Mirvac Projects Pty Ltd

Locomotive Workshops and Travelator Tunnel Long Term Environmental Management Plan South Eveleigh Precinct

Lot 4000 DP 1194309
2 Locomotive Street, Eveleigh NSW, 2015

31 January 2022

51142/142920 (Rev 0)

JBS&G Australia Pty Ltd

www.jbsg.com.au

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Abbreviations

Term	Definition
ACM	Asbestos Containing Material
AF/FA	Asbestos Fines/Fibrous Asbestos
ATP	Australian Technology Park
AHD	Australia Height Datum
bgs	below ground surface
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
COPC	Contaminants of Potential Concern
Council	The Council of the City of Sydney
DP	Deposited Plan
LTEMP	Long Term Environmental Management Plan
ENM	Excavated Natural Material
EPA	Environment Protection Authority
ha	Hectare
JBS&G	JBS&G Australia Pty Ltd
MCPL	Mirvac Construction Pty Ltd
Mirvac	Mirvac Projects Pty Ltd
OC	Occupation Certificate
PAH	Polycyclic Aromatic Hydrocarbons
RAP	Remedial Action Plan
SAS	Site Audit Statement
SEP	South Eveleigh Precinct
TPH	Total Petroleum Hydrocarbon
TRH	Total Recoverable Hydrocarbon
VENM	Virgin Excavated Natural Material
VOC	Volatile Organic Compounds

Executive Summary

JBS&G Australia Pty Ltd (JBS&G) was engaged by Mirvac Projects Pty Ltd (Mirvac, the client) for the provision of environmental services associated with the remediation/validation of Lot 4000 in Deposited Plan (DP) 1194309, also known as the Locomotive Workshop Building (the Site). The site comprises the Locomotive Workshops Development Stages 1 and 2, which includes a portion of a pedestrian travelator tunnel, and ancillary areas surrounding the building, situated within the South Eveleigh Precinct (SEP), formerly known as the Australian Technology Park (ATP), located at 2 Locomotive Street, Eveleigh, NSW. The site location and layout are shown on **Figures 1** and **2** respectively. The site occupies an area of approximately 26,984 m^2.

This long-term environmental management plan (LTEMP) applies to Mirvac owned land/facilities and it will be the continuing responsibility of the future Retail Strata Corporation: Mirvac Real Estate Pty Ltd as the site owner to implement this plan moving forward following issue of the occupation certificate (OC) by the consenting authority (Department of Planning, Industry and Environment) or the appointed certifier.

The objective of this LTEMP is to ensure the ongoing suitability of the site for the proposed mixed uses (commercial and retail) via maintenance of cap/cover measures that form a physical barrier to the underlying contaminated soil present at depth beneath the site. It is anticipated that this LTEMP will operate for the life of the development to protect the health and safety of personnel who visit and/or work on the site, and to protect the environment – both on site and off site.

This LTEMP has been prepared in accordance with the requirements outlined in the *Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (3rd edition*), as referenced in the remedial action plan (RAP, JBS&G 2016a[1]) prepared for the ATP. The plan has been designed to ensure activities which could potentially or directly result in exposure of future land users to the contaminated soils beneath the physical barrier are precluded or limited/controlled.

It is anticipated that this LTEMP will form an attachment to the final site audit statement (SAS) prepared in satisfaction of conditions relating to the following Development Consent conditions and applicable to the site, comprising:

- Stage 1: SSD 8517 (DPE 2019a[2]);
- Stage 2: SSD 8449 (DPE 2019b[3]); and
- Pedestrian Travelator (portion within the site): SSD 7317 (DPE 2019c[4]).

The site shall be maintained for the duration of the development and operation in accordance with the requirements of the LTEMP.

Please note this LTEMP replaces the Locomotive Workshop Stages 1A, 1B, 1C, Travelator Tunnel and Stage 2: Long Term Environmental Management Plan previously prepared by JBS&G (2021b[5]) resulting in a single combined document covering the portion of the building identified herein. JBS&G notes the balance of land comprising the pedestrian travelator tunnel situated within the

1 *Mirvac Projects Pty Ltd Australian Technology Park Remedial Action Plan – 2 Locomotive Street, Eveleigh, NSW*. JBS&G Australia Pty Ltd dated 15 June 2016 reference 51142/104280 Revision 0 (JBS&G 2016a);

2 *Development Consent Application No. SSD 8517 – Locomotive Workshops (Bays 1-4A)*. NSW Govt. Department of Planning and Environment. 22 February 2019 (DPE 2019a);

3 *Development Consent Application No. SSD 8449 – Locomotive Workshops (Bays 5-15)*. NSW Govt. Department of Planning and Environment. 22 February 2019 (DPE 2019b);

4 *Development Consent Application No. SSD 7317 (Mod 5) – Pedestrian Travelator*. NSW Govt. Department of Planning and Environment. 29 June 2019 (DPE 2019c);

5 Mirvac Projects Pty Ltd. *Locomotive Workshop Stages 1A, 1B, 1C, Travelator Tunnel and Stage 2: Long Term Environmental Management Plan: South Eveleigh Precinct.* JBS&G Australia Pty Ltd, dated 26 February 2021, reference 51142/135751 Rev 0 (JBS&G 2021b);

public domain cadastral boundary (Lot 4007 in DP 1194309) is subject to a separate LTEMP (JBS&G 2020a) for reference of the site auditor and relevant future parties applying the LTEMP.

1. Introduction

1.1 Introduction and Objective

JBS&G Australia Pty Ltd (JBS&G) was engaged by Mirvac Projects Pty Ltd (Mirvac, the client) for the provision of environmental services associated with the remediation/validation of Lot 4000 in Deposited Plan (DP) 1194309, also known as the Locomotive Workshop Building (the Site). The site comprises the Locomotive Workshops Development Stages 1 and 2, which includes a portion of a pedestrian travelator tunnel, and ancillary areas surrounding the building, situated within the South Eveleigh Precinct (SEP), formerly known as the Australian Technology Park (ATP), located at 2 Locomotive Street, Eveleigh, NSW.

The site location and layout are shown on **Figures 1** and **2** respectively. The site occupies an area of approximately 26,984 m^2.

Stage 1 encompasses the entirety of Bays 1-4A, including the pedestrian travelator tunnel and ancillary areas. Stage 1 is situated in the eastern portion of the Locomotive Workshop comprising Retail land uses and encompasses approximately 9,855 m^2. The pedestrian travelator tunnel forms a link from Bay 4 South of the Locomotive Workshop to the Building 2 basement to the south. The portion of the pedestrian travelator external to the site boundary is subject to a separate validation report (JBS&G 2020a[6]).

Stage 2 encompasses the entirety of Bays 5 to 15 and ancillary areas comprising commercial land uses. Stage 2 is situated in the western portion of the building and encompasses approximately 17,129 m^2.

This long-term environmental management plan (LTEMP) applies to Mirvac owned land/facilities and it will be the continuing responsibility of the future Retail Strata Corporation: Mirvac Real Estate Pty Ltd as the site owner to implement this plan moving forward following issue of the occupation certificate (OC) by the consenting authority (Department of Planning, Industry and Environment, DPIE) or the appointed certifier.

Redevelopment works at the site involved replacement of old in-ground services, installation of new services, construction of a pedestrian travelator tunnel, upgrades to permanent hardstand pavements external to the building to the south and improvements to capping arrangements within the building. Further developments include augmentations to the existing heritage building on the ground floor to incorporate public walkways, future retail space, stairwells and back of house space including a loading dock and waste storage area in Bays 1-2 North. Undergraduate and postgraduate education facilities are proposed on level one of Bays 3-4A North (mezzanine).

The objective of this LTEMP is to ensure the ongoing suitability of the site for the proposed mixed uses (commercial and retail) via maintenance of cap/cover measures that form a physical barrier to the underlying contaminated soil present at depth beneath the site. It is anticipated that this LTEMP will operate for the life of the development to protect the health and safety of personnel who visit and/or work on the site, and to protect the environment – both on site and off site.

This LTEMP has been prepared in accordance with the requirements outlined in the *Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (3rd edition*), as referenced in the remedial action plan (RAP, JBS&G 2016a[7]) prepared for the ATP. The plan has been designed to ensure activities which could potentially or directly result in exposure of future land users to the contaminated soils beneath the physical barrier are precluded or limited/controlled.

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[6] Mirvac Projects Pty Ltd. *Stages 1 and 2 Public Domain – Long Term Environmental Management Plan, South Eveleigh Precinct, Eveleigh, NSW, 2015*. JBS&G Australia Pty Ltd dated 14 May 2020 reference 51142/129543 Rev 0 (JBS&G 2020a);

[7] *Mirvac Projects Pty Ltd Australian Technology Park Remedial Action Plan – 2 Locomotive Street, Eveleigh, NSW*. JBS&G Australia Pty Ltd dated 15 June 2016 reference 51142/104280 Revision 0 (JBS&G 2016a);

The plan includes:

a) description of the nature and location of contamination remaining at depth on site;

b) the objectives of the LTEMP;

c) procedures for residual contamination management;

d) responsibilities for the LTEMP implementation; and

e) an implementation schedule for each action in the LTEMP.

It is anticipated that this LTEMP will form an attachment to the final site audit statement (SAS) prepared in satisfaction of conditions relating to the following Development Consent conditions and applicable to the site, comprising:

- Stage 1: SSD 8517 (DPE 2019a[8]);
- Stage 2: SSD 8449 (DPE 2019b[9]); and
- Pedestrian Travelator (portion within the site): SSD 7317 (DPE 2019c[10]).

The site shall be maintained for the duration of the development and operation in accordance with the requirements of the LTEMP.

Please note this LTEMP replaces the Locomotive Workshop Stages 1A, 1B, 1C, Travelator Tunnel and Stage 2: Long Term Environmental Management Plan previously prepared by JBS&G (2021b[11]) resulting in a single combined document covering the portion of the building identified herein. JBS&G notes the balance of land comprising the pedestrian travelator tunnel situated within the public domain cadastral boundary (Lot 4007 in DP 1194309) is subject to a separate LTEMP (JBS&G 2020a) for reference of the site auditor and relevant future parties applying the LTEMP.

1.2 Background

The SEP was occupied by a large complex of rail workshops and yards throughout the late nineteenth and most of the twentieth century. The northern portion of the SEP, adjacent to the railway lines was occupied by the Eveleigh Locomotive Workshops. The primary potentially contaminating activities within the workshops included a paint shop, potash shed, wheel press, welder shop, copper shop, Oliver shop, tin smiths and pattern shop among others. The Locomotive Workshop was partitioned to accommodate a blacksmiths, fitter shop, machine shop, fabrication shop.

Previous contamination investigations (JBS&G 2021c[12]) identified the presence of fill underlying the site reported to be impacted to varying degrees with semi to non-volatile petroleum hydrocarbons as total recoverable hydrocarbons (TRH), polycyclic aromatic hydrocarbons (PAHs) and heavy metals associated with fill materials historically used across the site or resultant from historical site activities. In addition, isolated asbestos in soil impacts were reported. A summary of historical analytical data is presented in **Appendix A**.

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8 *Development Consent Application No. SSD 8517 – Locomotive Workshops (Bays 1-4A)*. NSW Govt. Department of Planning and Environment. 22 February 2019 (DPE 2019a);

9 *Development Consent Application No. SSD 8449 – Locomotive Workshops (Bays 5-15)*. NSW Govt. Department of Planning and Environment. 22 February 2019 (DPE 2019b);

10 *Development Consent Application No. SSD 7317 (Mod 5) – Pedestrian Travelator*. NSW Govt. Department of Planning and Environment. 29 June 2019 (DPE 2019c);

11 Mirvac Projects Pty Ltd. *Locomotive Workshop Stages 1A, 1B, 1C, Travelator Tunnel and Stage 2: Long Term Environmental Management Plan: South Eveleigh Precinct.* JBS&G Australia Pty Ltd, dated 26 February 2021, reference 51142/135751 Rev 0 (JBS&G 2021b);

12 Mirvac Projects Pty Ltd. *Locomotive Workshop – Bays 1 to 16 In situ Waste Classification, Australian Technology Park, Eveleigh. NSW*. JBS&G Australia Pty Ltd, dated 26 February 2021; Reference: 51142/135817 Rev 0 (JBS&G 2021c);

Site development activities have resulted in construction and/or modification to the physical barrier (cap) to underlying fill material across the site; via either hardstand pavements (concrete hardstand and/or new pavers installed external to the building over a new blinding slab); environmentally suitable capping material surrounding heritage display items; or the prefabricated concrete shell surrounding the pedestrian travelator.

The implemented physical barrier is to ensure that during the operational life of the site there are:

- No complete exposure pathways (inhalation/ingestion of dust, dermal contact with soil) between the contaminated fill material and future site users and/or visitors; and
- No unacceptable potential risks associated with contaminant migration via surface water movement, dust generation, vapour migration, etc.

The lateral extent of the site is defined as the extent of capping arrangements comprising hardstand pavements spanning the entire site ground surface as defined by survey in **Appendix B**. The ground floor development and travellator design plans are presented in **Appendix C**.

2. Summary of Site Conditions

2.1 Site Details

As discussed in **Section 1.1**, the site comprises the entirety of Lot 4000, including the portion of the pedestrian travelator located in Bay 4 South within the lot boundary, residual areas external to the building comprising the frontage to Locomotive Street and a pedestrian walkway to the north, small residual areas to the east and a public domain forecourt to the south of the building, as shown on **Figure 2.**

The site is located approximately 5 km south of the Sydney CBD, 8 km north of Sydney airport and within 200 m of Redfern Railway Station. The site is legally identified as Lot 4000 in DP 1194309, occupies an area of approximately 2.7 ha and is located within the City of Sydney LGA.

The site is bound to the north by a railway easement, to the east by Innovation Plaza, to the south by Building 2 of the South Eveleigh Precinct and to west by State Rail Operation Facilities (Large Erecting Shed). The travellator is situated within the southern portion of Bay 4, extending below the southern extent of the Locomotive Workshop building, beneath the Locomotive Street reserve and connecting to the basement level of Building 2. The portion beneath the street reserve is beyond the site boundary for the purposes of this LTEMP, with ongoing management regarding contamination potential for this portion of the travellator addressed in JBS&G (2020a).

The location of the site is shown in **Figure 1**, the current site layout is shown in **Figure 2**. Site details are summarised in **Table 2.1**.

Table 2.1: Site Identification

Current Lot/DP	Lot 4000 DP 1194309
Current Address	2 Locomotive Street, Eveleigh, NSW, 2015
Local Government Authority	City of Sydney Council
Site Area (Lot 4000 DP 1194309)	Approximately 2.7 ha
Site Owner	Mirvac Projects Pty Ltd
Future Site Owner	Mirvac Real Estate Pty Ltd
Site Developer	Mirvac Construction Pty Ltd
Site Zoning	SEPP Major Development 2005 under the City of Sydney Local Environment Plan 2012
Geographical Coordinates (MGA 56)	Refer to **Figure 2**
Former Land Use	Locomotive Building and Workshop
Redeveloped Land Use	Mixed Land Uses (retail and commercial including Educational facilities)

2.2 Site Condition and Physical Barrier to Retained Fill Materials

With the exception of the pedestrian walkway, in which areas of asphaltic hardstand pavement and minimal areas of igneous gravel capping material of a thickness greater than 100 mm are located to the north of the Locomotive Workshop built form (shown in **Photographs 11** and **12**); the site is generally covered with a permanent physical barrier as described in **Section 1.2**, comprising a combination of the following:

- Newly constructed hardstand pavements comprising concrete hardstand and/or new pavers installed external to the building over a new blinding slab;

- Existing concrete hardstand capping arrangements, as described in the previous EMP for the site (ES 2015[13]);
- A concrete shell structure, completely encasing the pedestrian travelator in the south of Bay 4; and
- Compacted brown decomposed (deco) granite capping arrangement surrounding heritage display items primarily located in Bays 1 and 2 south (Blacksmiths Workshop) as shown in design plans provided as **Appendix C**.

The areas of heritage item cultural displays are capped by a minimum of 100 mm of high density, crushed deco granite, which has been stabilised with 10% builders cement and compacted to RMS road standard (RMS 2015[14]) overlying compacted site fill, as per the RAP addendum (JBS&G 2020b[15]), and overlying compacted DGB20 in the southern portion of the site, which serves as a permanent physical barrier over the retained fill. Capping arrangement thicknesses and locations are presented in **Figure 5A** (Bays 1-4A North) and **Figure 5B** (Bays 1-4A South).

Areas to the north of the built form were assessed as part of a capping integrity inspection assessment (JBS&G 2020c[16]) to confirm the existing capping arrangements were compliant with the requirements of the superseded EMP (ES 2015), upon which the physical separation requirements were based, i.e., capping arrangements comprising either hardstands or a physical capping of at least 0.1 m, as confirmed in recent photographs (**Photographs 11** and **12**).

Previous intrusive investigations have primarily consisted of manually and mechanically advanced boreholes concrete cored through the hardstand and reinstated with concrete following sampling (**Photographs 3** and **4**).

Construction of the pedestrian travelator tunnel linking Bay 4A south, with the basement carpark of Building 2 to the south of the site comprised the following:

- Bulk excavation achieve construction levels comprising:
  - Excavation and removal of sand and clay fill from the existing ground surface (approximately 21.5 m AHD) to 3.5 m bgs (approximately 18 m AHD); and
  - Excavation and removal of VENM sand to the base of excavation at 7.3 m bgs (approximately 14.2 m AHD).
- Installation of a pre-cast concrete box comprising:
  - 250 mm thick foundation slab at the base of excavation;
  - Combination of 200 mm concrete and 180-390 mm shotcrete walls; and
  - 550 mm thick structural roof slab.
- Backfill of overlying void space with imported fill sand material to underside of pavement capping arrangement.
- Construction and reinstatement of road reserves with a blinding slab and asphaltic concrete pavement, such that no exposure pathway was present between site users and underlying fill material.

[13] Environmental Management Plan, Australian Technology Park, Eveleigh NSW. Environmental Strategies Pty Ltd dated August 2015 Revision 0 (ES 2015)

[14] *Laboratory Compaction of Road Construction Materials: Technical Guide | L-G-004*. Roads and Maritime Services (RMS), Ed 1/Rev 0, published February 2015 (RMS 2015);

[15] Mirvac Projects Pty Ltd. *Locomotive Workshop – Addendum to the Remedial Action Plan: Heritage Item Capping Requirements, South Eveleigh Precinct, Eveleigh. NSW*. JBS&G Australia Pty Ltd, dated 9 March 2020; Reference: 51142/128057 Rev 1 (JBS&G 2020b);

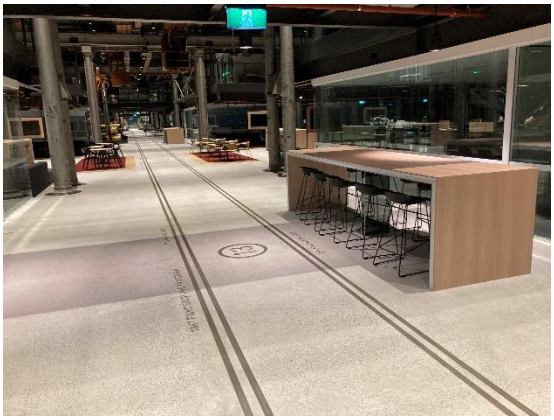
[16] Mirvac Projects Pty Ltd. *Public Domain Capping Thickness Integrity Inspection, South Eveleigh Precinct, Eveleigh, NSW*. JBS&G Australia Pty Ltd, dated 27 April 2020, reference 51142/129110 Rev 2 (JBS&G 2020c);

The concrete hardstand was documented by site photographs, design plans and survey information to identify the lateral extent of the physical barrier across the site. **Photographs 1** to **6** document slab thickness and decomposed granite capping arrangements surrounding heritage items, **Photographs 7** to **10** document the pedestrian travelator portion of the locomotive workshop. Survey documentation of capping arrangements and thickness are provided in **Appendix B**.

Works throughout the balance of site comprised installation of new services and replacement of existing pavements with new permanent hardstand pavement, as well as installation of a new mezzanine which features newly installed steel piles. Upon the completion of works all permanent hardstand pavements were replaced to equal or greater thickness, resulting in a physical barrier between site fill material and site users.



Photograph 1: Concrete hardstand/physical barrier construction process within Stage 2



Photograph 2: Concrete hardstand/physical barrier following completion of fit-out works within Stage 2.



Photograph 3: Illustrative concrete thickness and underlying soil.



Photograph 4: Intrusive boreholes/concrete hardstand reinstated following sampling works.



Photograph 5: Post placement of deco granite (minimum 100 mm thickness) surrounding retained heritage items as per JBS&G (2020) RAP Addendum requirements.



