Department of Planning and Environment

Site Wide Remedial Concept Plan

Bays West Stage 1
White Bay Power Station and Metro Sub-Precinct

1 August 2022

61895/ 146497 (Rev 0)

JBS&G Australia Pty Ltd

www.jbsg.com.au

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Table of Contents

Abbreviations vii

Executive Summary viii

1. Introduction 1
   - 1.1 Background 1
   - 1.2 Objective 1
   - 1.3 White Bay Power Station and Metro Station Sub-Precinct 1

2. Site Condition and Environmental Setting 3
   - 2.1 Site Identification 3
   - 2.2 Site Description 3
   - 2.3 Surrounding Land Uses 4
   - 2.4 Heritage 5
   - 2.5 Geology and Soils 5
   - 2.6 Acid Sulfate Soils 6
   - 2.7 Topography and Hydrology 6
   - 2.8 Hydrogeology 7
   - 2.9 Meteorology 7
   - 2.10 NSW EPA Public Register Search Records 7

3. Summary Site History 9

4. Previous Assessments 11
   - 4.1 JET (1998a) Preliminary Assessment, Bays Precinct City West 12
   - 4.2 JET (1998b) Restricted Phase 2 Assessment, White Bay Rail Yards 13
   - 4.3 PB (2003) Site Assessment, White Bay Power Station 13
   - 4.4 NAA (2012) Targeted Assessment, White Bay Power Station 14
   - 4.5 Prensa (2013a) Groundwater and Penstock Assessment, White Bay Power Station 14
   - 4.6 Prensa (2013b) Stage 2 Groundwater Assessment, White Bay Power Station 14
   - 4.7 Ryall (2013) Groundwater Conditions and Monitoring Advice, White Bay Power Station 15
   - 4.8 Prensa (2015) Groundwater Monitoring Results, White Bay Power Station 15
   - 4.9 JBS&G (2014) Preliminary Site Investigation, The Bays Precinct 15
   - 4.10 JBS&G (2015b) Evaluation of Existing Data, The Bays Precinct 16
   - 4.11 JBS&G (2015b) Targeted Site Investigation, The Bays Precinct 16
   - 4.12 JBS&G (2015c) Site Wide Remedial Concept Plan, The Bays Precinct 19
   - 4.13 JBS&G (2016) Additional Contamination Assessment, White Bay Power Station 19
   - 4.14 JBS&G (2017a) Detailed Site Investigation, White Bay Power Station Proposed Lot 1 20

4.15 JBS&G (2017b) Human Health and Ecological Risk Assessment, White Bay Power Station Proposed Lot 1 22
4.16 JBS&G (2017c) Detailed Site Investigation, White Bay Power Station Proposed Lot 2 23
4.17 GDP (2020a) Factual Contamination Assessment Report, Sydney Metro West 25
4.18 GDP (2020b) Contamination Assessment Report, Sydney Metro West Stage 1 Early Works 26
4.19 GDP (2020c) Groundwater Monitoring Report, Sydney Metro West Stage 2 Locations 26
4.20 Senversa (2021) Interpretive Contamination Investigation, Sydney Metro West White Bay 26
5. Conceptual Site Model 28
5.1.1 Areas of Known and/or Potential Concern 28
5.1.2 Source of Impacts 28
5.1.3 Potentially Impacted Media 31
5.1.4 Potential Human and Ecological Receptors 31
5.1.5 Potential Preferential Pathways for Migration 32
6. Conceptual Remedial Strategy 33
6.1 Remediation Goals 33
6.1.1 Guidance Framework 33
6.2 Regulatory and Planning Requirements 34
6.2.1 Requirements in Relation to Future Project Applications/Approvals 34
6.2.2 Other Requirements 35
6.2.3 Further Site Characterisation Requirements 36
6.2.4 Area Specific RAPs 37
6.3 Extent of Remediation and/or Management Required 38
6.3.1 Power Station Transformer Yard 38
6.3.2 Petroleum Infrastructure 39
6.3.3 Soil Impact 39
6.3.4 Acid Sulfate Soil Conditions 39
6.3.5 Groundwater Impact 39
6.3.6 Soil Vapour and Ground Gas 40
6.4 Hierarchy of Remedial Options 40
6.5 Options Assessment 41
6.5.1 On-site Treatment 41
6.5.2 Off-site Treatment 42
6.5.3 Consolidation and Isolation by Containment 42
6.5.4 Off Site Removal 43
6.5.5 Implementation of an Appropriate Management Strategy 44

6.6 Strategy for Selection of Proposed Options 44
6.7 Anticipated Scope of Remediation Works 45
6.7.1 Specific Areas Subject to Data Gaps 45
6.7.2 Contaminant Source Removal 46
6.7.3 Management of Asbestos Impacts 47
6.7.4 On-Site Containment Requirements 48
6.7.5 Site Boundaries 49
6.8 Material Movement Management 49
6.8.1 Material Movement Principles 49
6.8.2 Off-Site Disposal of Material 51
6.8.3 Beneficial Reuse of Material within the WBPS and Metro Station Sub-Precinct Footprint 51
6.8.4 Importation of Material 52
6.9 Proposed Validation Strategy 53
6.9.1 Validation Sampling Analysis and Quality Plan 53
6.9.2 Validation Assessment Criteria 53
6.9.3 Contaminant Source and Impacted Material Removal Validation 53
6.9.4 Accessible Soils Validation 54
6.9.5 Installation of Containment Measures Validation 55
6.9.6 Validation and Ongoing Management Requirement Reporting 55
6.10 Contingency Plans 56
6.10.1 Unexpected Material Finds 57
6.10.2 Failure to Meet Waste Classification Thresholds 57
6.10.3 Onsite Treatment/Stabilisation Failure 58
6.10.4 Emission Complaints 58
6.11 Remedial Work Environmental Management Plan 58
6.12 Work Health and Safety 59
6.13 Stakeholder/Community Consultation 60
7. Conclusions and Recommendations 61
7.1 Conclusions 61
7.2 Recommendations 61
8. Limitations 62

List of Tables

Table 2.1: Site Summary Details 3
Table 5.1: Identified Site Areas of Potential Concern and Associated COPCs 28
Table 5.1: Review of Potential Environmental Issues 58

List of Figures

Figure 1 Site Location
Figure 2 Site Layout
Figure 3 Emerging Preferred Development Option
Figure 4 Existing Sample Locations

Appendices

Appendix A Summary Analytical Tables
Appendix B Draft Master Plan

Abbreviations

Term	Definition
ACM	Asbestos Containing Materials
AGST	Above Ground Storage Tank
AHD	Australian Height Datum
APEC	Areas of Potential Environmental Concern
ASRIS	Australian Soil Resource Information System
ASS	Acid Sulfate Soils
ASSMP	Acid Sulfate Soil Management Plan
BTEXN	Benzene, Toluene, Ethylbenzene, Xylenes and Naphthalene
CLM Act	Contaminated Land Management Act
COC	Chain of Custody
COPC	Contaminants of Potential Concern
COS	City of Sydney
CSM	Conceptual Site Model
DO	Dissolved Oxygen
DP	Development Plan
DQI	Data Quality Indicators
DQO	Data Quality Objectives
DSI	Detailed Site Investigation
EC	Electrical Conductivity
Eh	Redox Potential
EIL	Ecological Investigation Levels
EPA	NSW Environment Protection Authority
ESA	Environmental Site Assessment
ESLs	Ecological Screening Levels
Ha	Hectare
HILs	Health Investigation Levels
HSLs	Health Screening Levels
INSW	Infrastructure NSW
JBS&G	JBS&G Australia Pty Ltd
LEP	Local Environmental Plan
LOR	Limit of Reporting
NATA	National Accreditation Testing Authority
OCP	Organochlorine Pesticides
OPP	Organophosphate Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PFAS	Per- and polyfluoroalkyl substances
PID	Photoionisation Detector
POEO Act	Protection of Environment Operations Act
PSI	Preliminary Site Investigation
QA/QC	Quality Assurance/Quality Control
RAP	Remedial Action Plan
RPD	Relative Percentage Difference
SAQP	Sampling Analytical and Quality Plan
SCID	Stored Chemical Information Database
SEPP	State Environmental Planning Policy
Metro SWRCP	Site Wide Remedial Concept Plan
TPH	Total Petroleum Hydrocarbons
TRH	Total Recoverable Hydrocarbons
UCL	Upper Confidence Limit
UGNSW	UrbanGrowth NSW
UST	Underground storage tank
VOC	Volatile Organic Compounds

Executive Summary

JBS&G Australia Pty Ltd (JBS&G) was engaged by Department of Planning and Environment (DPE, the client) to prepare a site wide remedial concept plan (SWRCP) for the properties the properties that comprise the White Bay Power Station (WBPS) and Metro Station Sub-Precinct (the site) as shown in **Figures 1** and **2**.

It is understood that The Minister is proposing to rezone the properties within the site to permit a staged mixed-use development as per the Bays West Stage 1 Master Plan presented in **Appendix B**. To assist the rezoning, an assessment of site contamination risks was undertaken as documented in JBS&G (2022[1]) in accordance with the Section 9.1 Ministerial Direction issued under the *Environmental Planning and Assessment Act 1979 Act (EP&A Act)*. The SWRCP is required to establish a suitable framework for management of potentially contaminated media at the site in order to facilitate the staged redevelopment of the WBPS and Metro Station Sub-Precinct.

This SWRCP identifies strategies and remedial/management options to address identified and suspected environmental (site contamination) impacts present at the site such that all areas of the site may be considered suitable for the proposed permissible land use(s) prior to future uses. Further, consideration has also been given to heritage, ecological and other constraints associated with various areas of the site to ensure that the requirements for these various aspects are appropriately considered during activities associated with management of site contamination issues.

Overall, it is considered that the proposed actions outlined in this plan conform to the general requirements of the *Contaminated Sites Guidelines for the NSW Site Auditor Scheme* (3rd Edition) (EPA 2017) because they are: technically feasible; environmentally justifiable; and consistent with relevant laws policies and guidelines endorsed by NSW EPA.

Subject to the successful implementation of the measures described in this plan and the recommendations below, it is concluded that the WBPS and Metro Station Sub-Precinct can be made suitable for the range of intended uses as proposed and that the risks posed by contamination can be managed in such a way as to be adequately protective of human health and the environment.

It is recommended that the processes outlined in this plan be implemented and that the following documentation be developed and implemented in addition to the area specific RAPs to ensure the risks and impacts during remediation works are controlled in an appropriate manner:

- A Remediation Environmental Management Plan (REMP), to document the monitoring and management measures required to control the environmental impacts of the works and ensure the validation protocols are being addressed; and
- A Work Health and Safety Management Plan (WHSP) to document the procedures to be followed to manage the risks posed to the health of the remediation workforce.

Each REMP and WHSP will need to address the potential for a range of chemical contaminant conditions in soil in addition to groundwater, ground gas/vapour and sediment in various areas of the site, in addition to the potential occurrence and storage / handling of asbestos contaminated soils on the site.

Upon completion of the works within various specific areas of the WBPS and Metro Station Sub-Precinct, validation reports and on-going Environmental Management Plans (EMPs) for residual impacted materials as may be retained beneath the specific area footprints will be required to be submitted to the consent authority documenting that the applicable footprint is considered suitable for the proposed use(s), subject (where applicable) to implementation of the relevant ongoing EMP.

[1] *Environmental Site Assessment, Bays West Stage 1, White Bay Power Station and Metro Station Sub-Precinct*, JBS&G Australia Pty Ltd, 20 July 2022 (JBS&G 2022)

1. Introduction

1.1 Background

JBS&G Australia Pty Ltd (JBS&G) was engaged by Department of Planning and Environment (DPE, the client) to prepare a site wide remedial concept plan (SWRCP) for the properties that comprise the White Bay Power Station (WBPS) and Metro Station Sub-Precinct (the site) as shown in **Figures 1** and **2**.

It is understood that The Minister is proposing to rezone the properties within the site, to permit a staged mixed-use development as per the Bays West Stage 1 Master Plan presented in **Appendix B**. To assist the rezoning, an assessment of site contamination risks was undertaken as documented in JBS&G (2022[2]) in accordance with the Section 9.1 Ministerial Direction issued under the *Environmental Planning and Assessment Act 1979 Act (EP&A Act)*. The SWRCP is required to establish a suitable framework for management of potentially contaminated media at the site in order to facilitate the staged redevelopment of the WBPS and Metro Station Sub-Precinct.

This SWRCP identifies strategies and remedial/management options to address identified and suspected environmental (site contamination) impacts present at the site such that all areas of the site may be considered suitable for the proposed permissible land use(s) prior to future uses. Further, consideration has also been given to heritage, ecological and other constraints associated with various areas of the site to ensure that the requirements for these various aspects are appropriately considered during activities associated with management of site contamination issues.

It is anticipated that subject to completion of the initial rezoning/master planning activities, specific development proposals will be defined for the resulting development lots that will then facilitate additional detailed site assessment activities appropriate for each development lot and its proposed use. This will enable preparation of a specific remedial action plan (RAP) for each development lot (or part thereof) within the NSW planning framework prior to approval of a detailed development proposal.

1.2 Objective

The objectives of this SWRCP are to:

- Provide a summary of known and suspected potential site contamination conditions and potential exposure pathways via documentation of a Conceptual Site Model (CSM) applicable to all or portions of the WBPS and Metro Station Sub-Precinct;
- Characterise the proposed potential future site landuses from an environmental perspective, providing identification of the scope of future development parcel specific RAPs as may be prepared to address remediation/management specific to a proposed landuse concept;
- Identify available remedial strategies as may be adopted for the WBPS and Metro Station Sub-Precinct and relevant portions thereof by an assessment of remedial options, including evaluation of options in accordance with the principles of ecologically sustainable development (ESD), heritage, ecological and other constraints associated with various areas of the site and the overall anticipated development objectives for the area(s) of the site.

1.3 White Bay Power Station and Metro Station Sub-Precinct

The Bays West Stage builds on the vision of the Bays West Place Strategy and reflects community feedback from the public exhibition of the place strategy in 2021. The Bays West Stage 1 Draft

[2] *Environmental Site Assessment, Bays West Stage 1, White Bay Power Station and Metro Station Sub-Precinct*, JBS&G Australia Pty Ltd, 20 July 2022 (JBS&G 2022)

Master Plan ('Draft Master Plan') provides a conceptual layout to guide the development of planning controls for the area around the WBPS and the future Bays Metro station identified as the WBPS and Metro Station Sub-Precinct. The rezoning proposal is based on the Draft Master Plan which has informed this report as provided in **Appendix B**.

Draft Master Plan provides overarching guidance about how the area should be developed based on community and stakeholder input, local character and place, current and future demographics, economic and social trends, cultural and environmental considerations, and urban renewal aspirations and needs regarding land use, community recreation, transportation, housing, and jobs. The Draft Master Plan aims to support the broader Bays West area with:

- Offices, shops, cafes and restaurants;
- Social and cultural infrastructure such as a community centre and creative and cultural uses in the WBPS;
- The historic White Bay Power Station protected and reinvented as a centre of community activity; and
- Approximately 2 cumulative hectares of public open space including both landscape and hardscape areas.

The current Emerging Preferred Option as summarised pictorially in **Figure 3**, incorporates:

- A new network of public roadways providing access to and from the site and the adjoining Port Authority of NSW facilities;
- The Metro station development, including sub-ground level station infrastructure in the south-east portion of the site and the Intake Substation (ISS) development in the south-west section of the site;
- Development blocks with the potential for future commercial, retail, community, residential, creative and education uses, which generally will be proposed to be constructed at or above the existing ground plane to address site flooding and ground condition limitations. This may comprise construction of basement level car parking and building plant functions on the current levels with filling of public domain areas above the current ground plane within this portion of the precinct; and
- Public open space along the foreshore area and facing Roberts St, potentially extending to the north-west of the WBPS infrastructure facing the intersection of Roberts St and Victoria Rd and a public domain connection from the Rozelle Rail Yards (beneath Victoria Road) to the WBPS infrastructure. It is currently anticipated that the landscape plan will incorporate surface water features and may include mounding above the current ground plane in areas to assist with surface water management, particularly around the WBPS.

Noting the proposed land-uses, consideration has been given to a variety of generic land-uses as provided to *National Environment Protection (Assessment of Site Contamination) Measure, 1999 Amendment No 1*, National Environment Protection Council (NEPC 2013) and detailed following:

- HIL B – Residential with minimal opportunities for soil access; includes dwellings with fully and permanently paved yard space such as high-rise buildings and apartments;
- HIL C – Public open space such as parks, playgrounds, playing fields, secondary schools and footpaths; and
- HIL D - Commercial/industrial, includes premises such as shops, offices, factories and industrial sites.

2. Site Condition and Environmental Setting

2.1 Site Identification

The site as shown on **Figure 1** and **Figure 2**, comprises the WBPS infrastructure and surrounds bounded by Robert Street to the north, Victoria Road to the west, Western Distributor to the south and White Bay to the east. Individual properties that together form the WBPS and Metro Station Sub-Precinct are identified by Lot and DP identifiers on **Figure 2**. The site details are summarised in **Table 2.1** and described in detail in the following sections.

Table 2.1: Site Summary Details

Address	Robert Street, Rozelle NSW
Lot/DP	Refer to **Figure 2**
Local Government Authority	Inner West Council
Approximate MGA Coordinates of Centre (MGA 56)	Easting: 331343.4 Northing: 6251104.8
Site Zoning	Sydney Regional Environmental Plan No. 26 – City West
Previous Use	Commercial/industrial
Current Use	Vacant
Proposed Use	commercial use, community use, mixed /residential use
Site Area	9.3 hectares

2.2 Site Description

Inspections of various properties forming the site have been completed during the period from June 2014 to May 2017 by various JBS&G consultants suitably trained, qualified and experienced in the identification of site contamination issues. In addition, review of current aerial imagery was completed to confirm previous observations on site remained applicable.

The site comprised two distinct areas including:

- The former WBPS site and immediate surrounds to the street frontages with Victoria Road to the west, Robert Road to the north and the Western Distributor to the south (the former; and
- The former yard/foreshore areas of the WBPS complex extending to the White Bay waterfront currently undergoing site establishment works for The Bays Station.

The former WBPS site was occupied by the retained former power station infrastructure within the northwestern extent including the turbine hall, boiler house, switch house, pump house, chimney, fly ash handling tower, coal wash/settling pit and coal conveyors. This infrastructure was generally surrounded by open space extending to the site boundaries to the north, west and south.

Access to the WBPS site portion occurred via gates from Robert St at the north of the main power station building where several demountable buildings were situated. These were in use as temporary office/ amenities facilities for site security staff and visitors. A loose gravel yard area to the north of the power station building was used as a visitor's vehicle parking area. It is noted that current heritage rehabilitation works in progress at the site has resulted in placement of temporary site sheds etc within the northern yard area of the site.

At the time of JBS&G (2017), the former yard/foreshore areas of the WBPS complex comprised a large area of vacant open space located to the east of the former power station buildings. This area at the time of the investigation works was largely asphaltic concrete paved and used periodically as a vehicle parking lot for activities at Glebe Island and the White Bay Passenger Terminal. Beyond the extent of the paved areas were several areas of overgrown vegetation, comprising shrubs, weeds and small trees. Review of current aerial imagery indicates that the former yard/foreshore areas are currently undergoing site establishment works as part of The Bays Station development works undertaken by Sydney Metro.

Further, at the time of JBS&G (2017), a disused railway siding crossed the site portion comprising the south-east extent of the site in a south-west to north-east direction, entering the site from beneath the Victoria Road overpass and extending into the White Bay Precinct to the north-east of the site. Review of current aerial imagery indicated that the railway siding had been removed as part of The West Connex Rozelle Interchange works to the south of the site and Bays Station development works.

A roadway known as the Port Access Road looped around the foreshore area, crossing the north-east most section of the site and continuing toward the north-east and the Glebe Island Precinct. Review of current aerial imagery indicated that reconfiguration of the Port Access Road was underway as part of The Bays Station development works.

The north-west portion of the site was characterised by a series of terraced levels generally orientated north-east to south-west parallel to the main power station building. These areas comprised a mix of concrete paved, loose gravel and weed covered ground surfaces with infrastructure consistent with previous use as the transformer yards. Driveways and associated gates accessed the various areas from Robert and Mullens Streets and Victoria Road.

Several vertical sandstone cut faces were apparent to the south of the former control room and main power station buildings in the vicinity of the former White Bay Hotel Site and extending to the railway siding.

At the time of JBS&G (2017), a single storey brick building was situated in the south-west most corner of the site, indicated on historical plans to comprise an electrical substation. This building was also located to the south of the former rail easement, and to the north of an asphalt paved access road passing beyond the site boundary, beneath the Victoria Road overpass. Review of current aerial imagery indicated that the substation building had been removed with the construction of the new Anzac Bridge temporary access road as part of Rozelle Interchange roadworks. These recent works included amendment to former ground levels in this southern portion of the site and associated vegetation clearance with subsequent construction of pavements/slope retention below the new approach road level.

An underground cooling water channel, extends beneath the main power station building and passes beneath the balance of the site from the north-east to the south of the site, located as shown in **Figure 2**. Based on site inspections and review of available construction drawings during JBS&G (2017), it is understood that the channel consists of a fully encased constructed tunnel beneath the power station building at considerable depth below the power station ground level and a constructed tunnel through the sandstone bedrock to the south of the building and across to the penstock.

2.3 Surrounding Land Uses

The following land-uses have been observed in proximity of the site.

- North – Mullens St and Roberts St are located adjoining the northern boundary of the site. A range of commercial and light industrial land-uses are located further north;
- East – The northern portion of the eastern boundary is generally shared with wharfage extension toward the White Bay Passenger Terminal infrastructure and White Bay itself. This boundary is defined by a sea wall. The southern part of the eastern boundary is shared with existing industrial (Port) uses of White Bay, including bulk storage and handling of cement;
- South – Victoria Rd is present adjoining the southern boundary of the site. Further south is located a range of light industrial / commercial marine uses as associated with Blackwattle Bay; and

- West – Victoria Road is also present adjoining the western boundary of the site. Further west are located generally residential uses in the suburb of Rozelle.

Surrounding land-uses can be observed on **Figures 1** and **2**.

2.4 Heritage

As reported in JBS&G (2014) the White Bay Power Station is listed under the NSW Heritage Act. The White Bay Power Station (Outlet) Canal and the White Bay Power Station Complex are listed by State Government Agencies. Sewage Pumping Station No 7 lies on Roberts Street in Rozelle and is listed on the NSW Heritage Register. A small portion of the southern extent of this feature is located at the northern boundary of the site.

2.5 Geology and Soils

Review of the Sydney 1:100 000 Geological Series Sheet 9130, NSW Department of Mineral Resources, 1983 indicates that the site is generally underlain by three geological types:

- Man-made fill typically comprising dredged estuarine sand and mud, demolition rubble, industrial and household waste;
- Quaternary aged silty to peaty quartz sand, silt and clay deposits with ferruginous and humic cementation in places and with common shell layers; and
- Hawkesbury Sandstone typically characterised as medium to coarse-grained quartz sandstone with very minor shale and laminate lenses.

The upper reaches at the east of the site are typically underlain by Sandstone bedrock as evidenced by sandstone bedrock outcrops occurring at the west and south-west of the site likely as a result of historical construction of the WBPS.

Closer to the water's edge, it is expected that the Sandstone bedrock is overlain by quaternary aged deposits and in some instances man-made fill material where reclamation has historically occurred to generate current site levels. It is further understood that at several volcanic dyke intrusions have been identified to extent across the site in a north-west to south-east alignment. Retaining walls, including those associated with the transformer yard occur in the north-west of the site resulting in variable depths of fill material.

Review of the *Sydney 1:100 000 Soil Landscape Series Sheet 9130*, Department of Land and Water Conservation, 1983 indicated that the site primarily lies within a Disturbed landscape. Disturbed landscapes are reported to generally comprise hummocky terrain, extensively disturbed by human activity including complete disturbance, removal or burial of soil, variable relief and slopes. Disturbed landscapes may include quarries, tips, land reclamation and large cut and fill features. Original vegetation may cleared and weeds may be abundant.

Within these profiles, the ground generally includes soil, rock, building and waste materials. Limitations of Disturbed landscapes includes soils with high variability that may include engineering hazard, unconsolidated low bearing strength materials, low permeability, poor drainage, very low soil fertility, toxic materials and wind erosion hazard. Disturbed landscapes may be sources of sediment and groundwater contamination.

None of the above mentioned landscapes are associated with saline soil conditions and as such this area of Sydney is not presented in published salinity risk maps. However, it is noted that groundwater within the foreshore area has previously been characterised as brackish to marine in character as a result of White Bay surface water intrusion and tidal influence and as such, design of below ground infrastructure would need to consider the potentially aggressive nature of marine water.

Previous site investigation activities have identified that from the WBPS buildings toward the water line, the sandstone bedrock is increasing overlain by placed fill material, comprising variable sandy material with incorporated coal wash, ash and slag components. In some instances, inclusions of sandstone, concrete and other building debris were noted. Fill material occurred to variable depths, being typically of approximately 1 m to 4 m below ground level (m bgs) as shown in **Figure 5.** It is noted that Senversa (2021) has indicated that suspected cow hair was noted within marine sediment in the foreshore fill areas, interpreted to potentially indicate disturbances historically occurred to a much greater depth than the above. JBS&G considers that this may be attributed to disturbance and turning over of sediment on the mudflat as part of natural disturbances during Glebe Island construction work.

Given the history of industrial activity and documentary evidence of former railway lines, coal loader infrastructure, etc it is anticipated that near surface and buried infrastructure will be present in various areas of the site, including buried foundations, railway lines, pits, culverts, etc. Data from range of sampling points shown in **Figure 4** have been excluded from the depth of fill model presented in **Figure 5** given they were terminated on near surface pavements, or other obstructions, within fill material. This particularly occurred in the northeast portion of the site to the east of the current port access road. It is also noted that the heritage cooling water inlet-outlet channel passes from White Bay, beneath the WBPS building and extends to Rozelle Bay beneath the Anzac Bridge approach road (as shown in **Figures 2** and **4**).

Marine and alluvial sediment deposits underlay the fill material from the WBPS buildings through to the eastern sea wall. These materials comprise highly variable silty clay, clayey silty and gravelly sand with organic matter and shell material inclusions. This profile extended to depths of between approximately 3 m and approximately 20 m bgs where sandstone bedrock (or the dyke intrusion) was encountered. Based on the depositional environment it is anticipated that at least a portion of these sediments will be characterised as Potential Acid Sulfate Soils (PASS).

2.6 Acid Sulfate Soils

Review of the *Prospect/Parramatta River 1:25 000 Acid Sulfate Soil Risk Map Sheets* 9130N3 indicates that the majority of the site is located within an area classed as ‘disturbed terrain’. Areas having this classification typically include filled areas which often occur following reclamation of low lying swamps for urban development. Other areas with this classification may include areas which have been mined, dredged, or have undergone heavy ground disturbance through general urban development. Soil investigation is required to assess these areas for acid sulfate potential.

Based on previous site investigation activities completed in various portions of the site, potential ASS conditions have been identified in natural alluvial/marine soil underlying fill material. Where natural alluvial/marine soil/sediments are identified or fill materials have alluvial/marine characteristics appropriate measures to manage the acid generation risks will be required to be documented as an ASS management plan (ASSMP) prior to any works that may result in disturbance (and so oxidation) of these materials.

Broadly, fill material where assessed has been identified as having being imported to the site rather than reclaimed via dredging activities and as such, has not been identified as ASS. However, it should be noted that further characterisation of site conditions prior to the commencement of ground disturbance activities should be completed to verify the absence of fill material with unacceptable acid generation potential.

2.7 Topography and Hydrology

Review of the regional topographic data on the NSW Government Land and Property Information Spatial Information eXchange website (SIX Maps) indicated that the majority of the site within is generally at or near to an elevation of 5 m Australian Height Datum (AHD). The northwest site corner nearby to the Robert St and Victoria Road intersection is comparably elevated when compared to

the balance of the site, with terraced levels present to the west of the Power Station buildings and associated vertical sandstone rock faces as discussed above.

The balance of the site is relatively level over its area apart from minor modifications associated with construction of the Port Access Road to assist with drainage and the batter slope defining the approach to the Anzac Bridge within the southern most portion of the site (recently modified as part of the Rozelle Interchange works). The site topography is understood to have been substantially filled by the historical infilling of low lying / estuarine areas and as a result of construction activities for the Anzac Bridge approaches in the southern most site portion.

Some drainage infrastructure is still present on the site as associated with the site's historical use as a power station, associated with surface water drainage from the adjoining Robert Street and the Port Access Road looping roadway that passes through the eastern portion of the site. Surface water generally moves across the site surfaces to enter drainage infrastructure where present and then typically discharges to White Bay, or otherwise runs overland and discharges to White Bay.

2.8 Hydrogeology

Review of the NSW Natural Resource Atlas registered groundwater bore information completed during previous site assessments has identified two recorded groundwater bores cross gradient to the site located to the north of White Bay.

Based on the previous available site investigation information broadly available for the site, groundwater within the central and eastern filled areas of the site has generally been reported at relatively shallow depths of 2m to 3.5 m bgs, with increasing tidal fluctuations toward the east of the site. It is anticipated that groundwater movement within sandstone areas in the west of the site will occur within fractures and inconsistencies within the sandstone bedrock formation. Flow directions generally occur toward the east and White Bay.

2.9 Meteorology

A review of average climatic data for the nearest Bureau of Meteorology monitoring location (Sydney - Observatory Hill[3]) indicates that the site is located within the following metrological setting:

- Average minimum temperatures vary from 8.1°C in July to 18.9°C in February;
- Average maximum temperatures vary from 16.4°C in July to 26.0°C in January;
- The average annual rainfall is approximately 1213.4 mm with rainfall greater than 1 mm occurring on an average of 99.5 days per year; and
- Monthly rainfall varies from 68.1 mm in September to 133 mm in June with the wettest periods occurring on average during the period from March to June inclusive.

2.10 NSW EPA Public Register Search Records

A search of the NSW EPA's public register maintained under the Protection of the Environment Operations Act (POEO) 1997 was undertaken and is included as **Appendix C**.

The search identified that there have been no prevention, clean-up or prohibitions notices and no transfer, variation, suspension, surrender or revocation of an environment protection licence (EPL) for the properties comprising the site.

[3] http://www.bom.gov.au/climate/averages/tables/cw_066062.shtml Commonwealth of Australia, 2011 Bureau of Meteorology, Product IDCJCM0028 prepared at 30 June 2022 and accessed by JBS&G on 5 July 2022.

A search was undertaken through the EPA's public contaminated land register and is included as **Appendix C**. The search identified that there were 7 former notices for the WBPS issued under the Contaminated Land Management Act 1997 (CLM Act).

A search of NSW contaminated sites notified to the EPA was undertaken and is included as **Appendix C**. The search identified that the WBPS has previously been notified to the EPA under section 60 of the CLM Act with regards to contamination, with regulation under CML Act considered not to be required.

A search was also undertaken through the EPA's Per- and polyfluoroalkyl substances (PFAS) register of contaminated sites. The search identified that there are no sites within vicinity of the site notified to the EPA with regards to PFAS contamination.

3. Summary Site History

Given the proximity of the WBPS and Metro Station Sub-Precinct to Sydney CBD and the initial location of Sydney colony, portions of the site have a long and often varied history of uses that may contribute to current site contamination characteristics. Broad comments in relation to historical site use information are made in the following sections.

It is anticipated that specific uses of various individual areas within the site will be required to be documented in future detailed site assessment activities to facilitate preparation of defensible site assessments to support Remedial Action Plans (RAPs) for future redevelopment.

Based upon information presented in previous site investigations, previous site uses are summarised in the following overall comments:

- 1800s – the White Bay Power Station site comprised a mud flat bound by high ground to the north, west and south of the site prior to the commencement of reclamation activities in the mid to late 1800s that resulted in the joining of Glebe Island to Rozelle in the south east of the Precinct extent.
- 1840s – a causeway was constructed at the south extent of the Precinct joining Rozelle to the sandstone outcrop known as Glebe Island. Prior to this, the island could only be accessed across mud flats at low tide. At other times the waters of White Bay freely mixed with those of Rozelle Bay.
- 1860s – the east portion of the White Bay Power Station site was still to be reclaimed, roads had been constructed at the west and south extent of the Precinct extending from Balmain/Rozelle via Glebe Island to Pyrmont.
- 1880s - maps prepared during this period indicated a small gas works was located to the north of White Bay in line with Rumsay St.
- 1890s – William Lever purchased land within the north east portion of the Precinct and it is reported a portion of the foreshore was reclaimed in the construction of a soap and coconut oil factory. These works were run as a subsidiary of the British soap manufacturer Lever Brothers (later Unilever). Whilst the majority of the factory site is situated to the north east of the Precinct extent, the reclamation works may have included the north east most portion of the Precinct and the west extent of the adjoining White Bay Precinct. The balance of the north portion of the Precinct comprised a mix of residential and small scale commercial/industrial uses. Balmain maps of approximately 1890 indicate at number of developments were located to the north of Abattoir Rd above the high water mark at this time.
- 1910 – the Royal Commission on Sydney Improvement Plan No 55 indicated that the low lying Power Station site portion of the Precinct footprint comprised a recreation reserve indicating that reclamation works associated with the former bay had resulted in new land to approximate extent apparent today within the Precinct.
- 1910s – private properties within the Power Station site were reportedly resumed from owners and initial power station construction works commenced, including construction of the water cooling conduit beneath the main turbine house. Ash and coal rail sidings and the Glebe Island sidings were constructed during this period in conjunction with infrastructure in the Rozelle Rail Yards Precinct and wharfage in the adjoining Glebe Island and White Bay Precincts. The Power Station plant was reported to have become operational in approximately 1917. The White Bay Hotel was also relocated to its modern day location at the west extent of the Precinct facing Victoria Road.

- 1920s – at the Power station site construction of additional infrastructure was completed by 1928. To the north of the power station the Roberts St industrial area was increasing developed for a range of small industries including further development of the soap works. The foreshore area comprising the east portion of the Power Station site appeared to largely be vacant open space beyond the extent of the rail sidings limited to the area immediately east of the turbine house and the south sidings extending to the Glebe Island Precinct. During these works, a road overbridge was constructed over the rail sidings leading from the Rozelle Rail Yards Precinct at the south west of the Precinct.
- 1930s - additional wharf infrastructure had also been developed at the east extent of the Precinct. Industrial development of the Robert St portion had also increased with the construction of larger factory complexes. The water intake canal in the north east of the Precinct had also been enlarged to a more formal channel.
- 1940s – an upgrade of the power station was reported to have been undertaken, including the installation of large oil/fuel storage tanks increasing the power generation capacity of the plant. Large warehouses had also been constructed to the east of the power station rail sidings.
- 1950s – further upgrades of the Power Station included the construction of a new boiler house and subsequent demolition of the former boiler house building. The former large warehouses within the Power Station site were demolished and the rail sidings to the coal loader at the No.1 Balmain Wharf at the north east extent of this Precinct and south west extent of the White Bay Precinct were established. Redevelopment of industrial land uses in the Roberts St portion of the Precinct was also occurring with some areas developed into larger yard/factory complexes.
- 1970s – operation of the White Bay Power Station was wound back with generation of power becoming a part time occurrence by the end of the 1970s.
- 1980s – the power station ceased operation in the early 1980s following which the boiler house was demolished and the above ground storage tanks were removed from the site. Upgrades to the road approaching Glebe Island Bridge at the south extent of the Precinct included the widening of the road reserve in this portion of the Precinct.
- 1990s – the former coal loader was demolished and the area replaced with a large hardstand yard and the White Bay container wharf infrastructure upgraded at the east of the Precinct and beyond. In the south portion of the Precinct further roadworks resulted in the construction of the underpass below the intersection of Victoria Road and the City West Link within the Precinct.
- 2000s – the White Bay Hotel was destroyed by fire and subsequently demolished.
- 2022 - The WBPS infrastructure remained largely unchanged, other than roof replacement activities in the 2000s, which resulted in the removal of former asbestos sheeting roofs and other limited preservation works to maintain the building. The former yard/foreshore areas to the east of the WBPS complex extending to the White Bay were undergoing site establishment works for the construction of The Bays Station. In addition heritage preservation works of the White Bay Power Station built infrastructure have also commenced during 2022, which are limited to above ground measures to ensure the ongoing stability and preservation of the structures.

4. Previous Assessments

A range of assessment reports prepared by JBS&G and others has been made available for review across the site to support this assessment. The following sections provide a summary and evaluation of the information and site characterisation data presented in each report, noting that a number of reports refer to the larger Bays Precinct footprint as a whole, whilst the remainder of the reports are specific to individual premises within the WBPS and Metro Station Sub-Precinct.

Comments in relation to contaminants of potential concern are provided in the following text in relation to assessment criteria adopted by the author at the time of report preparation. Exceedances shown in accompanying summary results tables are based on assessment criteria typically endorsed by NSW EPA at the time of the assessment report preparation. This comprises the range of health investigation levels presented in NEPC (1999[4]) and EPA (1994[5]) for investigation results generally up to an including the end of 2012; ANZECC (2000[6]) for groundwater and sediment thresholds until mid 2018, following which ANZG (2018[7]) has been adopted and NEPC (2013[8]) for groundwater results from 2012 onward (where TRH and benzo(a)pyrene TEQ values) were presented in reports.

This is considered appropriate to identify contaminants requiring further consideration in relation to development of an appropriate high-level management/remediation framework. Development of detailed remediation/management strategies for future specific land use proposals will be required to develop site specific assessment criteria with consideration to relevant land use scenarios against which the presented data may be further evaluated.

The reports as discussed in the following sections include:

- *Preliminary Site Contamination Investigations Bays Precinct City West for City West Development Corporation*. May 1998. Johnstone Environmental Technology Pty Ltd. Ref: JET0548-058. (JET 1998a).
- *Restricted Phase II Environmental Contamination Assessment of White Bay Rail Yards*. Prepared for Rail Estate, Johnstone Environmental Technology Pty Ltd. Ref: JET0697-004. Amendment B, May 1998 (JET 1998b).
- *Environmental Site Assessment, White Bay Power Station, Rozelle, NSW*. July 2003. Parsons Brinckerhoff. (PB 2003).
- *Targeted Contamination Assessment, White Bay Power Station, Rozelle NSW*. July 2012. Noel Arnold and Associates Pty Ltd. Ref: C107941:J110986. (NAA 2012).
- *Gauging and Penstock Sampling Summary Report, White Bay Power Station, Rozelle, New South Wales*. Prensa Pty Ltd. February 2013. (Prensa 2013a).
- *Stage 2 Groundwater Assessment, White Bay Power Station, Rozelle, NSW, 2089*. July 2013. Prensa Pty Ltd. Ref: 50758:S0014. (Prensa 2013b).
- *Re: White Bay Power Station – Up-date of Groundwater Monitoring Program and Way Forward*. Ryall Environmental Pty Limited, 15 November 2013 (Ryall 2013).

[4] *National Environment Protection (Assessment of Site Contamination) Measure, 1999*. National Environment Protection Council, 1999 (NEPC 1999)

[5] *Contaminated Sites: Guidelines for Assessing Service Station Sites*. NSW EPA December 1994 (EPA 1994)

[6] *Australian and New Zealand Guidelines for Fresh and Marine Waste Quality, Volume 1*, Australian and New Zealand Environment and Conservation Council (ANZECC) and Agriculture and Resource Management Council of Australia and New Zealand, October 2000 (ANZECC 2000)

[7] *Australian and New Zealand Guidelines for Fresh and Marine Water Quality,* Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia. Available at www.waterquality.gov.au/anz-guidelines (ANZG 2018)

[8] *National Environment Protection (Assessment of Site Contamination) Measure, 1999 Amendment No. 1 2013* (NEPC 2013)

- *Groundwater Monitoring Program No.1 Round 3 – March 2015, White Bay Power Station, Rozelle, New South Wales, 2039*. March 2015, Ref: 50758:S0013. (Prensa 2015).
- *Geotechnical and Noise Studies for White Bay to Glebe Island, Central Railway to Eveleigh, Ultimo to Pyrmont*. Kinhill Engineers Pty Ltd. August 1990. (Kinhill Engineers 1990).
- *Preliminary Site Investigation, Bays Precinct*. JBS&G Australia Pty Ltd, October 2014, Rev 1 (JBS&G 2014);
- *Evaluation of Existing Site Characterisation Data, The Bays Precinct Urban Renewal Program*. JBS&G Australia Pty Ltd, 16 November 2015, Rev 0 (JBS&G 2015a);
- *Environmental Site Assessment, The Bays Precinct Urban Transformation Area*. rev 1, 18 November 2015, JBS&G Australia Pty Ltd (JBS&G 2015b);
- *Site Wide Remedial Concept Plan, The Bays Precinct Urban Transformation Area*. rev 0, 4 December 2015, JBS&G Australia Pty Ltd (JBS&G 2015c);
- *Additional Contamination Assessment at White Bay Power Station Roberts Street Rozelle NSW*. rev A, 27 January 2016, JBS&G Australia Pty Ltd (JBS&G 2016);
- *Detailed Site Investigation White Bay Power Station Proposed Lot 1 Roberts Street Rozelle, NSW*. 31 March 2017, JBS&G Australia Pty Ltd (JBS&G 2017a);
- *Human Health and Ecological Risk Assessment, Proposed Lot 1 White Bay Power Station 28 Robert Street Rozelle, NSW*. 21 April 2017, JBS&G Australia Pty Ltd (JBS&G 2017b);
- *Detailed Site Investigation Proposed Lot 2, White Bay Power Station Robert Street Rozelle NSW*. draft, 5 May 2017, JBS&G Australia Pty Ltd (JBS&G 2017c);
- *Additional Hazardous Materials Assessment, White Bay Power Station Site, Robert Street, Rozelle, NSW*. 13 September 2021, JBS&G Australia Pty Ltd (JBS&G 2021).
- *Factual Contamination Assessment Report*. 1791865-002-RCAR- Rev0. 6 May 2020. Golder/Douglas Partners (GDP 2020a).
- *Sydney Metro West Contamination Assessment Report, The Bays Precinct, Stage 1 Early Works Package, White Bay, Rozelle, NSW*. 1791865-021-R-Rev1. 26 June 2020. Golder/Douglas Partners (GDP 2020b).
- *Sydney Metro West. Groundwater Monitoring Report – Stage 2 Locations*. 26 February 2021 Rev 0. (Rev A dated 7 October 2020). Golder / Douglas Partners (GDP 2020c).
- *Sydney Metro West. Addendum Draft Geotechnical Data Report – Tunnels and Excavations Investigation*. 17 May 2021, Rev 2 (Drafts Rev 0 dated 5 March 2021, Rev 1 dated 9 April 2021. Golder/Douglas Partners (GDP 2021).
- *Sydney Metro West. White Bay Site Investigation. Interpretive Contamination Investigation Report – Port Authority of New South Waste Licence Area, The Bays*. Senversa 23 July 2021 (Senversa 2021).
- *White Bay Power Station & Robert St Sub-Precincts Master Plan. Geotechnical Considerations*. PSM Consult Pty Limited, 7 July 2022 (PSM 2022).

4.1 JET (1998a) Preliminary Assessment, Bays Precinct City West

JBS&G were provided with a minor extract of this report, comprising part of the results discussion, a sample location plan and an extracted data summary table. The available sections indicate that ash and cinder impacted fill with PAH contaminant concentrations above the 'commercial threshold concentrations' was present to the north of the power station building and around the coal settling

tank (to the north-east of the building). Groundwater assessment indicated that PAH impacts were not present in the underlying groundwater.

4.2 JET (1998b) Restricted Phase 2 Assessment, White Bay Rail Yards

Assessment of the White Bay rail marshalling yards was completed across an area of approximately 6 Ha in size to facilitate redevelopment of the site for port related purposes. The scope of work completed included the review of available previous contamination assessment reports and historical site use information; a detailed site inspection; a field soil and groundwater sampling program; laboratory analysis of samples; and evaluation of the resulting data.

Sampling completed for this assessment was designed to complement previous investigation activities documented in an earlier JET report (likely finalised as JET 1998a). Investigation works included the sampling of three new monitoring wells and three installed during earlier investigation activities. Composite sampling was completed for the analysis of (soil) samples for heavy metals, non-volatile organic compounds and PAHs. The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**. Future characterisation in these areas was required to confirm current conditions as part of future data gap investigation activities.

Broadly the investigation identified the potential for elevated concentrations of heavy metals in soil and surface TPH impacted ballast in the rail-siding area at the south east of the site; TPH impact in the former transformer yard in the north west of the site; PAH impacts in the vicinity of the former coal storage area in the north east of the site where limited lead impacted soil was also identified; heavy metal impacted surface soils associated with blasting grit in the south west of the site near the Victoria Rd overpass and the potential for asbestos impacts associated with historical use of asbestos containing material in rail stock brake shoes.

Groundwater sample analyses identified various copper, lead and zinc heavy metal concentrations above the adopted thresholds which were not attributed to contamination sources from within the White Bay Rail Yards site.

4.3 PB (2003) Site Assessment, White Bay Power Station

This report documents an assessment of the Power Station site (3.66 Ha) to better confirm the extent of contamination identified during previous contamination investigation. The scope of work included review of the available previous investigations; sampling at 31 soil sampling locations and 11 groundwater monitoring wells (including 4 new wells and 7 pre-existing wells), evaluation and documentation of the resulting data.

The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

Smaller areas of environmental concern were reported including PAH and benzo(a)pyrene impacted fill south of the turbine hall; TPH impacted marine soils located to the south-east of the turbine hall and in material underlying the former Boiler House 2 location. It was noted by PB that there is the potential for additional zone(s) of fill containing coal ash and cinder to potentially occur in the vicinity of the main power station building (turbine hall) footprint.

Groundwater at MWB1 in the transformer yard was impacted with TPH (C10-C36) with concentrations in excess of 129,300 µg/L. Low levels of PAH compounds were also identified in groundwater at this location. The elevated levels of TPH were considered by PB to have possibly been derived from seepage of transformer oils into the ground over a long period of time resulting in soil and groundwater impacts in this area of the site. Contaminant concentrations down-gradient of the yard and the broader turbine hall were reported to demonstrate the absence of significant widespread contaminant migration. Whilst some elevations of individual heavy metals were

identified, the concentrations were considered to not be indicative of significant site contamination sources.

4.4 NAA (2012) Targeted Assessment, White Bay Power Station

This report documented a targeted assessment of groundwater conditions at the site, including a review of existing data and implementation of a groundwater monitoring event at four existing wells including MWB1 and three locations to the east and south-east of the main power station building (turbine house). The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

The groundwater sampling event identified the presence of light non-aqueous phase liquid (LNAPL) oil product approximately 200 mm in thickness at MWB1, located in the vicinity of the former switchyard. A discrete sample of the LNAPL product was analysed for PCBs with the results reported to be less than the laboratory LOR.

In addition to the LNAPL identified at this location, concentrations of TPH (C10-C36) were also identified in the most southerly monitoring well location (MWB2). Arsenic concentrations in the three easterly wells and zinc concentrations in two of the three easterly wells were reported to exceed the adopted thresholds.

4.5 Prensa (2013a) Groundwater and Penstock Assessment, White Bay Power Station

Following NAA (2012) Prensa completed further evaluation of LNAPL characteristics in groundwater in the vicinity of the former transformer yard and assessment of potential contaminant migration to address site owner obligations under Section 60 of the CLM Act.

The completed scope of works comprised field pump out and recovery tests in the LNAPL impacted well, and the collection/laboratory analysis of surface water samples from the penstocks to the north-east and south of the power station. A sample of LNAPL was also analysed during the assessment to evaluate the potential source of the product. The penstock surface water samples were designed to provide information on water conditions within the water circulation conduits that flow beneath the power station building as these were considered potential receptors of contaminant migration. The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

There was reported to be a LNAPL thickness of 260 mm at the time of the investigation and subsequent laboratory analysis identified this as comparable to transformer oil. The rebound thickness of LNAPL was measured as approximately 50 mm, with some minor tidal influence noted during gauging events with the distance below ground of the LNAPL less than 1 m.

4.6 Prensa (2013b) Stage 2 Groundwater Assessment, White Bay Power Station

Prensa were engaged to complete additional assessment of groundwater contamination conditions at the White Bay Power Station site following the outcome of the NAA (2012) and Prensa (2013a) assessments. It was reported that notification of the site has been completed under section 60 notification to the NSW EPA prior to issue of this report.

A total of nine wells were sampled (seven new and two existing) comprising locations. The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

One soil sample (3900 mg/kg) was identified as having lead concentrations above the adopted threshold (based on NEPC 2013 derived criteria) as shown in Figure 5D.

A summary of the reported groundwater sample laboratory analysis results are provided in Table C2. Concentrations of copper, nickel and zinc in groundwater were identified to exceed the adopted ecological assessment criteria in a number of wells. It was considered this was unlikely to be

specifically related to site conditions and unlikely to pose a risk to downgradient ecological receptors as they were likely representative of the natural geology of the Sydney basin.

LNAPL was still present in MWB1 at a thickness of 1 mm. Concentrations of TRH in MW02 in the central area of the site were reported in the range consistent with that previously identified in NAA (2012). The penstock surface water sampling results reported in Prensa (2013a) were considered to indicate that significant TRH contamination of this identified preferential contamination migration pathway was not currently occurring.

Based on the scope of work completed, Prensa indicated that it was unlikely LNAPL identified at MWB1 had significant impacted down-gradient areas of the site. Further, the reported groundwater contaminant concentrations were considered by Prensa as being unlikely to represent a significant risk to future or current site users based on the continued commercial/industrial use of the Site.

4.7 Ryall (2013) Groundwater Conditions and Monitoring Advice, White Bay Power Station

Ryall (2013) presented advice relating to ongoing management of transformer oil impact identified at the Power Station site. The advice was prepared following review of the results of the groundwater monitoring program implemented during 2013 (including Prensa 2013a and 2013b as discussed above and additional unsighted correspondence).

Ryall concluded that whilst it was given that remediation of the transformer oil present in the vicinity of MWB1 and its source would be required, it was considered that the impact was contained at present and that remediation would not be required in the 'short term'. It was considered appropriate that remediation works be undertaken at the time the site is to be redeveloped. A "no dig" policy was recommended at the site to ensure that no intrusive works would take place in the vicinity of the identified impact in addition to periodic ongoing monitoring such that should conditions at the site change, appropriate actions may be implemented to manage any identified migration of contaminants.

4.8 Prensa (2015) Groundwater Monitoring Results, White Bay Power Station

Prensa documented monitoring of existing groundwater monitoring wells as required to be reported to the EPA as part of their 'watching brief'. The scope of works included the evaluation of potential light non-aqueous phase liquid (LNAPL) in MWB1/MW01 and sampling of nine monitoring wells. The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

Concentrations of copper, nickel and zinc in groundwater were identified at levels above the adopted ecological based criteria. Prensa considered that these exceedances within the groundwater were unlikely to be the result of on-site contamination and instead were representative of background conditions.

No sample of groundwater from MWB1/MW01 where LNAPL was identified was submitted for laboratory analysis. TRH concentrations in MW02 were reported at concentrations exceeding the Dutch Intervention Value (0.6 mg/L) adopted for evaluation of the site data. This concentration was reported to be consistent with concentrations reported in Prensa (2013a/2013b).

4.9 JBS&G (2014) Preliminary Site Investigation, The Bays Precinct

JBS&G was engaged by UrbanGrowth NSW (UGNSW) to complete a phase 1 preliminary site investigation covering all seven Precincts of the Bays Precinct site (including Blackwattle Bay, White Bay Power Station, Rozelle Rail Yards, Rozelle Bay, Glebe Island, White Bay and Wentworth Park) to commence a staged site contamination evaluation process.

It was understood that the evaluation would contribute to a UGNSW driven concept plan for rezoning and future mixed use redevelopment of under-utilised foreshore land for mixed purposes. No surface or sub-surface intrusive investigations were undertaken for this assessment.

The objective of the Phase 1 assessment was to identify and document the potential for contamination concerns at the site based on available historical and current site use information in conjunction with available previous investigation information as available at the time of the engagement.

The outcomes of the phase 1 assessment included a Conceptual Site Model (CSM) which identifies: known and potential sources of impact and constituents of potential concern including the mechanism(s) of impact; potentially affected media (soil, sediment, groundwater, surface water, indoor air and ambient air); human and ecological receptors; potential and complete exposure pathways; and potential preferential pathways for migration. For the WBPS portion, the outcomes of this investigation are further discussed and refined in **Section 5** providing for the incorporation of information from additional previous site investigation reports as reviewed herein, or portions thereof.

4.10 JBS&G (2015b) Evaluation of Existing Data, The Bays Precinct

JBS&G was engaged by UGNSW to undertake an evaluation of all existing available site contamination assessment reports previously prepared for the properties that comprise the Bays Precinct Urban Transformation Area (BPUT) to assist with development of concept plans for the urban transformation proposal and to address statutory information requirements for a future rezoning.

A range of previous site investigation reports discussed in the following sections were included in the phase 1 assessment review. The outcome of the review comprised minor additions/amendments to the CSM developed in JBS&G (2014).

For the WBPS Precinct, areas of potential environmental concern (APECs) were identified including: Contiguous fly ash area – including coal washing/settling tanks and area north east of primary building; transformer and switchyard area; fill across site (ash included, but separate to contiguous fly ash area); coal storage and processing areas; ash handling yard; railway passages; boiler house 2 footprint; general inventory and warehouse building footprints and oil storage tank footprints.

The outcomes of this investigation are further discussed and refined in **Section 5** providing for the incorporation of information from additional previous site investigation reports as reviewed herein, or portions thereof.

4.11 JBS&G (2015b) Targeted Site Investigation, The Bays Precinct

JBS&G was engaged by UGNSW to complete a range of site contamination assessment activities, inclusive of review of existing available reports and targeted supplementary assessment to provide a basis for preparation of a site wide remedial concept plan (SWRCP) document as per the adopted UGNSW Management Strategy for Impacted Land within the Bays Precinct.

The broadscale investigation works were part of a staged strategy designed to result in the delivery of a SWRCP to support the future rezoning application for the Bays Precinct Urban Transformation Program. The objective of the investigation program was to supplement the separate evaluation of existing data collected by JBS&G and others with limited field investigation data in order to confirm the absence of significant and/or widespread contamination issues at the site and to provide sufficient data to support the preparation of the SWRCP. This report documented limited supplementary investigation activities completed within accessible portions of the Blackwattle and WBPS Precincts prior to development of the SWRCP.

Specific to the WBPS portion of the Bays Precinct, the scope of work comprised: implementation of a targeted site investigation program including soil, groundwater, soil vapour, ground gas and acid sulfate soil sampling as per an approved Sampling Analysis and Quality Plan (SAQP); comparison of levels of environmental constituents against relevant guidelines; and preparation of a limited Environmental Assessment (ESA) report.

The soil sampling program comprised the collection of soil samples from boreholes advanced by push tube at 6 locations within the WBPS Study Area, with sampling and subsequent analysis of representative samples for identified COPCs and sampling/analysis for ASS characterisation at 2 locations. Assessment of groundwater conditions comprised the installation of 3 new groundwater monitoring wells and sampling/ analysis of the 3 new wells in addition to 3 existing monitoring wells. Soil vapour assessment was also completed at 3 locations and ground gas assessment was undertaken at 5 monitoring wells. The documented sampling locations are shown in **Figure 4**.

Identified COPCs in soil comprised: heavy metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), volatile organic compounds (VOCs), organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs) and asbestos in soil. Groundwater COPCs comprised: heavy metals, TRH/BTEX, VOCs, PAHs, total nitrogen and phosphorus. Soil vapour samples were analysed for VOCs. The ground gas assessment was based upon field measurements, whilst representative samples for ASS where analysed for sPOCAS and chromium reducible sulfur. A summary of the reported sample laboratory analysis results are provided in **Appendix A**.

Adopted site assessment criteria were based upon the existing land uses, comprising a combination of commercial/industrial and recreational/public open space land uses. In light of the future permissible land uses nominated in the rezoning proposal, reference was also made to scenarios including a residential with minimal soil access land use. Relevant thresholds for soil and soil vapour were derived from relevant investigation and/or screening levels presented in NEPC (2013). Groundwater criteria were derived with reference to the NSW EPA's endorsed environmental values for the Parramatta River catchment in addition to drinking water/recreational waters as required by DEC (2007[9]), resulting in the adoption of ANZECC (2000) trigger values for ecological risk and NHMRC (2008[10]) and NHMRC (2011; 2018[11]) guidance for recreational exposure. Ground gas data were assessed via comparison with EPA (2012[12]). Acid sulfate soil data was assessed via comparison with trigger values presented in ASSMAC (1998[13]).

Consideration was also given to assumed background concentrations appropriate for inner Sydney commercial/industrial land uses in evaluating the data, particularly in areas with fewer valid data points, such that the potential for significant contamination other than that identified during the investigation may be evaluated.

A data quality validation assessment considered that procedures implemented for the assessment were suitable to demonstrate the collected and reported data is suitable to address the objectives of the assessment, inclusive of supporting the development of a conceptual site model and future remedial strategy for the broader site.

The completed field works identified the presence of fill material underlying current ground levels within the WBPS Study Area to depths of approximately 1 m to 3 m bgs. The fill material typically comprised of gravelly sand with inclusions of sandstone, brick, ash, slag, and concrete. The fill observed was underlain by fine grained sands and clay material typical of estuarine sediments and sandstone. There was no significant evidence of odours or staining observed within the soil/fill profile during the field works with the exception of minor estuarine/sulfide odours at location WB2. The PID readings varied from 0.0 and 3.5 ppm, indicating that there were no significant indications for the potential presence of TPH or VOCs in soils. In addition, there was no ACM observed within

[9] *Contaminated Sites: Guidelines for the Assessment and Management of Groundwater Contamination*. Department of Environment and Conservation NSW, March 2007 (DEC 2007)

[10] *Guidelines for Managing Risks in Recreational Water*. Australian Government National Health and Medical Research Council, February 2008 (NHMRC 2008)

[11] *National Water Quality Management Strategy, Australian Drinking Water Guidelines 6, 2011*. Australian Government National Health and Medical Research Council, Version 3.5 Updated August 2018 (NHMRC 2018)

[12] *Guideline for the Assessment and Management of Sites Impacted by Hazardous Ground Gases*, NSW EPA 2012 (EPA 2012)

[13] *Acid Sulfate Soil Manual*. Acid Sulfate Soil Management Advisory Committee, ASSMAC, 1998 (ASSMAC, 1998)

any of the boreholes or test pits advanced as part of this investigation. However, building demolition waste was noted at several locations within fill, indicating the elevated potential for the presence of ACM within fill at these locations.

Groundwater was generally grey-brown and ranged from clear to moderately turbid. Standing groundwater levels were between 1.634 m bgs and 4.765 m bgs. Review of the field parameters recorded for the samples indicated that the groundwater is brackish to saline, low in oxygen and with a pH close to neutral in all wells.

Whilst no detections of methane gas were identified, low concentrations of carbon dioxide were identified in a number of the gas monitoring wells. In accordance with the EPA (2012) methodology, a gas screening value (GSV) of 0.015 L/h CO_2 was adopted as worst case for the Precinct. This GSV value falls within 'characteristic gas situation 2', comprising low risk conditions.

Laboratory analysis results for soil identified the presence lead at one location (WB4 1.9-2.0 m) exceeding the adopted criteria in localised fill material. A concentration of nickel was detected at one groundwater sampling location (MW106) with levels greater than 1 order of magnitude above the adopted ecological investigation threshold. Elevated levels of benzo(a)pyrene were also reported in groundwater at levels above drinking water and recreational guideline thresholds at WB1 to the north of the power station building. Limited characterisation of natural soils was also completed, which confirmed the occurrence of potential ASS conditions above the ASSMAC (1998) trigger values.

The report presented the following conclusions with regard to the WBPS Study Area:

- Significant widespread soil contamination conditions were not identified at soil sampling locations. However, the assessment has confirmed specific areas where contaminant concentrations in soil will require further consideration, in conjunction with other existing site soil characterisation data in relation to the suitability of these areas for future uses. For the WBPS Study Area this includes fill material impacted with lead identified at WB4 1.9-2.0 m.
- Investigation of groundwater did not identify significant widespread contaminant conditions at the implemented sampling locations. However, as with the soil conditions, groundwater characteristics at a number of locations will require further evaluation in conjunction with existing groundwater data to evaluate the need for ongoing monitoring and/or management of groundwater conditions.
- Volatile contaminant concentrations in soil, soil vapour and groundwater samples analysed for specific locations within the WBPS Study Area did not identify indications of significant widespread volatile contaminant impacts that may be indicative of an unacceptable risk to human health in relation to the current or future potential land uses.
- The potential for ground gas conditions was assessed at investigation groundwater monitoring wells using a landfill gas meter. Based on the recorded field data, a conservative estimate of the Gas Screening Value (GSV) places conditions within the characteristic gas situation 2 category. As such, further assessment of potential ground gas conditions should be completed as part of future detailed site assessment activities where buildings and/or other infrastructure are proposed to be constructed.
- Limited sampling and assessment of alluvial soil conditions confirmed the occurrence of potential ASS conditions that will require further consideration and where required, development and implementation of acid sulfate soil management measures during future disturbance of the alluvial soils.

This report recommended that the investigation data presented in this document be further evaluated in combination with the existing site contamination investigation data identified to be of

suitable quality such that broader decisions could be made with respect to the potential requirements for management and/or remediation future development areas across the Precinct. Subsequent to the outcomes of this evaluation, it was anticipated that sufficient site characterisation information was available to support the development of a high-level strategy for future management of contamination risks at the site.

4.12 JBS&G (2015c) Site Wide Remedial Concept Plan, The Bays Precinct

JBS&G was engaged by UGNSW to complete to complete additional assessment of site contamination conditions and prepare a SWRCP to provide high level guidance on the approach to be adopted to manage site contamination concerns in a consistent manner during redevelopment of properties within the Bays Precinct.

The extent of contamination within the WBPS portion requiring remediation/management is further discussed in **Section 5** providing for the incorporation of information from additional previous site investigation reports as reviewed herein, or portions thereof. The conceptual remediation strategy developed for the site comprised a combination of source removal for mobile contaminants followed by on-site cap and containment of residual impacts during the redevelopment process, including those that occur beneath heritage structures.

4.13 JBS&G (2016) Additional Contamination Assessment, White Bay Power Station

JBS&G was engaged by UGNSW to undertake supplementary site contamination investigation activities at the WBPS site to further characterise the contamination extent such that potential impediments to the cap and containment strategy as proposed in the SWRCP could be confirmed in addition to source removal of the contaminant impact in the vicinity of the switchyard. The works were undertaken to support evaluation of the costs associated with management/ remediation during the redevelopment proposal period of the site.

The scope of intrusive investigations comprised:

- Asbestos quantification at a total of 19 test pit/ borehole locations.
- Soil sampling at 30 test pit/ borehole locations for a range of chemical COPCs including heavy metals, PAHs, TRH, BTEX, VOCs, cyanide, phenols, OCPs, PCBs, ammonia and nitrate.
- Groundwater monitoring at five new wells including one location at the west of the site to establish hydrogeologically upgradient conditions (A28) and 4 locations in the vicinity of the former switchyard (MW01) in order to delineate the historically identified impact at this location. Groundwater was analysed for COPCs including heavy metals, PAHs, TRH, BTEX, VOCs and PCBs.
- Sub-slab vapour assessment via installation of twelve sub-slab vapour probes. Sub-slab vapour probes were located within the Power Station building on a generally systematic grid basis with some locations skewed to areas downgradient of previously identified groundwater impact (considering historical data from location MW01. Sub-slab vapour samples were analysed for volatile organic compounds (VOCs) and TRH.

The documented sampling locations are shown in **Figure 4**.

Potential future land use scenarios were identified as cultural, maritime, recreational, retail, residential, research and development, education and commercial uses, potentially including sensitive uses including childcare centres and residential with accessible soil scenarios. On this basis, site assessment criteria adopted were based on commercial/industrial land use and residential with garden/accessible soil land use also including childcare centres, preschools and primary schools.

A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

Similar to previous investigations, soils were identified to be variously impacted with benzo(a)pyrene and carcinogenic PAHs, lead (health based impact) and elevated levels of heavy metals (potential ecological based impact), heavy fraction (C_{10}-C_{36}) petroleum hydrocarbons and asbestos in soil.

