



Environmental Statement Volume 1: Non-Technical Summary

**Red Bank Neighbourhood, Victoria North,
Manchester**

**City River Park (Phase 1) and Future Development
Platforms**

March 2022

Contents

1.	Introduction	1
2.	EIA Approach and Methodology	7
3.	Site Location and Description	18
4.	Alternatives	23
5.	The Proposed Development	25
6.	Ecology and Trees	31
7.	Townscape and Visual	33
8.	Ground Conditions.....	37
9.	Drainage and Flood Risk.....	38
10.	Archaeology and Heritage.....	40
11.	Transport and Access.....	42
12.	Air Quality.....	44
13.	Noise and Vibration.....	46
14.	Waste 47	
15.	Health and Wellbeing.....	49
16.	Socioeconomics.....	51
17.	Climate Change.....	53
18.	Summary and Conclusions	55

Appendices

Appendix 1 Site Location Plan

Appendix 2 HIF Enabling Works Indicative Site Location

Appendix 3 HIF Flood Defence Works Indicative Site Location

Appendix 4 Red Bank Neighbourhood Indicative Site Location

Appendix 5 Northern Gateway SRF Area and Illustrative Masterplan (extract)

Prepared By: Tom Kane

Approved By: Jonny Wilks and Richard Kevan

Status: Final

Date: March 2022

For and on behalf of Avison Young

1. Introduction

- 1.1 Manchester City Council (MCC) (referred to as 'the Applicant') is seeking to obtain planning permission for infrastructure works for the Red Bank Neighbourhood project. This application proposes the first phase of the new City River Park as well as creating the development platforms, new spine road, and infrastructure delivery associated with the future development of the Red Bank Neighbourhood, Manchester (hereafter referred to as 'the Proposed Development')
- 1.2 This Environmental Statement (ES) assesses the Development Project, which is the regeneration of the area in accordance with the Strategic Regeneration Framework (SRF). The Development Project is coming forward in 4 planning applications:
- HIF Advance Enabling Works (referred to hereafter as 'Application 1'). – planning permission has been granted for the demolition of Creamline dairy, tree and shrub clearance and construction of a temporary haul road.
 - City River Park (Phase 1), Future Development Platforms, New Spine Road, and Associated Infrastructure Works (referred to hereafter as 'Application 2'). I.e., this application, submitted by MCC. Creation of development platforms, demolition of sections of existing River Wall, remediation and earthworks, construction of Plateau Avenue and junction from Red Bank, creation of SUDs, utility and service connections and diversions and provision of green infrastructure including creation of green links and first phase of the new City River Park.
 - HIF Flood Defence Works (referred to hereafter as 'Application 3') – flood mitigation and defence works along the River Irk to reduce the area within flood zone 3.
 - Red Bank Neighbourhood (referred to hereafter as 'Application 4') approximately 4,000 new dwellings including a number of landmark buildings at height. Retail and commercial floorspace, open and amenity space, access and associated infrastructure.
- 1.3 Whilst the Applicant has the detail of the early applications, the later parts of the Development Project (and particularly Application 4) are still being designed and the details are not yet available. Therefore, the approach that has been taken in the ES is to break the Development Project into 3 elements, with each element being assessed in a level of detail commensurate with the detail that is available for the relevant part of the Development Project.
- 1.4 As such, a very full and detailed assessment is undertaken of Application 2, and then reasonable assumptions and judgements have informed and been made to assess Applications 1-4 together, and then Applications 1-4 and SRF.
- 1.5 The Proposed Development is located on an area of land which forms part of Victoria North, (previously referred to as Northern Gateway). This is a regeneration scheme which aims to deliver up to 15,000 new homes and social

and physical infrastructure on approximately 155 hectares ('ha') of land between Victoria Station and Queens Park. Seven interconnected neighbourhoods are proposed as part of the Victoria North regeneration project and the Proposed Development relates to the emerging Red Bank and New Town neighbourhoods. This is located to the north-east of Victoria Station, to the south of Red Bank Road, and immediately next to Manchester City Centre (this is referred to as 'the Site'). Victoria North will provide a range of employment, social, community, cultural and ancillary uses. Victoria North will establish a series of new, sustainable and integrated residential neighbourhoods, with a balanced mix of housing types and tenures, making it a desirable place for a variety of new and existing Manchester residents. Victoria North is one of the largest regeneration projects in the UK as well as being the largest single opportunity for residential redevelopment in Manchester, effectively a new town within the heart of an established, popular and growing city.

- 1.6 This Environmental Statement (ES) directly relates to a planning application for the infrastructure works at the Site. The boundary of the Site is shown in **Appendix 1. Figure 1.1** presents the extent of area related to the Victoria North initiative, inclusive of the seven interconnected neighbourhoods identified within the SRF and an 'Initial Development Area' (the red line imposed on **Figure 1.1**). This Initial Development Area has been identified as having the potential to deliver an estimated 5,500 homes across 21 housing development plots. The Initial Development Area shown is inclusive of the enabling works, the Proposed Development, and the subsequent neighbourhood application.

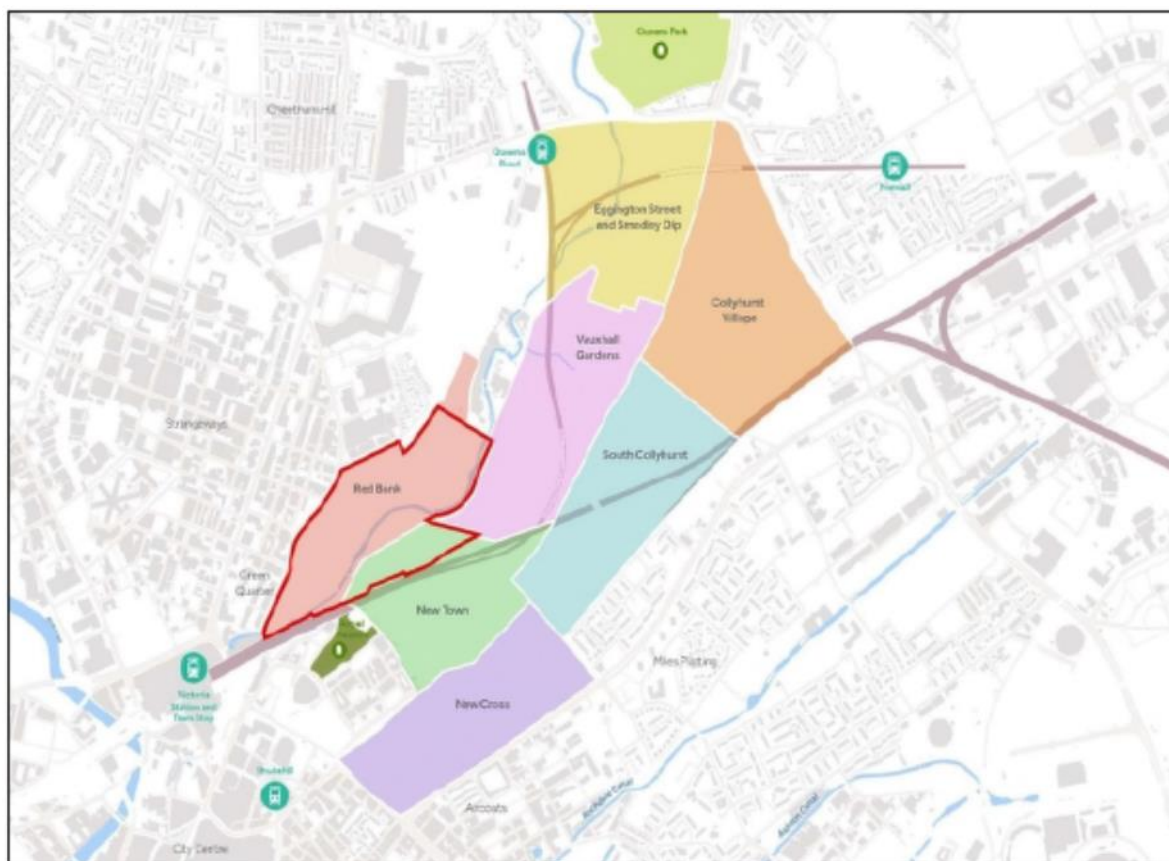


Figure 1.1 Boundary of the Initial Development Area in the context of the Northern Gateway SRF initiative

- 1.7 As noted, the Site is located within the Initial Development Area and within the Red Bank and New Town neighbourhoods proposed by the of the Northern Gateway SRF. **Figure 1.2** below shows the infrastructure works application site boundary (shown in red) in the context of the wider SRF.

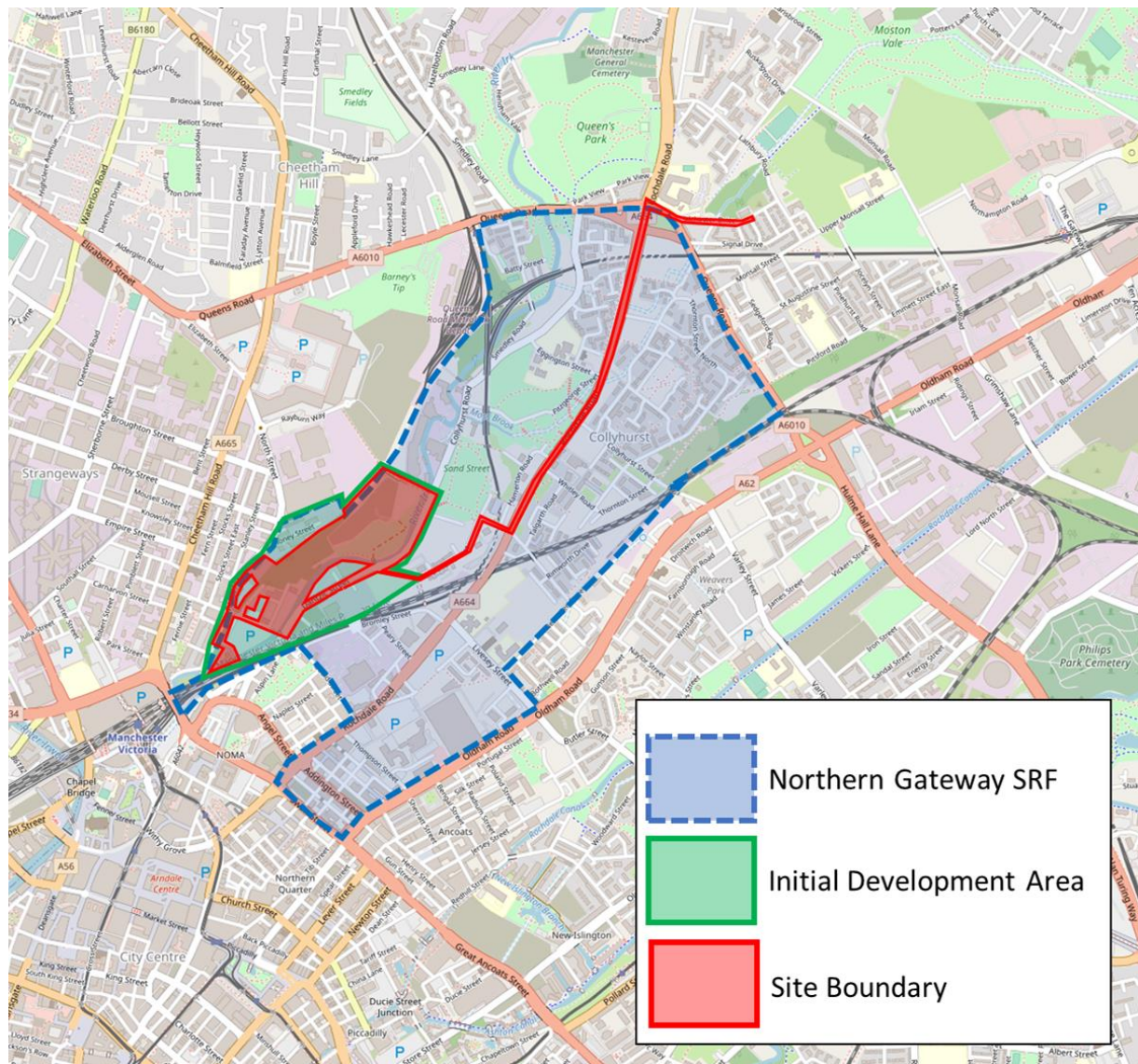


Figure 1.2 Site Location in context of Initial Development Area and wider Northern Gateway SRF (not exact planning boundaries)

- 1.8 The Site is irregular in shape and occupies an area of approximately 15.74ha. It is located to the south of Red Bank Road, Manchester. The Site is surrounded by existing commercial and industrial uses to the north, car parking, existing commercial units to the west and the former Red Bank viaduct, Dantzic Street and Collyhurst Road to the south, and existing commercial units to the east Including the HMG Paint complex.
- 1.9 The Site and its immediate vicinity have a history of more than 150 years of industrial uses and Victorian and pre-Victorian infrastructure.

- 1.10 The Site is described in detail in Chapter 3: Site Description.
- 1.11 In 2017 MCC appointed Far East Consortium International Ltd (FEC) as its partner to accelerate the delivery of Victoria North. Since this appointment, MCC has endorsed the Northern Gateway Strategic Regeneration Framework (SRF), which provides an updated vision, core objectives and development framework to guide the regeneration of Northern Gateway (now known as Victoria North), with a focus on the provision of housing and supporting infrastructure investment. In February 2019, MCC Executive endorsed the Northern Gateway SRF as a material consideration in the determination of all future planning applications relevant to the area.
- 1.12 The Development Project for EIA
- 1.13 The infrastructure and enabling works, flood alleviation works and the plot development on land controlled and owned by MCC and FEC at Red Bank constitutes the “Development Project”. This ES is prepared in respect of the HIF Infrastructure Works (the Proposed Development) (Application 2). Although the focus of this ES is to assess the Proposed Development, to ensure a robust worst-case assessment, it includes for an In-Combination Assessment (ICA) of the Development Project related to the Red Bank Neighbourhood, as well as the wider SRF.
- 1.14 To unlock the full potential of the area, MCC has secured £51.6m of Government Funding through the Housing Infrastructure Fund (HIF) to deliver critical infrastructure and enabling works within the area.
- 1.15 It has been necessary to approach the delivery of this development project by a number of separate planning applications. Four in total, will be made, as follows:
- HIF Advance Enabling Works (referred to as ‘Application 1’). – planning permission was granted for this in December 2021 (LPA reference: 132252/VO/2021).
 - City River Park (Phase 1), Future Development Platforms, New Spine Road and Associated Infrastructure Works (Main HIF Infrastructure Works) i.e. this application (referred to hereafter as ‘Application 2’).
 - HIF Flood Defence Works (referred to hereafter as ‘Application 3’).
 - Red Bank Neighbourhood (referred to hereafter as ‘Application 4’).
- 1.16 The Site that is the focus of this ES (seen on **Appendix 1**) is Application 2.
- 1.17 Application 1 for the HIF Advance Enabling Works was submitted to MCC on 25th November 2021 (planning ref. 132252/VO/2021) and was approved on 23rd December 2021. Work on the HIF Advance enabling Works is targeted to begin on site in February 2022.
- 1.18 Further context relating to the EIA strategy, including the assessment approach presented in this ES is presented in Chapter 2: EIA Approach and Methodology.

