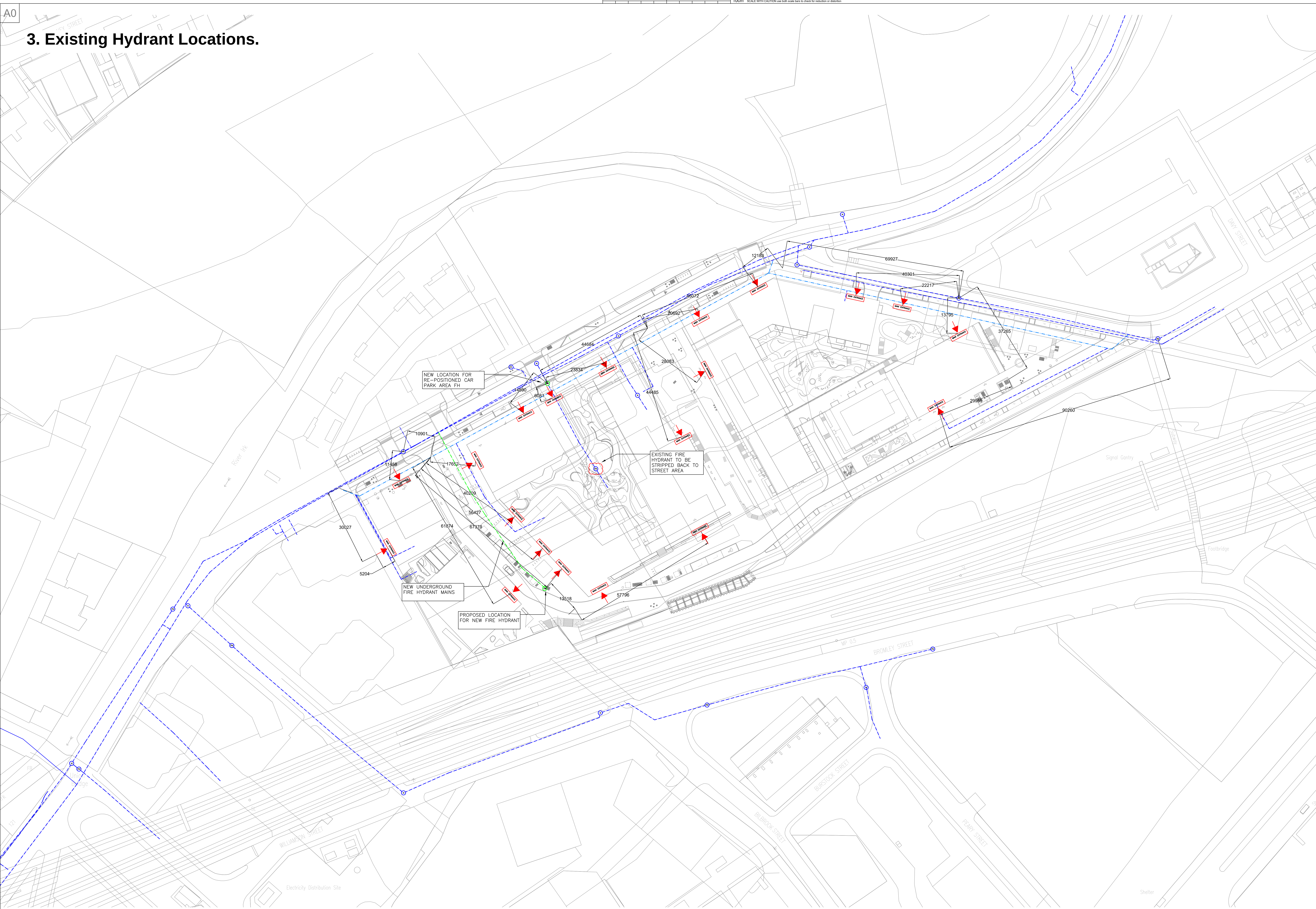


Legend

- Application boundary
- 1B-1P-1S
- 1B-2P-1S
- 2B-4P-1S
- 2B-4P-2S
- 3B-6P-1S
- 3B-6P-2S
- Amenity
- Commercial
- Cycles
- Lobby
- MEP
- Parking
- Private Amenity
- Waste



3. Existing Hydrant Locations.



POSITION OF SERVICES ARE INDICATIVE ONLY.
CLIENT/CONTRACTOR TO ARRANGE FOR SPECIALIST TO
SURVEY TO CONFIRM SIZES & POSITIONS.