There were no significantly elevated TRH or PAH concentrations in leachate analysis of fill samples indicative of conditions that would represent unacceptable risks of contaminant migration. Evaluation of individual heavy metals leachate data indicated that the overall risk of broad scale fill material conditions representing an unacceptable risk to sensitive ecological receptors was considered to be low. However, further evaluation via implementation of a site specific ecological risk assessment was considered to be required to establish individual heavy metal contaminant thresholds at which fill material will require management other than via cap and containment to ensure protection of the White Bay ecological receptors.

Natural alluvial soil underlying fill material in portions of the site were characterised as PASS and as such, if they were to potentially be disturbed during remediation and/or development activities, management was considered to be required. An acid sulfate soil management plan was considered to be required to be developed for implementation in conjunction with future works, including remediation of the site. The presence of such conditions were also required to be considered in evaluation of remediation options, particularly in the foreshore portion of the site.

Transformer oil based non-aqueous phase liquid (NAPL) was identified at the north-west portion of the site associated with the former transformer yard infrastructure. In addition to the previous MW1 location, the extent of impact was shown to comprise a relatively small area around locations MW01 and A25 at the base of the terraced infrastructure to the north-west of the Power Station buildings. Impacted soil and groundwater were identified to require remediation prior to or in conjunction with broader remedial activities.

Ground surface asbestos fragment impacts were also identified in the northern portion of the site that required to be addressed during future site works to manage the health based and aesthetic risks in this area of the site.

Levels of hydrocarbons and VOCs in sub-slab vapour samples completed below the existing heritage listed power station and control room buildings were generally low or below detection limits. On this basis, there was considered to not be any potential significant site contamination present underlying the power station or control room buildings that would represent an unacceptable health risk with respect to the proposed adaptive reuse of these heritage buildings under a scenario whereby the existing ground slabs are retained. Further consideration of potential risks was considered to be potentially required should adaptive reuse works include temporary and/or permanent alterative of the existing pavements to ensure there are no unacceptable risks to site workers and/or future occupants.

On the basis of the findings of this investigation and in consideration of previous investigations conducted at the site it was considered that the key assumptions identified in the SWRCP were valid for this site and the identified impacts can be appropriate managed via implementation of the proposed SWRCP strategy of source removal followed by on-site cap and containment during the redevelopment process. It was noted that following adoption of a preferred redevelopment plan, further consideration of remediation/management requirements for specific areas of the site may be undertaken such that a detailed remedial action plan (RAP) may be prepared for the site or portions thereof.

4.14 JBS&G (2017a) Detailed Site Investigation, White Bay Power Station Proposed Lot 1

JBS&G was engaged by UGNSW to undertake a detailed site investigation (DSI) for the proposed redevelopment of the 'Lot 1' portion of the WBPS site to address data gaps and to provide additional information to support preparation of an on-site human health and ecological risk assessment (HHERA), as specific to the proposed commercial and open space development of the site. 'Lot 1'

comprised the WBPS buildings and associated infrastructure in addition to immediate surrounds. A separate report (JBS&G 2017c) was prepared as discussed below documenting site investigations undertaken within proposed Lot 2 which comprised the eastern yard/foreshore areas of WBPS extending to the White Bay waterfront.

The scope of intrusive investigation comprised:

- Asbestos quantification at a total of 54 test pit/ borehole locations;
- Soil sampling at 69 test pit/ borehole locations and analysis for a range of chemical COPCs including heavy metals, PAHs, TRH, BTEX, VOCs, cyanide, phenols, OCPs, polychlorinated biphenyls PCBs, ammonia, nitrate and sPOCAS to assess for the presence of actual and/or potential acid sulfate soils;
- Additional analysis of soil samples with detected total levels of constituents for toxicity characteristic leaching procedure (TCLP) analysis to assist preliminary waste classifications;
- Column leachate testing at a total of 13 locations to assess potential leachability under common environmental conditions of on-site soils for heavy metals, PAHs and TRH;
- Groundwater monitoring at five new wells and five previously installed wells with analysis of samples for COPCs including heavy metals, PAHs, TRH, BTEX, VOCs and PCBs and further physical parameters including pH/EC and cation and anion balance;
- Assessment of hydraulic conductivity at one monitoring well location;
- Soil vapour assessment via installation of nine sub-slab vapour probes and three soil vapour probes. Soil vapour samples were analysed for VOCs and TRH; and
- Ground gas monitoring at all soil vapour assessment locations to assess for levels of potential landfill gases including methane.

The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

Potential future land use scenarios included commercial, research and development, education, cultural, retail and potentially recreational and public/private open space. On this basis, site assessment criteria adopted were based on commercial/industrial land use and public open space land use. In addition, residential with garden/accessible soil land use was also considered as applicable to childcare centres, preschools and primary schools reflective of the most conservative potential use to which portions of the site may be developed even though the development scheme did not anticipate these land-uses.

Based on the scope of works completed, the following conclusions were presented:

- Generally near surface / fill based soils were found to be impacted with some elevated levels of heavy metals (copper, lead and zinc), semi- and non-volatile TRH fractions, heavy PAHs, asbestos and localised detections of dichloromethane, OCPs including dieldrin and DDT, and single detections of tetrachloroethene and phenols;
- Leachates, as based on distilled water and column leached procedures to replicate site conditions, were generally free of detectable constituents apart from heavy metals. Levels of heavy metals in leachates were generally higher than levels measured in groundwater;
- Localised detections of bound and friable asbestos were reported in fill based soils;
- Waste classification of soils by total and TCLP analysis reported that the majority of fill material across the site are classified as General Solid Waste (GSW) and/or GSW mixed with Special Waste based on presence of asbestos. The most impacted soils, present in limited

locations within the site were considered likely to be classified as Restricted Waste (including use of existing NSW EPA issued general immobilisation approvals);

- Natural alluvial/estuarine soil present at depths underlying the site were typically classified as actual and/or potential acid sulfate soils. An Acid Sulfate Soils Management Plan (ASSMP) was identified as required to be developed prior to any site disturbance works to manage the potential risks associated with disturbance of these materials;
- Groundwater was found to have a typically neutral pH and be in a reducing condition. Groundwater was typically classified as Ca-HCO_3 type waters;
- Light non-aqueous phase liquid (LNAPL) consisting of a heavy weathered oil was reported in two monitoring wells at the north-west of the site, associated with historical use of these site portion as a transformer yard;
- Other than the LNAPL, groundwater impact was generally restricted to slightly elevated levels of heavy metals. Localised detections of semi- and non-volatile TRH fractions and chlorinated ethenes marginally exceeded detection limits;
- No evidence of landfill gases were identified, and soil and sub-slab vapours were generally well oxygenated; and
- Elevated levels of chlorinated ethenes were detected in soil vapour at two locations in the central north-west of the site.

The results as generated by this assessment were considered to be generally comparable to results of previous assessments where common media were assessed. The environmental data generated by this assessment and previous assessments were assessed in detail in a HHERA prepared concurrently for the site on the basis of a proposed commercial site development with public open space zones as discussed following.

4.15 JBS&G (2017b) Human Health and Ecological Risk Assessment, White Bay Power Station Proposed Lot 1

JBS&G was engaged by UGNSW to undertake a HHERA for the proposed redevelopment of the Lot 1 portion of the WBPS site. The HHERA considered environmental data as collected from soils, groundwater, leachates and soil vapour by environmental assessments completed by JBS&G during the period 2015-2017.

The HHERA considered a future site development scenario comprising re-use of existing buildings for commercial purposes, construction of new commercial buildings with basements, and implementation of areas of open space to support the future commercial workforce and visitors to the site. The human health risk assessment portion of the HHERA considered potential future exposures of commercial workers in slab on grade buildings and buildings constructed overlying basements, commercial workers engaged in the open space areas of the site as gardeners / landscapers, maintenance workers to lift pits within the basements and sub-surface excavation / maintenance workers potentially engaged on the site in the future. The assessment of these exposure scenarios was found to be protective of potential construction worker exposures as may occur during development works prior to site occupation.

The ecological risk assessment portion of the HHERA considered potential exposures of flora and fauna on the site within the proposed open space areas, and potential discharge of contaminants from the site through groundwater and impacts upon White Bay and/or Blackwattle Bay located hydrogeologically downgradient of the site.

Potential aesthetic impacts were considered to occur as associated with sub-surface light non-aqueous phase liquid (LNAPL) impact as present at the north-western portion of the site. This would

be through potential direct exposures of sub-surface maintenance / excavation workers. No other potentially significant aesthetic impacts were identified.

No potentially unacceptable health risk was identified for normal commercial worker users of the site or lift maintenance workers.

A potential for an unacceptable health risk was identified for potential future commercial workers occupationally engaged as landscapers / gardeners and sub-surface maintenance / excavation workers. The potential hazard exceedance was based on potential direct exposures to the highest levels of non-volatile TRH impact in soils as associated with conditions in the north-west portion of the site.

Fill based soils and areas of natural soils were identified as likely to be ecologically unsuitable to be used as growing media / topsoils in the open space areas of the site due to the presence of a range of heavy metal, TRH and PAH constituents.

Impact present in groundwater, or potentially caused to be present in site groundwater in the future by leaching from impacted soil, was found to not pose an unacceptable ecological risk to White Bay and/or Blackwattle Bay in proximity of the site. Site constituents present in groundwater and leachates were further found to not pose a potential health risk to recreational human users of White Bay and/or Blackwattle Bay in proximity of the site.

The following recommendations were made to inform the preparation of future Remedial Action Plans (RAPs) and/or Environmental Management Plans (EMPs) for the site, or parts thereof:

- LNAPL impact present at the northwest of the site required remediation or ongoing management. In lieu of remediation to remove the LNAPL impact, an EMP will be required to be prepared to control potential exposures of sub-surface workers to the LNAPL present at depth.
- Elevated levels of TRH $C_{>16}$ impact present in near surface fill based soils were found to pose a potential unacceptable hazard to future commercial workers engaged as landscapers / gardeners and potential future sub-surface excavation / maintenance workers. Remediation of the highest levels of TRH $C_{>16}$ present in soils will be required, otherwise the site EMP will be required to include provision to manage direct exposures to these soils.
- Fill based soils, and areas of natural soils at the depth of the fill / natural soil interface, were found to likely be unsuitable for use as growing media / topsoil within future landscaped site areas. Soils will be required to be imported to be used as growing media / topsoils in open space areas of the site proposed to be landscaped.

4.16 JBS&G (2017c) Detailed Site Investigation, White Bay Power Station Proposed Lot 2

JBS&G was engaged by UGNSW to undertake a DSI for the proposed redevelopment of the 'Lot 2' portion of the WBPS site to address data gaps and to provide additional information to support preparation of an on-site human health and ecological risk assessment (HHERA), as specific to the proposed commercial and open space development of the site. 'Lot 2' comprised the eastern yard/foreshore areas of WBPS extending to the White Bay waterfront.

The scope of intrusive investigation comprised:

- Asbestos quantification at a total of 69 test pit/ borehole locations;
- Soil sampling at 69 test pit/ borehole locations and analysis for a range of chemical COPCs including heavy metals, PAHs, TRH, BTEX, VOCs, cyanide, phenols, OCPs, polychlorinated biphenyls PCBs, ammonia, nitrate and sPOCAS to assess for the presence of actual and/or potential acid sulfate soils;

- Additional analysis of soil samples with detected total levels of constituents for TCLP analysis to assist preliminary waste classifications;
- Column leachate testing at a total of 15 locations to assess potential leachability under common environmental conditions of on-site soils for heavy metals, PAHs and TRH;
- Groundwater monitoring at seven new wells and three previously installed wells and analysed for COPCs including heavy metals, PAHs, TRH, BTEX, VOCs and PCBs and further physical parameters including pH/EC and cation and anion balance;
- Assessment of hydraulic conductivity at one monitoring well location;
- Soil vapour assessment via installation of eight sub-slab vapour probes and three soil vapour probes. Soil vapour samples were analysed for VOCs and TRH; and
- Ground gas monitoring at all soil vapour assessment locations to assess for levels of potential landfill gases including methane.

The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

Potential future land use scenarios included commercial, research and development, education, cultural, retail and potentially recreational and public/private open space. On this basis, site assessment criteria adopted were based on commercial/industrial land use and public open space land use. In addition, residential with garden/accessible soil land use was also considered as applicable to childcare centres, preschools and primary schools reflective of the most conservative potential use to which portions of the site may be developed even though the development scheme did not anticipate these land-uses.

Based on the scope of works completed, the following conclusions were presented:

- Generally near surface / fill based soils were found to be impacted with some elevated levels of heavy metals (copper, leads and zinc), semi- and non-volatile TRH fractions, heavy PAHs and asbestos. A majority of samples assessed for VOCs were further found to be impacted with dichloromethane, albeit at low concentrations;
- Leachates, as based on distilled water and column leached procedures to replicate site conditions, were generally free of detectable constituents apart from heavy metals. Levels of heavy metals in leachates were generally higher than levels measured in groundwater;
- Localised detections of bound and friable asbestos were reported in fill based soils;
- Waste classification of soils by total and TCLP analysis reported that the majority of the fill material present across the site was expected for the purposes of off-site disposal to be characterised as General Solid Waste (GSW) and/or GSW mixed with Special (Asbestos) Waste based on identification of ACM/asbestos fines in soil. The most impacted soils, presented in limited locations within the site were considered likely to be classified as Restricted Waste (including use of existing NSW EPA issued general immobilisation approvals);
- Natural estuarine/alluvial soils encountered underlying fill material at the site were typically classified as actual and/or potential acid sulfate soils. An Acid Sulfate Soils Management Plan (ASSMP) was required to be developed prior to any site disturbance works to manage potential health based and environmental risks as may occur during and following disturbance of these materials;
- Groundwater was found to have a typically neutral pH and be in a reducing condition. Evidence of marine water intrusion to the aquifer was observed in groundwater physical parameters at the north-east of the site;

- Groundwater impact was generally restricted to slightly elevated levels of heavy metals and some localised elevated levels of ammonia (as N);
- No evidence of landfill gases were identified, and soil and sub-slab vapours were generally well oxygenated; and
- No constituents were detected in soil vapour above the analytical reporting limits.

The results as generated by this assessment were generally considered to be comparable to results of previous assessments where common media have been assessed. It is noted that UGNSW did not at the time proceed with preparation of the HHERA for proposed Lot 2.

4.17 GDP (2020a) Factual Contamination Assessment Report, Sydney Metro West

Golder - Douglas Partners (GDP) was engaged by Sydney Metro to undertake a combined geotechnical and contamination investigation along the proposed alignment of the Sydney Metro West (SMW) project, a proposed rail link connecting Sydney CBD to Parramatta CBD via the Bays Precinct and Sydney Olympic Park.

The scope of intrusive investigation comprised a total of 96 boreholes advanced across the SMW route footprint of which 15 sample locations were located within the subject site. The documented sampling locations are shown in **Figure 4**. In addition, groundwater monitoring wells were installed within 72 boreholes with groundwater results reported separately in GDP (2020c) as discussed below.

Soil samples were analysed for a range of COPCs including heavy metals, PAH, TRH, OCP/OPP, PCBs, VOC/VHCs, tributyltin (TBT), phenols, Chromium VI, PFAS, cyanide and asbestos. SPOCAS and Chromium Reducible Sulfur analysis was undertaken for the assessment of PASS.

Adopted site assessment criteria were based upon the proposed SMW commercial/industrial land use. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

The report contained a factual representation of results with the following results reported in relation to sample locations within the subject site:

- Concentrations of lead and benzo(a)pyrene were reported exceeding adopted human health criterion at one location (ENV024). A concentration of TRH C_6-C_{10} (F1) was reported exceeding the adopted human health criterion at three locations (ENV026, ENV027 and ENV030).
- Concentrations of asbestos in soil were detected exceeding the adopted human health criterion at one location (ENV021).
- Concentrations of nickel, lead, copper, zinc, TRH C_6-C_{10} and benzo(a)pyrene were reported exceeding the adopted ecological criteria at a number of sample locations.
- Waste classification results indicated a combination of GSW, Restricted Solid Waste (RSW) and hazardous waste. Whilst no PFAS TCLP analysis was undertaken to enable waste classification in accordance with EPA (2016[14]), one sample within the subject site reported PFHxS and PFOS concentrations exceeding the unlined ASLP criterion for landfill acceptance as outlined in HEPA (2020[15]).
- Three samples collected within the subject site at depths greater than 4.0 m and below the water table exceeded the adopted ASS screening levels.

[14] *Addendum to the Waste Classification Guidelines (2014) – Part 1: classifying waste*. NSW EPA, October 2016 (EPA 2016)

[15] *PFAS National Environmental Management Plan, Version 2.0-January 2020*. National Chemicals Working Group of the Heads of EPAs Australia and New Zealand (HEPA 2020).

4.18 GDP (2020b) Contamination Assessment Report, Sydney Metro West Stage 1 Early Works

GDP was engaged by Sydney Metro to undertake a detailed contamination investigation for Stage 1 Sydney Metro City and Southwest project at land located within the Bays Precinct. The study boundary was limited to the Stage 1 Building Envelope located within the southeastern portion of the current site extending to the east. No intrusive investigations were undertaken as part of this report and it provided a summary of soil conditions as reported in GDP (2020a) supplemented by results from a separate pavement investigation that was previously not reported in GDP (2020a). Of the 34 sample locations discussed within the report, 25 were located within the subject site. The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

Baseline soil conditions included reportable concentrations of TRH, heavy metals, PAH, OCPs and PFAS, with concentrations mostly reported to be below the adopted commercial/industrial criteria. GDP concluded that there is likely to be limited contamination at the subject site which presents a risk to human health or the environment under the proposed commercial/industrial scenario.

Groundwater was not considered on the basis that the depth to groundwater was considered to be below the assumed vertical limit of Enabling Works construction related activities.

Soil vapour was considered unlikely to present a significant risk to the construction and/or operation of Enabling Works unless permanent underground structures were to be constructed.

On this basis, the location of the proposed road construction and associated ancillaries was considered unlikely to be significantly contaminated with respect to the planned activities under the licence arrangement.

4.19 GDP (2020c) Groundwater Monitoring Report, Sydney Metro West Stage 2 Locations

The report documented results from the groundwater monitoring undertaken by GDP between July 2018 and February 2021 at groundwater monitoring wells installed as part of GDP (2020a). Of the groundwater wells sampled during the investigation, 11 groundwater wells were located within the subject site as shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

Falling head and rising head tests were conducted at seven monitoring wells, with the estimated horizontal hydraulic conductivity reported between 2.0×10^{-6} and 2.4×10^{-5} metres per second (m/s).

Adopted groundwater site assessment criteria were based upon the proposed SMW commercial/ industrial land use. Multiple exceedances of adopted screening criteria were noted for nutrients (total phosphorus as P, ammonia as N) and heavy metals (arsenic, iron, manganese). PFAS was detected in two monitoring wells, with exceedances of perfluorohexane sulfonate (PFHxS) and perfluorooctanesulfonic acid (PFOS) in one well along the central western boundary of the Port Authority of NSW (PANSW) construction area. Isopropylbenzene and TRH (F1 and F2) were reported above the criteria in one well in the central portion of the Station Box. There were several other isolated exceedances of heavy metals (zinc, manganese, cobalt), nutrients (total nitrogen and nitrate as N) and major ions (fluoride).

4.20 Senversa (2021) Interpretive Contamination Investigation, Sydney Metro West White Bay

Senversa was engaged by Sydney Metro to undertake a site contamination investigation at the Sydney Metro Stage 2 Works Area at White Bay to establish baseline conditions for site contamination and groundwater conditions (PANSW area only) upon commencement of the licence for Sydney Metro's use of the site.

The scope of intrusive investigations comprised soil sampling at 70 test pit/borehole locations in addition to two surface samples and one stockpile sample; and groundwater sampling at 10 newly installed groundwater monitoring wells and 17 existing wells. Of the sample locations completed, 62

locations were located within the subject site. The documented sampling locations are shown in **Figure 4**. A summary of the reported sample laboratory analysis results is provided in **Appendix A**.

The lithology was noted to be spatially variable across the study area being largely dependent on the depth to bedrock and the original shoreline around White Bay. Fill containing anthropogenic material was observed to depths ranging from 2 to 4 m bgs. The underlying sediments observed to depths of up to 6 m in the central portion of the study area between the former Glebe Island and the Balmain shoreline was also conservatively inferred to comprise suspected fill material. Shallow bedrock was encountered in the southeast extent of the study area at 1 m bgs aligned with the interpreted former Glebe Island shoreline.

Collected samples were analysed for a range of COPCs generally including heavy metals, TRH, BTEX, PAH, OCP, PCB, VOCs, phenols, herbicides, PFAS, ASS screening, sulfate and chloride, nutrients and asbestos. Adopted site assessment criteria were based upon the proposed SMW commercial/ industrial land use.

Identified contamination levels in soil and groundwater were considered to be generally consistent with previous investigations and attributed to potentially contaminating activities including historical infilling (both from land reclamation and anthropogenic waste material predominantly from the power station and former railways), material/waste handing, maintenance activities and firefighting at the power station, railway use, port activities and hydraulically upgradient commercial/industrial activities.

When assessing the soil results in conjunction with the historical data set, concentrations of heavy metals, TRH/BTEX, PAH, VOCs were reported as exceeding adopted criteria in isolated soil sampling locations. Concentrations of PFAS were reported in low concentrations in a limited number of fill, natural and bedrock samples across the study area albeit at concentrations below the adopted screening criteria. Leachable PFAS concentrations in bedrock samples were reported to be below the laboratory LOR. Asbestos was identified in a limited number of fill samples across the study area. Based on lines of evidence for ASS, deeper fill and sediments were considered to comprise PASS.

When considering the groundwater results, heavy metals were reported exceeding adopted ecological criteria in both shallow and deeper groundwater. TRH/VOC, PAH, OCP and phenol concentrations were generally reported below laboratory LOR or below the adopted ecological criteria. Ammonia concentrations were reported above aesthetic and ecological criteria in a limited number of shallow and deeper groundwater samples. Further, phosphorus was reported above background conditions in one shallow well and one deeper well. PFAS was detected above the laboratory LOR in samples collected in the western extent of the study area and off-site to the west, upgradient of the study area. PFOS concentrations in these areas exceeded the adopted ecological criteria.

5. Conceptual Site Model

The *National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended 2013* (NEPC 2013) identifies a CSM as a representation of site related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The development of a CSM is an essential part of all site assessments.

NEPC (2013) identifies the essential elements of a CSM as including:

- Known and potential sources of contamination and contaminants of concern including the mechanism(s) of contamination;
- Potentially affected media (soil, sediment, groundwater, surface water, indoor and ambient air);
- Human and ecological receptors;
- Potential and complete exposure pathways; and
- Any potential preferential pathways for migration.

The following sections present these elements for the site which when considered together comprise the site CSM for the purposes of this assessment.

5.1.1 Areas of Known and/or Potential Concern

APECs and COPCs have been identified for areas/properties within the site on the basis of the identified former and current sites uses and available site assessment information. Constituents of Potential Concern have been identified in general accordance with the DUAP (1998[16]) *Appendix A: Industries and Chemicals Used*, with consideration of the specific history of the relevant property.

Table 5.1: Identified Site Areas of Potential Concern and Associated COPCs

Area of Potential Environmental Concern (APEC)	Constituents of Potential Concern (COPCs)
Contiguous fly ash area – including coal washing/ settling tanks and area northeast of primary building	Heavy metals, TPH, PAHs and PCBs/dioxins
Transformer and Switchyard area	Heavy metals, TPH, PCBs, OCPs, VOCs and PFAS
Fill across site (ash included, but separate to contiguous fly ash area)	Heavy metals, TPH/VOCs, PAHs, OCPs, herbicides, PCBs, PFAS, asbestos, ASS and ground gases
Coal storage and processing areas	Heavy metals, TPH, PAHs and PCBs/dioxins
Ash handling yard	Heavy metals, TPH, PAHs and PCBs/dioxins
Railway passages	Heavy metals, TPH/VOCs, PAHs, phenolics, nitrates, ammonia and asbestos
Boiler house 2 footprint	Heavy metals, TPH, PAHs and asbestos
General inventory and warehouse building footprints	Heavy metals, TPH, PAHs, OCPs, PCBs and asbestos
Oil Storage tank footprints	Heavy metals (lead), TPH/VOCs, MAHs, PAHs, phenols and asbestos

5.1.2 Source of Impacts

Heavy Metals and PAHs

Potential heavy metals and PAH sources are detailed in **Table 5.1** above. General potential sources of heavy metals and PAHs across the site include:

- fill used during land reclamation;
- general imported fill materials;
- general industrial land uses;

[16] *Managing Land Contamination: Planning Guidelines, SEPP 55-Remediation of Land*. Depart of Urban Affairs and Planning, 1998 (DUAP 1998)

- railway corridors;
- Industrial use associated with WBPS;
- ash/slag type waste materials associated with historical wood and coal fired boilers/metal smith workshops as would have been present associated with industries historically located on site and around the Bays; and
- the importation of waste for use as filling sourced from nearby historical industrial use facilities such as the Ultimo and Pyrmont Power Stations, railway and marine maintenance and construction activities, emoleum (bitumen) plants, oil terminals, tar pits, gas works and acid baths/scaling works.

Petroleum Hydrocarbons (TRH/TPH)

Potential TPH sources are detailed in **Table 5.1** and may also include the following:

- fill used during land reclamation and general imported fill materials used to create current site levels;
- fuel, oil/lubricant and solvent storage and terminal facilities;
- substations and transformers;
- petroleum storage and dispensing infrastructure including USTs and ASTs and associated bowsers (former and current);
- former bitumen plants;
- specific industrial uses such as marine and vehicle maintenance and construction activities, emoleum/bitumen plants, creosote treatment of timber, tar pits, gas works, timber yards etc; and
- maintenance of industrial machinery/infrastructure associated with former and current industrial operations.

Volatile Organic Compounds (VOCs) including Monocyclic Aromatic (BTEX) Hydrocarbons

Potential VOC sources are detailed in **Table 5.1** and may include the following:

- general industrial land uses including maintenance of industrial machinery and infrastructure;
- fuel, oil/lubricant and solvent storage facilities;
- substations and transformers; and
- metal workings.

Asbestos

Potential asbestos sources are detailed in **Table 5.1** and may include the following:

- fill used during land reclamation and general imported fill materials used to create current site levels;
- general industrial land uses;
- Industrial use associated with WBPS;
- inappropriate waste management during demolition of former buildings and associated infrastructure (Telstra pits, stormwater/fire hydrant pipework, conduits, formwork, etc); and

- specific industrial uses such as marine maintenance and repair works, boiler houses, railway carriage brake linings, furnace linings, transformer and substation facilities.

Pesticides and Herbicides (OCPs, OCPs)

Potential herbicides and OCP/OPP sources are detailed in **Table 5.1** and may include the following:

- fill used during land reclamation and general imported fill materials used to create current site levels;
- general industrial land uses;
- site maintenance activities within marina yard, waste storage areas, and parkland areas; and
- Specific spraying activities during/following unloading of cargo including food goods, seafood, timber and other products at the wharves.

PCBs

Potential PCB sources are detailed in **Table 5.1** and may include the following:

- fill materials;
- general industrial land use; and
- transformers.
- the importation of waste for use as filling sourced from specific industrial uses such as the White Bay Power Station, marine maintenance and repair works, transformer and substation facilities.

Organotin Compounds including TBT

Potential TBT sources are detailed in **Table 5.1** and may include the following:

- Marine maintenance activities associated with the use, storage and removal of anti-fouling paints; and
- Presence of marine sediments underlying sites as a result of dredging and/or filling over the top of former marine sediments during reclamation activities during the period following commencement of use of TBT (1950s).

PFAS

Potential PFAS sources are detailed in **Table 5.1** and may include the following:

- Fill materials; and
- Firefighting activities at WBPS.

Ground Gases

Potential ground gas sources are detailed in **Table 5.1** and include the following:

- areas of low lying mud flats where organic rich sediments were subsequently isolated by land reclamation activities resulting in anaerobic decomposition of the organic content of the sediment; and
- areas where putrescible waste was buried during land reclamation/filling activities, including potentially waste from land clearing, domestic waste, organic based industrial waste and/or abattoir waste.

Acid Sulfate Soils

Potential acid sulfate soils sources are detailed in **Table 5.1** and may include the following:

- marine and/or alluvial soil deposits that were subsequently isolated by land reclamation and/or filling activities;
- areas where dredging of marine and/or alluvial sediments were completed during land reclamation activities and the dredged material was subsequently placed as fill material; and
- current seabed areas adjoining the site boundaries.

5.1.3 Potentially Impacted Media

Potentially impacted media have been identified as the following:

- soils;
- sediments;
- groundwater;
- surface water; and
- vapours (indoor and ambient air).

The potential extent and degree to which the identified contamination sources may result in unacceptable impacts to the various media above is a reflection of a range of factors including the total contaminant mass, the lateral and vertical extent of impact, the mobility of the contaminant and opportunities available for migration, etc.

5.1.4 Potential Human and Ecological Receptors

Potential human populations whom may be exposed to contaminant impacts in the future (if they are not remediated or appropriate management is not implemented prior to or during development within specific areas of the WBPS and Metro Station Sub-Precinct) include:

- Potential future occupants where residential development occurs;
- Future and current recreational users of public open spaces (including road reserves, parkland, public walkways, plazas, etc);
- Future and current recreational users of water bodies located within the site;
- Future and current construction and site maintenance workers;
- Future and current workers present in commercial/industrial developments, community/education/cultural facilities or open spaces; and
- Future and current workers present in sub-surface excavations/infrastructure channels, basement/tunnel/service pit areas, and any other zones comprising potential confined spaces.

Exposure pathways for human receptors are anticipated to occur in the range from inhalation, ingestion or direct (dermal) contact with impacted media present within the site. This may include the potential for dermal contact with and ingestion of impacted soils / groundwater as present at shallow depths and/or accessible by future excavations by site workers, visitor and/or occupants or the potential inhalation of vapours migrating upwards and laterally from fill and/or natural soils.

Potential on-site ecological receptors and exposure pathways include:

- current public open and future public and/or private open spaces that may occur with redevelopment of the site, inclusive of all landscaped areas with soil contact. Land-based ecological receptors may be exposed to environmental impact through direct contact and/or ingestion of contaminated soil, surface water and/or groundwater. These exposure

pathways could potentially result in bioaccumulation where higher trophic organisms feed/predate on organisms exposed to environmental impacts (if present) at the site;

- waterbodies and their associated floral and fauna, as may potentially be impacted by sediment and surface water, in addition to migration from land based areas of groundwater, surface water and vapours discharged from land areas. Organisms living within estuarine systems have the ability to bioaccumulate contaminants from both pore waters, groundwater and overlying surface waters, as well as via ingestion of sediment particles and food.

5.1.5 Potential Preferential Pathways for Migration

For the purpose of this assessment, preferential pathways have been identified as natural and/or man-made pathways that result in the preferential migration of COPC as either liquids or gasses. Man-made preferential pathways are likely present throughout the site, generally associated with areas of previously disturbed fill material, below ground infrastructure and service easements.

6. Conceptual Remedial Strategy

6.1 Remediation Goals

The overall goal for the remediation and/or ongoing management of environmental impact at the WBPS and Metro Sub-Precinct site will be to:

- Prevent exposure of human populations including future site occupants, workers and users to contaminated media;
- Prevent potential phyto-toxicity effects to land, water and sediment based flora and/or fauna that may come into contact with contaminated media;
- Remove potential ongoing sources of environmental contamination (i.e. current and historical sub-surface petroleum storage) from the site; and
- Prevent human exposure to impacted groundwater and vapour where present.

In achieving the above goals, it is noted that consideration will also need to be given to the requirements of other urban redevelopment concerns including heritage, ecology, existing significant infrastructure, etc. It will be required that there is flexibility to adopt alternative measures, including the in-situ management of contamination to facilitate the protection/conservation of highly significant and/or sensitive items where contamination has been identified in such areas.

6.1.1 Guidance Framework

The *Contaminated Land Management (CLM) Act 1997* is the primary legislation associated with management of contaminated land in NSW. Section 105 of the Act allows the EPA to make or endorse guidelines connected with the objectives of the Act. These guidelines form the basis for making decisions in relation to the investigation, remediation, validation and documentation of contaminated land management within NSW.

As such, this remedial strategy document and future activities associated with assessment, remediation and validation will address the requirements of those guidelines. The current list of relevant NSW EPA endorsed guidelines comprises:

- *Contaminated Sites: Sampling Design Guidelines*, NSW EPA 1995;
- *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZG 2018 (including sediment quality guidelines);
- *Consultants Reporting on Contaminated Land*, Contaminated Land Guidelines, updated 5 May 2020, EPA 2020;
- *Guidelines for the NSW Site Auditor Scheme*, 3rd Ed, EPA 2017;
- *Guidelines for the Assessment and Management of Groundwater Contamination*, DECC March 2007;
- *Environmental Health Risk Assessment: Guidelines for Assessing Human Health Risks from Environmental Hazards,* Dept. of Health and Ageing and EnHealth Council, CoA 2012;
- *National Environment Protection (Assessment of Site Contamination) Measure 1999*, Amendment No.1, NEPC 2013; and
- *Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act, 1997*, NSW EPA 2015.

In addition, consideration is also required to guidelines made or endorsed by the EPA under the *Protection of the Environment Operations (POEO) Act 1997* and associated regulations, including:

- *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019*. UPSS 2019.
- *Waste Classification Guidelines, Part 1 - Classifying Waste*. NSW EPA 2014
- *Waste Classification Guidelines, Part 2 – Immobilising Waste*. NSW EPA 2014
- *Waste Classification Guidelines, Part 3 - Waste Containing Radioactive Material*. NSW EPA 2014
- *Waste Classification Guidelines, Part 4 – Acid Sulfate Soils*. NSW EPA 2014.

Other guidance that should also be considered in relation to site conditions includes:

- *Assessment and management of hazardous ground gases*, NSW EPA (2020);
- *Acid Sulfate Soil Manual*, Acid Sulfate Soil Management Advisory Committee 1998;
- *National Acid Sulfate Soil Guidance*. Australian Government Department of Agriculture and Water Resources (DAWR), June 2018 (AGDAW, 2018);
- *Organotin Waste Materials Chemical Control Order 1989*.
- *Work Health and Safety Act 2011* and *Work Health and Safety Regulation 2017*;
- *Managing Land Contamination, Planning Guidelines, SEPP 55 – Remediation of Land* (DUAP 1998).
- *Code of Practice for the Safe Removal of Asbestos*, SafeWork NSW, September 2019 (SafeWork 2019).

6.2 Regulatory and Planning Requirements

Where a proponent seeks approval for a change of permitted use of the land, either in the form of a rezoning, sub-division or project approval, it is required that the proponent satisfies the consent authority, and relevant regulator (including the NSW EPA), that contamination conditions as may be present at the site will be appropriately managed such that the site may be considered suitable for the proposed use.

In some instances, the proposed development and/or remedial works may also trigger requirements under the POEO Act for issue of a specific Environmental Protection Licence (EPL). Relevant categories and associated triggers are outlined in Schedule 1 of the POEO Act and relate to categories including the treatment of contaminated soil and/or groundwater, quarrying activities, etc.

6.2.1 Requirements in Relation to Future Project Applications/Approvals

The Bays West Stage 1 Rezoning Package is seeking approval for rezoning of the site that will facilitate renewal of the Precinct. Subsequent to the approval, it is anticipated that individual sites within the WBPS and Metro Station Sub-Precinct will each be the subject of one or more specific Development Applications to the appropriate consent authority. Such applications would define specific land uses and built form layouts.

Under the State Environmental Planning Policy (Resilience and Hazards) 2021, it is noted that the consent authority must not consent to the carrying out of development on the subject land unless:

a) It has been considered whether the land is contaminated; and

b) If the land is contaminated that the planning authority is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for all purposes for which the development is proposed to be carried out; and

c) If the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, the planning authority is satisfied that the land will be remediated prior to use for that purpose.

Further, it is required that the planning authority obtains from the proponent a report specifying the findings of a preliminary investigation of the land prepared in accordance with the contaminated land planning guidelines. The consent authority may also require the applicant to provide a report on the detailed investigation of the site if it is considered that the findings of the preliminary investigation warrant such additional assessment.

For future development within the WBPS and Metro Station Sub-Precinct it is anticipated that additional detailed site investigations may be implemented (as required) to address remaining data gaps present as a result of access limitations and inform the preparation of a detailed specific remedial action plan (RAP) covering the relevant area with specific consideration to the proposed development details (site levels, land use scenarios, etc). The data gap investigation report and subsequent RAP would be submitted to the consent authority prior to, or during the Project Application/Approvals process to satisfy the consent authority's obligations in relation to the State Environmental Planning Policy (Resilience and Hazards) 2021.

It is further anticipated that as part of the resulting project approval/development consent, the planning authority will issue consent conditions in relation to:

- compliance with the requirements of the SWRCP and relevant area specific RAP in completing site remediation works;
- documentation of remediation works as a validation assessment report(s) and where appropriate, an environmental management plan (EMP), to be submitted to the consent authority stating that the site contamination concerns have been appropriately addressed and the site is considered suitable for the approved use; and
- submission of a final site audit statement (SAS) to the consent authority endorsing the relevant final validation report(s) and EMP(s) certifying that the site is suitable for the approved use prior to occupation of the site for the use for which the approval/consent was issued.

Detailed and/or data gap investigation(s) and further evaluation of data in relation to specific site development proposals may identify that a specific area is considered suitable for the specific proposed use without requirement for ongoing management and/or remediation. In this event, rather than preparation of an area specific RAP, a final site audit statement (SAS) would be required to endorse the assessment report and its conclusions. The detailed assessment report and the associated SAS would then be submitted at the project approval/application stage in lieu of an area specific RAP. In this instance, the Development Consent conditions would not be required to address compliance with this overarching strategy document, issue of an SAS prior to occupancy or other issues, unless contamination/inground conditions are identified during site development works that are inconsistent with the conclusions of the site assessment and/or SAS.

6.2.2 Other Requirements

In addition to the requirements of the State Environmental Planning Policy (Resilience and Hazards) 2021, consideration of the regulatory requirements under NSW legislation will also be necessary in each site specific RAP as briefly outlined following:

- POEO Act (1997) - Evaluation of the proposed remediation/validation activities in relation to the categories and/or thresholds presented in Schedule 1 of this Act. Where works trigger one or more categories presented in Schedule 1, the works will require to be licensed by the EPA in addition to the requirements of the consent authority.
- Water Management Act (2000) – Where remediation works require the extraction (and treatment, reinjection or otherwise) of groundwater, consent for these works may be required under a temporary dewatering licence even if the triggers for an EPL are not met. Such requirements may potentially be stipulated as a condition of the development consent via the integrated development approvals process.
- POEO (Waste) Regulation 2014 – In addition to triggers for an EPL, consideration will be needed with respect to the POEO Waste Regulation in relation to non-licensed waste activities and waste transporting. This includes requirements for management of asbestos waste during transport/disposal, the approval of methods associated with the immobilisation of specific waste streams etc. as may be required under an area specific RAP.
- Work Health and Safety Act 2011 and associated Regulations including those related to Asbestos – Where asbestos impacts in soil are identified during either site investigation works, or during/following demolition of existing improvements, the site will be required to be considered as having asbestos contaminated soils and appropriate protections implemented with respect to the exposure of site workers and nearby sensitive receptors. In such instances, management requirements are outlined in *How to Manage and Control Asbestos in the Workplace Code of Practice*, WorkSafe NSW 2019.
- Organotin Waste Materials Chemical Control Order 1989 (CCO) – The CCO defines the management requirements for activities related to waste material contaminated with organotin contaminated waste, including the manufacture, storage and disposal of such waste. This includes material containing tributyltin or other organotin compounds either individually or in combination, including but not limited to paint waste, soil/sediment/water contaminated with organotins and materials to which paint remains adhered. Where appropriate, the requirements of this CCO have been incorporated into this plan.

6.2.3 Further Site Characterisation Requirements

For future consideration of individual site suitability within the WBPS and Metro Station Sub-Precinct, assessment of the existing data as presented in this plan and associated documents will be needed. Where one or more data gaps are identified within, or potentially influencing the specific area footprint, it is anticipated that either a detailed site investigation or data gap assessment will be implemented with consideration to the specific development concept prior to a proponent seeking development consent for the relevant concept. It is further noted that current site owners/occupants/managers may facilitate additional site investigation activities prior to, or during the early works phase development activities to benefit the overall site characterisation data set. In this event, additional assessment reports as may result from such works will also be required to be considered for each area of the site in addition to the characterisation data discussed in **Section 4**.

The scope of additional preliminary investigations or future development concept data gap investigations will be developed by a suitably qualified consultant using the NEPC (2013) framework and other endorsed NSW EPA guidance as identified in **Section 6.1.1**. Further, the proposed scope of the work should, in accordance with EPA (2017) be documented prior to the commencement of a field investigation within a Sampling Analytical and Quality Plan (SAQP), to be endorsed by the appointed auditor (where relevant). The SAQP will include identification of appropriate site assessment criteria based on EPA endorsed guidance against which the collected data will be evaluated.

The outcomes of the assessment will be documented as site assessment report(s) for the site, or relevant site portions, to the satisfaction of the appointed site auditor (where relevant). Dependent upon the scope of the additional investigation, the assessment reports will where appropriate, contain conclusions on the suitability of the site/site portion for the proposed land use. Alternatively, recommendations may be provided as to requirements for additional characterisation works or identify contamination issues that will require management or remediation such that the site may be considered suitable for use.

6.2.4 Area Specific RAPs

An area specific RAP is required to be prepared for each site within the WBPS and Metro Station Sub-Precinct in addition to the infrastructure/public open space areas where detailed investigation of contamination conditions as outlined above identifies the presence of contaminant impacts requiring management/ remediation. The area specific RAP should be prepared in conjunction with planning of the specific development proposal(s) such that appropriate exposure scenarios are considered in development of the required remedial/management strategy.

It is anticipated that the infrastructure and public open space site area RAPs will be prepared in conjunction with the detailed design phase prior to issue of the construction certificate for the infrastructure works. Following these initial works, it is anticipated that a detailed RAP for each development parcel will be lodged with project application/development approval submissions to the relevant consent authority.

The area specific RAPs will each be required to present as a minimum:

- Identification of the proposed extent of the site specific RAP;
- Identification of areas of known/suspected contaminant sources/media and the associated proposed remediation / treatment / disposal method inclusive of petroleum hydrocarbon, heavy metal, PAH, asbestos and/or other contaminant source types as relevant to the area;
- Identification of areas requiring containment (where relevant) and the proposed method of containment developed in conjunction with the specific development proposal;
- Validation methods for demonstrating the completion of remedial excavation works and/or implementation of capping and/or where appropriate treatment of has been identified and/or where suspected impacted soils proposed to be treated and either reused or disposed of from the site;
- An Unexpected Finds Protocol (UFP) specific to the proposed development works;
- A materials management framework including a plan for characterisation/validation of all material to be imported/exported from the site during works to demonstrate compliance with guidelines, exemptions and/or regulations issued/endorsed by the NSW EPA under both the contaminated land and waste/resource recovery frameworks;
- A remediation/construction environmental management plan (R/CEMP) to control potential emissions from remediation works. This should be particularly cognisant of vapours/odours (including volatile organic compounds, VOCs) and particulates with elevated levels of heavy metals, PAHs and asbestos fibres;
- The requirements for a Work Health and Safety Plan (WHSP) to be applied during the course of the remedial works to assess potential health and safety risks, appropriate measures to mitigate these risks and associated monitoring to assess actual risks;
- A Community Consultation Plan to notify all stakeholders including occupiers of neighbouring properties of the activities on the site; and

- The requirements for any long term/ongoing Environmental Management Plans to be applied long term after the completion of remediation / management works where material may be retained on-site in accordance with the strategies identified in the plan and/or Area Specific RAP.

6.3 Extent of Remediation and/or Management Required

The extent of remediation required is defined at a high level as being the extent of contaminated media at the site identified via reported soil, groundwater and/or soil vapour investigation data, or where no/limited data exists, as may be inferred via interrogation of the available data. This will require specific consideration of proposed end land uses, development details (ie. basements, paved/landscaped treatments) and details of proposed ground elevations.

Given the status of the current rezoning proposal, it is considered premature to complete even a qualitative evaluation of the existing data with regard to future sensitive receptor exposure scenarios. As such, once the proposed detailed design information is available with respect to specific sites, either generic NEPC (2013) or alternatively, site specific assessment criteria, may be considered most appropriate to adopt for each potentially contaminated media. In conjunction with supplementary data gap investigations (inclusive of any that may be required underlying heritage structures to be retained within lots), the adoption of refined site assessment criteria will enable quantitative evaluation of the data and enable decisions with regard to either site suitability or the extent of remediation and/or management required within each specific area to be documented within the specific area RAP.

Based on the extent of currently available data, as discussed in in **Section 4** and the resulting Conceptual Site Model as presented in **Section 5**, it is broadly assumed that soil conditions within the WBPS and Metro Station Sub-Precinct, including those that either currently, or in the future will lie within infrastructure corridors, public open space and sites within the WBPS and Metro Station Sub-Precinct may require at least some remediation and/or management such that the site may be considered suitable for the ongoing/new land uses. It is anticipated that future remediation and/or management of site contamination issues within each site may comprise one or more of the following elements.

6.3.1 Power Station Transformer Yard

Site investigation activities within the former transformer yard area at the north west extent of the power station site have previously identified the occurrence of free product (LNAPL) groundwater impacts at MW01 (**Figure 4**) that will require remediation. Previous assessment has identified this product to be consistent with transformer oil comprising mid to heavy fraction petroleum hydrocarbon (TRH) without detectable concentrations of PCBs.

Sufficient sampling has been previously completed to confirm the absence of conditions requiring regulation by the NSW EPA under the CLM Act (EPA 2015[17]). Historical assessments have indicated the plume is relatively immobile, with no evidence of changing condition over time. Further, soil vapour monitoring has not identified any risks from volatile TRH fractions as being associated with the LNAPL. However, remediation of the groundwater and impacted soil/sandstone underlying the transformer yard will be required such that this area may be considered suitable for redevelopment. It is anticipated that further characterisation of the extent and nature of the impacts in addition to consideration of a development concept will be used to derive a specific remedial plan for the initial contaminant source removal works.

[17] *Re: Former White Bay Power Station – Robert Street, Rozelle*. NSW EPA, 15 June 2015, Ref: DOC15/24483 (EPA 2015)

6.3.2 Petroleum Infrastructure

Whilst available information has not identified the presence of remaining petroleum infrastructure within the WBPS site, petroleum infrastructure, including USTs, above ground oil and fuel storage facilities, bowsers, oil/water separator units and associated pipework, have previously been identified within the broader Precinct, particularly associated with the small commercial/industrial developments to the north of the Power Station site.

6.3.3 Soil Impact

Historical filling activities undertaken prior to the construction of the Power Station building and subsequently across the foreshore area, in addition to activities associated with use of the power station including the transport, storage and processing of coal, storage of petroleum fuel and the railway sidings themselves have been identified as resulting in soil contamination impacts. The currently available assessment data has indicated the occurrence of near surface and subsurface fill material within the yard/foreshore areas of the WBPS site impacted with:

- Benzo(a)pyrene and total PAHs;
- Heavy metals (primarily copper, nickel, lead and zinc);
- total petroleum hydrocarbons (TRH/TPH); and
- Asbestos in soil.

Site contamination conditions have been identified to be reflective of the reclaimed nature of the foreshore and subsequent industrial use of the site. The distribution of contaminant concentrations across the site, with the exception of the impacts associated with the transformer yard, is considered reflective of the physical variability of the fill material across the site. Whilst for the majority of the site, the ground levels have not substantially changed for an extended period, it is noted that recent WestConnex construction works along the south-west of the site have included removal of the former fill embankment and exposure of a combination of sandstone bedrock and sandstone fill along the new Anzac Bridge approach lanes used to backfill the original causeway. Further the Metro West early works activities have commenced, including relocation of the former port access road which is expected to result in the disturbance of fill material within the foreshore portion of the site, the extent and nature of which are uncertain.

Natural (alluvial/estuarine) soils across the site have generally been identified to be free of significant contamination impact, with the exception of the fill/natural soil interface within the eastern portion of the site.

6.3.4 Acid Sulfate Soil Conditions

Natural soils have however been identified as potential and/or actual acid sulfate soil (PASS/AASS) and will require management where any activities will potentially result in disturbance of these materials, including changes in groundwater levels.

6.3.5 Groundwater Impact

Free product transformer oil impacts have been identified in the north west portion of the Power Station site underlying the former transformer yard area as discussed above. Assessment of the potential for off-site migration completed via sampling of the water cooling channel that passes beneath the power station turbine hall inferred that the extent of groundwater impact was constrained to the north west portion of the site. As noted above, remediation works will be required to include contaminant source removal activities in this area of the site, the extent of which will require confirmation prior to development of an area specific RAP.

Groundwater across the remainder of the site has been found to have some slightly elevated metals (typically chromium, copper, manganese and zinc) and trace detections of semi- and non-volatile

petroleum hydrocarbons, PAHs and PFAS). The concentrations of organic contaminants in groundwater (other than in the transformer yard) are considered to not present a risk to either human health or the environment such that they will require management. The heavy metal impacts are typical of those associated with impacted fill material and deeper groundwater samples have not indicated impacts extend to these resources. It is anticipated that there will be no future beneficial reuse of groundwater (as opposed to the potential for use of stormwater) and there will be no direct human exposures within the site. Whilst the conditions are not such that they will require specific management with regard to the future land use, should dewatering be required, it is anticipated groundwater would require some treatment prior to off-site discharge.

Ecological receptors within White Bay to the east and Rozelle Bay to the south of the site, may potentially be exposed to groundwater discharge from the site and/or leachate from fill materials migrating through seepage water / groundwater flows. It is noted that White Bay and Rozelle Bay are characterised as part of the Sydney Harbour and Parramatta River Catchment, the ultimate receiving water body, and is a tidal marine environment. White Bay is classed as a lower estuary and it is anticipated that this is a complete ecological receptor for groundwater at the site.

6.3.6 Soil Vapour and Ground Gas

Soil vapour has generally been identified as free of contaminant impact across the site. Ground gas monitoring, particularly targeting the potential for organic material within the estuarine/alluvial sediments and other placed fill material at the site to be decomposing resulting in the generation of methane, hydrogen sulfide and carbon dioxide has not identified any potential ground gas generation risks that may present a concern with regard to future land uses.

6.4 Hierarchy of Remedial Options

The preferred hierarchy of options for remediation (clean up) and/or management adopted by NSW EPA has been established within the NEPC (2013) Assessment of Site Contamination Policy Framework as follows:

- On-site treatment of the soil so that the contaminant is either destroyed or the associated risk is reduced to an acceptable level; and
- Off-site treatment of excavated soil so that the contaminant is either destroyed or the associated hazard is reduced to an acceptable level, after which the soil is returned to the site; or

if the above options are not practicable:

- Consolidation and isolation of the soil on site by containment with a properly designed barrier; and
- Removal of contaminated material to an approved site or facility, followed, where necessary, by replacement with appropriate material; or
- Where the assessment indicates remediation would have no net environmental benefit or would have a net adverse environmental effect, implementation of an appropriate management strategy.

In addition, when deciding which option to choose, consideration is also required to be given to the sustainability (environmental, economic and social) aspects of each option to ensure an appropriate balance between the benefits and effects of undertaking remedial/management options.

In cases where no readily available or economically feasible method is available for remediation, it may be possible to adopt appropriate regulatory controls or develop other forms of remediation.

6.5 Options Assessment

In accordance with the above hierarchy, remedial options for identified site impacts are further discussed below as opportunities and constraints to evaluate the preferred remedial options in relation to site impacts identified as requiring remediation/management, noting that these comprise impacted soil and contamination sources (transformer yard petroleum hydrocarbon impacted material).

6.5.1 On-site Treatment

On-site treatment of contaminants/contaminated material requires that the contaminants are either destroyed or otherwise the risk associated with the material is appropriately reduced to an acceptable level whereby no on-going management of the hazard is necessary. These opportunities are discussed following for the main contaminant groups encountered at the site.

- Heavy metals cannot be destroyed by treatment methods. However, there are a number of commercially available microencapsulation measures available, including cement stabilisation that effectively reduce hazards associated with soil heavy metal contaminant migration in leachable material. Whilst there are costs associated with site specific approvals, space and time requirements, etc, should treatment be successful, the stabilised material could potentially be reused on site saving the cost of off-site (landfill) disposal. As such, where soils are identified as impacted with leachable metals such that they require treatment to address contaminant migration risks, application of on-site treatment via micro-encapsulation and subsequent reuse of stabilised material may be a viable option, provided the material can be temporarily excavated and there is sufficient capacity for retention of an increased volume of material on-site.
- PAHs identified in soil, with the exception of any impacts associated with fuel and/or tar impacts (as may be identified), are typically present in the heavy, non-volatile range. These contaminants can be remediated by application of thermal processes such as indirect/direct thermal desorption (I/DTD). However, as for the heavy metal impacts, the material must be able to be excavated for treatment application ex-situ. Further, with consideration to the extent and nature of the identified site PAH impacts, the costs associated with plant establishment, the sensitivity of the site, on-site approvals and running (energy) costs in addition to space and time considerations, such methods are considered unlikely to be practicable at this site. Further, where material is also impacted with heavy metals and/or asbestos, these issues will remain upon treatment of the PAHs. For tar/fuel based PAH impacted soils, there are a number of commercially available microencapsulation options that may reduce the mobility of organic contaminants. Where unacceptable contaminant migration risks are not identified associated with material, there is not considered to be a requirement for microencapsulation of PAH impacted soil.
- For asbestos in soil impacts, where material comprises intact infrastructure and/or non-friable ACM on or in the soil, on-site treatment options may comprise removal of visible asbestos from the site surface or removal of non-friable ACM in shallow (<10cm) surface soils where the source of the asbestos is determined as previously poor/incomplete demolition of an asbestos structure. The ACM removal technique will include screening and/or manual (emu/sparrow) picking removal methods. The presence of broken ACM or co-occurrence with demolition rubble in fill material can potentially impact upon the viability of picking/removal programs, which do require space and time for works to be completed successfully. Such programs will require the subsequent off-site disposal of the ACM fragments/ infrastructure, but provide for the on-site retention of treated soil without further management. It is noted that there is no known methodology for the treatment/destruction of friable asbestos in soil. In addition, where non-friable and friable

asbestos impacts co-occur, this increases worker exposure risks. Given the above, on-site treatment of non-friable ACM in surface soils may be a potentially viable methodology, but this is not the case for material impacted by the presence of friable asbestos in soil.

- Where petroleum infrastructure is identified, these facilities will be removed. Where impacted soil is identified in conjunction with the facilities and/or as a separate occurrence, there is the potential that such soils may be remediated on-site using a bio-remediation type methodology, provided that suitable time and space is available to facilitate such methods. Bio-remediation comprises the breakdown of petroleum hydrocarbon compounds during the metabolic processes of soil micro-organisms present in, or added to the impacted soil. Application of bio-remediation methodologies will need to ensure that the remediation process is not simply a matter of contaminant volatilisation to the atmosphere, considered by the NSW EPA to comprise air pollution. This would comprise the application of covered bio-pile methods such that vapour emissions may be captured and passed through a carbon filter prior to environmental discharges. Further, in instances where free product is present, this may also impact on the suitability of the methodology. On this basis, limitations on the capacity of such treatment options are envisaged where significant volumes of impacted material are identified in areas with limited options for treatment space. The viability of such an option would require further consideration in applicable area specific RAPs.

6.5.2 Off-site Treatment

Off-site treatment of contaminants/contaminated material requires that the impacted material is excavated, transported to an alternative (lawful) location for treatment such that the contaminants are either destroyed or otherwise the inherent associated hazards are appropriately reduced to an acceptable level whereby no on-going management of the hazard is necessary. Following the completion of such treatment activities, the material would then either be returned to the site, or alternatively, lawfully disposed of from the treatment location. Available treatment options for contaminants are consistent with those identified for on-site treatment of soil discussed above.

The advantage of off-site treatment options when compared to on-site treatment for suitable heavy metal, PAH and/or TRH impacted soils are the absence of potential regulatory requirements for on-site treatment, on-site plant establishment costs and management of potential emissions associated with potential treatment methodologies. However, the material will still require excavation and potentially, return to the site and as such, consideration of the cost and impact of soil movement, the time required to complete the treatment works for required volumes (particularly in the case of petroleum hydrocarbon impacted material), social constraints (additional truck movements etc), would require consideration in a feasibility assessment. With regard to the off-site treatment of asbestos contaminated material in lieu of on-site treatment, consideration would be required of additional regulations regarding the transport, treatment and management of asbestos containing material. On this basis, off-site treatment of asbestos impacted soil is unlikely to be feasible.

6.5.3 Consolidation and Isolation by Containment

This option provides for the retention of the contaminated material on-site beneath a physical barrier such that there are no complete exposure pathways available between the contaminated material and sensitive human and ecological receptors. The material will be covered with a demarcation indicator (visual marker layer) and then a permanent physical barrier such as pavements and/or a layer of non-impacted soil. Subsequently, an environmental management plan (EMP) would be documented providing a framework for ongoing management of potential risks associated with the retained material.

- For heavy metals and PAHs of low volatility (ie. not of fuel and/or tar origin), this option is considered appropriate, subject to confirmation the contaminated material does not result in adverse impacts to groundwater quality, given there are no vapour generation risks

associated with such contaminants. Where material is identified as leachable and as such may impact groundwater quality, physical containment is unlikely to be an economically viable option given the proximity to White Bay, a sensitive marine ecological receptor. In such instances, impacted material should be the subject of one or more of the above options, provided the any heritage constraints provide for the excavation and off-site disposal and/or treatment.

- For asbestos impacted material, this option is considered to generate the least risk to remediation/construction personnel in relation to completion of site works. Implementation of a physical barrier such that asbestos fibres may not be liberated and become airborne is generally appropriate. However, consideration will be required of potential risks associated with site development activities where building foundations may be required to be installed within/ through the encapsulated material such that asbestos management controls may continue to be required during these construction activities.
- For petroleum hydrocarbon and semi-volatile PAH impacted material, which may potentially generate unacceptable soil vapour concentrations or migrate via groundwater, containment measures would need to address these potentially unacceptable risks to establish the appropriateness of this option.
- On-site containment would be suitable for consideration in any areas of the site where the heritage significance of inground features is such that the soil profile should not be excavated or otherwise disturbed to preserve the integrity of archaeological remains, heritage landscape and/or building features. The details of a physical separation mechanism and associated EMP to address site contamination provisions would require development in conjunction with the Aboriginal and/or European Heritage consultants such that the Heritage Conservation Management Plans and the future EMP complement and refer to each other to ensure compliance with all requirements.

6.5.4 Off Site Removal

Excavation and off-site disposal of contaminated material to a lawfully facility effectively removes the contaminants from the site such that no on-going management is required. Material is required to be transported to a facility lawfully able to accept the type of waste and associated fees including government waste levies apply. There are facilities within the Sydney region able to accept material classified as General Solid Waste (GSW), Special (asbestos) Waste and Restricted Solid Waste (RSW).

Social impacts, including high volume truck movements and potential environmental emissions associated with on-site activities and vehicle movements would require consideration in evaluation of this strategy.

Subsequent to off-site disposal of the contaminated material, in some instances replacement material may be required to be sourced to establish proposed development levels. Opportunities may exist for the beneficial reuse of excess suitable material from other areas of the WBPS and Metro Station Sub-Precinct during development. Alternatively, suitable material would require to be sourced from off-site locations. Consideration will also be required of the viability of this option for large quantities of material and where material is required to be sourced from off-site to reinstate site levels.

Further, where material is identified to be impacted such that contaminant concentrations exceed the thresholds for characterisation as GSW, GSW mixed with Special waste or RSW, material may require to be treated prior to off-site disposal to a lawful facility as discussed above. In such instances, on-site or off-site treatment of the contaminated soil as per the methodologies outlined above would require application prior to either beneficial reuse, or disposal as a lower category waste to landfill.

It is noted that in some portions of the Precinct, there is the potential that heritage features may require consideration with regard to the requirements for excavation of in-situ soils so as to preserve the intact nature of site features. In this instance, contaminated material identified within these areas, off-site removal may not be a suitable option.

6.5.5 Implementation of an Appropriate Management Strategy

Where assessment of site conditions and potential remediation opportunities has identified the absence of a strategy that would deliver net environmental gains and/or would result in greater environmental impact, then none of the above opportunities should be preferred. Instead, alternative approaches, including for example, monitored natural attenuation (MNA), or management of contamination at depth by maintenance of existing site uses/features may be considered. Evaluation of such opportunities would require appropriate lines of evidence to be documented, as well as the potential adoption of an EMP to guide the ongoing management of the site.

Given that technologies, exposure scenarios and/or contamination conditions over time may potentially influence the initial assessment outcomes with regard to the remediation/management options assessment, such a strategy may be considered as an interim rather than permanent solution and as such, the associated potential limitations would need to be considered by stakeholders prior to adoption of such a strategy.

6.6 Strategy for Selection of Proposed Options

Based upon the assessment of potential remedial options as presented above, it is likely that a range of potential strategies may be adopted during future development of the site, dependent upon specific factors including the contaminant(s) of concern in various areas, final site development details (ie. basement excavations, site surface treatments, exposure scenarios) and the potential for areas of heritage/archaeological significance that may be encountered as associated with the area of contamination.

In general, subject to the specific considerations above, it is anticipated that the preferred option for remediation of heavy metal, PAH and/or asbestos impacted fill material is, where appropriate, the on-site containment of the contaminated material. Where retention of impacted material on-site is not feasible as a result of development requirements (material excess to development requirements), it is anticipated that such materials will be the subject of off-site disposal to a lawful facility.

In preparation of the area specific RAPs for the site, proposals to adopt on-site containment will be required to demonstrate:

- Exclusion of potential direct human contact to materials by consideration of potential exposure times and pathways that will pose an unacceptable level of risk / hazard;
- Exclusion of new site flora contact to materials that may pose a potential phyto-toxicity risk; and
- Confirmation that the contained material is consistent with the extent of fill materials historically observed and reported on the site, to the extent that the materials will not potentially generate vapours / gases (posing a potential inhalation risk) as assessed via site soil, groundwater and/or direct vapour data or have significant levels of potentially leachable constituents (impacting groundwater quality) as assessed via comparison of soil leachate and groundwater data site specific contaminant threshold values to be adopted with consideration to the Sydney Harbour (Parramatta River) water quality objectives.

The preferred option for the remediation of petroleum hydrocarbon impacted materials is source removal followed by on-site bioremediation of impacted materials by a method that causes the

reduction of petroleum hydrocarbons in the affected soil/groundwater while preventing uncontrolled atmospheric release of petroleum constituents. Where bioremediation works cannot be implemented due to space / time / environmental constraints, the contingency option is off-site disposal of the materials. It is noted that where heavily impacted materials are encountered, limited bioremediation may be undertaken to reduce gross levels of impact and allow the material to be more readily disposed from the site to a lawful facility.

Localised areas of impacted fill material within specific site areas may be identified during data gap level assessment activities which pose a potential vapour / leaching risk. Specific evaluation of conditions in such areas will be completed to provide a suitable data set to enable defensible decision making with respect to the extent of contaminant source removal works required to address the identified risk. This will include assessment of vapour and/or soil leachate concentrations in accordance with site specific risk assessment derived thresholds.

Where vapour/leaching source material is identified, removal of such material will be identified as necessary. In such an event, the most preferred options will be identified on a case basis from one of the following preferred options:

- On-site treatment comprising chemical encapsulation, bioremediation or similar as appropriate to the contaminant characteristics; or
- Off-site disposal to a lawful waste facility.

6.7 Anticipated Scope of Remediation Works

6.7.1 Specific Areas Subject to Data Gaps

As identified in previous sections, in some instances, identification of the extent of remediation/ management required for a future land use proposal may benefit from additional site characterisation activities. Whilst a broad characterisation data set is available across the majority of existing properties within the WBPS and Metro Station Sub-Precinct, the scope of such investigations was limited by accessibility constraints and the absence of detailed future proposed landuse scenarios in many instances. As such it is anticipated that significant widespread potential contaminant conditions have been confirmed as present/absent at the site, but further data may be required to address data gaps prior to preparation of various detailed development lot DAs to enable decisions on site suitability at a development lot specific area level and/or facilitate final decisions with regard to waste classification for off-site disposal of excess excavated material.