Outline of the Proposed Development

- 1.19 The planning application to which this ES relates (Application 2) seeks full planning permission for infrastructure works to the north of Victoria Station, Manchester ('the Proposed Development'):
- Creation of development platforms within the Red Bank Plateau. This comprises development of seven plots referred to as RB01, RB02, RB03, RB04, RB05a, RB05b and RB12b (Figure 5.1 show these plot locations)
 - Demolition of sections of the existing River wall adjacent to the northern banks of the River Irk.
 - Remediation and earthworks across site. The development plot areas will have obstructions removed and the site turned to a depth of 500mm. Remediation will address any localised contamination hotspots through excavation and treatment on site. The existing slope between plots RB02 and RB03 and the River Irk will be regraded to address slope stability whilst maximising the development footprint of these plots.
 - Construction of Plateau Avenue and junction from Red Bank. This is a new internal circulation road which runs along the northern border of the development from a new site access from Red Bank and encircles Plot RB05a before returning to the new site access.
 - Creation of SUDs. This will include tree pits, swales and Plateau Avenue will incorporate permeable pavement sub base storage solutions.
 - Utility and services connections and diversions. The redline extends to Queens Park substation to cover the proposed service connections in the adopted highway which will be routed along Dalton Street and Rochdale Road. New electricity high voltage (HV) network expansion and new surface water sewer are proposed along Dantzic Street. To avoid overloading the already constrained Union Bridge, a new river crossing is proposed to enable utility network expansions. This will be a buried 'u-tube' crossing installed in a trench across the bed of the river. New utilities networks are proposed within the Site, including telecoms, drainage (surface water & foul), electricity (high voltage and low voltage) and water. These are routed along the proposed Plateau Avenue, within the proposed parkland, and include upgrades to existing assets within existing streets.
 - Provision of green infrastructure including (among others):
 - Creation of green links.
 - Creation of the first phase of the new City River Park.
- 1.20 The full description of development on the planning application form is:
- 1.21 "City Council Development for creation of a new City River Park (Phase 1) and other green infrastructure and green links, creation of development platforms for future delivery of the new Red Bank Neighbourhood including remediation and earthworks, construction of a new road and priority junction from Red Bank road, utility and services connections and diversions, street works for new utilities including ducting up to the Queens Park substation, preparatory tree and shrub clearance, demolition of certain existing structures, and other associated works"

- 1.22 Avison Young has been commissioned by the Applicant to co-ordinate the Environmental Impact Assessment (EIA) process and produce the Environmental Statement (ES) for the Proposed Development. EIA is a systematic process by which information on the likely environmental effects of a development are assessed and presented to the Local Planning Authority (LPA), relevant stakeholders and the public to inform the decision on whether the development should be granted planning permission. Specialist consultants have been appointed to undertake the component studies of the EIA.
- 1.23 This ES has been produced by competent EIA experts who specialise in the coordination and production of such assessments. As such, this ES has been coordinated by Avison Young's environmental management team who are members of the Institute of Environmental Management and Assessment (IEMA).
- 1.24 This document is the Non-Technical Summary (NTS) and is Volume 1 of the ES. It has been prepared by Avison Young in accordance with the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 (SI 2017 No. 571) and National Planning Practice Guidance (NPPG).

2. EIA Approach and Methodology

- 2.1 An EIA predicts the positive and negative environmental impacts associated with a development proposal to provide the Local Planning Authority (LPA) with sufficient information to make an informed decision on the determination of a planning application.
- 2.2 Application 1 was accompanied by an Environmental Statement. Each of the remaining applications will be accompanied by an Environmental Statement. In each Environmental Statement, the potential significant impacts of the Proposed Development will be assessed, together with an assessment of those impacts associated with the wider development project. As such, each application will be the subject of an Environmental Statement, and whatever development is granted permission will have been assessed.
- 2.3 Scoping is a process that, through research and consultation, identifies the environmental issues that require assessment as part of the EIA. This essentially refines the focus of the EIA on the environmental aspects which are likely to result in significant environmental impacts whilst also ensuring that no potentially significant areas are overlooked. The scoping process concluded that there were potentially significant environmental effects in relation to the below topics and that these should be included in the EIA:
- Ecology and Trees.
 - Archaeology and Heritage.
 - Ground Conditions.
 - Drainage and Flood Risk.
 - Townscape and Visual.
 - Transport and Access.
 - Air Quality and Dust.
 - Noise and Vibration.
 - Waste.
 - Socio-economic.
 - Health.
 - Climate Change.
- 2.4 Other topics were scoped out of the EIA as they have been identified as potentially giving rise to impacts that will be non-significant. This approach was approved through MCC's Scoping Opinion
- 2.5 The EIA is based on a series of information including:

- The Site red line application boundary (see **Appendix 1**).
- The written description of the Proposed Development including construction timescales and proposed construction methods and management protocols (see Chapter 5: The Proposed Development).
- The quantum of development and detailed plans submitted for approval as part of the application (see: Chapter 5: The Proposed Development).

2.6 Assessment on this basis allows the likely significant effects of the proposals to be assessed and appropriate mitigation measures to be identified and secured.

2.7 As explained in Chapter 1, the application forms part of a wider development project and SRF, therefore the EIA approach involves the presentation of a series of assessment scenarios to enable worst case to be identified and assessed. These assessment scenarios are presented by way of an In-Combination Assessment (ICA) in the body of the ES technical assessment chapters (Chapter 6 to Chapter 17). This ensures that:

- The impacts of the Proposed Development are identified in isolation.
- The impacts of the Proposed Development within the wider development project (inclusive of all related applications) are identified.
- The impacts of the wider SRF, inclusive of the Proposed Development and wider development project, are identified.

2.8 The assessment scenarios are presented in **Table 2.1**.

Table 2.1: In-Combination Assessment Scenarios

Assessment	Stage	Scenario
In-Combination Assessment (ICA)	Stage 1 – Demolition and Construction Phase	Scenario 1a – Assessment of the impacts relating to the Proposed Development only
		Scenario 1b – Assessment of the impacts relating to the Proposed Development, plus impacts associated with Application 1, 3 and 4
		Scenario 1c – Assessment of the impacts relating to the Proposed Development, Applications 1, 3 and 4, and the wider SRF
	Stage 2 – Completed and Operational Phase	Scenario 2a – Assessment of the impacts relating to the Proposed Development only
		Scenario 2b – Assessment of the impacts relating to the Proposed Development, plus impacts associated with Application 1, 3 and 4

Assessment	Stage	Scenario
		Scenario 2c – Assessment of the impacts relating to the Proposed Development, Applications 1, 3 and 4, and the wider SRF

2.9 Further to the ICA, a Cumulative Impact Assessment (CIA) is also presented. Schemes for consideration in the CIA were identified through a planning application search of the MCC and Salford City Council (SCC) planning portals. The cumulative sites include for those approved projects within 1km of the Site considered as having potential for cumulative ecological impact with the Proposed Development. This is the typical approach to CIA undertaken for an EIA. This process identified a total of 20 projects to be included within the cumulative assessment. These sites were agreed with MCC through the EIA Scoping process.

2.10 The assessment scenarios for consideration within the CIA are presented in **Table 2.2**.

Table 2.2: Cumulative Impact Assessment Scenarios

Assessment	Stage	Scenario
Cumulative Impact Assessment (CIA)	Stage 3 – Cumulatives	Scenario 3a - Assessment of the cumulative impacts relating to the Infrastructure works plus impacts associated with agreed cumulative sites
		Scenario 3b - Assessment of the cumulative impacts relating to the Infrastructure works, plus impacts associated with Application 1 (HIF Advance Enabling Works), 3 (HIF Flood Defence Works) and 4 (Red Bank Neighbourhood), and the agreed cumulative sites
		Scenario 3c - Assessment of the cumulative impacts relating to the Infrastructure works, plus impacts associated with Application 1 (HIF Advance Enabling Works), 3 (HIF Flood Defence Works) and 4 (Red Bank Neighbourhood), the wider SRF, and the agreed cumulative sites

2.11 The CIA is presented within the individual technical assessment chapters (Chapters 6 to 17). The assessment scenarios proposed ensure all potential cumulative impacts of the Proposed Development, the wider development project, and the NG SRF are considered as part of this EIA.

2.12 As outlined earlier in Chapter 1: Introduction and earlier in this chapter, the application and ES for this Proposed Development is coming forward in advance of the two other associated applications and follows the submission and approval of an enabling works application which all together form the wider development project. As noted in Chapter 1: Introduction, Application 1 has been submitted to MCC and is approved.

- 2.13 In order to present a robust assessment, it is necessary to present information in relation to Applications 3 and 4, which provide the assumptions for the presentation of the impacts of the In-Combination Assessment (ICA) and Cumulative Impact Assessment (CIA). These assumptions are shown in **Table 2.3** below and the list of cumulative sites is shown in **Table 2.4**.

Table 2.3: Assumptions used as basis for In-Combination Assessment and Cumulative Impact Assessment

Application / Project	Applicant	Indicative Site Location Plan	Estimated Site Area (ha)	Indicative quantum of development
Advance Enabling Works (Application ref. 132252/VO/2021)	Manchester City Council	See Appendix 2	2.83 ha	The below has been approved by MCC (Application ref. 132252/VO/2021): - The demolition of Creamline Dairies. - Area of Demolition – 0.34ha - Estimated quantum of material generated during demolition. To be recycled on site – 684m³ of concrete and 250m³ mixed hardcore - Tree and shrub clearance to facilitate the construction of a temporary haul road. - Area of Tree Clearance – 1.05 ha - The construction of the temporary haul road. - Length of Haul Road – 750m - Area of haul road – 0.9ha
Flood Defence and Alleviation Measures Application	Manchester City Council	See Appendix 3	Circa 1 ha	- Flood mitigation and defence works along the River Irk to reduce the area of flood zone 3 - Potential for new bridge to replace Union Bridge - New bridges at Dantzic St and Collyhurst

Application Project	Applicant	Indicative Site Location Plan	Estimated Site Area (ha)	Indicative quantum of development
Red Bank Neighbourhood Application	Far East Consortium	See Appendix 4	Circa 15.3 ha	- Approximately 4,000 residential dwellings - Indicative massing to align with the NG SRF, including a number of landmark buildings at height - Retail and commercial floorspace - Open and amenity space Access and associated infrastructure
Northern Gateway Strategic Regeneration Framework (SRF)	n/a	See Appendix 5a and 5b	Circa 155 ha	- Residential-led regeneration scheme proposing approximately 15,000 dwellings over a 15-20 year period - Employment and commercial uses - Retail provision - Green and Blue infrastructure - Improved transport and access

Table 2.4: Cumulative Sites

Site Ref.	Application No.	Proposal	Approx. Distance and Direction	Status
1	129393/VO/2021	City Council Development for the erection of 168, three and four storey dwellinghouses (Use Class C3a) and two, five and six storey apartment buildings to form 76 residential apartments (Use Class C3a) with associated ground floor flexible commercial unit (162 sqm) (Use Class E); and the creation of a new public park; all with associated car and parking, refuse storage, landscaping, public realm and other associated works and infrastructure following demolition of 29 existing residential dwellinghouses, the Collyhurst Village Store and associated car parking	650m north east	Approved Jun 2021
2	127971/FO/2020	Erection of a 6 storey building to form 90 residential apartments (Use Class C3a) following demolition of existing structures with associated access, car parking, amenity space, landscaping and other associated works	950m east	Approved May 2021
3	128248/FO/2020	Erection of 9 buildings ranging from 8 to 34 storeys in height to form 1202 residential apartments (Use Class C3a) and ground floor commercial uses (Use Class E) (192 sqm) together with associated car parking, new vehicular and pedestrian access, public realm, landscaping and other associated works following demolition of existing structures and buildings Land Bound By Gould Street, Williamson Street, Bromley Street And Bilbrook Street Manchester M4 4DD	150m south	Approved June 2021
4	116366/FO/2017	Erection of four residential buildings (22 storey building, 17 storey building, 40 storey building and part 12, part 9 storey building) to form 756 residential apartments (Use Class C3a) together with ground floor commercial uses (616 sqm) (Use Classes A1, A2, A3, A4, A5, D1 and B1) with associated car parking, landscaping, amenity areas, creation of new public realm following the closure of Aspin Lane, Mincing Street and Irk Street and other associated works following demolition of existing structures Land Bounded By Dantzie Street & Aspin Lane, Land Bounded By Gould Street & Angel Meadows And Land Bounded By Old Mount Street, School Street, Naples Street & Ludgate Street Manchester	150m south	Approved Aug 2017 Under construction
5	118120/FO/2017	Erection of a part 15, part 9, part 7 storey building to form 155 residential apartments together with ground floor commercial uses (Use Classes A1, A3 and B1) (288 sqm) with associated car parking, access arrangements	450m south	Approved May 2018

Site Ref.	Application No.	Proposal	Approx. Distance and Direction	Status
		and other associated works following the demolition of existing buildings and structure and the closure of Hatter Street Land Bounded By Thompson Street / Mason Street / Bendix Street And Rochdale Road Manchester		Under construction
6	127537/FO/2020	Erection of a 11 storey 229 bedroom hotel (Use Class C1) with ancillary ground floor bar/restaurant together associated public realm and other associated works 25 Rochdale Road Manchester M4 4HT	400m south	Approved Oct 2016
7	124973/FO/2019	Erection of an 11 storey building and a 12 storey building with plant rooms above to form a mixed use development comprising 39,184 sq.m (NIA) of Class B1a office use and commercial units of 1,286 sqm (NIA) (Use Classes A1, A2, A3, A4, B1a and D1) along with associated lower ground level car parking, hard and soft landscaping and associated works, including the creation of a new pedestrian route between Angel Street and Miller Street. Land Bounded By Co-op Headquarters Miller Street And Angel Street Manchester	350m south	Approved Feb 2016
8	111777/FO/2016/C1	Erection of two residential buildings of a maximum 21 and 26 storeys to accommodate 520 apartments (178 x 1 bed, 286 x 2 bed and 56 x 3 bed apartments) (Use Class C3). Erection of one office building of maximum eight storeys comprising up to 11,647 sq. m (GIA) of office accommodation. Ground floor commercial space (Use Class A1, A2, A3 and B1), lower ground level car parking, access and servicing arrangements, alterations to Corporation Street, new public realm and other associated works. New Victoria Land At Corporation Street Manchester M3 1NX	250m south east	Approved Sep 2016 Under construction
9	121375/FO/2018	Construction of a 22 storey building comprising 361 residential apartments (122 x 1 bed 2 person, 119 x 2 bed 3 person, 94 x 2 bed 4 person, 21 x 3 bed 5 person and 5 x 3 bed 6 person (34% 1 bed, 59% 2 bed and 7% 3 bed) ground floor commercial floorspace (Use Classes A1 (Shop), A3 (Restaurant and Cafe), A4 (Drinking Establishment) and A5 (Hot Food Take-away) associated landscaping, including new public realm and pedestrian route, together with servicing, cycle parking, access and other associated works following demolition of buildings at 20-22 and 24-26 High Street and 5 market stalls to Church Street.	840m south	Approved Oct 2020

Site Ref.	Application No.	Proposal	Approx. Distance and Direction	Status
10	18/71330/FUL	Erection of three residential blocks, comprising of a total of 156 apartments, together with car parking and landscaping	850m south west	Approved Oct 2018 Under construction
11	20/76134/FUL	Erection of 16-storey building plus plant comprising a hotel (Use Class C1) with ancillary bar and restaurant uses, access, servicing, landscaping and other associated works	1000m south west	Approved Feb 2020
12	17/70626/FUL	Erection of one 18 storey residential building (Block A, Use Class C3); one 16 storey residential building (Block B, Use Class C3); one 18 storey building providing a mix of residential and serviced apartment accommodation and amenity facilities including lounge, swimming pool and gym (Block C, Use Class Sui Generis); 536sqm of commercial floorspace (Use Classes A1, A2, A3, A4); new access from Greengate; car and cycle parking; public realm and landscaping; and other associated works.	840m south west	Approved Nov 2017 Under construction
13	19/74465/HYBEIA	Hybrid planning application for demolition of existing buildings on the Site and comprehensive redevelopment to create between 1,407 and 1,521 dwellings, comprising of: (a) Phase 1 (submitted in full with no matters reserved) for development of a 50-storey residential building; commercial floor-space (Use Classes A1, A2, A3, A4, A5, B1, D1 and D2); new public park; highways and public realm improvements and other associated works; and, (b) Phases 2 and 3 (submitted in outline with all matters reserved) for the development of two residential buildings up to 42 storeys in height; commercial floor-space (Use Classes A1, A2, A3, A4, A5, B1, D1 and D2); new highways; a public square; public realm improvements and other associated works. (EIA development, accompanied by Environmental Statement) Land Bound By Greengate, Collier Street, Queen And King Street And Gravel Lane M3 7BN	960m south west	Validated Nov 2019
14	126944/FO/2020	Erection of a residential-led mixed use development comprising 3 no. towers (37, 26 and 18 storeys) and podium levels (6 storey) to form 634 residential apartments and townhouse accommodation (Use Class C3) together with commercial accommodation (1222 sqm) (Use Classes A1,A2,A3,A4,A5,B1, D1 and D2)); with associated residential amenity areas, refuse storage, plant (including substation), car parking, cycle	140m south east	Approved Sep 2020 Under Construction