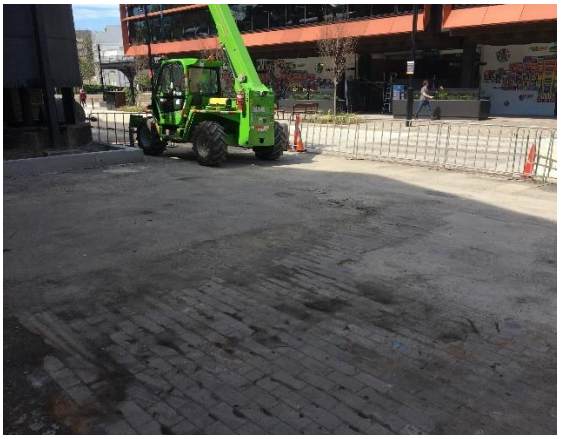
Photograph 6: Post placement of deco granite (minimum 100 mm thickness) surrounding retained heritage items as per JBS&G (2020) RAP Addendum requirements.



Photograph 7: Bulk earthworks within the locomotive workshop portion of the travelator.



Photograph 8: View of the travelator tunnel upon completion of the concrete shell installation such that a physical barrier was in place between underlying and adjacent fill material.



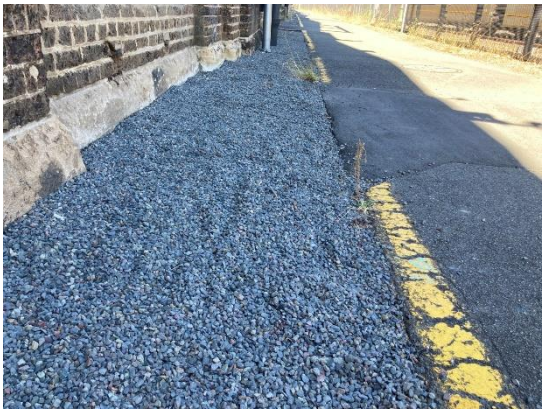
Photograph 9: Reinstated pavers following installation of a blinding slab within the footpath area of the locomotive workshop cadastral boundary, with locomotive street of the public domain beyond.



Photograph 10: View of the travelator tunnel upon completion of fit-out works.



Photograph 11: Capping arrangement to the north of the Locomotive Workshop Building (asphaltic hardstand and >100 mm of Blue Metal), consistent with the description in the capping integrity assessment.



Photograph 12: Capping arrangement to the north of the Locomotive Workshop Building (>100 mm of Blue Metal), consistent with the description in the capping integrity assessment.

2.3 Maintenance of the Barrier System

The existing physical barrier system (as outlined in **Section 2.2**) must be maintained across the entire site (**Appendix B**) in order to minimise the potential for uncontrolled exposure of future site users, occupiers, visitors and contractors to contaminated soil. Provided the barrier system is maintained in accordance with this LTEMP, there are no unacceptable health or contaminant migration risks associated with the chemical contaminants as there are no complete pathways between humans and the contaminated soil.

In the event that the barrier system is disturbed at any time as a result of planned or unplanned activities, the procedures documented in this LTEMP are required to be implemented to repair the barrier such that there continues to be an effective barrier between the contaminated soil and future site occupants/users during day to day use of the site.

In addition, the physical barrier is also noted to manage potential environmental risks associated with contamination (including contaminant migration, ecological exposure within and beyond the site, etc.).

No active additional monitoring or management of subsurface soil contaminant conditions is required during everyday operation of the site. Procedures as provided in **Appendix D** will only be needed in the event of either planned or unplanned breaches of the physical barrier occur to ensure the barrier is reinstated appropriately.

3. Summary of Identified Contamination Issues

Limited sampling was undertaken throughout the SEP prior to commencement of redevelopment to the heritage nature of the Locomotive Workshop. A Soil Characterisation Assessment (JBS&G 2018[17]) and in situ waste classification (JBS&G 2021c) were undertaken in April 2018 and January 2019 throughout the Locomotive Workshop. The investigation comprised advancement of 83 sample locations across a period of one year and eleven months as shown on **Figure 3**.

Fill and natural materials from within the site comprised the following:

- Surface covers were noted at the time to comprise concrete pavement/roadbase/asphalt/ metal sheet coverings all locations, including :
    - Asphalt pavement at four locations (BH01, BH02, BH05 and TP430) ranging from depths of 0.02 m bgs (BH02) to 0.15 m bgs (BH05);
    - Roadbase surface at five locations ranging from depths of 0.05 m bgs (TP424) to 0.10 m bgs (TP431);
    - Cast iron plates at two borehole locations (BH03 and BH04), with a plate thickness of 7 cm;
    - Concrete pavements at the remaining bore locations ranging from depths of 0.1 m bgs (BH08, TP422) to 0.9 m bgs (BH201 and TP437). The concrete slab at BH09 continued beyond 0.72 m bgs, with the absolute thickness unknown.
- Fill material comprised heterogeneous brown to dark brown silty gravelly sand fill with anthropogenic inclusions including ash, slag, bricks, concrete, metal, plastic and glass fragments with no discernible pattern across the site, overlying;
- Natural soils that comprised:
    - Light brown to off-white sand, encountered at depths ranging from 0.3 m bgs (BH202) to 3.75m bgs (TRA-04);
    - Brown to light brown/orange silty clay, encountered at depths ranging from 0.5 m bgs (TP440, TP441) to 3.95 m bgs (TRA-4); and
    - Natural red brown with white mottled clay encountered at depths ranging from 0.35 m bgs (TP425) to 3.6m bgs (TP407).

Upon completion of remediation/redevelopment works, a description of the physical barrier and retained impacted materials is provided in **Section 2.2**. The following is a summary of contamination issues at the site beneath the physical barrier/marker layer.

3.1 Soil

Soil Analytical Data is presented in **Appendix A**. Historic soil sample locations are presented on **Figure 3.**

3.1.1 Heavy Metals, PAHs and TRHs

Contaminants remaining within fill material at the site beneath the physical barrier include total recoverable hydrocarbons (TRH)/total petroleum hydrocarbons (TPH), polycyclic aromatic hydrocarbons (PAH) and heavy metals (principally chromium, copper, lead, nickel, zinc and to a lesser extent arsenic). Exposure to these contaminants can be via absorption through the skin,

[17] Mirvac Projects Pty Ltd. Loc*omotive Workshop – Bays 1 & 2 Soil Characterisation Assessment, Australian Technology Park, Eveleigh. NSW*. JBS&G Australia Pty Ltd, dated: 15 August 2018; Reference: 51142/116937 Rev 1 (JBS&G 2018);

ingestion, and inhalation via dust and/or vapours (for volatile compounds – **Section 3.2**) where such pathways are complete.

3.1.2 Asbestos

Previously identified areas of asbestos impacted fill material were removed from within the site footprint during the remediation works for WH&S purposes. Two areas where asbestos was identified were not disturbed during site development works, and hence the identified asbestos impacts remain on site, as shown in **Appendix A: Table B**, at locations shown on **Figure 3**.

Given the heterogeneity of fill materials, historical industrial land use activities, and extensive observations of rubble and other building-material related inclusions on historical borehole logs, there is further potential for residual asbestos impacts to occur within the retained fill material underlying the site. As such, an unexpected finds protocol/procedure is required to manage any such unexpected finds as may occur into the future should works below the physical barrier be required.

Non-friable asbestos material is any asbestos-containing material that is not considered to be friable asbestos, including material containing asbestos fibres reinforced with a bonding compound (SWA 2020[18]). The materials defined in the NEPC (2013[19]) as bonded asbestos are non-friable asbestos.

Friable asbestos material is any material that is in fibrous or powder form or that can be crumbled, pulverized or reduced to a powder by hand pressure when dry and contains asbestos (SWA 2020). The materials defined in the NEPM (2013) as fibrous asbestos (FA) and asbestos fines (AF) are friable asbestos.

Mechanical disturbance of asbestos containing material (ACM) fragments and disturbance of soils may result in the release of fibres and therefore, such activities should be managed to prevent any fibres becoming airborne. The health effects of asbestos are detailed in enHealth (2005) *Management of Asbestos in the Non-Occupational Environment*.

The primary issue associated with the asbestos is managing the risk of inhalation of respirable fibres where site activities encounter such material.

3.2 Soil Vapour

Elevated concentrations of volatiles such as chlorinated alkenes (trichloroethene, TCE) and trace amounts of benzene, toluene, ethylbenzene and xylene (BTEX) were identified in sub-slab soil vapour within the site, as shown in **Appendix A: Table E** at locations shown on **Figure 4**).

To demonstrate the identified impacts do not pose a potential risk to site users, ambient air monitoring and assessments undertaken by JBS&G and others in May 2010 (DP 2010[20]), December 2011 and May 2012 (ES 2012[21]), April 2018 (JBS&G 2018[22]), and an additional two rounds in July 2020 (2020g[23]), and July 2021 (JBS&G 2021c[24]) used to evaluate long term monitoring requirements as requested by the NSW EPA accredited site auditor.

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18 *How to Safely Remove Asbestos: Code of Practice*. Safe Work Australia July 2020 (SWA 2020);

19 *National Environment Protection (Assessment of Site Contamination) Measure 1999, Amended 11 April 2013*. National Environment Protection Council (NEPM 2013);

20 *Ambient Air Quality Assessment. The Locomotive, IBC, NIC, & RTA Buildings. Australian Technology Park, Eveleigh*. Douglas Partners Pty Ltd, reference: 71546(1), dated May 2010 (DP 2010);

21 *Ambient Air Quality Assessment of the Locomotive Building, Australian Technology Park Sydney Limited, Eveleigh.* Environmental Strategies Pty Ltd, reference: 12018LR1_v01, dated May 2012 (ES 2012);

22 Mirvac Projects Pty Ltd. *Locomotive Workshop Ambient Air Assessment – Australian Technology Park, Eveleigh. NSW*. JBS&G Australia Pty Ltd Letter, reference: 51142/114932 Rev 0, dated 27 April 2018 (JBS&G 2018);

23 Mirvac Projects Pty Ltd. *Locomotive Workshop Ambient Air Assessment – July 2020, South Eveleigh Precinct, Eveleigh. NSW*. JBS&G Australia Pty Ltd Letter, reference: 51142/131662 Rev 0, dated 10 August 2020 (JBS&G 2020g);

24 Mirvac Projects Pty Ltd. *Locomotive Workshop Ambient Air Assessment – July 2021, South Eveleigh Precinct, Eveleigh. NSW*. JBS&G Australia Pty Ltd Letter, reference: 51142/139435 Rev 0, dated 30 July 2021 (JBS&G 2021c);

Ambient air is considered to have been adequately characterised and conclusions have been drawn regarding the potential for soil vapour migration through the physical barrier of the Locomotive Workshop floor.

Based on all previous ambient air assessment data, the conditions at the site are such that there are no unacceptable risks to current and/or future site occupants. As such, volatile impacts identified as present in fill materials beneath the Locomotive Workshops are considered to not be impacting air quality within the Locomotive Workshops building in a worst-case scenario of low air circulation, small, confined assessment area and targeted to preferential pathways, and following completion of the built-form. Furthermore, changes to the built form did not result in increased VOC concentration in ambient air in comparison to historic data.

On this basis, the remedial strategy (which comprised a cap/cover remedial strategy) has been demonstrated to have maintained appropriate migration attenuation characteristics and is considered to be appropriate. Further assessment of ambient air is therefore not considered to be warranted.

Notwithstanding, if the physical barrier is broken for maintenance or installation of services (or the like) then there is a risk of exposure for workers to volatile compounds that will require management as per the procedures in **Appendix D**.

3.3 Groundwater

Based on available groundwater quality information, groundwater in the vicinity of the site was considered to not be significantly contaminated and did not present an unacceptable risk to future site users or down-gradient ecosystems. Minor elevated concentrations of contaminants as identified are representative of urban background environments, therefore no further remediation or management is required.

4. Application, Enforcement and Regulatory Requirements

4.1 Application of LTEMP

This LTEMP will apply indefinitely during future site operation or until such time as a SAS can be prepared by an NSW EPA Accredited Site Auditor or the NSW EPA stating that the LTEMP is not required for the site.

The requirements of this LTEMP are intended to apply to any activities within the site which could involve disturbance or exposure of contaminants in soil beneath the physical barrier, or partial removal of the physical barrier including, but not limited to:

- Demolition and removal of any pavements or buildings;
- Underground utility installation, maintenance or removal; or
- Excavations (e.g., dug, cut, piled or bored).

Specifically, it is anticipated that ground disturbance activities that may result in requirements under this LTEMP comprise the installation of additional and/or replacement underground services/infrastructure that require removal of part or all of the physical barrier.

4.2 Enforcement of LTEMP

This LTEMP will be enforced as a condition of consent via attachment to the SAS issued to address a Development Consent conditions (DPE 2019a/DPE 2019b/DPE 2019c).

4.3 Regulatory Requirements

Future activities on site are required to be completed in accordance with several pieces of environmental and occupational health and safety legislation and associated regulations. The primary Acts, Regulations and Guidelines are listed below with a brief summary of their applicability. Please note, however, that this list is not intended to be a comprehensive listing of acts and regulations. The site owner and contractors are required to satisfy themselves that all applicable permits, licences and legislation have been obtained and their conditions satisfied.

Work Health and Safety Act, 2011

The overarching Act for NSW setting law relating to employee health and safety and employer responsibilities.

Work Health and Safety Regulation 2017 (as amended in 2019)

Sets Regulations and details the duties for employers to achieve required employee health and safety performance.

***Contaminated Land Management Act 1997* (*CLM Act*)**

The *Contaminated Lands Management Act 1997* (CLM Act) controls the assessment of contamination and requirement of remediation of soils and groundwater. The act also contains guidance for the determination of whether a site presents a significant risk of harm and allows for accreditation of Site Auditors.

***Waste Avoidance and Resource Recovery Act 2001* (*WARR Act*)**

The *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) replaced the Waste Minimisation and Management Act 1995 and controls waste generation and waste reduction.

State Environmental Planning Policy (SEPP) 55 'Remediation of Land'

SEPP 55 relates to the decision-making process in undertaking remediation of land and making planning decisions regarding contaminated and potentially contaminated land.

National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) (NEPC 2013)

National guidelines for the assessment of land contamination endorsed by NSW EPA. These guidelines include recommended soil and groundwater assessment criteria for a variety of land uses.

Protection of the Environmental Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) is the key piece of environment protection legislation administered by the EPA.

5. LTEMP Implementation

This LTEMP has been designed to ensure, via the implementation of ongoing management measures pertaining to the areas of sub-surface contamination, that:

- The risk to the future users of the site from residual sub-surface contamination continues to be acceptable; and
- Contingency actions are available to be implemented where potential risk to human users or ecological receptors occurs.

It should be noted at this point that the LTEMP is in no way intended to replace or supersede existing Environmental Management Plans, Health and Safety Plans and/or Building Materials Management Plans prepared by Mirvac as the site owner and/or future tenants for management of the site and associated improvements. Instead, the LTEMP should be considered as a supplement to these documents and particularly targeted to deal with issues unique to residual contamination retained beneath the site and management of the potential for re-contamination of the site.

5.1 Responsibilities

This LTEMP will come into force at the completion of remedial activities and issue of a SAS.

Mirvac Real Estate Pty Ltd as the future site owner, or its nominated representative, will be responsible for the ongoing implementation of this LTEMP. A formal list of procedures is provided in this LTEMP (**Appendix D**). Specific responsibilities for the implementation of each procedure are detailed in the appropriate procedure.

The following detail is provided below on the key environmental responsibilities for specific personnel.

5.1.1 Site Manager

The site owner (Mirvac Real Estate Pty Ltd), or nominated representative will be/shall be responsible for the following in accordance with the specific procedures outlined in **Appendix D**:

- Management of all operations, employees and subcontractors at the site that may result in ground disturbance activities;
- Ensuring compliance with all environmental requirements outlined in this LTEMP and statutory requirements;
- Ensure that the physical barrier material, is not breached without implementation of appropriate management procedures;
- Liaison with the regulatory authorities in relation to environmental matters;
- Preparation of appropriate forms, registers, reporting formats, etc. as appropriate to document implementation of the LTEMP in a form able to be audited as per Environmental Management Procedure 11 (**EMP11**) included in **Appendix D**;
- Where necessary, review of environmental reports and inspections and initiating any actions to rectify conditions;
- Participation in environmental incident investigations;
- Participation in environmental meetings and programs;
- Oversee the implementation of environmental management measures at the site; and

- Ensuring that persons or sub-contractors, who are planning or likely to undertake intrusive works at the site, are made aware of their environmental responsibilities in relation to the site management requirements as described in **Section 2.3**.

5.2 Formal Notations

Future planning certificates as may be prepared by City of Sydney Council under s.10.7 of the *Environmental Planning and Assessment Act 1979* for subject lot(s) will document the presence of the SAS and associated LTEMP.

5.3 Period of Implementation

The LTEMP is to be implemented for an indefinite period of time during operation of the site under the current consent or until a review has been undertaken by either a NSW EPA Accredited Site Auditor and a SAS issued, or a written approval has been provided by the Department of Planning, Industry and Environment (DPIE) or the Council of the City of Sydney (as the potential consent authorities), or a written approval has been provided by NSW EPA, that removes the need for ongoing implementation of the LTEMP.

5.4 Environmental Management Procedures

Procedures have been provided to guide the implementation of this LTEMP. These procedures are provided in **Appendix D**.

5.5 Responsibilities of Council/DPIE – As the consent authority

As specified in Section 3.4.6 of the *Guidelines for the NSW Site Auditor Scheme (2017)*, the responsibilities of the Department of Planning and Environment (or the Council of the City of Sydney), in the role of consent authority, shall be limited to:

a) Public notification of the existence of the LTEMP on appropriate property records (refer to **Section 5.2** in this instance);

b) Enforcement of the LTEMP as a condition in any future development consent for additions or alterations to the development that may involve a breach of the cap; and

c) Confirmation in writing to the Site Auditor that the Department of Planning and Environment (or the Council of the City of Sydney) will comply with Items (a) and (b) to allow the auditor to prepare a SAS for this site.

6. 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 inquires.