During development of the specific land use proposal, a suitably qualified and experienced contaminated site consultant should complete an assessment of data available for the specific site area following completion of the above works. Evaluation of the data based on published information as documented in this plan and subsequent supporting documentation should facilitate identification of data gaps which require further investigation such that a defensible data set may be available upon which to base the area specific RAP. Based on this anticipated staging, minimal additional data assessment is likely to be required to confirm site conditions once earthworks commence.

It is anticipated that the initial assessment of data, particularly with respect to asbestos concerns, may include a qualitative assessment of potential risks associated with the proposed development. Such works, including a desktop review, may potentially identify that no further site specific data is required, particularly where works proposed include significant filling of the site, or where excavation and off-site removal of all fill material to the depth of exposed sandstone bedrock, etc is proposed. However, where site inspections, review of existing field logs/laboratory results and/or development details identify the need for additional data, supplementary investigations will require implementation.

Data gap investigations may comprise additional soil characterisation activities, particularly in relation to the assessment of the potential for asbestos in soil contamination; the potential for leaching of contaminants to groundwater/sensitive nearby receptors; provision of current data in the vicinity of potential contaminant sources; in areas where there is little or no existing data specific to individual sites; further detailed delineation of the extent of marine/estuarine soil deposits within areas requiring disturbance during development activities; and characterisation of sediment conditions within water based portions of the site, where development activities may result in disturbance of the bay sediment bed. The details of additional data gap investigations should be documented as a SAQP prior to the commencement of works such that the proposed approach can be endorsed by the appointed site auditor prior to the investigation.

Where appropriate, additional data will also be required to establish soil vapour conditions where soil and/or groundwater conditions identify potential source material that that may present an unacceptable volatilisation / inhalation risk such that the extent and degree of contamination impact may be appropriately considered in development of the remediation strategy.

To evaluate potential vapour risks from volatile organic contaminants and provide data to make decisions regarding requirements for remediation to address unacceptable soil vapour risks, it is anticipated that additional site assessment will be implemented via a staged approach comprising:

- Collection of site observations, soil and groundwater laboratory analysis data;
- Evaluation of site and laboratory soil and groundwater data against appropriate initial Tier 1 screening levels presented in NEPC (2013);
- Design and implementation of a defensible of soil vapour data set using endorsed methodologies and screening against initial Tier 1 screening levels presented in NEPC (2013); and where appropriate,
- Implementation of a site specific health risk assessment with appropriate consideration to exposure pathways specific to the proposed development details.

It is also noted that at this point, no specific assessment of conditions underlying existing heritage (or otherwise) structures as may be retained/adaptively re-used on site has been undertaken. Specific evaluation requirements will be subject to consideration of potential adaptive reuse proposals, heritage constraints, etc in determining the level of assessment required to manage any potential contamination risks associated with the structures.

It has been identified in the Environmental Site Assessment (JBS&G 2022) that there are no known significant broad scale groundwater contamination concerns at a Precinct level with the exception of identified hydrocarbon impacts associated with the former transformer yard. However, dependent upon the proposed development details, proximity to known potential infrastructure and the Bay, consideration may be required to specific further investigation of groundwater within a portion of the proposed development lots.

It is anticipated that further assessment of groundwater contaminant conditions will focus on the evaluation of potential contaminant sources and down-gradient site conditions. This should enable conclusions demonstrating that that minor exceedances with respect to adopted Tier 1 ecological investigation levels (ANZG 2018) as identified during various recent site assessment activities do not represent an unacceptable risk to sensitive receptors and therefore do not require remediation and/or ongoing management.

6.7.2 Contaminant Source Removal

Where assessment of soil, groundwater and/or soil vapour contaminant conditions identifies the occurrence of unacceptable contaminant sources within the area specific RAP footprint, these

sources will be required to be removed and/or treated such that they no longer represent an unacceptable risk. It is anticipated that sources may include, but are not necessarily limited to:

- Existing petroleum hydrocarbon infrastructure and associated impacted soils/groundwater including light/heavy non-aqueous phase liquids (L/DNAPLs);
- Existing liquid chemical (solvents, paint, lubricants, pesticides, fumigants, etc) infrastructure and associated impacted soil/groundwater including L/DNAPL;
- Fill/waste material with leachable contaminant concentrations representative of an unacceptable migration risk; and
- Fill/waste material with concentrations of volatile and/or semi-volatile contaminants presenting an unacceptable vapour generation risk in relation to the proposed land use scenario.

Validation of the works will be required during and potentially following completion of the source removal works to demonstrate that the unacceptable risks have been appropriately addressed prior to issue either of the final validation report or alternatively, implementation of cap and containment strategies to address residual impacts as may be identified within specific areas.

6.7.3 Management of Asbestos Impacts

Where asbestos impacts other than those in existing WBPS buildings and infrastructure (pits, pipework, etc) are identified within soil during either site investigation works, or during/following demolition of existing improvements, the site (or portions thereof) will be required to be considered as having asbestos contaminated soils.

Such soils are defined in *How to Manage and Control Asbestos in the Workplace Code of Practice*, September 2019, SafeWork NSW (SafeWork NSW 2019) as:

- Soil that contains visible asbestos as determined by a competent person; or
- Soil that contains asbestos fibres at quantities exceeding trace levels (considered to be the analytical detection limit in lieu of alternate guidance) as reported by analysis undertaken in accordance with *AS4964:2004 Method for the qualitative identification of asbestos in bulk samples*.

Environmental, work health and safety management requirements for the handling of these materials will be based on the requirements provided for asbestos-related works in WorkSafe NSW 2019 (or as updated). This will include preparation of an asbestos register and associated asbestos removal control/management plan.

Assessment of site soils/fill material may be completed via inspection and sampling by a competent person and subsequent laboratory analysis of appropriate characterisation samples. Consideration may also be given to a quantitative assessment of the asbestos in soil impact to evaluate the potential extent of remediation required using asbestos quantitation methods as outlined in NEPC (2013).

Where the assessment results indicate that such material does not fall within the ‘asbestos contaminated soil’ definition, the requirements for management of ‘asbestos contaminated soils’ will not be required to be implemented. Dependent upon the initial investigation (and any potential UFP assessment) results, it may be considered appropriate in specific areas to further delineate the extent of asbestos contaminated soil within a work stage by a similar assessment (i.e. identification of asbestos contamination hotspots).

For the purposes of remediation works in the Precinct, a competent person shall be considered to be a person who holds a tertiary degree in an environmental or occupational hygiene discipline, has experience in contaminated site assessment and has completed a Safe Work NSW approved

Asbestos Removal Supervisor course and/or a NSW WorkSafe accredited Licensed Asbestos Assessor (LAA).

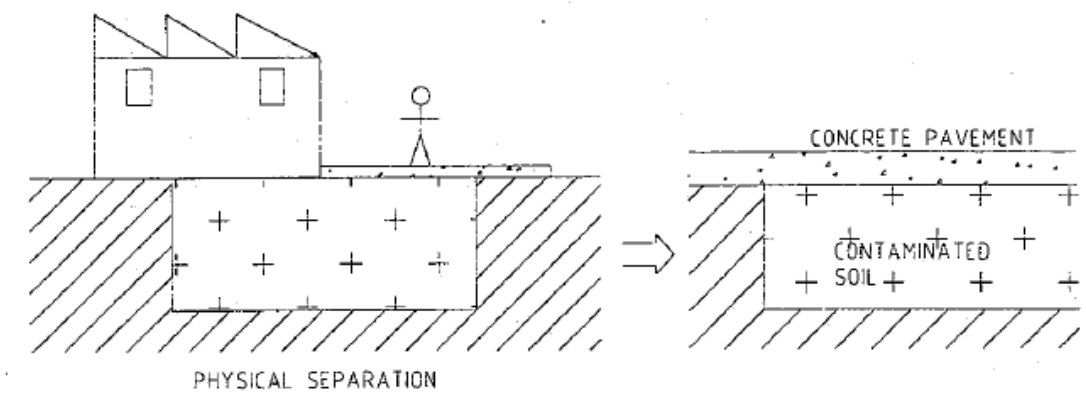
6.7.4 On-Site Containment Requirements

Requirements for installation of the physical barrier over impacted fill material are based upon the *Guidelines for the Assessment of On-Site Containment of Contaminated Soil*, September 1999, ANZECC (ANZECC 1999). With consideration to the primary COPCs other than those proposed to require treatment/removal, containment by physical covering in conjunction with appropriate control measures is considered appropriate for the impacted fill/disturbed natural materials.

The minimum typical requirements for physical separation to ensure that there are no complete exposure pathways include:

- Permanent pavement measures such as a concrete ground slab, asphalt surfaced pavement, mortared stone/concrete pavers or similar. The pavement base course shall be underlain by an easily discernible visual marker layer; or
- A thickness of soil that is unlikely to be penetrated by future users during everyday activities at the site (or relevant parts thereof). A minimum soil cover thickness of 0.5m is nominated in general site areas where exposed soil is proposed, which is to be underlain by a visual marker layer. However, it is noted that to achieve ecological objectives, increased depths of suitable non-contaminated soil may be required.

An example of such measure is shown schematically below:



Source: ANZECC (1999)

Further consideration will be given in the detailed area specific RAPs to relevant scenarios, including requirements to address the installation of underground services, areas of deep planting, etc.

The purpose of the marker layer is to serve as a visual signal to those disturbing the capping system of the presence of potentially contaminated fill material at depth. The marker layer shall consist of a light coloured knitted HDPE constructed equivalent to at least Bidum A19 in strength and durability. The marker layer should be of a distinctive bright colour such that future workers and/or site users will be alerted to conditions as documented in a site environmental management plan (EMP) prior to breaching the marker layer.

Where soil/rock based material is proposed to be used as part of the capping media and placed above the marker layer, the material will be required to be validated as meeting the adopted health / ecological criteria for the site such that there are no unacceptable risks to future site users/ occupants and/or workers during day to day site activities.

6.7.5 Site Boundaries

Given that this plan envisages redevelopment of the WBPS and Metro Station Sub-Precinct will be undertaken over an extended period, it is anticipated that in some instances, remediation of a specific site may require consideration of boundary conditions to protect adjoining structures and/or road infrastructure.

In such instances, it may not be feasible to complete remedial excavation works all the way to the site boundary. Either excavations may be battered back from the boundary, or alternatively shoring for excavations may be completed inside the property boundary such that impacted material may remain within the site at the time of validation. Where shoring is completed inside the boundary it is anticipated that (provided the shoring is permanent and will form part of a future structure) the capping beam will effectively cap the balance of the material such that the requirements of the RAP in relation to containment of material are met.

However, where battering is adopted at the excavation edge, the nature of the batters may cause environmentally impacted materials to be present at depths shallower than the minimum depth prescribed by the site capping requirements (ie. a minimum of 0.5 m of non-impacted material in non-paved areas). Where such conditions occur, the extent of the impacted material will be required to be surveyed and the non-compliance addressed in the final validation report and EMP to be implemented at the site such that future site workers/occupants that may complete activities in this area are appropriately advised.

Alternatively, license arrangements may be completed whereby the proponent may be allowed to construct boundary stability works within an adjoining lot such that the subject site may be completely remediated. In such an event, appropriate contamination management protocols are required to be followed such that the contamination conditions on the adjoining site are appropriately managed in accordance with the RAP(s).

In addition, noting the potential for several point sources of contamination within the WBPS and Metro Station Sub-Precinct, consideration to off-site migration in the context of the staged redevelopment of the site will be required. In certain cases, a particular property within the WBPS and Metro Station Sub-Precinct may be remediated prior to the remediation of an adjacent upgradient property – where contaminants migrating via groundwater may result in the remediated property been impacted once again. In such an event, appropriate contamination management protocols and/or appropriate interim measures will be required to be followed such that the contamination conditions on the adjoining site are appropriately managed. It is anticipated that these requirements will be identified during the development of area specific RAPs and appropriate measures can be developed. Furthermore, the off-site migration of contamination within properties of the WBPS and Metro Station Sub-Precinct will require management in accordance with the Contaminated Land Management Act (CLM) framework.

6.8 Material Movement Management

6.8.1 Material Movement Principles

As part of site remediation/redevelopment works it is anticipated that material excavated during works will fall into one of a number of categories, comprising material:

- required to be removed from the specific area RAP footprint to achieve site remediation objectives specific to the proposed landuse of that area that will require disposal to a lawful waste facility;
- required to be removed from the specific location to achieve site remediation objectives specific to the proposed landuse of that area that could potentially be reused under a less sensitive land use scenario within the broader WBPS and Metro Station Sub-Precinct redevelopment boundaries; and

- excavated for services installation, cut activities to establish development levels, basement construction, regrading for installation of landscaping, etc with contaminant concentrations suitable to be retained on the WBPS and Metro Station Sub-Precinct with or without ongoing management that generally would require disposal as waste if it could not be reused on site.

Appropriate sampling protocols including the required density of sampling for differing materials types, sampling methodology and documentation requirements will be nominated in each site specific RAP to ensure compliance with NSW EPA Regulations and Guidance.

Based on assessment outcomes, material falling within the first category will automatically require classification and off-site disposal to a lawful facility. Tracking of this material will be required with resulting documentation to be included in the relevant validation report.

For the remaining two categories, it is proposed that a single Premises definition be adopted for the WBPS and Metro Station Sub-Precinct as a whole to facilitate reuse of material across the broader redevelopment areas such that disposal to waste facilities may be minimised. This will assist with management of social impacts including truck movements, waste generation rates, the potential need to source material for importation, in addition to reducing the overall cost of remedial/development works.

The concept of a Premises is defined by the POEO Act (1997) and the associated *POEO (Waste) Regulation 2014*. In accordance with this Act, Waste includes 'any discarded, rejected, unwanted, surplus or abandoned substance' that is to be removed from a 'Premises'. For the purposes of this Act, a Premises includes:

a) A building or structure, or

b) Land or a place (whether enclosed or built or not), or

c) A mobile plant, vehicle, vessel or aircraft.

Application of this approach will result in management of such material under the Contaminated Land Management Act (CLM) framework, rather than the Waste (POEO Act) framework. This will provide for area specific RAPs to evaluate the potential suitability of material within each development area to be the subject of reuse within the broader WBPS and Metro Station Sub-Precinct site where excavation is required as part of development works.

In addition, where off-site disposal of surplus materials is required, materials with a lower waste classification, or alternatively the potential for off-site beneficial re-use should be selected in preference for off-site removal prior to off-site disposal of impacted material to a lawful facility to minimise the quantity of waste generated by the works. This may include consideration of excavation of non-contaminated or less impacted material from areas for off-site disposal, with the resulting area being re-instated with environmentally impacted material available on the site, subject to development approval for excavation/stockpiling activities. Soils moved between stages/development lots will require to be moved as per a materials tracking system as described below.

Within each area specific RAP, regardless of the adoption of the single Premises approach, management of excavated material will need to be addressed by application of an appropriate Material Tracking System (MTS). The scope and level of detail to be included in the MTS will be dependent upon the scale of excavated material to be generated within the area specific RAP footprint. However, it is anticipated that each MTS will comprise the following elements:

- Definition of Roles and Responsibilities;
- Material quality information;
- Material movement tracking;

- Material emplacement;
- Documentation required;
- Dealing with non-conformance; and
- Dealing with expected and unexpected finds.

It is noted that the MTS system should also cover material imported to site for use in development works until such time as a final SAS stating that the site is considered suitable for the proposed land use.

The relevant environmental, health and safety requirements of the handling of the soils on the source site as defined in the detailed area RAP issued for the source site shall be transferred to the area of relocation of the soils. This shall at least include provisions for stockpile management, material movement design in accordance with project staging / timeframes and separation of fill materials from naturally occurring soils.

6.8.2 Off-Site Disposal of Material

Where material is identified as either unsuitable under the RAP, or engineering specification, or the material is surplus to development objectives for the Premises, the material will be required to be assessed for off-site removal.

Should sufficient information be available at the time of preparation of the area specific RAP, a waste classification in accordance with EPA (2014) may be documented in the RAP. Alternatively, the requirements for assessment and documentation of a waste classification assessment will be documented in the area specific RAP as noted above.

It is further noted that a number of exemptions may potentially apply to material considered to be surplus to the requirements of the Premises (but not to material considered unsuitable under a RAP). A waste (resource recovery) exemption may be applicable for material covered by either a General or Specific Resource Recovery Exemption (RRE) as issued by the EPA under the *POEO (Waste) Regulation 2014* (or as updated), including Excavated Natural Material (ENM[18]), Recovered Aggregate (EPA 2010[19]) or similar. Dependent upon the characteristics and quantities of identified material(s) there may also be opportunities available with regard to the application of a Specific RRE in some instances. Virgin excavated natural material (VENM) as defined in the POEO Act is also exempt from the waste definition for the purposes of resource recovery.

Details of completed additional assessment activities including material characterisation reports will be included in the final validation documentation to be prepared in accordance with the requirements of an area specific RAP. Records associated with material tracking, including trucking receipts, landfill disposal records, etc will also be reviewed to ensure material removed from the site can be accounted for and has been disposed of lawfully.

6.8.3 Beneficial Reuse of Material within the WBPS and Metro Station Sub-Precinct Footprint

Material within each site specific RAP boundary will initially be evaluated with regard to the suitability of the material to remain within the site. Should the material be deemed by the source to be excess to its requirements, the material may be disposed of to a lawful facility off-site. Alternatively, the material may be the subject of further review to facilitate decisions within respect to the suitability of the material for beneficial reuse and/or containment elsewhere within the broader WBPS and Metro Station Sub-Precinct.

[18] *The Excavated Natural Material Exemption 2014*. NSW EPA 24 November 2014 (EPA 2014a)
[19] *The Recovered Aggregate Exemption 2014*. NSW EPA 24 November 2014 (EPA 2014b)

The remediation/validation consultant for the source area will be responsible for reviewing the available material characterisation data relevant to the excess material. Where necessary, the consultant will develop and implement an additional program of testing to close out any data gaps and confirm the suitability (or otherwise) of the material for beneficial reuse within the broader WBPS and Metro Station Sub-Precinct footprint.

It is noted that such characterisation assessments will be included in the final validation reports prepared for the source and where material is placed within a separate project site within WBPS and Metro Station Sub-Precinct, included also in the final validation report for the placement project site. As such, the assessment of the material will require to be sufficiently robust to confirm the material as suitable under the placement project site RAP.

The source site Remediation Consultant will be responsible for ensuring evaluations are completed for the site material characterisation assessment in accordance with the details in the respective site RAPs with respect to characterisation and validation of stockpile activities.

6.8.4 Importation of Material

Project remediation and/or redevelopment works may require the importation of material from other than WBPS and Metro Station Sub-Precinct footprint including:

- temporary use requirements – trafficability/accessibility measures, piling platforms, etc; or
- permanent use - utility/infrastructure trench backfill, reinstatement of excavations, landscaped area, drainage media, growing media, pavement subgrade, etc).

Prior to importation of all material, appropriate assessment of such materials must be completed to demonstrate the material is both fit for purpose and suitable from a contamination view point. In accordance with EPA requirements, the extent of assessment will be determined by the type of material proposed to be imported. Whilst it is anticipated that an appropriate assessment strategy (including sampling methodology, density and analysis details) will be developed at a site specific RAP level once details of likely importation details can be considered, the following overall principles will require consideration.

Where material proposed to be imported is Virgin Excavated Natural Material (VENM), an assessment must demonstrate that the material is compliant with the definition of VENM as presented in the POEO Act 1997, adopting in the minimum requirements for characterisation of fill material as presented in EPA (1995), other than where the material is sourced from a commercial quarry operating under an EPL.

Where material proposed to be imported has been characterised under the Resource Recovery Framework (Order/Exemption), the material must firstly be demonstrated by the supplier as suitable for use in accordance with the requirements of the Order via provision of a statement of compliance. Such materials are anticipated to comprise, but will not necessarily be limited to: excavated natural material (ENM), recycled aggregate, basalt fines, compost, mixed organic waste, pasteurised garden organics and recovered fines, with reference to the list of current orders and exemptions on the NSW website required to be reviewed.

In addition to the testing completed by the supplier, given the low frequency of compliance testing required under these Exemptions, the specific material proposed to be imported will require an additional compliance assessment prior to approval to import. The additional assessment is required to ensure that the incoming material does not pose an unacceptable risk to human health and/or environment at the placement site and is therefore suitable for use. It is anticipated that such assessment activities will include visual inspections, representative sampling and laboratory analysis of material to demonstrate the material meets the requirements to be outlined in the site specific RAP in relation to use of material on-site. As for VENM assessments, it is considered suitable to

define such requirements on a specific site basis given the potential variability of project site requirements.

Material tracking records in addition to the import assessment report are required to be included in the final validation report for each site specific area.

6.9 Proposed Validation Strategy

Data will be required to be collected during remediation works to assess the effectiveness of the implemented remedial actions and document the final condition of the site at the completion of works such that conclusions may be drawn on the end suitability of the site for the proposed development use.

The following sections present an overview of general principles that will be required to be considered in greater detail within each future area specific RAP.

6.9.1 Validation Sampling Analysis and Quality Plan

A validation sampling analytical quality plan (SAQP) will be prepared either as a standalone document or within each specific area RAP prior to the commencement of on-site remedial works. In broad terms, validation will be required to address the following aspects of the remedial works:

- Removal of contamination sources including petroleum infrastructure;
- Completion of remedial excavation works;
- Installation of capping materials;
- Verification that uncapped / accessible soils (including imported filling and growing media) are suitable for the proposed use;
- Characterisation of identified data gaps including site areas not subject to previous sampling and analysis as a result of access limitations at the time of preparation of the applicable area specific RAP;
- Characterisation and off-site disposal and/or beneficial use of materials excess to development requirements; and
- Assessment and close out of Unexpected Finds assessments.

6.9.2 Validation Assessment Criteria

Validation assessment criteria will be required to be developed for each potentially contaminated media (soil, groundwater, vapour, sediment, etc) as part of each site specific RAP in accordance with the framework established in NEPC (2013). In some instances, it may be appropriate to adopt NEPC (2013) tier 1 investigation levels as default validation criteria. However, site specific validation criteria developed by a process of health and/or ecological risk assessment may be more appropriate for some media and/or some site areas dependent upon the identified contaminants of concern and the development details.

Specific consideration will be required to potential exposure scenarios associated with the development proposed within each specific area footprint. It is further acknowledged that a range of potential validation criteria may be appropriate for one or more media within a single RAP as a result of the proposed development land use details and consideration of the final depth of material.

6.9.3 Contaminant Source and Impacted Material Removal Validation

Validation of excavations resulting from the removal of source material will be undertaken by a combination of physical inspection (visual and olfactory assessments as appropriate) and sampling analysis of representative samples of the lateral and vertical extents. Validation samples will be analysed for identified contaminants of concern associated with the source material removal

activities and the results compared to the applicable validation assessment criteria. The density of sampling will be developed in accordance with NSW EPA endorsed guidance and documented in the area specific RAP.

Appropriate validation assessment activities may also comprise additional validation assessment of groundwater and/or soil vapour conditions subsequent to removal of source material to verify the success of the remedial works in removing the contaminant source. Dependent upon the contaminant characteristics and scale of impact, a program of ongoing monitoring may be required to demonstrate improvements in groundwater, soil, and/or sediment quality and/or decline in soil vapour concentrations over time (such as via monitored natural attenuation).

6.9.4 Accessible Soils Validation

Where material sourced from either the specific site area or from within the broader WBPS and Metro Station Sub-Precinct Area is proposed to be reused in areas of accessible soils either without ongoing management, or above the marker layer in areas subject to management, this material will be required to be validated as suitable with respect to both human health and ecological assessment considerations. In addition, material imported for use in site reinstatement, civil/infrastructure works (aggregates, subgrade material, drainage layers, growing media, etc) will also be required to be demonstrated as fit for purpose from a contamination point of view, including evaluation with respect to human exposure and where appropriate, ecological assessment.

In areas of proposed landscaping, sampling and analysis of existing on-site fill/natural soil materials will be required to demonstrate the suitability of the material for both:

- Human contact under the relevant landuse scenario (residential with accessible soils, child care centres, public open space, commercial/industrial etc, land use scenario); and
- Growing media, in accordance with thresholds for ecological assessment in urban public open space scenarios.

Alternatively, the existing fill materials may be subject to capping as relevant for the proposed land use and/or landscaping objectives as detailed in specific area RAPs.

In assessing the potential for future human exposure it shall be assumed that direct exposure by site users may occur to soils to a depth of 2 m below the finished ground surface. This depth is considered suitable also for assessment of fill material in deep planting areas. It is noted that this is substantially deeper than the proposed generic capping thickness. Consideration will also be required of potential disturbance, such as infrastructure installation (underground services, etc) and ongoing maintenance activities, that may extend to depths greater than 2 m. In these localised areas, consideration may be required for assessment (and where required remediation/management) to greater depths. As such, it is anticipated that the area specific RAPs will define specific depth of validation and/or containment requirements relevant to proposed development details for each area of the site.

In general, where site soil and soil vapour conditions are able to be successfully validated with respect to the final validation criteria to a depth of 2 metres below the finish ground surface or greater in unpaved areas of the site, no physical 'marker layer' is required to be installed and these areas would not be subject to on-going management under a long term Environmental Management Plan. However, consideration may also be required in addition to specific details, including installation of deeper infrastructure (underground services, etc), the potential for future soil disturbance and/or the presence of other subsurface features in defining where remediation and/or ongoing management may or may not be required for the site to be considered suitable for the proposed use.

6.9.5 Installation of Containment Measures Validation

Where impacted material is considered suitable to be retained on-site subject to implementation of a physical separation layer and ongoing management, a program of inspections will be required to confirm the requirements in relation to the physical barrier are met during construction. It is anticipated that inspection points will including installation of the marker layer, pavement subgrade and pavements, or alternatively application of suitable soil capping media. Photographic records will be retained from the inspection activities for inclusion in the validation documentation.

In addition, the remediation contractor will be required to provide survey drawings documenting the upper extent of the impacted material/marker layer and the lateral extent of the placed layer material in addition to a final 'as built' survey of the completed works ground level within each remediation area/stage to demonstrate the requirements of the physical barrier (cap and containment) have been achieved. These documents will also be required to be included in the final validation report(s).

Consideration may be given, where the capping material includes final ground surface treatments such as pavers, tiles, boardwalks, landscaped areas surrounding buildings, to the staged application of capping arrangements, where an interim cap is placed to achieve remediation sign-off requirements to allow for construction of adjoining buildings/infrastructure, following which the final capping measures will be installed. Such measures would be required to be documented in the area specific RAP.

6.9.6 Validation and Ongoing Management Requirement Reporting

A validation report(s) shall be prepared at the completion of the remediation works for each specific RAP. It is anticipated that the validation report shall:

- Update relevant portions of the site description and CSM as presented in the area specific RAP relevant to the validation assessment footprint;
- Present all sampling field notes and laboratory data including calibration certificates for field monitoring equipment, environmental monitoring etc.;
- Undertake an assessment of QA/QC of analytical data generated by the works and identify data that is reliable for use in characterising the applicable portion of the site;
- Sort data into data sets as required by the decision rules;
- Assess whether sufficient data has been obtained to meet required limits on decision error;
- Undertake assessment to the decision rules and identify any environmental data which causes decision rules to be failed;
- Provide a summary of waste classification and/or beneficial reuse assessment and material tracking documentation including, but not limited to details of all material removed from site either as waste or under a resource recovery exemption, material volumes, receipts from receiving facilities, RRE order condition compliance statements;
- Identify the requirements for the EMP (where appropriate) including presentation of a survey clearly identifying the extent of the retained impacted material and associated capping; and
- Provide a comment on the suitability of the site for the proposed use and requirements for any ongoing monitoring/management (where applicable).

Where the remedial works for the site result in requirements for ongoing management, an Environmental Management Plan (EMP) will be required to be prepared to detail site conditions and any ongoing management/monitoring requirements for applicable portions of the site. The precise

nature and extent of the management requirements will not be known until remediation/ management works are conducted and the validation data obtained.

The EMP(s) are required to document the following elements:

- A statement of the objectives of the EMP – i.e., to ensure continued suitability of the site following remediation.
- Identification of residual environmental contamination issues at the site that require ongoing management/monitoring to meet the EMP objectives, including the type of contamination and location within the site (including a survey plan prepared by a registered surveyor).
- Documentation of environmental management measures which have been implemented to address the identified environmental issues at the site.
- Description of management controls to limit the exposure of site users to known areas of contamination to acceptable levels.
- Description of responsibilities for implementing various elements of the provisions contained in the EMP.
- Timeframes for implementing the various control/monitoring, etc. elements outlined in the EMP.
- Environmental monitoring and reporting requirements (if required) for the future management of environmental impact underlying the site including:
    - Appropriate monitoring locations and depth within and down-gradient of any residual contamination;
    - Relevant assessment criteria to be used in evaluating monitoring results;
    - Frequency of monitoring and reporting;
    - Process for reviewing monitoring data and how decisions will be made regarding the ongoing management strategy;
    - The length of time for which monitoring is expected to continue;
    - The regulatory authorities involved and the management inputs required from each;
    - The integration of environmental management and monitoring measures for soil and groundwater;
    - Health and safety requirements for particular activities;
    - A program of review and audits;
    - The provisions in the EMP are feasible (i.e., able to be implemented) and able to be legally enforceable (i.e., a mechanism exists, such as development consent conditions, to give the plan a basis in law); and
- The relevant consent authority is satisfied that the inclusion of a development consent condition relating to the implementation of the EMP is acceptable.
- Corrective action procedures to be implemented where EMP assessment criteria are breached.

6.10 Contingency Plans

The detailed area specific RAPs will be required to address contingency plans specific to conditions and proposed works that could feasibly occur during remediation works within the area specific

footprint. It is anticipated issues that may require to be addressed in the area specific RAPs may include:

- Encountering additional and/or unknown contaminated media and/or contamination sources;
- Increased volume of contaminated material at one or more locations;
- Failure of source removal works and/or on-site treatment of materials;
- Identification of material requiring removal either as a result of being contamination source material and/or excess to development requirements that cannot be classified for off-site disposal under EPA (2014) or subsequent endorsed guidance.

Broad discussion of contingency procedures that may be employed to address the above issues are outlined in the following sections.

6.10.1 Unexpected Material Finds

Even following the implementation of additional investigation as appropriate to address identified data gaps prior to preparation of each specific area RAP, there remains the possibility that additional hazards may be identified during demolition works and/or remediation works. The nature of hazards which may be present and which may be discovered at the Site are largely anticipated to be detectable through visual or olfactory means, for example:

- Large scale occurrences of buried friable asbestos waste (lagging etc);
- Construction / Demolition Waste potentially including ACM (visible);
- Hydrocarbon/solvent or similar impacted materials (visible / odorous);
- Drums or underground storage tanks (USTs) (visible);
- Tar impacted material and/or buried tar pits (visible/odorous);
- Buried putrescible waste (visible/odorous);
- Excessive Ash and / or slag and / or oily contaminated soils / fill materials not considered to be consistent with the appearance of the majority of fill materials (visible).

As a precautionary measure to ensure the protection of the workforce and surrounding community, should any of the abovementioned substances (or any other unexpected potentially hazardous substance) be identified during demolition/remediation/earthworks, the unexpected finds protocol (UFP) to be provided in each area specific RAP shall be required to be followed.

The sampling strategy for each 'unexpected find' shall be designed by a suitably qualified environmental consultant. The strategy will, however, be aimed at determining the nature of the substance – that is, is it hazardous and, if so, is it at concentrations which pose an unacceptable risk to human health or the environment. Sampling and analysis shall also be consistent with the overall requirements for validation sampling and analysis as outlined in the area specific RAP.

6.10.2 Failure to Meet Waste Classification Thresholds

Where material is required to be removed from site to address the remedial works objectives, or alternatively where material is surplus to development requirements and contaminant concentrations are identified to exceed the thresholds for characterisation under NSW EPA (2014), consideration will be given to the availability of NSW EPA endorsed on-site treatment methods to reduce contaminant concentrations to meet the thresholds for off-site disposal.

Alternatively, consideration may be given to off-site removal to a facility with the appropriate environment approvals (via an EPL) for treatment of contaminated material. Advice would be required to be provided to the appointed site auditor as part of the feasibility assessment for on-site

/off-site treatment and all associated validation data, material tracking documentation etc. would then be included in the relevant validation report(s).

6.10.3 Onsite Treatment/Stabilisation Failure

Where an area specific RAP identifies requirements/opportunities for on-site treatment of contaminated material such that the treated material may be either retained on-site or alternatively disposed of from the Premises with a lower waste classification, the success of such works will be assessed via validation requirements to be documented in the area specific RAP.

The applicable area specific RAP will be required to document contingency measures proposed to be implemented should the treated material be identified as not having met the requirements for validation. It is anticipated that such contingency measures may include, but will not necessary be limited to:

- Disposal of material as the higher classification of waste (where applicable);
- Application of additional treatment measures (as applicable for chemical stabilisation, direct thermal desorption (DTD), bio-remediation, etc); and
- Application of alternative treatment/stabilisation measures.

6.10.4 Emission Complaints

It is not expected, based on site contaminant data available to date, that significant widespread odorous/malodorous soils will be encountered. However, other emissions issues that will require consideration during works may include:

- Noise and vibration arising from demolition, excavation, piling/shoring and other works;
- Dust emissions arising from excavation, material handling and placement;
- Visibly impacted water quality in surface water discharged from the site; and
- Small scale odour emissions arising from handling of malodorous soil excavated from backfill areas and/or associated with fuel infrastructure.

Monitoring of all environmental emissions shall be undertaken during the works as detailed in the REMP (discussed in Section following) and appropriate actions taken to further control emissions following receipt of a complaint. The REMP shall contain provision for contingency actions where excessive emissions occur.

6.11 Remedial Work Environmental Management Plan

A summary of potential environmental issues associated with the remediation works is provided in **Table 5.1**. A Remediation Environmental Management Plan (REMP) will be required to be prepared as a separate document for each remediation works stage to control each of the identified potential environmental emissions as applicable to the remediation work stage. The REMP may reference broader construction and remediation environmental management plans as may be implemented within the various site portions. The provisions of the REMP shall require to be extended to any location where impacted material from the remediation works area may be relocated within the Premises.

Table 5.1: Review of Potential Environmental Issues

Media / Emission	Potential Impacts
Air Quality	Generation of particulates from earthmoving activities. Generation of asbestos fibres by storage / handling of fill materials impacted with asbestos fibres. Malodorous emissions from petroleum hydrocarbon contaminated materials, or hydrocarbon impacted unexpected finds.

	Particle emissions from plant and vehicle emissions.
Surface Water Quality	Sediment laden surface water discharged from site and entering local stormwater system with discharge to Alexandra Canal. Contaminated soil entering the storm water system. A spill or release of a hazardous substance (i.e. remnant petroleum products as held in USTs).
Noise and vibration	Excessive noise or vibration generated by plant and equipment and impacting on nearby commercial areas / residences.
Traffic / Access	Where significant off-site disposal of materials is required, there will potentially be significant numbers of heavy vehicle movements on the local road network.
Protection of adjoining structures	Excavation works will potentially occur adjoining the site boundaries and associated structures.
Contaminated materials	Equipment as used with remediation works will potentially be impacted with contaminated materials present on the site.
Acid Sulfate Soils	Disturbance of Bay sediments and/or marine/estuarine soils underlying fill material within land based portions of the site that may be disturbed during development activities that may result in the generation of acidic conditions that could impact site infrastructure and/or sensitive environmental receptors.

6.12 Work Health and Safety

A detailed Work Health and Safety Plan (WHSP) is required to be developed prior to commencement of remediation works. The objectives of the WHSP are to:

- apply standard procedures that minimises risks resulting from the works;
- ensure all employees are provided with appropriate training, equipment and support to consistently perform their duties in a safe manner; and
- have procedures to protect other site workers and the general public.

These objectives will be achieved by:

- Assignment of responsibilities;
- An evaluation of hazards;
- Establishment of personal protection standards, mandatory safety practices and procedures;
- Monitoring of potential hazards and implementation of corrective measures; and
- Provision for contingencies that may arise while operations are being conducted at the site.

The WHSP shall be in accordance with the requirements of the Work Health and Safety Act (2011) and relevant regulations.

In addition to general assessment of the potential for exposure to chemical contaminants the WHSP should also include specific consideration of the identified contaminants of potential concern present within in-situ materials on the Site, including:

- PAHs, as may be present in fill materials;
- Heavy metals (namely arsenic, cadmium, chromium, copper, lead, nickel, mercury and zinc);
- TPH;
- OCPs/PCBs;
- TBT;
- PFAS compounds;

- VOCs; and
- Asbestos.

As a precautionary measure, the WHSP shall include the requirement for the plan to be revised in the event of an unexpected find of contaminated material during remediation construction.

When working with contaminated materials in general, care needs to be taken to ensure that the contamination is not introduced to the worker via ingestion, inhalation or absorption. The WHSP must detail the PPE and decontamination requirements to be followed to control the risks posed by potential exposure to chemical contaminants at the site.

Noting the potential for 'asbestos contaminated soils' to be identified in various areas of the site, the WHSP for specific areas will contemplate requirements needed for various works with reference to the provisions of WorkSafe NSW (2019) for working with asbestos contaminated materials. Noting the potential for handling of asbestos contaminated soils in atmospheric environments, it is anticipated that a substantial asbestos monitoring program may be required in various portions of the WBPS and Metro Station Sub-Precinct dependent upon specific conditions as identified during development of the area specific RAPs.

6.13 Stakeholder/Community Consultation

Consequent of the social, heritage and potential environmental profile of the WBPS and Metro Station Sub-Precinct Area, a community consultation / communication plan shall be developed to notify all stakeholders (including occupiers of neighbouring properties and other contractors performing works in remediated areas of the site) of the proposed remedial works. This plan should be integrated with existing community consultation / communication planning.

Community consultation on remediation options relevant to Specific Area RAPs will be appropriate to varying degrees dependent upon the sensitivity of the area within the broader WBPS and Metro Station Sub-Precinct area and the proposed land use scenario. In all instances, community consultation should be implemented consistent with the principles outlined in NEPC (2013).

7. Conclusions and Recommendations

7.1 Conclusions

Overall, it is considered that the proposed actions outlined in this plan conform to the requirements of the *Contaminated Sites Guidelines for the NSW Site Auditor Scheme* (3rd Edition) (EPA 2017) because they are: technically feasible; environmentally justifiable; and consistent with relevant laws policies and guidelines endorsed by NSW EPA.

Subject to the successful implementation of the measures described in this plan and the recommendations below, it is concluded that the WBPS and Metro Station Sub-Precinct can be made suitable for the range of intended uses as proposed and that the risks posed by contamination can be managed in such a way as to be adequately protective of human health and the environment.

7.2 Recommendations

It is recommended that the processes outlined in this plan be implemented and that the following documentation be developed and implemented in addition to the area specific RAPs to ensure the risks and impacts during remediation works are controlled in an appropriate manner:

- A Remediation Environmental Management Plan (REMP), to document the monitoring and management measures required to control the environmental impacts of the works and ensure the validation protocols are being addressed; and
- A Work Health and Safety Management Plan (WHSP) to document the procedures to be followed to manage the risks posed to the health of the remediation workforce.

Each REMP and WHSP will need to address the potential for a range of chemical contaminant conditions in soil in addition to groundwater, ground gas/vapour and sediment in various areas of the site, in addition to the potential occurrence and storage / handling of asbestos contaminated soils on the site.

Upon completion of the works within sites located in the WBPS and Metro Station Sub-Precinct, validation reports and on-going EMPs for residual impacted materials as may be retained beneath the specific area footprints will be required to be submitted to the consent authority documenting that the applicable footprint is considered suitable for the proposed use(s), subject (where applicable) to implementation of the relevant ongoing EMP.

8. Limitations

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only, and has been based in part on information obtained from the client and other parties.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

JBS&G accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced without prior approval by the client, or amended in any way without prior approval by JBS&G, and should not be relied upon by other parties, who should make their own enquires.

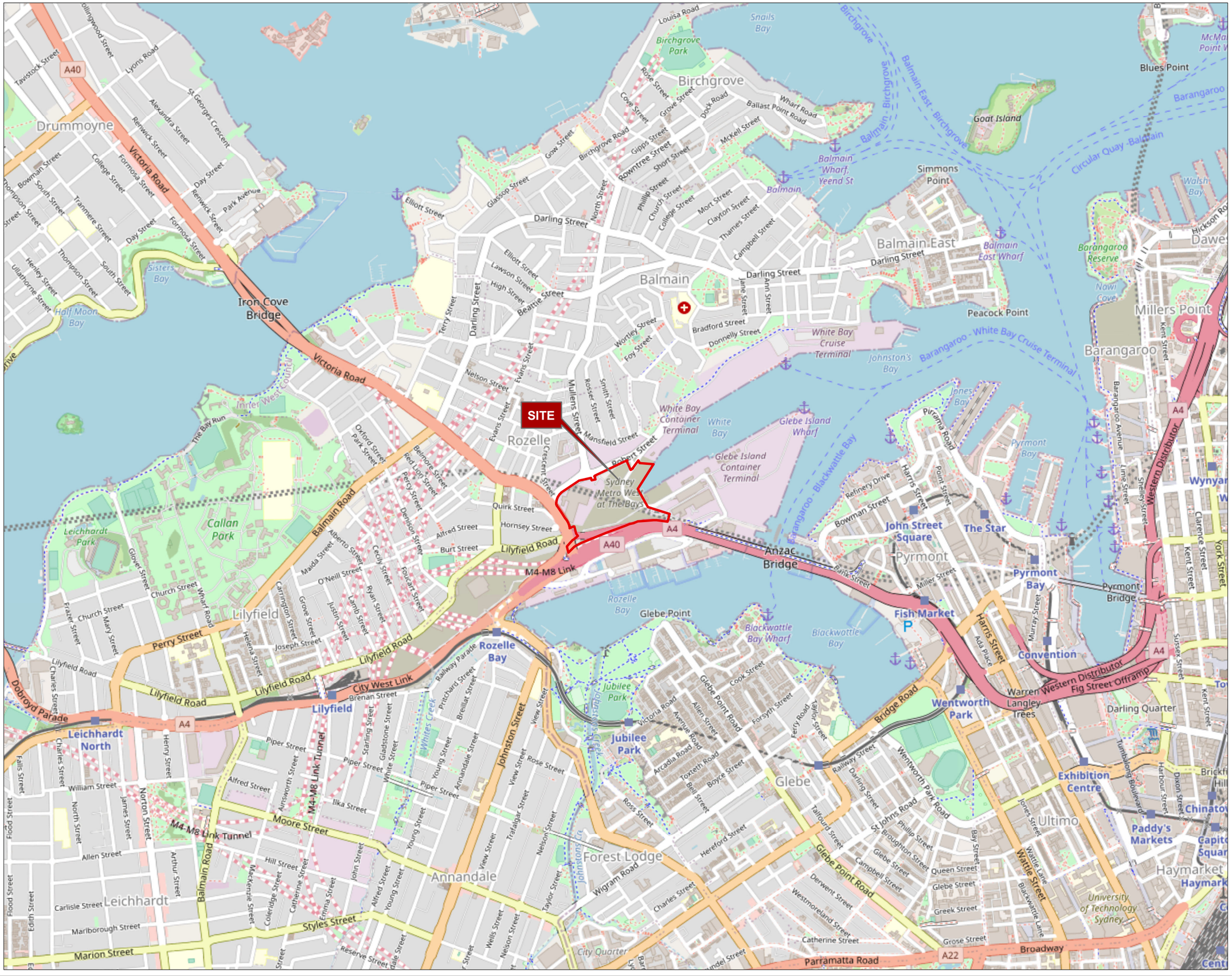
Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements.

Limited sampling and laboratory analyses were undertaken as part of the investigations undertaken, as described herein. Ground conditions between sampling locations and media may vary, and this should be considered when extrapolating between sampling points. Chemical analytes are based on the information detailed in the site history. Further chemicals or categories of chemicals may exist at the site, which were not identified in the site history and which may not be expected at the site.

Changes to the subsurface conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS&G reserves the right to review the report in the context of the additional information.

Figures



Legend:

Approximate Site Boundary - White Bay Power Station

JBS&G

Job No: 61895	
Client: DPIE	
Version: R02 Rev A	Date: 26-Jul-2022
Drawn By: RF	Checked By: SG/JR

Scale 1:15,000

0 150 300
metres

Coord. Sys. GDA2020 MGA Zone 56

White Bay Power Station

SITE LOCATION

FIGURE 1

File Name: N:\Projects\DPIE\61895 BaysWest MasterPlanning\GIS\Maps\R02 Rev A\61895_01_SiteLocation.mxd
Reference:



Legend:

- Approximate Site Boundary - White Bay Power Station
- Cooling Water Channel
- Cadastre (DFSI, 2022)

JBS&G

Job No: 61895	
Client: DPIE	
Version: R02 Rev A	Date: 26-Jul-2022
Drawn By: RH/RF	Checked By: SG/JR

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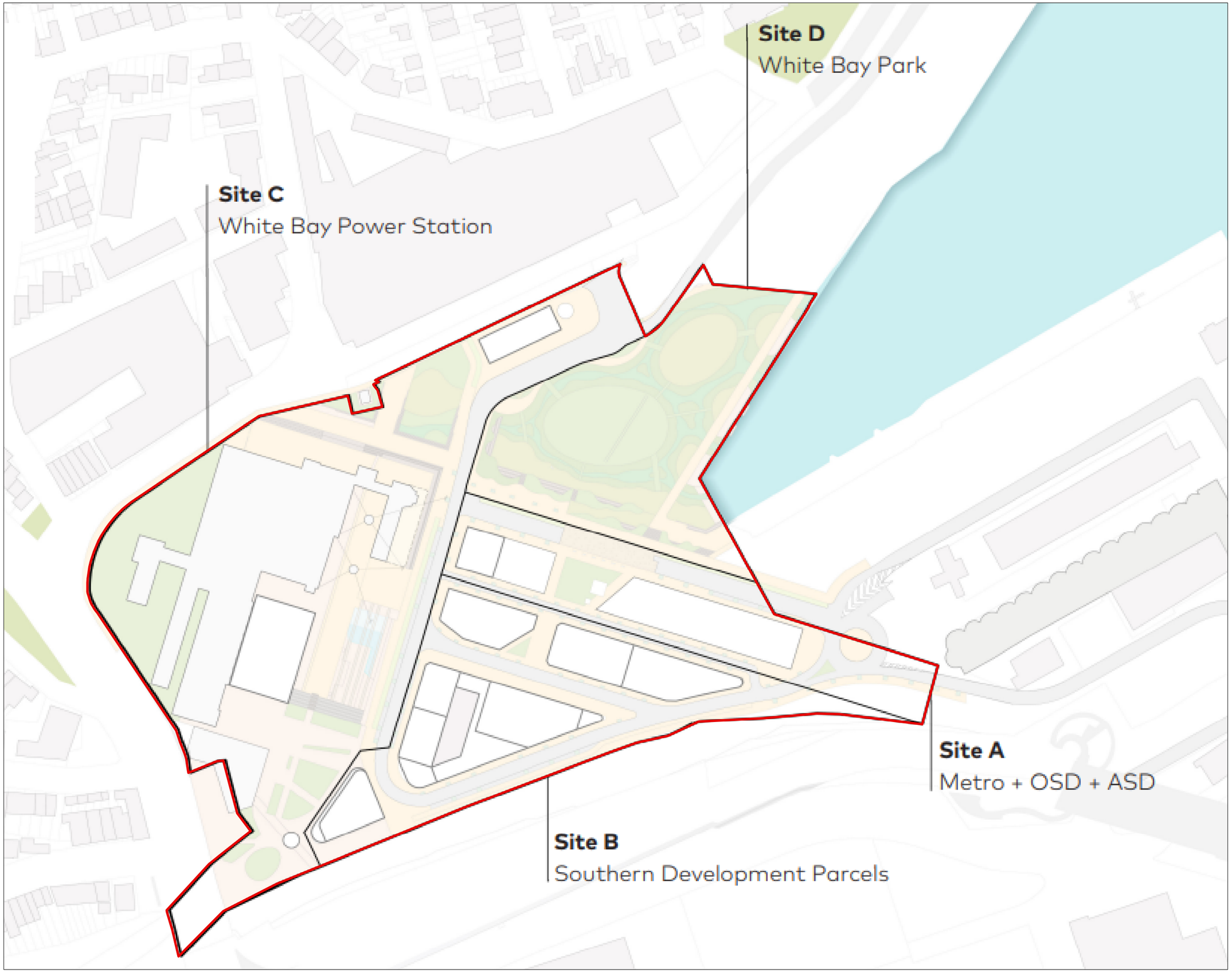
Coord. Sys. GDA2020 MGA Zone 56

White Bay Power Station

CURRENT SITE LAYOUT AND CADASTRE

FIGURE 2

File Name: N:\Projects\DPIE\61895 BaysWest MasterPlanning\GIS\Maps\R02 Rev A\61895_02_CurrentSiteLayout_Cadastre.mxd
Reference:



Legend:

Approximate Site Boundary - White Bay Power Station

JBS&G

Job No: 61895	
Client: DPIE	
Version: R02 Rev A	Date: 26-Jul-2022
Drawn By: RF	Checked By: SG/JR

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metres

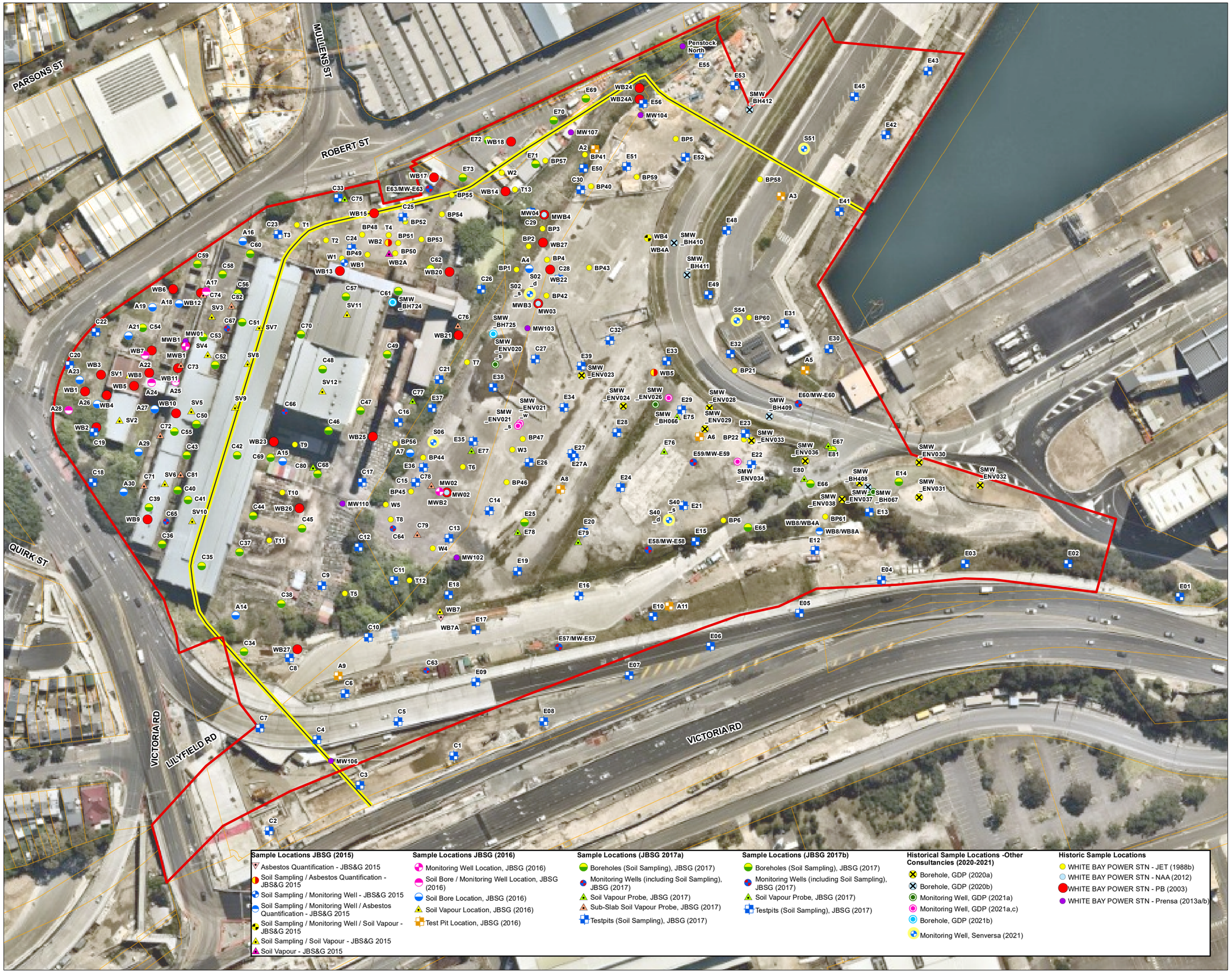
Coord. Sys. GDA2020 MGA Zone 56

White Bay Power Station

PROOF OF CONCEPT: BAYS WEST STAGE 1 MASTER PLAN AND REZONING FOR THE WHITE BAY POWER STATION (AND METRO) AND ROBERT STREET SUB-PRECINCTS. DEPT OF PLANNING AND ENVIRONMENT. 19 JULY 2022

FIGURE 3

File Name: N:\Projects\DPIE\61895 BaysWest MasterPlanning\GIS\Maps\R02 Rev A\61895_03_BaysWestStage1MasterPlan_Rezoning.mxd
Reference: Proof of Concept. Bays West Stage 1 Master Plan and Rezoning for the White Bay Power Station (and Metro) and Robert Street Sub-precincts. Dept of Planning and Environment. 19 July 2022.



Sample Locations JBSG (2015)
- Asbestos Quantification - JBS&G 2015
- Soil Sampling / Asbestos Quantification - JBS&G 2015
- Soil Sampling / Monitoring Well - JBS&G 2015
- Soil Sampling / Monitoring Well / Asbestos Quantification - JBS&G 2015
- Soil Sampling / Monitoring Well / Soil Vapour - JBS&G 2015
- Soil Sampling / Soil Vapour - JBS&G 2015
- Soil Vapour - JBS&G 2015

Sample Locations JBSG (2016)
- Monitoring Well Location, JBSG (2016)
- Soil Bore / Monitoring Well Location, JBSG (2016)
- Soil Bore Location, JBSG (2016)
- Soil Vapour Location, JBSG (2016)
- Test Pit Location, JBSG (2016)

Sample Locations (JBSG 2017a)
- Boreholes (Soil Sampling), JBSG (2017)
- Monitoring Wells (including Soil Sampling), JBSG (2017)
- Soil Vapour Probe, JBSG (2017)
- Sub-Slab Soil Vapour Probe, JBSG (2017)
- Testpits (Soil Sampling), JBSG (2017)

Sample Locations (JBSG 2017b)
- Boreholes (Soil Sampling), JBSG (2017)
- Monitoring Wells (including Soil Sampling), JBSG (2017)
- Soil Vapour Probe, JBSG (2017)
- Testpits (Soil Sampling), JBSG (2017)

Historical Sample Locations -Other Consultancies (2020-2021)
- Borehole, GDP (2020a)
- Borehole, GDP (2020b)
- Monitoring Well, GDP (2021a)
- Monitoring Well, GDP (2021a,c)
- Borehole, GDP (2021b)
- Monitoring Well, Senversa (2021)

Historic Sample Locations
- WHITE BAY POWER STN - JET (1988b)
- WHITE BAY POWER STN - NAA (2012)
- WHITE BAY POWER STN - PB (2003)
- WHITE BAY POWER STN - Prensa (2013a/b)

Legend:
- Approximate Site Boundary - White Bay Power Station
- Cadastre (DFSI, 2022)

JBS&G

Job No: 61895

Client: DPIE

Version: R02 Rev A | Date: 26-Jul-2022

Drawn By: RH/RF | Checked By: SG/JR

Scale 1:1,600

0 10 20
metres

Coord. Sys. GDA2020 MGA Zone 56

White Bay Power Station

HISTORIC SAMPLE LOCATIONS

FIGURE 4

File Name: N:\Projects\DPIE\61895 BaysWest MasterPlanning\GIS\Maps\R02 Rev A\61895_04_HistoricSampleLocations.mxd
Reference:

Appendix A Summary Analytical Tables

Appendix A - Summary of Historical Site Investigation Results
Table A1- Historical Soil Investigation Data

			Heavy Metals									TPH (NEPC 1999)					BTEX						PAHs															
			Arsenic	Cadmium	Chromium (III+VI)	Copper	Nickel	Mercury	Lead	Zinc	Mercury	C6-C9	C10-C14	C15-C28	C29-C36	Total C10-C36	Benzene	Toluene	Ethyl Benzene	Total m+p-Xylenes	o-Xylene	Total Xylenes	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b+k)fluoranthene	Benzo (a) Pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	Total PAH
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOR / PQL / EQL																																						
NEPC 1999 Soil HIL D (minimal access residential)			400	80	400	4000	2400	60	1200	28000																							4				80
NEPC 1999 Soil HIL E (Parks and Open Space)			200	40	200	2000	600	30	600	14000																							2				40
NEPC 1999 Soil HIL F (commercial/industrial)			500	100	500	5000	3000	75	1500	35000																							5				100
EPA 1994												65				1000	1	1.4	3.1			14																
Sample ID	Depth	Date																																				
JET 1998b (composite samples - included for information only)																																						
COMP1		1998	280	1	15	139	22	-	82	175	-	na	<1	2	<1	2	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP2		1998	220	1	14	119	37	-	110	171	-	na	<1	3	<1	3	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP3		1998	135	<1	7	89	13	-	36	109	-	na	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP4		1998	192	3	16	148	27	-	304	727	-	na	<1	8	<1	8	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP5		1998	12	<1	7	97	43	-	44	84	-	na	<1	8	<1	8	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP6		1998	200	2	12	102	23	-	226	533	-	na	<1	5	<1	5	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP7		1998	35	32	34	1320	72	-	17600	8720	-	na	<1	1	<1	1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP7 re-analysis		1998	30	23	10	936	39	-	40500	2000	-	na	na	na	<1	na	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP7/1		1998	na	na	na	2420	na	-	49700	13600	-	na	na	na	na	na	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP7/2		1998	na	na	na	1040	na	-	3750	8600	-	na	na	na	na	na	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP7/3		1998	na	na	na	2280	na	-	5120	17700	-	na	na	na	na	na	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP7/4		1998	na	na	na	701	na	-	1450	3560	-	na	na	na	na	na	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP8		1998	48	2	11	99	15	-	319	967	-	na	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP9		1998	27	<1	8	69	16	-	80	155	-	na	<1	7	<1	7	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP10		1998	13	<1	6	163	30	-	87	216	-	na	9	120	5	135	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP11		1998	176	176	7	74	14	-	117	431	-	na	<1	22	6	28	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP12		1998	<5	<1	<5	112	15	-	16	70	-	na	1	53	1	55	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP13		1998	<5	<1	10	61	30	-	30	86	-	na	1	44	1	46	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP14		1998	25	<1	8	114	25	-	154	257	-	na	<1	1	<1	1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP15		1998	6	<1	6	37	11	-	111	117	-	na	<1	5	<1	5	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP16		1998	<5	<1	7	121	44	-	12	49	-	na	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP16dup		1998	na	na	na	na	na	-	na	na	-	na	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
COMP17		1998	14	<1	8	102	43	-	141	164	-	na	<1	8	3	11	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
SUB A		1998	na	na	na	na	na	-	na	na	-	<1	<1	49350	9	49360	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
SUB B		1998	na	na	na	na	na	-	na	na	-	<1	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
JET 1998b individual soil sample data																																						
BP40	0.6-1.0	1998	8	<1	15	221	13	-	882	427	-	<1	<1	300	99	399	-	-	-	-	-	-	<1	<1	<1	<1	18	4	28	24	22	14	31	10	<1	<1	<1	151
BP40	0.6-1.0 DUP	1998	na	na	na	na	na	-	na	na	-	<1	<1	133	49	182	-	-	-	-	-	-	<1	<1	<1	<1	11	2	18	16	12	8	18	6	<1	<1	<1	91
BP40	1.2-1.4	1998	8	<1	13	120	8	-	304	235	-	<1	<1	102	52	153	-	-	-	-	-	-	<1	<1	<1	<1	7	1	12	13	10	11	16	9	<1	<1	<1	79
BP41	0.0-0.55	1998	<5	<1	<5	46	29	-	85	181	-	<1	1	983	290	1274	-	-	-	-	-	-	<1	<1	<1	<1	19	5	43	45	6	13	17	12	<1	<1	<1	160
BP41	0.55-1.0	1998	10	<1	5	7	<5	-	14	13	-	<1	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BP41	1.0-1.4	1998	17	<1	40	1030	21	-	1450	733	-	<1	2	124	51	178	-	-	-	-	-	-	<1	<1	<1	<1	9	1	16	19	10	10	16	9	<1	<1	<1	90
BP42	0.6-1.4	1998	14	<1	8	169	17	-	406	279	-	<1	1	352	116	470	-	-	-	-	-	-	<1	<1	<1	<1	21	6	32	26	21	13	19	19	<1	<1	<1	157
BP43	0.05-0.3	1998	<5	<1	6	169	86	-	<5	46	-	<1	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BP44	0.05-1.0	1998	13	<1	6	52	17	-	150	251	-	<1	2	28	<1	30	-	-	-	-	-	-	<1	<1	<1	<1	1	1	1	1	<1	2	<2	<1	<1	<1	<1	6
BP44	0.05-1.0 DUP	1998	na	na	na	na	na	-	na	na	-	<1	1	25	<1	25	-	-	-	-	-	-	<1	<1	<1	<1	1	1	1	1	<1	2	<2	<1	<1	<1	<1	6
BP45	0.4-0.9	1998	na	na	na	na	na	-	na	na	-	<1	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BP45	0.9-1.3	1998	24	2	9	72	21	-	377	736	-	<1	1	30	1	33	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BP46	0.4-1.05	1998	na	na	na	na	na	-	na	na	-	<1	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BP46	1.05-1.35	1998	na	na	na	na	na	-	na	na	-	<1	<1	89	25	114	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BD1-100298 (BP46/1.05-1.35)		1998	na	na	na	na	na	-	na	na	-	<1	<1	97	31	129	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BP47	0.5-1.0	1998	na	na	na	na	na	-	na	na	-	<1	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BP47	1.0-1.4	1998	11	1	8	156	7	-	717	1960	-	<1	<1	78	26	103	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BP56	0.5-0.8	1998	8	<1	10	186	15	-	387	241	-	<1	<1	11	4	16	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1
BP56	0.9-1.2	1998	na	na	na	na	na	-	na	na	-	<1	<1	<1	<1	<1	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1

Appendix A - Summary of Historical Site Investigation Results
Table A1- Historical Soil Investigation Data