Site Ref.	Application No.	Proposal	Approx. Distance and Direction	Status
		storage, landscaping and new public realm including the re-instatement of Bromley Street and other associated works		
15	114860/FO/2016	Erection of a part 6, part 10, part 15, part 24 storey building to form 415 residential apartments (Use Class C3a) together with commercial floor space (268 sqm) (Use Classes A1, A2, A3, A4, B1 and/or D2) with associated car parking, public realm, hard and soft landscaping, access from Dantzic Street and other associated works following demolition of existing buildings	145m south east	Approved October 2017
16	131708/FO/2021	Erection of a part 11, part 13 storey building to form residential apartments (Use Class C3a) together with the erection of two blocks of 3 storey townhouses (Use Class C3a) to form 237 residential homes in total with associated commercial floor (Use Class E) (132 sqm), basement car parking, landscaping and public realm, and associated engineering and infrastructure works following demolition of existing buildings and structures	450m south	Validated September 2021
17	118831/FO/2018	Erection of two buildings (a part 17, part 12 storey building and a part 26, part 23 storey building) to form 556 residential units (Use Class C3a) together with the creation of 3490 sqm of commercial floor space (Use Classes A1, A2, A3, B1 and D1) with associated landscaping, access and other associated works	635m south west	Approved June 2018
18	128997/FO/2020	Erection of a ground plus 9-storey building to form 118 no. residential apartments (Use Class C3), including amenity areas, ground floor food and beverage/ commercial units (Sui Generis/ Use Class E), public realm and landscaping, with supporting infrastructure and associated works following demolition of existing building	730m south	Approved September 2021
19	124888/FO/2019	Erection of a 6-9 storey residential building (Use Class C3) comprising 80 no. dwellings including 9 no. townhouses and 71 no. apartments with residents lounge, refuse, plant, new substation, cycle storage, an internal landscaped courtyard and improvements to the adjacent footways	665m south	Approved January 2020 Under Construction
20	125678/FO/2019	Erection of 8-storey residential building (Use Class C3) comprising 73 residential units, with ground floor commercial use (Classes A1, A2, A3, B1 and D1 (excluding Places of Worship)) (205 sqm); alterations to the retained perimeter wall and chimney including the	640m south	Approved December 2020

Site Ref.	Application No.	Proposal	Approx. Distance and Direction	Status
		introduction of a light box; disabled car parking, highways, landscaping and other associated works		

2.14 The EIA has identified and assessed the significance of potential environmental effects relating to ecology, townscape and visual, ground conditions, drainage and flood risk, transport and access, air quality, noise and vibration, waste, health and wellbeing, socio-economics and climate change. The assessments of these topics follow a consistent structure to assist the reader in understanding the approach.

2.15 The type of effect can be adverse, negligible (neutral) or beneficial; a brief description is provided below:

- **Adverse** - a negative impact on a sensitive receptor or the existing environment;
- **Negligible** - no discernible effect on a sensitive receptor or the existing environment; and
- **Beneficial** - a positive effect on a sensitive receptor or the existing environment.

2.16 In addition, the degree of significance can be minor, moderate or major; and a brief description is provided below:

- **Minor** - slight, short-term, or localised effect on a sensitive receptor or the existing environment;
- **Moderate** - a noticeable effect on a sensitive receptor or the existing environment; and
- **Major** - a substantial effect on a sensitive receptor or the existing environment.

2.17 When a **significant adverse** impact is identified as a result of the assessment process, then measures to avoid, reduce and, if possible, offset significant adverse environmental effects associated with the proposal are outlined within the assessment. These measures are referred to as mitigation. Embedded mitigation are measures which have been 'designed-in' to the Proposed Development to mitigate potential adverse environmental effects. Identifying and implementing mitigation measures is a key part of the EIA process and the residual impacts, and their significance, which remain after mitigation have been identified and their significance has been stated.

3. Site Location and Description

- 3.1 The Site is irregular in shape and occupies approximately 15.74ha of land to the north of Victoria Station, Manchester, within the ward of Cheetham. The Site Location Plan is presented on **Appendix 1**.
- 3.2 The Site is bound by existing commercial and industrial uses to the north, hardstanding car park, existing commercial units to the west and the former Red Bank viaduct, Dantzic Street and Collyhurst Road to the south, and existing commercial units to the east Including the HMG Paint complex.
- 3.3 The Initial Development Area, within which the Site sits, is divided into the following areas:
- Red Bank Plateau;
 - Red Bank Viaduct;
 - St Catherine's Wood;
 - Travis Island;
 - New Town Plots.
- 3.4 **Figure 3.1** below shows the extent of these areas:

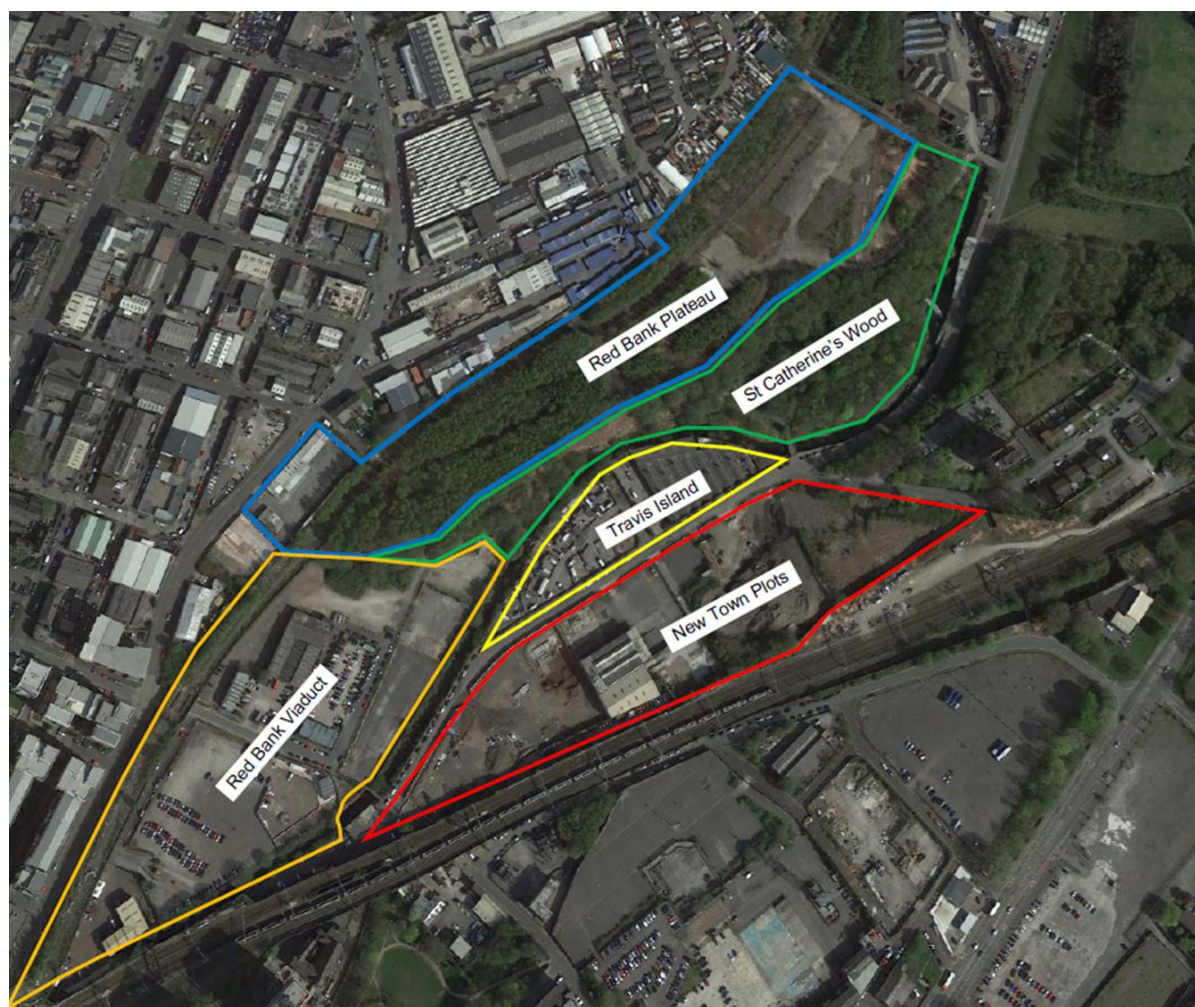


Figure 3.1: Existing Site Areas

- 3.5 Travis Island, New Town Plots and parts of Red Bank Viaduct areas are excluded from the Site area.
- 3.6 The Site and its immediate vicinity are affected by the legacy of more than 150 years of industrial uses and Victorian / pre-Victorian infrastructure with modified waterways; significant operational and redundant rail infrastructure; limited sewerage, water, electricity, and gas infrastructure; and contaminated sites associated with textile manufacturing and other heavy industries.
- 3.7 Historically the area was used as railway sidings, following the route of the former Prestwich Branch of the Lancashire and Yorkshire Railway which started at Victoria Station to the south west before heading north west. This is now disused and forms a plateau above the River Irk valley to the south east.

Site and Surrounding Context

Ecology and Trees

- 3.8 The Rochdale Canal Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI) is located 3.1km north east of the Site. Although the Site falls within the SSSI Impact Risk Zone (IRZ), the Proposed Development does not meet the risk IRZ threshold.
- 3.9 Boggart Hole Clough Local Nature Reserve (LNR) is located 1.6km north of the Site. Four Sites of Biological Importance (SBIs) lie within 2km, including:
- Rochdale Canal: Scott's Lane to Ducie Street Basin SBI located 0.9km south of the Site.
 - Ashton Canal (West) SBI located 1.2km south of the Site.
 - Reservoirs at Harpurhey SBI located 0.8km north east of the Site.
 - River Irwell SBI located 1.8km south west of the Site.
- 3.10 The Site includes a semi-natural Woodland, plantation broad-leaved Woodland, scrub and scattered broadleaved trees. These are distributed throughout the Site.
- 3.11 The River Irk runs throughout the Site, flowing from east to west. In the north of the Site is a raised weir which limits the passage of fauna. The River is also surrounded by scattered scrub.

Townscape and Visual

- 3.12 The Site is not located in an Area of Outstanding Natural Beauty (AONB) or any other area designated for its landscape value.
- 3.13 The study area is largely located within the Lower Irk Valley neighbourhood, which occupies the western parts of the Northern Gateway, and the Site and wider study area can be characterised as a relatively under-developed and under-utilised area of land adjacent to the city centre.
- 3.14 There are 16 Grade II listed buildings and 1 Grade II* listed building within 500m of the Site, the closest of which is the Grade II Listed Union Bridge, located on the south eastern boundary of the Site.

Drainage and Flood Risk

- 3.15 The River Irk is located within the southern extents of the Site and flows in a south-westerly direction towards the confluence with the River Irwell, located approximately 900m downstream.

- 3.16 The EA flood map¹ shows that the majority of the Site sits in Flood Zone 1. This is classified to be at 'Low Risk' of fluvial flooding. This comprises land assessed as having a less than a 1 in 1000 annual probability of river or sea flooding in any year (<0.1%). Areas identified as Flood Zone 3 follow the edges of the River Irk channel within the Site, and are therefore considered as Flood Zone 3a, rather than Flood Zone 3b classified as functional floodplain.
- 3.17 The EA surface water flooding maps show that there are localised areas of low, medium, and high risk of surface water flooding (directly generated from pluvial events). The surface water flooding follows the alignment of the plateau with the depth of the flooding being less than 300mm for most of the site.

Ground Conditions

- 3.18 There are no protected geological designations within the Site boundary.
- 3.19 Glacial till underlies the Site in the area south-east of the River Irk and along the north-western site boundary. Although not indicated, it is assumed that alluvial deposits are to be found in association with the current and former channels of the River Irk.
- 3.20 Bedrock varies from east to west across the Site. The Chester Pebble Beds Formation underlies the west of the Site; The Manchester Marls Formation underlies the centre of the Site; and the Collyhurst Sandstone Formation underlies the north-eastern corner of the Site. All three units are shown on mapping to be gently dipping (5 degrees) SSW.
- 3.21 The principal aquifers beneath the Site are the Chester Pebble Peds Formation and Collyhurst Sandstone Formation. The Manchester Marl is classified as a Secondary (B) Aquifer.

Accessibility

- 3.22 The Site is within a ten-minute walk of the City Centre.
- 3.23 The A665 Cheetham Hill Road and A664 Rochdale Road provide major routes to and from the city centre and carry a mix of road users including buses. Bus stops are located on these routes providing public transport access to the Site.
- 3.24 Victoria Station is located approximately 420m to the south-west of the Proposed Development and is one of the main transport interchanges within Manchester City Centre with heavy and light rail services, buses and taxis. Shudehill interchange, one of the main bus stations within the City Centre is located approximately 600m south of the Proposed Development.

¹ <https://flood-map-for-planning.service.gov.uk/>

- 3.25 Metrolink services are also available in the area, the closest of which is located at Victoria Station 420m south of the Site.

Archaeology and Heritage

- 3.26 The Site is located in an area of low archaeological potential for Prehistoric, Roman, Early Medieval, Medieval and Post Medieval periods. The Site is located in an area of and high potential for Industrial and Modern periods.
- 3.27 There is one designated heritage asset located within the Site boundary. This is the Grade II listed Union Bridge. No other designated heritage assets (Scheduled Monuments, Grade I, II* and II Listed Buildings, Conservation Areas, Registered Parks and Gardens or Registered Battlefields) are located within the Site boundary. There are 22 grade II listed buildings and one Grade II* listed building within 350m radius of the Site, however many of these assets have no intervisibility with the subject site given the local topography and the intervening built form.
- 3.28 The Site is not located within a Conservation Area nor are there any Conservation Areas in the immediate vicinity of the Site. Shudehill Conservation Area is located approximately 300m southwest of the Site, but there is no intervisibility between the Site and this Conservation Area due to the distance between the two, local topography and intervening built form.

Air Quality

- 3.29 The Development Site is not within an Air Quality Management Area (AQMA); however, it is adjacent to an AQMA to the southwest. This was declared in 2001 due to exceedances of the nitrogen dioxide (NO₂) annual mean objective and particulate matter (PM₁₀) 24-hour mean objective.

Noise

- 3.30 The existing noise climate is dominated by road traffic noise emanating from the surrounding highway network and train lines associated with Victoria Station.

4. Alternatives

- 4.1 The Proposed Development has been developed through the EIA and design process with stakeholder and community consultation. Environmental constraints and potential adverse effects have been identified and as a result mitigation measures have been incorporated into the overall proposals.

The 'Do-Nothing' Alternative

- 4.2 The 'no development option' evaluates the likely environmental conditions at the Site in the absence of implementing the Proposed Development. Schedule 4 of the EIA Regulations states that the assessment provide "an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed". A description of the baseline scenario is set out in Chapter 3: Site Description.
- 4.3 In the absence of the Proposed Development, it is not expected that there would be any significant changes to the baseline conditions. There is no indication that in the absence of development the use and therefore management of the Site would alter and therefore it is considered that the environmental conditions of the Site would remain at its existing level as described in Chapter 3: Site Description.
- 4.4 Due to the fact that the NG SRF has been endorsed, the Site is part of the Initial Development Area of Victoria North initiative (essentially Phase 1 of the NG SRF) and funding has been secured by Manchester City Council to undertake the necessary infrastructure works, the 'no development option' at this Site is not, in fact, an option that the Applicant needed to consider. The advance enabling works that make up the Proposed Development to be assessed in this ES are absolute necessary in order to begin the process of regeneration and development in the Initial Development Area of Victoria North.
- 4.5 The 'no development option' has been dismissed by the Applicants, as the reason for their involvement in the Site is to bring forward the development of the Site in line with the SRF. The 'no development option' would mean the Site is not developed and the regeneration benefits of the wider development project, as well as the NG SRF, would not be realised.
- 4.6 Whilst providing much-needed new homes and supporting development, the Proposed Development and wider development project have the potential to result in a number of adverse impacts. This includes, but is not limited to, the loss of the trees on-Site, changes to local drainage patterns and water quality, health of workers and users of the Site, impacts to controlled waters, and additional and avoided GHG emissions. While this is the case in respect of this Proposed Development, this application alongside and in the context of the wider development project, represent redevelopment of an existing poor-quality environment, and the delivery of the aspirations of

the Northern Gateway SRF, and with it a range of beneficial impacts, not least the provision of a new river city park which will achieve at least 10% Biodiversity Net Gain across the Site.