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

Figure 1 **Site Location**

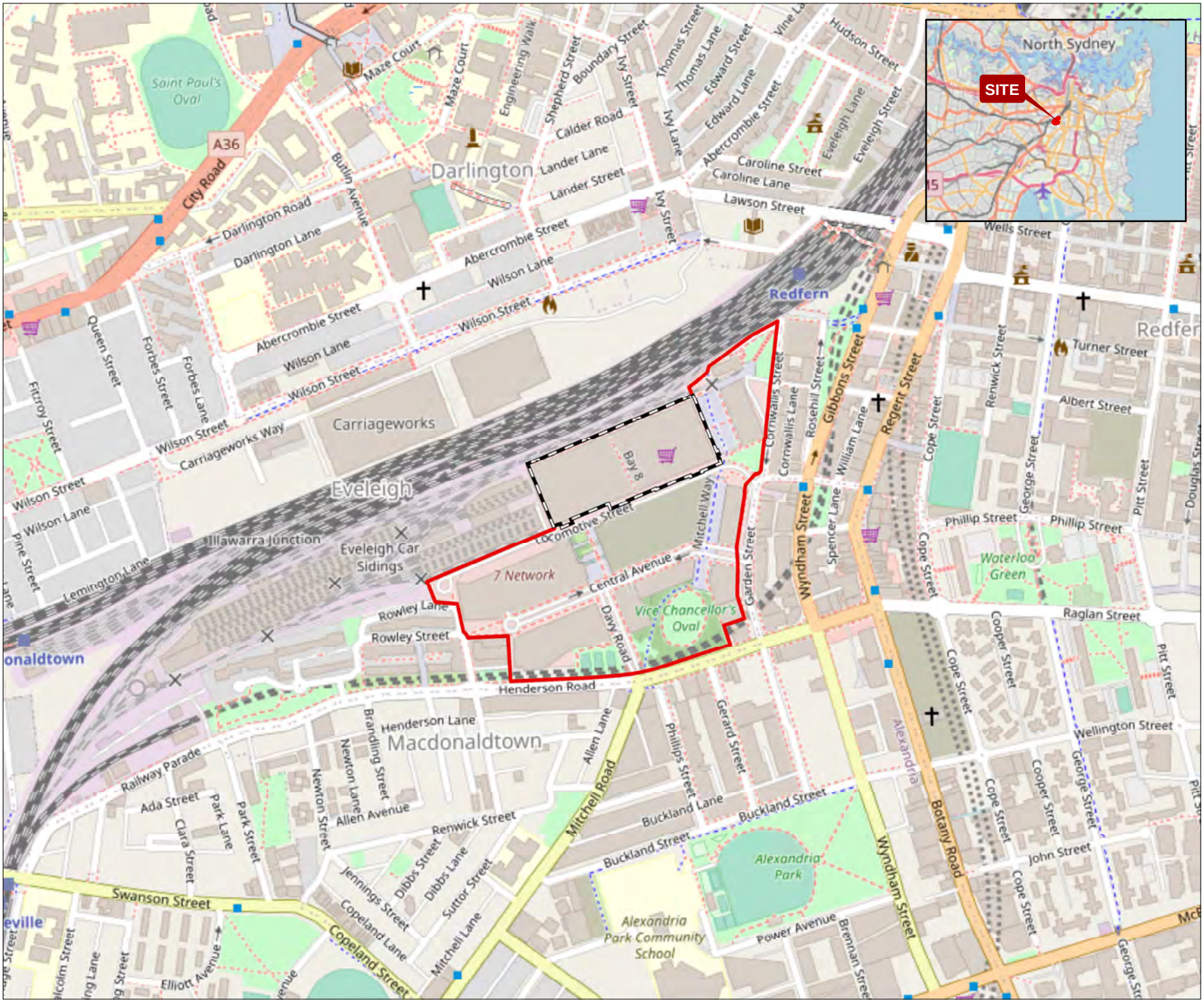
Figure 2 **Site Layout**

Figure 3 **Historical Soil Sample Locations**

Figure 4 **Historical Soil Vapour Sample Locations**

Figure 5A **Bays 1-2 North Capping Arrangements**

Figure 5B **Bays 1-2 South (Blacksmiths Workshop) Capping Arrangements**



Legend:

- Approximate Boundary – Broader South Eveleigh Precinct
- Locomotive Workshop - "The Site"

JBS&G

Job No: 51142

Client: Mirvac

Version: R59 Rev 0	Date: 21-Dec-2021
Drawn By: RF	Checked By: TF

Scale 1:7,500

0 100 200

metres

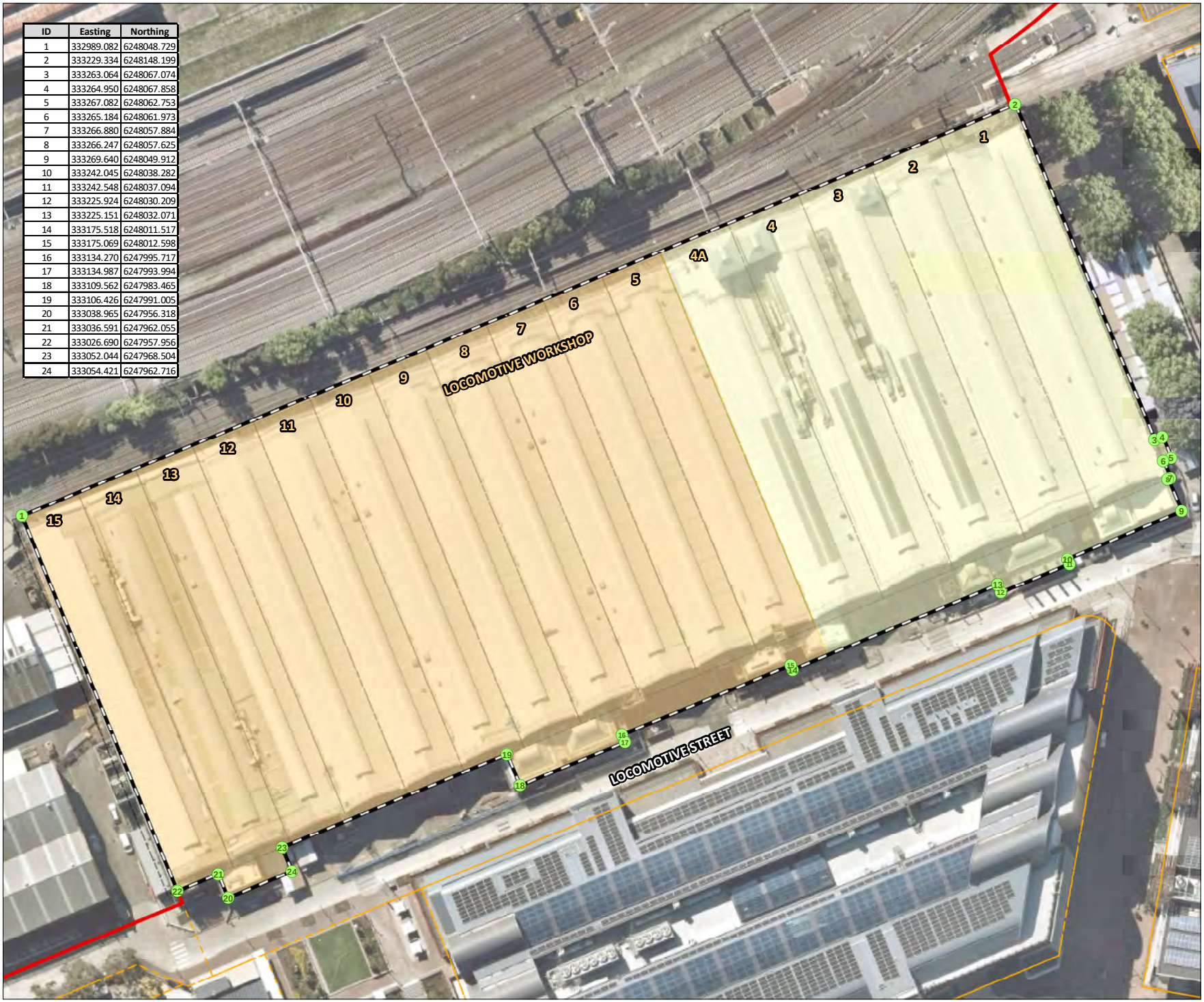
Coor. Sys. GDA 1994 MGA Zone 56

South Eveleigh Precinct (SEP)
Eveleigh, NSW

SITE LOCATION

FIGURE 1

File Name: N:\Projects\Mirvac\51142 ATP Validation\GIS\Maps\Reports\R59 Rev 0\51142_01_SiteLoc.mxd
Reference: © OpenStreetMap (and) contributors, CC-BY-SA



ID	Easting	Northing
1	332989.082	6248048.729
2	333229.334	6248148.199
3	333263.064	6248067.074
4	333264.950	6248067.858
5	333267.082	6248062.753
6	333265.184	6248061.973
7	333266.880	6248057.884
8	333266.247	6248057.625
9	333269.640	6248049.912
10	333242.045	6248038.282
11	333242.548	6248037.094
12	333225.924	6248030.209
13	333225.151	6248032.071
14	333175.518	6248011.517
15	333175.069	6248012.598
16	333134.270	6247995.717
17	333134.987	6247993.994
18	333109.562	6247983.465
19	333106.426	6247991.005
20	333038.965	6247956.318
21	333036.591	6247962.055
22	333026.690	6247957.956
23	333052.044	6247968.504
24	333054.421	6247962.716

Legend:

- Approximate Boundary – Broader South Eveleigh Precinct
- Cadastral Boundaries
- Locomotive Workshop - Bay Number
- Locomotive Workshop - "The Site"
- Retail Land Use
- Commercial Land Use

JBS&G

Job No: 51142

Client: Mirvac

Version: R59 Rev 0	Date: 12-Jan-2022
Drawn By: RF	Checked By: TF

Scale 1:1,250

0 20 40
metres

Coor. Sys. GDA 1994 MGA Zone 56

South Eveleigh Precinct (SEP), Eveleigh NSW

SITE LAYOUT

FIGURE 2

File Name: 51142_02_SiteLayout
Reference: Imagery - www.nearmap.com: Cadastre Boundary -maps.six.nsw.gov.au



Legend:

- Approximate Boundary – Broader South Eveleigh Precinct
- Cadastral Boundaries
- Locomotive Workshop - Bay Number
- Borehole Location - DP 2017
- Sample Location (JBS&G 2018a)
- In-situ Waste Classification (JBS&G 2019a)
- Delineation Sample Locations (JBS&G 2019a)

JBS&G

Job No: 51142

Client: Mirvac

Version: R59 Rev 0	Date: 12-Jan-2022
Drawn By: RF	Checked By: TF

Scale 1:1,250

0 20 40
metres

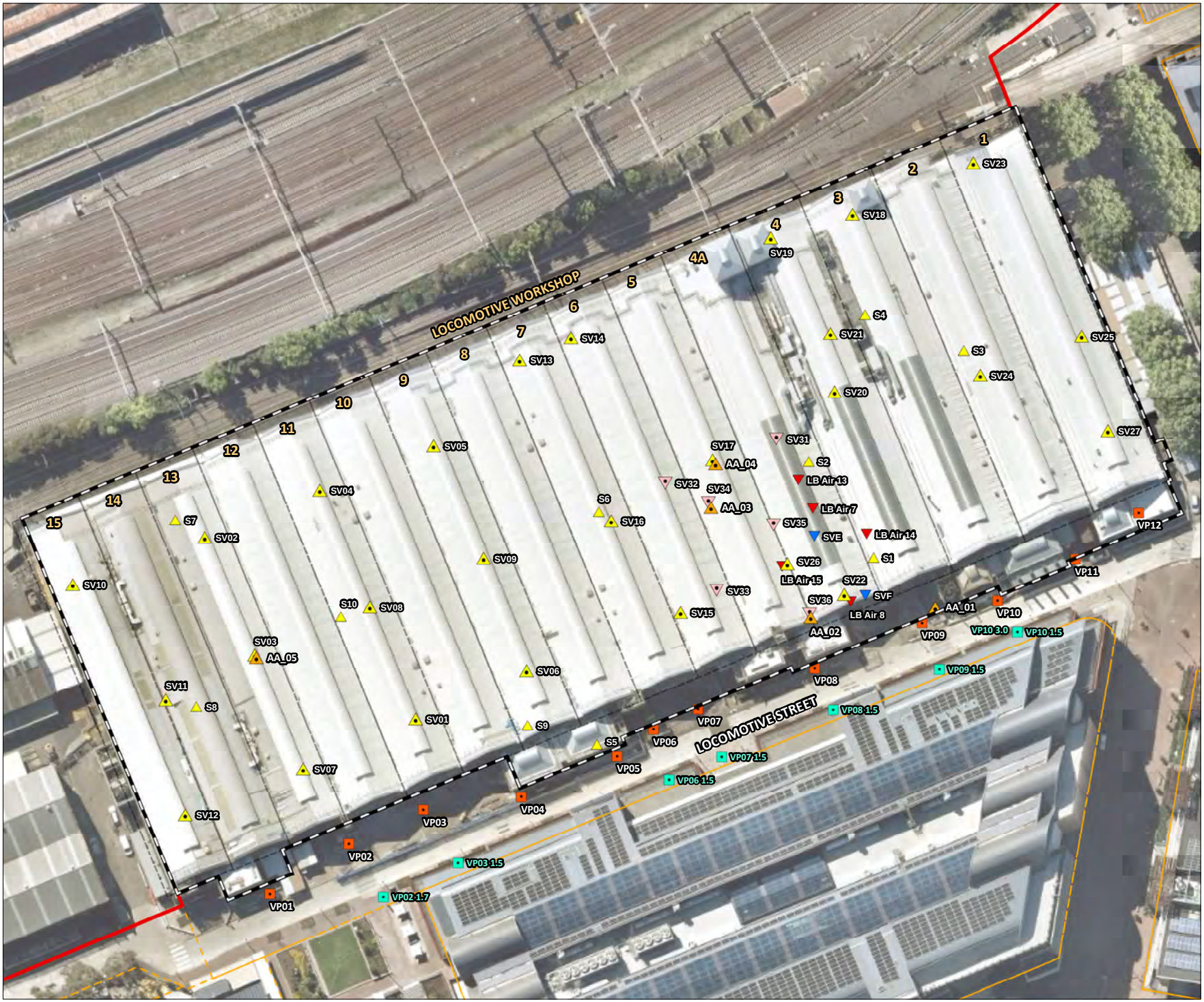
Coor. Sys. GDA 1994 MGA Zone 56

South Eveleigh Precinct, Eveleigh NSW

HISTORIC SOIL SAMPLE LOCATIONS

FIGURE 3

File Name: 51142_03_HistoricSoilSampleLocations
Reference: Imagery - www.nearmap.com: Cadastre Boundary -maps.six.nsw.gov.au



Legend:

- Approximate Boundary – Broader South Eveleigh Precinct
- Cadastral Boundaries
- Locomotive Workshop - Bay Number
- Locomotive Workshop - "The Site"
- Ambient Air DP 2010c
- Ambient Air ES 2015a
- Soil Vapour ES 2015a
- Sub-Slab Vapour Location - May 20 2016
- Sub-Slab Vapour Location - May 5-6 2016
- Sub-Slab Vapour Location - Feb 2017
- Soil Vapour Well Location - May 2017
- JBS&G Ambient Air Sample Location (July 2020)

JBS&G

Job No: 51142

Client: Mirvac

Version: R59 Rev 0	Date: 12-Jan-2022
Drawn By: RF	Checked By: TF

Scale 1:1,250

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metres

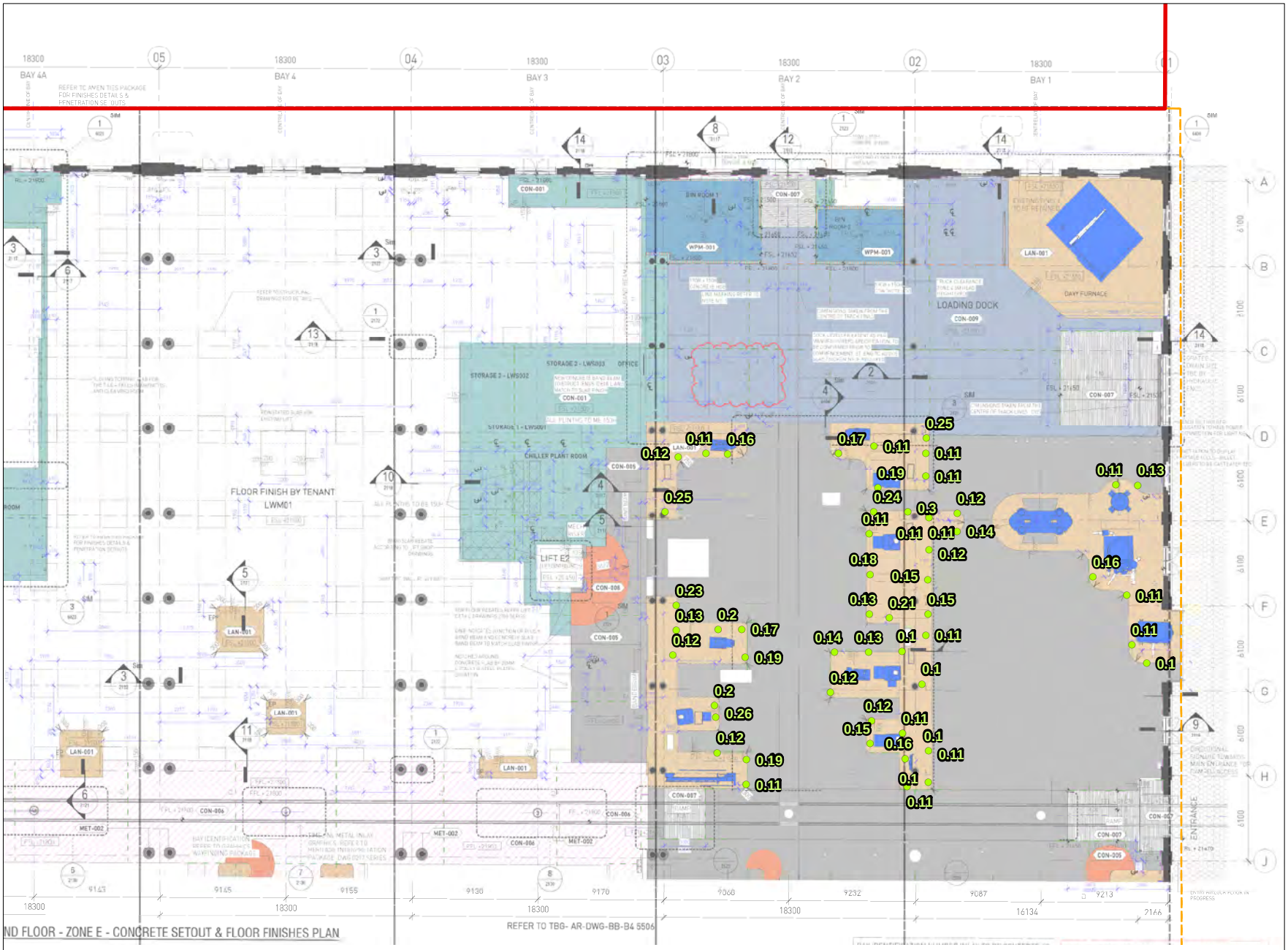
Coor. Sys. GDA 1994 MGA Zone 56

South Eveleigh Precinct (SEP)
Eveleigh NSW

HISTORIC SOIL VAPOUR SAMPLE LOCATIONS

FIGURE 4

File Name: 51142_04_HistoricSoilVapourSampleLocs
Reference: Imagery - www.nearmap.com: Cadastre Boundary -maps.six.nsw.gov.au



Legend:

- Approximate Boundary – Broader South Eveleigh Precinct
- Cadastral Boundaries
- Locomotive Workshop - Bay Number
- Retained Heritage Items
- Compacted Deco Granite
- New and Existing Concrete Hardstand Pavement
- Cap Validation Location

JBS&G

Job No: 51142

Client: Mirvac

Version: R59 Rev 0	Date: 31-Jan-2022
Drawn By: RF	Checked By: TF

Scale 1:400

0 4.5 9
metres

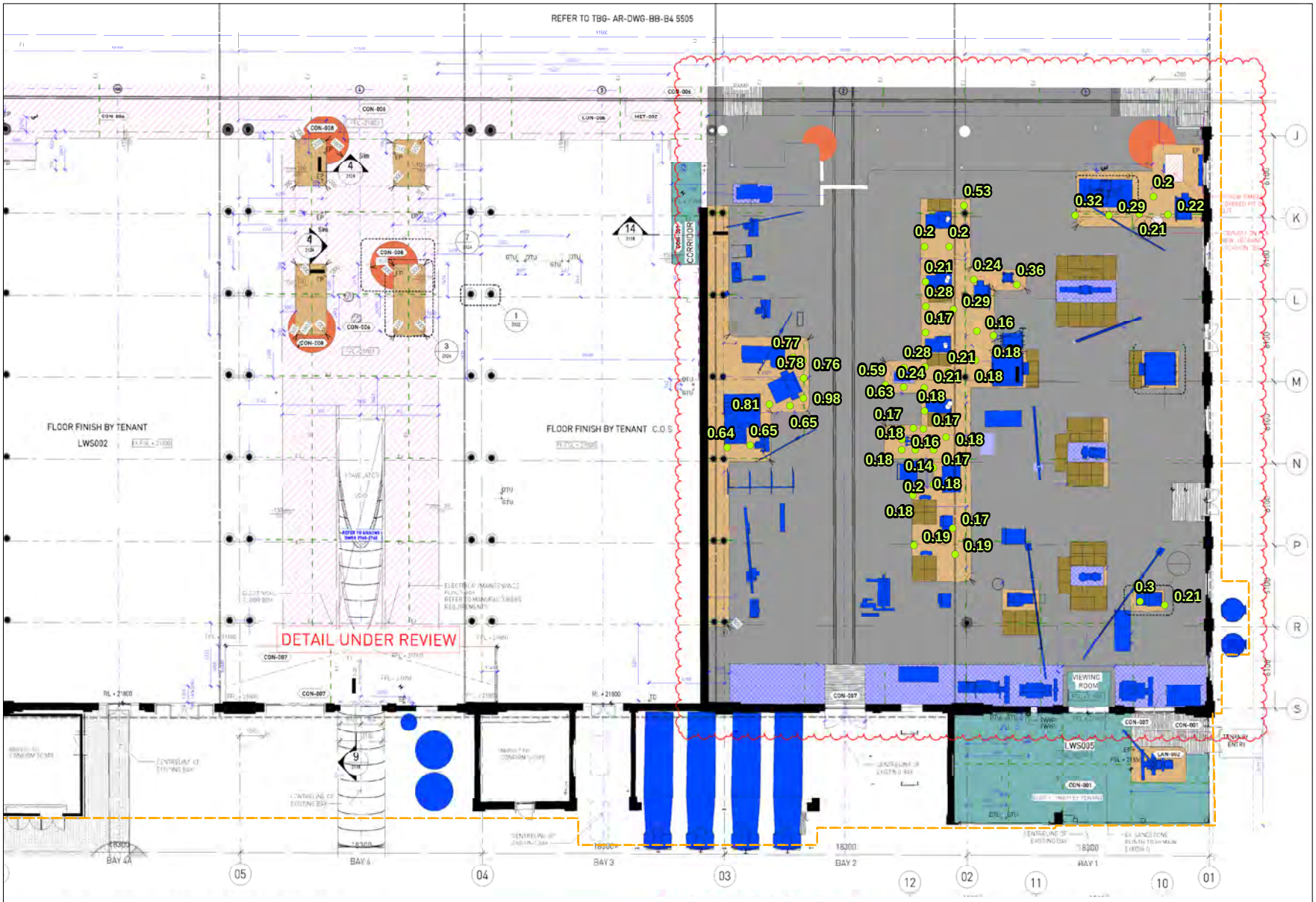
Coor. Sys. GDA 1994 MGA Zone 56

South Eveleigh Precinct, Eveleigh NSW

BAYS 1-2 NORTH CAPPING ARRANGEMENTS

FIGURE 5A

File Name: 51142_05A_Bays 1-2 North Capping Arrangementsv4
Reference: BAY1-2-ASBUILT-LEVELS-GRANITE / Floor Finishes Zone E - TBG-AR-DWG-BB-B4-210513_2