			Heavy Metals									TPH (NEPC 1999)					BTEX						PAHs															
			Arsenic	Cadmium	Chromium (III+VI)	Copper	Nickel	Mercury	Lead	Zinc	Mercury	C6-C9	C10-C14	C15-C28	C29-C36	Total C10-C36	Benzene	Toluene	Ethyl Benzene	Total m+p-Xylenes	o-Xylene	Total Xylenes	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b+k)fluoranthene	Benzo (a) Pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	Total PAH
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOR / PQL / EQL																																						
NEPC 1999 Soil HIL D (minimal access residential)			400	80	400	4000	2400	60	1200	28000																							4				80
NEPC 1999 Soil HIL E (Parks and Open Space)			200	40	200	2000	600	30	600	14000																							2				40
NEPC 1999 Soil HIL F (commercial/industrial)			500	100	500	5000	3000	75	1500	35000																							5				100
EPA 1994												65				1000	1	1.4	3.1			14															
PB (2003)																																						
MWB1	0.5	2003	6	<0.5	<5	29	2		100	94	0.13	nd	50	5900	340	6290	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB1	2	2003	<5	<0.5	<5	<5	<2		<5	<5	0.07	<2	<10	1700	80	1780	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB2	2.5	2003	6	<0.5	8	9	<2		35	62	0.18	13	740	1300	<50	2040	<0.2	<1	<1	<2	<1	<3	0.6	nd	1.4	1.4	1.8	nd	1	1.2	0.6	nd	nd	0.5	nd	nd	nd	8.6
MWB2	4	2003	6	<0.5	<5	<5	<2		<5	6	0.07	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MWB3	0.3	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MWB3	3	2003	7	<0.5	<5	<5	<2		5	<5	<0.05	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MWB4	1	2003	6	0.8	<5	72	4		120	660	0.29	-	-	-	-	-	-	-	-	-	-	-	4.6	2	4.4	6	22	7.8	25	33	21	21	42	34	20	5.2	19	270
MWB4	3	2003	10	<0.5	15	12	<2		40	59	0.21	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	0.9	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	3
WB1	1	2003		-	-	-	-			-	-	<2	<10	160	<50	160	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB2	0.3	2003	-	-	-	-	-		-	-	-	<2	<10	220	360	580	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB2	1.4	2003	-	-	-	-	-		-	-	-	<2	<10	360	200	560	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB3	0.1	2003	-	-	-	-	-		-	-	-	<2	20	620	220	860	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB3	2.4	2003	-	-	-	-	-		-	-	-	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB4	0.3	2003	-	-	-	-	-		-	-	-	<2	<10	90	<50	90	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB4	2.4	2003	<5	<0.5	<5	<5	<2		9	11	<0.05	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB5	0.1	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB5	0.5	2003	5	<0.5	11	20	<2		61	71	1.02	<2	<100	7000	3500	10500	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB6	0.5	2003	14	1	14	480	9		410	690	0.46	<2	<10	320	120	440	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB7	0.6	2003	-	-	-	-	-		-	-	-	<2	<10	1100	140	1240	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB8	0.5	2003	26	<0.5	<5	12	<2		34	49	0.08	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB8	2.1	2003	<5	<0.5	<5	<5	<2		<5	<5	<0.05	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB9	0.3	2003	<5	<0.5	<5	8	<2		15	10	0.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB10	0.6	2003	-	-	-	-	-		-	-	-	<2	<10	<50	<50	-	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB11	0.5	2003	7	<0.5	11	12	<2		36	41	2.52	<2	<10	<50	<50	-	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB11	4	2003	-	-	-	-	-		-	-	-	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB12	0.3	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB12	0.5	2003	10	<0.5	<5	26	3		120	180	0.19	<2	<10	320	120	440	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB13	0.3	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB13	0.5	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	1.4	0.9	0.6	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	5
WB13	2	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	1.2	0.7	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	4.4
WB14	0.5	2003	13	0.6	18	160	17		190	270	0.4	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	1.2	1	0.6	0.6	<0.5	0.5	<0.5	<0.5	<0.5	4.6
WB14	3	2003	<5	<0.5	19	6	8		27	24	<0.05	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WB15	0.5	2003	<5	<0.5	8	85	8		150	230	0.42	<2	<10	260	100	360	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB16	0.5	2003	<5	<0.5	6	27	4		47	49	0.1	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1	1	0.6	0.5	<0.5	0.6	<0.5	<0.5	<0.5	5.4
WB16	4	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WB17	0.3	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	1.4	<0.5	<0.5	7.4	1.4	18	18	9.2	9.6	18	12	9	1.8	7.8	110
WB17	3	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WB18	0.5	2003	-	-	-	-	-		-	-	-	<2	<10	420	120	540	<0.2	<1	<1	<2	<1	<3	<0.5	2.2	<0.5	1.4	10	2.8	10	9.6	6.8	5.4	11	7.4	4.6	1	4	76
WB18	3	2003	<5	<0.5	6	8	<2		29	42	0.09	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4
WB19	0.1	2003	<5	<0.5	<5	<5	<2		<5	24	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB19	2	2003	-	-	-	-	-		-	-	-	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB20	0.5	2003	9	<0.5	10	39	10		110	270	0.12	-	-	-	-	-	-	-	-	-	-	-	0.7	<0.5	<0.5	<0.5	3.6	<0.5	2.8	1.8	1.2	1.4	1	0.5	<0.5	<0.5	<0.5	13
WB20	3	2003	11	<0.5	21	16	6		63	64	0.13	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	1.2	1.2	0.6	0.6	1	0.7	<0.5	<0.5	<0.5	6
WB21	0.5	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WB21	2.4	2003	-	-	-	-	-		-	-	-	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WB22	1	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.8	0.6	1.8	16	5	18	18	12	10	20	15	8.6	2	7.6	140
WB22	3	2003	<5	<0.5	21	9	2		23	35	<0.05	<2	<10	<50	<50	LPQL	<0.2	<1	<1	<2	<1	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	1	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.4
WB23	0.5	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	2	3.8	5.2	49	15	43	39	24	22	38	22	17	3.6	12	300
WB23	3	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WB24	1	2003	23	7	30	2100	7		820	7700	1.68	<2	<10	320	100	420	<0.2	<1	<1	<2	<1	<3	0.7	1.2	nd	0.5	6.8	2.2	11	10	7	6	13	9.2	6	1.2	5.4	80
WB24	3	2003	15	<0.5	25	34	<2		86	99	0.39	<2	<10	160	90	250	<0.2	<1	<1	<2	<1	<3	<0.5	<0.5	<0.5	<0.5	1	<0.5	2.6	2.6	1.6	1	2	1.4	1	<0.5	1	14
WB25	0.3	2003	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB25	0.5	2003	<5	0.5	14	39	19		100	230	0.15	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	3.2	1	4.2	3.8	2.4	1.6	4	2	1.8	<0.5	1.2	25
WB25	2	2003	<5	1	<5	7	13		9	200	<0.05	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WB26	0.9	2003	<5	<0.5	7	51	12		150	230	0.63	-	-	-	-	-	-	-	-	-	-	-	<0.5	1	<0.5	0.8	3.2	1.4	4	4	3	2.2	7	4.6	4.4	0.7	3.2	39
WB27	0.1	2003	<5	<0.5	6	6	7		17	110	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DPIT		2003	20	2.8	26	370	25		1000	2300	0.19	<2	30	21000	1700	22730	<0.2	<1	<1	<2	<1	<3	<0.5	<0.5	<0.5	<0.5	2.2	<0.5	3.4	3.6	1.2	1.6	2	1.4	1.2	<0.5	1.2	18

Appendix A - Summary of Historical Site Investigatio
Table A1- Historical Soil Investigation Data

			PCBs						OCPs																						OPPs								
			Arochlor1016	Arochlor1221	Arochlor1232&1242	Arochlor1248&1254	Arochlor1260&1262	TotalPCBs	Hexachlorobenzene	a-BHC	g-BHC	Heptachlor	Aldrin	b-BHC	d-BHC	Oxychlordane	HeptachlorEpoxide	Endosulfan(I)	Chlordane(trans)	Chlordane(cis)	trans-Nonachlor	DDE	Dieldrin	Endrin	DDD	Endosulfan(II)	DDT	EndosulfanSulphate	Methoxychlor	Diazon	Dimethoate	chlorpyrifosmethyl	ronnel	chlorpyrifos	malathion	fenithion	bromophosethyl	ethion
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOR / PQL / EQL																																						
NEPC 1999 Soil HIL D (minimal access residential)								20				40																										
NEPC 1999 Soil HIL E (Parks and Open Space)								40				20																										
NEPC 1999 Soil HIL F (commercial/industrial)								50				50																										
EPA 1994																																						
Sample ID	Depth	Date																																				
JET 1998b (composite samples - included for information only)																																						
COMP1		1998	-	-	-	-	-	na	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
COMP2		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP3		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP4		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP5		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP6		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP7		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP7 re-analysis		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP7/1		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP7/2		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP7/3		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP7/4		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP8		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP9		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP10		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP11		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP12		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP13		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP14		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP15		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP16		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP16dup		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMP17		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB A		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB B		1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JET 1998b individual soil sample data																																						
BP40	0.6-1.0	1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP40	0.6-1.0 DUP	1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP40	1.2-1.4	1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP41	0.0-0.55	1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP41	0.55-1.0	1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP41	1.0-1.4	1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP42	0.6-1.4	1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP43	0.05-0.3	1998	-	-	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP44	0.05-1.0	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP44	0.05-1.0 DUP	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP45	0.4-0.9	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP45	0.9-1.3	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP46	0.4-1.05	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP46	1.05-1.35	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BD1-100298 (BP46/1.05-1.35)		1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP47	0.5-1.0	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP47	1.0-1.4	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP56	0.5-0.8	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP56	0.9-1.2	1998	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix A - Summary of Historical Site Investigatio
Table A1- Historical Soil Investigation Data

			PCBs						OCPs																						OPPs								
			Arochlor1016	Arochlor1221	Arochlor1232&1242	Arochlor1248&1254	Arochlor1260&1262	TotalPCBs	Hexachlorobenzene	a-BHC	g-BHC	Heptachlor	Aldrin	b-BHC	d-BHC	Oxychlordane	HeptachlorEpoxide	Endosulfan(I)	Chlordane(trans)	Chlordane(cis)	trans-Nonachlor	DDE	Dieldrin	Endrin	DDD	Endosulfan(II)	DDT	EndosulfanSulphate	Methoxychlor	Diazon	Dimethoate	chlorpyrifosmethyl	ronnel	chlorpyrifos	malathion	fenithion	bromophosethyl	ethion
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOR / PQL / EQL																																						
NEPC 1999 Soil HIL D (minimal access residential)								20				40																										
NEPC 1999 Soil HIL E (Parks and Open Space)								40				20																										
NEPC 1999 Soil HIL F (commercial/industrial)								50				50																										
EPA 1994																																						
PB (2003)																													-	-	-	-	-	-	-	-	-	-
MWB1	0.5	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB1	2	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB2	2.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB2	4	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB3	0.3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB3	3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB4	1	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB4	3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB1	1	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB2	0.3	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB2	1.4	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB3	0.1	2003	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
WB3	2.4	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB4	0.3	2003	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
WB4	2.4	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB5	0.1	2003	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
WB5	0.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB6	0.5	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB7	0.6	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB8	0.5	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB8	2.1	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB9	0.3	2003	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
WB10	0.6	2003	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
WB11	0.5	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB11	4	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB12	0.3	2003	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
WB12	0.5	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB13	0.3	2003							<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
WB13	0.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB13	2	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB14	0.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB14	3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB15	0.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB16	0.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB16	4	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB17	0.3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB17	3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB18	0.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB18	3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB19	0.1	2003	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
WB19	2	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB20	0.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB20	3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB21	0.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB21	2.4	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB22	1	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB22	3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB23	0.5	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB23	3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB24	1	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB24	3	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB25	0.3	2003	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
WB25	0.5	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB25	2	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB26	0.9	2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WB27	0.1	2003	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
DPIT		2003	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | | Metals & Metalloids | | | | | | | | | | | | | | | | TPHs (NEPC 1999) | | | | | TRHs (NEPC 2013) | | | | | BTEX | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | Metals & Metalloids | | | | | | | | | | | | | | | | TPHs (NEPC 1999) | | | | | TRHs (NEPC 2013) | | | | | BTEX | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

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Appendix A - Summary of Historical Site Investigation Results

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Appendix A - Summary of Historical Site Investigation Results

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| | Metals & Metalloids | | | | | | | | | | | | | | | | TPHs (NEPC 1999) | | | | | TRHs (NEPC 2013) | | | | | BTEX | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

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| | Metals & Metalloids | | | | | | | | | | | | | | | | TPHs (NEPC 1999) | | | | | TRHs (NEPC 2013) | | | | | BTEX | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

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| | Metals & Metalloids | | | | | | | | | | | | | | | | TPHs (NEPC 1999) | | | | | TRHs (NEPC 2013) | | | | | | BTEX | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

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| | Metals & Metalloids | | | | | | | | | | | | | | | | TPHs (NEPC 1999) | | | | | TRHs (NEPC 2013) | | | | | BTEX | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | | | | | | | | | |

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| | Metals & Metalloids | | | | | | | | | | | | | | | | | TPHs (NEPC 1999) | | | | TRHs (NEPC 2013) | | | | | BTEX | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | Metals & Metalloids | | | | | | | | | | | | | | | | | TPHs (NEPC 1999) | | | | | TRHs (NEPC 2013) | | | | | | BTEX | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

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| | Metals & Metalloids | | | | | | | | | | | | | | | | TPHs (NEPC 1999) | | | | TRHs (NEPC 2013) | | | | | BTEX | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

		Chlorinated Alkanes																Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons					Chlorinated Benzenes					Polychlorinated Biphenyls							Phenols										
		1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,2,2,2-tetrachloroethane	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dibromoethane	1,2-dichloropropane	1,3-dichloropropane	Bromodichloromethane	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dichlorodifluoromethane	Dichloromethane	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	1,2-dichloropropene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	Ethylbenzene	Isopropylbenzene	Styrene	2,4 - dibromoethane	Methyl tert-butyl ether (MTBE)	Methyl-2-pentanone (MIBK)	Naphthalene	Bromobenzene	Bromomethane	Chlorobenzene	2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4 & 4-Methylphenol	5-Chloro-3-M-ethylphenol	Pentachlorophenol	Phenol	Phenols (Total)
		mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

	Chlorinated Alkanes																Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons					Chlorinated Benzenes					Polychlorinated Biphenyls							Phenols									
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromodichloromethane	Carbon tetrachloride	Chloroethane	Chloroform	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	1,2-dichloropropene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	Monobromobenzene	Isopropylbenzene	Styrene	2,2-dimethylbutane	Butanone (MEK)	Methyl-2-pentanone (MIBK)	Naphthalene	Bromomethane	Dibromomethane	Chlorobenzene	2-Chlorotoluene	3-chlorotoluene	4-chlorotoluene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4,6-4-Methylphenol	2-Chloro-3-Methylphenol	Pentachlorophenol	Phenol	Phenols (Total)
	mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

		Chlorinated Alkanes																Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons				Miscellaneous Hydrocarbons				Chlorinated Benzenes				Polychlorinated Biphenyls							Phenols									
		1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Dichlorodifluoromethane	Carbon tetrachloride	Chloroethane	Chloromethane	Dibromochloromethane	Dichloromethane	Trichloroethene	Vinyl Chloride	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	Chloroprene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,3-dichloropropene	Tetrachloroethene	Vinyl Chloride	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	Cumene	Isopropylbenzene	Styrene	2,4 - dibromotoluene	Butanone (MEK)	Methyl-2-pentanone (MIBK)	Naphthalene	Propylbenzene	Toluene	Chlorobenzene	2-Chlorotoluene	3-chlorotoluene	4-chlorotoluene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4 & 4-Methylphenol	2-Chloro-3-(4-ethylhexyl	Pentachlorophenol	Phenols (Total)
		mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

	Chlorinated Alkanes																Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons					Chlorinated Benzenes				Polychlorinated Biphenyls						Phenols											
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,2,2,2-tetrachloroethane	1,2-dibromo-3-chloropropane	1,2-dibromoethane	1,2-dichloropropane	1,3-dichloropropane	Dibromomethane	Carbon tetrachloride	Chloroethane	Chloromethane	Dibromochloromethane	Dichlorodifluoromethane	Dichloromethane	Hexachlorobutadiene	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	Chlorobenzene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	Toluene	2,2-dimethylpentane	2-Methyl-2-pentanone (MIBK)	Naphthalene	Tetrahydrofuran	Toluene	Chlorobenzene	1,2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4 & 4-Methylphenol	4-Chloro-3-Methylphenol	Pentachlorophenol	Phenol	Phenols (Total)
	mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

	Chlorinated Alkanes																Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons					Chlorinated Benzenes				Polychlorinated Biphenyls							Phenols									
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Dichlorodifluoromethane	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dichloromethane	Hexachloroethane	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	Cyclohexane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	Ethylbenzene	Isopropylbenzene	Styrene	2,4 - dinonylphenol	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Naphthalene	Tetrachloroethene	Toluene	Chlorobenzene	2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4 & 4-Methylphenol	4-Chloro-3-Methylphenol	Pentachlorophenol	Phenol	Phenols (Total)
	mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

		Chlorinated Alkanes																Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons					Chlorinated Benzenes				Polychlorinated Biphenyls							Phenols									
		1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,2,2,2-tetrachloroethane	1,2-dichloropropane	2,3-trichloropropane	2-dichloropropane	3-dichloropropane	3-dichloropropene	Bromodichloromethane	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dichlorodifluoromethane	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	Chloroprene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Cumene	Isopropylbenzene	Styrene	2,4 - dibromoethane	Methyl tert-butyl ether (MTBE)	Methyl-2-pentanone (MIBK)	Naphthalene	Tetrachloroethene	Toluene	Chlorobenzene	2-Dichlorobenzene	3-dichlorobenzene	4-dichlorobenzene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4 & 4-Methylphenol	2-Chloro-3-(4-ethylhexyl)	Pentachlorophenol	Phenols (Total)
		mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

	Chlorinated Alkanes																	Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons					Chlorinated Benzenes					Polychlorinated Biphenyls							Phenols										
	1,1,2,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,2,2,2-tetrachloroethane	1,2-dichloroethane	1,2,3-trichloropropane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	2-chloroethyl vinyl ether	Carbon tetrachloride	Chloroethane	Chloromethane	Dibromomethane	Dichlorodifluoromethane	Hexachlorobutadiene	Tetrachloroethene	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	1,2-dichloropropene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Monochlorobenzene	Isopropylbenzene	Styrene	1,2,4-trichlorobenzene	Methyl-tert-butyl ether (MTBE)	Methyl-2-pentanone (MIBK)	Naphthalene	Tetrahydrofuran	Toluene	Chlorobenzene	2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4,6-4-Methylphenol	4-Chloro-3-Methylphenol	Pentachlorophenol	Phenols (Total)
	mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

	Chlorinated Alkanes																	Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons					Chlorinated Benzenes					Polychlorinated Biphenyls							Phenols									
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,2,2,2-tetrachloroethane	1,2,2-tetrachloroethane	1,2,3-trichloropropane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Dichlorodifluoromethane	Carbon tetrachloride	Chlorobromomethane	Chloroethane	Chloroform	Dibromochloromethane	Dibromomethane	Dichloromethane	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	1,2-dichloropropene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Monobenzene	Isopropylbenzene	Styrene	2,4-dibromoethane	Butanone (MEK)	Methyl-2-pentanone (MIBK)	Naphthalene	Tetrachloroethane	Toluene	Chlorobenzene	2-Dichlorobenzene	3-dichlorobenzene	4-dichlorobenzene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4,6-4-Methylphenol	2-Chloro-3-(4-ethylhexyl	Pentachlorophenol	Phenol	Phenols (Total)
	mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

	Chlorinated Alkanes																Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons					Chlorinated Benzenes					Polychlorinated Biphenyls							Phenols									
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Dichloromethane	Carbon tetrachloride	Chloroethane	Chloroform	Methane	Tetrachloroethene	Trichloroethene	Vinyl Chloride	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	1,2-dichloropropene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	Monobromobenzene	Isopropylbenzene	Styrene	2,4 - dibromoethane	Butanone (MEK)	Methyl-2-pentanone (MIBK)	Dibromomethane	Bromomethane	Bromomethane	Chlorobenzene	1,2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4 & 4-Methylphenol	2-Chloro-3-(4-ethylhexyl	Pentachlorophenol	Phenols (Total)
	mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

	Chlorinated Alkanes																Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons					Chlorinated Benzenes					Polychlorinated Biphenyls							Phenols									
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Dichlorodifluoromethane	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dichlorofluoromethane	Dichloromethane	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	1,2-dichloropropene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Monobenzene	Isopropylbenzene	Styrene	2,4- dibromoethane	Methyl-tert-butyl ether (MTBE)	Methyl-2-pentanone (MIBK)	Naphthalene	Bromomethane	Bromomethane	Chlorobenzene	1,2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobenzene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4 & 4-Methylphenol	4-Chloro-3-Methylphenol	Pentachlorophenol	Phenols (Total)
	mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

	Chlorinated Alkanes																Chlorinated Alkenes										Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons				Chlorinated Benzenes				Polychlorinated Biphenyls								Phenols									
	1,1,2,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2-trichloroethane	1,2,2,2-tetrachloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Dichlorodifluoromethane	Carbon tetrachloride	Chloroethene	Chloroethane	Chloromethane	Dibromochloromethane	Dichlorofluoromethane	Dichloromethane	1,1,2,2-tetrachloroethene	1,1-Dichloroethene	1,2-dichloropropene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	Monodeuterated benzene	Isopropylbenzene	Styrene	2,2,4,4,6-pentamethylheptane	Methyl-tert-butyl ether (MTBE)	Methyl-2-pentanone (MIBK)	Naphthalene	Bromobenzene	Bromochloromethane	Bromomethane	Chlorobenzene	1,2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobutadiene	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	2,3,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2-chlorophenol	2-Methylphenol	2-nitrophenol	4,4-Methylphenol	2-Chloro-3-(4-ethylhexyl	Phenol	Phenols (Total)
	mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | | Organochlorine Pesticides | | | | | | | | | | | | | | | | | | | | | | | Organophosphorous Pesticides | | | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | Organochlorine Pesticides | | | | | | | | | | | | | | | | | | | | | | | | | Organophosphorous Pesticides | | | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

	Organochlorine Pesticides																									Organophosphorous Pesticides																										Herbicides & Fungicides		Non-Metallic Inorganics			Heavy Metals (Organo)		
	Aldrin	Dieldrin	Aldrin + Dieldrin (Sum of Total)	DDD	4,4-DDE	DDT	DDT+DDE+DDD (Sum of Total)	Alpha-BHC	Beta-BHC	Delta-BHC	Chlordane	Alpha-Chlordane	Gamma-Chlordane	Endosulfan alpha	Endosulfan beta	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor Epoxide	Hexachlorobenzene	Methoxychlor	Pentachlorophenol	Toxaphene	Azinphos-methyl	Azinphos-ethyl	Bromophos-ethyl	Chlorfenvinphos	Chlorfenvinphos E	Chlorpyrifos	Chlorpyrifos-methyl	Di-Chlorfenvinphos	Dimethoate + methyl	Diazinon	Malathion	Parathion	Pirimiphos-methyl	Fenitrothion	Fenthion	Malathion	Methidathion	Parathion-methyl	Monocrotophos	Parathion	Pirimiphos-ethyl	Prothiofos	2-Nitro-4-cresol	Phenoxyacetic acid	Ammonia (as N)	Cyanide	Nitrate (as N)	Dibutyltin	Monobutyltin	Tributyltin
	mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | | Organochlorine Pesticides | | | | | | | | | | | | | | | | | | | | | | | | Organophosphorous Pesticides | | | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | Organochlorine Pesticides | | | | | | | | | | | | | | | | | | | | | | | Organophosphorous Pesticides | | | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

		Organochlorine Pesticides																								Organophosphorous Pesticides																											Herbicides & Fungicides		Non-Metallic Inorganics			Heavy Metals (Organo)		
		Aldrin	Dieldrin	Aldrin + Dieldrin (Sum of Total)	DDD	4,4-DDE	DDT	DDT+DDE+DDD (Sum of Total)	Alpha-BHC	Beta-BHC	Delta-BHC	Chlordane	Alpha-Chlordane	Gamma-Chlordane	Endosulfan alpha	Endosulfan beta	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor Epoxide	Hexachlorobenzene	Methoxychlor	Pentachlorophenol	Bioxylene	Azinphos-methyl	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenitrothion	Malathion	Monochrotophos	Parathion	Parathion-methyl	Phosphamidon	Pirimiphos-ethyl	Pirimiphos-methyl	Prothiofos	Terbufos	Trichloronate	2,4-D	MCPA	Arsenic (as As)	Cadmium	Nitrate (as N)	Dibutyltin	Monobutyltin	Tributyltin
		mg/kg	mg/kg	mg/kg

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | | Organochlorine Pesticides | | | | | | | | | | | | | | | | | | | | | | | | | | Organophosphorous Pesticides | | | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | | Organochlorine Pesticides | | | | | | | | | | | | | | | | | | | | | | | | Organophosphorous Pesticides | | | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | | Organochlorine Pesticides | | | | | | | | | | | | | | | | | | | | | | | Organophosphorous Pesticides | | | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | | Organochlorine Pesticides | | | | | | | | | | | | | | | | | | | | | | | | Organophosphorous Pesticides | | | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A2- Historical Soil Investigation Data

| | Organochlorine Pesticides | | | | | | | | | | | | | | | | | | | | | | | Organophosphorous Pesticides | | | | | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results

Table A3- Historical Soil Investigation Data

		Dioxins																									PCDDs and PCDFs						
		Total TEQ I-TEQ1 (zero)	Total TEQ I-TEQ2 (0.5 LOR)	Total TEQ I-TEQ3 (LOR)	Total TEQ WHO-TEQ1 (zero)	Total TEQ WHO-TEQ2 (0.5 LOR)	Total TEQ WHO-TEQ3 (LOR)	Tetra-Dioxins	Penta-Dioxins	Hexa-Dioxins	Hepta-Dioxins	Octa-Dioxin	2,3,7,8-Tetrachlorodibenzofuran	1,2,3,7,8-Pentachlorodibenzofuran	2,3,4,7,8-Pentachlorodibenzofuran	1,2,3,7,8-Pentachlorooxanthrene	1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-Hexachlorooxanthrene	2,3,4,6,7,8-Hexachlorodibenzofuran	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,7,8-Hexachlorooxanthrene	1,2,3,4,6,7,8-Heptachlorooxanthrene	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	1,2,3,4,6,7,8,9-Octachlorooxanthrene	Hepta-Furans	Hexa-Furans	Octa-Furan	Penta-Furans	Tetra-Furans	1,2,3,7,8,9-Hexachlorooxanthrene	2,3,7,8-Tetrachlorooxanthrene
		pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g
National Dioxins Program - Southeast Australia, Mean			3.4																														
Chemical Control Order Threshold								10,000																									
Field ID	**Date**																																
Senversa 2021																																	
S08_2.5-2.8	24/03/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S08_3.2-3.4	24/03/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S12_0.5-0.6	16/03/2021	3.50	5.93	8.37	1.32	4.10	6.88	<0.5	<2.5	<22.1	69.8	3,100	<0.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	3.4	<2.5	35.8	<2.5	6.7	3,100	<9.8	<2.5	6.7	<2.5	<0.5	<2.5	<0.5
S16_0.5-0.6	12/03/2021	12.21	14.66	17.10	4.02	6.81	9.60	7.1	<2.5	25.7	91.3	11,700	<0.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	4.4	<2.5	46.9	<2.5	<4.9	11,700	<9.9	<2.5	<4.9	<2.5	10.4	<2.5	<0.5
S59_2.6-2.8	24/03/2021	18.90	21.13	23.35	7.98	10.55	13.13	36.6	79.1	490	883	15,600	<0.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	4.7	<2.5	<2.5	<2.5	197	<2.5	<5.0	15,600	<2.5	<2.5	<5.0	<2.5	<8.4	8.6	<0.5
S60_6.0-6.2	27/04/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S62_0.0-0.1	9/03/2021	2.31	4.79	7.28	0.90	3.73	6.56	<0.5	<19.9	<19.9	59.3	2,010	<0.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	30.1	<2.5	<5.0	2,010	<5.0	<2.5	<5.0	<42.4	<8.5	<2.5	<0.5
S62_2.2-2.5	8/04/2021	12.50	14.81	17.12	4.72	7.38	10.04	14.3	<24.8	48.3	133	11,100	3.6	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	2.9	<2.5	11.3	<2.5	62.7	<2.5	8.9	11,100	16.9	<32.3	8.9	<42.2	36.6	<2.5	<0.5
S62_4.0-4.2	8/04/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S64_2.0-2.1	31/03/2021	22.08	23.52	24.97	14.13	15.30	16.47	77.3	92.6	497	958	14,500	1.0	<2.5	<2.5	4.4	<2.5	<2.5	<2.5	7.9	<2.5	3.0	5.4	256	<2.5	<5.0	14,500	<9.9	<27.3	<5.0	<39.8	33.2	13.6	<0.5
S64_2.0-2.1	31/03/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S65_3.0-3.1	30/03/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S66_3.0-3.1	30/03/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix A - Summary of Historical Site Investigation Results
Table A4- Historical Soil Investigation Data

		Perfluorinated Compounds																												
		10:2 Fluorotelomer sulfonic acid	4:2 Fluorotelomer sulfonic acid	8:2 Fluorotelomer sulfonate	N-Et-FOSA	N-Et-FOSE	N-Me-FOSA	N-Me-FOSE	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid	Perfluoro-n-pentanoic acid (PFPeA)	Perfluoropentane sulfonic acid	PFDoS	N-methyl-perfluorooctanesulfonamidoacetic acid	Sum of PFHxS and PFOS (lab reported)	Sum of PFASs (n=28)	Perfluorobutanesulfonic acid (PFBS)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoate (PFOA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)	Perfluorohexanoic acid (PFHxA)	6:2 Fluorotelomer Sulfonate (6:2 FtS)	N-ethyl-perfluorooctanesulfonamidoacetic acid	Perfluorooctanesulfonamide (PFOSA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnA)
PFAS NEPM 2.0 Health, HIL B															2								20									
PFAS NEPM 2.0 Health, HIL C															1								10									
PFAS NEPM 2.0 Health, HIL D															20								50									
Field ID	**Date**																															
GDP 2020a																																
ENV020_0.2	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
ENV020_0.5	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV020_1.0	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV020_2.0	11/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV020_4.0	11/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV020_5.0	11/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV020_8.0	11/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV020_12.0	12/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV020_13.0	12/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV020_16.0	12/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV021_0.15	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV021_0.5	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV021_1.0	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV021_1.5	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV021_4.0	6/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV021_7.0	6/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV021_9.0	6/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV021_14.0	6/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV023_0.5	3/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV023_1.0	3/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC115	3/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC215	3/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV023_1.5	3/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV023_2.0	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV023_3.0	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV023_5.0	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV023_8.0	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV023_14	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV022_0.0	3/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV022_1.2	3/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV022_1.5	3/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV022_2.0	3/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV022_3.0	3/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV022_4.0	3/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV022_6.0	3/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV022_10.0	3/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV022_12.0	13/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV022_14.0	13/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV022_16.0	13/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV025_0.0	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV025_0.5	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV025_1.0	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV025_2.0	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV025_3.0	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV025_5.0	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV025_10.0	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV025_14.0	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV024_0.0	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV024_0.5	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV024_2.0	6/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV024_3.0	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV024_10.0	6/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV024_14.0	6/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
BH066_0.5	28/05/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC101	28/05/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC201	28/05/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH066_1.0	28/05/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH066_2.5	28/05/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH066_3.0	28/05/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH066_6.0	28/05/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV027_0.2	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix A - Summary of Historical Site Investigation Results
Table A4- Historical Soil Investigation Data

		Perfluorinated Compounds																												
		10:2 Fluorotelomer sulfonic acid	4:2 Fluorotelomer sulfonic acid	8:2 Fluorotelomer sulfonate	N-Et-FOSA	N-Et-FOSE	N-Me-FOSA	N-Me-FOSE	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid	Perfluoro-n-pentanoic acid (PFPeA)	Perfluoropentane sulfonic acid	PFDoS	N-methyl-perfluorooctanesulfonamidoacetic acid	Sum of PFHxS and PFOS (lab reported)	Sum of PFASs (n=28)	Perfluorobutanesulfonic acid (PFBS)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoate (PFOA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)	Perfluorohexanoic acid (PFHxA)	6:2 Fluorotelomer Sulfonate (6:2 FtS)	N-ethyl-perfluorooctanesulfonamidoacetic acid	Perfluorooctanesulfonamide (PFOSA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnA)
PFAS NEPM 2.0 Health, HIL B															2								20								
PFAS NEPM 2.0 Health, HIL C															1								10								
PFAS NEPM 2.0 Health, HIL D															20								50								
Field ID	**Date**																														
GDP 2020a																															
ENV027_0.5	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC120	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC220	5/12/2018		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV027_1.5	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV027/2.8-3.0	17/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV027/3.8-4.0	17/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV027/6.7-6.8	17/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV027/6.8-7.0	17/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV027/9.7-9.8	17/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV027/9.8-10	17/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV027/10.7-10.8	17/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV026_0.5	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0032	0.0034	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0024	0.0002	0.0008	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002
QC121	4/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0052	0.0055	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0038	0.0003	0.0014	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV026_1.0	4/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV026_3.0	14/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV026_4.3	14/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV026_4.3	14/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV026_5.5	14/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV026_6.0	14/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV026_8.0	14/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV026_10.0	14/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV026_11.0	14/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV026_12.0	14/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV029_0.2	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV029_1.0	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV029_1.6	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
ENV029_2.0	10/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV029_3.2	10/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002
ENV029_3.3	10/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002
ENV029_6.0	10/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV029_8.0	10/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002
ENV029_10.0	10/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV029_12.0	10/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV028_0.5	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV028_1.0	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV028_1.5	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV028/2.0	17/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV028/6.0-6.2	17/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV028/6.2-6.4	17/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV028/8.2-8.4	17/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV028/9.0-9.2	17/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV028/11.4-11.7	17/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV034_0.2	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV034_0.5	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0012	0.0018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0012	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0005	<0.0002
QC125	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
QC225	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV034_1.5	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV034_2.0	10/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV034_3.0	10/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV034_4.0	10/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV034_4.0	10/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV034_7.0	10/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV034_9.0	10/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV034_9.0	10/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV033_0.2	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV033_0.5	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV033_0.5	5/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV033_1.0	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV033_1.5	5/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV033_4.0	7/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV033_6.0	7/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
ENV033_7.0	7/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix A - Summary of Historical Site Investigation Results
Table A4- Historical Soil Investigation Data

		Perfluorinated Compounds																												
		10:2 Fluorotelomer sulfonic acid	4:2 Fluorotelomer sulfonic acid	8:2 Fluorotelomer sulfonate	N-Et-FOSA	N-Et-FOSE	N-Me-FOSA	N-Me-FOSE	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid	Perfluoro-n-pentanoic acid (PFPeA)	Perfluoropentane sulfonic acid	PFDoS	N-methyl-perfluorooctanesulfonamidoacetic acid	Sum of PFHxS and PFOS (lab reported)	Sum of PFASs (n=28)	Perfluorobutanesulfonic acid (PFBS)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoate (PFOA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)	Perfluorohexanoic acid (PFHxA)	6:2 Fluorotelomer Sulfonate (6:2 FtS)	N-ethyl-perfluorooctanesulfonamidoacetic acid	Perfluorooctanesulfonamide (PFOSA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnA)
PFAS NEPM 2.0 Health, HIL B															2							20								
PFAS NEPM 2.0 Health, HIL C															1							10								
PFAS NEPM 2.0 Health, HIL D															20							50								
Field ID	**Date**																													
GDP 2020a																														
ENV033_10.0	7/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV036_0.1	7/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV036_0.5	7/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV036_1.0	6/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV035_0.2	7/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV035_0.5	7/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV035_1.0	7/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV038_0.2	13/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV037_0.25	13/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV037_0.4	13/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV037_0.45	13/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV037_0.5	13/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV037_0.6	13/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
BH067_0.25	5/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH067_0.5	5/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC104	5/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC204	5/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV030_0.65	14/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV030_1.0	14/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV030_2.0	14/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV030_2.5	14/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV030_3.0	7/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV030_3.0	14/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV031_0.35	13/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
ENV031_0.5	13/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV032_0.1-0.2	13/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENV032_0.5	13/12/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH037_0.6	19/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC106	19/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH037_1.0	19/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH037_2.0	19/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH037_3.0	19/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH037_4.0	19/06/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Senversa 2021																															
S08_0.8-1.0	10/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC106	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S08_2.0-2.3	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC206	24/03/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	0.0001	0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.001	<0.005	<0.0005	<0.0005
S08_3.2-3.4	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S08_6.0-6.2	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S08_9.0-9.3	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S08_10.9-11.2	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S09_0.8-1.0	10/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S09_3.0-3.2	10/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S10_0.9-1.1	10/03/2021	<0.0005	<0.0005	<0.0005	<0.0012	<0.0012	<0.0012	<0.0012	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0012	<0.0005	<0.0005	<0.0012	<0.0005	<0.0005
S10_2.5-3.0	10/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S10_5.5-5.8	10/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC204	16/03/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.001	<0.005	<0.0005	<0.0005
S12_1.5-1.6	16/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC104	16/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S12_2.3-2.4	16/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S16_0.5-0.6	12/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S16_2.3-2.6	12/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S19_1.4-1.5	18/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S19_5.0-5.1	18/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S20_0.4-0.5	17/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S20_1.4-1.5	17/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S21_0.15-0.25	17/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S21_2.0-2.1	17/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S22_0.5-0.7	26/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S22_5.8-6.0	26/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S23_0.5-0.6	6/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002

Appendix A - Summary of Historical Site Investigation Results
Table A4- Historical Soil Investigation Data

		Perfluorinated Compounds																												
		10:2 Fluorotelomer sulfonic acid	4:2 Fluorotelomer sulfonic acid	8:2 Fluorotelomer sulfonate	N-Et-FOSA	N-Et-FOSE	N-Me-FOSA	N-Me-FOSE	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid	Perfluoro-n-pentanoic acid (PFPeA)	Perfluoropentane sulfonic acid	PFDoS	N-methyl-perfluorooctanesulfonamidoacetic acid	Sum of PFHxS and PFOS (lab reported)	Sum of PFASs (n=28)	Perfluorobutanesulfonic acid (PFBS)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoate (PFOA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)	Perfluorohexanoic acid (PFHxA)	6:2 Fluorotelomer Sulfonate (6:2 FtS)	N-ethyl-perfluorooctanesulfonamidoacetic acid	Perfluorooctanesulfonamide (PFOSA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnA)
PFAS NEPM 2.0 Health, HIL B															2								20								
PFAS NEPM 2.0 Health, HIL C															1								10								
PFAS NEPM 2.0 Health, HIL D															20								50								
Field ID	**Date**																													
Senversa 2021																														
S23_1.0-1.1	6/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S23_4.0-4.1	6/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S23_7.0-7.1	6/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S23_9.04-9.14	6/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S23_15.0-15.1	6/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S23_19.17-19.27	6/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S23_25.03-25.13	6/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S25_1.5-1.8	15/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S25_3.0-3.3	15/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
QC216	13/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.001	<0.005	<0.0005
S29_1.8-2.2	13/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S29_5.8-6.2	13/04/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S31_1.8-2.2	13/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S31_4.8-5.2	13/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S32_4.0-4.2	13/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S32_6.0-6.2	13/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S34_0.4-0.7	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0019	0.0023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0019	0.0004	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S34_2.8-3.2	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S37_0.0-0.1	12/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0009	0.0009	<0.0002	<0.0002	<0.0002	<0.0002	0.0007	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S38_1.0-1.1	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S38_4.0-4.2	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S40_0.0-0.1	15/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S40_1.8-2.2	19/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
QC117	15/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0017	0.0031	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0017	0.0003	<0.0002	0.0008	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S42_0.4-0.5	15/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0024	0.0039	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0021	0.0004	0.0003	0.0008	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S42_2.0-2.3	20/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S43_0.4-0.5	15/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S43_2.8-3.4	20/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S45_0.4-0.5	15/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S45_2.8-3.2	20/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S47_0.4-0.5	15/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0007	0.0009	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0007	0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S47_1.9-2.0	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S49_0.0-0.15	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0015	0.0043	<0.0002	0.0013	<0.0002	<0.0002	0.0015	0.0004	<0.0002	0.0004	0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	0.0005
S51_2.8-3.2	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S51_4.8-5.2	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S52_1.0-1.1	14/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0010	0.0010	<0.0002	<0.0002	<0.0002	<0.0002	0.0007	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S52_4.0-4.3	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S53_1.0-1.1	14/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S53_2.8-3.0	16/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0018	0.0020	<0.0002	<0.0002	<0.0002	<0.0002	0.0008	0.0002	0.0010	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S54_0.6-0.7	14/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S54_5.0-5.3	20/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_1.0-1.1	9/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_1.7-2.0	9/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_2.6-2.8	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_4.6-4.8	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_7.8-8.0	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_12.2-12.5	24/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_14.9-15.1	25/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_18.3-18.5	25/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_22.9-23.0	26/03/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
QC207	26/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.001	<0.005	<0.0005
S59_24.77-25.0	26/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0008	0.0008	<0.0002	<0.0002	<0.0002	<0.0002	0.0008	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S59_29.49-29.59	26/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S60_1.0-1.1	9/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S60_1.1-1.5	10/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S60_3.0-3.2	7/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
QC113	7/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
QC213	7/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.001	<0.005	<0.0005
S60_5.0-5.2	7/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S60_7.0-7.2	7/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S60_10-10.1	7/04/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002
S60_13-13.1	7/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002

Appendix A - Summary of Historical Site Investigation Results
Table A4- Historical Soil Investigation Data

		Perfluorinated Compounds																												
		10:2 Fluorotelomer sulfonic acid	4:2 Fluorotelomer sulfonic acid	8:2 Fluorotelomer sulfonate	N-Et-FOSA	N-Et-FOSE	N-Me-FOSA	N-Me-FOSE	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid	Perfluoro-n-pentanoic acid (PFPeA)	Perfluoropentane sulfonic acid	PFDoS	N-methyl-perfluorooctanesulfonamidoacetic acid	Sum of PFHxS and PFOS (lab reported)	Sum of PFASs (n=28)	Perfluorobutanesulfonic acid (PFBS)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoate (PFOA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)	Perfluorohexanoic acid (PFHxA)	6:2 Fluorotelomer Sulfonate (6:2 FtS)	N-ethyl-perfluorooctanesulfonamidoacetic acid	Perfluorooctanesulfonamide (PFOSA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnA)
PFAS NEPM 2.0 Health, HIL B															2								20								
PFAS NEPM 2.0 Health, HIL C															1								10								
PFAS NEPM 2.0 Health, HIL D															20								50								
Field ID	**Date**																														
Senversa 2021																															
S60_17-17.1	7/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S61_1.4-1.5	11/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S61_3.0-3.1	11/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S62_0.0-0.1	9/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002
S62_0.5-0.6	9/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002
QC114	8/04/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002
S62_2.2-2.5	8/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC214	8/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.001	<0.005	<0.0005	<0.0005
S62_6.0-6.3	8/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S62_12.0-12.2	8/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S62_15.0-15.2	8/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S62_15.97-16.1	9/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S62_22-22.1	9/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S62_28-28.1	9/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S63_1.3-1.5	11/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S63_3.0-3.2	16/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S64_0.5-0.6	11/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S64_1.5-1.6	11/03/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S64_11-11.1	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S64_14-14.1	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC110	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC210	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.001	<0.005	<0.0005	<0.0005
S64_2.0-2.1	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S64_5.0-5.1	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S64_7.0-7.1	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S65_0.5-0.6	11/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S65_2.0-2.2	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S65_4.0-4.2	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC109	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC209	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.001	<0.005	<0.0005	<0.0005
S65_6.0-6.2	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S65_8.0-8.2	30/03/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S65_10-10.3	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S65_15-15.1	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S65_18.95-19	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S65_25-25.1	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S65_28.9-29	30/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S66_1.0-1.1	11/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S66_3.0-3.1	1/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC112	1/04/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC212	1/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.001	<0.005	<0.0005	<0.0005
S66_7.0-7.1	1/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S66_11-11.1	1/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S66_12.45-12.55	1/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S66_15-15.1	1/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S66_18-18.15	1/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S66_25-25.1	1/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S67_1.0-1.1	11/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S67_1.5-1.6	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S67_2.0-2.1	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S67_4.0-4.1	31/03/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC111	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
QC211	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.001	<0.005	<0.0005	<0.0005
S67_6.0-6.1	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S67_8.0-8.1	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S67_9.0-9.1	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S67_9.6-9.7	31/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S68_0.0-0.1	12/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0012	0.0017	<0.0002	0.0005	<0.0002	<0.0002	0.0012	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S68_1.0-1.1	12/03/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S69_3.15-3.25	19/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S69_7.0-7.1	19/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S69_10.0-10.1	19/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S69_14.0-14.1	19/04/2021	<0.0002	<0.0002	<0.0002	<0.001	<0.005	<0.001	<0.001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S69_18.06-18.17	19/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S69_19.9-20.0	19/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
S69_24.0-24.1	19/04/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
JBS&G 2015																								
WB2_0.0-1.0	2/07/2015	-	-	-	901	0	0	0	0	0	0.0034	0.0034	0.0034	0.0004	No asbestos detected at the reporting limit of 0.001% w/w.	Amosite asbestos detected in the form of loose fibre bundles.	NIL	Organic fibre detected.	NIL	-	-	-	-	-
WB2_1.0-1.7	2/07/2015	-	-	-	1024	0	0	0	0	0	0.0012	0.0012	0.0012	0.0001	No asbestos detected at the reporting limit of 0.001% w/w.	Chrysotile asbestos detected in the form of loose fibre bundles.	NIL	Organic fibre detected.	NIL	-	-	-	-	-
WB5_0.0-1.0	2/07/2015	-	-	-	1174	0	0	0	0	0	0	0	0	0	No asbestos detected at the	NIL	NIL	Organic fibre detected.	No respirable fibres detected	-	-	-	-	-
WB5_1.0-1.9	2/07/2015	-	-	-	1071	0	0	0	0	0	0	0	0	0	No asbestos detected at the	NIL	NIL	Organic fibre detected.	No respirable fibres detected	-	-	-	-	-
WB7A_0.0-1.0	2/07/2015	-	-	-	985	0	0	0	0	0	0	0	0	0	No asbestos detected at the	NIL	NIL	Organic fibre detected.	No respirable fibres detected	-	-	-	-	-
WB7A_1.0-2.0	2/07/2015	-	-	-	1075	0	0	0	0	0	0	0	0	0	No asbestos detected at the	NIL	NIL	Organic fibre detected.	No respirable fibres detected	-	-	-	-	-
WB7A_2.0-3.0	2/07/2015	-	-	-	1064	0	0	0	0	0	0	0	0	0	No asbestos detected at the	NIL	NIL	Organic fibre detected.	No respirable fibres detected	-	-	-	-	-
WB8A_0.0-1.0	2/07/2015	-	-	-	925	0	0	0	0	0	0	0	0	0	No asbestos detected at the	NIL	NIL	Organic fibre detected.	No respirable fibres detected	-	-	-	-	-
QC03	2/07/2015	-	-	-	988	0	0	0	0	0	0	0	0	0	No asbestos detected at the	NIL	NIL	Organic fibre detected.	No respirable fibres detected	-	-	-	-	-
QC03a	2/07/2015	-	-	-	986	0	0	0	0	0	0	0	0	0	No asbestos detected at the	NIL	NIL	Organic fibre detected.	NIL	-	-	-	-	-
JBS&G 2016																								
A1 0-1	9/12/2015	-	-	-	897	0	0	0	0	0	0	0	0	0						100	163000	356	53.4	0.03276
A2 0-1	10/12/2015	-	-	-	1030	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A2 1-1.5	10/12/2015	-	-	-	1020	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A3 0-1	9/12/2015	-	-	-	1132	0	0	0	0.0075	0.006	0	0	0.006	0.0005						100	163000	0	-	-
A3 1-2	9/12/2015	-	-	-	933	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A3 2-3	9/12/2015	-	-	-	1155	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A4 0-1	10/12/2015	-	-	-	1020	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A4 1-1.8	10/12/2015	-	-	-	1144	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A5 0-1	9/12/2015	-	-	-	1043	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A5 1-2	9/12/2015	-	-	-	1028	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A6 0-1	10/12/2015	-	-	-	967	0	0	0	0.0023	0.0014	0	0	0.0014	0.0001						100	163000	0	-	-
A7 0-1	10/12/2015	-	-	-	1429	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A7 1-2	10/12/2015	-	-	-	596	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A8 0-1	10/12/2015	-	-	-	1018	2.292	0.3437	0.0338	0	0	0	0	0	0						100	163000	0	-	-
QS04	10/12/2015	-	-	-	1033	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
QS04A	10/12/2015	-	-	-	-	-	-	-	-	-	-	-	-	-						100	163000	0	-	-
A8 1-2	10/12/2015	-	-	-	1063	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A9 0-1	9/12/2015	-	-	-	1160	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A10 0-1	9/12/2015	-	-	-	1112	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A10 1-2	9/12/2015	-	-	-	1010	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A10 2-3	9/12/2015	-	-	-	1023	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A11 0-1	9/12/2015	-	-	-	1194	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A11 1-2	9/12/2015	-	-	-	686	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A11 2-3	9/12/2015	-	-	-	917	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A12 0-1	9/12/2015	-	-	-	1099	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A13 0.1-0.5	10/12/2015	-	-	-	1060	0	0	0	0.0117	0.0082	0	0	0.0082	0.0008						100	163000	0	-	-
A13 0.5-1.0	10/12/2015	-	-	-	869	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A13 1.0-2.0	10/12/2015	-	-	-	1002	0	0	0	0.0177	0.0106	0	0	0.0106	0.0011						100	163000	0	-	-
QC03	10/12/2015	-	-	-	930	0	0	0	0.0141	0.0085	0	0	0.0085	0.0009						100	163000	0	-	-
QC03A	10/12/2015	-	-	-	-	-	-	-	-	-	-	-	-	-						100	163000	0	-	-
A14 0.1-0.9	10/12/2015	-	-	-	960	0	0	0	0	0	0	0	0	0						10	16300	0	-	-
A15 0.0-0.1	10/12/2015	-	-	-	1228	0	0	0	0	0	0	0	0	0						10	16300	0	-	-
A15 0.2-0.7	10/12/2015	-	-	-	781	0	0	0	0	0	0	0	0	0						10	16300	0	-	-
A16 0-1	9/12/2015	-	-	-	987	0	0	0	0	0	0	0	0	0						100	163000	444	66.6	0.04086
A16 1-2	9/12/2015	-	-	-	828	0	0	0	0	0	0	0	0	0						100	163000	0	-	-
A26 0-1	9/12/2015	-	-	-	920	0	0	0	0	0	0	0	0	0						10	16300	0	-	-
A26 1-2	9/12/2015	-	-	-	938	0	0	0	0	0	0	0	0	0						10	16300	0	-	-
A27 0-0.7	9/12/2015	-	-	-	911	0	0	0	0	0	0	0	0	0						10	16300	0	-	-
A30 0-1	10/12/2015	-	-	-	969	0	0	0	0	0	0	0	0	0						10	16300	0	-	-
A30 1-2	10/12/2015	-	-	-	960	0	0	0	0	0	0	0	0	0						10	16300	0	-	-

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
JBS&G 2017a																								
C1 1.0-1.1	20/02/2017	-	-	-	656	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C1 3.0-3.1	20/02/2017	-	-	-	544	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C1 0-1.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C1 1.0-2.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C1 2.0-3.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C1 3.0-4.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C1_4.0-4.3	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C2_0.4-0.5	2/03/2017	-	-	-	928	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC08A - duplicate of C2_0.4-0.5	2/03/2017	-	-	-	769	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC08 - triplicate of C2_0.4-0.5	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C2 0-0.8	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C3 0.4-0.5	20/02/2017	-	-	-	773	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C3 0-1.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C3 1.0-1.6	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C4_0.1-0.2	2/03/2017	-	-	-	646	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C4 0-0.3	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C5_0.1-0.2	1/03/2017	-	-	-	895	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C5 0-0.6	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C6_0-0.1	17/02/2017	-	-	-	951	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C6 0-1.0	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C6 1.0-2.0	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C6 2.0-2.5	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C7_0-0.1	17/02/2017	-	-	-	478	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C7 0-0.5	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C8_0-0.1	2/03/2017	-	-	-	756	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C8 0-0.3	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C9 0-0.1	20/02/2017	-	-	-	754	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C9 0-0.7	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C10_0.0-0.1	1/03/2017	-	-	-	399	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C10_0.2-0.3	1/03/2017	-	-	-	458	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C10 0-0.5	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C11 0.5-0.6	15/02/2017	-	-	-	756	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C11 0-0.1	15/02/2017	-	-	-	703	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C11 0-0.6	15/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C12 0.5-0.6	15/02/2017	-	-	-	664	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C12 0-0.7	15/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C13 0.1-0.2	20/02/2017	-	-	-	865	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C13 1.0-1.1	20/02/2017	-	-	-	703	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C13 0-1.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C13 1.0-2.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C13 2.0-3.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C13 3.0-4.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C13 4.0-4.2	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0

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TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
C14_0.1-0.2	1/03/2017	-	-	-	812	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C14 0-1.0	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C14 1.0-1.2	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C15_0.4-0.5	1/03/2017	-	-	-	835	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C15_1.0-1.1	1/03/2017	-	-	-	611	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C15 0-1.0	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C15 1.0-1.1	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C16 0-0.1	20/02/2017	-	-	-	586	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C16 1.0-1.1	20/02/2017	-	-	-	556	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C16 0-1.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C16 1.0-2.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C16 2.0-2.8	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C17 _0.0-0.1	16/02/2017	-	-	-	656	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC03A - duplicate of C17 _0.0-0.1	16/02/2017	-	-	-	570	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC03 - triplicate of C17 _0.0-0.1	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C17 _0.5-0.6	16/02/2017	-	-	-	560	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C17 0-1.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C17 1.0-1.9	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C18 0.4-0.5	20/02/2017	-	-	-	747	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C18 0-1.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C18 1.0-1.1	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C19 0.1-0.2	20/02/2017	-	-	-	982	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C19 0-1.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C19 1.0-1.5	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C20 0-0.1	20/02/2017	-	-	-	784	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C20 1.0-1.1	20/02/2017	-	-	-	656	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C20 0-1.0	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C20 1.0-1.5	20/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C21 0.5-0.6	15/02/2017	-	-	-	603	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C21 0-0.1	15/02/2017	-	-	-	352	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C21 0-0.6	15/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C22_0.5-0.6	17/02/2017	-	-	-	571	0	0	0	0.0628	0.0377	0.0006	0.0006	0.0383	0.0067	NIL	AF: Amosite asbestos detected in the form of loose fibre bundles.	FA: Chrysotile and amosite asbestos detected in insulation material.	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C22_1.5-1.6	17/02/2017	-	-	-	761	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C22 0-1.0	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C22 1.0-2.0	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C22 2.0-2.4	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C23 _0.1-0.2	16/02/2017	-	-	-	472	0.7973	0.1196	0.0253	0.0075	0.006	0.0672	0.0101	0.0161	0.0034	ACM: Chrysotile asbestos detected in fibre cement fragments.	AF: Chrysotile asbestos detected in fibre cement fragments and in the form of loose fibre bundles.	FA: Chrysotile asbestos detected in weathered fibre cement fragments.	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC02A - duplicate of C23 _0.1-0.2	16/02/2017	-	-	-	466	0	0	0	0	0	0.0025	0.0024	0.0024	0.0005	NIL	AF: Chrysotile asbestos detected in the form of loose fibre bundles.	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC02 - triplicate of C23 _0.1-0.2	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C23 0-1.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C23 1.0-2.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C23 2.0-3.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C23 3.0-3.4	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C24 _0.5-0.6	16/02/2017	-	-	-	644	0	0	0	0.0529	0.037	0.0018	0.0018	0.0388	0.006	NIL	AF: Chrysotile asbestos detected in the form of loose fibre bundles.	FA: Chrysotile asbestos detected in weathered fibre cement fragments.	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C24 0-1.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C24 1.0-1.4	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
C25 _0.0-0.1	16/02/2017	-	-	-	548	0	0	0	0.0048	0.0019	0.0014	0.0013	0.0032	0.0006	NIL	AF: Chrysotile asbestos detected in the form of loose fibre bundles.	FA: Chrysotile and amosite asbestos detected in weathered fibre cement fragments.	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C25 0-1.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C26 0.3-0.4	15/02/2017	-	-	-	724	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C26 0.5-0.6	15/02/2017	-	-	-	544	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C26 0-1.0	15/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C27 _0.5-0.6	16/02/2017	-	-	-	725	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C27 _1.0-1.1	16/02/2017	-	-	-	620	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C27 0-1.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C27 1.0-2.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C27 2.0-2.4	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C29 0-0.1	15/02/2017	-	-	-	506	2.487	0.4974	0.0983	0	0	0	0	0	0	ACM: Chrysotile and amosite asbestos detected in fibre cement fragments.	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C29 0-0.2	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C30_0.5-0.6	17/02/2017	-	-	-	759	0	0	0	0	0	0.0034	0.0034	0.0034	0.0004	NIL	AF: Chrysotile asbestos detected in the form of loose fibre bundles.	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C30_1.5-1.6	17/02/2017	-	-	-	625	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
QC04A - duplicate of C30_1.5-1.6	17/02/2017	-	-	-	532	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
QC04 - triplicate of C30_1.5-1.6	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C30 0-1.0	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C30 1.0-2.0	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C30 2.0-2.3	17/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C32 _0.5-0.6	16/02/2017	-	-	-	909	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C32 _1.5-1.6	16/02/2017	-	-	-	497	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C32 0-1.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C32 1.0-2.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C32 2.0-3.0	16/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C33 0.5-0.6	15/02/2017	-	-	-	448	0	0	0	0	0	0.0026	0.0026	0.0026	0.0006	NIL	AF: Chrysotile asbestos detected in the form of loose fibre bundles.	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C33 0-0.1	15/02/2017	-	-	-	876	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C33 0-1.0	15/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C34 0-0.1	15/02/2017	-	-	-	581	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C34 0-0.1	15/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C35 0.4-0.5	23/02/2017	-	-	-	501	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
QC10 - duplicate of C35 0.4-0.5	23/02/2017	-	-	-	450	0	0	0	0	0	0.0017	0.0017	0.0017	0.0004	NIL	AF: Chrysotile asbestos detected in the form of loose fibre bundles.	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C35 0-0.0.5	23/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	8150	0	0	0
C37 0-0.1	21/02/2017	-	-	-	748	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C37 0-0.0.3	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C38 0-0.1	15/02/2017	-	-	-	830	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C38 0-0.0.3	15/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C39 0.4-0.5	2/03/2017	-	-	-	590	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C39 0-0.0.5	15/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C43-0.4-0.5	22/02/2017	-	-	-	594	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C43_0-1.0	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C43_1.0-2.0	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C44 0.1-0.2	21/02/2017	-	-	-	999	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C44_0-0.5	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C45 0.1-0.2	21/02/2017	-	-	-	804	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-	-
C45_0-0.5	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
C46 0.2-1.0	21/02/2017	-	-	-	433	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C46_0-1.0	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C46_1.0-1.3	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C48 0-0.1	1/03/2017	-	-	-	562	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC11A - duplicate of C48 0-0.1	2/03/2017	-	-	-	760	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC11 - triplicate of C48 0-0.1	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C48 0-1.0	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C48 1.0-2.0	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C48 2.0-2.5	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C49_0-1.0	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C50-0.4-0.5	22/02/2017	-	-	-	576	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C50 0-1.0	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C50 1.0-2.0	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C50 2.0-2.2	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C52 (2.0-2.1)	22/02/2017	-	-	-	688	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres detected.	No respirable fibres detected	-	-	-	-	-
C54_0.0-0.1	1/03/2017	-	-	-	627	0	0	0	0	0	0.0008	0.0008	0.0008	0.0001	NIL	AF: Amosite asbestos detected in the form of loose fibre bundles.	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC07A - duplicate of C54_0.0-0.1	1/03/2017	-	-	-	567	0	0	0	0.0038	0.0027	0	0	0.0027	0.0005	NIL	NIL	FA: Chrysotile and amosite asbestos detected in weathered fibre cement fragments.	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
QC07 - triplicate of C54_0.0-0.1	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C54_1.0-1.1	1/03/2017	-	-	-	471	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C54 0-1.0	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C54 1.0-2.0	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C54 2.0-3.0	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C54 3.0-3.6	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C55 0.3-0.4	2/03/2017	-	-	-	616	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C55_0-0.4	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C56_0-1.0	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	8150	0	0	0
C59_0.0-0.1	1/03/2017	-	-	-	714	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C59 0-1.0	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C59 1.0-2.0	1/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C61_0-1.0	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C62 0-0.1	21/02/2017	-	-	-	669	30.38	4.557	0.6813	0.0403	0.0282	0.0649	0.013	0.0412	0.0062	ACM: Chrysotile and amosite asbestos detected in fibre cement fragments.	AF: Chrysotile asbestos detected in fibre cement fragments.	FA: Chrysotile and amosite asbestos detected in weathered fibre cement fragments.	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C62_0-1.0	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	140	21	0.129
C62_1.0-1.6	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	12	1.8	0.011
C63 0.4-0.5	23/02/2017	-	-	-	786	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C63 0-0.1	23/02/2017	-	-	-	795	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C63_0-1.0	23/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C64-0.4-0.5	22/02/2017	-	-	-	655	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C64_0-1.0	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C64_1.0-2.0	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C64_2.0-2.4	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	8150	0	0	0
C66 1.2-1.5	21/02/2017	-	-	-	626	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C66-2.2-2.4	22/02/2017	-	-	-	640	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C66_0-1.0	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C66_1.2-1.5	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	6520	0	0	0
C66_2.2-2.5	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	6520	0	0	0
C67_0-1.0	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C67_1.0-2.0	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C67_1.0-2.0	22/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C68 0-0.1	21/02/2017	-	-	-	741	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C68 2.0-2.1	21/02/2017	-	-	-	563	0	0	0	0	0	0	0	0	0	NIL	NIL	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C68_0-1.0	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C68_1.0-1.3	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
C69 0.4-0.5	21/02/2017	-	-	-	658	0	0	0	0	0	0.0008	0.0008	0.0008	0.0001	NIL	AF: Chrysotile asbestos detected in the form of loose fibre bundles.	NIL	Organic Fibres Detected	No respirable fibres detected	-	-	-	-	-
C69_0-0-0.6	21/02/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
JBS&G 2017b																								
E01_0.15-0.25	15/03/2017	-	-	-	635	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E01_0-0.1	15/03/2017	-	-	-	471	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E01_0-0.3	15/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E02_0.15-0.25	15/03/2017	-	-	-	606	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E02_0-0.1	15/03/2017	-	-	-	469	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E02_0-0.3	15/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E03_0.0-0.1	15/03/2017	-	-	-	543	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E03_0-0.3	15/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E04_0-0.1	13/03/2017	-	-	-	664	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E04_0-0.4	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E05_0.0-0.1	15/03/2017	-	-	-	519	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E05_0.1-0.2	15/03/2017	-	-	-	763	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E05_0-0.4	15/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E06_0.0-0.05	15/03/2017	-	-	-	660	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E06_0.2-0.25	15/03/2017	-	-	-	702	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E06_0-0.25	15/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E07_0.4-0.5	13/03/2017	-	-	-	769	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E07_1.4-1.5	13/03/2017	-	-	-	685	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E07_0-1.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E07_1.0-2.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E07_2.0-3.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E07_3.0-4.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E07_4.0-4.1	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E08_0-0.1	13/03/2017	-	-	-	940	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E08_1.0-1.1	13/03/2017	-	-	-	785	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E08_0-1.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E08_1.0-2.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E08_2.0-3.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E08_3.0-4.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E08_4.0-4.2	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E09_0.4-0.5	13/03/2017	-	-	-	611	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E09_0-0.1	13/03/2017	-	-	-	810	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E09_0-1.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E09_1.0-2.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E09_2.0-3.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E09_3.0-4.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E09_4.0-4.2	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E10_0.5-0.6	13/03/2017	-	-	-	768	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E10_2.0-2.1	13/03/2017	-	-	-	751	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E10_0-1.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E10_1.0-2.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E10_2.0-3.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E10_3.0-3.3	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E12_0-0.1	13/03/2017	-	-	-	649	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E12_0-0.5	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E13_0.4-0.5	13/03/2017	-	-	-	781	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC12A	13/03/2017	-	-	-	841	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E13_1.5-1.6	13/03/2017	-	-	-	722	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E13_0-1.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E13_1.0-2.0	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E13_2.0-2.1	13/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E14 0-0.1	3/03/2017	-	-	-	597	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E14 1.0-1.1	3/03/2017	-	-	-	718	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E14_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E14_1.0-1.3	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
E15 0.10-0.15	3/03/2017	-	-	-	494	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E15 0.5-0.6	3/03/2017	-	-	-	887	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E15 2.5-2.6	3/03/2017	-	-	-	639	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E15_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E15_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E15_2.0-3.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E15_3.0-3.8	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E16 0.1-0.2	3/03/2017	-	-	-	925	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E16_0-0.5	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E17 0.05-0.15	3/03/2017	-	-	-	971	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E17 0.4-0.5	3/03/2017	-	-	-	939	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E17 1.5-1.6	3/03/2017	-	-	-	771	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E17_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E17_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E17_2.0-3.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E17_3.0-3.8	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E18_0-0.1	9/03/2017	-	-	-	765	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E18_1.0-1.1	9/03/2017	-	-	-	751	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E18_2.0-2.1	9/03/2017	-	-	-	767	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E18_0-1.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E18_1.0-2.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E18_2.0-3.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E18_3.0-3.2	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E19 0.1-0.2	3/03/2017	-	-	-	1065	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E19 1.2-1.3	3/03/2017	-	-	-	745	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E19_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E19_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E19_2.0-3.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E19_3.0-4.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E19_4.0-4.5	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E20:0.2-0.3	6/03/2017	-	-	-	942	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E20:1.8-1.9	6/03/2017	-	-	-	606	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E20_0-1.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E20_1.0-2.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E20_2.0-3.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E20_3.0-4.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E21:0.5-0.6	6/03/2017	-	-	-	834	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E21:1.5-1.6	6/03/2017	-	-	-	700	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E21_0-1.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E21_1.0-2.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E21_2.0-3.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E22:0.6-0.7	6/03/2017	-	-	-	754	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E22:2.3-2.4	6/03/2017	-	-	-	740	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E22_0-1.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E22_1.0-2.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E22_2.0-3.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E22_3.0-3.6	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E23:0.4-0.5	6/03/2017	-	-	-	673	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E23:0-0.1	6/03/2017	-	-	-	840	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E23:1.9-2.0	6/03/2017	-	-	-	865	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC03-K	6/03/2017	-	-	-	695	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QA03A-K	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E23:3.7-3.8	6/03/2017	-	-	-	758	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E23_0-1.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E23_1.0-2.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
E23_2.0-3.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E23_3.0-3.5	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E24:1.0-1.1	6/03/2017	-	-	-	685	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E24:2.5-2.6	6/03/2017	-	-	-	619	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC04-K	6/03/2017	-	-	-	640	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QA04A-K	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E24_0-1.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E24_1.0-2.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E24_2.0-3.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E25_0-0.1	2/03/2017	-	-	-	508	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC03A	2/03/2017	-	-	-	692	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC03	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E25_2.0-2.1	2/03/2017	-	-	-	636	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E25_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E25_1.0-2.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E25_2.0-2.5	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E26-0.2-0.3	7/03/2017	-	-	-	1015	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E26-1.7-1.8	7/03/2017	-	-	-	938	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E26_0-1.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E26_1.0-2.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E26_2.0-2.5	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E27_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E27_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E27A 0.05-0.10	3/03/2017	-	-	-	808	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E27A 0.7-0.8	3/03/2017	-	-	-	714	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QA01-K	3/03/2017	-	-	-	695	0	0	0	0	0	0.0006	0.0006	0.0006	0.0001	Nil	AF: Chrysotile asbestos detected in	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QA01-KA	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E27A_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E27A_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E27A_2.0-3.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E27A_3.0-3.5	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E28 0.05-0.10	3/03/2017	-	-	-	947	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E28 0.8-0.9	3/03/2017	-	-	-	641	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E28 1.9-2.0	3/03/2017	-	-	-	677	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E28 4.1-4.2	3/03/2017	-	-	-	817	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E28_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E28_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E28_2.0-3.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E28_3.0-3.6	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E29:0.4-0.5	6/03/2017	-	-	-	773	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E29:0-0.1	6/03/2017	-	-	-	940	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E29:2.6-2.7	6/03/2017	-	-	-	831	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E29_0-1.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E29_1.0-2.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E29_2.0-2.5	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E30_0.1-0.2	9/03/2017	-	-	-	753	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E30_1.0-1.1	9/03/2017	-	-	-	724	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E30_0-1.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E30_1.0-2.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E30_2.0-2.4	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E31_0.0-0.1	9/03/2017	-	-	-	613	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E31_0-0.2	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E32_0.3-0.4	9/03/2017	-	-	-	602	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E32_1.6-1.7	9/03/2017	-	-	-	63	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E32_0-1.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E32_1.0-2.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E32_2.0-2.9	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0