Design Evolution

- 4.7 The Applicant and the design team have regularly liaised with MCC during a series of pre-application meetings and correspondence in order to ensure that the evolving design meets the aspirations for the Site.
- 4.8 The objective of the Proposed Development is to create a new internal access road and new junction from the existing Red Bank Road, utility and services connections, remediation and earthworks, demolition of existing structures and the provision of green infrastructure which will enable the associated works, and, ultimately, the Red Bank Neighbourhood.
- 4.9 The key points of design evolution of the Proposed Development are as follows:
- Creating a new circular road from Red Bank which loops around plot RB05a.
 - Widening the new circular road to 7.3m on entry to enable large vehicles to pass on the immediate bend.
 - Creating a new circulation route through the new park from the Red Bank area to the existing St Catherine's Wood bridge to the south of the Site.
 - Removal of works from the planning application for works to Dantzig Street .
 - Removal of Travis Island from the planning application.
 - Reduction of the slope angle between Red Bank Plateau and the River Irk.
 - Inclusion of a SuDS Strategy that is based predominantly on permeable paving as opposed to swales and detention basins.

Alternative Sites

- 4.10 No alternative sites were considered for the development as the Proposed Development are required in association with the wider Northern Gateway SRF on an area of land which forms part of Victoria North, immediately adjacent to Manchester City Centre.

5. The Proposed Development

5.1 The planning application seeks full planning permission for the infrastructure works for the Red Bank Neighbourhood scheme on land to the north of Victoria Station, Manchester.

5.2 This planning application seeks full planning permission for:

“City Council Development for the creation of development platforms, including remediation and earthworks, and change in site levels, to allow delivery of future residential-led development at the Red Bank Neighbourhood, together with the construction of a new road and priority junction from Red Bank, new drainage infrastructure, utility and services connections and diversions, street works for new utilities including ducting up to the Queens Park substation, preparatory tree and shrub clearance, and demolition of certain existing structures, along with the creation of new and improved green infrastructure and landscaping including the improvements of St Catherine’s Wood to form part of a City River Park, and other associated works.”

5.3 The planning application is part of a wider Development Project, as explained earlier, and this ES assesses the Development Project, which is the regeneration of the area in accordance with the SRF. The Development Project is coming forward in 4 planning applications which are explained below. Proposals for the first major phase of development at Victoria North are being formulated by Manchester City Council (MCC) and Far East Consortium (FEC). The plans include the transformation of its landholdings to create the new “Red Bank Neighbourhood”: a sustainable residential-led neighbourhood which reinvigorates the green spaces along the River Irk Valley and brings nature into the city.

5.4 The proposed Red Bank neighbourhood is shown in **Figure 5.1** below.



Figure 5.1 The proposed Red Bank Neighbourhood (not exact planning boundaries).

5.5 The plans for Red Bank Neighbourhood include:

- Approximately 4,000 homes (out of the 5,500 homes envisaged in the Initial Development Area), across a range of tenure types and sizes, including affordable homes, set within high quality public realm;
- New community facilities;
- 5 hectares of new or improved green space, including the revitalisation of St Catherine's Wood;
- New walking and cycling routes to improve connections between neighbouring communities;
- Improvements to the River Irk to enhance the river environment, including measures to help prevent flooding; and,
- Low carbon neighbourhood that delivers development in a sustainable way.

5.6 The JV's proposals at Red Bank are envisaged as a single development project, including the HIF infrastructure and enabling works, and the residential plot development associated with FEC's proposed residential masterplan, which will deliver approximately 4,000 of the 5,500 new homes envisaged for the Red Bank Neighbourhood. In

order to meet the HIF funding requirements, and the resulting programme implications, a series of planning applications will be submitted to MCC for approval as follows:

Table 5.1: Red Bank Neighbourhood Planning Applications

Application No.*	Description of Proposals	Applicant	Timescale for Submission	Timescale for Delivery
1	Advance HIF Enabling Works	MCC	Nov '21	June '22
2	Main HIF Infrastructure Works	MCC	Q1 '22	March '24
3	HIF Flood Defence and Alleviation Measures	MCC	Q3 '22	March '24
4	Red Bank Neighbourhood Application	FEC	Q2/Q3 '22	'22 – '33

* Note that the application numbering does not necessarily refer to the sequencing of submissions

- 5.7 Notably Application 1 has already been granted planning permission (LPA reference: 132252/VO/2021) with works due to commence on site during Q1 of 2022.
- 5.8 The key components of each application are briefly summarised below to give an overview of the overall Development Project.

Advance HIF Infrastructure Enabling Works (Application 1)

- 5.9 A key condition of the HIF funding that has been secured by MCC is that the spend availability only runs until March 2024, by which time the infrastructure and enabling works must be completed. Therefore, the infrastructure works required at the Site will be split into multiple planning applications to allow an early start on site.
- 5.10 The enabling works were the subject of Application 1 (LPA reference: 132252/VO/2021), which was granted planning permission on 23rd December 2021, for the following development:
- The demolition of Creamline Dairies including partial demolition of the c. 5m high retaining wall between the Dairies site and former railway line to the immediate south-east;
 - Tree and shrub clearance to facilitate the construction of a temporary haul road; and,
 - The construction of the temporary haul road.
- 5.11 This planning application comprised the HIF enabling works and will facilitate an early start on site and clear a path for the main HIF works proposed by this application, flood works (Application 3) and, ultimately, residential led development (Application 4) proposed by successive prospective planning applications at the Site.

Future Development Platforms and Green Infrastructure (Main HIF Infrastructure Works - Application 2)

5.12 Application 2, which this planning application relates, includes the creation of development platforms, formation of a new spine road (Phase 1), and new utilities and services connections that will allow for future residential-led development (to be applied for in a future planning application), together with new and improved green infrastructure, including the revitalisation St Catherine's Wood as part of the City River Park, are the subject of this planning application. The works are summarised below.

Permanent Landscaping

5.13 The permanent landscaping works comprise:

- The enhancement of St Catherine's Wood park to deliver c. 5ha of the City River Park, including vegetation planting, lighting and security, and a new circulation route access for pedestrian and cyclists leading from St Catherine's Wood bridge, including some minor reprofiling of slopes to the rear of the park and tree and shrub clearance; and,
- The creation of new public realm areas in the form of Red Bank Terraces, and Union Waterfront at the southern-most extent of the Site, and connecting pedestrian and cycling circulation routes.

Preparatory Works to Create Development Platform

5.14 The preparatory works comprise:

- Demolition of sections of retaining wall. Three sections of the existing river wall adjacent to the northern banks of the River Irk are proposed for removal to facilitate the proposed earthworks and landscaping in these areas.
- Tree and shrub clearance to facilitate the construction of the residential led development platform (Red Bank Plateau) and as part of the park area/ proposed landscape improvements.
- The reclamation of the development platform at Red Bank Plateau, Red Bank Terraces and the circulation route to Union Waterfront comprising.
 - Cut and fill and remediation to the Red Bank Plateau and Red Bank Terraces, including the regrading/reprofiling of existing slopes and changing the Red Bank Plateau platform levels.
 - The reprofiling of stretches of the northern bank of the River Irk and the erection of a bund to assist with flood alleviation.

Highway Works

5.15 The highway works comprise:

- The formation of a new spine road (Phase 1) (Plateau Avenue) on Red Bank Plateau. This application is seeking planning permission for Phase 1 of the new road at Plateau Avenue. This road will be constructed with sacrificial highway and footpath finishes for Phase 1, which will be upgraded by FEC's residential led development. The detail of the road will be agreed through future reserved matters applications pursuant to FEC's prospective outline planning application (Application 4).
- The creation of a circulation route leading from 'Red Bank Terraces' and 'Union Waterfront', at the western extent of the Site, to the Packaging Products access bridge, at the eastern-most point of the Site, which will also be for emergency access.
- The formation of the new priority junction at Red Bank road.

Utilities Works

5.16 The utilities works comprise:

- New drainage installation including the creation of SuDS, including drainage for the future development plots (to be applied for by FEC as part of Application 4/ the residential masterplan).
- Utilities and services connections for all new development plots and park/landscape/public realm areas and highways.
- Utilities diversion and new installations on Dantzig Street and new drainage installation.
- Street Works for new utilities incorporating two trenches for HV ducting from Queens Park substation to the north-east of the Site, and additional utilities needs within existing streets local to the Initial Development Area.

Temporary Works

5.17 The temporary works comprise:

- Temporary construction access from the eastern-most point of the Site, adjacent to the Packaging Products site.
- Temporary site security including gates and fencing to be erected during construction works.

HIF Flood Defence and Alleviation Works (Application 3)

5.18 The restoration of the River Irk is key for the success of the Red Bank Neighbourhood. Although there have been significant improvements in water quality over the years, its re-naturalisation is fundamental for habitat creation and the return of life in and around the River Irk, as well as allow for new residential development to be built in the area.

5.19 Application 3 will focus on providing new flood defences as well as improvements to the river's water quality and bringing life back to the river. Key aims include:

- Making the river more naturalistic and less engineered in order to improve and create habitats, but also make access better for people.
- Delivering positive environmental change will increase biodiversity, benefiting many species.
- The trout could be used as a flagship species for the river, along with other species – a powerful metaphor for positive change.
- Parts of the river are dominated by invasive species – Japanese Knotweed and Himalayan Balsam – and there is a long-term commitment to keep the invasive species under control.
- Comprehensive measures to achieve flood resilience to safeguard new and existing homes.

5.20 Subject to the agreement of flood mitigation works, Application 3 may also include new and/or improved bridges to the south of the City River Park providing new/ improved connections over the River Irk.

Red Bank Neighbourhood Application (Application 4)

5.21 The emerging vision for the residential masterplan to be applied for by FEC on JV controlled land is to deliver:

- Approximately 4,000 new homes (of the 5,500 envisaged for the Red Bank Neighbourhood) across a range of tenure types and sizes, including affordable homes, set within high quality public realm.
- New community facilities.
- Low carbon neighbourhood that delivers development in a sustainable way.

5.22 The below diagram sets out some of the initial thoughts and ideas that have been developed for the Red Bank Neighbourhood, including how the potential residential development plots (shown as indicative locations in white on the below diagram) will sit alongside the regeneration of St Catherine's Wood, the Red Bank Viaduct, and surrounding green streets and spaces.

The SRF

5.23 The wider SRF will include a residential-led regeneration scheme proposing approximately 15,000 dwellings over a 15-20 year period. Employment, commercial and retail provision will also be delivered together with green and blue infrastructure and improved transport and access.

6. Ecology and Trees

- 6.1 An ecological impact assessment ('EclA') has been undertaken to assess the baseline ecological conditions currently at the Site, evaluate the potential direct and indirect effects of the Proposed Development and the wider Development Project, and outline any avoidance and mitigation measures which may be needed to address ecological effects. The assessment has been undertaken by TEP.
- 6.2 One internationally designated site is located within 10km of the Site boundary; Rochdale Canal SAC located 3.1km northeast. This is designated for its population floating water-plantain.
- 6.3 Rochdale Canal Special Scientific Interest (SSSI), designated for its diverse assemblage of aquatic flora indicating high water quality, is located 3.1km northeast of the Site. Due to the distance and significant inner-city barriers between the Site and the SSSI, it is not considered that there are any potential direct or indirect pathways of likely significant effect.
- 6.4 Four non-statutory Sites of Biological Importance (SBIs) are located within 2km, the closest of which is Reservoirs at Harpurhey SBI, located 0.8km northwest. All four SBI's are separated from the Proposed Development by significant inner city residential, commercial and industrial development and infrastructure.
- 6.5 The assessment has identified two existing regionally important ecological features within the Site: semi-natural woodland which dominates the Red Bank Terrace, and plantation broad-leaved woodland within St Catherine's Wood. These receptors have the potential to be significantly affected by the Proposed Development. A further six locally important existing ecological features are also identified within the Site. These are scattered broadleaved trees, the River Irk corridor, roosting bats, bat foraging/commuting, breeding birds and fish.
- 6.6 The construction and demolition phase of the Proposed Development gives rise to potential for disturbance effects and unintended habitat loss or damage. However, these can be avoided through mitigation measures including the production of a Project Execution Plan (PEP), a Landscape Ecological Management Plan (LEMP), an invasive species mitigation strategy, a lighting strategy and tree protection measures.
- 6.7 The operational phase of the Proposed Development has potential for further disturbance effects and unintended habitat loss or damage resulting from increased public pressure within St Catherine's Wood. This can be avoided through mitigation measures including the LEMP and through embedded mitigation via formalised foot and cycleways.
- 6.8 Habitat loss would be minimised as far as possible, but some loss is unavoidable. Negative significant residual impacts as a result of the Proposed Development include a small area of loss 1.51ha and 0.27ha of relatively young semi-natural and plantation woodland. However, off-Site compensation for woodland loss through the combined Biodiversity Net Gain (BNG) Assessment will ensure at least a 10% Biodiversity Net Gain will be achieved across the

Red Bank Neighbourhood development. Potentially negative significant effects associated with impacts on scattered trees, bat foraging/commuting, breeding birds and the River Irk are all adequately mitigated for and would therefore be non-significant. Changes to the River Irk would be positive. The enhancement of retained woodland blocks, both semi-natural and plantation, also generate a positive effect.

- 6.9 An assessment of the Development Project i.e. associated Applications 1, 3 and 4 and the wider SRF is provided via a high level combined assessment. It is predicted that the significance of effects from the cumulative loss of semi-natural woodland, bat foraging and commuting habitat and breeding bird habitat could increase depending on the timing and extent of habitat removal. However, given the commitments within the Northern Gateway Biodiversity Plan, it is likely there would be an overall positive effect on woodland habitat, quality/quantity of bat foraging and commuting habitat and quantity/quality of breeding bird habitat in the long term.
- 6.10 Overall, the predicted demolition and construction effects associated with the Proposed Development plus Applications 1, 3, and the wider SRF are expected to be minor adverse moving to minor beneficial in relation to tree and woodland habitat, as well as the River Irk Corridor. Effects in relation to bats, birds and fish are expected to be negligible.
- 6.11 The predicted operational effects associated with the Proposed Development plus Applications 1, 3, and the wider SRF are expected to neutral changing to minor beneficial in relation to woodland habitat. Operational effects in relation to bats, birds and fish are expected to be negligible.
- 6.12 The sites considered in the cumulative assessment (noted in Table 2.4) are generally of low ecological value. This would not change the significance of woodland loss currently identified. The geographical separation would avoid a cumulative effect and the combined loss of woodland resource for the wider area would not increase the significance of effects, even if there was a time overlap of loss before the mitigation (e.g. via BNG 10% gain commitment) was implemented

7. Townscape and Visual

- 7.1 A Townscape and Visual Impact Assessment ('TVIA') has been undertaken to assess the effects of the Proposed Development and Development Project on landscape character and visual amenity. In particular it identifies and assesses the anticipated effects of change resulting from the Proposed Development and Development Project on the character and features of the landscape; and on people's views and visual amenity within the surrounding area. The assessment has been undertaken by Planit-IE.
- 7.2 The study area is largely located within the Lower Irk Valley neighbourhood, which occupies the western parts of the Northern Gateway, and the Site and wider study area can be characterised as a relatively under-developed and under-utilised area of land adjacent to the city centre.
- 7.3 The Proposed Development area spans the majority of the Red Bank neighbourhood area, identified within the Northern Gateway SRF. There are 16 Grade II listed buildings and 1 Grade II* listed building within 500m of the Site, the closest of which is the Grade II Listed Union Bridge, located on the south eastern boundary of the Site. The Red Bank Viaduct to the south of the Site forms a major structure which runs parallel to Red Bank and bisects the once heavily industrialised Irk Valley.
- 7.4 The townscape character within the study area has been assessed as 'medium' in value with a 'low' susceptibility to change and an overall sensitivity of 'medium/low'.
- 7.5 The application Site is visually well contained due to the combination of tree cover, ground levels and surrounding built form. A total of 7 viewpoints have been identified, located primarily to the south, east and west of the application Site. There are no views of the Site from the north.
- 7.6 6 viewpoints have been assessed as 'low' in terms of overall sensitivity
- View 1: View from Listed Union Bridge/ Dantzic Street looking north across site.
 - View 2: View from footway of Dalton Street looking across bridge into St Catherine's Wood.
 - View 3: View from Collyhurst Road footway looking across River Irk and into St Catherine's Wood.
 - View 5: Elevated View from footway at corner of St Chads Street/ Stanley Street looking east.
 - View 6: View from viaduct gateway on Roger Street looking south east across the Site.
 - View 7: Elevated view from Sand Street Park pathway looking west over site.
- 7.7 One viewpoint is stated to be of 'medium' overall sensitivity:
- View 4: Elevated view from Barney Steps bridge and public footpath looking south west over site.