Legend:

- Approximate Boundary – Broader South Eveleigh Precinct
- Cadastral Boundaries
- Locomotive Workshop - Bay Number
- Retained Heritage Items
- Compacted Deco Granite
- New and Existing Concrete Hardstand Pavement
- Cap Validation Location

JBS&G

Job No: 51142

Client: Mirvac

Version: R59 Rev 0	Date: 31-Jan-2022
Drawn By: RF	Checked By: TF

Scale 1:425

0 5 10
metres

Coor. Sys. GDA 1994 MGA Zone 56

South Eveleigh Precinct, Eveleigh NSW

BAYS 1-2 SOUTH CAPPING ARRANGEMENTS

FIGURE 5B

File Name: 51142_05B_Bays 1-2 South Blacksmiths Workshop Capping Arrangementsv2
Reference: 190727-GS-SV-DWG-BB-B4-0072A-1 / GS-SV-DWG-BB-B4-0069A / Floor finishes Zone F - TBG-AR-DWG-BB-B4-2106[13]

Appendix A Summary Tables

Table A - Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

	Metals & Metalloids								TRHs (NEPC 2013)							BTEXN							Polycyclic Aromatic Hydrocarbons																					
	Arsenic (Total)	Cadmium	Chromium (Total)	Copper	Lead	Mercury (Inorganic)	Nickel	Zinc	>C10-C16 Fraction	>C16-C34 Fraction	>C34-C40 Fraction	>C10-C40 Fraction (Total)	>C10-C16 less Naphthalene (F2)	C6-C10 Fraction	C6-C10 less BTEX (F1)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene (Total)	Naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (lower bound)*	Benzo(a)pyrene TEQ (medium bound)*	Benzo(a)pyrene TEQ (upper bound)*	Benzo(b,j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Carcinogenic PAHs as B(a)P TEQ	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Phenanthrene	PAHs (Total)	Pyrene
	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	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	2	0.4	1	1	1	0.1	1	1	50	100	100	50	50	20	20	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.05	0.5	0.5	0.5	0.5	0.1	0.5	0.1	0.1		0.1	0.1	0.1	0.1	0.5	0.1
NEPM 2013 Soil HIL D	3000	900	3600	240000	1500	730	6000	400000																				40	40	40						40					4000	
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 0 to <1m													NL		260	3	NL	NL			230	NL																				
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 1 to <2m													NL		370	3	NL	NL			NL	NL																				
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 2 to <4m													NL		630	3	NL	NL			NL	NL																				
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil									1000	3500	10000			700																												

Sample ID	Date	Lab Report	Location																																										
BH200 0.64-0.7	BH200	19/04/2017	543119	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC01	BH200	19/04/2017	543119	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC01A	BH200	19/04/2017	165554	<4	<0.4	2	<1	1	<0.1	1	1	<50	<100	<100	<50	<50	<25	<25	<0.2	<1	<0.5	<1	<2	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.5	0.5	<0.5	-	<0.1	-	<0.1	<0.1	<0.172	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1
BH201_0.9-1.0	BH201	20/04/2017	543330	6.9	<0.4	21	640	190	0.1	15	72	<50	<100	<100	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	0.6	<0.5	<0.5	0.5	1.7	0.6
BH202_0.3-0.38	BH202	20/04/2017	543330	83	<0.4	18	730	190	0.1	26	56	<50	<100	<100	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH203 0.56-0.6	BH203	21/04/2017	543445	<2	<0.4	<5	52	19	<0.1	<5	12	<50	<100	<100	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH204 0.6-0.7	BH204	21/04/2017	543445	51	0.5	29	9500	2500	1	42	680	<50	1200	320	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	1	2.2	1.7	2.3	2.6	2.8	1.4	1.1	1.3	2.1	<0.5	2.562	4.4	<0.5	0.9	3.8	23.8	3.9
QC02		21/04/2017	543445	200	0.9	24	70,000	3000	0.7	59	1700	55	2500	700	-	55	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5 - 1.2	<0.5	0.6	1.4	2.6	2.1	2.8	3.1	3.3	1.9	1.5	1.4	2.6	<0.5	3.091	5.6	0.9	1.1	6.7	34.6	5
QC02A		21/04/2017	165740	<4	<0.4	4	4	71	<0.1	1	11	<50	<100	<100	<50	<50	<25	<25	<0.2	<1	<0.5	<1	<2	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.5	0.5	<0.5	-	<0.1	-	<0.1	<0.1	<0.172	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1
BH204 0.9-1.0		21/04/2017	543445	33	3.4	22	5300	2400	1	34	780	<50	<100	<100	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	1.7	3.1	2.5	3.4	3.6	3.9	1.9	1.4	2	3.1	<0.5	3.615	6.8	0.6	1.2	7	37.2	5.9
BH205 0.32-0.5	BH205	21/04/2017	543445	40	0.7	26	8600	1300	0.3	49	1000	78	1200	250	-	72	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	6 - 7.5	1.3	0.8	4	4.3	3.3	5	5	5	2.1	1.7	2.8	4.1	0.6	5.028	11	3.6	1.5	16	74.2	9.6
BH206 0.28-0.35	BH206	21/04/2017	543445	6.4	<0.4	7.1	74	170	<0.1	7.8	39	<50	160	<100	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.64	0.6	<0.5	<0.5	<0.5	1.7	0.5
BH207 0.62-0.7	BH207	21/04/2017	543445	<2	<0.4	<5	35	23	<0.1	<5	16	<50	<100	<100	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	0.7	<0.5	2	2.8	3.7	3.9	4.2	2.1	2.7	1.9	2	<0.5	3.927	1.7	<0.5	2.3	<0.5	20.7	2.5
BH208 0.3-0.4	BH208	21/04/2017	543445	9.4	<0.4	8.1	680	210	<0.1	7	62	120	2200	790	-	120	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<5	<5	5.7	9.7	7	8.1	11	15	<5	<5	<5	9.1	<5	11.34	17	<5	<5	15	82.5	19
BH208 0.6-0.7		21/04/2017	543445	6.4	<0.4	13	140	120	<0.1	<5	17	<50	280	110	-	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	1.1	0.6	0.8	1.1	1.4	<0.5	<0.5	<0.5	0.8	<0.5	1.071	1.3	<0.5	0.5	1	6.7	1.4
BH01 0.07-0.15	25/07/2018	609598	BH01	15	<0.4	8.3	370	260	0.2	25	120	<50	640	310	950	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH01 0.15-0.25	25/07/2018	609598	BH01	28	<0.4	6.8	140	180	<0.1	18	77	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH01 0.5-0.6	25/07/2018	609598	BH01	<2	<0.4	<5	<5	5.8	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
~~BH02 0.02 0.15~~	~~25/07/2018~~	~~609598~~	~~BH02~~	~~<2~~	~~<0.4~~	~~63~~	~~130~~	~~72~~	~~<0.1~~	~~260~~	~~140~~	~~<50~~	~~310~~	~~130~~	~~440~~	~~<50~~	~~<20~~	~~<20~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<0.3~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~0.6~~	~~0.7~~	~~<0.5~~	~~<0.5~~	~~0.7~~	~~1.2~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~0.8~~	~~<0.5~~	~~0.6555~~	~~1.4~~	~~<0.5~~	~~<0.5~~	~~1.7~~	~~6.6~~	~~1.4~~
~~BH02 0.3-0.4~~	~~25/07/2018~~	~~609598~~	~~BH02~~	~~3.1~~	~~<0.4~~	~~45~~	~~230~~	~~95~~	~~<0.1~~	~~120~~	~~120~~	~~<50~~	~~570~~	~~160~~	~~730~~	~~<50~~	~~<20~~	~~<20~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<0.3~~	~~<0.5~~	~~0.8~~	~~<0.5~~	~~2.6~~	~~5~~	~~2.3~~	~~3.7~~	~~3.7~~	~~3.7~~	~~1.3~~	~~1~~	~~1.6~~	~~4.5~~	~~0.5~~	~~3.735~~	~~8.6~~	~~0.8~~	~~0.9~~	~~8.2~~	~~46.8~~	~~8.7~~
~~QC25072018-A~~	~~25/07/2018~~	~~197101~~	~~BH02~~	~~<4~~	~~<0.4~~	~~14~~	~~230~~	~~61~~	~~<0.1~~	~~61~~	~~87~~	~~<50~~	~~920~~	~~130~~	~~1000~~	~~<50~~	~~<25~~	~~<25~~	~~<0.2~~	~~<1~~	~~<0.5~~	~~<1~~	~~<2~~	~~<1~~	~~<1 0.4~~	~~3.1~~	~~<0.1~~	~~8.8~~	~~16~~	~~11~~	~~16~~	~~16~~	~~16~~	—	~~3.8~~	—	~~13~~	~~1.3~~	~~14.41~~	~~27~~	~~2.4~~	~~3.4~~	~~27~~	~~160~~	~~26~~
~~QC25072018-A - [TRIPLICATE]~~	~~25/07/2018~~	~~197101~~	~~BH02~~	~~6~~	~~<0.4~~	~~17~~	~~1800~~	~~170~~	~~<0.1~~	~~79~~	~~200~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
~~QC25072018~~	~~26/07/2018~~	~~609598~~	~~BH02~~	~~3.4~~	~~<0.4~~	~~56~~	~~170~~	~~77~~	~~<0.1~~	~~120~~	~~140~~	~~<50~~	~~1300~~	~~270~~	~~1570~~	~~<50~~	~~<20~~	~~<20~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<0.3~~	~~<0.5~~	~~1.3~~	~~<0.5~~	~~4.8~~	~~9.8~~	~~4.1~~	~~7.3~~	~~7.3~~	~~7.3~~	~~3.1~~	~~1.9~~	~~2.8~~	~~7.6~~	~~1.3~~	~~7.255~~	~~14~~	~~1.1~~	~~1.9~~	~~15~~	~~82.7~~	~~14~~
BH03 0.07-0.12	25/07/2018	609598	BH03	2	<0.4	12	8	6.4	<0.1	7.5	32	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH03 0.5-0.6	25/07/2018	609598	BH03	5.5	<0.4	8.2	17	14	<0.1	<5	8.5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH03 1.0-1.1	25/07/2018	609598	BH03	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH04 0.15-0.25	25/07/2018	609598	BH04	6.8	<0.4	50	250	160	<0.1	67	160	<50	140	<100	140	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	1	0.5	0.6	0.9	1.3	<0.5	<0.5	<0.5	1.1	<0.5	0.9385	2.2	<0.5	<0.5	1.1	8.3	2.4
BH04 0.25-0.35	25/07/2018	609598	BH04	3.9	<0.4	12	130	130	<0.1	9.1	65	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH04 08-0.9	25/07/2018	609598	BH04	<2	<0.4	<5	<5	<5	<0.1	<5	7.9	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH05 0.15-0.25	25/07/2018	609598	BH05	26	<0.4	19	180	130	0.2	40	85	<50	130	<100	130	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH06 0.4-0.5	25/07/2018	609598	BH06	4.6	<0.4	7	170	100	<0.1	5.9	41	<50	820	110	930	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH06 0.7-0.8	25/07/2018	609598	BH06	<2	<0.4	<5	8.7	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH07 0.35-0.40	25/07/2018	609598	BH07	3.9	<0.4	11	37	95	<0.1	14	130	<50	350	<100	350	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH07 0.7-0.8	25/07/2018	609598	BH07	<2	<0.4	<5	<5	6.8	<0.1	<5	13	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH08 0.1-0.2	26/07/2018	609598	BH08	2	<0.4	17	99	13	<0.1	24	57	<50	160	210	370	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH08 0.6-0.7	26/07/2018	609598	BH08	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH10 0.06-0.1	26/07/2018	609598	BH10	6.2	<0.4	20	120	96	<0.1	82	130	<50	150	<100	150	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH10 0.2-0.3	26/07/2018	609598	BH10	13	<0.4	8.2	560	150	<0.1	25	300	<50	210	<100	210	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC26072018	26/07/2018	609598	BH10	8.5	<0.4	8.5	390	140	<0.1	27	240	<50	220	<100	220	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC26072018-A	26/07/2018	197101	BH10	5	<0.4	5	420	120	<0.1	17	180	<50	<100	<100	<50	<50	<25	<25	<0.2	<1	<0.5	<1	<2	<1	<0.1	<0.1	<0.1	<0.1	0.1	0.08	<0.5	<0.5	<0.5	-	<0.1	-	0.1	<0.1	0.1465	0.2	<0.1	<0.1	0.2	0.92	0.2
BH11 0.2-0.4	26/07/2018	609598	BH11	5.5	<0.4	25	150	120	<0.1	21	130	<50	150	<100	150	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH11 0.8-0.9	26/07/2018	609598	BH11	<2	<0.4	<5	7.4	14	<0.1	<5	5.4	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH12 0.3-0.4	26/07/2018	609598	BH12	6.8	<0.4	12	43	310	<0.1	<5	110	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH12 1-1.1	26/07/2018	609598	BH12	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP400 0.5-0.6	24/01/2019	637874	TP400	4.6	<0.4	12	73	82	<0.1	<5	93	<50	480	<100	480	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	1	0.8	1	1.3	1.6	<0.5	<0.5	0.8	0.7	<0.5	1.29	1.5	<0.5	<0.5	1.4	7.9	1.7
TP400 2.5-2.6	24/01/2019	637874	TP400	4.2	<0.4	17	82	130	<0.1	<5	99	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	0.6	0.6
TP400 3-3.1	24/01/2019	637874	TP400	<2	<0.4	<5	<5	<5	<0.1	<5	10	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP401 0.3	24/01/2019	637874	TP401	4.7	<0.4	8.9	300	160	0.2	6.1	220	<50	260	<100	260	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	0.9	1.8	1.2	1.6	1.9	2.1	0.7	0.7	<0.5	1.2	<0.5	1.854	3.6	<0.5	1.1	2.8	18	4
TP401 0.5-0.6	24/01/2019	637874	TP401	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
~~TP402 0.3~~	~~24/01/2019~~	~~637874~~	~~TP402~~	~~8.6~~	~~<0.4~~	~~20~~	~~77~~	~~160~~	~~<0.1~~	~~9~~	~~62~~	~~<50~~	~~<100~~	~~<100~~	~~<100~~	~~<50~~	~~<20~~	~~<20~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<0.3~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~0.6~~	~~1.2~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<1.21~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TP402 0.4-0.5~~	~~24/01/2019~~	~~637874~~	~~TP402~~	~~6.8~~	~~<0.4~~	~~16~~	~~170~~	~~720~~	~~0.1~~	~~9.6~~	~~150~~	~~<50~~	~~<100~~	~~<100~~	~~<100~~	~~<50~~	~~<20~~	~~<20~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<0.3~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~0.6~~	~~1.2~~	~~<0.5~~	~~<0.5~~

Table A - Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

				Organochlorine Pesticides																						Chlorinated Alkanes																	
				4,4-DDE	Aldrin	Aldrin + Dieldrin (Sum of Total)	alpha-BHC	beta-BHC	Chlordane	DDD	DDT	Dieldrin	DDT+DDE+DDD (Sum of Total)	delta-BHC	Endosulfan alpha	Endosulfan beta	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor Epoxide	Lindane	Methoxychlor	Toxaphene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	Carbon tetrachloride	Chloroethane	Chloromethane	Dichlorodifluoromethane	Dichloromethane	Trichlorofluoromethane
				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	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1	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	0.5	0.5
NEPM 2013 Soil HIL D						45			530				3600					100			50			2500	160																			
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 0 to <1m																																											
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 1 to <2m																																											
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 2 to <4m																																											
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																																											
Sample ID	**Date**	**Lab Report**	**Location**																																									
BH200 0.64-0.7	BH200	19/04/2017	543119	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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	0.8	<0.5
QC01	BH200	19/04/2017	543119	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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	0.7	<0.5
QC01A	BH200	19/04/2017	165554	<0.1	<0.1	<0.2	<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	<1	<1	<1	<1	-	<1
BH201_0.9-1.0	BH201	20/04/2017	543330	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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
BH202_0.3-0.38	BH202	20/04/2017	543330	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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	0.6	<0.5
BH203 0.56-0.6	BH203	21/04/2017	543445	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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
BH204 0.6-0.7	BH204	21/04/2017	543445	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<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	1.7	<0.5
QC02		21/04/2017	543445	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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	2.5	<0.5
QC02A		21/04/2017	165740	<0.1	<0.1	<0.2	<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	<1	<1	<1	<1	-	<1
BH204 0.9-1.0		21/04/2017	543445	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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
BH205 0.32-0.5	BH205	21/04/2017	543445	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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	6.1	<0.5
BH206 0.28-0.35	BH206	21/04/2017	543445	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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	2	<0.5
BH207 0.62-0.7	BH207	21/04/2017	543445	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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
BH208 0.3-0.4	BH208	21/04/2017	543445	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<1	<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	0.8	<0.5
BH208 0.6-0.7		21/04/2017	543445	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<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	3	<0.5
BH01 0.07-0.15	25/07/2018	609598	BH01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH01 0.15-0.25	25/07/2018	609598	BH01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH01 0.5-0.6	25/07/2018	609598	BH01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
~~BH02 0.02-0.15~~	~~25/07/2018~~	~~609598~~	~~BH02~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	~~<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~~
~~BH02 0.3-0.4~~	~~25/07/2018~~	~~609598~~	~~BH02~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	~~<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~~
~~QC25072018 A~~	~~25/07/2018~~	~~197101~~	~~BH02~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<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~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~—~~	~~<1~~
~~QC25072018 A - [TRIPLICATE]~~	~~25/07/2018~~	~~197101~~	~~BH02~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
~~QC25072018~~	~~26/07/2018~~	~~609598~~	~~BH02~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	~~<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~~
BH03 0.07-0.12	25/07/2018	609598	BH03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH03 0.5-0.6	25/07/2018	609598	BH03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH03 1.0-1.1	25/07/2018	609598	BH03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH04 0.15-0.25	25/07/2018	609598	BH04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH04 0.25-0.35	25/07/2018	609598	BH04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH04 08-0.9	25/07/2018	609598	BH04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH05 0.15-0.25	25/07/2018	609598	BH05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH06 0.4-0.5	25/07/2018	609598	BH06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH06 0.7-0.8	25/07/2018	609598	BH06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH07 0.35-0.40	25/07/2018	609598	BH07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH07 0.7-0.8	25/07/2018	609598	BH07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH08 0.1-0.2	26/07/2018	609598	BH08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH08 0.6-0.7	26/07/2018	609598	BH08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH10 0.06-0.1	26/07/2018	609598	BH10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH10 0.2-0.3	26/07/2018	609598	BH10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
QC26072018	26/07/2018	609598	BH10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
QC26072018-A	26/07/2018	197101	BH10	<0.1	<0.1	<0.2	<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	<1	<1	<1	<1	-	<1
BH11 0.2-0.4	26/07/2018	609598	BH11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH11 0.8-0.9	26/07/2018	609598	BH11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH12 0.3-0.4	26/07/2018	609598	BH12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
BH12 1-1.1	26/07/2018	609598	BH12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
TP400 0.5-0.6	24/01/2019	637874	TP400	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
TP400 2.5-2.6	24/01/2019	637874	TP400	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
TP400 3-3.1	24/01/2019	637874	TP400	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
TP401 0.3	24/01/2019	637874	TP401	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
TP401 0.5-0.6	24/01/2019	637874	TP401	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
~~TP402 0.3~~	~~24/01/2019~~	~~637874~~	~~TP402~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	~~<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~~
~~TP402 0.4-0.5~~	~~24/01/2019~~	~~637874~~	~~TP402~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	~~<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~~
~~TP402 0.5-0.6~~	~~24/01/2019~~	~~637874~~	~~TP402~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	~~<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~~
~~TP402-B 0.3-0.4~~	~~20/03/2019~~	~~646797~~	~~TP402-B~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~