Appendix A - Summary of Historical Site Investigation Results

TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
E33-0.4-0.5	7/03/2017	-	-	-	875	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E33-2.0-2.1	7/03/2017	-	-	-	850	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E33_0-1.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E33_1.0-2.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E33_2.0-3.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E33_3.0-3.3	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E34-0-0.1	7/03/2017	-	-	-	814	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E34-1.0-1.1	7/03/2017	-	-	-	939	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E34_0-1.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E34_1.0-2.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E34_2.0-2.3	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E35:0.4-0.5	6/03/2017	-	-	-	694	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E35:1.8-1.9	6/03/2017	-	-	-	779	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E35_0-1.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E35_1.0-2.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E35_2.0-2.6	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E36:0.05-0.15	6/03/2017	-	-	-	1061	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E36:0.8-0.9	6/03/2017	-	-	-	656	0	0	0	0.0036	0.0036	0.0038	0.0023	0.0059	0.0009	Nil	AF: Chrysotile and amosite asbestos	FA: Chrysotile, amosite and	Organic fibres	No respirable fibres detected	-	-	-	-	-
E36_0-1.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E36_1.0-2.0	6/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E37_0.1-0.2	9/03/2017	-	-	-	735	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E37_1.4-1.5	9/03/2017	-	-	-	569	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E37_2.4-2.5	9/03/2017	-	-	-	773	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E37_0-1.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E37_1.0-2.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E37_2.0-2.3	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E38_0.4-0.5	8/03/2017	-	-	-	956	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E38_1.4-1.5	8/03/2017	-	-	-	433	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E38_0-1.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E38_1.0-2.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E38_2.0-2.8	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E39-0.5-0.6	7/03/2017	-	-	-	992	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E39-1.5-1.6	7/03/2017	-	-	-	827	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E39_0-1.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E39_1.0-2.0	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E39_2.0-2.6	7/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E41_0.0-0.1	9/03/2017	-	-	-	906	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E41_0.3-0.4	9/03/2017	-	-	-	537	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E41_0-0.4	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E42_0.0-0.1	9/03/2017	-	-	-	779	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E42_0-0.1	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E43_0.0-0.1	9/03/2017	-	-	-	676	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E43_0-0.1	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E44_0.0-0.1	9/03/2017	-	-	-	482	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E44_1.0-1.1	9/03/2017	-	-	-	392	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E44_0-1.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E44_1.0-1.2	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E45_0.0-0.1	9/03/2017	-	-	-	824	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E45_0.4-0.5	9/03/2017	-	-	-	820	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E45_0-0.5	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E48_0.0-0.1	9/03/2017	-	-	-	660	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E48_0.3-0.4	9/03/2017	-	-	-	641	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E48_0-0.4	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E49_0.4-0.5	9/03/2017	-	-	-	828	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E49_0.5-0.6	9/03/2017	-	-	-	537	0	0	0	0.1404	0.0983	0.0013	0.0013	0.0996	0.0186	Nil	AF: Chrysotile and amosite asbestos	FA: Chrysotile and amosite	Organic fibres	No respirable fibres detected	-	-	-	-	-
E49_0-0.6	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
ES0_0-01	9/03/2017	-	-	-	588	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES0_0-0.2	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES1_0.9-1.0	8/03/2017	-	-	-	764	0	0	0	0.0141	0.0099	0.0017	0.0017	0.0116	0.0015	Nil	AF: Chrysotile asbestos detected in	FA: Chrysotile and crocidolite	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES1_1.5-1.6	8/03/2017	-	-	-	768	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES1_3.5-3.6	8/03/2017	-	-	-	599	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES1_0-1.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES1_1.0-2.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES1_2.0-2.4	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES2_0.1-0.2	8/03/2017	-	-	-	1031	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES2_1.4-1.5	8/03/2017	-	-	-	928	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES2_0-1.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES2_1.0-2.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES2_2.0-3.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES2_3.0-3.3	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES3_0.4-0.5	9/03/2017	-	-	-	732	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES3_1.6-1.7	9/03/2017	-	-	-	585	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES3_0-1.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES3_1.0-2.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES3_2.0-2.8	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES4 0.4-0.5	3/03/2017	-	-	-	570	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES4 1.4-1.5	3/03/2017	-	-	-	697	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES4_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES4_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES4_2.0-2.3	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES4A_0.0-01	9/03/2017	-	-	-	791	0	0	0	0	0	0.0054	0.0049	0.0049	0.0006	Nil	AF: Chrysotile and amosite asbestos	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC10A	9/03/2017	-	-	-	879	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC10	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES4A_0.3-0.4	9/03/2017	-	-	-	642	0	0	0	0	0	0.0013	0.0013	0.0013	0.0002	Nil	AF: Chrysotile asbestos detected in	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES4A_0-0.4	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES5_0.0-0.1	9/03/2017	-	-	-	836	0	0	0	0	0	0.0007	0.0007	0.0007	0.0001	Nil	AF: Chrysotile and amosite asbestos	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES5_3.0-3.1	9/03/2017	-	-	-	745	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES5_0-1.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES5_1.0-2.0	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES5_2.0-2.9	9/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES6_0.1-0.2	8/03/2017	-	-	-	1063	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES6_1.9-2.0	8/03/2017	-	-	-	491	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES6_0-1.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES6_1.0-2.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES6_2.0-3.0	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES6_3.0-3.3	8/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES7_0.05-0.15	2/03/2017	-	-	-	765	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES7_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES7_1.0-2.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES7_2.0-2.1	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES8 0-0.1	3/03/2017	-	-	-	692	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC06	3/03/2017	-	-	-	673	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES8_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES8_1.0-1.8	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES9 0-0.1	3/03/2017	-	-	-	549	0	0	0	0.0107	0.0086	0	0	0.0086	0.0016	Nil	Nil	FA: Chrysotile asbestos	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC04	3/03/2017	-	-	-	494	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES9 1.4-1.5	3/03/2017	-	-	-	514	0	0	0	0	0	0.0005	0.0005	0.0005	0.0001	Nil	AF: Chrysotile asbestos detected in	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES9_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES9_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES9_2.0-2.2	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
ES60 0.4-0.5	3/03/2017	-	-	-	805	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
ES60 2.0-2.1	3/03/2017	-	-	-	644	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
E60_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E60_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E60_2.0-3.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E60_3.0-3.3	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E61 0.4-0.5	3/03/2017	-	-	-	821	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E61 2.0-2.1	3/03/2017	-	-	-	711	0	0	0	0	0	0.0004	0.0004	0.0004	0.0001	Nil	AF: Chrysotile asbestos detected in	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E61_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E61_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E61_2.0-3.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E61_3.0-3.5	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E62 0-0.1	3/03/2017	-	-	-	704	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E62 1.4-1.5	3/03/2017	-	-	-	597	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E62_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E62_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E62_2.0-3.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E62_3.0-3.2	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E63_0.15-0.25	2/03/2017	-	-	-	484	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E63_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E63_1.0-1.6	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E64_1.0-1.1	2/03/2017	-	-	-	512	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E64_2.0-2.1	2/03/2017	-	-	-	581	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E64_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E64_1.0-2.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E64_2.0-3.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E64_3.0-3.1	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E65_0.05-0.15	2/03/2017	-	-	-	530	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E65_1.0-1.1	2/03/2017	-	-	-	483	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E65_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E65_1.0-1.8	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E66_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E66_1.0-2.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E66_2.0-2.3	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E67_0-0.1	2/03/2017	-	-	-	674	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E67_1.0-1.1	2/03/2017	-	-	-	665	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E67_2.0-2.1	2/03/2017	-	-	-	659	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E67_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E67_1.0-2.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E67_2.0-3.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E67_3.0-3.1	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E68 0.4-0.5	3/03/2017	-	-	-	717	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E68 0-0.1	3/03/2017	-	-	-	573	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E68 2.4-2.5	3/03/2017	-	-	-	544	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E68_0-1.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E68_1.0-2.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E68_2.0-3.0	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E68_3.0-3.1	3/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E69_0-0.1	2/03/2017	-	-	-	687	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC02A	2/03/2017	-	-	-	751	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
QC02	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E69_1.0-1.1	2/03/2017	-	-	-	586	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E69_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E69_1.0-1.5	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E70_0.2-0.3	2/03/2017	-	-	-	588	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E70_1.4-1.5	2/03/2017	-	-	-	716	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E70_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E70_1.0-2.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E70_2.0-2.4	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E71_0.05-0.15	2/03/2017	-	-	-	688	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E71_0.4-0.5	2/03/2017	-	-	-	617	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E71_0-0.6	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E72_1.0-1.1	2/03/2017	-	-	-	756	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E72_2.0-2.1	2/03/2017	-	-	-	306	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E72_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E72_1.0-1.2	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E73_0.4-0.5	2/03/2017	-	-	-	475	0	0	0	0	0	0	0	0	0	Nil	Nil	Nil	Organic fibres	No respirable fibres detected	-	-	-	-	-
E73_0-1.0	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0
E73_1.0-1.6	2/03/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	16300	0	0	0

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
GDP 2020a																								
ENV020_0.2	4/12/2018	35.6	NAD	NFD																				
ENV020_0.5	4/12/2018	235	NAD	NFD																				
ENV020_1.0	4/12/2018	19.2	NAD	NFD																				
ENV021_0.15	4/12/2018	743	NAD	NFD																				
ENV021_0.5	4/12/2018	21.5	NAD	NFD																				
ENV021_1.0	4/12/2018	500	AD	NFD																				
ENV021_1.5	4/12/2018	480	AD	NFD																				
ENV023_0.5	3/12/2018	44	NAD	NFD																				
ENV023_1.0	3/12/2018	607	NAD	NFD																				
QC115	3/12/2018	173	NAD	NFD																				
QC215	3/12/2018																							
ENV023_1.5	3/12/2018	199	NAD	NFD																				
ENV022_0.0	3/12/2018	745	NAD	NFD																				
ENV022_1.2	3/12/2018	485	NAD	NFD																				
ENV022_1.5	3/12/2018	490	NAD	NFD																				
ENV025_0.0	4/12/2018	211	NAD	NFD																				
ENV025_0.5	4/12/2018	155	NAD	NFD																				
ENV025_2.0	4/12/2018	192	NAD	NFD																				
ENV024_0.0	4/12/2018	175	NAD	NFD																				
ENV024_0.5	4/12/2018	188	NAD	NFD																				
ENV024_2.0	6/12/2018	142	NAD	NFD																				
BH066_0.5	28/05/2018	45.4	NAD	NFD																				
QC101	28/05/2018	44	NAD	NFD																				
QC201	28/05/2018	15	NAD	NFD																				
BH066_1.0	28/05/2018	38.3	NAD	NFD																				
BH066_2.5	28/05/2018	26.8	NAD	NFD																				
ENV027_0.2	5/12/2018	482	NAD	NFD																				
ENV027_0.5	5/12/2018	26.4	NAD	NFD																				
QC120	5/12/2018	10.1	NAD	NFD																				
ENV027_1.5	5/12/2018	18.1	NAD	NFD																				
ENV026_0.5	4/12/2018	26.5	NAD	NFD																				
QC121	4/12/2018	7.47	NAD	NFD																				
ENV026_1.0	4/12/2018	38.8	NAD	NFD																				
ENV029_0.2	5/12/2018	595	NAD	NFD																				
ENV029_1.0	5/12/2018	320	NAD	NFD																				
ENV029_2.0	10/12/2018	188	NAD	NFD																				
ENV028_0.5	5/12/2018	641	NAD	NFD																				
ENV028_1.0	5/12/2018	441	NAD	NFD																				
ENV028_1.5	5/12/2018	560	NAD	NFD																				
ENV028/2.0	17/12/2018	365	NAD	NFD																				
ENV034_0.2	5/12/2018	564	NAD	NFD																				
ENV034_0.5	5/12/2018	544	NAD	NFD																				
QC125	5/12/2018	10.5	NAD	NFD																				
ENV034_2.0	10/12/2018	19	NAD	NFD																				
ENV033_0.2	5/12/2018	622	AD	NFD																				
ENV033_0.5	5/12/2018	586	NAD	NFD																				
ENV033_1.0	5/12/2018	388	NAD	NFD																				
ENV036_0.1	7/12/2018	383	NAD	NFD																				
ENV036_1.0	6/12/2018	531	NAD	NFD																				
ENV035_0.2	7/12/2018	380	NAD	NFD																				
ENV035_1.0	7/12/2018	400	NAD	NFD																				
ENV038_0.2	13/12/2018	10.3	NAD	NFD																				
ENV037_0.25	13/12/2018	25.1	NAD	NFD																				
ENV037_0.4	13/12/2018	5.54	NAD	NFD																				
ENV037_0.5	13/12/2018	7.08	NAD	NFD																				
BH067_0.25	5/06/2018	27.6	NAD	NFD																				
BH067_0.5	5/06/2018	12.7	NAD	NFD																				
QC104	5/06/2018	34.4	NAD	NFD																				
QC204	5/06/2018	40	NAD	NFD																				
ENV030_0.65	14/12/2018	16.5	NAD	NFD																				
ENV030_1.0	14/12/2018	16.5	NAD	NFD																				
ENV031_0.35	13/12/2018	13.5	NAD	NFD																				
ENV031_0.5	13/12/2018	12.6	NAD	NFD																				
ENV032_0.1-0.2	13/12/2018	12.3	NAD	NFD																				
ENV032_0.5	13/12/2018	7.92	NAD	NFD																				
BH037_0.6	19/06/2018	39.8	NAD	NFD																				
QC106	19/06/2018	8.2	NAD	NFD																				
BH037_1.0	19/06/2018	40.2	NAD	NFD																				

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
Senversa 2021																								
S08_0.4-0.5	10/03/2021	-	-	-	325	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S08_0.8-1.0	10/03/2021	-	-	-	186	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S08_1.4-1.5	10/03/2021	-	-	-	150	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S09_0.8-1.0	10/03/2021	-	-	-	327	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S10_0.2-0.3	16/03/2021	-	-	-	406	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S10_0.5-0.6	9/03/2021	-	-	-	518	-	8.3	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S10_0.9-1.1	10/03/2021	-	-	-	261	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S11_0.5-0.6	15/03/2021	-	-	-	261	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S11_1.5-1.6	15/03/2021	-	-	-	264	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S12_0.0-0.2	16/03/2021	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S12_0.5-0.6	16/03/2021	-	-	-	273	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S12_0.5-0.6_frag	16/03/2021	-	-	-	1,300	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-
S13_0.5-0.6	16/03/2021	-	-	-	348	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S14_0.5-0.6	16/03/2021	-	-	-	353	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S15_0.0-0.1	16/03/2021	-	-	-	256	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S16_0.0-0.1	12/03/2021	-	-	-	395	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S16_0.5-0.6	12/03/2021	-	-	-	459	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S16_2.3-2.6	12/03/2021	-	-	-	315	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S17_0.0-0.1	16/03/2021	-	-	-	366	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S17_0.5-0.6	16/03/2021	-	-	-	239	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S18_0.5-0.6	17/03/2021	-	-	-	384	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S18_0.8-1.0	17/03/2021	-	-	-	192	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S18_0.15-0.2	17/03/2021	-	-	-	558	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S19_0.4-0.5	18/03/2021	-	-	-	494	-	-	-	-	<0.0004	-	-	0.0575	0.012	-	-	-	No	-	-	-	-	-	-
S19_0.9-1.0	18/03/2021	-	-	-	348	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S19_0.15-0.25	18/03/2021	-	-	-	140	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S20_0.4-0.5	17/03/2021	-	-	-	116	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S20_0.9-1.0	17/03/2021	-	-	-	392	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S20_0.15-0.25	17/03/2021	-	-	-	304	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S21_0.4-0.5	17/03/2021	-	-	-	152	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S21_0.9-1.0	17/03/2021	-	-	-	265	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S21_0.15-0.25	17/03/2021	-	-	-	151	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S22_0.5-0.7	26/04/2021	-	-	-	74.5	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S24_0.15-0.25	12/04/2021	-	-	-	600	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S25_0.9-1.1	13/04/2021	-	-	-	456	-	-	-	-	<0.0004	-	-	0.0022	<0.001	-	-	-	No	-	-	-	-	-	-
S25_1.5-1.8	15/04/2021	-	-	-	40.8	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S26_0.0-0.1	13/04/2021	-	-	-	674	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S27_0.4-0.5	13/04/2021	-	-	-	376	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S27_0.9-1.0	15/04/2021	-	-	-	249	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S28_1.1-1.2	13/04/2021	-	-	-	146	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S29_0.17-0.2	13/04/2021	-	-	-	479	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S29_1.8-2.2	13/04/2021	-	-	-	109	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S30_0.9-1.0	13/04/2021	-	-	-	222	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S31_0.4-0.5	13/04/2021	-	-	-	32.4	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S31_1.8-2.2	13/04/2021	-	-	-	42.8	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S32_0.9-1.0	12/04/2021	-	-	-	208	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S32_4.0-4.2	13/04/2021	-	-	-	189	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S33_0.9-1.2	13/04/2021	-	-	-	33.7	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S34_0.0-0.1	16/04/2021	-	-	-	185	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S34_0.4-0.7	16/04/2021	-	-	-	21.7	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S35_0.4-0.5	14/04/2021	-	-	-	371	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S36_0.0-0.1	17/03/2021	-	-	-	550	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S36_0.5-0.6	17/03/2021	-	-	-	190	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S36_1.0-1.1	17/03/2021	-	-	-	391	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S37_0.0-0.1	12/03/2021	-	-	-	752	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S38_0.05-0.10	12/04/2021	-	-	-	530	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S38_1.0-1.1	16/04/2021	-	-	-	198	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S39_1.0-1.15	15/03/2021	-	-	-	351	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S40_0.0-0.1	15/04/2021	-	-	-	452	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S40_0.8-1.0	19/04/2021	-	-	-	354	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S41_0.5-0.6	15/03/2021	-	-	-	489	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S42_0.4-0.5	15/04/2021	-	-	-	370	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S42_0.9-1.0	20/04/2021	-	-	-	308	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
S43_0.4-0.5	15/04/2021	-	-	-	252	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S43_1.4-1.5	20/04/2021	-	-	-	474	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S44_0.0-0.1	17/03/2021	-	-	-	696	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S44_0.5-0.6	17/03/2021	-	-	-	537	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S44_1.0-1.1	17/03/2021	-	-	-	594	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S45_0.4-0.5	15/04/2021	-	-	-	170	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S45_1.4-1.5	20/04/2021	-	-	-	44.3	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S46_0.4-0.5	16/03/2021	-	-	-	352	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S47_0.1-0.2	15/04/2021	-	-	-	292	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S47_0.4-0.5	15/04/2021	-	-	-	411	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S48_0.0-0.1	16/03/2021	-	-	-	453	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S48_0.4-0.5	16/03/2021	-	-	-	265	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S48_0.8-0.9	16/03/2021	-	-	-	356	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S49_0.0-0.15	16/04/2021	-	-	-	260	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S50_0.5-0.6	14/04/2021	-	-	-	303	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S50_0.16-0.25	14/04/2021	-	-	-	93.2	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S50_3.0-3.2	15/04/2021	-	-	-	240	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S51_0.3-0.4	14/04/2021	-	-	-	344	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S51_1.4-1.5	16/04/2021	-	-	-	253	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S52_0.3-0.4	14/04/2021	-	-	-	323	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S52_1.0-1.1	14/04/2021	-	-	-	104	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S53_0.26-0.35	14/04/2021	-	-	-	248	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S53_1.0-1.1	14/04/2021	-	-	-	96.5	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S54_0.6-0.7	14/04/2021	-	-	-	302	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	Yes	-	-	-	-	-	-
S54_1.4-1.5	14/04/2021	-	-	-	213	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S55_0.4-0.5	12/04/2021	-	-	-	96.0	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S55_1.7-2.2	19/04/2021	-	-	-	364	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S56_0.8-1.0	16/04/2021	-	-	-	313	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S57_0.5-0.7	16/04/2021	-	-	-	242	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S58_0.3-0.4	26/04/2021	-	-	-	366	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S58_0.5-0.6	26/04/2021	-	-	-	285	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S58_1.0-1.1	26/04/2021	-	-	-	254	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S59_0.2-0.3	16/03/2021	-	-	-	569	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S59_0.5-0.6	16/03/2021	-	-	-	31.0	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S59_1.0-1.1	9/03/2021	-	-	-	172	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S59_1.7-2.0	9/03/2021	-	-	-	318	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S60_0.2-0.3	16/03/2021	-	-	-	314	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S60_1.0-1.1	9/03/2021	-	-	-	513	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S60_1.1-1.5	10/03/2021	-	-	-	23.2	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S60_2.0-2.2	7/04/2021	-	-	-	320	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S60_3.0-3.2	7/04/2021	-	-	-	585	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S60_4.0-4.2	7/04/2021	-	-	-	655	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S60_5.0-5.2	7/04/2021	-	-	-	303	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S60_6.0-6.2	7/04/2021	-	-	-	640	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S61_0.2-0.3	16/03/2021	-	-	-	533	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S61_0.5-0.6	11/03/2021	-	-	-	244	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S61_0.9-1.0	11/03/2021	-	-	-	137	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S61_1.4-1.5	11/03/2021	-	-	-	309	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S61_2.1-2.3	11/03/2021	-	-	-	41.2	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S62_0.0-0.1	9/03/2021	-	-	-	750	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S62_0.5-0.6	9/03/2021	-	-	-	600	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S62_0.9-1.0	11/03/2021	-	-	-	198	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-

Appendix A - Summary of Historical Site Investigation Results
TableB1- Historical Asbestos in Soil Investigation Data

		Asbestos ID			Asbestos Trace Analysis										Asbestos - comments					Asbestos - Field Results				
		Sample weight (dry)	Asbestos (1-Detect or <1-Non-Detect)	Asbestos Fines	Approx. Sample Mass	Mass ACM	Mass Asbestos in ACM	Asbestos from ACM in soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Asbestos from FA & AF in soil	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment	Respirable Fibres - Comment	Volume of Sample	Soil Mass	Mass ACM	Mass Asbestos in ACM	Asbestos
		g	Comment	Comment	g	g	g	%w/w	g	g	g	g	g	%w/w	Comment	Comment	Comment	Comment	Comment	L	g	g	g	%w/w
EQL																								
NEPM 2013 Soil HSL B								0.04						0.001										0.04
NEPM 2013 Soil HSL C								0.02						0.001										0.02
NEPM 2013 Soil HSL D								0.05						0.001										0.05
Sample ID	**Date**																							
S62_1.4-1.5	11/03/2021	-	-	-	215	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S62_1.6-1.7	8/04/2021	-	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S62_2.2-2.5	8/04/2021	-	-	-	405	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S62_4.0-4.2	8/04/2021	-	-	-	316	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S62_6.0-6.3	8/04/2021	-	-	-	225	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S63_0.0-0.1	11/03/2021	-	-	-	541	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S63_0.5-0.6	11/03/2021	-	-	-	539	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S63_1.3-1.5	11/03/2021	-	-	-	591	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S63_2.0-2.2	16/03/2021	-	-	-	301	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S64_0.0-0.1	11/03/2021	-	-	-	639	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S64_0.5-0.6	11/03/2021	-	-	-	328	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S64_0.9-1.0	11/03/2021	-	-	-	599	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S64_1.5-1.6	11/03/2021	-	-	-	597	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S65_0.0-0.1	11/03/2021	-	-	-	713	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S65_0.5-0.6	11/03/2021	-	-	-	595	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S65_1.0-1.1	11/03/2021	-	-	-	685	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S65_1.5-1.6	30/03/2021	-	-	-	452	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S65_2.0-2.2	30/03/2021	-	-	-	539	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S66_0.0-0.1	11/03/2021	-	-	-	525	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S66_0.4-0.5	11/03/2021	-	-	-	626	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S66_1.0-1.1	11/03/2021	-	-	-	260	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S66_1.5-1.6	1/04/2021	-	-	-	270	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S66_2.0-2.1	1/04/2021	-	-	-	548	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S66_3.0-3.1	1/04/2021	-	-	-	397	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S66_4.0-4.1	1/04/2021	-	-	-	339	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S66_5.0-5.1	1/04/2021	-	-	-	602	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S66_6.0-6.1	1/04/2021	-	-	-	274	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S67_0.0-0.1	11/03/2021	-	-	-	726	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S67_0.6-0.7	11/03/2021	-	-	-	550	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S67_1.0-1.1	11/03/2021	-	-	-	23.0	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S67_2.0-2.1	31/03/2021	-	-	-	700	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S67_5.0-5.1	31/03/2021	-	-	-	564	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-
S68_0.0-0.1	12/03/2021	-	-	-	590	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S68_0.5-0.6	12/03/2021	-	-	-	444	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S68_1.0-1.1	12/03/2021	-	-	-	214	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S68_1.5-1.6	12/03/2021	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S69_0.0-0.1	10/03/2021	-	-	-	537	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S69_0.5-0.6	10/03/2021	-	-	-	362	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S70_0.4-0.5	17/03/2021	-	-	-	209	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S70_0.8-0.9	17/03/2021	-	-	-	196	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S70_0.15-0.2	17/03/2021	-	-	-	231	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S71_0.0-0.1	26/04/2021	-	-	-	879	-	-	-	-	<0.0004	-	-	<0.0004	<0.001	-	-	-	No	-	-	-	-	-	-
S72_0.0-0.1	17/03/2021	-	-	-	583	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S72_0.5-0.6	17/03/2021	-	-	-	860	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S72_1.0-1.1	17/03/2021	-	-	-	508	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S72_1.5-1.6	17/03/2021	-	-	-	491	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S72_2.0-2.1	17/03/2021	-	-	-	505	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S72_2.4-2.5	17/03/2021	-	-	-	553	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-
S72_3.0-3.1	17/03/2021	-	-	-	528	-	-	-	-	-	-	-	-	-	-	-	-	No	-	-	-	-	-	-

Appendix A - Summary of Historical Site Investigation Results
Table C1 - Historical Groundwater Investigation Data

		Heavy Metals								TPH (NEPC 1999)					TRH (NEPC 2013)						MAHs (BTEX)						PAHs																		OCPs						
		Arsenic	Cadmium	Chromium (III+VI)	Copper	Nickel	Lead	Zinc	Mercury	C6-C9	C10-C14	C15-C28	C29-C36	C10 - C36 (Sum of total)	C6-C10	C10-C16	C16-C34	C34-C40	C6 - C10 less BTEX (F1)	>C10 - C16 less Naphthalene (F2)	Benzene	Toluene	Ethyl Benzene	Total m+p Xylenes	o-Xylene	Total Xylene	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b+k)fluoranthene	Benzo (a) Pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	Total PAH	DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	Dieldrin
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EPA (1994)														0.6							0.3	0.3	0.14		0.38																										
ANZECC 2000 (95% Eco Marine Waters)		0.013	0.007	0.0044	0.0013	0.007	0.0044	0.015	0.00001												0.5	0.18	0.005	0.75	0.35		0.05				0.0006	0.0001	0.001					0.0001														
NEPC (2013) HSL Vapour intrusion															1	1					0.8	NL	NL	NL	NL		NL																										
Sample ID	Date																																																		
JET 1998b																																																			
BP4	May-98	<0.05	0.0002	<0.05	**0.009**	0.006	<0.001	**0.1**	<0.00005	<0.005	<0.005	0.069	0.031	0.1	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP5	May-98	<0.05	0.0001	<0.05	**0.015**	0.003	<0.001	**0.1**	<0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP6	May-98	<0.05	0.0005	<0.05	**0.028**	**0.011**	<0.001	**0.64**	<0.00005	<0.005	<0.005	0.009	0.014	0.023	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP58	May-98	<0.05	0.0001	<0.05	**0.002**	0.005	<0.001	**0.15**	<0.00005	<0.005	0.041	0.383	0.309	0.734	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP59	May-98	<0.05	0.0001	<0.05	**0.002**	0.003	<0.001	**0.13**	<0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BD1-230498 (=BP59)	May-98	<0.05	<0.0001	<0.05	0.001	0.003	<0.001	**0.09**	<0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP60	May-98	<0.05	0.0001	<0.05	0.001	0.004	<0.001	**0.12**	<0.00005	0.005	0.039	0.15	0.116	0.31	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
FB1-230498	May-98	<0.05	<0.0001	<0.05	<0.001	<0.001	<0.001	<0.05	<0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP4	Apr-98	0.002	<0.0005	0.005	**0.068**	0.003	<0.001	0.012	<0.0001	0.017	0.013	0.036	0.014	0.08	-	-	-	-	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	0.000012	<0.00003	<0.00003	<0.00001	0.00007
BP5	Apr-98	0.006	<0.0005	**0.008**	**1**	0.005	**0.009**	**0.163**	<0.0001	0.011	0.007	0.039	0.011	0.068	-	-	-	-	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	0.000003
BP6	Apr-98	0.011	<0.0005	**0.019**	**0.036**	0.006	<0.001	**0.072**	<0.0001	0.007	0.006	0.119	0.015	0.147	-	-	-	-	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP58	Apr-98	0.007	<0.0005	0.003	0.001	0.003	<0.001	<0.002	<0.0001	0.018	0.015	0.1	0.016	0.149	-	-	-	-	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	0.000005	0.000005	<0.00003	<0.00003	<0.00001	0.00001
BP59	Apr-98	0.003	<0.0005	**0.005**	**0.011**	0.003	<0.001	0.003	<0.0001	0.008	0.009	0.06	0.01	0.087	-	-	-	-	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	0.000026	<0.00003	<0.00003	<0.00001	0.000012
BP60	Apr-98	0.008	<0.0005	0.003	**0.014**	0.002	<0.001	<0.002	<0.0001	<0.003	<0.003	0.027	<0.003	0.027	-	-	-	-	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BD1-050398 (=BP60)	Apr-98	0.009	<0.0005	**0.011**	0.001	0.002	<0.001	<0.002	<0.0001	<0.003	0.003	0.03	<0.003	0.033	-	-	-	-	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
FB1-2050398	Apr-98	<0.001	<0.0005	<0.001	**0.01**	<0.001	<0.001	<0.002	<0.0001	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP4-080897	Aug-97	0.007	<0.0005	0.004	**0.003**	-	<0.001	**0.016**	<0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP5-070897	Aug-97	0.002	<0.0005	0.004	**0.002**	-	<0.001	0.008	<0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BD1-070897 (=BP5)	Aug-97	0.002	<0.0005	0.003	**0.002**	-	<0.001	0.011	<0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP6-070897	Aug-97	0.003	<0.0005	0.004	**0.003**	-	<0.001	**0.062**	<0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
FB1-070897	Aug-97	<0.001	<0.0005	<0.001	**0.009**	-	<0.001	<0.001	<0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP4-230597	May-97	0.006	<0.0005	<0.001	**0.009**	-	<0.001	**0.098**	**0.002**	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BD1-230597 (=BP4)	May-97	0.006	<0.0005	<0.001	<0.001	-	<0.001	0.006	**0.003**	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP5-230597	May-97	0.002	<0.0005	<0.001	<0.001	-	<0.001	**0.018**	**0.003**	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
BP6-230597	May-97	0.002	<0.0005	<0.001	<0.001	-	<0.001	0.005	**0.002**	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
FB1-230597	May-97	<0.001	<0.0005	<0.001	**0.013**	-	<0.001	0.004	**0.001**	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.00014	<0.00003	<0.00001	<0.00003	<0.00004	<0.00004	<0.00003	<0.00003	<0.00001	<0.00002
PB (2003)																																																		
GW03 (D&M)	Feb-03	0.004	0.0002	<0.001	**0.002**	0.001	0.002	**0.069**	<0.0001	<0.02	<0.02	<0.1	<0.1	LPQL	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
GW05 (D&M)	Feb-03									<0.02	<0.02	<0.1	<0.1	LPQL	-	-	-	-	-	-	IS	IS	IS	IS	IS	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
GW06 (D&M)	Feb-03	0.001	0.0002	<0.001	**0.002**	<0.001	<0.001	**0.297**	IS	<0.02	<0.02	<0.1	<0.1	LPQL	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
W3 (JET)	Feb-03	**0.014**	<0.001	<0.01	<0.01	<0.01	<0.01	**0.028**	<0.0001	<0.02	<0.02	<0.1	<0.1	LPQL	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
W4 (JET)	Feb-03	0.004	<0.001	0.002	**0.002**	0.001	<0.001	**0.112**	<0.0001	<0.02	<0.02	<0.1	<0.1	LPQL	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
W5 (JET)	Feb-03	0.006	<0.001	0.003	**0.003**	<0.001	<0.001	**0.04**	<0.0001	<0.02	<0.02	<0.1	<0.1	LPQL	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
BP5 (JET)	Feb-03	0.005	<0.001	0.002	<0.001	0.003	<0.001	**0.039**	<0.0001	<0.02	<0.02	<0.1	<0.1	LPQL	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
MWB1 (PB, 2002)	Feb-03	0.003	<0.001	0.001	<0.001	<0.001	<0.001	**0.05**	<0.0001	<0.02	2.1	149	2.19	**153.3**	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-
QA1	Feb-03	0.003	<0.001	0.001	<0.001	<0.001	<0.001	**0.049**	<0.0001	<0.02	2.8	186.2	2.65	**191.7**	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	0.001	0.004	<0.001	0.004	0.004	0.001	0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.016	-	-	-	-	-	-	-	-	-	-
QA1A	Feb-03	0.003	<0.001	0.002	**0.008**	<0.001	0.002	**0.206**	<0.0001	<0.02	2.8	98.3	28.2	**129.3**	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
MWB2 (PB, 2002)	Feb-03	0.003	<0.001	0.002	0.001	**0.01**	0.001	**0.042**	<0.0001	<0.02	0.28	0.394	<0.1	**0.674**	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
MWB3 (PB, 2002)	Feb-03	0.003	<0.001	<0.001	0.001	<0.001	<0.001	**0.035**	<0.0001	<0.02	<0.02	<0.1	<0.1	LPQL	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
GW03 (D&M)	Feb-03	0.004	0.0002	<0.002	**0.002**	0.001	0.002	**0.069**	<0.0001	<0.02	<0.02	<0.1	<0.1	LPQL	-	-	-	-	-	-	<0.0005	<0.001	<0.001	<0.002	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	LPQL	-	-	-	-	-	-	-	-	-	-
NAA 2012																																																		
MW01	Jul-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW02	Jul-12	**0.057**	<0.0001	<0.001	0.001	0.003	<0.001	**0.024**	<0.00005	<0.01	0.31	1.1	<0.1	**1.41**	-	-	-	-	-	-	<0.001	<0.001	<0.001	-	-	<0.002	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW03	Jul-12	**0.04**	<0.0001	<0.001	0.001	0.002	<0.001	**0.02**	<0.00005	<0.01	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	-	-	<0.002	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04	Jul-12	<0.001	<0.0001	0.001	0.001	0.002	<0.001	**0.018**	<0.00005	<0.01	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	-	-	<0.002	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prensa 2013a																																																		
50758_Penstock North	7/02/2013	<0.001	<0.0001	<0.001	**0.003**	<0.001	<0.001	**0.019**	<0.00005	<0.01	<0.05	<0.1	<0.1	-	<0.01	<0.05	<0.1	<0.1	-	-	<0.001	<0.001	<0.001	<0.002	<0.001	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
50758_Penstock South	7/02/2013	-	-	-	-	-	-	-	-	<0.01	<0.05	<0.1	<0.1	-	<0.01	<0.05	<0.1	<0.1	-	-	<0.001	<0.001	<0.001	<0.002	<0.001	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Prensa 2013b																																																		
50758-MW02	16/07/2013	**0.05**	<0.0001	<0.001	<0.001	0.002	<0.001	0.014	<0.00005	-	-	-	-	-	<0.01	0.33	0.66	<0.1	-	-	-	-	-	-	-	-	<0.001	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0039	-	-	-	-	-	-	-	-	-	-
50758-MW04	16/07/2013	<0.001	0.0001	<0.001	**0.002**	0.002	<0.001	0.014	<0.00005	-	-	-	-	-	<0.01	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
50758-MW101	16/07/2013	0.005	<0.0001	<0.001	<0.001	<0.001	<0.001	0.007	<0.00005	-	-	-	-	-	<0.01	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	-	-	PAHs+BI73:BX7	-	-	-	-	-	-	-	-
50758-MW102	15/07/2013	0.011	<0.0001	<0.001	<0.001	**0.015**	<0.001	0.042	<0.00005	-	-	-	-	-	<0.01	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
50758-MW103	16/07/2013	**0.017**	<0.0001	<0.001	<0.001	0.001	<0.001	**0.016**	<0.00005	-	-	-	-	-	<0.01	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
50758-MW104	16/07/2013	0.003	<0.0001	<0.001	0.001	**0.049**	<0.001	**0.059**	<0.00005	-	-	-	-	-	<0.01	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
50758-MW105	15/07/2013	<0.001	<0.0001	<0.001	<0.001	**0.18**	<0.001	**0.12**	<0.00005	-	-	-	-	-	<0.01	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
50758-MW106	15/07/2013	<0.001	<0.0001	<0.001	**0.003**	0.01	<0.001	**0.058**	<0.00005	-	-	-	-	-	<0.01	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
50758-MW107	16/07/2013	<0.001	<0.0001	<0.001	0.001	**0.026**	<0.001	**0.062**	<0.00005	-	-	-	-	-	0.054	<0.05	<0.1	<0.1	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
Prensa 2015																																																		
50758-MW02	2/03/2015	**0.1**	<0.0001	<

Appendix A - Summary of Historic
Table C1 - Historical Groundwater

| | | PCBs | | | | | Non-Metallic Inorganics | | | | Major Cations | | | Chlorinated Alkanes | | | | |

Appendix A - Summary of Historica
Table C1 - Historical Groundwater

		Aromatic Hydrocarbons					Miscellaneous Hydrocarbons									
		n-butyl benzene	n-propyl benzene	sec-butyl benzene	Styrene	Tert-butyl benzene	1,2-dibromoethane	2-Butanone (MEK)	2-Propanone (Acetone)	4-Methyl-2-pentanone (MIBK)	Bromoform	Bromomethane	Cyclohexane	Dibromomethane	Iodomethane	Carbon disulfide
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EPA (1994)																
ANZECC 2000 (95% Eco Marine Waters)																
NEPC (2013) HSL Vapour intrusion																
Sample ID	Date															
JET 1998b																
BP4	May-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP5	May-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP6	May-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP58	May-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP59	May-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BD1-230498 (=BP59)	May-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP60	May-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FB1-230498	May-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP4	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP5	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP6	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP58	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP59	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP60	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BD1-050398 (=BP60)	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FB1-2050398	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP4-080897	Aug-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP5-070897	Aug-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BD1-070897 (=BP5)	Aug-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP6-070897	Aug-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FB1-070897	Aug-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP4-230597	May-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BD1-230597 (=BP4)	May-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP5-230597	May-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP6-230597	May-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FB1-230597	May-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PB (2003)																
GW03 (D&M)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW05 (D&M)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW06 (D&M)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W3 (JET)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W4 (JET)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W5 (JET)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP5 (JET)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB1 (PB, 2002)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QA1	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QA1A	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB2 (PB, 2002)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB3 (PB, 2002)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW03 (D&M)	Feb-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NAA 2012																
MW01	Jul-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW02	Jul-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW03	Jul-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04	Jul-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prensa 2013a																
50758_Penstock North	7/02/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758_Penstock South	7/02/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prensa 2013b																
50758-MW02	16/07/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW04	16/07/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW101	16/07/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW102	15/07/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW103	16/07/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW104	16/07/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW105	15/07/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW106	15/07/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW107	16/07/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prensa 2015																
50758-MW02	2/03/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW04	2/03/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW101	2/03/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW102	2/03/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW103	2/03/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW104	2/03/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW105	2/03/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW106	2/03/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50758-MW107	2/03/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JBS&G 2105																
MW102	1/07/2015	-	-	-	<0.001	-	<0.001	<0.001	<1	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001
MW104	1/07/2015	-	-	-	<0.001	-	<0.001	<0.001	<1	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001
MW106	1/07/2015	-	-	-	<0.001	-	<0.001	<0.001	<1	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001
QW01	1/07/2015	-	-	-	<0.001	-	<0.001	<0.001	<1	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001
QW01A	1/07/2015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	<0.001	<0.01	<0.001	<0.001	-	-
WB1	1/07/2015	-	-	-	<0.001	-	<0.001	<0.001	<1	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001
WB4	1/07/2015	-	-	-	<0.001	-	<0.001	<0.001	<1	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001
WB8	1/07/2015	-	-	-	<0.001	-	<0.001	<0.001	<1	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001
JBS&G 2016																
A17	16/12/2015	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001
QW01	16/12/2015	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001
QW01A	16/12/2015	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001
A22	16/12/2015	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001
A24	16/12/2015	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001
A25 - PSH	16/12/2015	-	-	-	<20	-	<20	<20	<20	-	<20	<20	-	<20	<20	<20
A28	16/12/2015	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001
MW01	16/12/2015	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001
MW02	16/12/2015	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001

Appendix A - Summary of Historical Site Investigation Results
Table C2 - Historical Groundwater Investigation Data

		Metals										Polycyclic Aromatic Hydrocarbons																TPHs (NEPC 1999)					TRHs (NEPC 2013)						BTEX					
		Arsenic (Total) (Filtered)	Barium (Filtered)	Cadmium (Filtered)	Chromium (Total) (Filtered)	Copper (Filtered)	Lead (Filtered)	Manganese (Filtered)	Mercury (inorganic) (Filtered)	Nickel (Filtered)	Zinc (Filtered)	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (WHO)	Benzo(b,j)fluoranthene	Benzo(g,h,i)perylene	Benzo(b,jnk)fluoranthene	Benzo[k]fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Total)	Total Positive PAHs	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Total)	>C10-C16 Fraction	>C16-C34 Fraction	>C34-C40 Fraction	C6-C10 Fraction	>C10 - C16 less Naphthalene (F2)	C6 - C10 less BTEX (F1)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene (Total)
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL		1.00	20.00	0.10	1.00	1.00	1.00	5.00	0.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	10.00	50.00	100.00	100.00	100.00	50.00	100.00	100.00	10.00	50.00	10.00	1.00	1.00	1.00	2.00	1.00	3.00
ANZECC 2000 Marine Water 95%				5.5	27.4[#5]	1.3	4.4		0.4	70	15																70														500[#21][#22]	5[#2]	180[#2]		350[#2]	625[#2]
ANZECC 2000 Marine Water Low Reliability																																													
NEPM 2013 GIL - Marine Waters				0.7[#5]	4.4	1.3[#6]	4.4[#6]		0.1[#7]	7[#6]	15[#8]															50[#9]															500[#9]					
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																																						1000	1000	800	NL	NL			NL
NEPM 2013 Groundwater HSL C for Vapour Intrusion - Sand 2 to <4m																																						NL	NL	NL	NL	NL			NL
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 2 to <4m																										NL												NL	6000[#11]	5000	NL	NL			NL
NHMRC (2011) (as amended December 2014) (Factor 10) – Aesthetics						10000		1000			30000																														30	250			20[#12]
NHMRC (2011) (as amended December 2014) (Factor 10) – Health		100	20000	20		20000	100	5000	10	200						0.1																								1[#12]	300[#12]	800[#12]			6000
Sample ID	**Date**																																												
JBS&G 2017a																																													
A17	28/02/2017	6	40	<0.2	<1	2	<1	31	<0.1	<1	<5	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<20	<50	<100	<100	<100	<50	100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
A24	28/02/2017	3	60	<0.2	<1	<1	<1	87	<0.1	<1	16	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<20	<50	900	<100	900	<50	1000	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
A28	28/02/2017	<1	80	<0.2	<1	2	<1	13	1.4	<1	<5	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<20	<50	<100	<100	<100	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
C63	27/02/2017	1	110	<0.2	<1	2	<1	150	<0.1	3	39	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<20	<50	<100	<100	<100	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
C64	27/02/2017	<1	80	<0.2	<1	<1	<1	1500	<0.1	<1	<5	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<20	60	<100	<100	<100	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
QW01 - duplicate of C64	28/02/2017	1	90	<0.2	<1	<1	<1	1500	<0.1	<1	<5	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<20	<50	<100	<100	<100	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
QW01A - triplicate of C64	27/02/2017	1	-	<0.1	<1	<1	<1	-	<0.05	<1	<1	<1	<1	<1	<1	<1	<1	<5	-	<1	<2	-	<1	<1	<1	<1	<1	<1	-	0[#4]	<10	<50	<100	<100	-	<50	<100	<100	<10	<50	<10	<1	<3	<1	<2	<1	-
C65	28/02/2017	1	70	<0.2	8	1	<1	300	<0.1	6	52	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<20	<50	<100	<100	<100	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
C66	28/02/2017	1	30	<0.2	<1	<1	<1	35	<0.1	<1	<5	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<20	<50	<100	<100	<100	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
C67	28/02/2017	<1	40	<0.2	<1	<1	<1	110	<0.1	<1	5	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<20	<50	<100	<100	<100	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
MW82	27/02/2017	10	140	<0.2	<1	<1	<1	230	<0.1	<1	<5	4	<1	<1	<1	<1	-	<1	<1	-	<1	<1	5	<1	<1	<1	<1	9	-	<20	390	900	<100	1290	470	700	<100	470	<20	<50	<1	<1	<1	<2	<1	<3
WB4	27/02/2017	12	430	<0.2	1	<1	<1	430	0.2	<1	<5	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	2	<1	2	-	80	<50	<100	<100	<100	<50	<100	<100	90	<50	90	<1	<1	<1	<2	<1	<3
JBS&G 2017b																																													
E57	15/03/2017	2	-	<0.2	3	3	<1	13,000	<0.1	3	15	<0.05	<0.05	<0.05	<0.05	<0.01	-	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
E58	15/03/2017	1	-	<0.2	<1	3	<1	13,000	<0.1	<1	8	<0.05	<0.05	<0.05	<0.05	<0.01	-	-	<0.05	-	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	0.1	0.1	0.3	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
QA01-W - duplicate of E58	15/03/2017	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	-	0	-	-	-	-	-	<50	<100	<100	<10	-	-	<1	<1	<1	<2	<1	-
E59	15/03/2017	10	-	<0.2	4	<1	2	110,000	<0.1	<1	<5	<0.05	<0.05	<0.05	<0.05	<0.01	-	-	<0.05	-	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	0.1	0.2	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
E60	15/03/2017	7	-	<0.2	<1	2	<1	18,000	<0.1	2	40	<0.05	<0.05	<0.05	<0.05	<0.01	-	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
E61	15/03/2017	2	-	<0.2	<1	5	5	340,000	<0.1	2	30	<0.05	<0.05	<0.05	<0.05	<0.01	-	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	0.1	0.2	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
E62	15/03/2017	1	-	0.5	<1	2	<1	15,000	<0.1	2	180	0.4	0.3	0.1	0.1	0.1	-	-	<0.05	-	0.1	0.2	<0.05	1.2	0.1	<0.05	<0.05	0.1	0.8	3.6	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
E63	16/03/2017	<1	-	<0.2	<1	1	<1	7800	<0.1	<1	18	<0.05	<0.05	<0.05	<0.05	<0.01	-	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
WB8_W	15/03/2017	49	-	<0.2	<1	3	<1	18,000	<0.1	<1	14	<0.05	<0.05	<0.05	<0.05	<0.01	-	-	<0.05	-	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	0.1	0.1	0.3	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
MW104_W	15/03/2017	2	-	<0.2	<1	1	<1	35,000	<0.1	10	39	<0.05	<0.05	<0.05	<0.05	<0.01	-	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3
MW107_W	16/03/2017	1	-	<0.2	<1	<1	<1	17,000	<0.1	<1	9	<0.05	<0.05	<0.05	<0.05	<0.01	-	-	<0.05	-	<0.05	<0.05	<0.05	0.2	<0.05	<0.05	<0.05	<0.05	0.2	0.4	-	-	-	-	-	-	<50	<100	<100	<20	<50	<20	<1	<1	<1	<2	<1	<3

Appendix A - Summary of Historical Site Investigation Results
Table C2 - Historical Groundwater Investigation Data

JBS&G

| | | Non-Metallic Inorganics | | | | | | | | | | | | | | | Chlorinated Alkanes | | | | | | | | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results
Table C2 - Historical Groundwater Investigation Data

	Major Cations								Maj. Anions	Ionic Balance						Solvents						Inorganic
	Calcium	Calcium (Filtered)	Magnesium	Magnesium (Filtered)	Potassium	Potassium (Filtered)	Sodium	Sodium (Filtered)	Chloride	EC_Lab	Bicarbonate Alkalinity (as CaCO3)	Carbonate Alkalinity (as CaCO3)	pH_Lab	Hardness as CaCO3	Total Alkalinity (as CaCO3)	Methyl Ethyl Ketone	4-Methyl-2-pentanone	Allyl chloride	Carbon disulfide	Cyclohexane	2-Propanone (Acetone)	Hydroxide Alkalinity (as CaCO3)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µS/cm	µg/L	µg/L	ph Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	500.00		500.00		500.00		500.00		1000.00	1.00	5000.00	5000.00	0.10	5000.00	5000.00	1.00	1.00	1.00	1.00		1.00	5000.00
ANZECC 2000 Marine Water 95%																						
ANZECC 2000 Marine Water Low Reliability																						
NEPM 2013 GIL - Marine Waters																						
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																						
NEPM 2013 Groundwater HSL C for Vapour Intrusion - Sand 2 to <4m																						
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 2 to <4m																						
NHMRC (2011) (as amended December 2014) (Factor 10) – Aesthetics							1800000	1800000	2500000				6.5-8.5									
NHMRC (2011) (as amended December 2014) (Factor 10) – Health																						
Sample ID	**Date**																					
JBS&G 2017a																						
A17	28/02/2017	46,000	-	1800	-	3900	-	11,000	-	9500	290	83,000	<5000	7.6	120,000	83,000	-	-	-	-	-	<1	<5000
A24	28/02/2017	87,000	-	1800	-	3500	-	11,000	-	6100	410	150,000	<5000	7.4	230,000	150,000	-	-	-	-	-	<1	<5000
A28	28/02/2017	76,000	-	9100	-	6300	-	29,000	-	32,000	490	140,000	<5000	7.4	230,000	140,000	-	-	-	-	-	<1	<5000
C63	27/02/2017	110,000	-	15,000	-	7700	-	30,000	-	16,000	730	270,000	<5000	7.2	340,000	270,000	-	-	-	-	-	<1	<5000
C64	27/02/2017	110,000	-	18,000	-	25,000	-	59,000	-	55,000	870	290,000	<5000	7.5	360,000	290,000	-	-	-	-	-	<1	<5000
QW01 - duplicate of C64	28/02/2017	100,000	-	16,000	-	24,000	-	55,000	-	72,000	870	290,000	<5000	7.5	320,000	290,000	-	-	-	-	-	<1	<5000
QW01A - triplicate of C64	27/02/2017	-	91,000	-	14,000	-	23,000	-	58,000	45,000	750	440,000	<5000	7.6	-	440,000	-	-	-	-	-	-	<5000
C65	28/02/2017	37,000	-	5800	-	11,000	-	96,000	-	58,000	620	57,000	<5000	7.3	120,000	57,000	-	-	-	-	-	<1	<5000
C66	28/02/2017	96,000	-	2500	-	19,000	-	19,000	-	21,000	510	160,000	<5000	8.1	250,000	160,000	-	-	-	-	-	<1	<5000
C67	28/02/2017	95,000	-	9700	-	17,000	-	33,000	-	23,000	610	190,000	<5000	7.3	280,000	190,000	-	-	-	-	-	<1	<5000
MWB2	27/02/2017	140,000	-	31,000	-	20,000	-	61,000	-	51,000	1100	430,000	<5000	6.9	480,000	430,000	-	-	-	-	-	<1	<5000
WB4	27/02/2017	100,000	-	20,000	-	55,000	-	150,000	-	60,000	1500	580,000	<5000	7.2	330,000	580,000	-	-	-	-	-	<1	<5000
JBS&G 2017b																						
E57	15/03/2017	72,000	-	13,000	-	13,000	-	89,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	<1	-
E58	15/03/2017	170,000	-	13,000	-	12,000	-	31,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	<1	-
QA01-W - duplicate of E58	15/03/2017	-	170,000	-	12,000	-	12,000	-	31,000	-	-	-	-	-	-	-	-	-	-	-	<1	-	-
E59	15/03/2017	190,000	-	110,000	-	38,000	-	590,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	20	-
E60	15/03/2017	140,000	-	18,000	-	22,000	-	110,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	23	-
E61	15/03/2017	250,000	-	340,000	-	110,000	-	2,700,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	<1	-
E62	15/03/2017	91,000	-	15,000	-	9100	-	61,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	<1	-
E63	16/03/2017	150,000	-	7800	-	10,000	-	11,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	<1	-
WB8_W	15/03/2017	66,000	-	18,000	-	8100	-	23,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	<1	-
MW104_W	15/03/2017	130,000	-	35,000	-	41,000	-	100,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	<1	-
MW107_W	16/03/2017	230,000	-	17,000	-	8300	-	23,000	-	-	-	-	-	-	-	-	<1	<1	<1	<1	-	29	-

Appendix A - Summary of Historical Site Investigation Results
Table C3 - Historical Groundwater Investigation Data

		Physical Parameters	Inorganics				Major Ions									Alkalinity												
		Total Dissolved Solids	Ammonia (as N)	Nitrate (as N)	Phosphorus (as P)	Ortho-phosphate (as P)	Calcium (filtered)	Chloride	Magnesium (filtered)	Potassium (filtered)	Sulfate (as SO4) (filtered)	Sodium (filtered)	Anions Total	Cations Total	Ionic Balance	Bicarbonate Alkalinity (as CaCO3)	Carbonate Alkalinity (as CaCO3)	Hydroxide Alkalinity (as CaCO3)	Total Alkalinity (as CaCO3)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (filtered)	Cobalt (filtered)
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	LOR	5	0.005	0.005	0.01	0.005	0.5	1	0.5	0.5	1	0.5	0.01	0.01	0.01	1	1	1	1	0.001	0.001	0.001	0.05	0.0001	0.001	0.001
Maintenance of Ecosystems - 95% Protection - marine water (Excluding PFAS)			0.9[#1]	2.4[#2]																0.013[#3]		0.00013[#4]	0.37[#5]	0.0007	0.0044[#6]	0.001
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																										
NEPM 2013 Groundwater HSL C for Vapour Intrusion - Sand 2 to <4m																										
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																										
Recreation and Aesthetics		6,000[#15]	[#16]	[#17]				2,500[#18]			2,500[#19]	1,800[#20]								[#21]	[#21]	[#21]	[#21]	0.02[#21]	[#22]	
PFAS NEPM 2.0: Ecological, 95% species protection																										
PFAS NEPM 2.0: Ecological, 99% species protection																										
Field ID	**Date**																									
Senversa 2021																										
A17	3/05/2021	601	-	-	-	-	54	14	2	5	20	11	3.45	3.46	0.24	132	<1	<1	132	0.006	0.035	<0.001	0.05	<0.0001	<0.001	<0.001
C64	4/05/2021	566	1.71	<0.01	-	-	101	71	20	22	5	63	10.6	9.99	3.24	428	<1	<1	428	<0.001	0.107	<0.001	0.53	<0.0001	<0.001	<0.001
C65	3/05/2021	139	-	-	-	-	5	20	<1	5	24	26	1.84	1.66	-	39	<1	<1	39	0.008	0.042	<0.001	<0.05	<0.0001	<0.001	0.004
C66	3/05/2021	362	0.16	<0.01	-	-	82	21	2	17	21	20	5.42	5.56	1.24	220	<1	<1	220	<0.001	0.026	<0.001	0.09	<0.0001	<0.001	<0.001
QC121	3/05/2021	362	0.16	<0.01	-	-	83	22	3	17	19	20	5.67	5.69	0.19	233	<1	<1	233	<0.001	0.026	<0.001	0.09	<0.0001	<0.001	<0.001
QC220	3/05/2021	400	0.18	0.02	-	0.085	78	18	2.5	16	15	18	-	-	-3.0	240	<5	<5	240	<0.001	-	-	-	<0.0001	<0.001	-
E60	7/05/2021	829	-	-	-	-	70	54	8	15	91	177	13.1	12.2	3.37	484	<1	<1	484	0.002	0.047	<0.001	1.56	<0.0001	<0.001	<0.001
E62	5/05/2021	604	0.01	0.83	-	-	164	33	18	12	71	50	11.2	12.1	4.23	438	<1	<1	438	<0.001	0.137	<0.001	0.29	0.0001	<0.001	<0.001
E63	3/05/2021	441	<0.01	1.77	-	-	128	12	6	8	22	10	7.45	7.52	0.47	333	<1	<1	333	<0.001	0.060	<0.001	0.15	<0.0001	<0.001	<0.001
MW02	4/05/2021	738	-	-	-	-	151	82	33	23	<10	71	14.4	13.9	1.60	604	<1	<1	604	0.062	0.241	<0.001	0.66	<0.0001	<0.001	<0.001
MW107	5/05/2021	753	0.20	0.02	-	-	247	25	19	9	88	31	14.5	15.5	3.35	597	<1	<1	597	0.002	0.110	<0.001	0.23	<0.0001	<0.001	<0.001
S02_D	4/05/2021	1,530	0.36	<0.01	-	-	14	421	14	21	75	390	19.2	19.4	0.52	286	<1	<1	286	<0.001	0.016	<0.001	1.45	<0.0001	<0.001	<0.001
S02_D	4/05/2021	-	-	-	0.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S02_S	3/05/2021	452	1.40	<0.01	-	-	136	17	14	7	16	20	9.02	8.99	0.20	411	<1	<1	411	0.021	0.065	<0.001	0.14	<0.0001	<0.001	<0.001
S02_S	3/05/2021	-	-	-	0.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S06	3/05/2021	1,260	0.53	<0.01	-	-	21	354	22	34	81	380	20.8	20.2	1.33	457	<1	<1	457	<0.001	0.103	<0.001	1.18	<0.0001	<0.001	<0.001
S06	3/05/2021	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_D	6/05/2021	7,720	2.54	0.22	-	-	55	3,580	128	93	696	2,450	129	122	2.62	667	<1	<1	667	<0.001	0.051	<0.001	4.37	<0.0001	<0.001	0.012
S40_D	6/05/2021	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_S	6/05/2021	545	0.62	0.12	-	-	118	60	10	18	87	39	9.54	8.87	3.64	302	<1	<1	302	<0.001	0.184	<0.001	0.10	0.0002	<0.001	<0.001
S40_S	6/05/2021	-	-	-	13.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S51	7/05/2021	960	0.09	0.11	-	-	92	82	66	38	5	164	18.4	18.1	0.75	800	<1	<1	800	0.009	0.072	<0.001	0.25	<0.0001	<0.001	0.001
S51	7/05/2021	-	-	-	0.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC221	5/05/2021	8,800	0.51	<0.005	-	<0.005	130	4,100	300	100	370	2,200	-	-	3.0	55	<5	<5	55	<0.001	-	-	-	<0.0001	<0.001	-
S54	5/05/2021	9,150	0.74	<0.10	-	-	159	4,490	308	94	467	2,260	137	134	1.23	48	<1	<1	48	<0.001	0.120	<0.001	0.24	<0.0001	<0.001	<0.001
S54	5/05/2021	-	-	-	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S55	5/05/2021	33,400	0.11	0.28	-	-	438	15,900	1,170	365	2,490	9,680	503	548	4.32	136	<1	<1	136	<0.010	0.028	<0.010	3.54	<0.0010	<0.010	<0.010
S55	5/05/2021	-	-	-	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_D	7/05/2021	825	1.00	0.19	-	-	69	232	26	16	114	169	13.6	13.3	0.93	234	<1	<1	234	0.001	0.123	<0.001	<0.05	<0.0001	<0.001	0.023
S58_D	7/05/2021	-	-	-	7.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_S	6/05/2021	822	-	-	-	-	30	267	31	4	263	175	14.0	11.8	8.78	51	<1	<1	51	0.008	0.041	<0.001	0.11	<0.0001	0.001	0.035
S58_S	6/05/2021	-	-	-	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SWM_ENV020_W	4/05/2021	5,100	0.14	<0.01	-	-	50	2,520	118	62	498	1,520	84.5	79.9	2.79	152	<1	<1	152	0.041	0.035	<0.001	1.26	<0.0001	<0.001	<0.001
SMW_ENV020_S	4/05/2021	630	-	-	-	-	194	18	13	10	41	26	12.2	12.1	0.14	541	<1	<1	541	0.091	0.092	<0.001	0.20	<0.0001	<0.001	0.001
SMW_ENV021_S	10/05/2021	6,390	-	-	-	-	255	2,830	207	72	372	1,600	103	101	0.87	771	<1	<1	771	0.007	0.238	<0.001	1.14	<0.0001	<0.001	<0.001
SMW_ENV021_W	10/05/2021	1,280	-	-	-	-	2	174	4	16	18	349	15.9	16.0	0.40	531	<1	<1	531	0.021	0.024	<0.001	1.24	<0.0001	<0.001	<0.001
SMW_ENV026	4/05/2021	1,300	-	-	-	-	125	355	63	31	3	281	24.2	24.4	0.53	706	<1	<1	706	0.004	0.148	<0.001	1.34	<0.0001	<0.001	<0.001
SMW_ENV034	10/05/2021	8,640	2.04	<0.01	-	-	81	4,060	218	110	690	2,640	143	140	1.34	728	<1	<1	728	0.007	0.039	<0.001	3.54	<0.0001	<0.001	<0.001
WB4	10/05/2021	478	8.42	0.09	-	-	89	27	8	23	74	55	8.58	8.08	2.98	314	<1	<1	314	0.017	0.190	<0.001	0.38	<0.0001	<0.001	0.002
QC122	5/05/2021	454	3.66	<0.01	-	-	37	101	2	28	64	93	6.44	6.77	2.52	23	90	<1	113	0.083	0.021	<0.001	<0.05	<0.0001	<0.001	<0.001
WB8	5/05/2021	460	3.72	<0.01	-	-	37	101	2	27	64	92	6.54	6.70	1.24	24	95	<1	118	0.085	0.022	<0.001	0.05	<0.0001	<0.001	<0.001