- 7.8 There is one significant townscape or visual effect predicted during the demolition and construction phase of the Proposed Development (Scenario 1a). This was a short-term, adverse, temporary effect at the local level which is significant on View 4 due to its elevated position looking over an area subject to construction activities.
- 7.9 The high-level assessment of Scenario 1b has predicted a short-term temporary adverse effect at the local level (wider study area) which is significant on townscape character as a result of construction of the Proposed Development in conjunction with Applications, 1, 3, and 4. There are predicted short-term temporary adverse effects at the local level (wider study area) which is significant on View 4 as a result of construction works due to the scale of development and the proximity of the works to the viewpoints.
- 7.10 The high-level assessment of Scenario 1c has predicted medium-term temporary adverse effects at the local level (wider study area) which are significant for all townscape receptors apart from Urban Grain, due to the scale of the proposed construction works within the wider SRF. There are predicted to be short-term temporary adverse effects at the local level (wider study area) which are significant for View 4 and View 7 as a result of construction works due to the scale of proposed development and the proximity of the works to the viewpoints.
- 7.11 There are predicted to be permanent significant beneficial effects on public open space and woodland and site character during the operational phase as a result of the Proposed Development (Scenario 2a).
- 7.12 The high-level assessment of Scenario 2b has predicted significant beneficial effects on townscape character and public open space. There are predicted to be moderately significant beneficial effects on View 1, View 5 and View 6. This is as a result of the substantial development of the Red Bank neighbourhood as part of Application 4. View 4 is predicted to have a long-term adverse effect at the local level (wider study area) which is significant. This is due to the proximity of new built form that will completely change the character and composition of the view and block open views to the City Centre and surrounding green space.
- 7.13 The high-level assessment of Scenario 2c has predicted long-term beneficial effects at the local level (wider SRF area) which are significant on all townscape receptors as a result of the transformative nature of the SRF. There are predicted to be long-term beneficial effects at the local level (wider study area) which is moderately on viewpoints 1, 5, 6 and 7. View 4 will continue to have a long-term adverse effect at the local level (wider study area) which is moderately significant.

Cumulative Assessment

- 7.14 The cumulative assessment considers the cumulative sites that are located within 500m of the Proposed Development as it is assumed that beyond this distance, the cumulative schemes do not have the potential to result in significant cumulative townscape and visual effects with the Proposed Development or Development Project.

Assessment Scenario 3a – Proposed Development Only

- 7.15 Nine cumulative schemes are located within the 500m study area for this assessment. These are located to the south of Dantzic Street and are located outside of the Red Bank neighbourhood as defined within the Northern Gateway Regeneration Strategy. There are therefore not predicted to be any short/ medium-term temporary cumulative townscape effects at the local level on the Red Bank neighbourhood during the demolition and construction phase.
- 7.16 The railway line forms a physical barrier and separation between the Site and the identified cumulative schemes to the south. There are therefore not predicted to be any cumulative effects during demolition and construction with schemes located to the south of the railway line.
- 7.17 Site Ref. 14 and 15 in Table 2.4 are located within the Northern Gateway to the immediate south of the Site, and to the north of the railway line. Due to the scale of the two proposed schemes and their proximity to the Site, during the demolition and construction phase there is potential for short/medium-term temporary cumulative adverse effects at the local level (wider study area) on townscape receptors due to the cumulative effects during demolition and construction, assuming 'worst-case scenario' that the demolition and construction phases will occur concurrently. However, during the operations phase there is potential for beneficial effects on townscape due to new contemporary built form, new land uses, defined urban grain and public realm.
- 7.18 There is potential for cumulative visual effects during the demolition and construction phase of the development from viewpoints 1, 5 and 6. There is potential for views of the Proposed Development in conjunction with the Site Ref. 3, 14, 15. There is potential to increase the adverse effects on visual receptors due to the cumulative effects during demolition and construction, assuming 'worst-case scenario' that the demolition and construction phases will occur concurrently. At the operational phase, there is potential to increase the beneficial effects on visual receptors. The view of the Proposed Development within the Site in conjunction with the three identified schemes will signal the wider regeneration of the Northern Gateway.

Assessment Scenario 3b – Proposed Development plus impacts associated with Applications 1, 3 and 4

- 7.19 Site Ref. 14 and 15 are included within the Application 4 Red Bank boundary, and as such the potential townscape cumulative effects are included within the assessment for this scenario. During the demolition and construction phase, the potential effects could be small to medium adverse, which would have minor to moderate significance. However, at the completed development phase the potential effects are anticipated to be small to medium beneficial, which would have minor to moderate significance.
- 7.20 There is potential for further cumulative visual effects during the demolition and construction phase of the development from viewpoints 1, 5 and 6. There is potential for views of the Proposed Development, applications 3 & 4 and Site Ref. 3. There is potential to increase the adverse effects on visual receptors due to the cumulative effects during demolition and construction, assuming 'worst-case scenario' that the demolition and construction

phases will occur concurrently. The potential effects could be small to medium adverse, which would be not significant/ have minor significance. At the operational phase, there is potential for increased beneficial effects on visual receptors due to the introduction of contemporary new building s/ city skyline and new public realm. The potential effects could be beneficial with minor to moderate significance.

Assessment Scenario 3c – Proposed Development plus impacts associated with Applications 1, 3 and 4 and wider SRF

- 7.21 Four of the cumulative sites (Sites 1, 7, 8 & 9) identified in Table 2.4 above are located within the Northern Gateway Regeneration Strategy area, and as such the potential townscape cumulative effects are included within the assessment for Scenario 3c.
- 7.22 Due to the scale of the remaining proposed schemes and their proximity to the SRF study area, there is potential for short/medium-term temporary cumulative adverse effects at the local level (wider SRF study area) on townscape receptors due to the cumulative effects during demolition and construction, assuming 'worst-case scenario' that the demolition and construction phases will occur concurrently. The potential effects could be small to large adverse, which would have minor to moderate significance.
- 7.23 With regards to the operational townscape effects there is potential for long-term beneficial cumulative effects at the local level (wider SRF study area) on townscape receptors due to the cumulative effects during the operational phase. This would be due to new contemporary built form, new land uses, defined urban grain and new areas of public realm. The overall potential change could be small to large adverse, which would have minor to moderate significance.
- 7.24 There is potential for further cumulative visual effects during the demolition and construction phase of the development from viewpoints 1, 5 and 6. There is potential for views of the Proposed Development, applications 3 & 4 and Site Ref. 3. There is not predicted to be cumulative visual effects with Site Refs 2-6 due to the direction of the views and intervening built form. There is potential to increase the adverse effects on visual receptors due to the cumulative effects during demolition and construction, assuming 'worst-case scenario' that the demolition and construction phases will occur concurrently. The potential effects could be small to medium adverse, which would be not significant/ have minor significance. There is also potential for increased beneficial effects on visual receptors during operational phase due to the introduction of contemporary new buildings / city skyline and new public realm. The overall sensitivity of the visual receptors is low, and the potential magnitude of change could be small to large beneficial, which would be have minor to moderate significance.

8. Ground Conditions

- 1.1 A Ground Condition Assessment has been undertaken which seeks to establish the current baseline conditions in respect of land contamination and stability, before identifying and assessing the potential impacts that may arise due to the Proposed Development and Development Project, and the effects upon identified receptors from the impacts. It has been prepared by Arup.
- 8.1 The ground conditions at the Site have been assessed utilising available information. Geological, hydrogeological and contaminated land related impacts have been identified, of which the main points of focus are related to potential for contamination in the soils beneath the Site and potential for migration of contaminants into groundwater and the River Irk.
- 8.2 The effect of the potential impacts has been assessed in the context of the construction phase and operational phase. A number of risks have been identified associated with the ground conditions and the potential for contaminated land. Mitigation measures have been recommended to reduce these risks.
- 8.3 Any areas of contamination that are identified as presenting a risk to health or the environment will be addressed by removal or treatment. A remediation strategy will be developed for the Site which will be reported via the planning process. As part of the remediation strategy, materials re-use criteria will be developed to be protective of human health and controlled waters based on the Proposed Development. Only soils that have been validated as meeting the required re-use criteria will be used in the earthworks.
- 8.4 The PEP produced and implemented during the construction phase will outline how adverse effects on the environment will be avoided or mitigated in accordance with current environmental legislation.
- 8.5 During construction, any previously unidentified areas of contamination, that are considered to present a demonstrable risk, will need to be addressed by removal or treatment.
- 8.6 Once mitigation measures have been implemented, no significant effects (on human health, controlled water, phytotoxicity or buried structures and services) are expected in relation to the construction or operational phase of the Proposed Development.
- 8.7 It is assumed that the developments identified as having potentially cumulative effects will be delivered in accordance with the same environmental standards and require the appropriate level of mitigation at construction and operation to meet regulatory requirements. Therefore, it is predicted that the cumulative impacts are no greater than those from the proposed scheme in isolation.

9. Drainage and Flood Risk

- 1.2 A drainage and flood risk assessment has been undertaken which seeks to establish the baseline conditions currently existing at the Site and surroundings, the potential direct and indirect impacts of the Proposed Development arising from changes to the existing drainage regime at the Site, the mitigation measures required to prevent, reduce, or offset the impacts and the residual impacts. The assessment also aims to predicted impacts associated with the Proposed Development alongside applications 1, 3, 4 and the wider SRF. The assessment has been undertaken by Arup.
- 9.1 The river Irk flows in a south-westerly direction towards the confluence with the River Irwell, located approximately 900m downstream.
- 9.2 The majority of the Site sits in Flood Zone 1. This is classified to be at 'Low Risk' of river flooding. Areas identified as Flood Zone 3 follow the edges of the River Irk channel within the Site, and these have a high risk of river flooding.
- 9.3 There are localised areas of low, medium, and high risk of surface water flooding (generated from rainfall events).
- 9.4 A range of mitigation measures have been identified to ensure that no significant effects will arise in relation to drainage and flood risk. These include:
- Using standard construction best practice measures relating to pollution prevention.
 - Utilising an adequate construction drainage system is to ensure runoff is treated prior to being discharged from the Site.
 - Maintaining a site drainage plan.
 - Maintaining the temporary haulage road.
 - Management of material removal.
 - Implementing and maintaining SuDs.
 - Designing the works within the river corridor to ensure the off-Site flood risk is not increased.
- 9.5 Provided that best practice guidance and mitigation is followed for pollution prevention and surface water management during the construction and operational phases, there would be no significant effects on the surface water environment and flood risk predicted during the construction and operational phases of the Proposed Development.
- 9.6 The ICA of effects for the Proposed Development alongside the wider development project (Applications 1, 3 and 4) and the wider SRF has been undertaken. Using the available information and considering a worst-case outcome,

there are no significant likely effects predicted for the surface water environment and flood risk for the wider development project.

- 9.7 In relation to the CIA, it is assumed that the planning requirements imposed on the cumulative sites will mean that concurrent construction activities will adhere to the same design and environmental standards as the infrastructure works. Requirements for a reduction in runoff rates from new development should result in a reduction in surface water flood risk. It is therefore envisaged that the cumulative impacts would not pose a significant effect on the overall water environment.

10. Archaeology and Heritage

- 1.3 An archaeological and heritage assessment has been undertaken to assess the baseline archaeology and heritage conditions currently at the Site and the surrounding area, evaluate the potential direct and indirect effects of the Proposed Development and wider Development Project, and outline any avoidance and mitigation measures which may be needed to address potential impacts.
- 10.1 There is a high potential to encounter archaeology related to the Industrial period at the Site, particularly remains associated with the former Travis Mill on the River Irk which was in use from at least the mid-17th century to the 20th century. There is low potential to encounter archaeology related to earlier periods, and the widespread past industrial use of the Site is likely to have significantly truncated or removed any archaeological deposits related to earlier periods.
- 10.2 Additional mitigation to record potential archaeological deposits at the Site and to collect palaeoenvironmental data is recommended. Proposed archaeological and palaeoenvironmental investigation at the Site would be designed and agreed with Greater Manchester Archaeological Advisory Service (GMAAS). Proposed additional mitigation at the Site includes:
- Geoarchaeological watching brief during ground investigations
 - Geoarchaeological deposit modelling
 - Archaeological investigation using a strip, map and sample approach at the former Travis Mill site
- 10.3 Dependent on the results of the proposed additional archaeological mitigation and in consultation with GMAAS, further archaeological investigation may be required.
- 10.4 It is expected that demolition and construction effects of the Proposed Development on archaeology would be minor adverse .
- 10.5 It is expected that effects on archaeology from the completed Proposed Development would be neutral.
- 10.6 The effects from the wider development project (Proposed Development plus applications 1, 3,4 and the SRF) on archaeology would largely minor adverse during constructions and demolition. The effects associated with the operational phase would however be neutral. The built heritage assets within the Site include the Grade II listed Union Bridge, and the non-designated low value Lowry Footbridge, River Irk walls and the negligible value northern retaining walls.
- 10.7 Significant heritage assets in the study area include Shudehill Conservation Area, Queen's Park, the Grade II* listed Manchester Jewish Museum and 22 Grade II listed buildings.

- 10.8 The River Irk walls and the northern retaining walls will experience partial removal of or alterations to sections of their length. Additional mitigation is proposed in the form of a Level 2 descriptive historic building record of the historic river walls and retaining walls at the Site prior to any alteration which will allow for the historic wall sections to be seen, described and photographed.
- 10.9 It is expected that the residual demolition and construction effects associated with the Proposed Development on built heritage would be neutral.
- 10.10 It is expected that the residual effects from the completed Proposed Development on the settings of built heritage within the Site would be neutral to beneficial.
- 10.11 The effects from the wider development project (Proposed Development plus applications 1, 3,4 and the SRF) on built heritage would be neutral during constructions and demolition. The effects associated with the operational phase would be beneficial to built heritage assets within the Proposed Development Site itself but would be adverse to heritage settings of value within the wider development.