Table A - Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

				Chlorinated Alkenes											Polychlorinated Biphenyls								Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons							Chlorinated Benzenes						Trihalomethanes			
				1,1-dichloroethene	1,3-dichloropropene	3-chloropropene	4-chlorotoluene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	Bromobenzene	Isopropylbenzene	Styrene	1,2-dibromoethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Bromomethane	Dibromomethane	Iodomethane	1,2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Hexachlorobenzene	Bromodichloromethane	Chloroform	Dibromochloromethane	Tribromomethane
				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	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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	0.05	0.5	0.5	0.5	0.5
NEPM 2013 Soil HIL D																						7																	80				
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 0 to <1m																																											
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 1 to <2m																																											
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 2 to <4m																																											
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																																											
Sample ID	Date	Lab Report	Location																																									
BH200 0.64-0.7	BH200	19/04/2017	543119	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC01	BH200	19/04/2017	543119	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC01A	BH200	19/04/2017	165554	<1	<2	-	<1	<1	<1	<1	<1	<1	<1	<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	-	<1	<1	<1	<1	<0.1	<1	<1	<1	<1
BH201_0.9-1.0	BH201	20/04/2017	543330	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH202_0.3-0.38	BH202	20/04/2017	543330	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH203 0.56-0.6	BH203	21/04/2017	543445	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH204 0.6-0.7	BH204	21/04/2017	543445	<0.5	<1	<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	<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
QC02		21/04/2017	543445	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
QC02A		21/04/2017	165740	<1	<2	-	<1	<1	<1	<1	<1	<1	<1	<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	-	<1	<1	<1	<1	<0.1	<1	<1	<1	<1
BH204 0.9-1.0		21/04/2017	543445	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH205 0.32-0.5	BH205	21/04/2017	543445	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH206 0.28-0.35	BH206	21/04/2017	543445	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH207 0.62-0.7	BH207	21/04/2017	543445	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH208 0.3-0.4	BH208	21/04/2017	543445	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH208 0.6-0.7		21/04/2017	543445	<0.5	<1	<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	<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
BH01 0.07-0.15	25/07/2018	609598	BH01	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH01 0.15-0.25	25/07/2018	609598	BH01	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH01 0.5-0.6	25/07/2018	609598	BH01	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
~~BH02 0.02-0.15~~	~~25/07/2018~~	~~609598~~	~~BH02~~	~~<0.5~~	~~<1~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<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~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~BH02 0.3-0.4~~	~~25/07/2018~~	~~609598~~	~~BH02~~	~~<0.5~~	~~<1~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<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~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~QC25072018 A~~	~~25/07/2018~~	~~197101~~	~~BH02~~	~~<1~~	~~<2~~	—	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~	—	—	~~<1~~	~~<1~~	—	~~<1~~	~~<1~~	~~<1~~	~~<1~~	~~<0.1~~	~~<1~~	~~<1~~	~~<1~~	~~<1~~
~~QC25072018 A - [TRIPLICATE]~~	~~25/07/2018~~	~~197101~~	~~BH02~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
~~QC25072018~~	~~26/07/2018~~	~~609598~~	~~BH02~~	~~<0.5~~	~~<1~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<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~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
BH03 0.07-0.12	25/07/2018	609598	BH03	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH03 0.5-0.6	25/07/2018	609598	BH03	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH03 1.0-1.1	25/07/2018	609598	BH03	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH04 0.15-0.25	25/07/2018	609598	BH04	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH04 0.25-0.35	25/07/2018	609598	BH04	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH04 08-0.9	25/07/2018	609598	BH04	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH05 0.15-0.25	25/07/2018	609598	BH05	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH06 0.4-0.5	25/07/2018	609598	BH06	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH06 0.7-0.8	25/07/2018	609598	BH06	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH07 0.35-0.40	25/07/2018	609598	BH07	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH07 0.7-0.8	25/07/2018	609598	BH07	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH08 0.1-0.2	26/07/2018	609598	BH08	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH08 0.6-0.7	26/07/2018	609598	BH08	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH10 0.06-0.1	26/07/2018	609598	BH10	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH10 0.2-0.3	26/07/2018	609598	BH10	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
QC26072018	26/07/2018	609598	BH10	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
QC26072018-A	26/07/2018	197101	BH10	<1	<2	-	<1	<1	<1	<1	<1	<1	<1	<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	-	<1	<1	<1	<1	<0.1	<1	<1	<1	<1
BH11 0.2-0.4	26/07/2018	609598	BH11	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH11 0.8-0.9	26/07/2018	609598	BH11	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH12 0.3-0.4	26/07/2018	609598	BH12	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
BH12 1-1.1	26/07/2018	609598	BH12	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
TP400 0.5-0.6	24/01/2019	637874	TP400	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
TP400 2.5-2.6	24/01/2019	637874	TP400	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
TP400 3-3.1	24/01/2019	637874	TP400	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
TP401 0.3	24/01/2019	637874	TP401	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
TP401 0.5-0.6	24/01/2019	637874	TP401	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
~~TP402 0.3~~	~~24/01/2019~~	~~637874~~	~~TP402~~	~~<0.5~~	~~<1~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<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~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~

Table A - Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

	Metals & Metalloids								TRHs (NEPC 2013)							BTEXN							Polycyclic Aromatic Hydrocarbons																					
	Arsenic (Total)	Cadmium	Chromium (Total)	Copper	Lead	Mercury (Inorganic)	Nickel	Zinc	>C10-C16 Fraction	>C16-C34 Fraction	>C34-C40 Fraction	>C10-C40 Fraction (Total)	>C10-C16 less Naphthalene (F2)	C6-C10 Fraction	C6-C10 less BTEX (F1)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene (Total)	Naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (lower bound)*	Benzo(a)pyrene TEQ (medium bound)*	Benzo(a)pyrene TEQ (upper bound)*	Benzo(b,j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Carcinogenic PAHs as B(a)P TEQ	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Phenanthrene	PAHs (Total)	Pyrene
	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	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	2	0.4	1	1	1	0.1	1	1	50	100	100	50	50	20	20	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.05	0.5	0.5	0.5	0.5	0.1	0.5	0.1	0.1		0.1	0.1	0.1	0.1	0.5	0.1
NEPM 2013 Soil HIL D	3000	900	3600	240000	1500	730	6000	400000																				40	40	40						40					4000	
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 0 to <1m													NL		260	3	NL	NL			230	NL																				
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 1 to <2m													NL		370	3	NL	NL			NL	NL																				
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 2 to <4m													NL		630	3	NL	NL			NL	NL																				
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil									1000	3500	10000			700																												
Sample ID	**Date**	**Lab Report**	**Location**																																								
TP410 0.25-0.3	25/01/2019	637874	TP410	6.8	0.6	24	1000	430	1.6	38	730	<50	700	110	810	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	5.3	4.9	4.1	6	6	6	2.1	1.5	3.1	4.5	0.6	5.97	16	<0.5	2	23	83.1	16
QA20190125-01	25/01/2019	637874	TP410	8.8	0.6	23	1600	460	1.4	41	600	51	2400	470	2921	51	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	1.4	5.3	5	7.7	7.7	7.7	3.2	1.9	4.6	4	1	7.669	10	<0.5	3	4.8	55.2	11
QC20190125-01	25/01/2019	210371	TP410	28	2	75	9700	1000	1.6	110	2300	110	2300	640	3100	110	<25	<25	<0.2	<1	<0.5	<1	<2	<1	<1 - 0.4	0.7	0.1	2.5	9	6.5	9.6	9.6	9.6	-	3	-	7.2	0.8	8.562	16	0.3	2.6	9	85	16
TP410 1.4-1.5	25/01/2019	637874	TP410	5.9	<0.4	10	240	65	<0.1	<5	81	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP411 0.6-0.7	25/01/2019	637874	TP411	17	<0.4	9.3	3200	690	0.2	7.9	220	<50	410	140	550	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	1.2	2.6	1.8	2.5	2.8	3	1.1	0.7	1.5	1.7	<0.5	2.764	5.8	<0.5	1.7	4.2	28.1	5.8
TP411 2.0-2.1	25/01/2019	637874	TP411	4.9	<0.4	10	8.2	23	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP411 3.5-3.6	25/01/2019	637874	TP411	19	<0.4	14	26	17	<0.1	<5	6	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP412 0.5-0.6	25/01/2019	637874	TP412	9.2	<0.4	8.6	1100	610	0.2	7	87	<50	790	110	900	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5 - 0.7	0.6	<0.5	2.3	5.1	3.4	5.4	5.4	5.4	2.2	1.3	2.8	3.4	0.7	5.417	12	1.1	2.6	11	61.2	12
TP412 0.9-1.0	25/01/2019	637874	TP412	2.4	<0.4	7.8	5.4	5.6	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP413 0.6-0.7	29/01/2019	638188	TP413	2.9	<0.4	39	68	110	<0.1	7	24	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP413 1.6-1.7	29/01/2019	638188	TP413	<2	<0.4	17	<5	12	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP415 0.6-0.7	29/01/2019	638188	TP415	27	<0.4	36	18	24	<0.1	<5	12	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP415 2.1-2.2	29/01/2019	638188	TP415	19	<0.4	22	<5	32	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP414 0.3-0.4	31/01/2019	638290	TP414	8.7	<0.4	6.3	230	220	0.1	23	41	<50	540	<100	540	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	0.8	<0.5	<0.5	1	2.6	0.8
TP414-0.3-0.5	7/02/2019	639656	TP414	11	<0.4	8.6	660	510	0.1	19	180	56	420	<100	476	56	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	2.4	1.9	2.7	2.9	3.2	1.4	1.4	1.8	1.8	<0.5	2.912	2.2	<0.5	1.7	1.5	18.8	2.7
QA20190130-02	29/01/2019	638188	TP416	9.9	0.5	14	1100	1100	0.2	13	220	<50	450	110	560	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	2.1	4.8	8.4	11	11	11	4.1	1.6	4.8	4.6	1	11.02	9.8	<0.5	1.9	6.7	61.8	12
QC20190129-02	29/01/2019	210631	TP416	9	0.7	15	850	270	0.2	12	210	<50	300	140	430	<50	<25	<25	<0.2	<1	<0.5	<1	<2	<1	<1 - 0.2	0.1	0.4	0.9	1.9	1.7	2.5	2.5	2.5	-	0.9	-	1.8	0.3	2.287	3.3	0.2	0.7	2.6	21	4
TP416 0.3-0.4	29/01/2019	638188	TP416	8.2	<0.4	9.1	530	220	0.1	9.3	200	<50	780	180	960	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	1.5	4.9	8.1	12	12	12	3.5	3.5	5.2	5.4	1.7	11.78	7.9	<0.5	5.3	7.2	64.2	10
TP416 0.8-0.9	29/01/2019	638188	TP416	6.2	<0.4	11	<5	15	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
~~TP417 0.26-0.4~~	~~29/01/2019~~	~~638188~~	~~TP417~~	~~7.4~~	~~<0.4~~	~~6~~	~~260~~	~~340~~	~~0.1~~	~~18~~	~~53~~	~~<50~~	~~290~~	~~<100~~	~~290~~	~~<50~~	~~<20~~	~~<20~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<0.3~~	~~<0.5 1.1~~	~~0.5~~	~~<0.5~~	~~1.3~~	~~1.8~~	~~2.9~~	~~4.5~~	~~4.5~~	~~4.5~~	~~1.3~~	~~1.7~~	~~1.8~~	~~1.7~~	~~0.8~~	~~4.454~~	~~4~~	~~0.8~~	~~2.3~~	~~5.1~~	~~30.9~~	~~3.8~~
~~TP417 A 0.3-0.4~~	~~29/01/2019~~	~~646797~~	~~TP417 A~~	~~3.5~~	~~<0.4~~	~~7.6~~	~~79~~	~~88~~	~~<0.1~~	~~<5~~	~~33~~	~~<50~~	~~430~~	~~<100~~	~~430~~	~~<50~~	~~<20~~	~~<20~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<0.3~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~1.5~~	~~2.6~~	~~2.3~~	~~3.1~~	~~3.3~~	~~3.6~~	~~1.3~~	~~1.1~~	~~2~~	~~2.1~~	~~<0.5~~	~~3.342~~	~~5.5~~	~~0.8~~	~~1.7~~	~~5.8~~	~~32~~	~~5.3~~
~~TP417 C 0.3-0.4~~	~~20/03/2019~~	~~646797~~	~~TP417 C~~	~~67~~	~~<0.4~~	~~23~~	~~610~~	~~930~~	~~0.5~~	~~46~~	~~210~~	~~<50~~	~~2400~~	~~540~~	~~2940~~	~~<50~~	~~<20~~	~~<20~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<0.3~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~0.5~~	~~1.9~~	~~1.8~~	~~2.5~~	~~2.7~~	~~3~~	~~1.5~~	~~1.2~~	~~1.6~~	~~1.6~~	~~<0.5~~	~~2.738~~	~~3~~	~~<0.5~~	~~1.6~~	~~1.7~~	~~19.4~~	~~3~~
TP420 0.4-0.5	29/01/2019	638188	TP420	18	<0.4	14	3400	800	0.3	20	150	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.64	1	<0.5	0.6	1	3.6	1
TP421 0.3-0.4	29/01/2019	638188	TP421	2.3	<0.4	<5	53	87	<0.1	<5	52	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QA20190130-03	29/01/2019	638188	TP421	<2	<0.4	<5	<5	13	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC20190129-03	29/01/2019	210631	TP421	<4	<0.4	3	6	8	<0.1	1	9	<50	<100	<100	<50	<50	<25	<25	<0.2	<1	<0.5	<1	<2	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.5	<0.5	<0.5	-	<0.1	-	<0.1	<0.1	<0.172	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1
TP421 1.2-1.3	29/01/2019	638188	TP421	3.6	<0.4	6.3	5.2	11	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP422 0.1-0.2	29/01/2019	638188	TP422	9.3	<0.4	19	240	170	0.1	16	180	<50	230	<100	230	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	1.1	1.1	1.5	1.8	2	0.9	0.8	0.9	0.6	<0.5	1.794	2.2	<0.5	1.4	1.4	12.7	2.3
TP423 0.9-1.0	29/01/2019	638188	TP423	<2	<0.4	<5	<5	<5	<0.1	<5	6.1	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP425 1.3-1.4	29/01/2019	638188	TP425	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	0.5	1.2	1.8	2.2	2.5	2.7	0.8	0.9	1.1	1.2	<0.5	2.481	2.5	<0.5	1	2.5	16	2.5
TP425 0.1-0.2	30/01/2019	638188	TP425	5.5	<0.4	21	360	130	<0.1	28	140	220	7000	2000	9220	220	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5 - 1.8	7.5	1.7	30	47	46	67	67	67	36	21	35	44	6.3	66.55	91	6.2	18	96	581.5	94
QA20190130-04	30/01/2019	638188	TP425	4.8	<0.4	15	450	80	<0.1	21	110	290	7600	2000	9890	290	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5 - 1.6	7.2	<0.5	33	46	74	98	98	98	31	16	52	43	8.4	98.19	95	6.1	23	100	636.3	100
QC20190130-04	30/01/2019	210631	TP425	6	<0.4	16	420	100	<0.1	21	130	240	5300	1800	7300	240	<25	<25	<0.2	<1	<0.5	<1	<2	<1	2 - 2.6	8.1	2.1	130	62	49	70	70	70	-	15	-	52	5.6	62.67	120	6.5	12	140	800	120
TP425 1.3-1.4	30/01/2019	638188	TP425	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP428 0.3-0.4	30/01/2019	638188	TP428	23	<0.4	16	740	430	6.7	34	210	<50	270	<100	270	<50	<20	<20	<0.1	<0.1	0.5	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	0.8	<0.5	<0.5	0.8	2.4	0.8
TP428 1.4-1.5	30/01/2019	638188	TP428	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP429 0.2-0.25	30/01/2019	638188	TP429	78	<0.4	16	240	410	0.3	110	150	<50	170	<100	170	<50	<20	<20	<0.1	<0.1	0.3	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.63	0.7	<0.5	0.5	0.7	2.5	0.6
TP430 0.1-0.2	30/01/2019	638188	TP430	11	<0.4	37	130	120	0.1	84	310	<50	330	290	620	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP430 0.8-0.9	30/01/2019	638188	TP430	2.2	<0.4	<5	5.5	5.5	<0.1	5	6.2	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP431 0.2-0.3	30/01/2019	638188	TP431	3.1	<0.4	<5	98	83	<0.1	8	76	<50	170	200	370	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP431 3.4-3.5	30/01/2019	638188	TP431	2.2	<0.4	7.6	<5	7.2	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP432 0.2-0.3	31/01/2019	638290	TP432	15	<0.4	17	350	270	0.2	26	230	<50	150	<100	150	<50	<20	<20	<0.1	<0.1	0.5	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP432 2.4-2.5	31/01/2019	638290	TP432	<2	<0.4	<5	<5	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP433-2.3-2.5	7/02/2019	639656	TP433	<2	<0.4	<5	9.6	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP434-0.4-0.6	7/02/2019	639656	TP434	27	<0.4	12	6500	600	0.3	24	700	<50	370	110	480	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	0.9	1.5	1.3	1.8	2.1	2.3	0.9	0.9	1.3	1.4	<0.5	2.063	3.2	<0.5	1.2	3.7	19.6	3.3
TP435-2.3-2.7	7/02/2019	639656	TP435	<2	<0.4	<5	<5	8.1	<0.1	<5	12	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP436-0.4-0.6	7/02/2019	639656	TP436	4.2	<0.4	12	96	130	1.1	5.6	110	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	0.5	0.5	0.9	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.855	1.2	<0.5	<0.5	0.6	3.5	1.2
TP437-0.9-1.6	7/02/2019	639656	TP437	<2	<0.4	<5	11	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP438-0.9-1.2	7/02/2019	639656	TP438	<2	<0.4	<5	5.6	<5	<0.1	<5	<5	<50	110	<100	110	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP439-0.4-0.7	7/02/2019	639656	TP439	<2	<0.4	<5	26	<5	<0.1	<5	<5	<50	<100	<100	<100	<50	<20	<20	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
~~TP440 0.3-0.5~~	~~7/02/2019~~	~~639656~~	~~TP440~~	~~140~~	~~1.2~~	~~130~~	~~50,000~~	~~4600~~	~~0.9~~	~~110~~	~~2700~~	~~130~~	~~4100~~	~~680~~	~~4910~~	~~129.2~~	~~<20~~	~~<20~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.2~~	~~<0.3~~	~~0.8-1.6~~	~~2.1~~	~~1.3~~	~~12~~	~~19~~	~~19~~	~~27~~	~~27~~	~~27~~	~~14~~	~~11~~	~~13~~	~~17~~	~~2.1~~	~~27.18~~	~~46~~	~~2.9~~	~~12~~	~~31~~	~~249~~	~~45~~
~~TP440 A 0.3-0.4~~	~~20/03/2019~~	~~646797~~	~~TP440 A~~	—	—	—	—	~~850~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
~~TP440 A 0.6-0.9~~	~~20/03/2019~~	~~646797~~	~~TP440 A~~	—	—	—	—	~~24~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
~~TP440 B 0.3-0.4~~	~~20/03/2019~~	~~646797~~