Appendix A - Summary of Historical Site Investigation Results
Table C3 - Historical Groundwater Investigation Data

Metals										BTEX							Total Petroleum Hydrocarbons					Total Recoverable Hydrocarbons			
		Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Vanadium (filtered)	Zinc (filtered)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Total Xylene	Total BTEX	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	C6-C10 Fraction	C6-C10 Fraction minus BTEX (F1)	>C10-C16 Fraction	>C10-C16 Fraction minus naphthalene (F2)
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR		0.001	0.001	0.001	0.00005	0.001	0.01	0.01	0.001	1	1	1	2	1	2	1	10	50	100	50	50	10	10	50	50
Maintenance of Ecosystems - 95% Protection - marine water (Excluding PFAS)		0.0013	0.0044	1.9[#1]	0.0001[#6]	0.007[#6]	0.005[#5]	0.1	0.015	950[#1]	180[#4]	80[#4]	~[#7]	350[#1]									440[#8]		440[#8]
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m										800	NL	NL			NL								1000		1000
NEPM 2013 Groundwater HSL C for Vapour Intrusion - Sand 2 to <4m										NL	NL	NL			NL								NL		NL
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand										5,000	NL	NL			NL								6,000		NL
Recreation and Aesthetics		[#23]	[#21]	[#24]	0.01[#21]	[#21]	[#21]		[#25]	[#21]	[#26]	[#27]			[#28]										
PFAS NEPM 2.0: Ecological, 95% species protection																									
PFAS NEPM 2.0: Ecological, 99% species protection																									
Senversa 2021																									
A17	3/05/2021	0.001	<0.001	0.014	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	120	<50	120	<20	<20	<100	<100
C64	4/05/2021	<0.001	<0.001	1.22	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
C65	3/05/2021	<0.001	0.002	0.116	<0.0001	0.002	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	330	680	1,010	<20	<20	<100	<100
C66	3/05/2021	<0.001	<0.001	0.055	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
QC121	3/05/2021	<0.001	<0.001	0.054	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
QC220	3/05/2021	<0.001	<0.001	-	<0.00005	<0.001	-	-	0.007	<1	<1	<1	<2	<1	-	-	<10	<50	<100	<100	-	<10	<10	<50	<50
E60	7/05/2021	<0.001	<0.001	0.150	<0.0001	0.002	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	70	280	360	710	<20	<20	<100	<100
E62	5/05/2021	<0.001	<0.001	0.048	<0.0001	<0.001	<0.01	<0.01	0.060	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
E63	3/05/2021	0.002	<0.001	0.001	<0.0001	<0.001	<0.01	<0.01	0.010	<1	<2	<2	<2	<2	<2	<1	<20	<50	160	<50	160	<20	<20	<100	<100
MW02	4/05/2021	<0.001	<0.001	0.286	<0.0001	<0.001	<0.01	<0.01	0.011	<1	<2	<2	<2	<2	<2	<1	<20	250	440	<50	690	<20	<20	420	420
MW107	5/05/2021	<0.001	<0.001	0.101	<0.0001	<0.001	<0.01	<0.01	0.018	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
S02_D	4/05/2021	<0.001	<0.001	0.029	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	3	<2	<2	<2	<2	3	<20	<50	<100	<50	<50	<20	<20	<100	<100
S02_D	4/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S02_S	3/05/2021	<0.001	<0.001	0.345	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
S02_S	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S06	3/05/2021	<0.001	<0.001	0.204	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	160	<50	160	<20	<20	<100	<100
S06	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_D	6/05/2021	<0.001	<0.001	1.21	<0.0001	0.009	<0.01	<0.01	0.024	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
S40_D	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_S	6/05/2021	0.007	<0.001	0.231	<0.0001	0.004	<0.01	<0.01	0.368	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
S40_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S51	7/05/2021	0.001	<0.001	0.151	<0.0001	0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
S51	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC221	5/05/2021	<0.001	<0.001	-	<0.00005	<0.001	-	-	0.006	<1	2	<1	<2	<1	-	-	<10	<50	<100	<100	-	<10	<10	<50	<50
S54	5/05/2021	<0.001	<0.001	1.95	<0.0001	<0.001	<0.01	<0.01	0.010	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
S54	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S55	5/05/2021	<0.010	<0.010	<0.010	<0.0001	<0.010	<0.10	<0.10	<0.050	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
S55	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_D	7/05/2021	<0.001	<0.001	0.878	<0.0001	0.033	<0.01	<0.01	0.023	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
S58_D	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_S	6/05/2021	<0.001	<0.001	3.41	<0.0001	0.023	<0.01	<0.01	0.044	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
S58_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SWM_ENV020_W	4/05/2021	<0.001	<0.001	0.099	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
SMW_ENV020_S	4/05/2021	<0.001	<0.001	0.180	<0.0001	<0.001	<0.01	<0.01	0.115	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
SMW_ENV021_S	10/05/2021	<0.001	<0.001	0.227	<0.0001	<0.001	<0.01	<0.01	0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
SMW_ENV021_W	10/05/2021	<0.001	<0.001	0.005	<0.0001	<0.001	<0.01	<0.01	0.010	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
SMW_ENV026	4/05/2021	<0.001	<0.001	0.273	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	180	<50	<100	<50	<50	200	200	<100	<100
SMW_ENV034	10/05/2021	<0.001	<0.001	0.139	<0.0001	<0.001	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
WB4	10/05/2021	0.002	0.001	0.204	<0.0001	0.005	<0.01	<0.01	0.024	<1	<2	<2	<2	<2	<2	<1	60	<50	<100	<50	<50	60	60	<100	<100
QC122	5/05/2021	0.001	0.001	0.025	0.0006	0.003	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100
WB8	5/05/2021	0.001	0.001	0.024	0.0006	0.003	<0.01	<0.01	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<50	<100	<50	<50	<20	<20	<100	<100

Appendix A - Summary of Historical Site Investigation Results
Table C3 - Historical Groundwater Investigation Data

					Phenols						PAHs																				
		>C16-C34 Fraction	>C34-C40 Fraction	>C10-C40 Fraction (Sum)	2-Methylphenol	2-Nitrophenol	2,4-Dimethylphenol	3-&4-Methylphenol (m&p- cresol)	4-Chloro-3-methylphenol	Phenol	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(b+j+k)fluoranthene	Benzo(b+j)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (Zero)	Sum of Polycyclic Aromatic Hydrocarbons (PAH)	Benzo(a)pyrene TEQ
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	LOR	100	100	100	1	1	1	2	1	1	1	1	1	1	0.5	1	1	2	1	1	1	1	1	1	1	1	1	1	0.5	0.5	5
Maintenance of Ecosystems - 95% Protection - marine water (Excluding PFAS)		640[#8]	630[#10]				1900[#4]	1900[#4]			320[#1]			0.01[#11]										1900[#11]				2400[#1]	1900[#11]		
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																															
NEPM 2013 Groundwater HSL C for Vapour Intrusion - Sand 2 to <4m																															
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																										NL					
Recreation and Aesthetics															0.1[#21]											300[#29]			0.1[#30]		0.1[#30]
PFAS NEPM 2.0: Ecological, 95% species protection																															
PFAS NEPM 2.0: Ecological, 99% species protection																															
Senversa 2021																															
A17	3/05/2021	150	<100	150	-	-	-	-	-	-	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
C64	4/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
C65	3/05/2021	780	220	1,000	-	-	-	-	-	-	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
C66	3/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
QC121	3/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
QC220	3/05/2021	<100	<100	-	-	-	-	-	-	<50	<1	<1	<1	<1	<1	<1	<1	<2	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<5
E60	7/05/2021	550	130	680	-	-	-	-	-	-	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
E62	5/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
E63	3/05/2021	160	<100	160	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
MW02	4/05/2021	250	<100	670	-	-	-	-	-	-	2.3	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	2.5	<1.0	<1.0	<1.0	<1.0	<1.0	4.8	-	-
MW107	5/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S02_D	4/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S02_D	4/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S02_S	3/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S02_S	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S06	3/05/2021	160	<100	160	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S06	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_D	6/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S40_D	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_S	6/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S40_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S51	7/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S51	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC221	5/05/2021	<100	<100	-	-	-	-	-	-	<50	<1	<1	<1	<1	<1	-	<1	<2	-	-	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<5
S54	5/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S54	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S55	5/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S55	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_D	7/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S58_D	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_S	6/05/2021	<100	<100	<100	-	-	-	-	-	-	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
S58_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SWM_ENV020_W	4/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
SMW_ENV020_S	4/05/2021	<100	<100	<100	-	-	-	-	-	-	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
SMW_ENV021_S	10/05/2021	<100	<100	<100	-	-	-	-	-	-	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
SMW_ENV021_W	10/05/2021	<100	<100	<100	-	-	-	-	-	-	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
SMW_ENV026	4/05/2021	<100	<100	<100	-	-	-	-	-	-	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
SMW_ENV034	10/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
WB4	10/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
QC122	5/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	6.7	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-
WB8	5/05/2021	<100	<100	<100	<1.0	<1.0	<1.0	<2.0	<1.0	6.1	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	-

Appendix A - Summary of Historical Site Investigation Results
Table C3 - Historical Groundwater Investigation Data

		MAH									Halogenated Benzenes									Halogenated Hydrocarbons				
		1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	Styrene	1,2,3-Trichlorobenzene	1,2-Dichlorobenzene	1,2,4-Trichlorobenzene	1,3-Dichlorobenzene	2-Chlorotoluene	1,4-Dichlorobenzene	4-Chlorotoluene	Bromobenzene	Chlorobenzene	1,2-Dibromomethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1	1	1	1	1	1	1	1	1	1	10	10	5	10
Maintenance of Ecosystems - 95% Protection - marine water (Excluding PFAS)				0.03[##]							[#]6	160[#1]	[#]6	260[#1]										
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																[#]1								
NEPM 2013 Groundwater HSL C for Vapour Intrusion - Sand 2 to <4m																								
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																								
Recreation and Aesthetics										0.04[###]	[#]32	[#]33	[#]32			#34				[#]27				
PFAS NEPM 2.0: Ecological, 95% species protection																					[#]21	[#]21		
PFAS NEPM 2.0: Ecological, 99% species protection																								
Senversa 2021																								
A17	3/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
C64	4/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
C65	3/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
C66	3/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
QC121	3/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
QC220	3/05/2021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10	-	<10
E60	7/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
E62	5/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
E63	3/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
MW02	4/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
MW107	5/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S02_D	4/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S02_D	4/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S02_S	3/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S02_S	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S06	3/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S06	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_D	6/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S40_D	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_S	6/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S40_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S51	7/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S51	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC221	5/05/2021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10	-	<10
S54	5/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S54	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S55	5/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S55	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_D	7/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S58_D	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_S	6/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
S58_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SWM_ENV020_W	4/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
SMW_ENV020_S	4/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
SMW_ENV021_S	10/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
SMW_ENV021_W	10/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
SMW_ENV026	4/05/2021	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
SMW_ENV034	10/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
WB4	10/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
QC122	5/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50
WB8	5/05/2021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5	<50

Appendix A - Summary of Historical Site Investigation Results
Table C3 - Historical Groundwater Investigation Data

		Chlorinated Hydrocarbons																										Chlorinated Hydrocarbons				
		1,1-Dichloropropane	1,1-Dichloroethane	1,1-Dichloroethene	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,2-Dibromo-3-chloropropane	1,2,2-Trichloroethane	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	1,2-Dichloroethane	1,3-Dichloropropane	1,2-Dichloropropane	2,2-Dichloropropane	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon Tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,4-Dichloro-2-butene	cis-1,2-Dichloroethene	Dibromomethane	cis-1,3-Dichloropropene	Hexachlorobutadiene	Pentachloroethane	Tetrachloroethene	trans-1,4-Dichloro-2-butene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl Chloride
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	LOR	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	1	10	5	1	1	1	1	5	1	5	1	1	10
Maintenance of Ecosystems - 95% Protection - marine water (Excluding PFAS)			[a]#4	700[a#]		270[a#]		6,500[#1]	400[a#]		1,900[#6]	1,100[#6]	900[#6]					240[a#]			370[a#]							0.04[a#]	[a]#4	[a]#4				330[a#]	100[a#]
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																																		
NEPM 2013 Groundwater HSL C for Vapour Intrusion - Sand 2 to <4m																																		
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																																		
Recreation and Aesthetics				[a]#21							[a]#21					2,500[#21]	2,500[#21]	[a]#21	2,500[#21]		2,500[#21]				[a]#21			#21		[a]#21				#21
PFAS NEPM 2.0: Ecological, 95% species protection																																		
PFAS NEPM 2.0: Ecological, 99% species protection																																		
Senversa 2021																																		
A17	3/05/2021	-	-	-	-	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
C64	4/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
C65	3/05/2021	-	-	-	-	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
C66	3/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
QC121	3/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
QC220	3/05/2021	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<10	<1	<10	<1	<1	<1	<1	-
E60	7/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
E62	5/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
E63	3/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
MW02	4/05/2021	-	-	-	-	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
MW107	5/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
S02_D	4/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
S02_D	4/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S02_S	3/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
S02_S	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S06	3/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
S06	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_D	6/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
S40_D	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S40_S	6/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
S40_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S51	7/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
S51	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC221	5/05/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<10	-	<1	<1	<1	<1	-	<1	-	<1	<1	<10
S54	5/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
S54	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S55	5/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
S55	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_D	7/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
S58_D	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S58_S	6/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
S58_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SWM_ENV020_W	4/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
SMW_ENV020_S	4/05/2021	-	-	-	-	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
SMW_ENV021_S	10/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
SMW_ENV021_W	10/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
SMW_ENV026	4/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
SMW_ENV034	10/05/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50
WB4	10/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
QC122	5/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5
WB8	5/05/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<5

Appendix A - Summary of Historical Site Investigation Results
Table C3 - Historical Groundwater Investigation Data

| | | Halogenated Phenols | | | | | | Fungicides | Polychlorinated Biphenyls | | | | | | | | Solvents | | | | | | Organochlorine Pesticides | | | | | | | |

Appendix A - Summary of Historical Site Investigation Results
Table C3 - Historical Groundwater Investigation Data

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Table C3 - Historical Groundwater Investigation Data

		(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Carboxylic Acids										Perfluoroalkane Sulfonic Acids								Perfluoroalkyl Sulfonamides								PFAS
		4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluorohexanoic acid (PFHxA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluoropentane Sulfonic Acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane Sulfonic Acid (PFHpS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorobutane Sulfonic acid (PFBS)	Sum of PFHxS and PFOS		N-Et ethyl perfluorooctane sulfonamidoethanol (N-EtFOSE)	N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)	N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	N-Et ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	Perfluorooctane sulfonamide (FOSA)	Sum of PFAS	
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
LOR		0.01	0.01	0.02	0.02	0.01	0.02	0.01	0.02	0.05	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	LOR		0.05	0.02	0.02	0.05	0.05	0.05	0.02	0.01
Maintenance of Ecosystems - 95% Protection - marine water (Excluding PFAS)																								Maintenance of Ecosystems - 95% Protection - marine water (Excluding PFAS)									
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																								NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m									
NEPM 2013 Groundwater HSL C for Vapour Intrusion - Sand 2 to <4m																								NEPM 2013 Groundwater HSL C for Vapour Intrusion - Sand 2 to <4m									
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																								NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand									
Recreation and Aesthetics																								Recreation and Aesthetics									
PFAS NEPM 2.0: Ecological, 95% species protection																								PFAS NEPM 2.0: Ecological, 95% species protection									
PFAS NEPM 2.0: Ecological, 99% species protection																								PFAS NEPM 2.0: Ecological, 99% species protection									
Senversa 2021																								**Senversa 2021**									
A17	3/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	A17	3/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	0.04
C64	4/05/2021	<0.05	<0.05	<0.05	<0.05	0.16	<0.02	<0.02	0.04	<0.05	0.03	<0.1	<0.02	<0.02	<0.02	0.06	1.57	0.10	0.95	0.05	<0.02	0.09	2.52	C64	4/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	3.05
C65	3/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	C65	3/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	0.03
C66	3/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	0.18	<0.02	0.05	<0.02	<0.02	<0.02	0.23	C66	3/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	0.23
QC121	3/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	0.18	<0.02	0.06	<0.02	<0.02	<0.02	0.24	QC121	3/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	0.24
QC220	3/05/2021	<0.01	<0.01	<0.02	<0.02	0.01	<0.05	<0.01	<0.02	<0.5	<0.01	<0.02	<0.02	<0.02	<0.1	<0.02	0.20	<0.01	0.05	<0.01	<0.02	<0.01	0.24	QC220	3/05/2021	<0.5	<0.02	<0.02	<0.1	<0.05	<0.05	<0.1	0.26
E60	7/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	E60	7/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
E62	5/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	E62	5/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
E63	3/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	E63	3/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	0.01
MW02	4/05/2021	<0.05	<0.05	<0.05	<0.05	0.16	<0.02	<0.02	0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	0.04	0.79	0.10	0.91	0.04	<0.02	0.12	1.70	MW02	4/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	2.18
MW107	5/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	MW107	5/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S02_D	4/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	S02_D	4/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S02_D	4/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S02_D	4/05/2021	-	-	-	-	-	-	-	-
S02_S	3/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	S02_S	3/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S02_S	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S02_S	3/05/2021	-	-	-	-	-	-	-	-
S06	3/05/2021	<0.05	<0.05	<0.05	<0.05	0.08	<0.02	<0.02	0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	0.02	0.36	0.07	0.39	0.02	<0.02	0.06	0.75	S06	3/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	1.02
S06	3/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S06	3/05/2021	-	-	-	-	-	-	-	-
S40_D	6/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	S40_D	6/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S40_D	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S40_D	6/05/2021	-	-	-	-	-	-	-	-
S40_S	6/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	S40_S	6/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S40_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S40_S	6/05/2021	-	-	-	-	-	-	-	-
S51	7/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	S51	7/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S51	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S51	7/05/2021	-	-	-	-	-	-	-	-
QC221	5/05/2021	<0.01	<0.01	<0.02	<0.02	<0.01	<0.05	<0.01	<0.02	<0.5	<0.01	<0.02	<0.02	<0.1	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	QC221	5/05/2021	<0.5	<0.02	<0.02	<0.1	<0.05	<0.05	<0.1	<0.01
S54	5/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	S54	5/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S54	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S54	5/05/2021	-	-	-	-	-	-	-	-
S55	5/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	S55	5/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S55	5/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S55	5/05/2021	-	-	-	-	-	-	-	-
S58_D	7/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	S58_D	7/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S58_D	7/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S58_D	7/05/2021	-	-	-	-	-	-	-	-
S58_S	6/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	S58_S	6/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
S58_S	6/05/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S58_S	6/05/2021	-	-	-	-	-	-	-	-
SWM_ENV020_W	4/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	SWM_ENV020_W	4/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
SMW_ENV020_S	4/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	SMW_ENV020_S	4/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
SMW_ENV021_S	10/05/2021	<0.05	<0.05	<0.05	<0.05	0.03	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	0.01	0.09	0.04	0.28	<0.02	<0.02	0.04	0.37	SMW_ENV021_S	10/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	0.49
SMW_ENV021_W	10/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	0.01	<0.02	0.05	<0.02	<0.02	<0.02	0.06	SMW_ENV021_W	10/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	0.06
SMW_ENV026	4/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	SMW_ENV026	4/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
SMW_ENV034	10/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	SMW_ENV034	10/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
WB4	10/05/2021	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.1	<0.02	<0.02	<0.02	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	WB4	10/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	<0.01
QC122	5/05/2021	<0.05	<0.05	<0.05	<0.05	0.09	<0.02	<0.02	0.07	<0.05	0.03	<0.1	<0.02	<0.02	<0.02	0.08	0.04	<0.02	0.04	<0.02	<0.02	0.03	0.08	QC122	5/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	0.38
WB8	5/05/2021	<0.05	<0.05	<0.05	<0.05	0.09	<0.02	<0.02	0.08	<0.05	0.03	<0.1	<0.02	<0.02	<0.02	0.08	0.03	<0.02	0.04	<0.02	<0.02	0.02	0.07	WB8	5/05/2021	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.02	0.37

Appendix A - Summary of Historical Site Investigation Results
Table D1 - Historical Soil Vapour Investigation Data

			Organic Alcohols	Chlorinated Alkanes																Chlorinated Alkenes								
			Isopropyl alcohol	1,1,1,2-tetrachlorcethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	bromodichloromethane	Carbon tetrachloride	Chloroform	dibromochloromethane	Trichlorofluoromethane	1,1,2,2-tetrachloroethylene	1,1-Dichloroethene	1,1-dichloropropene	2-chlorotoluene	4-chlorotoluene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,3-dichloropropene	Trichloroethene
			mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3
EQL			1.67	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
NEPM 2013 HIL Commercial/Industrial D Soil Vapour					230															8					0.3			0.08
NEPM 2013 HIL Recreational C Soil Vapour					1200															40					2			0.4
NEPM 2013 HIL Residential B Soil Vapour					60															2					0.08			0.02
NEPM 2013 Soil Vapour HSL A&B - Sand 0 to <1m																												
NEPM 2013 Soil Vapour HSL C - Sand 0 to <1m																												
NEPM 2013 Soil Vapour HSL D - Sand 0 to <1m																												
Field_ID	**Sampled_Date-Time**																											
JBS&G 2015																												
WB2A BACK	2/07/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
WB2A FRONT	2/07/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
WB4A BACK	2/07/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
WB4A FRONT	2/07/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
WB7A BACK	2/07/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
WB7A FRONT	2/07/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
JBS&G 2016																												
SV1_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV1_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV2_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV2_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	0.5833	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV3_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV3_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV4_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV4_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV5_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV5_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV6_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV6_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
QV01_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
QV01_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV7_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV7_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV8_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV8_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV9_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV9_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV10_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV10_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV11_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV11_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV12_BACK	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
SV12_FRONT	11/12/2015	<1.667	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
JBS&G 2017a																												
C72	28/02/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
C73	28/02/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	0.5168	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
C74	28/02/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
C75	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
C77	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
C76	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
C78	2/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
C79	2/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
C81	1/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
C82	1/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	10.84	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	0.4501
QSV01 - Duplicate o	1/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	9.835	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	0.4668
JBS&G 2017b																												
E74	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
QC01 - duplicate of	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
E75	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
E76	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
E77	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
E78	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
E79	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
E80	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335
E81	23/03/2017	<1.667	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335	<0.08335

Appendix A - Summary of Historical Site Investigation Results
Table D1 - Historical Soil Vapour Investigation Data

			BTEX						Polycyclic Aromatic Hydrocarbons	Monocyclic Aromatic Hydrocarbons									Miscellaneous Hydrocarbons							Chlorinated Benzenes						
Vinyl Chloride			Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene (Total)	Naphthalene	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	4-isopropyl toluene	Isopropylbenzene	n-butyl benzene	n-propyl benzene	sec-butyl benzene	Styrene	Tert-butyl benzene	1,2-dibromoethane	Bromoform	2-Propanone (Acetone)	Cyclohexane	Dibromomethane	Hexachlorobutadiene	Surrogate Bromochloromethane	Chlorobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene
mg/m3			mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3
0.08	EQL		0.08	0.08	0.08			0.25	0.83	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.83	0.08	0.08	0.08			0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
0.1	NEPM 2013 HIL Commercial/Industrial D Soil Vapour																														
0.5	NEPM 2013 HIL Recreational C Soil Vapour																														
0.03	NEPM 2013 HIL Residential B Soil Vapour																														
	NEPM 2013 Soil Vapour HSL A&B - Sand 0 to <1m		1	1300	330			220	0.8																						
	NEPM 2013 Soil Vapour HSL C - Sand 0 to <1m		360	NL	NL			NL	410																						
	NEPM 2013 Soil Vapour HSL D - Sand 0 to <1m		4	4800	1300			840	3																						
	Field_ID	Sampled_Date-Time																													
	JBS&G 2015																														
<0.08333	WB2A BACK	2/07/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.8333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	WB2A FRONT	2/07/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.8333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	WB4A BACK	2/07/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.8333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	WB4A FRONT	2/07/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.8333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	WB7A BACK	2/07/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.8333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	WB7A FRONT	2/07/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.8333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
	JBS&G 2016																														
<0.08333	SV1_BACK	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV1_FRONT	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV2_BACK	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV2_FRONT	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV3_BACK	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV3_FRONT	11/12/2015	0.1833	0.35	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV4_BACK	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV4_FRONT	11/12/2015	<0.08333	0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV5_BACK	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV5_FRONT	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV6_BACK	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV6_FRONT	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	QV01_BACK	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	QV01_FRONT	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV7_BACK	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV7_FRONT	11/12/2015	<0.08333	0.15	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV8_BACK	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
<0.08333	SV8_FRONT	11/12/2015	<0.08333	<0.08333	<0.08333	-	-	<0.25	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.8333	<0.08333	<0.08333	<0.08333	-	-	<0.08333	<0.08333	-	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333	<0.08333
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Appendix A - Summary of Historical Site Investigation Results
Table E1 - Historical Ground Gas Investigation Data

Well No.	Date of Monitoring	Atmospheric Pressure (mb)	Flow Rate (L/h)	CH_4 (%)	CH_4 GSV (L/hr)	CO_2 (%)	CO_2 GSV (L/hr)	O_2 (%)	H_2S (ppm)	CO (ppm)
JBS&G 2015										
WB1	24/09/2015	1025	0.1	0.0	0.000	4.5	0.005	16.2	0	0
WB2A	24/09/2015	1025	0.1	0.0	0.000	15.3	0.015	5.2	0	0
WB4	24/09/2015	1025	0.1	0.0	0.000	6.8	0.007	13.7	0	0
WB7A	24/09/2015	1025	0.1	0.0	0.000	5.2	0.005	14.3	0	0
WB8	24/09/2015	1025	0.1	0.0	0.000	0.5	0.001	20.8	0	0

Appendix B Draft Master Plan

19 July 2022

Bays West Stage 1 Master Plan and Rezoning for the White Bay Power Station (and Metro) and Robert Street Sub-precincts

Proof of Concept

COX

NSW GOVERNMENT Planning & Environment

Proof of Concept Yields

Totals

250 Dwellings
500 Residents
4,954 Workers

Residential GFA = 23,923m^2
Commercial GFA = 70,998m^2
Retail GFA = 4,718m^2
Community GFA = 3,000m^2

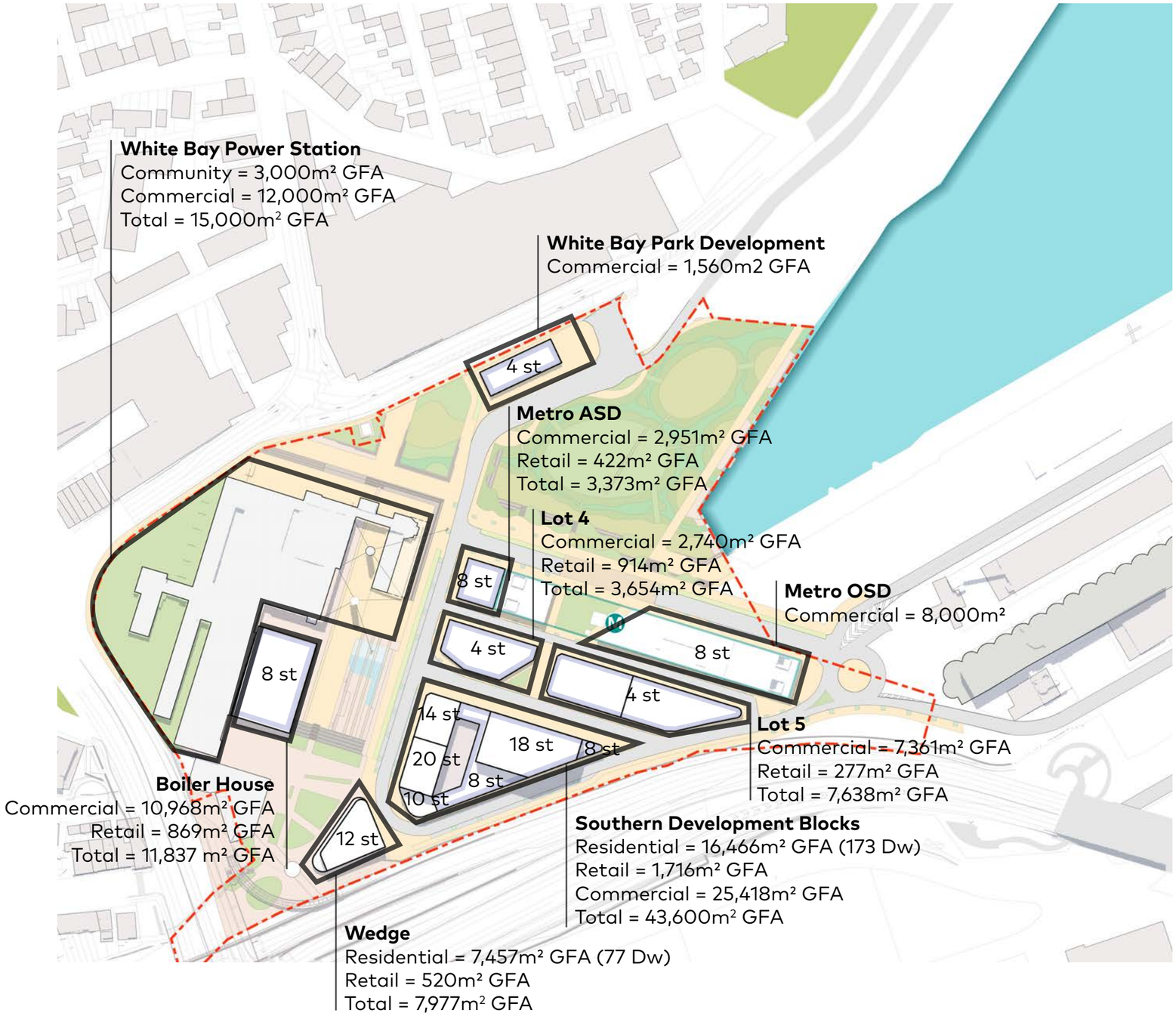
Total = 102,639m^2 GFA

1.1:1 Gross FSR on a 93,000m2 site
More than 50% as public open space

Assumptions

80% GBA to GFA (average across all buildings and uses)
95m2 GFA per dwelling
2.0 persons per dwelling

15m2 GFA commercial per job
35m2 GFA retail/community per job

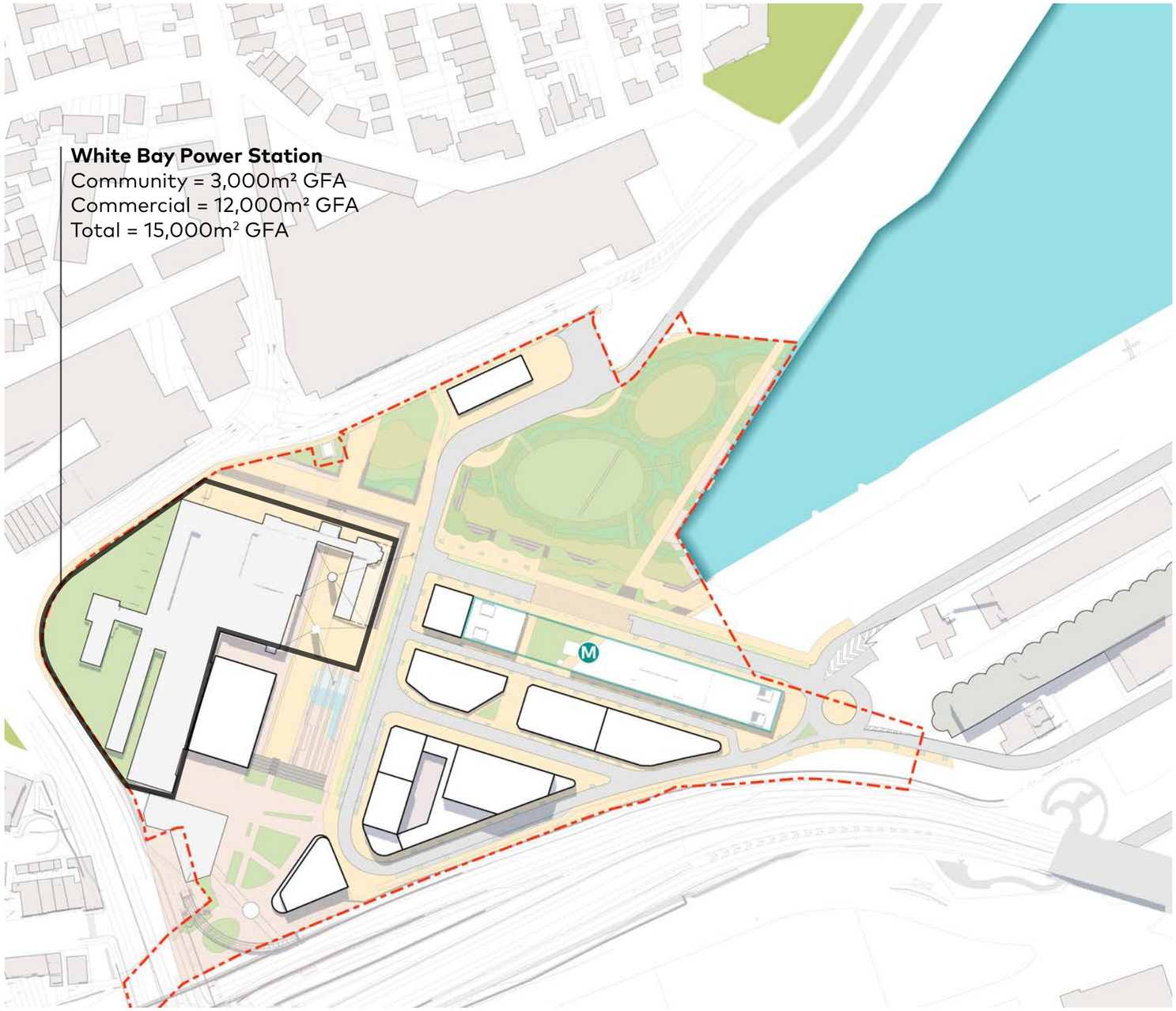


WBPS

Commercial GFA (inc 3,000 startup spaces) = 12,000m^2
Commercial Jobs = 800

Community GFA (multipurpose hub) = 3,000m^2
Community Jobs = 86

Total = 15,000m^2 GFA
Total = 886 Jobs

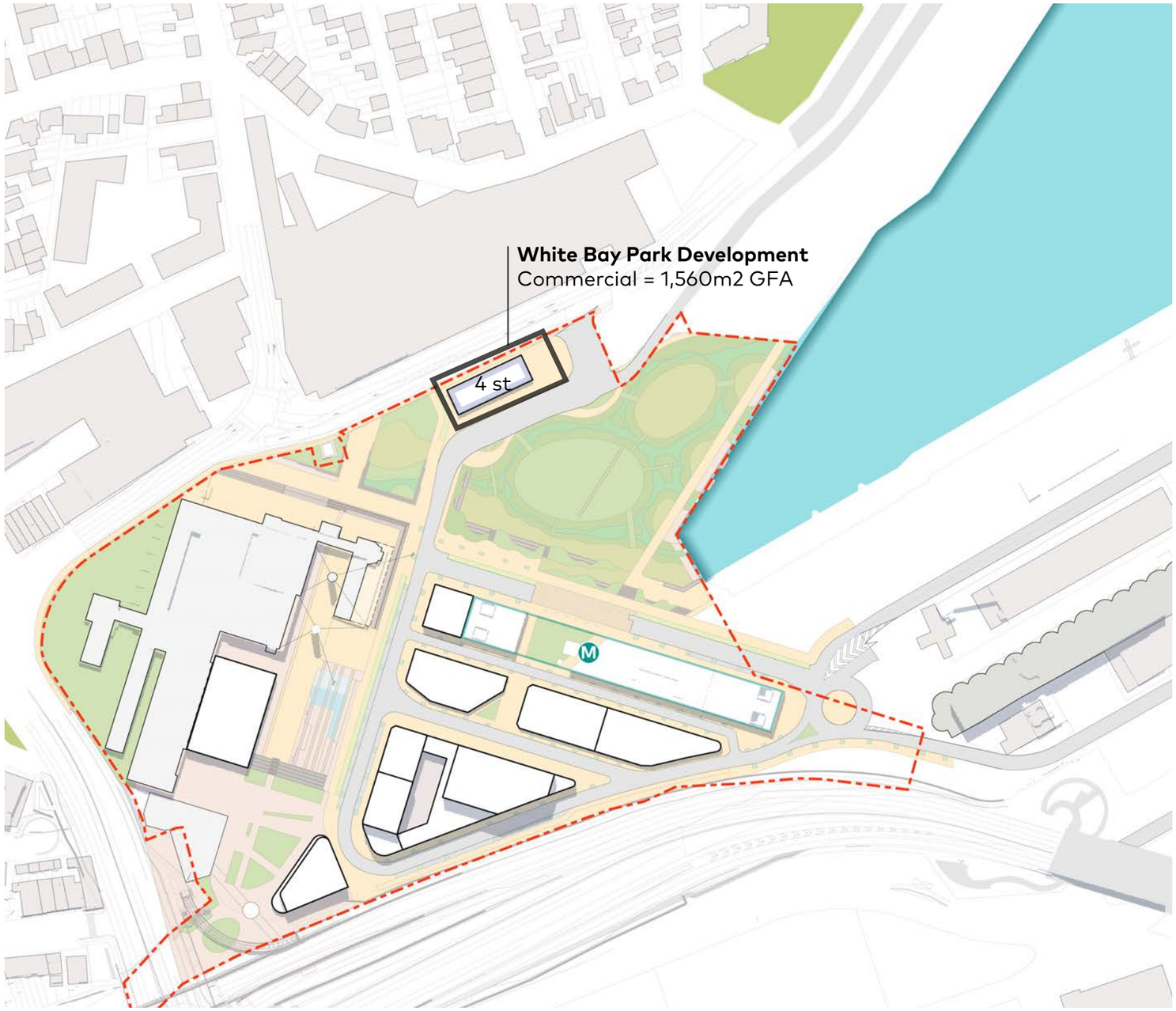


White Bay Park Development

White Bay Park Development

Commercial GFA = 1,560m^2
Commercial Jobs = 104

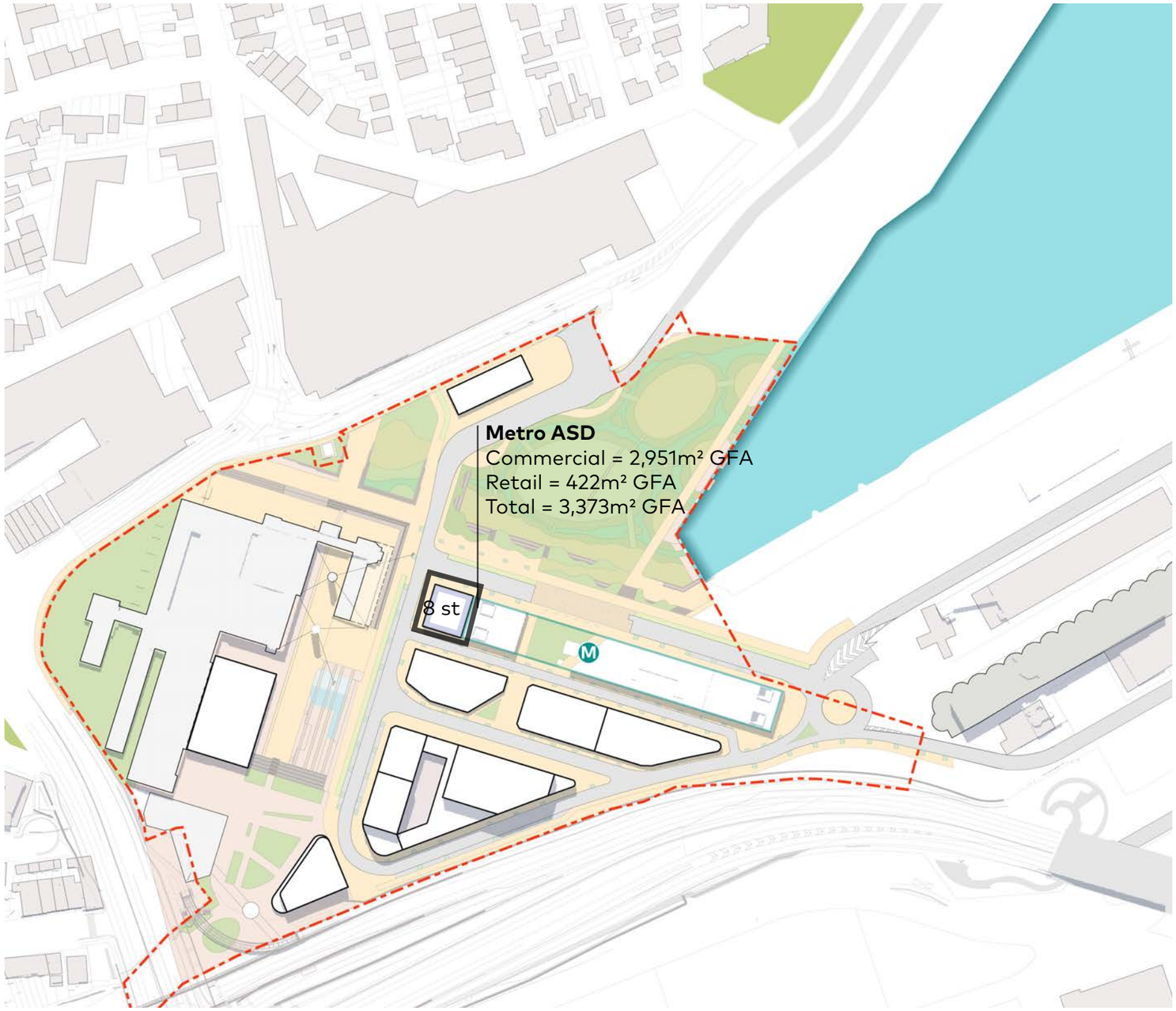
Total = 1,560m^2 GFA
Total = 104 Jobs



Metro ASD
Commercial GFA = 2,951m^2
Commercial Jobs = 197

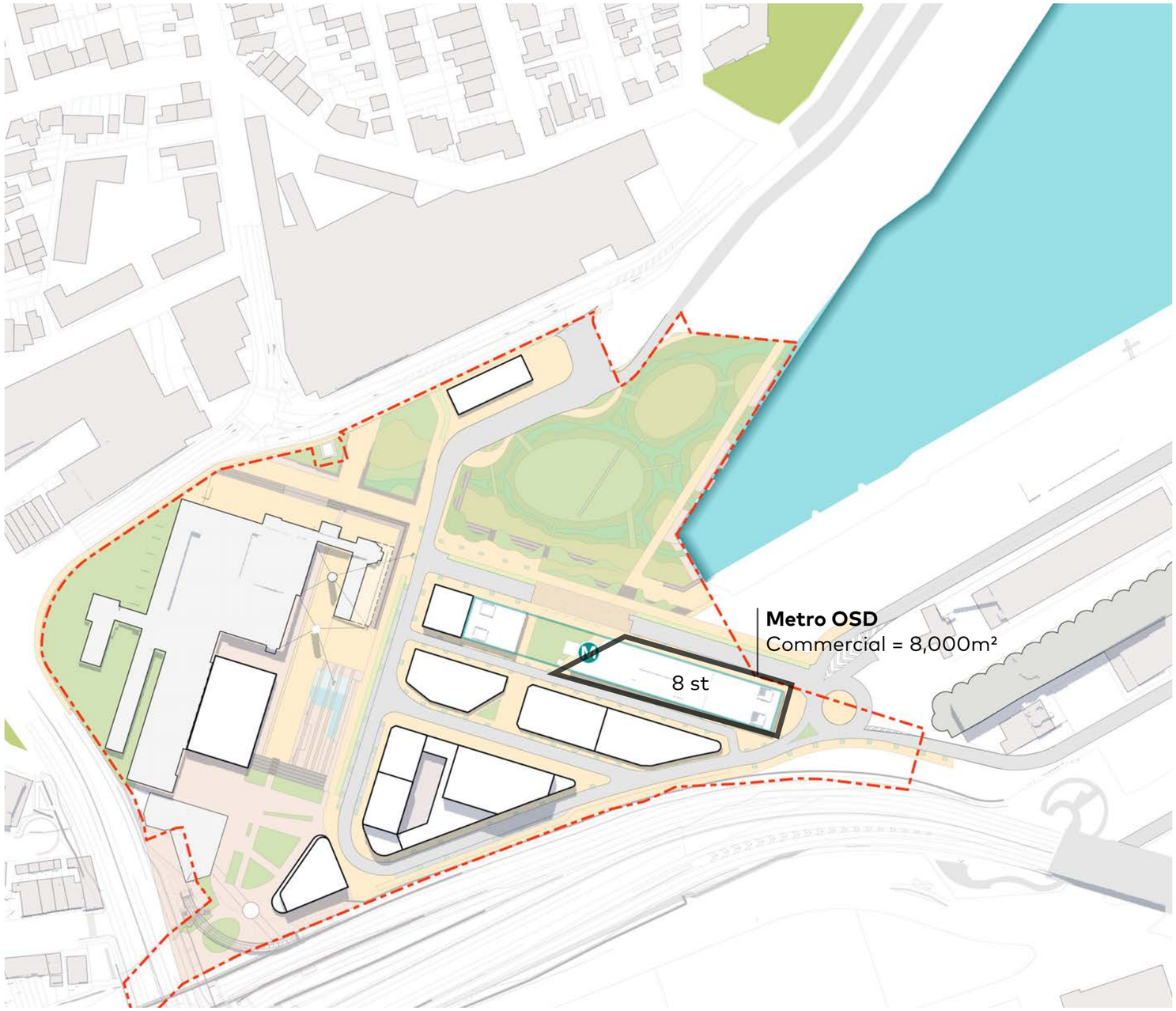
Retail GFA = 422m^2
Retail Jobs = 12

Total = 3,373m^2 GFA
Total = 209 Jobs



Metro OSD
Commercial GFA = 8,000m^2
Commercial Jobs = 533

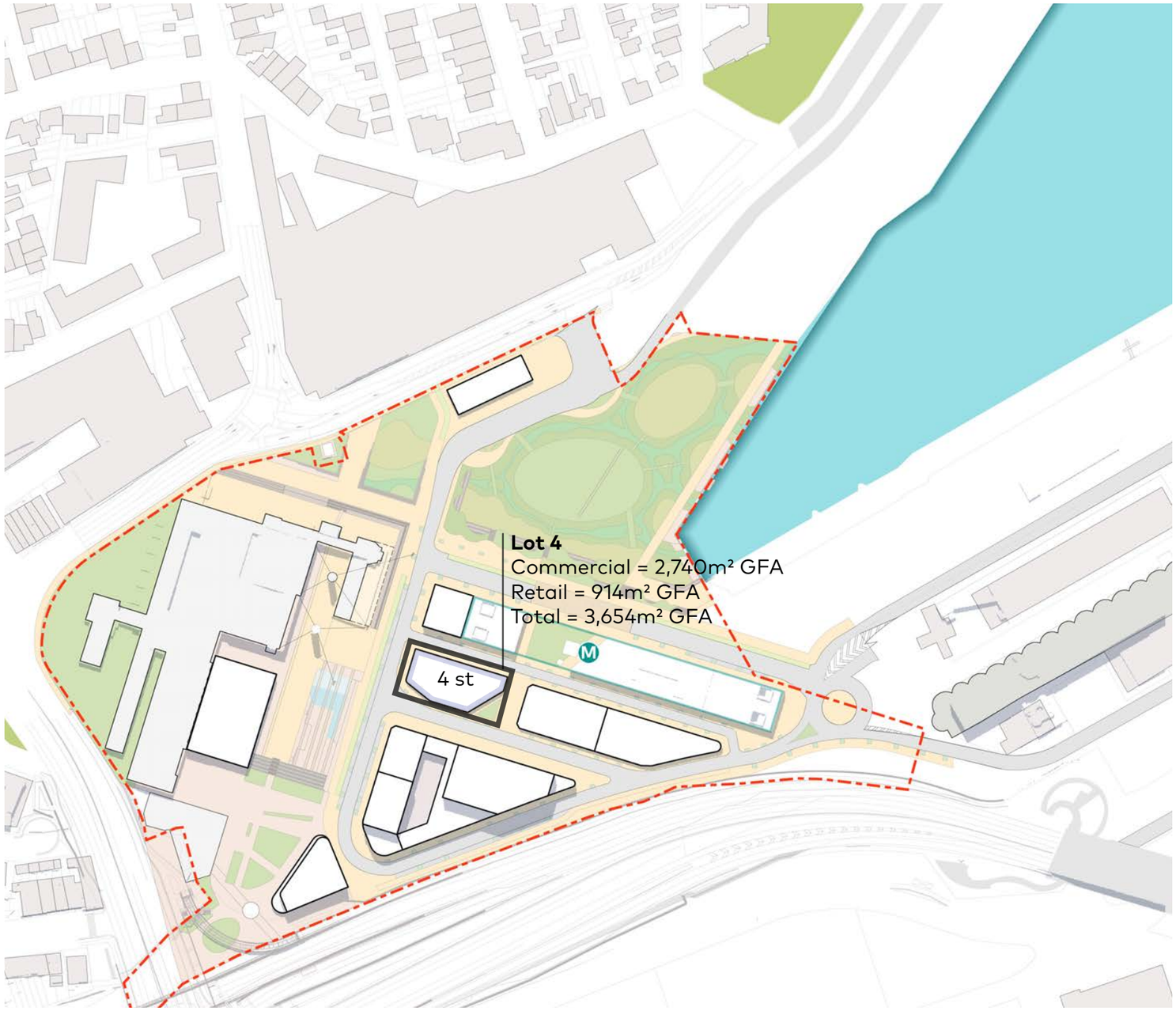
Total = 8,000m^2 GFA
Total = 533 Jobs



Lot 4
Commercial GFA = 2,740m^2
Commercial Jobs = 183

Retail GFA = 422m^2
Retail Jobs = 26

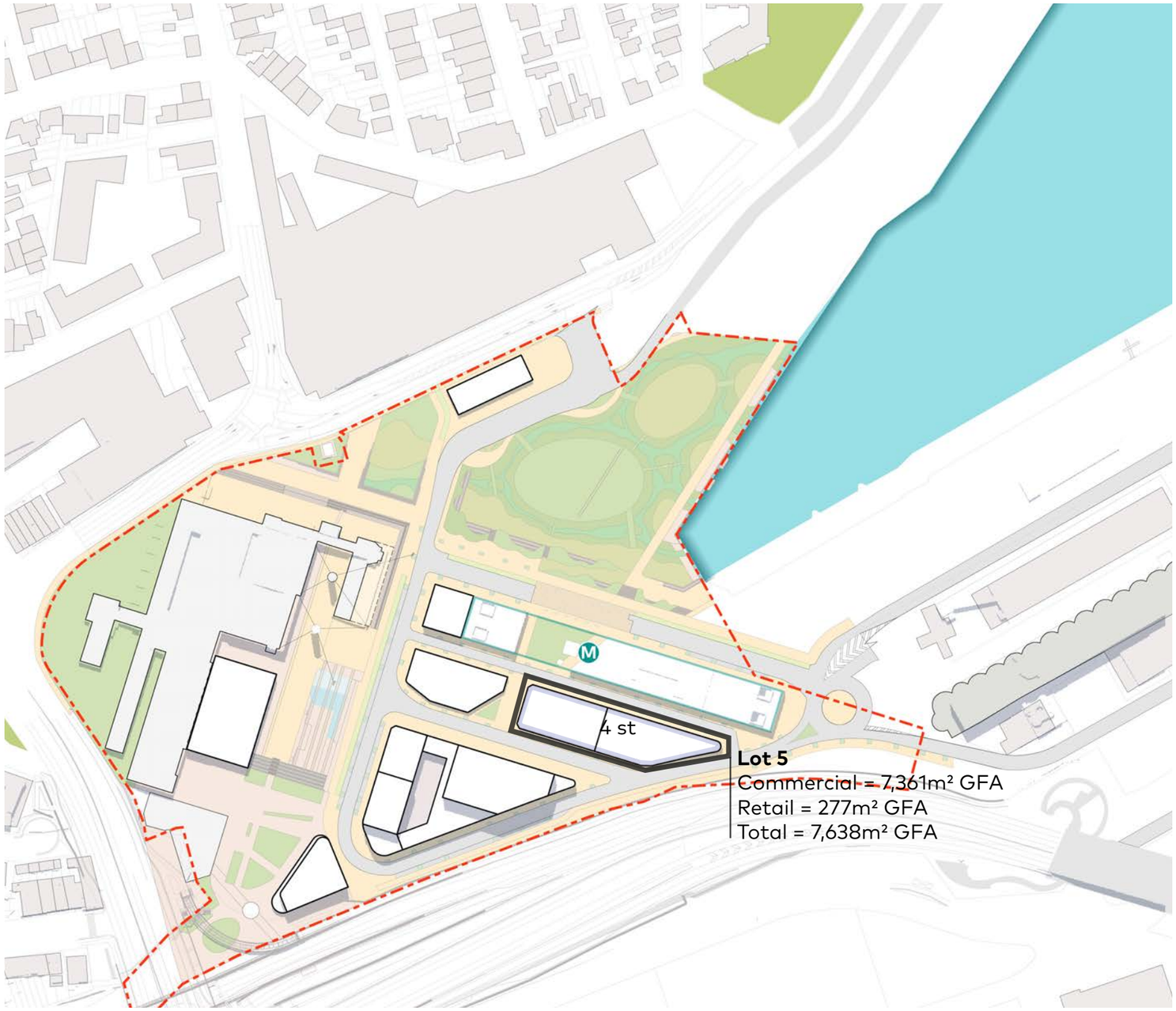
Total = 3,654m^2 GFA
Total = 209 Jobs



Lot 5
Commercial GFA = 7,361m^2
Commercial Jobs = 491

Retail GFA = 277m^2
Retail Jobs = 8

Total = 3,654m^2 GFA
Total = 499 Jobs



Southern Development Parcel

Southern Development Parcel

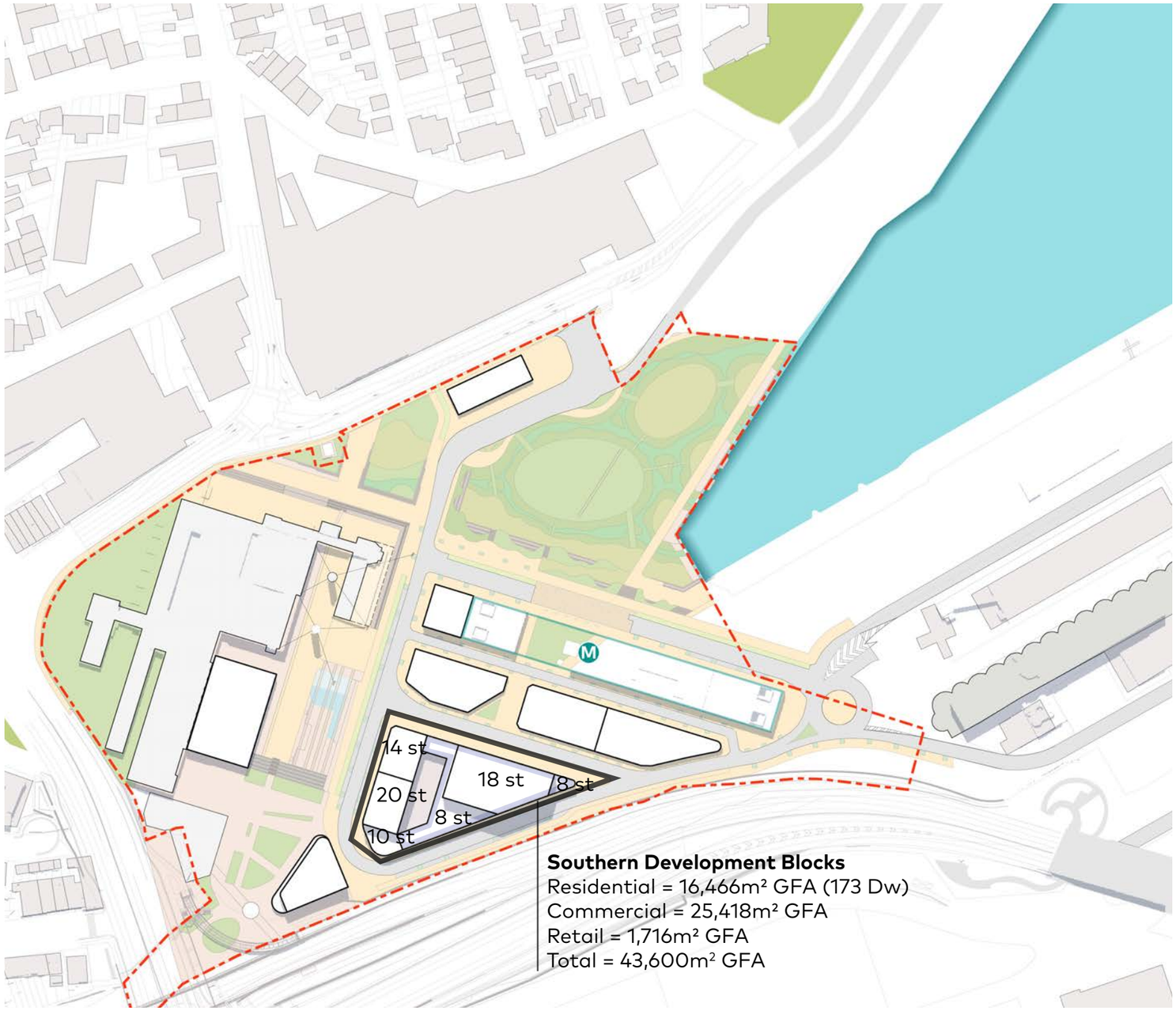
Residential GFA = 16,466m^2
Dwellings = 173
Residents = 346

Commercial GFA = 25,418m^2
Commercial Jobs = 1,695

Retail GFA = 1,716m^2
Retail Jobs = 49

Total = 43,600m^2 GFA
Total = 1,744 Jobs

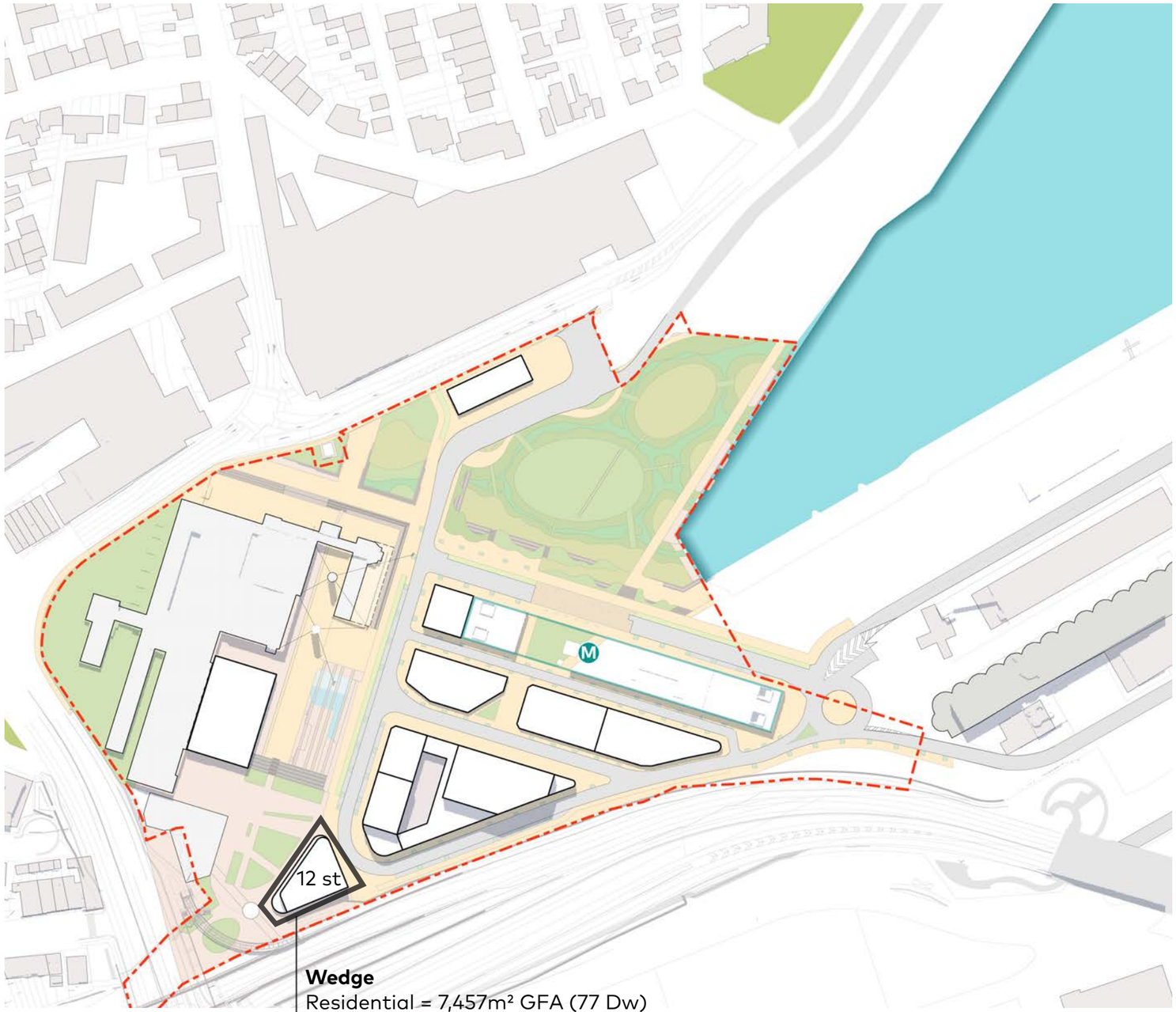
Total "Basement" GBA = 5,060m2



Wedge
Residential GFA = 7,457m^2
Dwellings = 77
Residents = 154

Retail GFA = 520m^2
Retail Jobs = 15

Total = 7,977m^2 GFA
Total = 15 Jobs



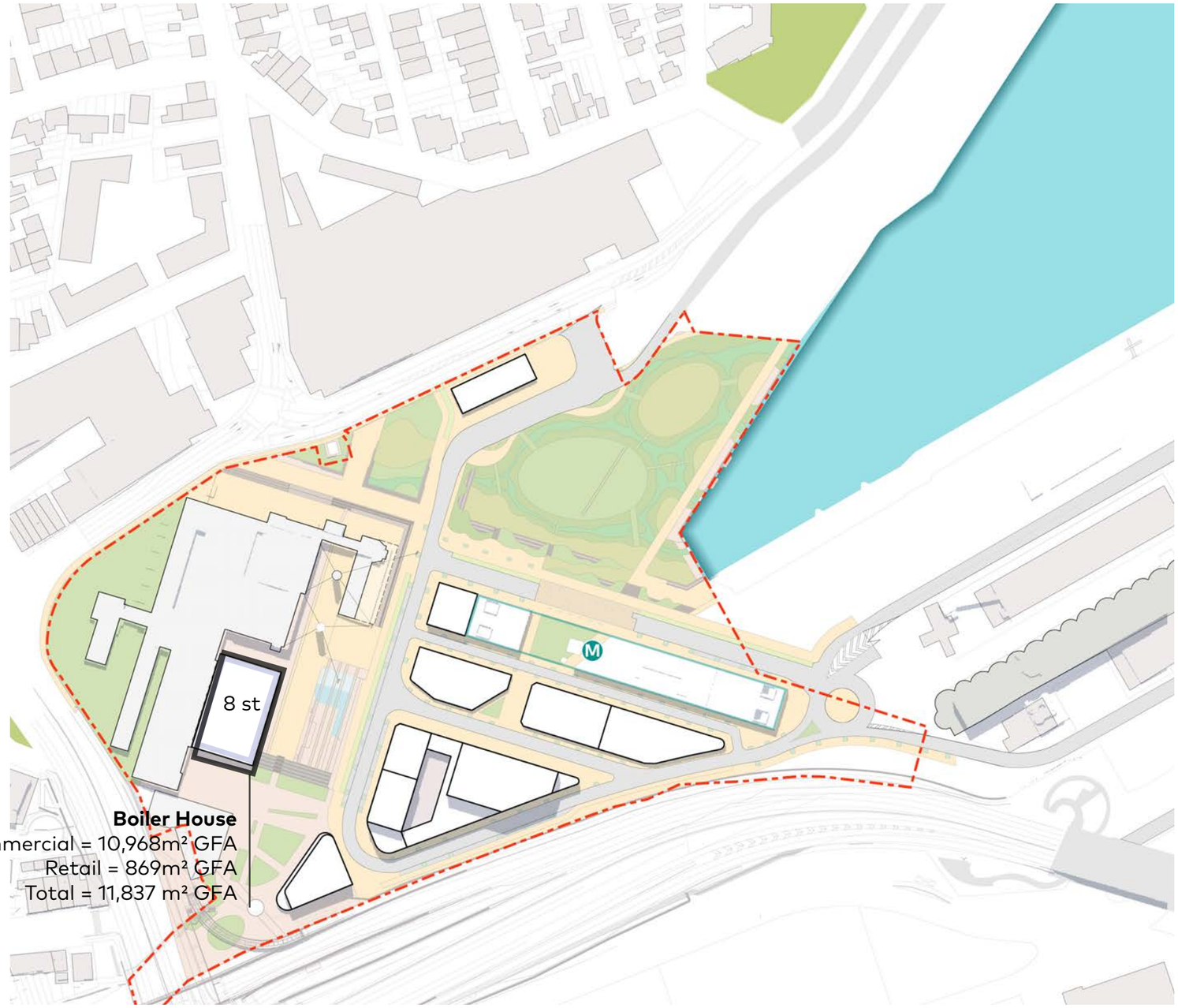
Wedge
Residential = 7,457m² GFA (77 Dw)
Retail = 520m² GFA
Total = 7,977m² GFA