11. Transport and Access

- 1.4 A transport assessment has been undertaken to consider the effects of the Proposed Development and Development Project on transport and mobility. In particular, it considers the anticipated effects of the Proposed Development and Development Project on the operation of both the local and strategic highway networks in the vicinity. It provides an assessment of the potential transport environmental effects associated with construction and operation. The assessment has been prepared by Arup.
- 11.1 The A665 Cheetham Hill Road and A664 Rochdale Road provide major routes to and from the city centre and carry a mix of road users including buses. Other key routes in the vicinity of the Site include:
- Queens Road (A665) is located to the north of the site and forms part of the intermediate ring road.
 - Dantzic Street connects to Collyhurst Road to the north-east with the inner ring road (A664) to the south-west.
 - Collyhurst Road runs from its junction with Dantzic Street to Queens Road (A6010).
 - Red Bank runs from Corporation Street to the entrance of Creamline Dairy which is to be demolished to provide a site access (approved through a separate extant planning consent).
 - North Street connects Red Bank to Cheetham Hill Road (A665), which forms a major radial route to and from the city centre.
 - Knowsley Street connects Red Bank to Cheetham Hill Road (A665).
- 11.2 There are no major 'accident blackspots' which indicate underlying issues within the layout of the surrounding highway network, and no existing highway safety issues which would be likely to be exacerbated by an increase in traffic due to the construction of the Proposed Development.
- 11.3 A PEP would help to mitigate the effects and would reduce the significance of the effects by managing the movements of HGVs accessing the Site during construction.
- 11.4 The Proposed Development would have minor to moderate adverse effects on local transport networks in the area surrounding the Site during the demolition and construction works. This would be in the short-term at a local level in terms of driver delay, pedestrian delay, severance, pedestrian amenity and fear and intimidation. There would be a moderate adverse effect in the short-term at a local level in terms of accidents and safety. These effects are due to the forecast increase in Heavy Goods Vehicle (HGV) movements associated with the construction of the infrastructure works. These effects would be reversible and temporary in nature.
- 11.5 The significance of effects for the wider Development Project (i.e., Scenario 1b and 1c) would be similar in nature and scale to those associated with the Proposed Development.

- 11.6 During operation, the Proposed Development will not generate traffic movements and will not adversely affect traffic conditions. As such, it has been agreed with MCC to scope operational impacts out of the assessment. However, for completeness, an assessment of the wider Development Project (i.e., Scenarios 2b and 2c) has been undertaken. Scenario 2a (i.e. the Proposed Development in isolation during operation) would not result in any change in traffic movements and has therefore not been assessed.
- 11.7 The later parts of the Development Project (and particularly Application 4) and the wider SRF are still being designed and the details are not yet available. Estimates of the potential changes in traffic that might arise during the operation of these later parts of the Development Project have been made, drawn from information that supported the development of the SRF.
- 11.8 In both Scenario 2b and 2c the Development Project will have a major adverse effect on driver delay in the long-term at the local level. It should be noted however, that this is forecast based on the increase in total traffic. As the details for the later parts of the Development Project are defined, a more refined traffic forecast and assessment of the impacts of these parts will be undertaken through subsequent Transport and Environmental Impact Assessments for Application 4. This may demonstrate the impact on driver delay to be less significant, in particular building on the sustainable location of the Development Project and the aspiration of the Applicant to promote sustainable and active travel above the use of motorised vehicles.
- 11.9 As such, through the production of a comprehensive Travel Plan for Application 4 it is considered that the residual effect could be reduced to either minor or moderate. However, at this time the precise nature of the Travel Plan and the commitments to mitigation associated with Application 4 cannot be confirmed.
- 11.10 In terms of the CIA, within the completed development and operational phase the traffic generated by the cumulative sites will be included within the assessments described above either through the application of traffic growth factors to surveyed traffic flows or through the consideration of additional traffic associated with the wider SRF. As such, it is considered that the cumulative impacts of the above sites in the operational phase are already integrated into the Scenario 1a, 1b, 1c, 2b and 2c assessments as is the best practice approach for transport assessment. No significant cumulative impacts are therefore predicted.

12. Air Quality

- 1.5 An Air Quality Assessment has been undertaken to establish the baseline conditions currently existing at the Site and surrounding area, the potential direct and indirect impacts of the Proposed Development and Development Project arising from construction and operation, the mitigation measures required to prevent, reduce, or offset the impacts and the residual impacts on air quality. The assessment has been prepared by Arup.
- 1.6 Although the Proposed Development will not have any built form or produce operational traffic associated with it, assessments of the operational effects have been undertaken for scenarios 2b and 2c to account for the wider Development Project.
- 12.1 The main sources of traffic emissions within 2km of the Development Site are the A665, A6010, A665 and the A62. These major roads carry significant volumes of traffic.
- 12.2 The Development Site is not within an AQMA; however, it is adjacent to an AQMA to the southwest. MCC declared the Manchester AQMA in 2001 due to exceedances of the nitrogen dioxide and particulate matter objectives.
- 12.3 A qualitative assessment of the potential impacts of the Proposed Development on local air quality has been undertaken using industry-recognised guidance and methodology from the Institute of Air Quality Management (IAQM).
- 12.4 Impacts from construction dust and construction traffic would be non-significant both during the Proposed Development stage, and when the Proposed Development is considered in combination with application 1, 3, 4 and the SRF.
- 12.5 Best-practice mitigation measures would be included within the PEP to ensure that all effects related to construction dust and traffic remain non-significant.
- 12.6 Following a review of the current monitoring and Defra air quality background data, it is likely that the Proposed Development would be in compliance of all relevant air quality objectives based on the most recent published data. Furthermore, come the likely opening year of the development, it is likely that pollutant concentrations will have fallen further due to national trends.
- 12.7 Upon completion, the Proposed Development will not result in any built form and as such no 'operational' traffic emissions will be associated with scenario 2a. Traffic data has therefore been modelled for the scenario 2c (Applications 1, 3 and 4, and the wider SRF) which is when the maximum predicted movements would take place. The assessment of the operational effects concluded that there would be negligible effects at all sensitive receptor locations which is not significant.

- 12.8 In relation to the CIA, those sites located over 350m from the Development Site would not result in any cumulative impacts.
- 12.9 For sites within 350m, IAQM recommends to 'Hold regular liaison meetings with other high risk construction sites within 500m of the site boundary, to ensure plan are co-ordinated and dust and particulate matter emissions are minimised.' This measure will be included in the PEP. With these best-practice mitigation measures in place, cumulative effects would be reduced to a negligible, non-significant level.

13. Noise and Vibration

- 13.1 A noise and vibration impact assessment has been carried out to assess the likely impacts associated with the construction and operation of the Proposed Development and Development Project as well as assessing the suitability of the Site for residential development. The assessment has been undertaken by Arup.
- 13.2 There are a range of residential and commercial areas, as well as King of Kings School located around the Site. These are largely deemed to be of high sensitivity with regards to noise and vibration.
- 13.3 Potential impacts during the demolition and construction phase of the Proposed Development relate to construction site noise, construction traffic noise and construction site vibration.
- 13.4 Impacts related to construction site noise and construction traffic noise are expected to be non-significant whilst impacts related to construction site vibration could be significant during compaction works.
- 13.5 Mitigation measures are proposed to ensure these that all of these impacts become non-significant. Such mitigation includes:
- Adhering to best-practice construction measures implemented via the PEP.
 - Monitoring vibration levels during the demolition and construction phase and, if necessary, avoid vibratory compaction when in close proximity to nearby dwellings.
- 13.6 No additional effects can be identified within the additional ICA scenarios.
- 13.7 It is therefore concluded that, once the proposed mitigation measures have been employed, the Proposed Development and wider Development Project would have no residual significant effects.
- 13.8 In relation to the CIA, there is potential for significant cumulative construction site noise effects to arise with Victoria Riverside (cumulative site 14) and cumulative site 15 (see Table 2.4 for cumulative site list), however this would marginally exceed the Significant Observed Adverse Effect Level (SOAEL) (the level above which significant adverse effects on health and quality of life occur) and would be short-term in nature.
- 13.9 No significant cumulative effects are anticipated with regards to the Proposed Development, Development Projects and those developments identified in Table 2.4
- 13.10 No cumulative effects due to vibration are identified.

14. Waste

- 14.1 A waste assessment has been undertaken to assess of the likely significant environmental effects associated with the generation and management of solid waste with respect to the construction and operational phases of the Proposed Development and Development Project. The assessment includes the types and quantities of solid waste that would be generated, the quantity of residual waste requiring disposal to landfill and the available capacity of waste management infrastructure to manage the residual waste fraction.
- 14.2 The Site predominantly comprises areas of post-industrial land, including significant operational and redundant infrastructure, hard-standing, and trees and vegetation. The majority of structures remaining on the Site will be removed as part of the associated Enabling Works (Application 1) which was consented on 23rd December 2021 (planning ref. 132252/VO/2021), and it is assumed that the Site will be vacant prior to commencement of the Proposed Development (Application 2). There are expected to be no waste generating activities being undertaken on the Site that would give rise to waste arisings. It can therefore be assumed as a reasonable worst case that for the baseline conditions, no waste is generated on an annual basis.
- 14.3 This assessment assesses the impact of waste generated by the Proposed Development in isolation, and in combination with related schemes (Applications 1, 3, and 4, and the NG SRF), on the remaining landfill capacity likely to be affected. The assessment follows the approach and methodology described in the Institute of Environmental Management and Assessment (IEMA) guidance.
- 14.4 For the Proposed Development, it can be concluded that environmental effects on all categories of landfill (occupation of remaining inert landfill void space, occupation of remaining non-hazardous landfill void space, and occupation of remaining hazardous landfill void space) during construction and operation could give rise to minor adverse effects at a regional and supra-regional level. However, a Site Waste Management Plan (SWMP) and will identify specific design and construction measures to reduce waste generation and propose a strategy to minimise the quantity of residual waste requiring disposal to landfill. The SWMP will help to ensure that landfill diversion of waste generated during construction is able to meet or exceed the England average is proposed as sufficient mitigation to ensure these effects are non-significant.
- 14.5 It can be confidently concluded that environmental effects on all categories of landfill during construction and operation, will be slight or neutral for the proposed scheme in isolation, and when considered in association with Applications 1, 3 and 4. This conclusion is premised on the Development achieving industry standard landfill diversion rates, and that future ground investigation data does not identify extensive contamination not previously detected.
- 14.6 As there is limited design data related to the NG SRF, it makes it difficult to draw conclusions regarding potential environmental effects for in the wider development area. Whilst it has been concluded that the Proposed

Development plus Applications 1, 3 and 4 and the wider NG SRF will not generate a significant environmental effect during operation, the same cannot be inferred during construction. It cannot be confidently concluded that the Proposed Development plus Applications 1, 3 and 4 and the wider NG SRF will not give rise to significant impacts on available landfill capacity during construction. However, it is likely that this effect can be mitigated through careful design, and the development of SWMPs as explained above. This could ensure that effects on waste remain non-significant.

- 14.7 In relation to the CIA, a wider appraisal of committed developments, beyond those identified in Table 2.X, with the potential to disrupt trends in landfill capacity and generate significant cumulative impacts identified Phase 2a of the High Speed Two (HS2) project. The construction of Phase 2a of HS2 overlaps with the proposed HIF infrastructure works, both in the region in which waste is likely to be disposed of, and in the years in which construction is underway.
- 14.8 However, based on the quantities of waste stated for HS2, it is predicted that the cumulative impacts on inert, non-hazardous and hazardous landfill capacity are no greater than those forecast from the Proposed Development in isolation, and with Application 1, 3, 4 and the NG SRF.
- 14.9 No significant cumulative impacts on waste are therefore expected.

15. Health and Wellbeing

- 15.1 A health and wellbeing assessment has been undertaken to establish the potential direct and indirect impacts on the health and well-being of residential communities and other human receptor groups that may be affected during the operation and construction of the Proposed Development and wider Development Project.
- 15.2 The Proposed Development Site falls across the wards of Cheetham and Harpurhey which are the wards that are considered in the context of the Development Site. However, as the Development Site sits within the wider context of the Northern Gateway SRF, potential health and wellbeing impacts are considered across the neighbourhoods of four Manchester wards which are included within the site boundary of the SRF. These are Piccadilly, Cheetham, Miles Platting and Newton Heath, and Harpurhey. These make up the study area.
- 15.3 In terms of the specific health domain, according to the Indices of Multiple Deprivation (IMD), much of the study area falls within the 10% most deprived neighbourhoods². Output areas within Piccadilly ward, however, generally rank higher than the other wards (i.e. are not as deprived). Except for Piccadilly ward, all wards experience higher than national average health deprivation which results in lower life expectancy.
- 15.4 The population within the study area was 78,640³ in 2020, which compares to a population of 555,741 across the whole of Manchester (14% of the population).
- 15.5 There are unlikely to be any significant health and wellbeing effects associated with the Proposed Development. No assessment is therefore made in relation to Assessment Scenario 1a and 2a (HIF Infrastructure Works only). However, when considered in-combination with the other assessment scenarios, there is a potential for there to be significant effects with regards to health and wellbeing. The purpose of this assessment is therefore to identify what health effects are considered likely when the Proposed Development is combined with applications 1,3, 4 and the wider SRF (i.e., Scenarios 1b, 1c, 2b and 2c).
- 15.6 It is predicted that scenarios 1b, 1c, 2b and 2c would give rise to effects relating to:
- Access to employment, training, and education.
 - Access to open space.
 - Air quality.
 - Noise.
 - Neighbourhood amenity.

² Indices of Deprivation: 2019. DCLG. Available at: http://dclgapps.communities.gov.uk/imd/iod_index.html#

³ ONS Data (2021) Mid-2020 Population Estimates for 2020 Wards. Available at: [Ward-level population estimates \(Experimental Statistics\)](https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/ward-level-population-estimates-experimental-statistics) - Office for National Statistics ([ons.gov.uk](https://www.ons.gov.uk))

- Crime reduction and community safety.
- 15.7 During the construction phase, for both scenario 1b and 1c effects on access to employment, training, and education are expected to be beneficial, whilst effects on access to open space, effects on air quality and effects on noise are expected to be slightly adverse in nature.
- 15.8 During the operational phase, for both scenario 2b and 2c effects on access to employment, training, and education, effects on access to open space, effects on air quality and effects on neighbourhood amenity are all expected to be beneficial in nature. Effects on noise and effects on crime reduction and community safety are not yet known.
- 15.9 In relation to the CIA for scenario 3b undertaken for the sites identified in Table 2.4, it is expected that access to employment, training and education would improve, and any new employment opportunities would also benefit local communities.
- 15.10 If construction across sites occurs at the same time, access to open space would be negatively impacted. However, once all developments are completed, access to open space is likely to have significantly improved across all sites due to the improved public realm and green spaces that are planned.
- 15.11 In relation to air quality, it is assumed that during construction all developments would follow site management practices to mitigate air quality impacts. It is therefore unlikely that there would be any cumulative air quality impacts leading to health effects. On completion, air quality impacts would be related to traffic generated by the developments. The air quality assessments undertaken for these proposals would have already taken account of cumulative developments (as this is intrinsic to the air quality assessment process), it is therefore unlikely that there would be additional health effects resulting.
- 15.12 There is potential for construction noise overlaps to arise, however due to the nature of the developments it is unlikely that there would be cumulative noise impacts of a scale which would affect population health.
- 15.13 Once completed, cumulatively the improvements made to neighbourhood amenity are likely to be substantial which will bring increased health and well-being benefits.
- 15.14 Once completed, the cumulative developments will result in increased numbers of people residing and working within the local community. More people generally means that the chance of crime occurring increases. Therefore, the cumulative effect of more people moving into the new residential properties is likely to lead to the potential for more crime and therefore increased adverse health and wellbeing effects. However, there is no reason to suggest that this would not be over and above the average crime rates expected.
- 15.15 These effects for scenario 3b are expected to increase in magnitude in scenario 3c as the developments progress.