Table A - Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

				Organochlorine Pesticides																						Chlorinated Alkanes																	
				4,4-DDE	Aldrin	Aldrin + Dieldrin (Sum of Total)	alpha-BHC	beta-BHC	Chlordane	DDD	DDT	Dieldrin	DDT+DDE+DDD (Sum of Total)	delta-BHC	Endosulfan alpha	Endosulfan beta	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor Epoxide	Lindane	Methoxychlor	Toxaphene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	Carbon tetrachloride	Chloroethane	Chloromethane	Dichlorodifluoromethane	Dichloromethane	Trichlorofluoromethane
				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	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1	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	0.5	0.5
NEPM 2013 Soil HIL D						45			530				3600					100			50			2500	160																			
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 0 to <1m																																											
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 1 to <2m																																											
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 2 to <4m																																											
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																																											
Sample ID	**Date**	**Lab Report**	**Location**																																									
TP410 0.25-0.3	25/01/2019	637874	TP410	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
QA20190125-01	25/01/2019	637874	TP410	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
QC20190125-01	25/01/2019	210371	TP410	<0.1	<0.1	<0.2	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1		
TP410 1.4-1.5	25/01/2019	637874	TP410	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP411 0.6-0.7	25/01/2019	637874	TP411	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP411 2.0-2.1	25/01/2019	637874	TP411	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP411 3.5-3.6	25/01/2019	637874	TP411	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP412 0.5-0.6	25/01/2019	637874	TP412	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP412 0.9-1.0	25/01/2019	637874	TP412	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP413 0.6-0.7	29/01/2019	638188	TP413	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP413 1.6-1.7	29/01/2019	638188	TP413	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP415 0.6-0.7	29/01/2019	638188	TP415	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP415 2.1-2.2	29/01/2019	638188	TP415	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP414 0.3-0.4	31/01/2019	638290	TP414	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP414-0.3-0.5	7/02/2019	639656	TP414	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
QA20190130-02	29/01/2019	638188	TP416	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
QC20190129-02	29/01/2019	210631	TP416	<0.1	<0.1	<0.2	<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	<1	<1	<1	<1	-	<1		
TP416 0.3-0.4	29/01/2019	638188	TP416	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP416 0.8-0.9	29/01/2019	638188	TP416	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
~~TP417 0.26 0.4~~	~~29/01/2019~~	~~638188~~	~~TP417~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	~~<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~~	~~<0.5~~	~~<0.5~~
~~TP417 A 0.3 0.4~~	~~20/03/2019~~	~~646797~~	~~TP417 A~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TP418 0.3-0.5	29/01/2019	638188	TP418	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP418 3.0-3.1	29/01/2019	638188	TP418	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
~~TP419 0.26 0.3~~	~~29/01/2019~~	~~638188~~	~~TP419~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	~~<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~~	~~<0.5~~	~~<0.5~~
~~TP419 A 0.3 0.4~~	~~20/03/2019~~	~~646797~~	~~TP419 A~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
~~TP419 C 0.3 0.4~~	~~20/03/2019~~	~~646797~~	~~TP419 C~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<1~~	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP420 0.4-0.5	29/01/2019	638188	TP420	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP421 0.3-0.4	29/01/2019	638188	TP421	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
QA20190130-03	29/01/2019	638188	TP421	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
QC20190129-03	29/01/2019	210631	TP421	<0.1	<0.1	<0.2	<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	<1	<1	<1	<1	-	<1		
TP421 1.2-1.3	29/01/2019	638188	TP421	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP422 0.1-0.2	29/01/2019	638188	TP422	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP423 0.9-1.0	29/01/2019	638188	TP423	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP425 1.3-1.4	29/01/2019	638188	TP425	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP425 0.1-0.2	30/01/2019	638188	TP425	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
QA20190130-04	30/01/2019	638188	TP425	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
QC20190130-04	30/01/2019	210631	TP425	<1	<1	<2	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1		
TP425 1.3-1.4	30/01/2019	638188	TP425	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP428 0.3-0.4	30/01/2019	638188	TP428	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP428 1.4-1.5	30/01/2019	638188	TP428	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP429 0.2-0.25	30/01/2019	638188	TP429	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP430 0.1-0.2	30/01/2019	638188	TP430	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP430 0.8-0.9	30/01/2019	638188	TP430	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP431 0.2-0.3	30/01/2019	638188	TP431	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP431 3.4-3.5	30/01/2019	638188	TP431	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP432 0.2-0.3	31/01/2019	638290	TP432	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP432 2.4-2.5	31/01/2019	638290	TP432	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP433-2.3-2.5	7/02/2019	639656	TP433	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP434-0.4-0.6	7/02/2019	639656	TP434	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP435-2.3-2.7	7/02/2019	639656	TP435	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP436-0.4-0.6	7/02/2019	639656	TP436	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	<0.5	<0.5
TP437-0.9-1.6	7/02/2019	639656	TP437	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<

Table A - Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

				Chlorinated Alkenes											Polychlorinated Biphenyls								Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons							Chlorinated Benzenes						Trihalomethanes			
				1,1-dichloroethene	1,3-dichloropropene	3-chloropropene	4-chlorotoluene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	Bromobenzene	Isopropylbenzene	Styrene	1,2-dibromoethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Bromomethane	Dibromomethane	Iodomethane	1,2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Hexachlorobenzene	Bromodichloromethane	Chloroform	Dibromochloromethane	Tribromomethane
				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	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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	0.05	0.5	0.5	0.5	0.5
NEPM 2013 Soil HIL D																						7																	80				
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 0 to <1m																																											
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 1 to <2m																																											
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 2 to <4m																																											
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																																											
Sample ID	**Date**	**Lab Report**	**Location**																																									
TP410 0.25-0.3	25/01/2019	637874	TP410	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
QA20190125-01	25/01/2019	637874	TP410	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
QC20190125-01	25/01/2019	210371	TP410	<1	<2	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	-	<1	<1	<1	<1	<0.1	<1	<1	<1	<1
TP410 1.4-1.5	25/01/2019	637874	TP410	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP411 0.6-0.7	25/01/2019	637874	TP411	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP411 2.0-2.1	25/01/2019	637874	TP411	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP411 3.5-3.6	25/01/2019	637874	TP411	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP412 0.5-0.6	25/01/2019	637874	TP412	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP412 0.9-1.0	25/01/2019	637874	TP412	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP413 0.6-0.7	29/01/2019	638188	TP413	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP413 1.6-1.7	29/01/2019	638188	TP413	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP415 0.6-0.7	29/01/2019	638188	TP415	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP415 2.1-2.2	29/01/2019	638188	TP415	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP414 0.3-0.4	31/01/2019	638290	TP414	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP414-0.3-0.5	7/02/2019	639656	TP414	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
QA20190130-02	29/01/2019	638188	TP416	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
QC20190129-02	29/01/2019	210631	TP416	<1	<2	-	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	-	-	<1	<1	-	<1	<1	<1	<1	<0.1	<1	<1	<1	<1
TP416 0.3-0.4	29/01/2019	638188	TP416	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP416 0.8-0.9	29/01/2019	638188	TP416	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
~~TP417 0.26 0.4~~	~~29/01/2019~~	~~638188~~	~~TP417~~	~~<0.5~~	~~<1~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<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~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TP417 A 0.3 0.4~~	~~20/03/2019~~	~~646797~~	~~TP417 A~~	—	—	—	—	—	—	—	—	—	—	—	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	~~<0.05~~	—	—	—	—
TP418 0.3-0.5	29/01/2019	638188	TP418	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP418 3.0-3.1	29/01/2019	638188	TP418	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
~~TP419 0.26 0.3~~	~~29/01/2019~~	~~638188~~	~~TP419~~	~~<0.5~~	~~<1~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<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~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TP419 A 0.3 0.4~~	~~20/03/2019~~	~~646797~~	~~TP419 A~~	—	—	—	—	—	—	—	—	—	—	—	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	~~<0.05~~	—	—	—	—
~~TP419 C 0.3 0.4~~	~~20/03/2019~~	~~646797~~	~~TP419 C~~	—	—	—	—	—	—	—	—	—	—	—	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	~~<0.05~~	—	—	—	—
TP420 0.4-0.5	29/01/2019	638188	TP420	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP421 0.3-0.4	29/01/2019	638188	TP421	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
QA20190130-03	29/01/2019	638188	TP421	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
QC20190129-03	29/01/2019	210631	TP421	<1	<2	-	<1	<1	<1	<1	<1	<1	<1	<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	<1	<1	<1	<0.1	<1	<1	<1	<1
TP421 1.2-1.3	29/01/2019	638188	TP421	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP422 0.1-0.2	29/01/2019	638188	TP422	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP423 0.9-1.0	29/01/2019	638188	TP423	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP425 1.3-1.4	29/01/2019	638188	TP425	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP425 0.1-0.2	30/01/2019	638188	TP425	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
QA20190130-04	30/01/2019	638188	TP425	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
QC20190130-04	30/01/2019	210631	TP425	<1	<2	-	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	-	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
TP425 1.3-1.4	30/01/2019	638188	TP425	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP428 0.3-0.4	30/01/2019	638188	TP428	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP428 1.4-1.5	30/01/2019	638188	TP428	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP429 0.2-0.25	30/01/2019	638188	TP429	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP430 0.1-0.2	30/01/2019	638188	TP430	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	0.3	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP430 0.8-0.9	30/01/2019	638188	TP430	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP431 0.2-0.3	30/01/2019	638188	TP431	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP431 3.4-3.5	30/01/2019	638188	TP431	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP432 0.2-0.3	31/01/2019	638290	TP432	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP432 2.4-2.5	31/01/2019	638290	TP432	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP433-2.3-2.5	7/02/2019	639656	TP433	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP434-0.4-0.6	7/02/2019	639656	TP434	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP435-2.3-2.7	7/02/2019	639656	TP435	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP436-0.4-0.6	7/02/2019	639656	TP436	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP437-0.9-1.6	7/02/2019	639656	TP437	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP438-0.9-1.2	7/02/2019	639656	TP438	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
TP439-0.4-0.7	7/02/2019	639656	TP439	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<0.5	<0.5	<0.5	<0.5
~~TP440 0.3 0.5~~	~~7/02/2019~~	~~639656~~	~~TP440~~	~

Table A - Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

| | | | | | Metals & Metalloids | | | | | | | | TRHs (NEPC 2013) | | | | | | | BTEXN | | | | | | | Polycyclic Aromatic Hydrocarbons | | | | | | | |

Table A - Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

				Organochlorine Pesticides																						Chlorinated Alkanes															
				4,4-DDE	Aldrin	Aldrin + Dieldrin (Sum of Total)	alpha-BHC	beta-BHC	Chlordane	DDD	DDT	Dieldrin	DDT+DDE+DDD (Sum of Total)	delta-BHC	Endosulfan alpha	Endosulfan beta	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor Epoxide	Lindane	Methoxychlor	Toxaphene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	Carbon tetrachloride	Chloroethane	Chloromethane	Dichlorodifluoromethane	Dichloromethane	Trichlorofluoromethane
				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	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1	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
NEPM 2013 Soil HIL D						45			530				3600					100			50			2500	160																
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 0 to <1m																																								
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 1 to <2m																																								
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 2 to <4m																																								
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																																								
Sample ID	**Date**	**Lab Report**	**Location**																																						
TP442-0.4-0.8	7/02/2019	639656	TP442	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
TP443-0.1-0.4	7/02/2019	639656	TP443	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
TP444-0.3-0.9	7/02/2019	639656	TP444	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
TP444-2.9-3.2	7/02/2019	639656	TP444	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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
~~B4S(0.6-0.7)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.2~~	~~<1~~	~~<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~~
~~B4S(1.8-1.9)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.2~~	~~<1~~	~~<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~~
~~B4S(2.5-2.6)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.2~~	~~<1~~	~~<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~~
~~B4S(3.4-3.5)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.2~~	~~<1~~	~~<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~~
~~B4S(4.6-4.7)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.2~~	~~<1~~	~~<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~~
~~B4S(5.5-5.6)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.2~~	~~<1~~	~~<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~~
~~TRA-01 0.16-0.3~~	~~12/06/2018~~	~~602775~~	~~TRA-01~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-01 3.0-3.2~~	~~12/06/2018~~	~~602775~~		~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-02 0.6-0.85~~	~~12/06/2018~~	~~602775~~	~~TRA-02~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-02 5.0-5.2~~	~~12/06/2018~~	~~602775~~		~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-03 0.8-1.0~~	~~12/06/2018~~	~~602775~~	~~TRA-03~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-03 1.1-1.3~~	~~12/06/2018~~	~~602775~~		~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-4 3.2-3.75~~	~~12/06/2018~~	~~602775~~	~~TRA-04~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-4 3.95-4.1~~	~~12/06/2018~~	~~602775~~		~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-5 0.8-1.0~~	~~12/06/2018~~	~~602775~~	~~TRA-05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-5 2.0-2.2~~	~~12/06/2018~~	~~602775~~		~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-6 0.65-0.9~~	~~12/06/2018~~	~~602775~~	~~TRA-06~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
~~TRA-6 4.0-4.2~~	~~12/06/2018~~	~~602775~~		~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.1~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~<0.05~~	~~–~~	~~<0.05~~	~~<1~~	~~<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~~
Statistical Summary																																								
Number of Results				143	143	143	143	143	135	143	143	143	143	143	143	143	143	143	143	135	143	143	125	143	135	141	141	141	141	141	141	141	141	141	141	141	141	141	133	141	
Number of Detects				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	
Minimum Concentration				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<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	
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	ND	
Maximum Concentration				<1	<1	<2	<1	<1	<0.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	6.1	<1	
Maximum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1	ND	
Average Concentration				0.03	0.03	0.037	0.03	0.03	0.047	0.03	0.033	0.03	0.033	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.03	0.03	0.03	0.038	0.5	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.37	0.27	
Median Concentration				0.025	0.025	0.025	0.025	0.025	0.05	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Standard Deviation				0.04	0.04	0.083	0.04	0.04	0.0085	0.04	0.04	0.04	0.042	0.04	0.04	0.04	0.04	0.04	0.04	0	0.04	0.04	0.043	0.046	0	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.62	0.061	
Number of Guideline Exceedances				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Number of Guideline Exceedances(Detects Only)				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

*** Note *** sample locations denoted with a strikethrough have been removed off-site to facilitate disposal of the balance of fill as General Solid Waste

Table A - Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

	Chlorinated Alkenes											Polychlorinated Biphenyls								Monocyclic Aromatic Hydrocarbons					Miscellaneous Hydrocarbons							Chlorinated Benzenes					Trihalomethanes				
	1,1-dichloroethene	1,3-dichloropropene	3-chloropropene	4-chlorotoluene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	Bromobenzene	Isopropylbenzene	Styrene	1,2-dibromoethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Bromomethane	Dibromomethane	Iodomethane	1,2-Dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Hexachlorobenzene	Bromodichloromethane	Chloroform	Dibromochloromethane	Tribromomethane
	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	mg/kg	mg/kg
EQL	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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	0.05	0.5	0.5	0.5	0.5
NEPM 2013 Soil HIL D																			7																80				
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 0 to <1m																																							
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 1 to <2m																																							
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 2 to <4m																																							
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																																							

Sample ID	Date	Lab Report	Location																																						
TP442-0.4-0.8	7/02/2019	639656	TP442	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5
TP443-0.1-0.4	7/02/2019	639656	TP443	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5
TP444-0.3-0.9	7/02/2019	639656	TP444	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5
TP444-2.9-3.2	7/02/2019	639656	TP444	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5
~~84S(0.6-0.7)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.5~~	~~–~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<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~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~84S(1.8-1.9)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.5~~	~~–~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<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~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~84S(2.5-2.6)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.5~~	~~–~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<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~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~84S(3.4-3.5)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.5~~	~~–~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<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~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~84S(4.6-4.7)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.5~~	~~–~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<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~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~84S(5.5-5.6)~~	~~9/08/2017~~	~~557933~~	~~B4S~~	~~<0.5~~	~~–~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<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~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA-01 0.16-0.3~~	~~12/06/2018~~	~~602775~~	~~TRA-01~~	~~<0.5~~	~~–~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA-01 3.0-3.2~~	~~12/06/2018~~	~~602775~~		~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA-02 0.6-0.85~~	~~12/06/2018~~	~~602775~~	~~TRA-02~~	~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA-02 5.0-5.2~~	~~12/06/2018~~	~~602775~~		~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA-03 0.8-1.0~~	~~12/06/2018~~	~~602775~~	~~TRA-03~~	~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA-03 1.1-1.3~~	~~12/06/2018~~	~~602775~~		~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA 4 3.2-3.75~~	~~12/06/2018~~	~~602775~~	~~TRA-04~~	~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA 4 3.95-4.1~~	~~12/06/2018~~	~~602775~~		~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA-5 0.8-1.0~~	~~12/06/2018~~	~~602775~~	~~TRA-05~~	~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA-5 2.0-2.2~~	~~12/06/2018~~	~~602775~~		~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA 6 0.65-0.9~~	~~12/06/2018~~	~~602775~~	~~TRA-06~~	~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~
~~TRA-6 4.0-4.2~~	~~12/06/2018~~	~~602775~~		~~<0.5~~	—	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	~~<0.1~~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.05~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~<0.5~~

Statistical Summary

Number of Results	141	123	133	141	141	141	141	141	141	141	141	143	143	143	143	143	143	143	143	141	141	141	141	141	141	141	133	141	141	141	141	141	133	141	141	141	141	143	141	141	141	141
Number of Detects	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	18	18	18	18	18	18	18	18	18	18	18	18	18	18	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND	ND	0.3	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND	ND	0.3	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration	0.27	0.54	0.25	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.099	0.075	0.099	0.1	0.099	0.099	0.099	0.1	0.27	0.27	0.27	0.27	0.27	0.27	0.25	0.25	0.27	0.27	0.25	0.27	0.27	0.27	0.27	0.03	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Median Concentration	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Standard Deviation	0.061	0.13	0.022	0.061	0.061	0.061	0.061	0.061	0.061	0.071	0.061	0.22	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.065	0.065	0.065	0.065	0.065	0.065	0.023	0.023	0.065	0.065	0.023	0.061	0.061	0.061	0.061	0.04	0.061	0.061	0.061	0.061	0.061	0.061	0.061
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

*** Note *** sample locations denoted with a strikethrough have been removed off-site to facilitate disposal of the balance of fill as General Solid Waste