EXISTING HYDRANTS POSITIONS ARE APPROXIMATE

Revisions				
Item	Description	Drawn & Checked by	Revised by	Date
P1	PRELIMINARY ISSUE	HF	KH	13.03.23
P2	PRELIMINARY ISSUE	MH	KH	06.04.23

LEGEND

- MANCHESTER COUNCIL CABLE
- ELECTRIC
- SEWER
- GAS
- TELECOMS
- WATER
- UNITED UTILITIES WATER
- EXISTING GAS MAIN EASEMENT
- PROPOSED GAS MAIN EASEMENT DIVERSION
- PROPOSED INCOMING UTILITIES TRENCH - REFER TO DETAIL A FOR TYPICAL DETAILS NO EASEMENT REQUIRED (PUBLIC LAND)
- PROPOSED INCOMING UTILITIES TRENCH - REFER TO DETAIL B FOR TYPICAL DETAILS NO EASEMENT REQUIRED (PRIVATE LAND)
- EXISTING UTILITIES TO BE DIVERTED
- FIRE HYDRANT
- HYDRANT

Architect: Hawkins Brown

Client: Far East Consortium

STAGE 3A

FUTURESERV
DESIGN ENGINEER SUSTAIN
WWW.FUTURESERV.CO.UK

10 Oxford Court - Manchester - M2 3WQ
+44 (0)161 827 1760 enquiries@futureserv.co.uk www.futureserv.co.uk

Project Title: REDBANK NT02, 03 & 04

Drawing Title: EXISTING SITE WATER & HYDRANT SERVICES

Project No: P7352

Drawn & Checked by: HF

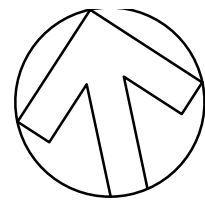
Reviewed by: KH

Date: MARCH 2023

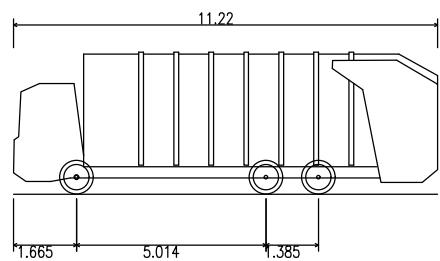
Scale: 1:500 @ A0

Drawing No. P7352-FUT-XX-XX-DR-MEP-7002 Rev. P2

4. Swept Path Analysis



DO NOT SCALE



Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)
Overall Length 11.220m
Overall Width 2.550m
Overall Body Height 3.756m
Min. Body Ground Clearance 0.309m
Track Width 2.530m
Lock to lock time 4.00s
Kerb to Kerb turning Radius 11.550m

P03	29/03/2023	DR	AMENDED ARCHITECTS BASE	JO	JO
P02	22/03/2023	DR	AMENDED ARCHITECTS BASE	JO	JO
P01	10/03/2023	DR	FIRST ISSUE	JO	JO
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS:	S0 - WORK IN PROGRESS
-----------------	-----------------------



8 First Street, Manchester, M15 4GU, UK
T+ 44 (0) 161 200 5000
wsp.com

CLIENT:	FAR EAST CONSORTIUM
---------	---------------------

ARCHITECT:	MACCREANOR LAVINGTON
------------	----------------------

SITE/PROJECT:	REDBANK AND DANTZIC STREET
---------------	----------------------------

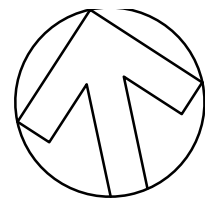
TITLE:	11.22m REFUSE VEHICLE SWEEP PATH ANALYSIS
--------	--

SCALE @ A1:	NTS	CHECKED:	JO	APPROVED:	JO
PROJECT NO:	70079268	DESIGNED:	DR	DATE:	March 23

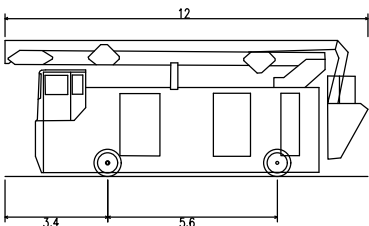
DRAWING NO:	70079268-WSP-XX-XX-DR-TP-023	REV:	P03
-------------	------------------------------	------	-----

© WSP UK Ltd

4. Swept Path Analysis



DO NOT SCALE



Aerial Platform/ Turntable Ladder/ Special Appliance @ 5mp/h
Overall Length 12.000m
Overall Width 3.400m
Overall Body Height 5.800m
Min Body Ground Clearance 0.135m
Track Width 2.450m
Lock to lock time 4.00m
Kerb to Kerb Turning Radius 13.750m

P03	29/03/2023	DR	AMENDED ARCHITECTS BASE	JO	JO
P02	22/03/2023	DR	AMENDED ARCHITECTS BASE	JO	JO
P01	10/03/2023	DR	FIRST ISSUE	JO	JO
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: S0 - WORK IN PROGRESS



8 First Street, Manchester, M15 4GU, UK
T+ 44 (0) 161 200 5000
wsp.com

CLIENT: FAR EAST CONSORTIUM

ARCHITECT: MACCREANOR LAVINGTON

SITE/PROJECT: REDBANK AND DANTZIC STREET

TITLE: 12m FIRE TENDER
SWEEP PATH ANALYSIS

SCALE @ A1: NTS	CHECKED: JO	APPROVED: JO
PROJECT NO: 70079268	DESIGNED: DR	DRAWN: DR
		DATE: March 23

DRAWING NO: 70079268-WSP-XX-XX-DR-TP-021	REV: P03
--	----------

© WSP UK Ltd



MEGAN HALLIWELL
PRINCIPAL FIRE ENGINEER

+44 161 834 4754
meganhalliwell@hoarelea.com

HOARELEA.COM

Royal Exchange
Manchester
M2 7FL
England