16. Socioeconomics

- 1.7 A socio-economic assessment has been undertaken to establish the baseline socio-economic conditions on site and in the surrounding areas and to assess the potential impact that the Proposed Development and Development Project may have on the existing socio-economic conditions. It has been prepared by Arup.
- 16.1 With respect to the Proposed Development, during demolition and construction (Scenario 1a), there would be a beneficial effect on construction employment however this would not be significant. During demolition and construction, there would be an adverse effect due to the potential disruption through changes to environmental quality however this would not be significant. During the operation (Scenario 2a) of the City Park, there is anticipated to be a significant beneficial effect.
- 16.2 With respect to the construction effects of the Proposed Development plus applications 1, 3 and 4 (Scenario 1b), construction employment provision of housing, and provision of open space and social infrastructure were all identified as major beneficial effects. There would be an adverse effect on local residents and a negligible effect on local businesses due to the potential disruption through changes to environmental quality however this would not be significant. During the operational phase of the Proposed Development plus applications 1, 3 and 4 (Scenario 2b), there would be a beneficial effect on local residents due to the provision of a primary school, nursery, health centre, and other uses. There would be a beneficial effect on the local economy as a result of local expenditure from new residents however this would not be significant.
- 16.3 With respect to the construction effects of the Proposed Development plus applications 1, 3 and 4 and the wider SRF (Scenario 1c), construction employment and housing provision have been identified as beneficial effects. during the operational phase of the Proposed Development plus applications 1, 3 and 4 and the wider SRF (Scenario 1c), the potential for economic growth is also identified as a beneficial effect. The effect on local expenditure and on the provision of social and community infrastructure has been scoped out given the lack of available information on the proposed infrastructure within the wider SRF area. It is anticipated that this could be covered in more detail in subsequent assessments.
- 16.4 In relation to the CIA, it is possible that for scenario 3b and 3c that additional disruption and adverse effects (including noise, vibration, air quality, and construction traffic movement) from construction works occurring on cumulative sites may give rise to significant effects during the construction phase of the Proposed Development. This will depend on a number of factors, not all of which can be determined; for example, the location of cumulative sites relative to the Proposed Development and relative to the identified receptors, the timing and duration of construction works for cumulative sites, and the nature of construction activities on cumulative sites. Cumulative sites which are more than 225m from the Site are scoped out of this part of the CIA based on the thresholds applied by relevant contributory topics.

- 16.5 The cumulative effects of additional housing provision, affordable housing provision, and the likely increase to local expenditure have all been considered. In addition, the cumulative effects on local communities during the operation of the developments including access to primary and secondary education, primary healthcare, and open spaces has been considered.

17. Climate Change

17.1 A climate change assessment has been undertaken by Arup to ascertain the potential impact of the Proposed Development on CO₂ emissions associated with fossil fuel and electricity use.

17.2 Aligned to Institute of Environmental Management & Assessment (IEMA) guidance, this chapter presents the climate change assessment under the following two headings:

- **Impact of the project on climate (Greenhouse Gas (GHG) emissions assessment)** – the potential additional and avoided GHG emissions associated with demolition, construction and operation.
- **Vulnerability of the project to climate change (Climate Change Risk (CCR) assessment)** – how climate change is anticipated to manifest itself in the future and the vulnerability of the project to such climate change.

Impact of the project on climate (Greenhouse Gas (GHG) emissions assessment)

17.3 For context, the UK's total GHG emissions in 2019 were 454.8 million tonnes of carbon dioxide equivalents (MtCO_{2e}). At a local level, in 2019, emissions in Manchester were 2MtCO_{2e}.

17.4 The assessment of the impact of the Proposed Development on climate (GHG emissions assessment) quantitatively assessed the potential GHG emissions from scenarios 1a and 2a. The assessment concluded that the demolition and construction phase would result in estimated GHG emissions of 5,230tCO_{2e}, and the completed and operational phase would result in estimated net GHG emissions of 1,437tCO_{2e}. Overall, these emissions were considered unlikely to impact the UK Government's ability to meet the relevant UK Carbon Budget. However, the nature of GHG emissions are cumulative over time and as such, and as set out in the IEMA guidance, any GHG emissions can be considered significant. Therefore, it is concluded that there will be a significant effect on climate due to GHG emissions.

17.5 High-level, qualitative assessments were undertaken of scenarios 1b, 1c, 2b and 2c based on current understanding of the applications and professional judgement. All scenarios were considered likely to result in GHG emissions. The nature of GHG emissions are cumulative over time and as such, and as set out in the IEMA guidance, any GHG emissions can be considered significant. Therefore, it was concluded that there will be a significant adverse in-combination effect due to GHG emissions of the development as a whole (Applications 1-4 and the wider SRF).

Vulnerability of the project to climate change (Climate Change Risk (CCR) assessment)

17.6 The UK CP18 future climate projections, indicate an increased likelihood of warmer, wetter winters and hotter, drier summers, in addition to an increase in the frequency of extreme weather events. The likelihood of an increase in floods, storms, and extreme heat as a result of changes in climate and associated weather patterns has the

potential to damage buildings, disrupt transport, and affect health. Buildings and infrastructure will need to be built resilient to, or be adapted to cope with these changed climatic conditions.

- 17.7 A high-level, qualitative assessment was undertaken of scenarios 2a, 2b and 2c based on current understanding of the applications.
- 17.8 It has been concluded that so long as Applications 1, 2, 3, 4 and the wider SRF are designed in accordance with current planning, design and engineering practice, standards and codes, and that additional mitigation proposed is effectively implemented that there would not be a significant effect on the vulnerability of the development to climate change. The assessment assumes that any required mitigation measures to reach these standards and address the climate risks, are implemented fully and effectively, such that the climate risk is fully mitigated.
- 17.9 It should, however, be noted that future EIAs for Applications 3 and 4 should be subject to Climate Change Risk (CCR) Assessments to reassess CCR with more information about these development stages and that such consideration may draw different conclusions.

Cumulative Impact Assessment

- 17.10 In relation to the CIA, the assessment of the impact of the project on climate concluded that there would be emissions associated with the demolition, construction and operation of the project. These emissions are unlikely to impact the UK Government's ability to meet the relevant Carbon Budget. The nature of the GHG emissions are cumulative over time and as such, and as set out in the IEMA guidance, any GHG emissions they can be considered significant. Therefore, it is concluded that there will be a significant adverse cumulative effect due to GHG emissions.
- 17.11 Owing to the transboundary nature of GHG emissions, the effects of the Proposed Development and wider Development Project must be considered in the context of global GHG emissions and concentrations of GHGs in the atmosphere. The IEMA guidance states that the GHG emissions from all projects will contribute to climate change, the largest inter-related cumulative environmental effect.

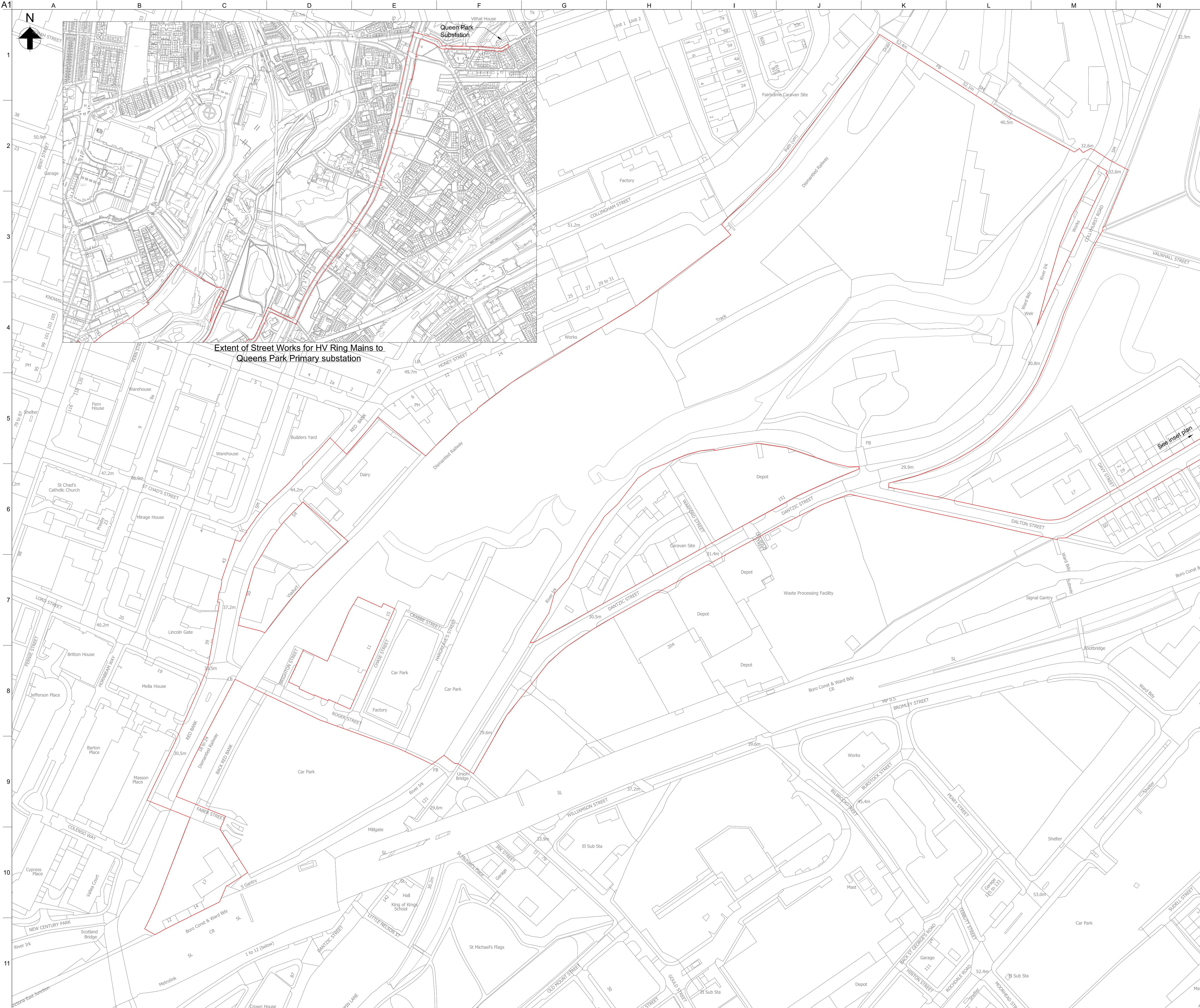
18. Summary and Conclusions

- 18.1 An assessment of the potential effects of the demolition and construction, and operational phases of the Proposed Development, alongside an in-combination assessment with applications 1, 3, 4 and the SRF has been undertaken as part of this EIA to establish the environmental changes associated with the proposals.
- 18.2 The Proposed Development has been designed in accordance with the findings and recommendations of the EIA. Any adverse effects identified through the assessment have been minimised as far as possible through the design process or the application of appropriate mitigation measures.
- 18.3 Residual effects during the demolition and construction stage are considered to be short term, temporary in nature, and are not significant in the main.
- 18.4 Best practice measures will be implemented via an overarching PEP. In addition, a range of management plans are proposed to ensure any potential environmental effects as a result of the Proposed Development are minimised. These include, but are not limited to:
- Project Execution Plan (covering the Construction Phase Plan, Environmental Management Plan, and Quality Plan)
 - Landscape Management Plan
 - Site Waste Management Plan (SWMP).
- 18.5 No significant adverse residual effects are expected as a result of the Proposed Development once completed.
- 18.6 The Proposed Development, considered in the context of the wider development project, will facilitate redevelopment of an existing poor-quality environment, and the delivery of the aspirations of the Northern Gateway SRF, and with it a range of beneficial impacts. An assessment of the Proposed Development in the context of the wider development project at Red Bank Neighbourhood, and considering the wider SRF, has been undertaken. There are likely to be temporary, moderately significant adverse effects during demolition and construction due to the extent of the works proposed. Once completed, there are predicted to be permanent beneficial effects for a range of topic areas. There is the opportunity for beneficial effects during the operational phase of the wider development, for example through improved access to employment, training, education, and new green infrastructure. This will also have beneficial effects on neighbourhood amenity, both a socioeconomic and health benefit for the local population.
- 18.7 The Proposed Development constitutes sustainable development in accordance with the NPPF when taken as a whole. It is an essential area of regeneration to improve the area immediately adjacent Manchester City Centre. Significant change and regeneration is planned for the surrounding area as presented in the Northern Gateway SRF and this planning application will facilitate an early start on site and clear a path for the main infrastructure,

flood works and, ultimately, residential development proposed by associated successive prospective planning applications at the Site.

Appendix 1

Site Location Plan



- Notes
1. All dimensions are in mm, all levels in mAOD, unless specified otherwise.
 2. This map is reproduced from Ordnance Survey Material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office (c) Crown Copyright, License Number 100019568 (2021).

Key

Extent of Infrastructure Works

P01	09/11/21			EC	EC	ME	—
P02	09/11/21	For Enabling Works Application		EC	EC	ME	—
P03	16/11/21	Updated redline boundary		EC	EC	ME	—
P04	10/12/21			RG	RG	RG	—
P05	04/02/22	For Information		RG	RG	RG	—
Rev	Date	Description		By	Chkd	Appd	Auth

ARUP

6th Floor 3 Piccadilly Place
Manchester M1 3BN
Tel +44 161 228 2331 Fax +44 161 228 6879
www.arup.com

Client



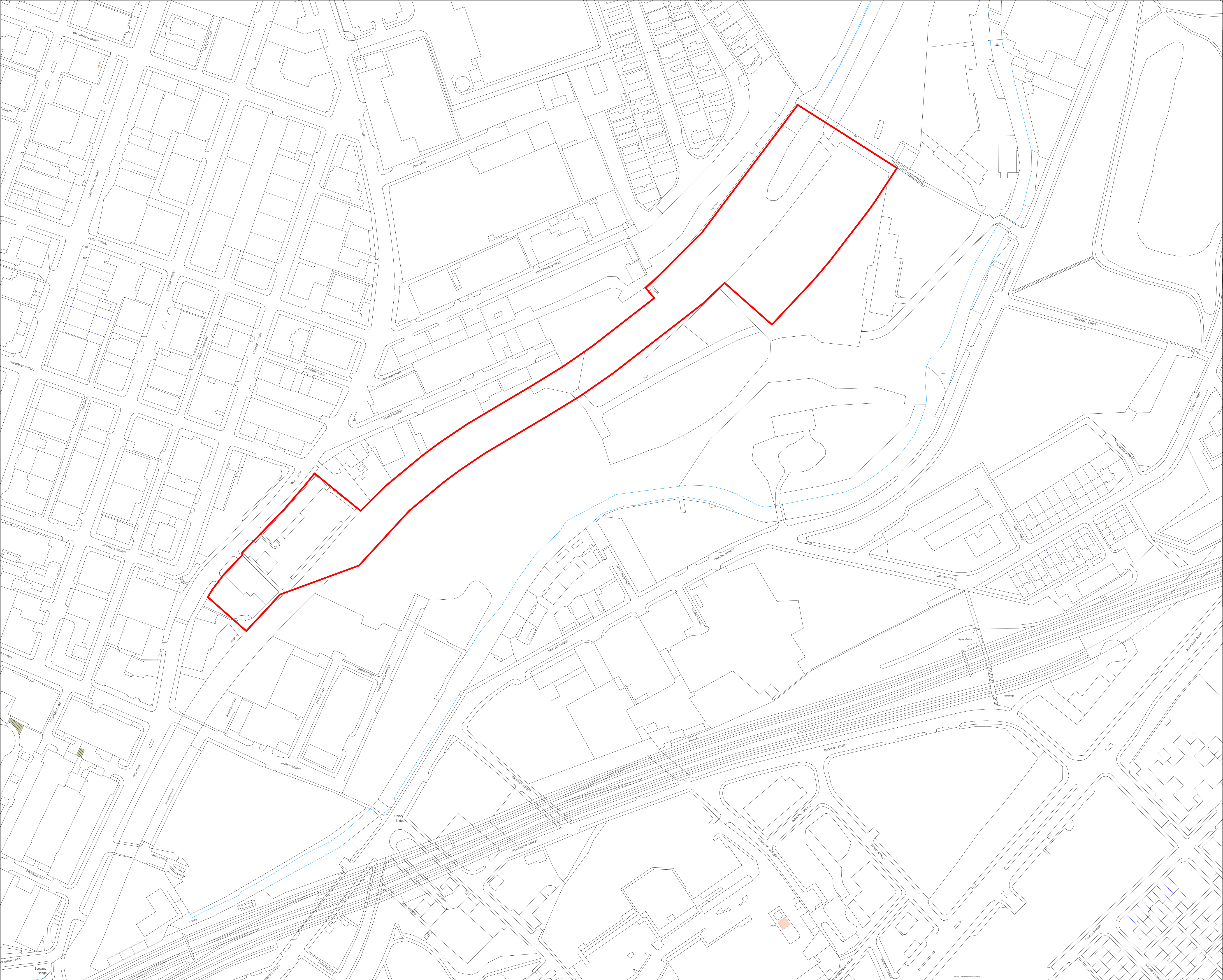
Project Title
Victoria North HIF Infrastructure & Enabling Works

Drawing Title
HIF Infrastructure Study Area

Scale at A1		1:1250		Arup Job No		282022-00	
Role		GIS & Land Surveyors					
Suitability		S3 - Issued for Review and Comment					
Rev	By	Chkd	Appd		—		
P05	RG	RG	RG				
	Date	Date	Date		—		
	04/02/22	04/02/22	04/02/22				
Name							
VNIF - ARP - 00 - YYY - DR - G - 0009							
Project	Originator	Volume	Location	Type	Role	Number	

Appendix 2

HIF Enabling Works Indicative Site Location



THIS DRAWING IS COPYRIGHT PROTECTED AND MAY NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN AUTHORITY FROM THE OWNER.