Table B - Asbestos in Soil Analytical Data

Project Number: 51142

Project Name: Locomotive Workshop LTEMP

				Asbestos									
				Approx. Sample Mass	Asbestos from ACM in Soil	Asbestos from FA & AF in Soil	Mass ACM	Mass Asbestos in ACM	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF
				g	%w/w	%w/w	g	g	g	g	g	g	g
EQL													
NEPM 2013 HSL Asbestos in Soil - Bonded ACM - Commercial/Industrial - HSL D					0.05								
NEPM 2013 HSL Asbestos in Soil - FA & AF - HSL						0.001							
Sample ID	**Date**	**Lab Report**	**Location**										
BH200 0.64-0.7	19/04/2017	543119	BH200	578	0	0	0	0	0	0	0	0	0
QC01	19/04/2017	543119	BH200	569	0	0	0	0	0	0	0	0	0
BH201_0.9-1.0	20/04/2017	543330	BH201	233	0	0	0	0	0	0	0	0	0
BH202_0.3-0.38	20/04/2017	543330	BH202	767	0	0	0	0	0	0	0	0	0
BH203 0.56-0.6	21/04/2017	543445	BH203	658	0	0	0	0	0	0	0	0	0
QC02	21/04/2017	543445	BH204	520	0	0.0017	0	0	0	0	0.0086	0.0086	0.0086
BH204 0.9-1.0	21/04/2017	543445	BH204	531	0	0.0014	0	0	0	0	0.0072	0.0072	0.0072
BH205 0.32-0.5	21/04/2017	543445	BH205	516	0	0.005	0	0	0.0364	0.0255	0.0005	0.0005	0.026
BH206 0.28-0.35	21/04/2017	543445	BH206	450	0	0	0	0	0	0	0	0	0
BH207 0.62-0.7	21/04/2017	543445	BH207	573	0	0	0	0	0	0	0	0	0
BH208 0.3-0.4	21/04/2017	543445	BH208	550	0	0	0	0	0	0	0	0	0
BH01 0.07-0.15	25/07/2018	609598	BH01	519	0	0	0	0	0	0	0	0	0
BH01 0.15-0.25	25/07/2018	609598	BH01	492	0	0	0	0	0	0	0	0	0
~~BH02 0.02-0.15~~	~~25/07/2018~~	~~609598~~	~~BH02~~	~~944~~	~~0~~	~~0.0004~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0.0036~~	~~0.0036~~	~~0.0036~~
~~BH02 0.3-0.4~~	~~25/07/2018~~	~~609598~~	~~BH02~~	~~1114~~	~~0~~	~~0.003~~	~~0~~	~~0~~	~~0.0315~~	~~0.0315~~	~~0.0018~~	~~0.0018~~	~~0.0333~~
~~QC25072018~~	~~26/07/2018~~	~~609598~~	~~BH02~~	~~975~~	~~0~~	~~0.0007~~	~~0~~	~~0~~	~~0.0056~~	~~0.0056~~	~~0.0012~~	~~0.0012~~	~~0.0068~~
QA_30/7	30/07/2019	668643	BH02-V1_N	558	0	0	0	0	0	0	0	0	0
V1_N	30/07/2019	668643	BH02-V1_N	637	0	0	0	0	0	0	0	0	0
V2_E	30/07/2019	668643	BH02-V2_E	584	0	0	0	0	0	0	0	0	0
V3_S	30/07/2019	668643	BH02-V3_S	805	0	0	0	0	0	0	0	0	0
V4_W	30/07/2019	668643	BH02-V4_W	774	0	0	0	0	0	0	0	0	0
VS_B	30/07/2019	668643	BH02-VS_B	702	0	0	0	0	0	0	0	0	0
BH03 0.07-0.12	25/07/2018	609598	BH03	847	0	0	0	0	0	0	0	0	0
BH03 0.5-0.6	25/07/2018	609598	BH03	585	0	0	0	0	0	0	0	0	0
BH04 0.15-0.25	25/07/2018	609598	BH04	653	0	0	0	0	0	0	0	0	0
BH04 0.25-0.35	25/07/2018	609598	BH04	601	0	0	0	0	0	0	0	0	0
BH05 0.15-0.25	25/07/2018	609598	BH05	608	0	0	0	0	0	0	0	0	0
BH06 0.4-0.5	25/07/2018	609598	BH06	778	0	0	0	0	0	0	0	0	0
BH07 0.35-0.40	25/07/2018	609598	BH07	843	0	0	0	0	0	0	0	0	0
BH08 0.1-0.2	26/07/2018	609598	BH08	821	0	0	0	0	0	0	0	0	0
BH10 0.06-0.1	26/07/2018	609598	BH10	945	0	0	0	0	0	0	0	0	0
BH10 0.2-0.3	26/07/2018	609598	BH10	498	0	0	0	0	0	0	0	0	0
QC26072018	26/07/2018	609598	BH10	546	0	0	0	0	0	0	0	0	0
BH11 0.2-0.4	26/07/2018	609598	BH11	659	0	0	0	0	0	0	0	0	0
BH12 0.3-0.4	26/07/2018	609598	BH12	630	0	0	0	0	0	0	0	0	0
TP400 0.5-0.6	24/01/2019	637874	TP400	620	0	0	0	0	0	0	0	0	0
TP400 2.5-2.6	24/01/2019	637874	TP400	628	0	0	0	0	0	0	0	0	0
TP401 0.3	24/01/2019	637874	TP401	987	0	0	0	0	0	0	0	0	0
~~TP402 0.3~~	~~24/01/2019~~	~~637874~~	~~TP402~~	~~635~~	~~0~~	~~0.0001~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0.0004~~	~~0.0004~~	~~0.0004~~
~~TP402 0.4-0.5~~	~~24/01/2019~~	~~637874~~	~~TP402~~	~~689~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TP402-A 0.25-0.35~~	~~20/03/2019~~	~~646797~~	~~TP402-A~~	~~707~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TP402-A 0.5-0.6~~	~~20/03/2019~~	~~646797~~	~~TP402-A~~	~~720~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TP402-B 0.3-0.4~~	~~20/03/2019~~	~~646797~~	~~TP402-B~~	~~654~~	~~0~~	~~0.0029~~	~~0~~	~~0~~	~~0.0315~~	~~0.0189~~	~~0~~	~~0~~	~~0.0189~~
~~TP402-B 0.6-0.9~~	~~20/03/2019~~	~~646797~~	~~TP402-B~~	~~598~~	~~0~~	~~0.0014~~	~~0~~	~~0~~	~~0.0105~~	~~0.0084~~	~~0~~	~~0~~	~~0.0084~~
TP403 0.4-0.5	24/01/2019	637874	TP403	580	0	0	0	0	0	0	0	0	0
TP404 0.3	24/01/2019	637874	TP404	743	0	0	0	0	0	0	0	0	0
TP404 0.5-0.6	24/01/2019	637874	TP404	532	0	0	0	0	0	0	0	0	0
TP405 0.4-0.5	24/01/2019	637874	TP405	541	0	0	0	0	0	0	0	0	0
TP406 0.4	24/01/2019	637874	TP406	526	0	0	0	0	0	0	0	0	0
TP407 1.0-1.1	24/01/2019	637874	TP407	603	0	0	0	0	0	0	0	0	0
TP407 1.5-2.0	24/01/2019	637874	TP407	509	0	0	0	0	0	0	0	0	0
TP408 0.3	24/01/2019	637874	TP408	353	0	0	0	0	0	0	0	0	0
TP409 0.7-0.8	25/01/2019	637874	TP409	699	0	0	0	0	0	0	0	0	0
TP410 0.25-0.3	25/01/2019	637874	TP410	487	0	0	0	0	0	0	0	0	0
QA20190125-01	25/01/2019	637874	TP410	372	0	0	0	0	0	0	0	0	0
TP411 0.6-0.7	25/01/2019	637874	TP411	367	0	0	0	0	0	0	0	0	0
TP412 0.5-0.6	25/01/2019	637874	TP412	579	0	0	0	0	0	0	0	0	0
TP413 0.6-0.7	29/01/2019	638188	TP413	705	0	0	0	0	0	0	0	0	0
TP414 0.3-0.4	31/01/2019	638290	TP414	463	0	0	0	0	0	0	0	0	0
TP414-0.3-0.5	7/02/2019	639656	TP414	489	0	0	0	0	0	0	0	0	0
TP415 0.6-0.7	29/01/2019	638188	TP415	521	0	0	0	0	0	0	0	0	0
QA20190130-02	29/01/2019	638188	TP416	485	0	0	0	0	0	0	0	0	0
TP416 0.3-0.4	29/01/2019	638188	TP416	478	0	0	0	0	0	0	0	0	0
~~TP417 0.26-0.4~~	~~29/01/2019~~	~~638188~~	~~TP417~~	~~487~~	~~0~~	~~0.0006~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0.0028~~	~~0.0028~~	~~0.0028~~
~~TP417-A 0.3-0.4~~	~~20/03/2019~~	~~646797~~	~~TP417-A~~	~~448~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TP417-A 0.8-0.9~~	~~20/03/2019~~	~~646797~~	~~TP417-A~~	~~517~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TP417-A 1.3-1.5~~	~~20/03/2019~~	~~646797~~	~~TP417-A~~	~~652~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~QA5~~	~~20/03/2019~~	~~646797~~	~~TP417-B~~	~~581~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TP417-B 0.4-0.5~~	~~20/03/2019~~	~~646797~~	~~TP417-B~~	~~508~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
TP418 0.3-0.5	29/01/2019	638188	TP418	540	0	0	0	0	0	0	0	0	0
~~TP419 0.26-0.3~~	~~29/01/2019~~	~~638188~~	~~TP419~~	~~489~~	~~0~~	~~0.0025~~	~~0~~	~~0~~	~~0.0128~~	~~0.0122~~	~~0~~	~~0~~	~~0.0122~~
~~TP419-A 0.3-0.4~~	~~20/03/2019~~	~~646797~~	~~TP419-A~~	~~550~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TP419-A 0.8-0.9~~	~~20/03/2019~~	~~646797~~	~~TP419-A~~	~~659~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TP419-B 0.3-0.4~~	~~20/03/2019~~	~~646797~~	~~TP419-B~~	~~586~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~QA6~~	~~20/03/2019~~	~~646797~~	~~TP419-B~~	~~634~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TP419-C 0.3-0.4~~	~~20/03/2019~~	~~646797~~	~~TP419-C~~	~~281~~	~~0~~	~~0.0039~~	~~0~~	~~0~~	~~0.0138~~	~~0.011~~	~~0~~	~~0~~	~~0.011~~
~~TP419-C 0.8-0.9~~	~~20/03/2019~~	~~646797~~	~~TP419-C~~	~~637~~	~~0~~	~~0.0001~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0.0006~~	~~0.0006~~	~~0.0006~~
TP420 0.4-0.5	29/01/2019	638188	TP420	439	0	0	0	0	0	0	0	0	0
TP421 0.3-0.4	29/01/2019	638188	TP421	691	0	0	0	0	0	0	0	0	0
QA20190130-03	29/01/2019	638188	TP421	835	0	0	0	0	0	0	0	0	0
TP422 0.1-0.2	29/01/2019	638188	TP422	727	0	0	0	0	0	0	0	0	0
TP423 0.0-0.1	29/01/2019	638188	TP423	1106	0	0	0	0	0	0	0	0	0
TP424 0.05-0.15	29/01/2019	638188	TP424	678	0	0	0	0	0	0	0	0	0
TP425 0.1-0.2	30/01/2019	638188	TP425	599	0	0	0	0	0	0	0	0	0
QA20190130-04	30/01/2019	638188	TP425	795	0	0	0	0	0	0	0	0	0
TP426 0.1-0.2	30/01/2019	638188	TP426	1098	0	0	0	0	0	0	0	0	0
TP427 0.05-0.2	30/01/2019	638188	TP427	761	0	0	0	0	0	0	0	0	0
TP428 0.3-0.4	30/01/2019	638188	TP428	513	0	0	0	0	0	0	0	0	0
TP429 0.2-0.25	30/01/2019	638188	TP429	655	0	0	0	0	0	0	0	0	0
TP430 0.1-0.2	30/01/2019	638188	TP430	901	0	0	0	0	0	0	0	0	0
TP430 0.8-0.9	30/01/2019	638188	TP430	813	0	0	0	0	0	0	0	0	0
TP431 0.2-0.3	30/01/2019	638188	TP431	599	0	0	0	0	0	0	0	0	0
TP431 3.4-3.5	30/01/2019	638188	TP431	807	0	0	0	0	0	0	0	0	0
TP432 0.2-0.3	31/01/2019	638290	TP432	493	0	0	0	0	0	0	0	0	0
TP432 2.4-2.5	31/01/2019	638290	TP432	619	0	0	0	0	0	0	0	0	0
TP433-2.3-2.5	7/02/2019	639656	TP433	822	0	0	0	0	0	0	0	0	0
TP434-0.4-0.6	7/02/2019	639656	TP434	624	0	0	0	0	0	0	0	0	0
TP436-0.4-0.6	7/02/2019	639656	TP436	744	0	0	0	0	0	0	0	0	0
TP439-0.4-0.7	7/02/2019	639656	TP439	697	0	0	0	0	0	0	0	0	0
~~TP440-0.3-0.5~~	~~7/02/2019~~	~~639656~~	~~TP440~~	~~679~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
TP441-0.3-0.45	7/02/2019	639656	TP441	524	0	0	0	0	0	0	0	0	0
TP442-0.4-0.8	7/02/2019	639656	TP442	536	0	0	0	0	0	0	0	0	0
TP443-0.1-0.4	7/02/2019	639656	TP443	808	0	0	0	0	0	0	0	0	0
TP444-0.3-0.9	7/02/2019	639656	TP444	734	0	0	0	0	0	0	0	0	0
~~TRA-01 0.16-0.3~~	~~12/06/2018~~	~~602775~~	~~TRA-01~~	~~385~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TRA-02 0.6-0.85~~	~~12/06/2018~~	~~602775~~	~~TRA-02~~	~~657~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TRA-03 0.8-1.0~~	~~12/06/2018~~	~~602775~~	~~TRA-03~~	~~654~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TRA-4 3.2-3.75~~	~~12/06/2018~~	~~602775~~	~~TRA-04~~	~~558~~	~~0~~	~~0.0235~~	~~0~~	~~0~~	~~0.497~~	~~0.1243~~	~~0.0066~~	~~0.0066~~	~~0.1309~~
~~TRA-5 0.8-1.0~~	~~12/06/2018~~	~~602775~~	~~TRA-05~~	~~364~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~TRA 6 0.65-0.9~~	~~12/06/2018~~	~~602775~~	~~TRA 06~~	~~620~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~

*** Note *** Samples denoted with a strikethrough have been removed from the site to facilitate disposal of the balance of material as GSW

Statistical Summary

Number of Results	110	110	110	110	110	110	110	110	110	110
Number of Detects	110	110	110	110	110	110	110	110	110	110
Minimum Concentration	233	0	0	0	0	0	0	0	0	0
Minimum Detect	233	ND	0.0001	ND	ND	0.0056	0.0056	0.0004	0.0004	0.0004
Maximum Concentration	1114	0	0.0235	0	0	0.497	0.1243	0.0086	0.0086	0.1309
Maximum Detect	1114	ND	0.0235	ND	ND	0.497	0.1243	0.0086	0.0086	0.1309
Average Concentration	631	0	0.00043	0	0	0.0058	0.0022	0.0003	0.0003	0.0025
Median Concentration	613.5	0	0	0	0	0	0	0	0	0
Standard Deviation	163	0	0.0024	0	0	0.048	0.013	0.0013	0.0013	0.013
Number of Guideline Exceedances	0	0	9	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	9	0	0	0	0	0	0	0

Table C - Soil Leachate Analytical Data
Project Number: 51142
Project Name: Locomotive Workshop LTEMP

	Metals & Metalloids					TPHs (NEPC 1999)				TRHs (NEPC 2013)				BTEXN	Polycyclic Aromatic Hydrocarbons																	Ionic Balance			
	Arsenic (Total)	Copper	Chromium (Total)	Lead	Nickel	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Total)	>C10-C16 Fraction	>C16-C34 Fraction	>C34-C40 Fraction	>C10-C40 Fraction (Total)	Naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b,j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Phenanthrene	PAHs (Total)	Pyrene	Total Positive PAHs	pH (TCLP - HCl addition)	pH (TCLP - initial)	pH (TCLP - off)	pH (Leachate fluid)
	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	ph Units	ph Units	ph Units	ph Units
EQL	0.01	0.01	0.01	0.01	0.01	0.05	0.1	0.1	0.5	0.05	0.1	0.1	0.1	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.1	0.1	0.1	0.1
Sample ID	**Date**	**Lab Report**	**Location**																																
BH01_0.07-0.15	25/07/2018	611467	BH01	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	5.8	5.2	5.1
BH01_0.15-0.25	25/07/2018	611467	BH01	-	-	-	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	5.9	5.2	5.1
BH05_0.15-0.25	25/07/2018	611467	BH05	-	-	-	0.02	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	6.3	5.1	5.1
~~BH02_0.02-0.15~~	~~25/07/2018~~	~~611467~~	~~BH02~~	~~-~~	~~-~~	~~-~~	~~-~~	~~0.03~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~1.7~~	~~8.3~~	~~5.5~~	~~5.1~~
~~BH02_0.3-0.4~~	~~25/07/2018~~	~~611467~~	~~BH02~~	~~-~~	~~-~~	~~-~~	~~-~~	~~0.02~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~<0.001~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~1.7~~	~~9~~	~~5.3~~	~~5.1~~
~~QC25072018~~	~~25/07/2018~~	~~611467~~	~~BH02~~	~~-~~	~~-~~	~~-~~	~~-~~	~~0.02~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~<0.001~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~1.7~~	~~7.7~~	~~5.3~~	~~5.1~~
BH04_0.15-0.25	25/07/2018	611467	BH04	-	-	-	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	5.9	5.8	5.1
BH04_0.25-0.35	25/07/2018	611467	BH04	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	8	5.9	5.1
BH06_0.4-0.5	25/07/2018	611467	BH06	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	6.5	6.2	5.1
BH10_0.06-0.1	25/07/2018	611467	BH10	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	8.6	6.3	5.1
BH10_0.2-0.3	25/07/2018	611467	BH10	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	6.9	5.3	5.1
BH11_0.2-0.4	25/07/2018	611467	BH11	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	7.1	6.6	5.1
BH12_0.3-0.4	25/07/2018	611467	BH12	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	7.3	5.6	5.1
~~TP402 0.4-0.5~~	~~24/01/2019~~	~~639929~~	~~TP402~~	~~—~~	~~—~~	~~—~~	~~0.05~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~1.9~~	~~9.2~~	~~5.4~~	~~5.1~~
~~TP402 0.4-0.5~~	~~24/01/2019~~	~~639929~~	~~TP402~~	~~—~~	~~—~~	~~—~~	~~0.05~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~1.9~~	~~9.2~~	~~5.4~~	~~5.1~~
~~TP402-B 0.3-0.4~~	~~20/03/2019~~	~~648519~~	~~TP402-B~~	~~-~~	~~-~~	~~-~~	~~1~~	~~0.11~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~1.8~~	~~8.4~~	~~5.4~~	~~5~~
~~TP402-B 0.3-0.4~~	~~20/03/2019~~	~~648519~~	~~TP402-B~~	~~-~~	~~-~~	~~-~~	~~1~~	~~0.11~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~1.8~~	~~8.4~~	~~5.4~~	~~5~~
TP404 0.3	24/01/2019	639929	TP404	-	-	-	-	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	9.4	5.7	5.1
TP405 0.4-0.5	24/01/2019	639929	TP405	-	-	-	-	-	0.71	1.1	0.2	2.01	0.93	1.1	<0.1	2.03	0.031	0.009	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	0.003	0.049	<0.001	-	1.9	9.7	7	5.1
TP406 0.4	24/01/2019	639929	TP406	-	-	-	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	9.2	6	5.1
TP408 0.3	24/01/2019	639929	TP408	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	1.9	9.6	5.9	5.1
QA20190125-01	24/01/2019	639929	TP410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	1.9	7.5	5.7	5.1
QC20190125-01	25/01/2019	210371-A	TP410	-	-	-	3.8	-	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	-	<0.001	0.001	-	-	-	-
TP410 0.25-0.3	24/01/2019	639929	TP410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	2	8.8	5.6	5.1
TP411 0.6-0.7	24/01/2019	639929	TP411	-	-	-	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	8	5.5	5.1
TP412 0.5-0.6	24/01/2019	639929	TP412	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	1.9	9.7	5.5	5.1
TP414 0.3-0.4	7/02/2019	641074	TP414	-	-	-	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	1.9	8.2	5.1	5
QA20190130-02	24/01/2019	639929	TP416	-	-	-	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	1.8	6.3	5.2	5.1
TP416 0.3-0.4	24/01/2019	639929	TP416	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	2	7.9	5.1	5.1
~~TP417-A 0.3-0.4~~	~~20/03/2019~~	~~648519~~	~~TP417-A~~	~~—~~	~~—~~	~~—~~	~~0.03~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~<0.001~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~1.7~~	~~8.2~~	~~5.2~~	~~5~~
TP418 0.3-0.5	24/01/2019	639929	TP418	-	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	1.8	9.4	6.6	5.1
~~TP419 0.26-0.3~~	~~24/01/2019~~	~~639929~~	~~TP419~~	~~—~~	~~—~~	~~—~~	~~0.05~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~<0.001~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~1.8~~	~~6.8~~	~~6~~	~~5.1~~
~~TP419-A 0.3-0.4~~	~~20/03/2019~~	~~648519~~	~~TP419-A~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~<0.001~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~1.7~~	~~8.4~~	~~5~~	~~5~~
~~TP419-C 0.3-0.4~~	~~20/03/2019~~	~~648519~~	~~TP419-C~~	~~—~~	~~—~~	~~—~~	~~0.06~~	~~<0.01~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~<0.001~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~1.7~~	~~8.6~~	~~5.4~~	~~5~~
TP420 0.4-0.5	24/01/2019	639929	TP420	-	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	10	6.4	5.1
QA20190130-04	24/01/2019	639929	TP425	-	-	-	-	-	-	-	-	-	-	-	-	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.007	<0.001	-	1.8	7.3	5.7	5.1
QC20190130-04	30/01/2019	210631-A	TP425	-	-	-	-	-	-	-	-	-	-	-	-	0.002	0.002	<0.001	0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	0.001	<0.001	0.006	-	<0.001	0.012	-	-	-	-
TP425 0.1-0.2	24/01/2019	639929	TP425	-	-	-	-	-	-	-	-	-	-	-	-	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.003	0.01	<0.001	-	1.9	9.3	5.5	5.1
TP428 0.3-0.4	24/01/2019	639929	TP428	-	-	-	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	10	5.2	5.1
TP429 0.2-0.25	24/01/2019	639929	TP429	-	-	-	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	7.2	5.4	5.1
TP434 0.4-0.6	7/02/2019	641074	TP434	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	1.8	8.2	6.6	5
~~TP440 0.3-0.5~~	~~7/02/2019~~	~~641074~~	~~TP440~~	~~<0.01~~	~~—~~	~~<0.01~~	~~24~~	~~0.12~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~0.001~~	~~<0.001~~	~~<0.001~~	~~<0.001~~	~~<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~~	—	~~1.8~~	~~8.3~~	~~5.6~~	~~5~~
~~TP440-A 0.6-0.9~~	~~20/03/2019~~	~~648519~~	~~TP440-A~~	~~—~~	~~—~~	~~—~~	~~0.02~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~1.6~~	~~8.7~~	~~4.9~~	~~5~~
~~QA3~~	~~20/03/2019~~	~~648519~~	~~TP440-B~~	~~—~~	~~—~~	~~—~~	~~0.48~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~2~~	~~8.5~~	~~6.4~~	~~5~~
~~TP440-B 0.3-0.4~~	~~20/03/2019~~	~~648519~~	~~TP440-B~~	~~—~~	~~—~~	~~—~~	~~0.48~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~1.8~~	~~8.6~~	~~6.4~~	~~5~~
~~TP440-C 0.2-0.3~~	~~20/03/2019~~	~~648519~~	~~TP440-C~~	~~—~~	~~—~~	~~—~~	~~0.68~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~1.7~~	~~8.3~~	~~5.2~~	~~5~~
~~TRA-1 0.16-0.3~~	~~12/06/2018~~	~~604193~~	~~TRA-01~~	~~—~~	~~0.04~~	~~—~~	~~<0.01~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~<0.001~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~4.9~~	~~1.7~~	~~6.3 - 6.7~~	~~6.1 - 8.3~~
~~TRA-2 0.6-0.85~~	~~12/06/2018~~	~~604193~~	~~TRA-02~~	~~—~~	~~—~~	~~—~~	~~<0.01~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~<0.001~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~4.9~~	~~1.7~~	~~5.4 - 5.5~~	~~8.2 - 8.3~~
~~TRA-3 0.8-1.0~~	~~12/06/2018~~	~~604193~~	~~TRA-03~~	~~—~~	~~—~~	~~—~~	~~<0.01~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~4.9~~	~~1.7~~	~~6.3 - 7.25~~	~~6.1 - 8.7~~
~~TRA-6 0.65-0.9~~	~~12/06/2018~~	~~604193~~	~~TRA-06~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~<0.001~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~4.9~~	~~1.7~~	~~5.1 - 5.2~~	~~5.4 - 5.6~~
Statistical Summary																																			
Number of Results	1	1	1	36	11	1	1	1	1	1	1	1	1	6	6	6	6	6	24	4	6	4	6	6	6	6	6	6	4	6	2	48	48	48	48
Number of Detects	0	1	0	28	7	1	1	1	1	1	1	0	1	5	4	0	2	0	0	0	0	0	0	0	0	3	0	6	4	0	2	48	48	48	48
Minimum Concentration	<0.01	0.04	<0.01	<0.01	<0.01	0.71	1.1	0.2	2.01	0.93	1.1	<0.1	2.03	<0.001	<0.001	<0.001	<0.001	<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	1.6	1.7	4.9	5
Minimum Detect	ND	0.04	ND	0.02	0.02	0.71	1.1	0.2	2.01	0.93	1.1	ND	2.03	0.001	0.002	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	0.001	ND	0.001	0.002	ND	0.001	1.6	1.7	4.9	5
Maximum Concentration	<0.01	0.04	<0.01	24	0.12	0.71	1.1	0.2	2.01	0.93	1.1	<0.1	2.03	0.031	0.009	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	0.006	0.049	<0.001	0.012	4.9	10	7.25	8.7
Maximum Detect	ND	0.04	ND	24	0.12	0.71	1.1	0.2	2.01	0.93	1.1	ND	2.03	0.031	0.009	ND	0.002	ND	ND	ND	ND	ND	ND	ND	ND	0.004	ND	0.006	0.049	ND	0.012	4.9	10	7.25	8.7
Average Concentration				0.94	0.045									0.0066	0.0028	0.0005	0.00083	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0013	0.0005	0.0028	0.017	0.0005		2.1	7.6	5.7	5.2
Median Concentration	0.005	0.04	0.005	0.05	0.02	0.71	1.1	0.2	2.01	0.93	1.1	0.05	2.03	0.002	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00075	0.0005	0.003	0.0085	0.0005	0.0065	1.8	8.25	5.5	5.1
Standard Deviation				4	0.048									0.012	0.0032	0	0.00061	0	0	0	0	0	0	0	0	0.0014	0	0.0018	0.022	0		0.87	2.1	0.54	0.64
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table D: Soil Vapour Field Measurements
Project Number: 51142
Project Name: Locomotive Workshop LTEMP