Boiler House
Commercial GFA = 10,968m^2
Commercial Jobs = 731

Retail GFA = 869m^2
Retail Jobs = 25

Total = 11,837m^2 GFA
Total = 757 Jobs

Total "Basement" GBA = 240m2



Land Applicaton Map



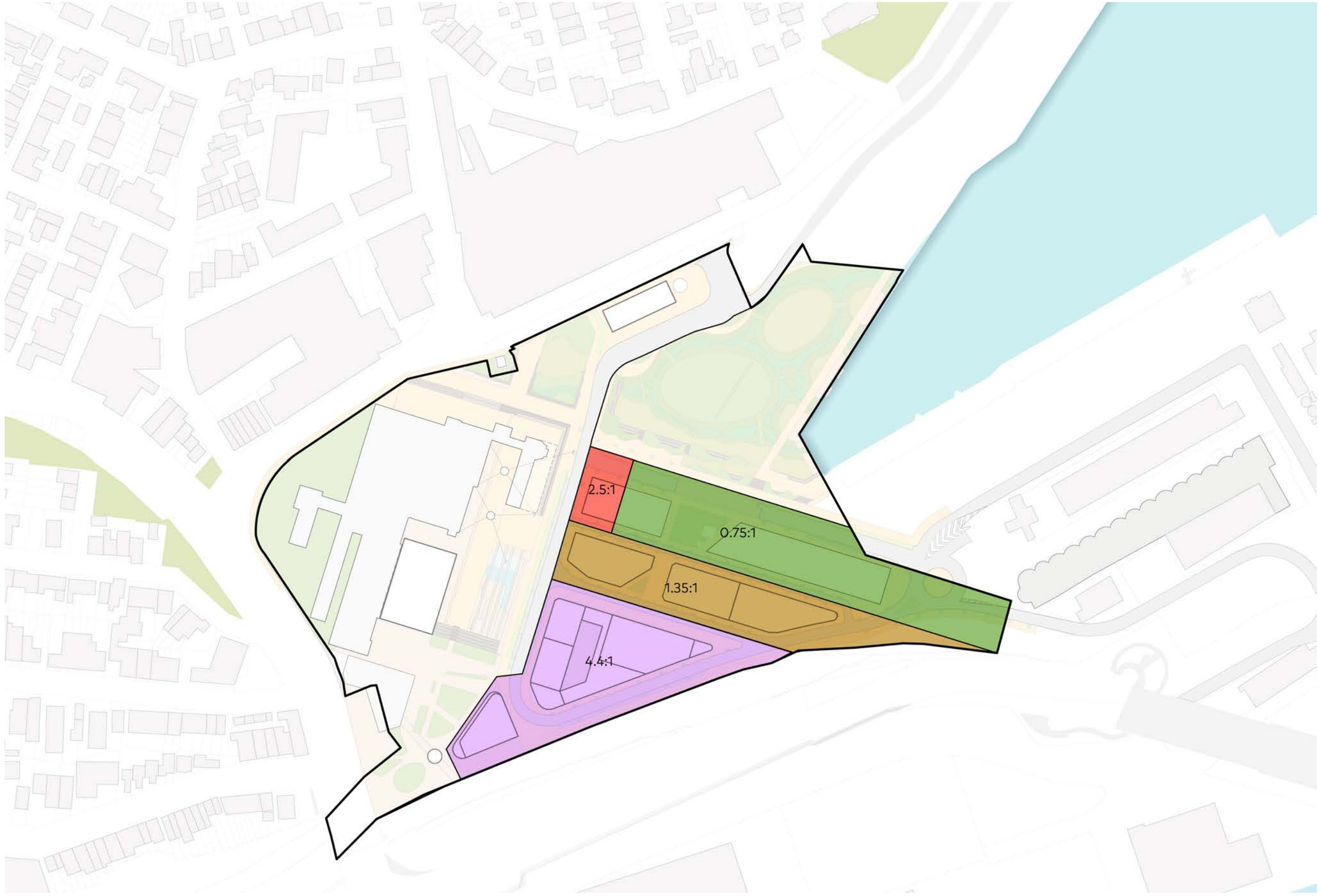
Key Sites


Site D
White Bay Park
Site C
White Bay Power Station
Site A
Metro + OSD + ASD
Site B
Southern Development Parcels

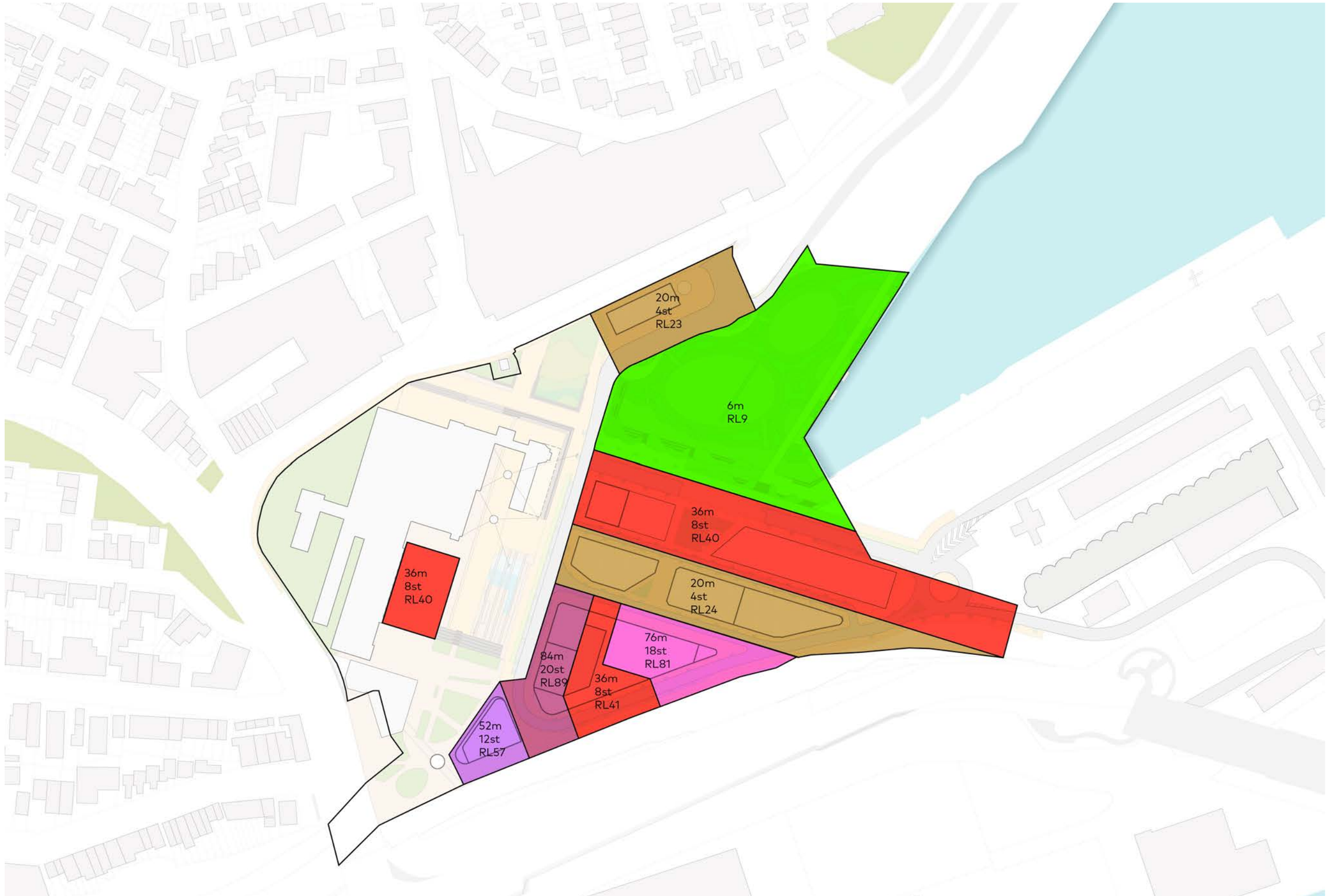
Proposed Land Use Zones



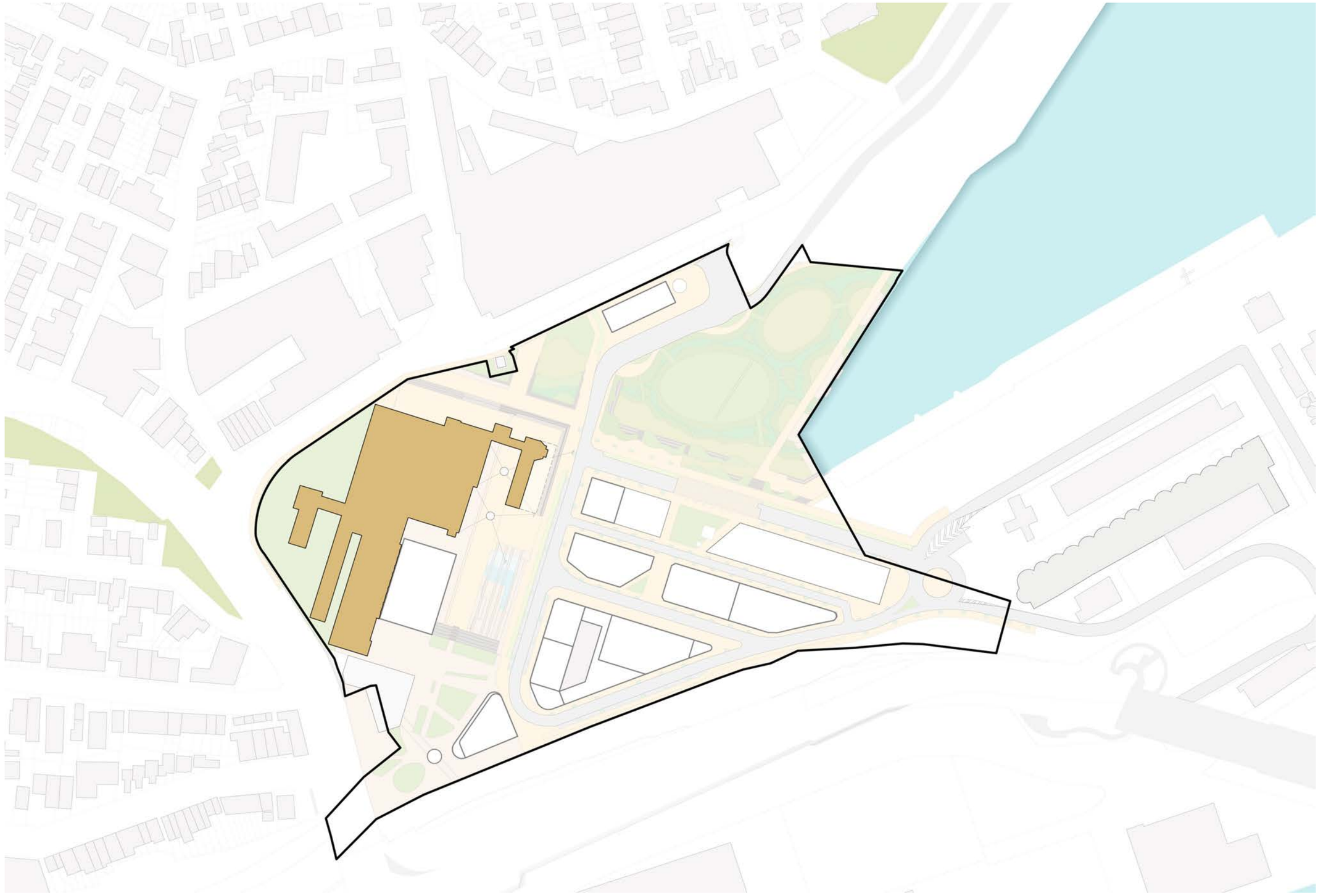
Floor Space Ratios



Height of Buildings



Heritage



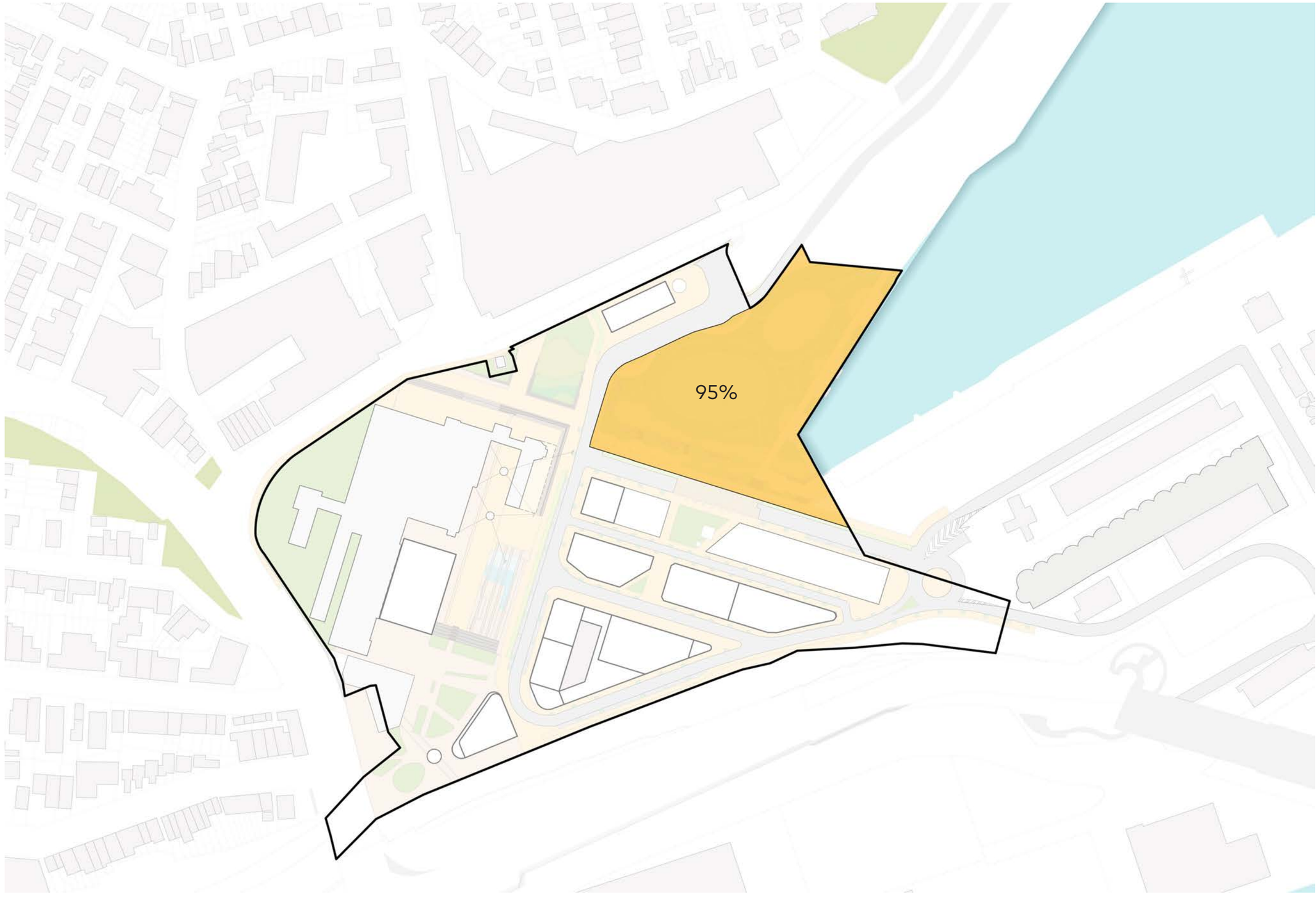
Solar Access to Public Open Space (2 hour proportions)

The diagram below the solar access that is required in terms of proportions of the public open space that achieve a minimum of 2 hours direct sunlight between 9am and 3pm on 21st June (mid winter).



Solar Access to Public Open Space (4 hour proportions)

The diagram below the solar access that is required in terms of proportions of the public open space that achieve a minimum of 2 hours direct sunlight between 9am and 3pm on 21st June (mid winter).



Ground Floor Plan Overall

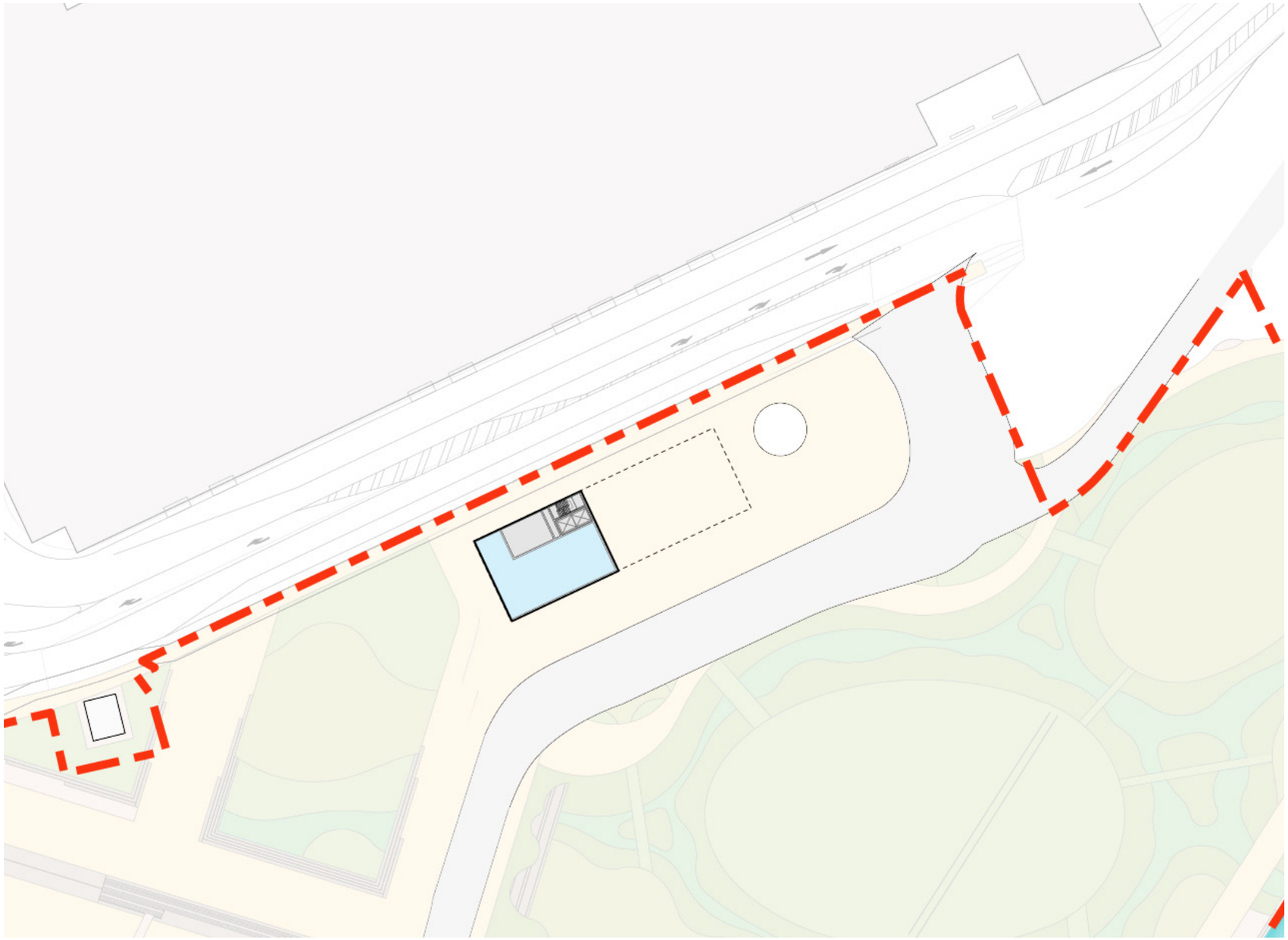


Retail Circulation/Service/Waste Commercial Residential Lobby Building Entries

Illustrative Master Plan

TURF TO PROVIDE

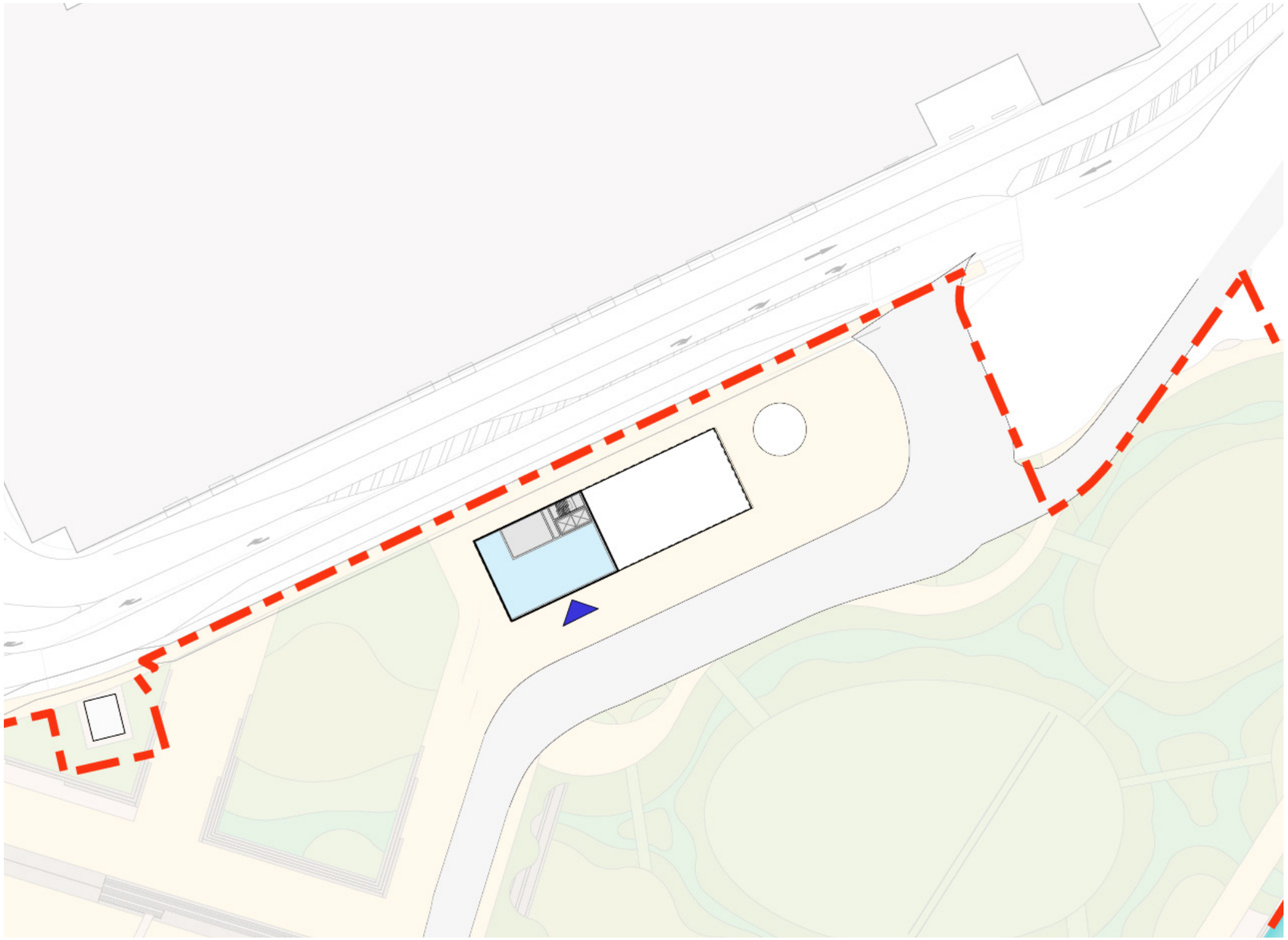
White Bay Park Development
Typical Ground Floor



Retail

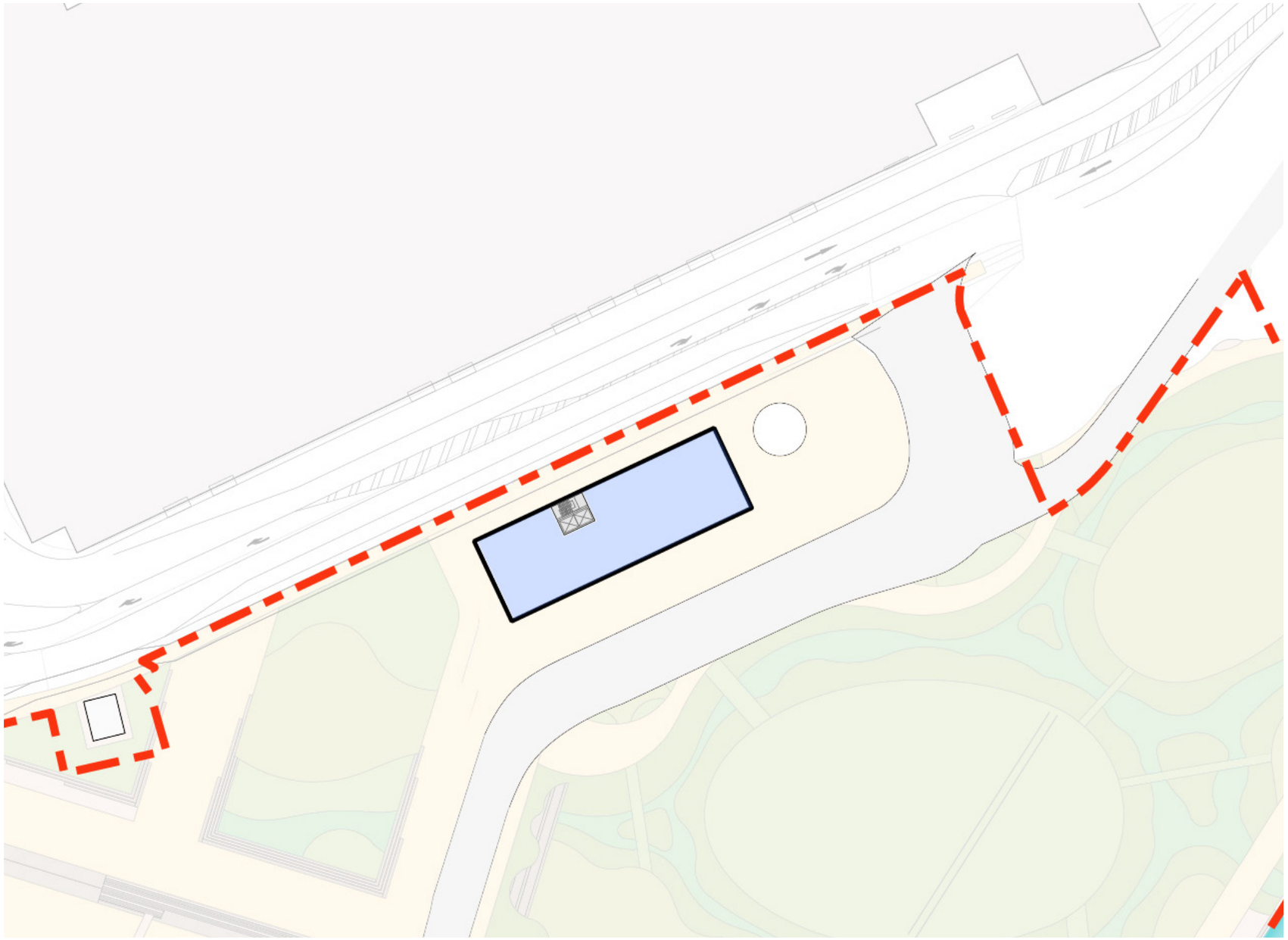
Circulation/Service/Waste

White Bay Park Development
Typical Ground Floor
Building Entries



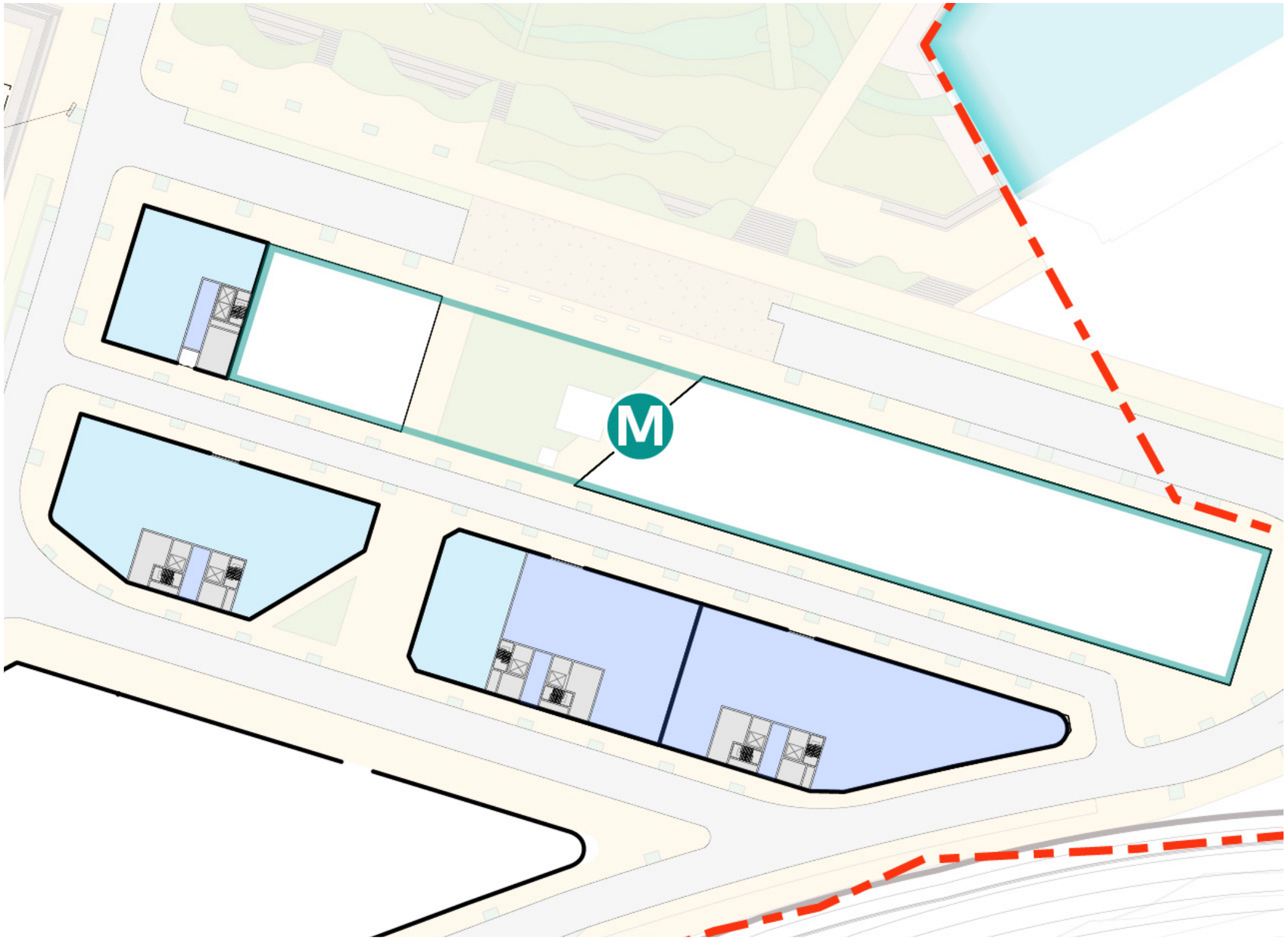
Retail Circulation/Service/Waste Commercial Entry

White Bay Park Development
Typical Level



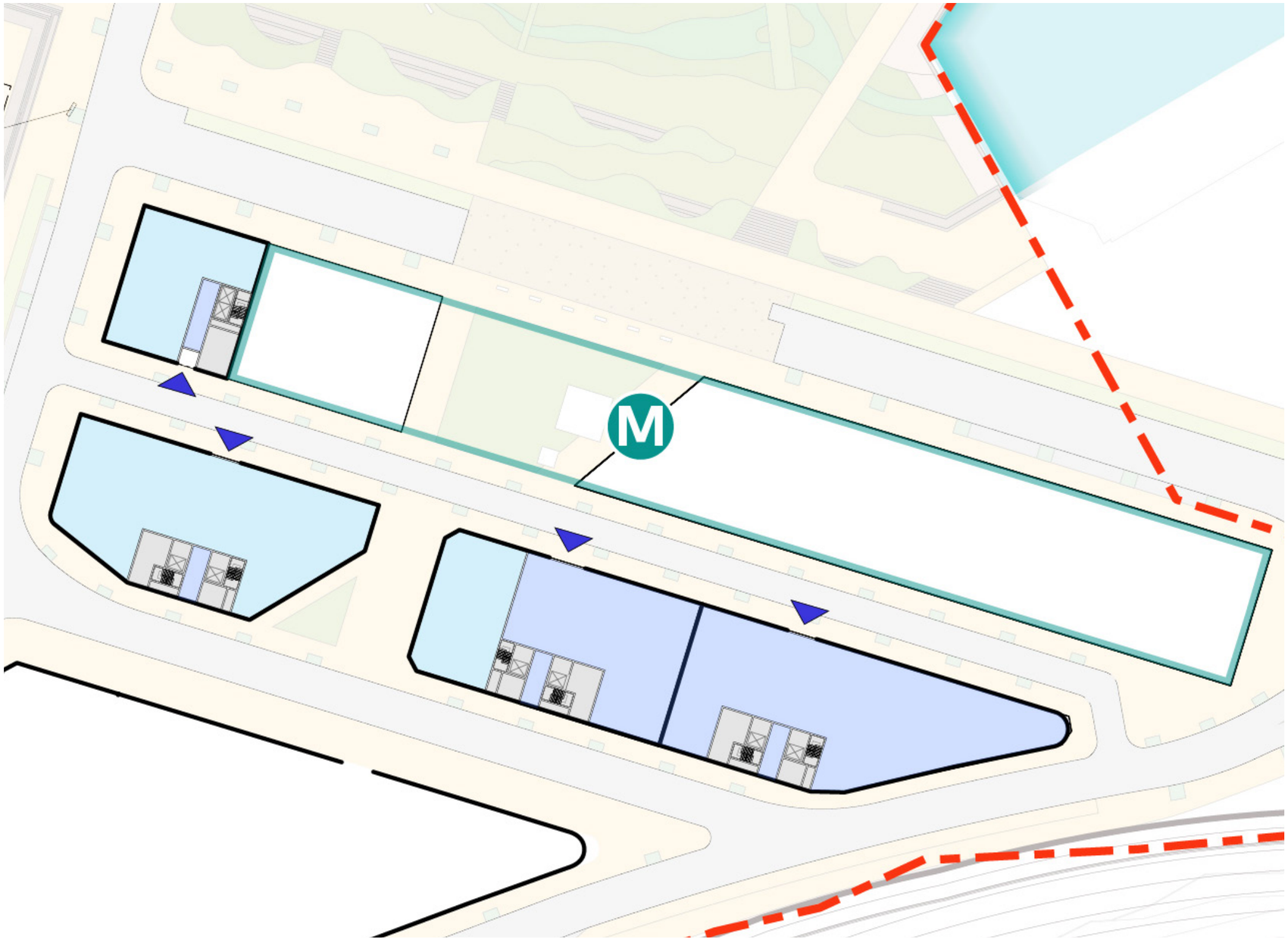
Commercial Circulation/Service/Waste

Metro ASD, Lot 4 and 5
Typical Ground Floor



Commercial
Retail
Circulation/Service/Waste

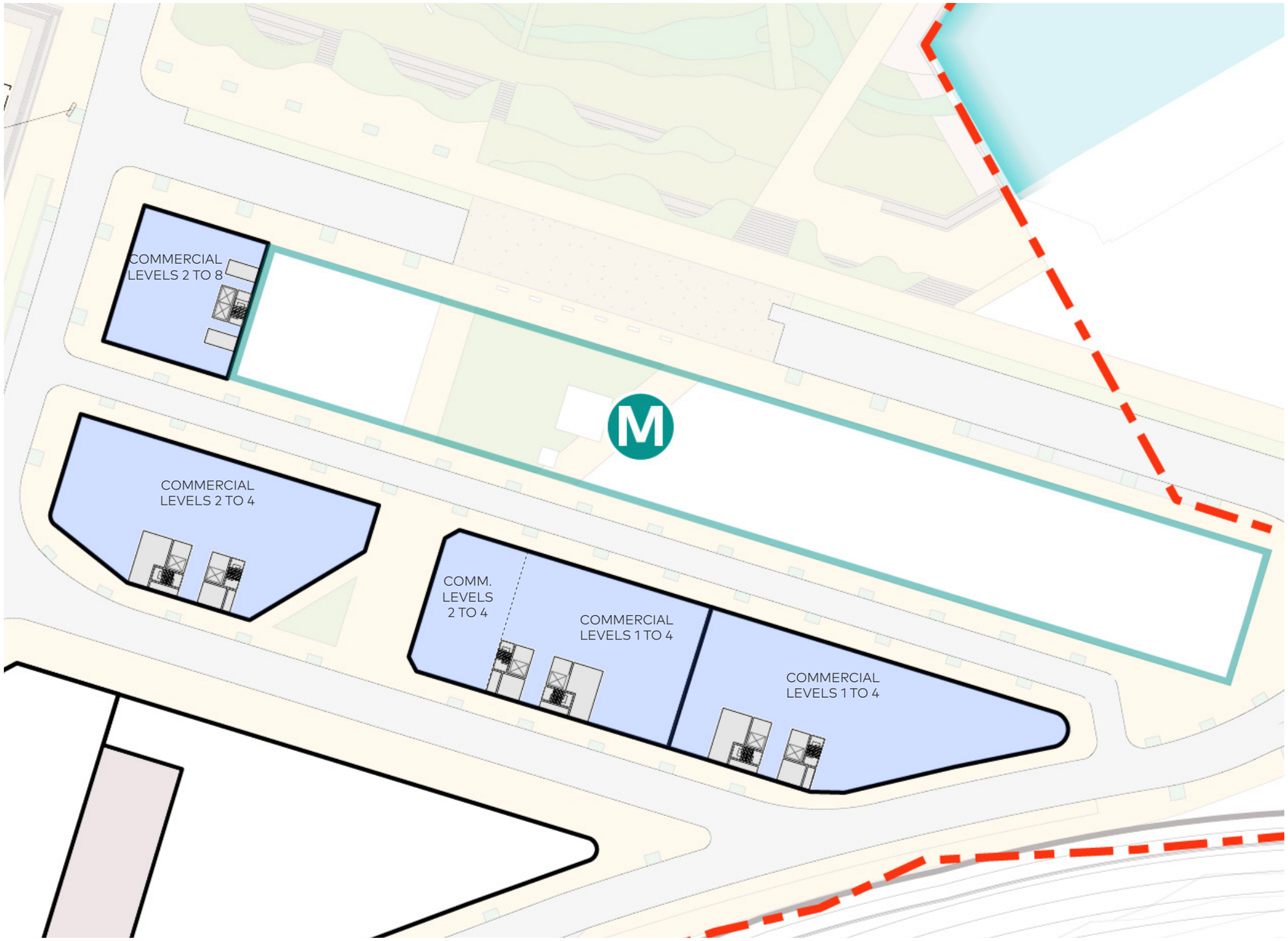
Metro ASD, Lot 4 and 5
Typical Ground Floor
Building Entries



Commercial
Retail
Circulation/Service/Waste
Commercial Entry

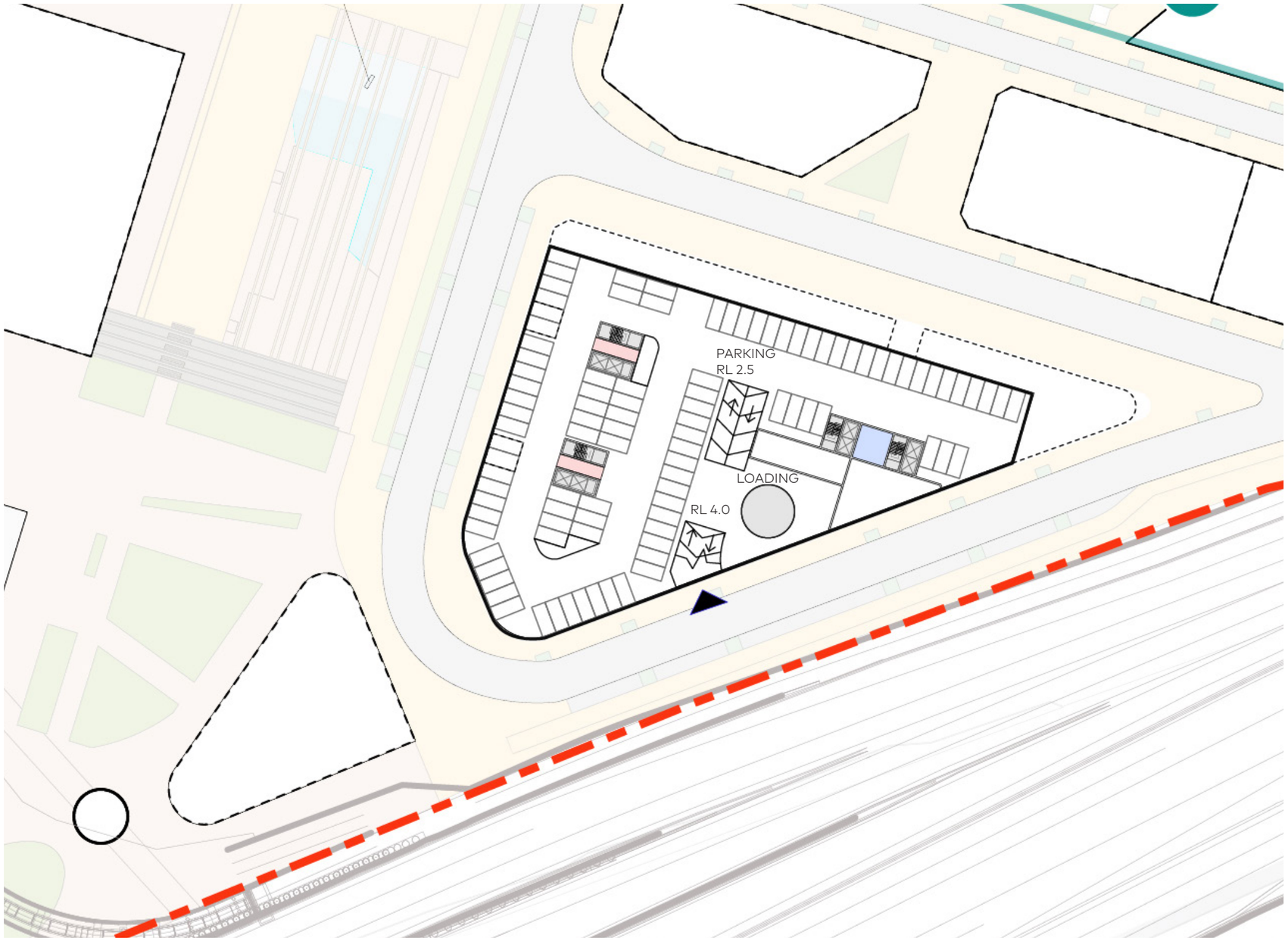
Bays West Stage 1
Master Plan and Rezoning

Metro ASD, Lot 4 and 5
Typical Level



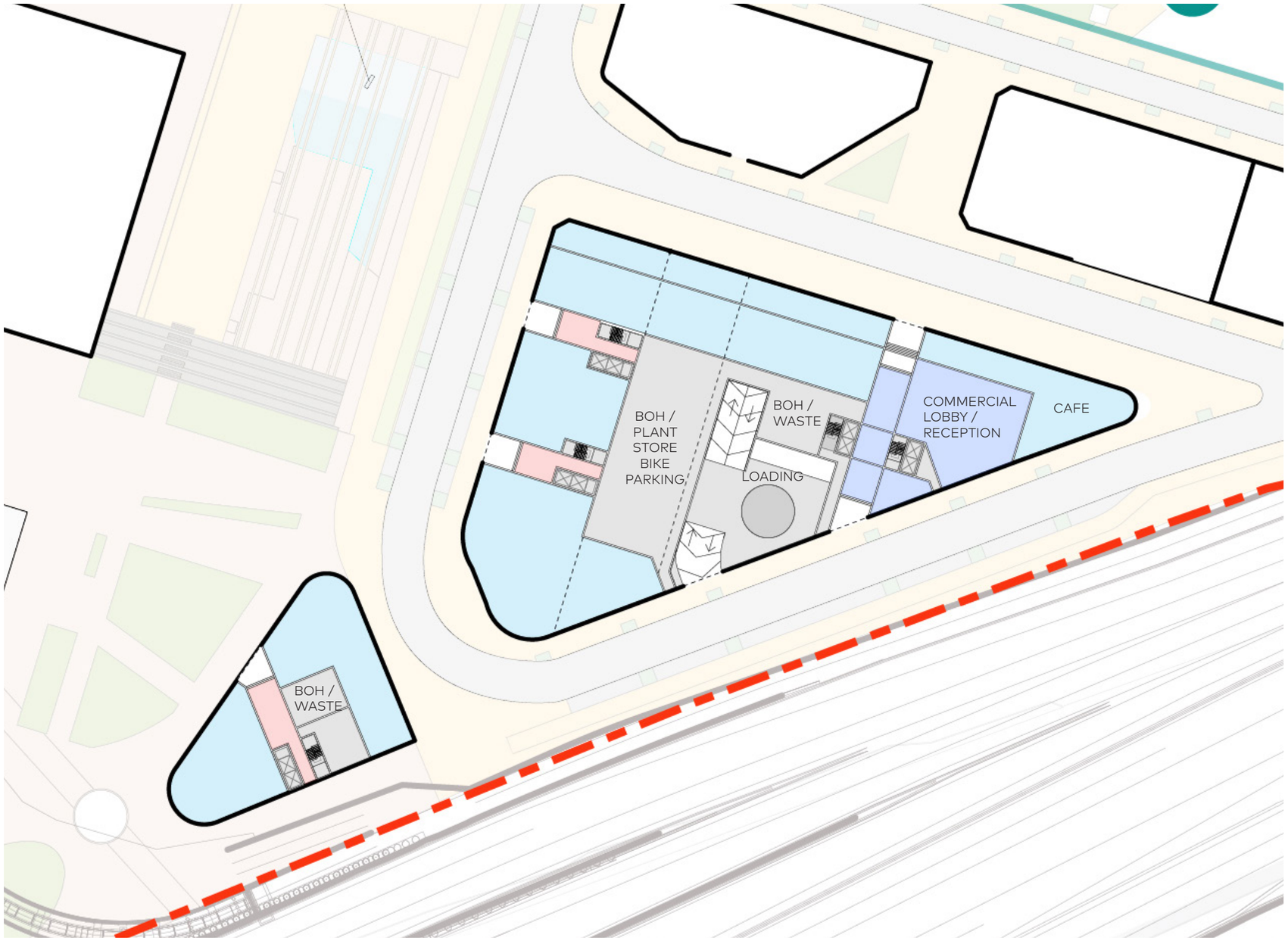
Commercial Circulation/Service/Waste

Southern Development Parcel and Wedge Building
Typical Basement Level and Entry



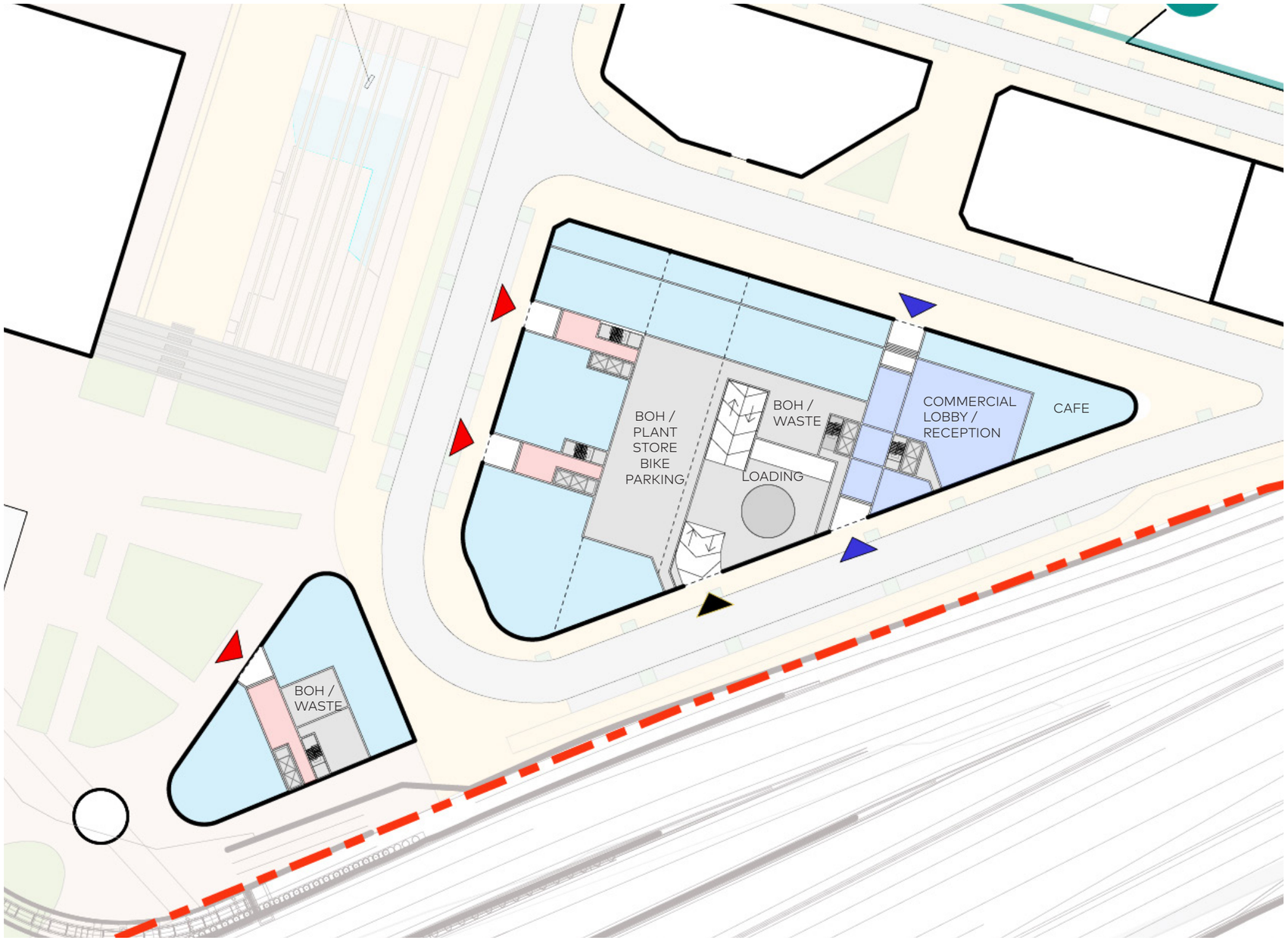
Circulation | Commercial Carpark Entry | Residential Carpark Entry | Carparking/Circulation/Loading | Car Entry

Southern Development Parcel and Wedge Building
Typical Ground Level



Circulation/Service/Waste Commercial Entry Residential Entry Carparking/ Building Entry Retail

Southern Development Parcel and Wedge Building
Typical Ground Level
Building Entries



Circulation/Service/Waste
Commercial Lobby
Residential Lobby
Carparking/ Building Entry
Retail
Carpark Entry
Commercial Entry
Residential Entry

Southern Development Parcel and Wedge Building
Typical Mid Level



Circulation/Service/Waste Commercial Residential

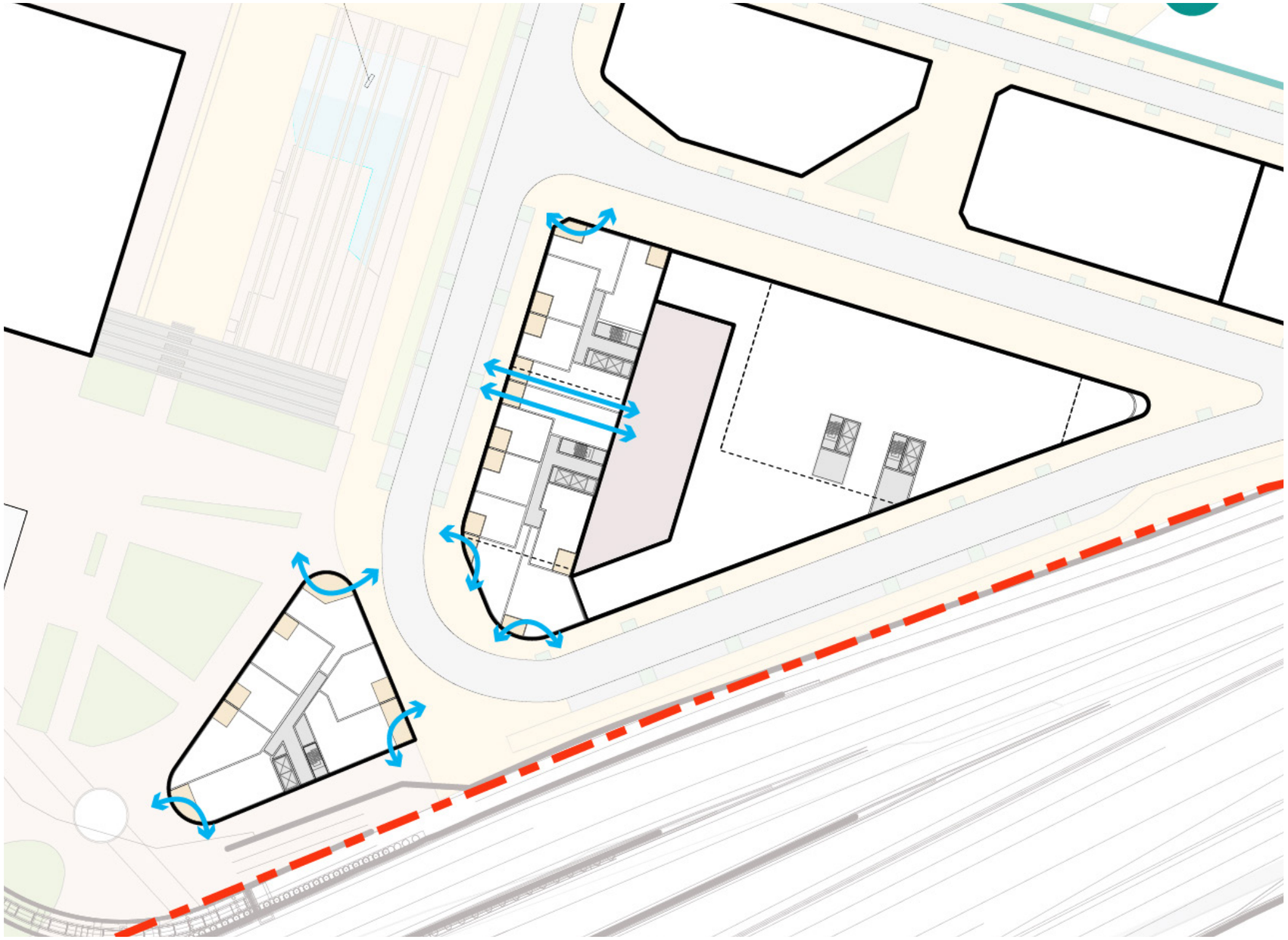
Southern Development Parcel and Wedge Building
Typical Mid Level
Solar and Ventilation Analysis



Circulation/Service/Waste

> 2 hours of Sunlight

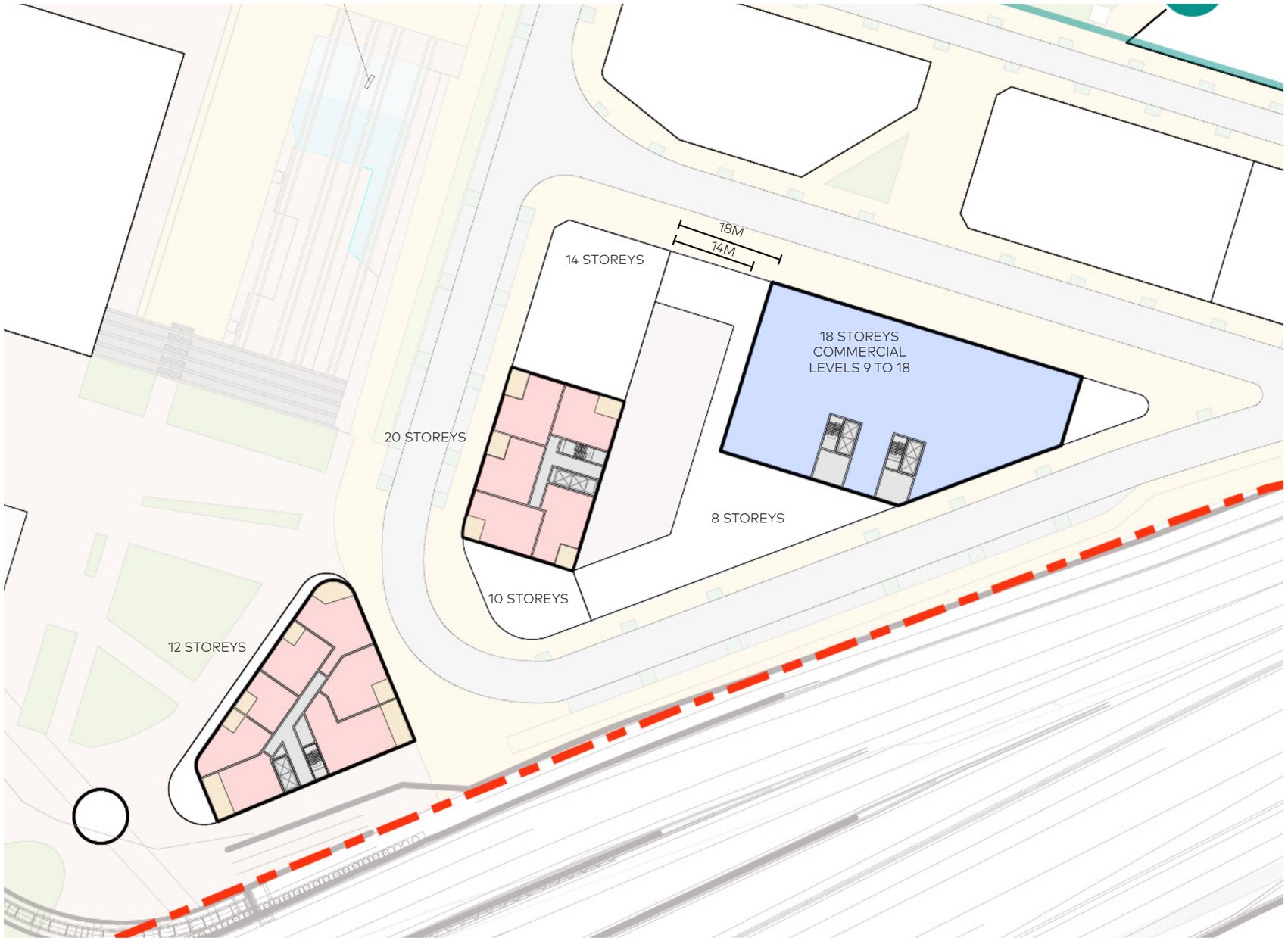
Southern Development Parcel and Wedge Building
Typical Mid Level
Solar and Ventilation Analysis



Circulation/Service/Waste

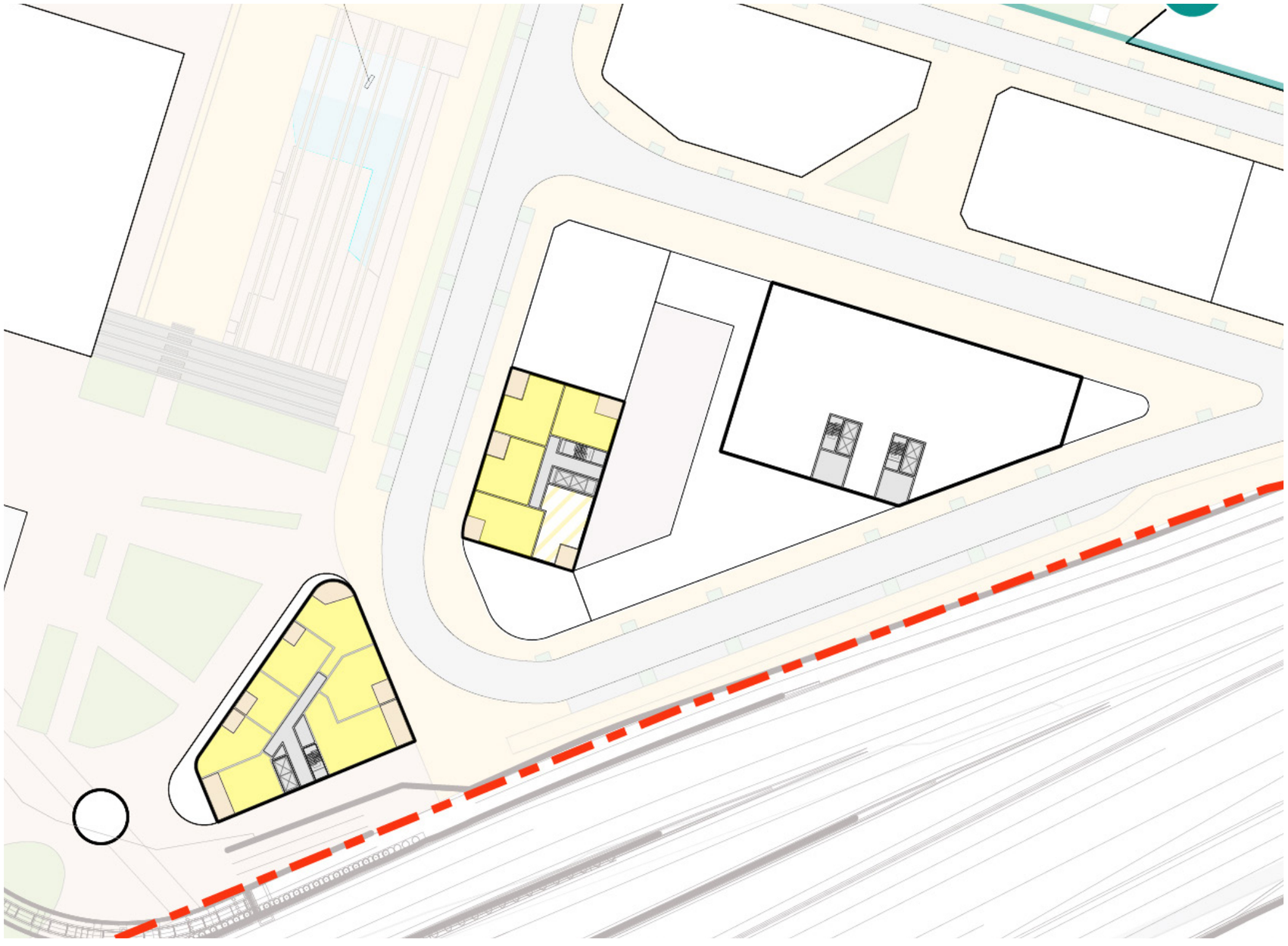
Ventilation

Southern Development Parcel and Wedge Building
Typical Upper Level



Circulation/Service/Waste Commercial Residential

Southern Development Parcel and Wedge Building
Typical Upper Level
Solar and Ventilation Analysis