NOTES:

1. Do not scale from this drawing.

2. Always work to noted dimensions.

3. All dimensions are in millimetres unless otherwise stated.

4. All setting out, levels and dimensions to be agreed on site.

5. The dimensions of all materials must be checked on site before being laid out.

6. This drawing must be read with the relevant specification clauses and detail drawings.

7. Order of construction and setting out to be agreed on site.

KEY

ENABLING WORKS

Red Line Boundary

P01.01

03-09-21

First Issue

MS

MS

Revision	Date	Description	Drawn	Apprvd.
----------	------	-------------	-------	---------

Planit I.E. Limited

E: info@planit-ie.com

W: planit-ie.com

MANCHESTER

2 Back Grafton St., Altrincham, WA14 1DY

T: 0161 928 9281

LEEDS

No 1 Aire Street, Leeds Station, Leeds, LS1 4PR

T: 0113 824 6413

LIVERPOOL

Tempest S.3, 12 Tithebarn Street, Liverpool, L2 2DT

T: 0151 363 1230

LONDON

Unit 6 Waterside, 44-48 Wharf Road, London, N1 7UX

T: 0207 253 5678

STANDISH

Standish Gatehouse, Stonehouse, Gloucestershire, GL10 3BZ

T: 0145 360 7080

Client

BAM Nuttall Ltd / Arup

Project

Victoria North HIF Infrastructure

Drg Title

Enabling Works Scheme Boundary

Created on

03/09/21

Created by

MS

Approved by

MS

Scale

1:1250

Size

A1

Workstage

Stage 2

Drg No.

VNIF-PLA-00-YYY-DR-L-0001

Suitability

S2

Revision

P01.01

©Planit I.E. Limited

Appendix 3

HIF Flood Defence Works Indicative Site Location

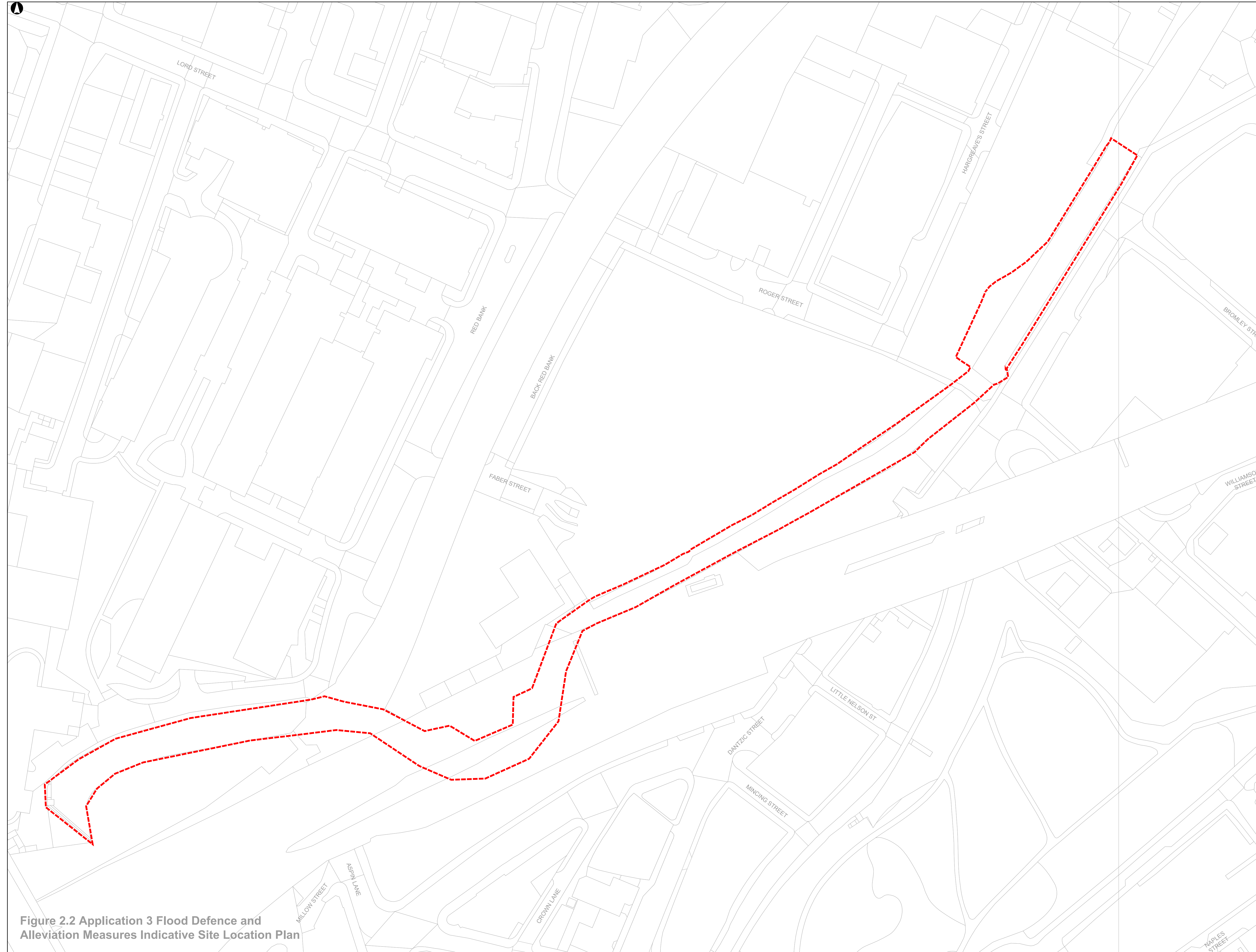


Figure 2.2 Application 3 Flood Defence and Alleviation Measures Indicative Site Location Plan

Appendix 4

Red Bank Neighbourhood Indicative Site Location

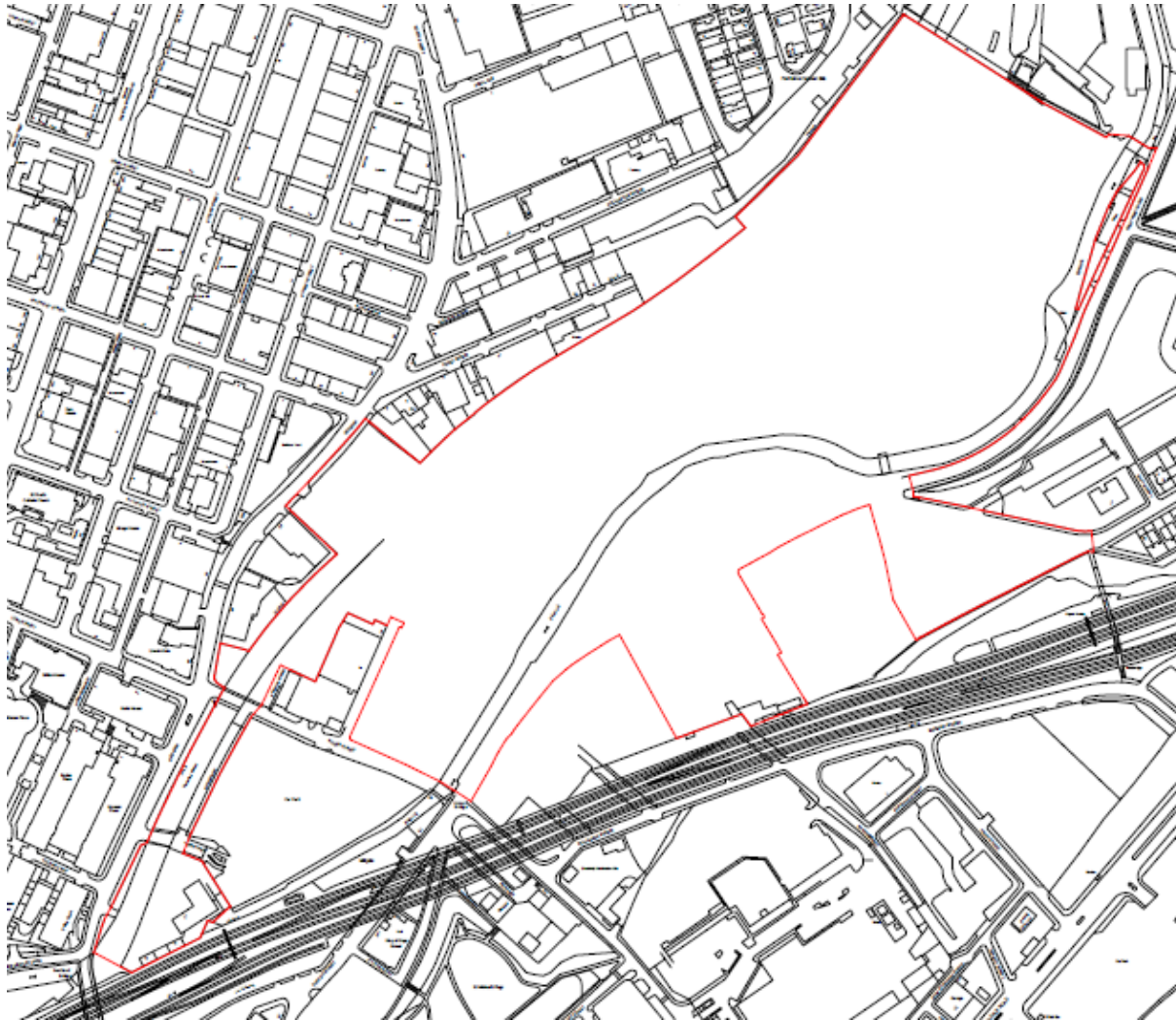


Figure 2.3: Indicative development area relating to Application 4: Red Bank Built Development (N.B. not definitive planning boundary)

Appendix 5

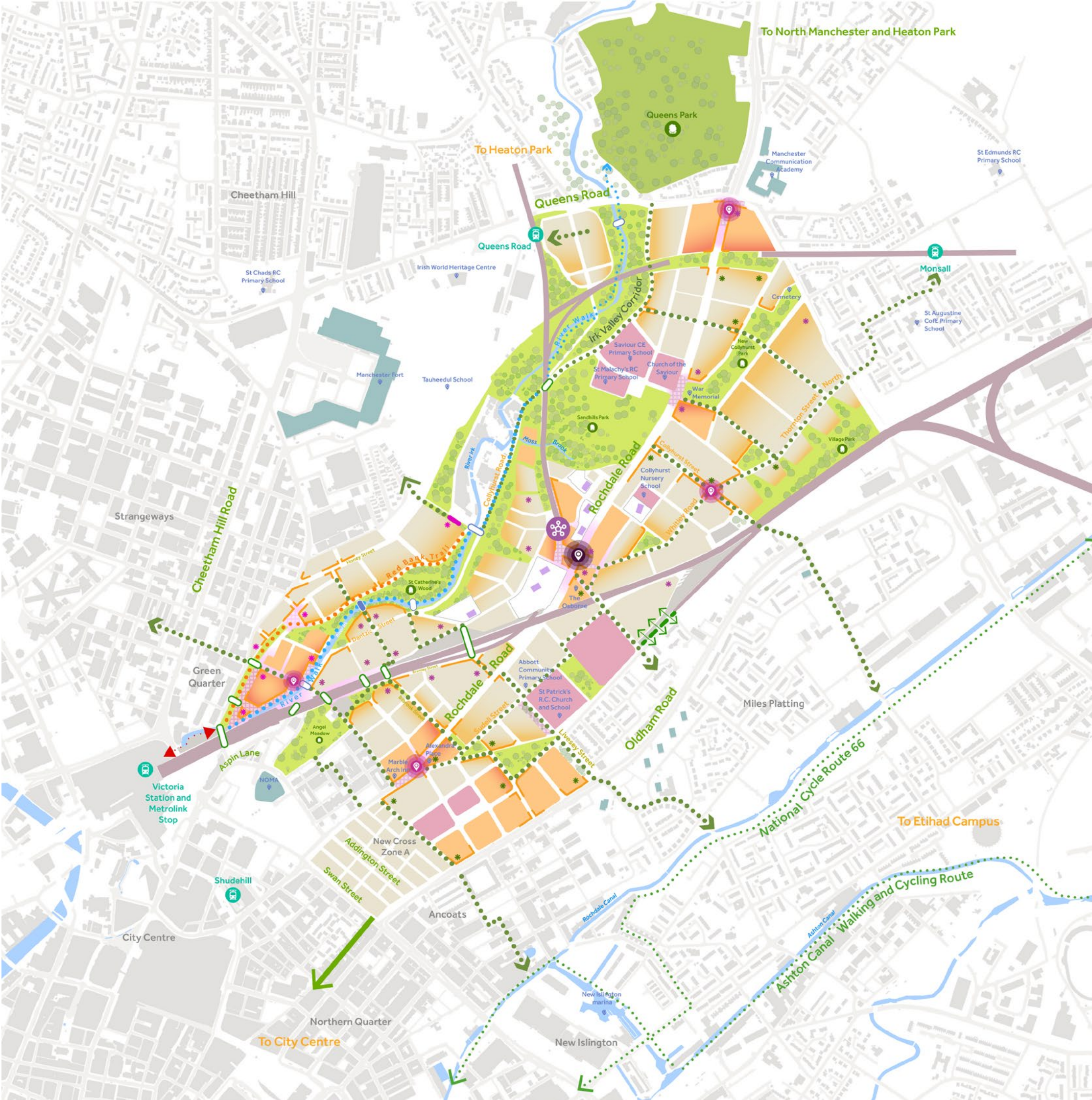
Northern Gateway SRF Area and Illustrative Masterplan (extract)

ILLUSTRATIVE MASTERPLAN

In response to the SRF-wide and neighbourhood design and development principles, an Illustrative Masterplan is presented for the entire Northern Gateway which shows how the residential-led neighbourhoods could be developed. The Masterplan is an accumulation of the Indicative Spatial Frameworks presented for each neighbourhood.

- Retained utilities
- Railway/Metrolink
- Existing towers
- Key surrounding landmarks
- SRF development areas
- Local assets
- Blocks with open space views
- Key active frontages
- Mix of commercial and residential uses
- Social and community uses
- Green space
- Green link
- Public realm enhancements to major road
- River Walk
- Stairs
- Enhancements to public realm
- Enhancements to existing bridge
- Key passage through viaduct
- Proposed bridge over River Irk
- Enhanced treatment and permeability of railway arches
- Potential access from Red Bank Viaduct to the Ring Road and Victoria Station
- Primary Retail and Service Hub
- Secondary Retail and Service Hub
- Integrated transport hub
- Opportunities for distinctive landmark buildings with a focus on height
- Opportunities for distinctive landmark buildings with a focus on architectural treatment

Figure 100 - Illustrative Masterplan



Contact Details

Enquiries

Richard Kevan

0161 834 7187

Richard.Kevan@avisonyoung.com

Visit us online

avisonyoung.co.uk

Avison Young

Norfolk House, 7 Norfolk Street, Manchester M2 1DW

Avison Young is the trading name of Avison Young (UK) Limited

© 2022 Avison Young (UK) Limited