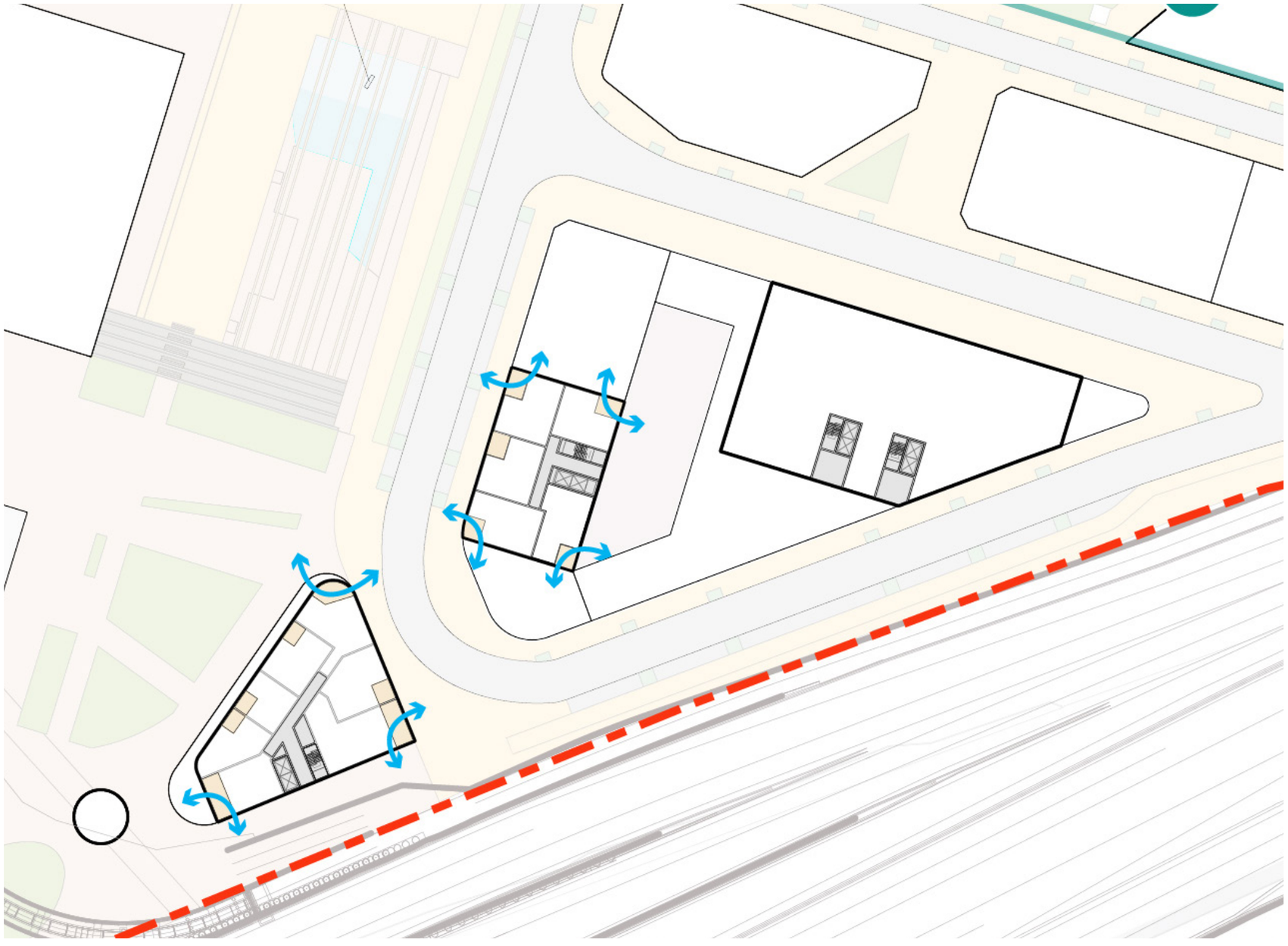


Circulation/Service/Waste

> 2 hours of Sunlight

> 2 hours of Sunlight for levels 12-14 and 18-20

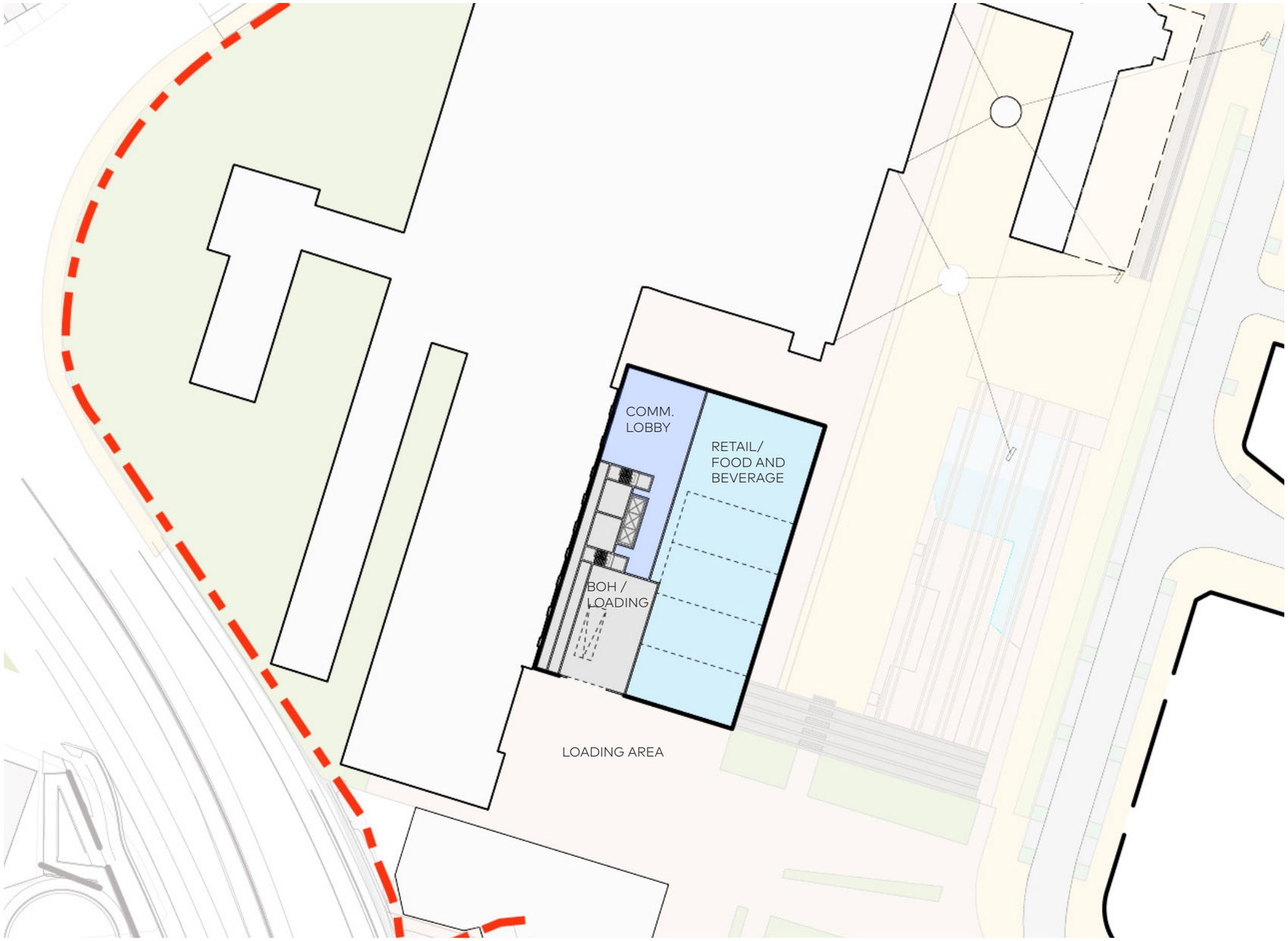
Southern Development Parcel and Wedge Building
Typical Upper Level
Solar and Ventilation Analysis



Circulation/Service/Waste

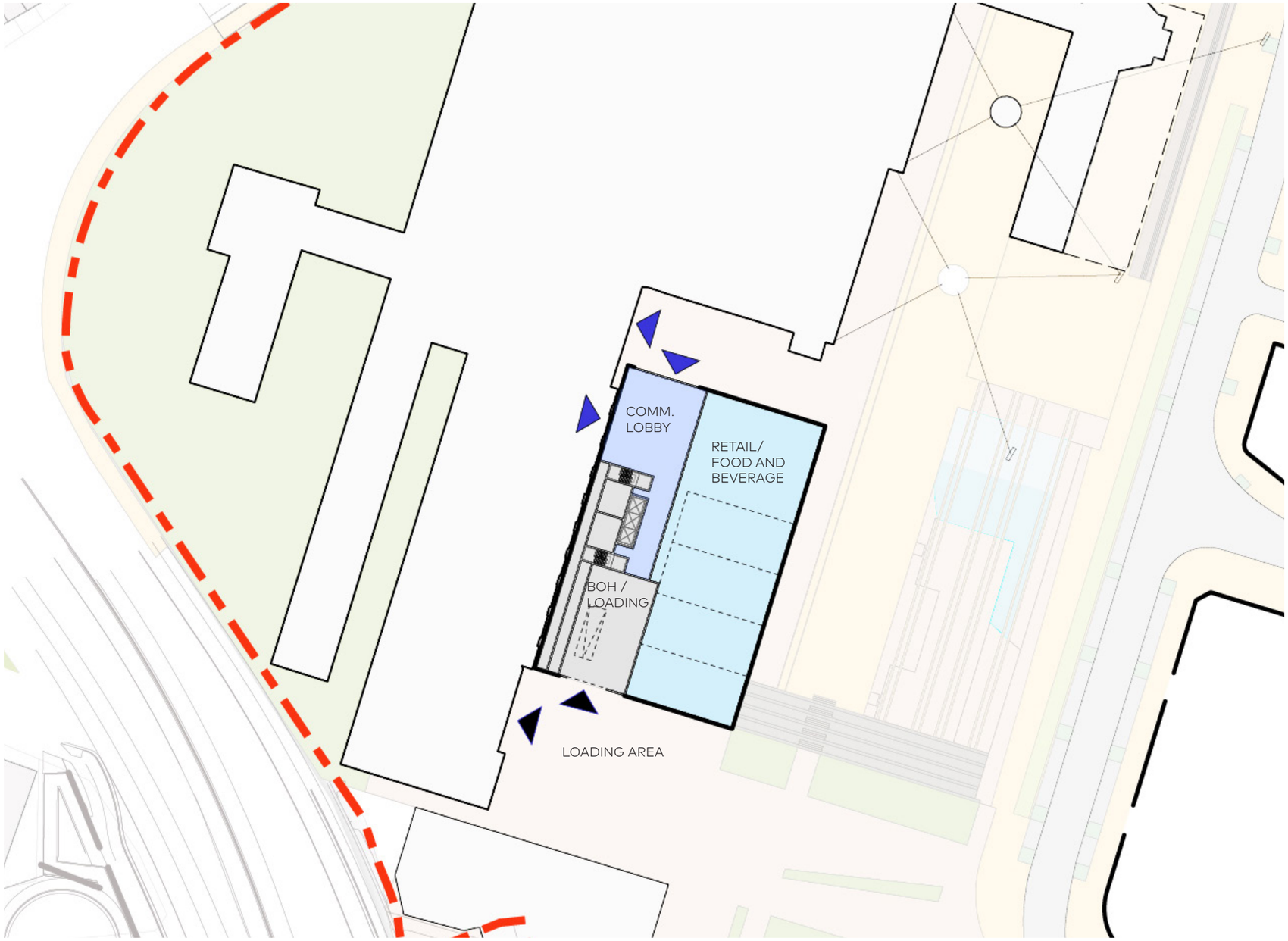
Ventilation

Boiler House
Typical Ground Level



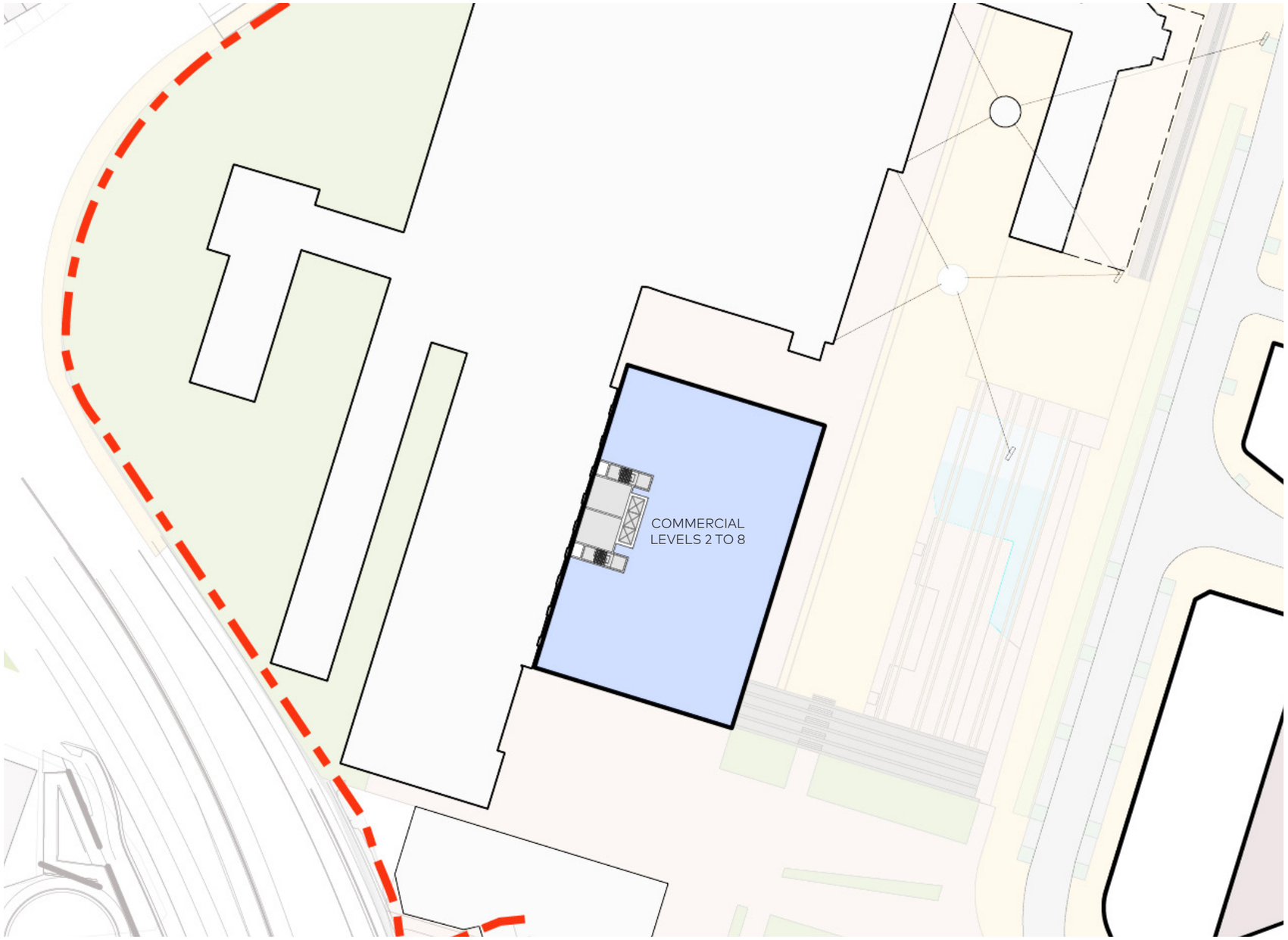
Commercial
Retail
Circulation/Service/Waste

Boiler House
Typical Ground Level



Circulation/Service/Waste
Commercial
Carparking/ Building Entry
Retail
Vehicle Entry
Commercial Entry

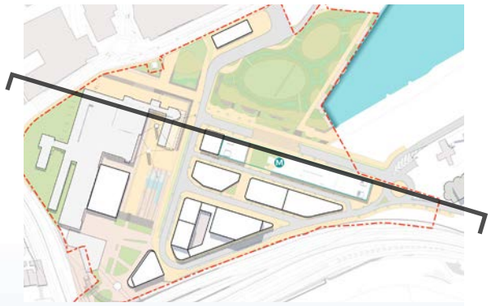
Boiler House
Typical Level

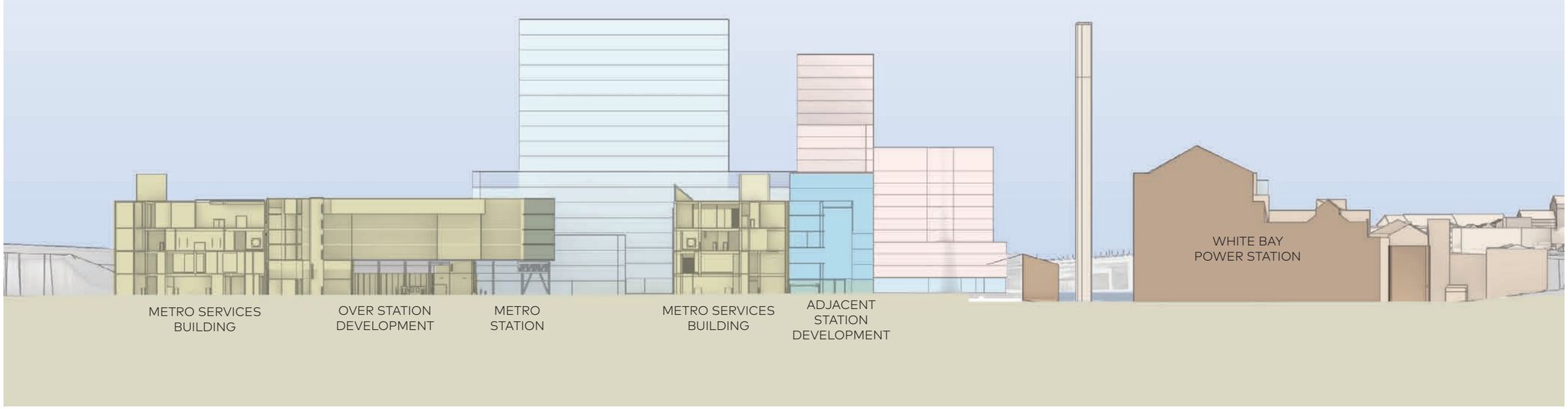


Circulation/Service/Waste

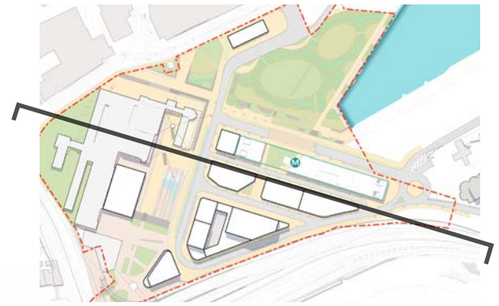
Commercial

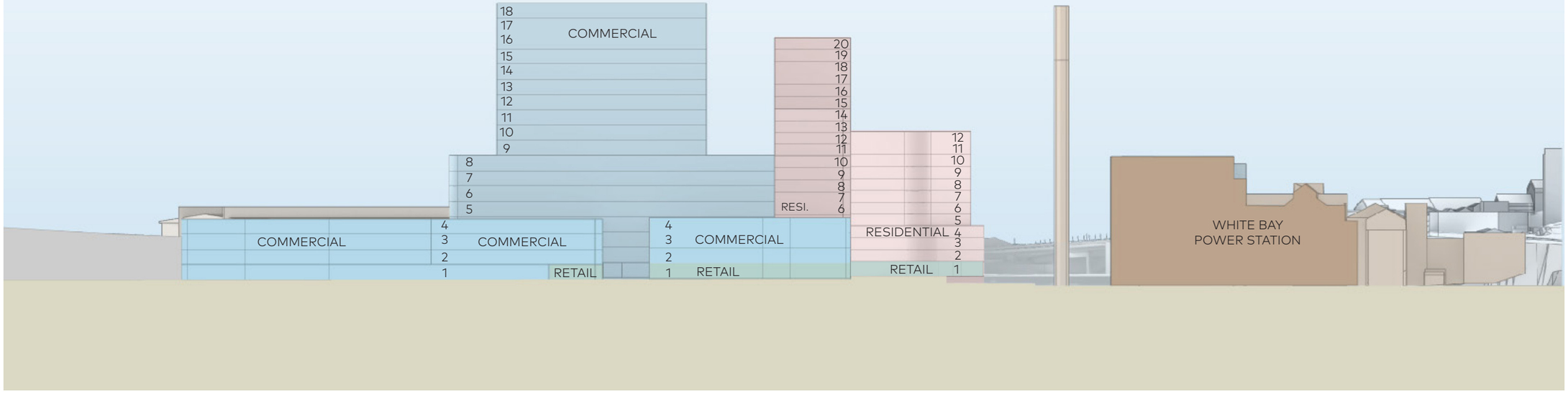
Site Sections



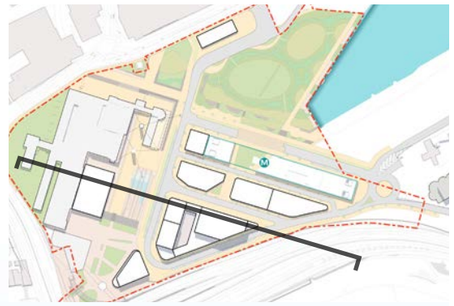


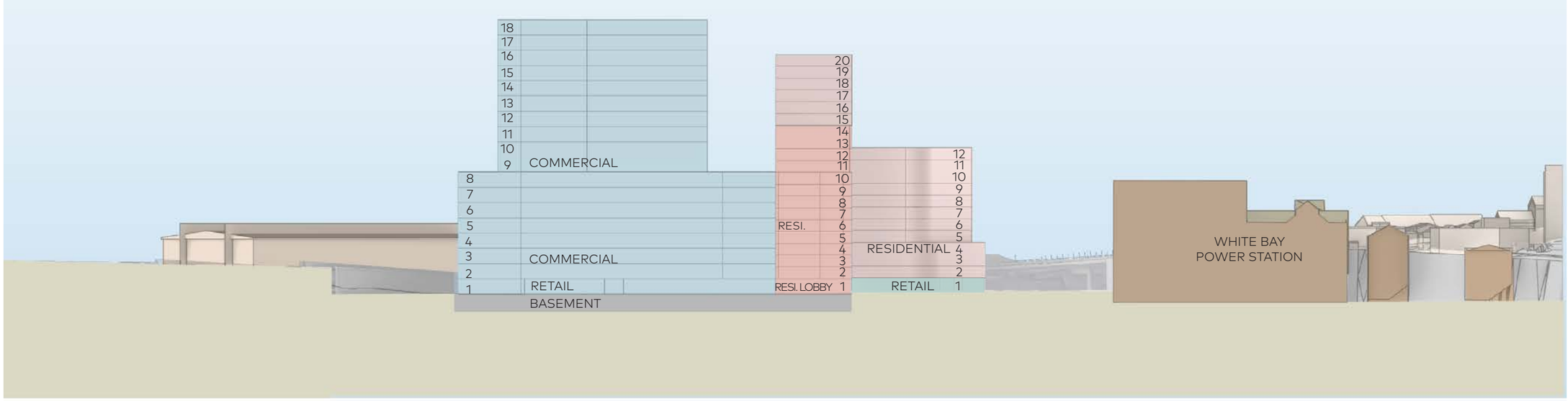
Site Sections



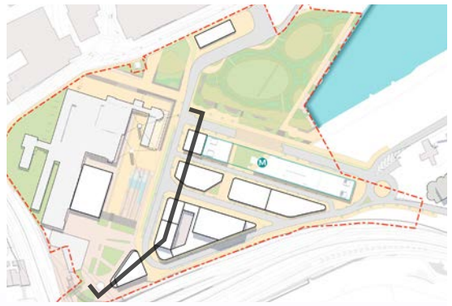


Site Sections

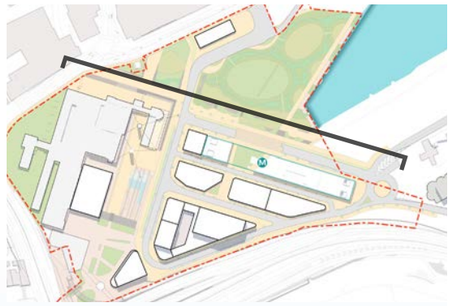


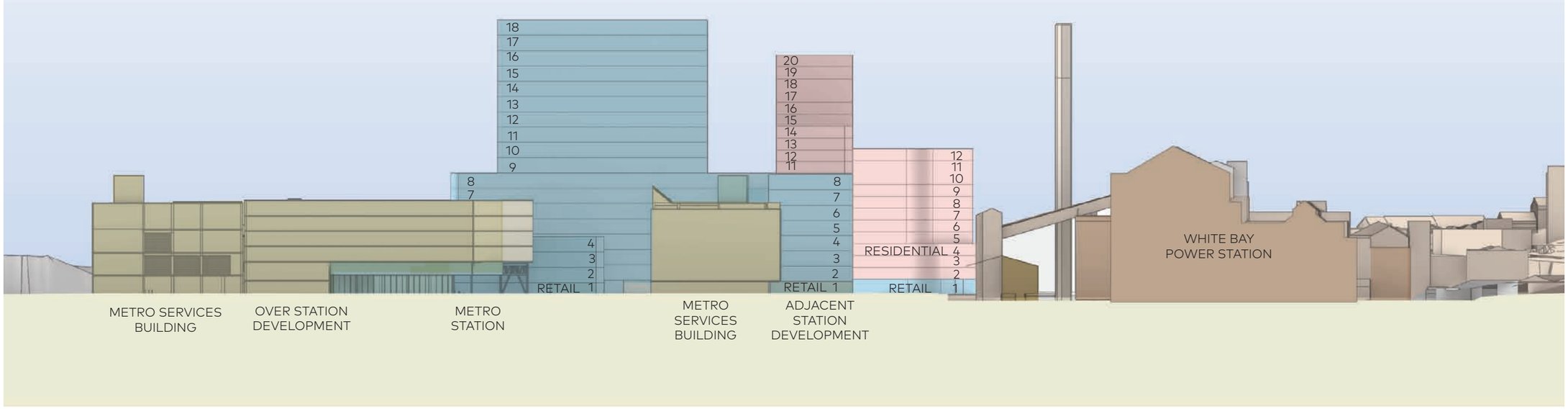


Site Sections



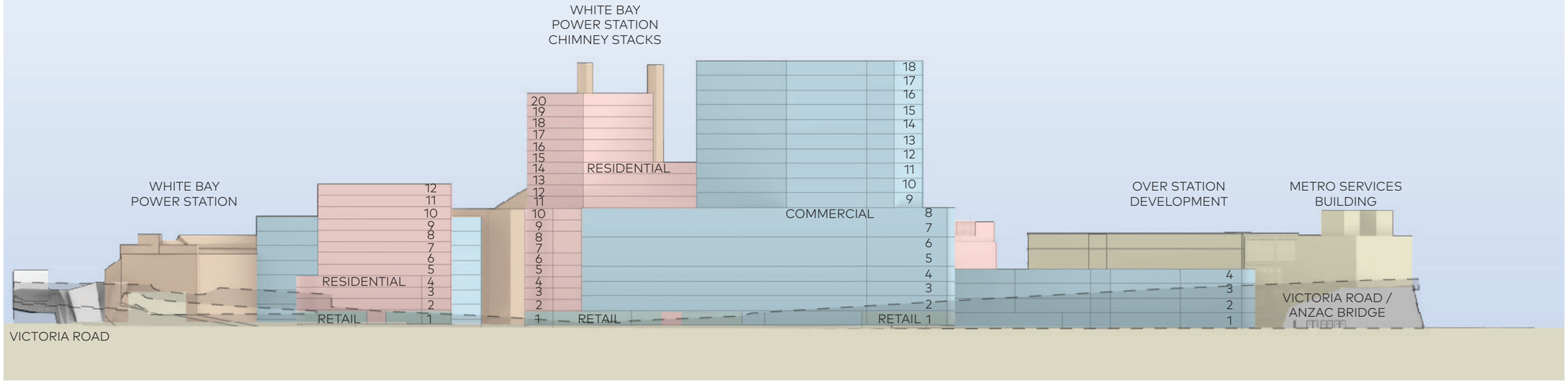
Site Elevations





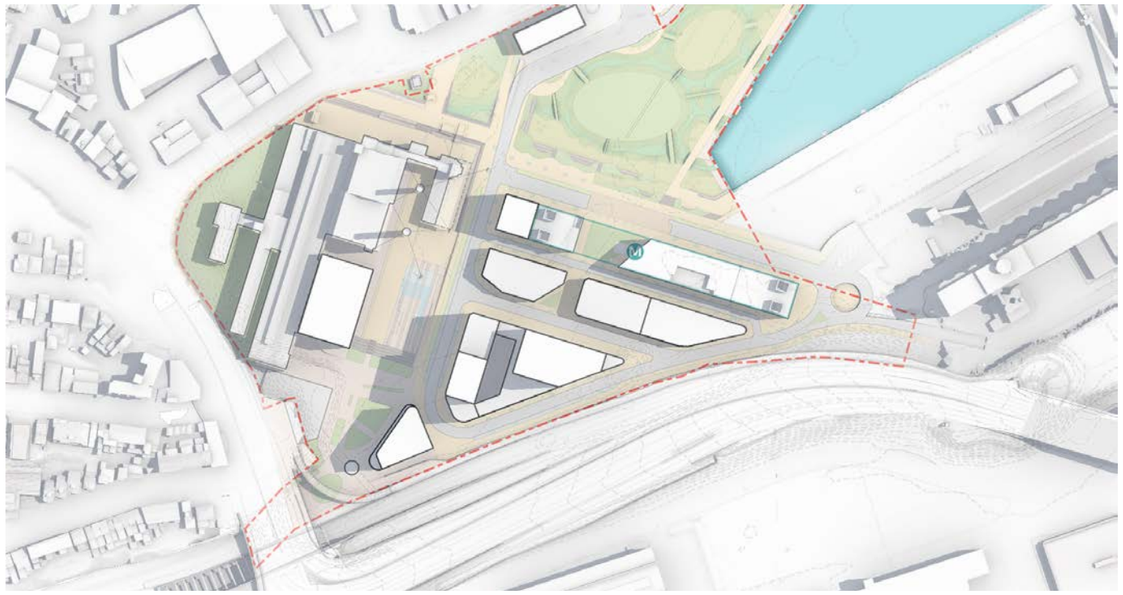
Site Elevations





Shadow Analysis

December 21nd



December 22nd - 9am

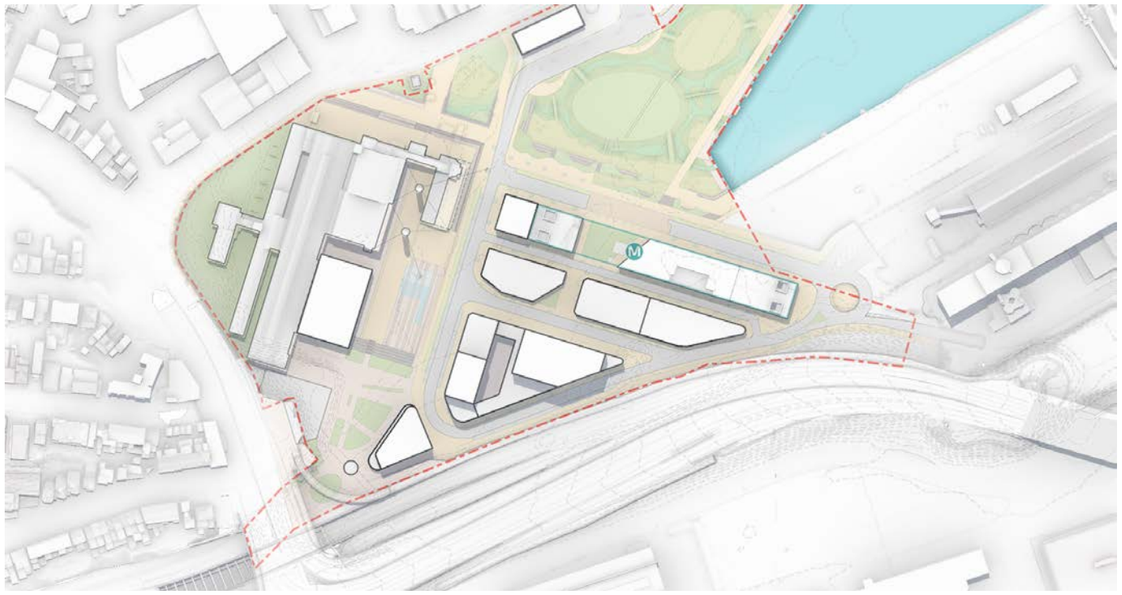


December 22nd - 10am



December 22nd - 11am

Shadow Analysis



December 22nd - 12pm



December 22nd - 1pm



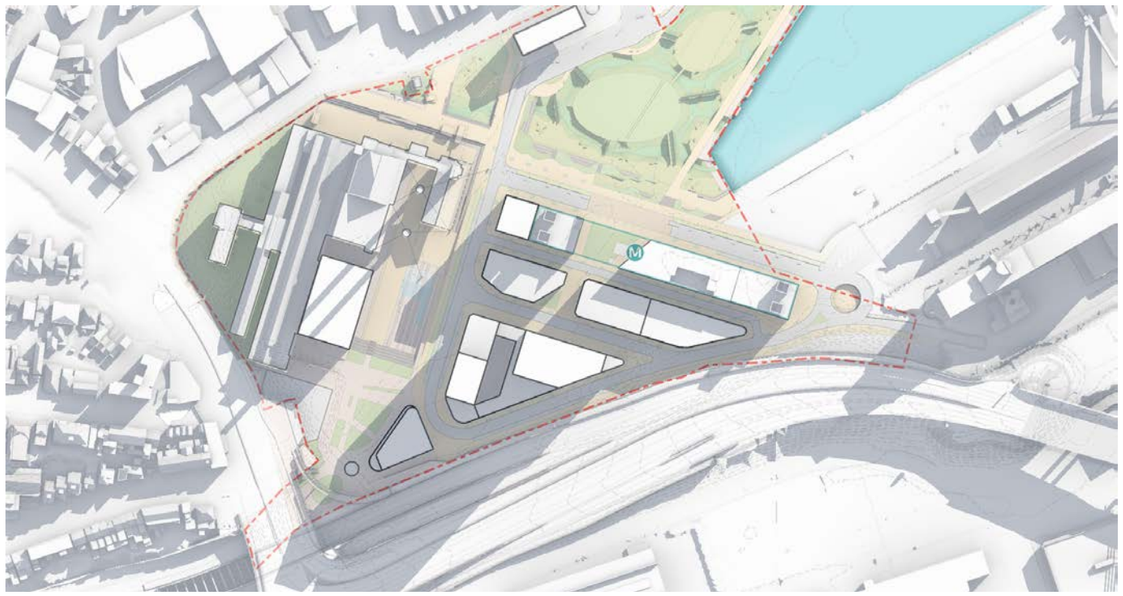
December 22nd - 2pm



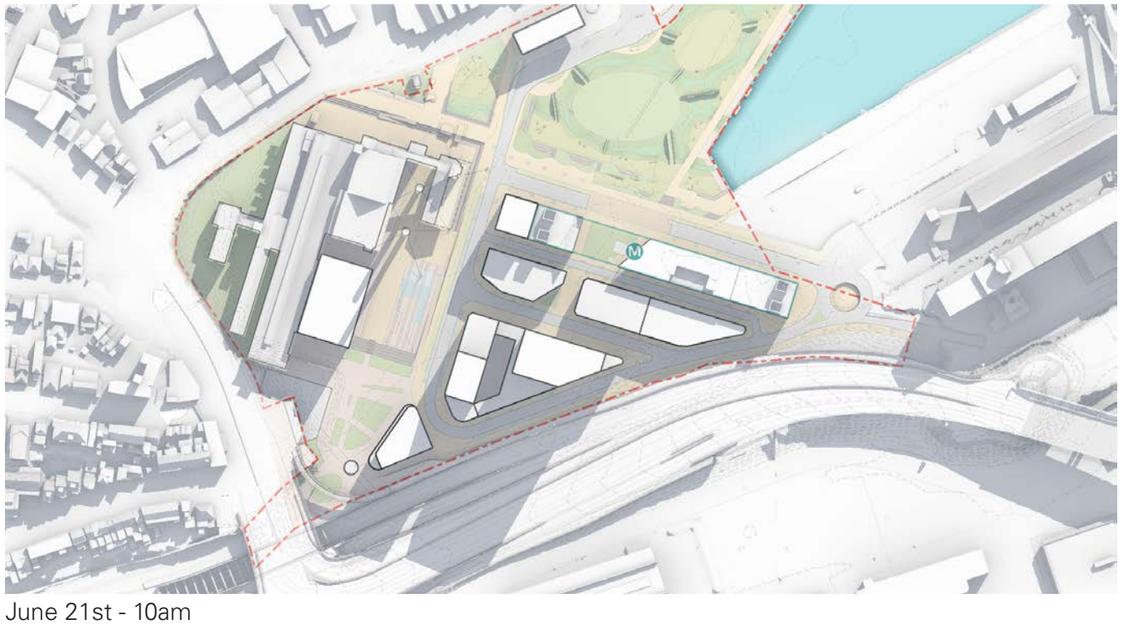
December 22nd - 3pm

Shadow Analysis

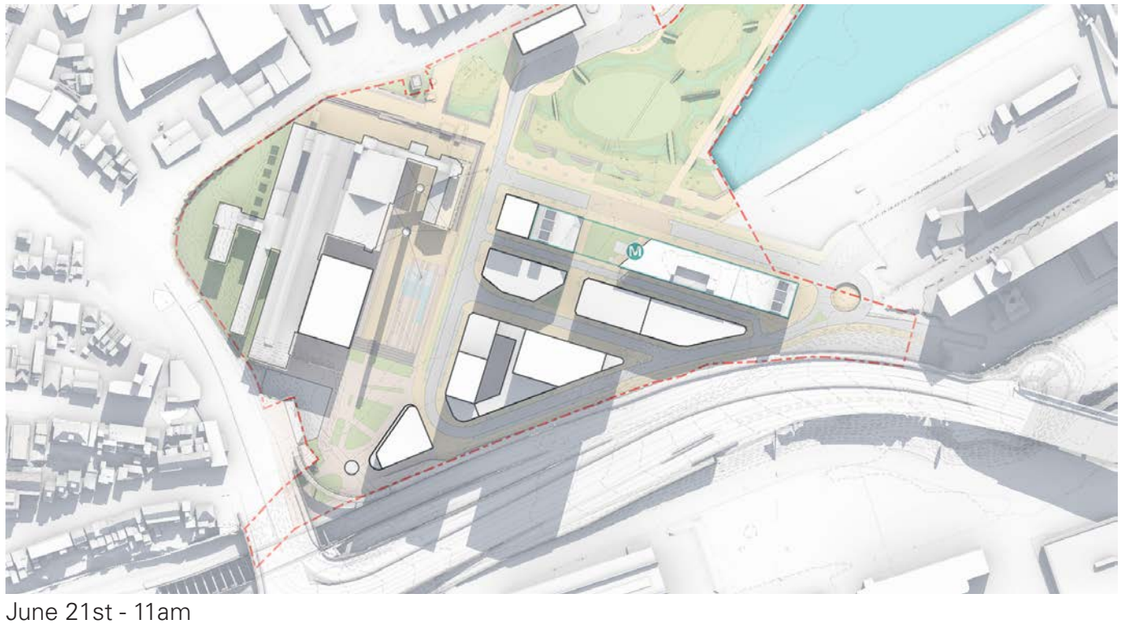
June 21st



June 21st - 9am

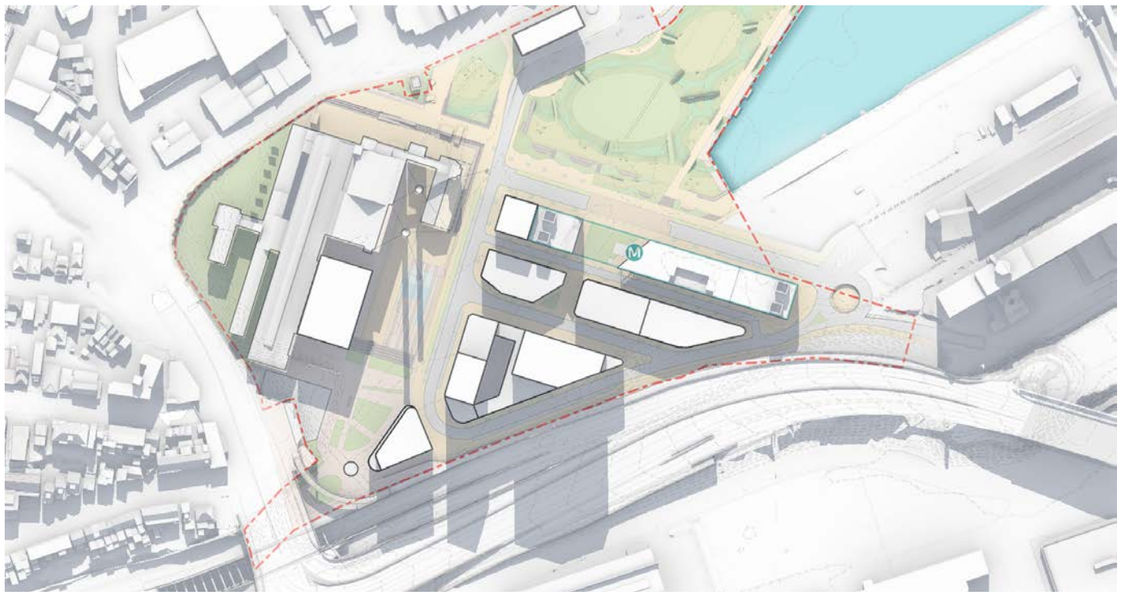


June 21st - 10am

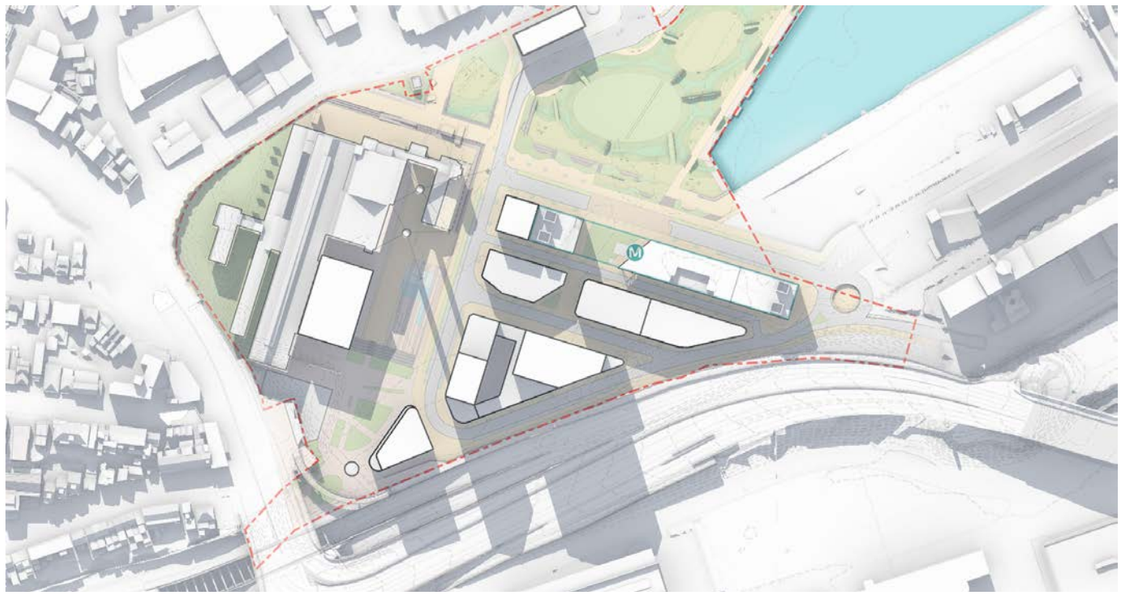


June 21st - 11am

Shadow Analysis



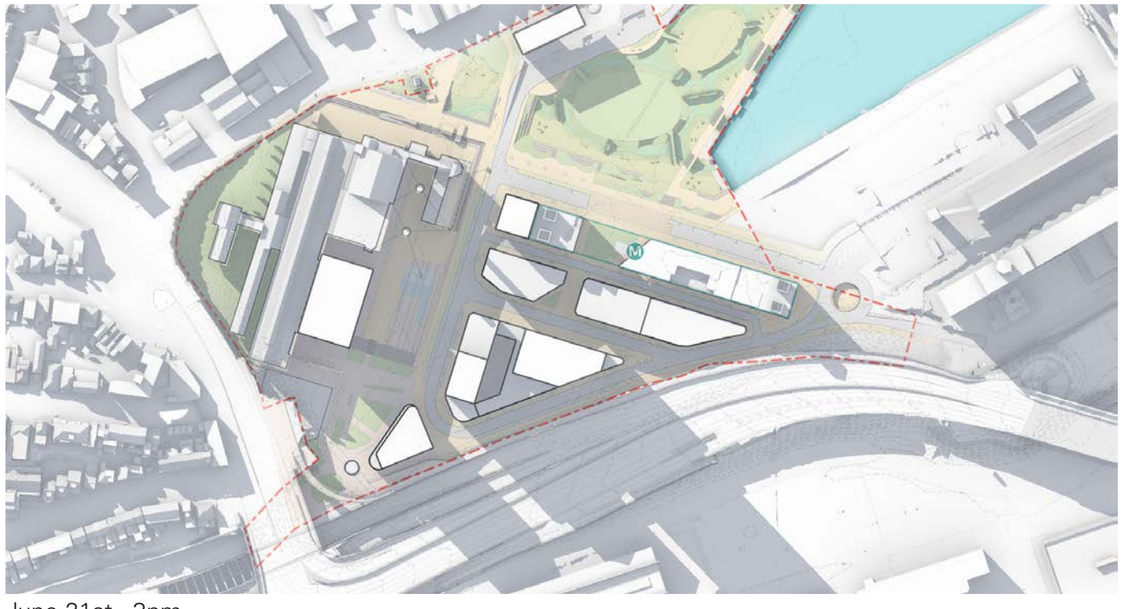
June 21st - 12pm



June 21st - 1pm



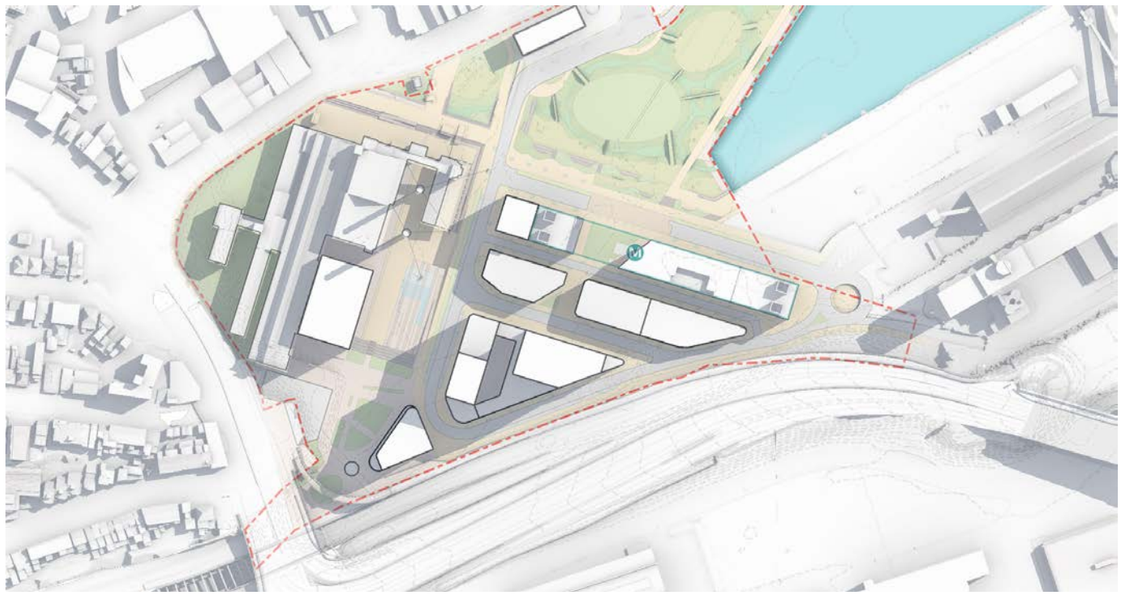
June 21st - 2pm



June 21st - 3pm

Shadow Analysis

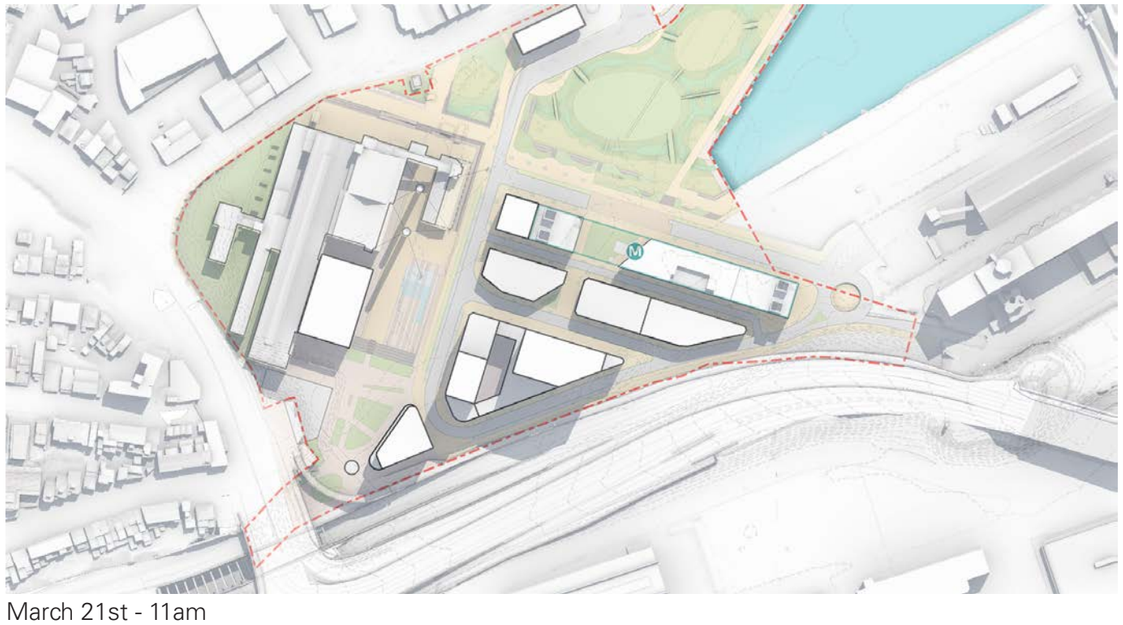
March 21st



March 21st - 9am

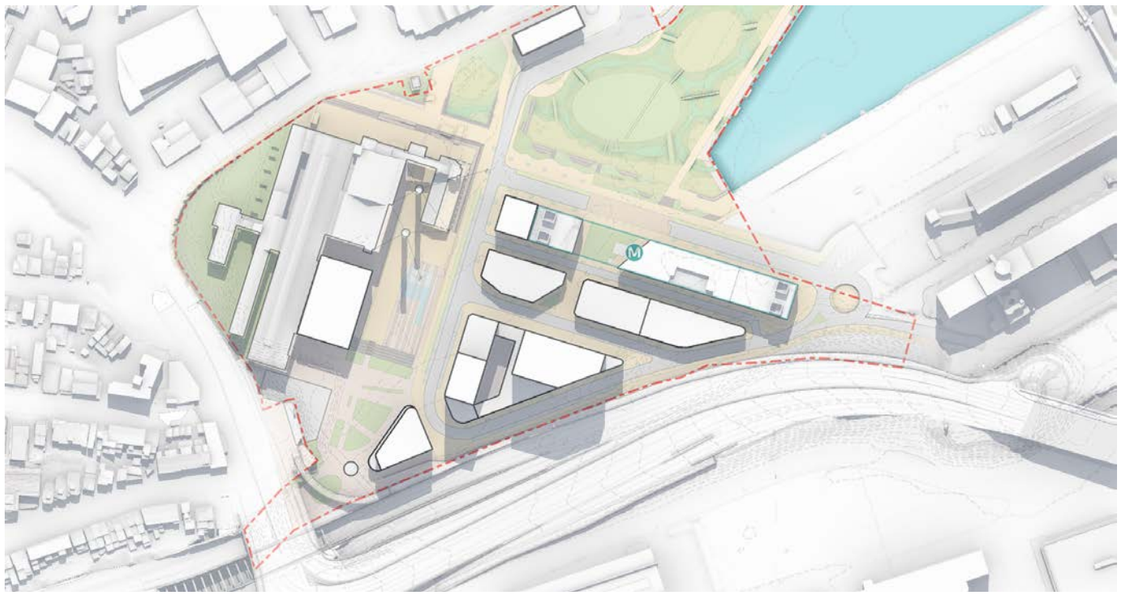


March 21st - 10am



March 21st - 11am

Shadow Analysis



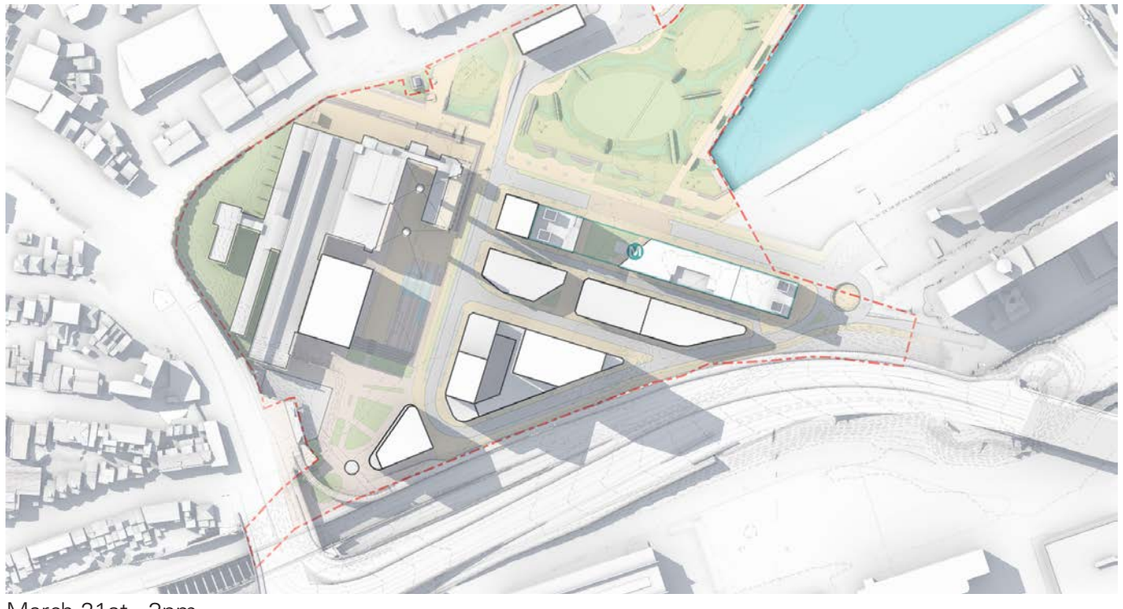
March 21st - 12pm



March 21st - 1pm



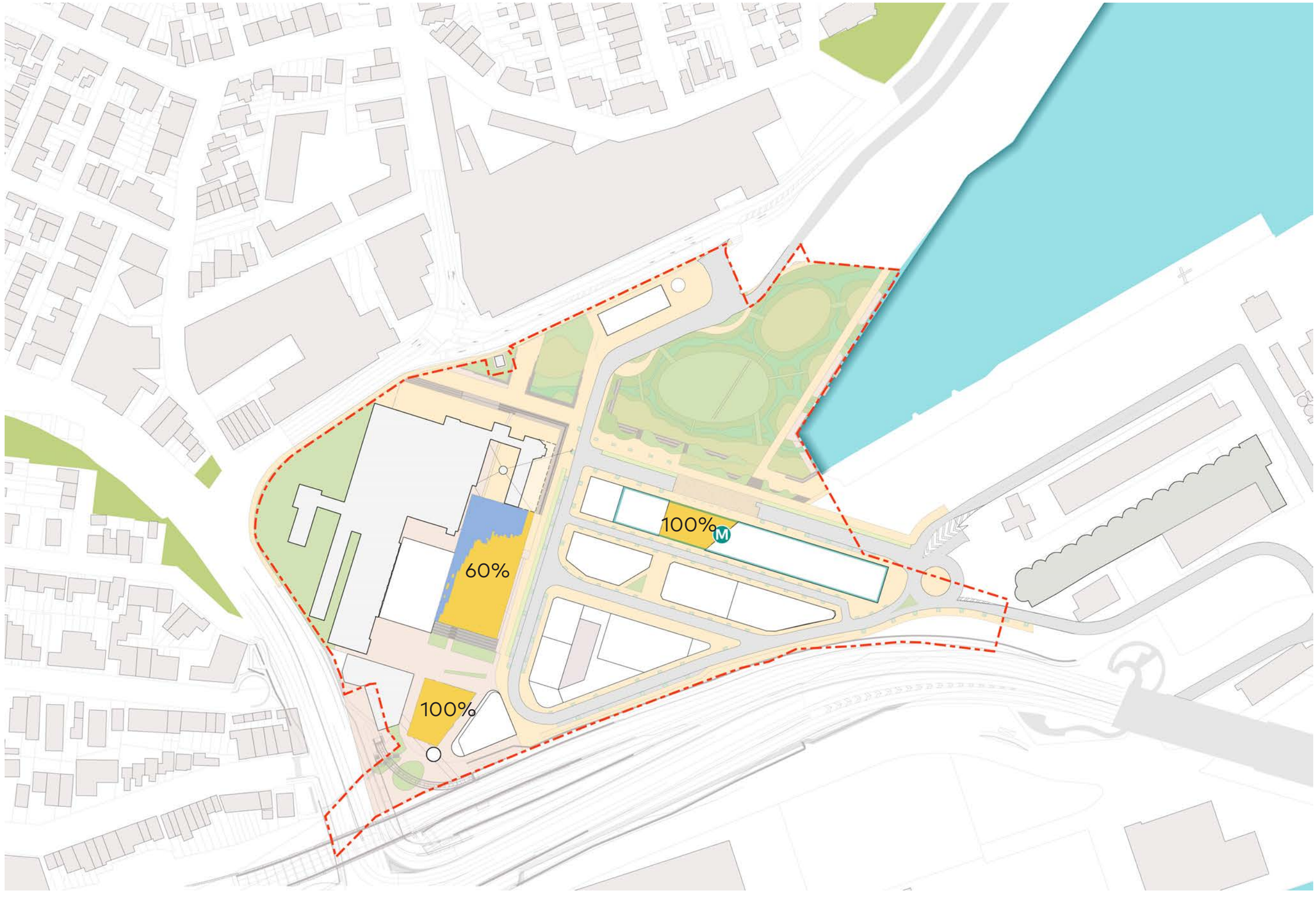
March 21st - 2pm



March 21st - 3pm

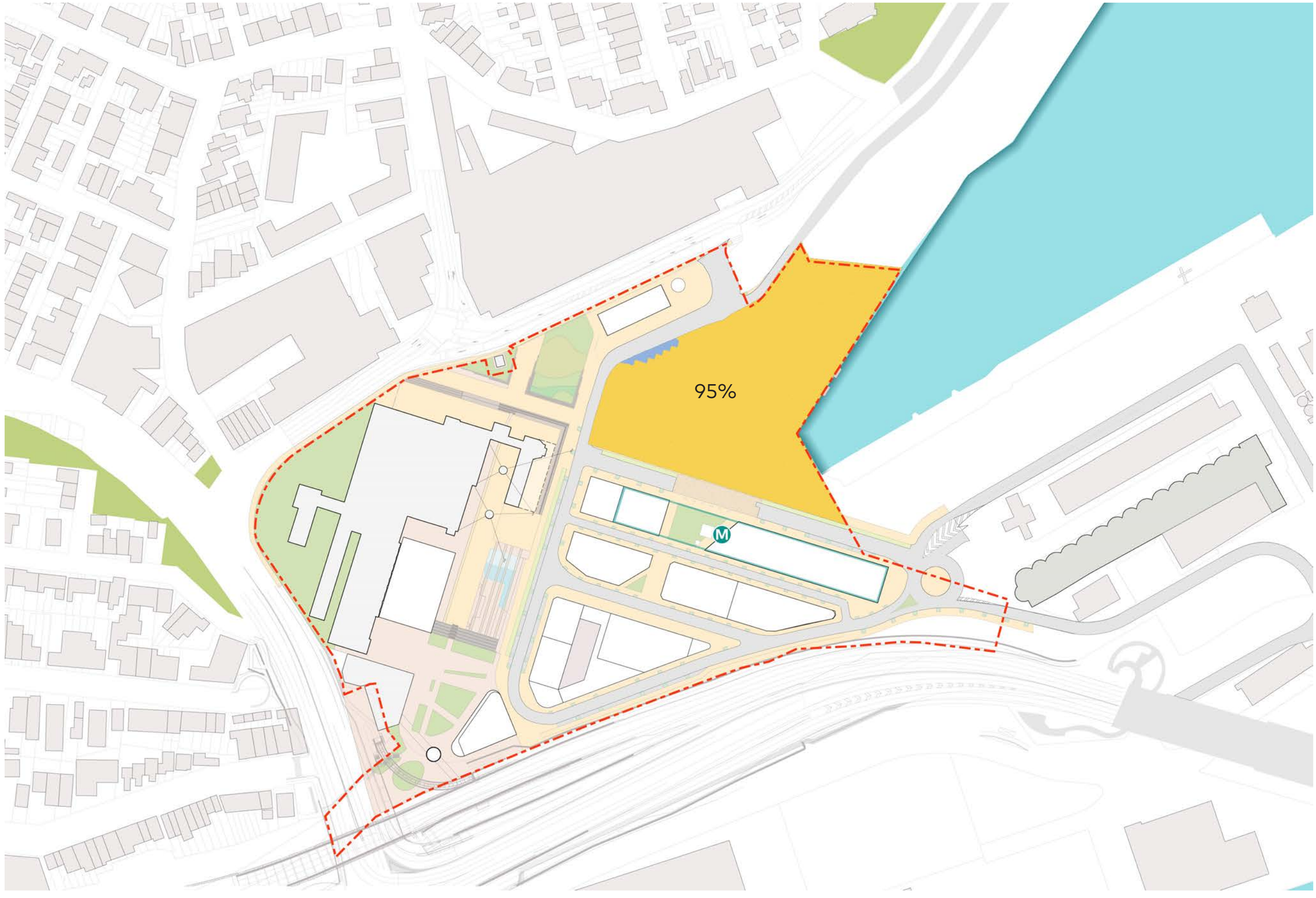
Solar Access to Public Open Space (2 hour proportions)

The diagram below the solar access that is required in terms of proportions of the public open space that achieve a minimum of 2 hours direct sunlight between 9am and 3pm on 21st June (mid winter).



Solar Access to Public Open Space (4 hour proportions)

The diagram below the solar access that is required in terms of proportions of the public open space that achieve a minimum of 2 hours direct sunlight between 9am and 3pm on 21st June (mid winter).



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