Well ID	Date	Time (seconds)	Physcial Parameters						Flow Rate and Run Times					Observations
			CH4 %	CO2 %	O2 %	LEL %	PID	Barometric Pressure	Flow Rate (mL/min)	Pump On	Pump Off	Run Time	Sample Volume	Comments
VP01	18-May-17	20	0.0	0.0	20.3	0.6	2.0	1026.9	200	9:10	4:25	See comments	60 L	Pump stalled at 138 mins, replaced punp with a new pump set to 300 mL/min for remaining 1 hr 50 mins. Leak detection passed.
		40	0.1	0.0	20.1	3.2	-							
		60	0.1	0.0	20.0	1.9	1.8							
VP02	18-May-17	20	0.0	0.0	20.1	0.0	0.0	1026.9	-	-	-	See comments	60 L	60 L Sample noted to be collected. Leak detection passed.
		40	0.0	0.0	20.0	0.0	-							
		60	0.0	0.0	19.9	0.0	0.0							
VP02_1.7	16-Jun-17	20	0.0	3.2	12.5	0.0	3.3	1026.1	200	8:23	2:31	6 hours	72 L	Leak detection passed.
		40	0.0	3.3	11.3	0.01	-							
		60	0.0	3.3	11.3	0.01	-							
		80	0.0	3.3	11.3	0.01	-							
		100	0.0	3.3	11.3	0.01	-							
		120	0.0	3.3	11.4	0.01	3.1							
VP03	18-May-17	20	0.3	0.0	20.0	7.0	5.8	1026.9	200	9:30	2:31	5 hours	60 L	Leak detection passed.
		40	0.1	0.0	19.9	3.8	-							
		60	0.1	0.0	19.9	2.5	5.7							
VP03_1.5	16-Jun-17	20	0.0	1.7	8.2	0.0	1.4	1026.1	200	8:46	2:16	5.5 hours	66 L	Leak detection passed.
		40	0.0	2.2	14.1	0.0	-							
		60	0.0	2.7	14.2	0.0	-							
		80	0.0	3.1	14.5	0.0	-							
		100	0.0	3.3	14.6	0.0	1.5							
VP03_2.7	16-Jun-17	20	0.0	8.0	14.5	0.0	2.9	1026.1	200	8:47	2:12	5.5 hours	66 L	Moisture noted in carbon tube
		40	0.0	10.2	10.6	0.0	-							
		60	0.0	10.2	10.3	0.0	-							
		80	0.0	10.1	10.4	0.0	-							
		100	0.0	9.9	10.6	0.0	-							
		120	0.0	9.8	14.6	0.0	0.4							
VP04	18-May-17	20	0.0	0.0	20.0	0.6	2.3	1026.9	200	9:37	2:37	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	19.9	0.6	-							
		60	0.0	0.0	19.8	1.6	2.3							
VP05	18-May-17	20	0.1	0.0	20.0	2.5	0.6	1026.9	-	-	-	See comments	60 L	60 L Sample noted to be collected. Leak detection passed.
		40	0.0	0.0	19.8	1.9	-							
		60	0.0	0.0	19.8	1.3	0.7							
VP06	18-May-17	20	0.0	0.0	20.2	0.0	1.6	1026.9	-	-	-	See comments	60 L	60 L Sample noted to be collected. Leak detection passed.
		40	0.0	0.0	19.9	0.0	-							
		60	0.0	0.0	19.9	0.0	1.4							
VP06_1.5	16-Jun-17	20	0.0	1.9	15.6	0.0	0.0	1026.1	200	8:57	2:45	5.5 hours	72 L	Leak detection passed.
		40	0.0	1.9	14.9	0.0	-							
		60	0.0	1.9	14.8	0.0	-							
		80	0.0	1.9	14.9	0.0	-							
		100	0.0	1.9	14.9	0.0	0.0							
VP06_2.5	16-Jun-17	20	0.0	4.9	1.2	0.01	1.3	-	-	-	-	-	-	No Sample, probe drew water after 80 seconds purging.
		40	0.0	12.9	0.7	0.01	-							
		60	0.0	12.7	1.1	0.01	1.2							
VP07	18-May-17	20	0.0	0.0	20.0	0.0	1.2	1026.9	-	-	-	See comments	60 L	60 L Sample noted to be collected. Leak detection passed.
		40	0.0	0.1	19.9	0.3	-							
		60	0.0	0.1	19.9	0.3	1.5							
VP07_1.5	16-Jun-17	20	0.0	3.6	12.1	0.0	0.6	1026.1	200	9:02	2:20	5 hours	60 L	Leak detection passed.
		40	0.0	3.6	11.8	0.0	-							
		60	0.0	3.6	11.8	0.0	-							
		80	0.0	3.6	11.8	0.0	-							
		100	0.0	3.6	11.8	0.0	0.3							
VP08	18-May-17	20	0.0	0.0	20.2	0.0	7.6	1026.9	-	-	-	See comments	60 L	60 L Sample noted to be collected. Leak detection passed.
		40	0.0	0.1	20.1	0.0	-							
		60	0.0	0.1	20.1	0.0	7.3							
VP08_1.5	16-Jun-17	20	0.0	1.7	17.3	0.0	2.2	1026.1	200	9:17	2:49	5.5 hours	66 L	Leak detection passed.
		40	0.0	1.8	14.9	0.0	-							
		60	0.0	1.8	14.1	0.0	-							
		80	0.0	1.9	14.1	0.0	-							
		100	0.0	1.9	14.1	0.0	2.2							
VP08_2.5	16-Jun-17	-	-	-	-	-	-	-	-	-	-	-	-	No Sample, probe drew water during purging.
VP09	18-May-17	20	0.0	0.0	20.2	0.0	0.9	1026.9	-	-	-	See comments	60 L	60 L Sample noted to be collected. Leak detection passed.
		40	0.0	0.0	20.1	0.6	-							
		60	0.0	0.0	20.1	0.6	0.7							
VP09_1.5	16-Jun-17	20	0.0	5.0	13.0	0.0	1.6	1026.1	200	9:23	2:24	5 hours	60 L	Leak detection passed.
		40	0.0	5.0	12.3	0.0	-							
		60	0.0	5.0	12.2	0.0	-							
		80	0.0	5.0	12.2	0.0	-							
		100	0.0	5.0	12.2	0.0	0.3							
VP09_3.0	16-Jun-17	-	-	-	-	-	-	-	-	-	-	-	-	No Sample, probe drew water during purging.
VP10	18-May-17	20	0.0	0.0	20.3	0.0	2.4	1026.9	-	-	-	See comments	60 L	60 L Sample noted to be collected. Leak detection passed.
		40	0.0	0.0	19.8	0.6	-							
		60	0.0	0.0	19.9	0.6	2.5							
VP10_1.5	16-Jun-17	20	0.0	4.6	15.6	0.0	0.0	1026.1	200	9:38	2:54	5 hours	60 L	Leak detection passed.
		40	0.0	4.7	14.1	0.0	-							
		60	0.0	4.7	13.9	0.0	-							
		80	0.0	4.7	13.8	0.0	-							
		100	0.0	4.7	13.8	0.0	0.0							
VP10_3.0	16-Jun-17	20	0.0	5.3	14.8	0.0	0.8	1026.1	200	9:39	2:55	5 hours	60 L	Leak detection passed.
		40	0.0	5.3	13.7	0.0	-							
		60	0.0	5.3	13.6	0.0	-							
		80	0.0	5.3	13.6	0.0	-							
		100	0.0	5.3	13.6	0.0	-							
		120	0.0	5.3	13.6	0.0	0.7							
VP11	18-May-17	20	0.0	0.0	20.1	0.0	0.8	1026.9	-	-	-	See comments	60 L	60 L Sample noted to be collected. Leak detection passed.
		40	0.0	0.0	19.2	0.0	-							
		60	0.0	0.0	19.1	0.0	0.6							
VP12	18-May-17	20	0.0	0.0	18.8	0.0	0.3	1026.9	-	-	-	See comments	60 L	60 L Sample noted to be collected. Leak detection passed.
		40	0.0	0.0	18.5	0.0	-							
		60	0.0	0.0	18.4	0.0	0.4							
SV01	30-May-17	20	0.0	0.4	19.8	0.0	0.6	1020.1	200	10:25	3:32	5 hours	60 L	Leak detection passed.
		40	0.0	0.7	17.8	0.0	-							
		60	0.0	0.8	18.2	0.0	-							
		80	0.0	0.9	18.3	0.0	0.5							
SV02	30-May-17	20	0.0	0.0	18.6	0.0	0.3	1023.2	200	9:40	2:42	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	19.1	0.0	-							
		60	0.0	0.1	19.1	0.0	0.3							
SV03	30-May-17	20	0.0	2.0	18.2	0.0	0.3	1023.2	200	9:29	2:35	5 hours	60 L	Leak detection passed.
		40	0.0	2.1	17.7	0.0	-							
		60	0.0	2.1	17.6	0.0	0.3							
SV04	30-May-17	20	0.0	5.0	14.3	0.0	0.3	1023.2	200	9:47	2:54	5 hours	60 L	Leak detection passed.
		40	0.0	4.7	10.1	0.0	-							
		60	0.0	4.7	11.1	0.0	-							
		80	0.0	4.6	12.2	0.0	0.4							
SV05	30-May-17	20	0.0	0.2	16.8	0.0	0.9	1023.2	200	9:54	2:57	5 hours	60 L	Leak detection passed.
		40	0.0	0.5	18.8	0.0	-							
		60	0.0	0.5	19.1	0.0	0.9							
SV06	30-May-17	20	0.0	0.0	17.2	0.0	0.5	1020.1	200	10:16	3:18	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	19.3	0.0	-							
		60	0.0	0.0	20.2	0.0	-							
		80	0.0	0.0	20.3	0.0	0.4							
SV07	30-May-17	20	0.0	0.3	19.2	0.0	0.8	1023.2	200	9:30	2:37	5 hours	60 L	Leak detection passed.
		40	0.0	0.3	18.8	0.0	-							
		60	0.0	0.4	18.8	0.0	0.8							

Table D: Soil Vapour Field Measurements
Project Number: 51142
Project Name: Locomotive Workshop LTEMP

Well ID	Date	Time (seconds)	Physcial Parameters						Flow Rate and Run Times					Observations
			CH4 %	CO2 %	O2 %	LEL %	PID	Barometric Pressure	Flow Rate (mL/min)	Pump On	Pump Off	Run Time	Sample Volume	Comments
SV08	30-May-17	20	0.0	0.0	18.1	0.0	0.7	1020.1	200	10:01	3:06	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	17.0	0.0	-							
		60	0.0	0.0	17.0	0.0	0.7							
SV09	30-May-17	20	0.0	0.4	17.2	0.0	0.5	1020.1	200	10:09	3:13	5 hours	60 L	Leak detection passed.
		40	0.0	0.6	16.1	0.0	-							
		60	0.0	0.7	16.7	0.0	-							
		80	0.0	0.7	17.0	0.0	0.5							
SV10	24-May-17	20	0.0	0.0	20.4	0.0	4.2	1014.7	200	7:36	12:37	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	20.3	0.0	-							
		60	0.0	0.0	20.3	0.0	4.2							
SV11	24-May-17	20	0.0	0.0	20.1	0.0	0.6	1014.7	200	7:26	12:28	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	20.1	0.0	-							
		60	0.0	0.0	20.1	0.0	0.5							
SV12	24-May-17	20	0.0	0.0	20.6	0.0	0.3	1014.7	200	7:47	12:50	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	20.7	0.0	-							
		60	0.0	0.0	20.7	0.0	0.2							
SV13	24-May-17	20	0.0	0.0	19.9	0.0	1.1	1014.7	200	6:41	11:41	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	19.8	0.0	-							
		60	0.0	0.0	19.8	0.0	1.0							
SV14	24-May-17	20	0.0	0.2	20.4	0.0	0.1	1014.7	200	6:53	11:53	5 hours	60 L	Leak detection passed.
		40	0.0	0.2	20.4	0.0	-							
		60	0.0	0.2	20.4	0.0	0.1							
SV15	24-May-17	20	0.0	2.8	16.9	0.0	0.1	1014.7	200	6:46	11:46	5 hours	60 L	Leak detection passed.
		40	0.0	3.0	16.4	0.0	-							
		60	0.0	3.0	16.4	0.0	-							
		80	0.0	3.0	16.4	0.0	0.1							
SV16	24-May-17	20	0.0	2.8	17.7	0.0	0.0	1014.7	200	6:22	11:23	5 hours	60 L	Leak detection passed.
		40	0.0	3.2	17.4	0.0	-							
		60	0.0	3.3	17.3	0.0	-							
		80	0.0	3.3	17.3	0.0	0.0							
SV17	23-May-17	20	0.0	0.6	18.9	0.0	0.0	1017.0	200	12:31	5:32	5 hours	60 L	Leak detection passed.
		40	0.0	0.6	19.2	0.0	-							
		60	0.0	0.6	19.2	0.0	0.0							
SV18	23-May-17	20	0.0	0.0	20.1	0.0	-	1017.0	200	12:01	5:01	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	20.2	0.0	-							
		60	0.0	0.0	20.2	0.0	-							
SV19	23-May-17	20	0.0	0.6	19.5	0.0	0.2	1017.0	200	11:49	4:49	5 hours	60 L	Leak detection passed.
		40	0.0	0.8	19.4	0.0	0.1							
		60	0.0	0.9	19.4	0.0	0.1							
SV20	23-May-17	20	0.0	0.7	18.4	0.0	0.2	1022.0	200	8:28	1:30	5 hours	60 L	Leak detection passed.
		40	0.0	0.7	18.4	0.0	-							
		60	0.0	0.7	18.3	0.0	0.1							
SV21	23-May-17	20	0.0	0.4	15.1	0.9	0.5	1022.0	200	8:46	1:46	5 hours	60 L	Leak detection passed.
		40	0.0	0.3	17.6	0.0	-							
		60	0.0	0.3	18.3	0.0	-							
		80	0.0	0.3	18.3	0.0	0.5							
SV22	23-May-17	20	0.0	0.2	18.7	0.0	1.8	1022.0	200	8:14	1:15	5 hours	60 L	Leak detection passed.
		40	0.0	0.2	18.6	0.0	-							
		60	0.0	0.2	18.6	0.0	2.0							
SV23	22-May-17	20	0.0	0.5	20.1	0.0	0.1	1021.8	300	1:50	5:10	3 hours + 20 minutes	60 L	Leak detection passed.
		40	0.0	0.5	20.1	0.0	-							
		60	0.0	0.5	20.1	0.0	0.1							
SV24	22-May-17	20	0.0	0.6	19.1	0.0	0.6	1021.8	300	1:19	3:39	3 hours + 20 minutes	60 L	Leak detection passed.
		40	0.0	0.7	18.8	0.0	-							
		60	0.0	0.7	18.7	0.0	0.3							
SV25	22-May-17	20	0.0	0.0	20.1	0.0	0.6	1021.8	300	1:37	4:57	3 hours + 20 minutes	60 L	Leak detection passed.
		40	0.0	0.0	19.9	0.0	-							
		60	0.0	0.0	19.9	0.0	0.6							
SV26	24-May-17	20	0.0	0.4	19.9	0.0	0.1	1014.7	200	10:49	3:51	5 hours	60 L	Leak detection passed.
		40	0.0	0.5	19.8	0.0	-							
		60	0.0	0.5	19.8	0.0	0.0							
SV27	22-May-17	20	0.0	1.6	18.7	0.0	0.1	1021.8	300	1:28	4:49	3 hours + 20 minutes	60 L	Leak detection passed.
		40	0.0	1.6	18.7	0.0	-							
		60	0.0	1.6	18.6	0.0	0.0							
SV31	23-May-17	20	0.0	0.0	19.8	0.0	19.2	1017.0	200	12:13	5:14	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	19.9	0.0	-							
		60	0.0	0.0	19.9	0.0	18.5							
SV35	23-May-17	20	0.0	0.1	18.3	0.0	4.6	1017.0	200	12:20	5:22	5 hours	60 L	Leak detection passed.
		40	0.0	0.2	18.6	0.0	-							
		60	0.0	0.2	18.6	0.0	4.4							
SV36	23-May-17	20	0.0	0.0	19.2	0.0	0.1	1022.0	200	8:02	1:03	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	19.1	0.0	-							
		60	0.0	0.0	19.1	0.0	0.0							
SV32	23-May-17	20	0.0	0.0	19.2	0.0	0.5	1017.0	200	12:40	5:40	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	19.2	0.0	-							
		60	0.0	0.0	19.2	0.0	0.5							
SV33	24-May-17	20	0.0	0.0	20.5	0.0	0.1	1014.7	200	8:26	2:07	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	20.5	0.0	-							
		60	0.0	0.0	20.5	0.0	0.1							
SV34	24-May-17	20	0.0	0.0	20.6	0.0	0.1	1014.7	200	8:35	2:11	5 hours	60 L	Leak detection passed.
		40	0.0	0.0	20.7	0.0	-							
		60	0.0	0.0	20.7	0.0	0.0							

Table E: Soil Vapour Analytical Results
Project Name: 51142
Project Number: Locomotive Workshop LTEMP

				Chlorinated Alkanes																	Chlorinated Alkenes									
				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-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromochloromethane	Bromodichloromethane	Carbon tetrachloride	Chloroform	dibromochloromethane	Trichlorofluoromethane	1,1-Dichloroethene	1,1-dichloropropene	2-chlorotoluene	Tetrachloroethene	4-chlorotoluene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride
				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
EQL				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	0.08	0.08
NEPM 2013 HIL Comm/Ind. D Indoor Air (Attenuation Factor 0.1)					23[#2]																			0.8[#2]		0.03[#2]			0.008[#2]	0.01[#2]
NEPM 2013 HIL Comm/Ind. D Soil Vapour					230																			8		0.3			0.08	0.1
NEPM 2013 Soil Vapour HSL D - Sand 0 to <1m																														
Sample ID	**Location**	**Date**	**Lab Report**																											
VP01	Loco St. - Bay 14	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP01	Loco St. - Bay 14	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP02	Loco St. - Bay 12/13	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP02	Loco St. - Bay 12/13	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP02_1.7	Loco St. South - Bay 12/13	16/06/2017	550933	<0.008335	0.1234	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.02	<0.008335	0.02667	<0.008335	<0.008335	<0.008335	0.02	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP03	Loco St. - Bay 11/12	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP03	Loco St. - Bay 11/12	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP03 1.5	Loco St. South - Bay 11/12	19/06/2017	550933	<0.008335	0.01667	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.02	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP04	Loco St. - Bay 10	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP04	Loco St. - Bay 10	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP05	Loco St. - Bay 8	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP05	Loco St. - Bay 8	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP06	Loco St. - Bay 7/8	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP06	Loco St. - Bay 7/8	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP06_1.5	Loco St. South - Bay 7/8	16/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP07	Loco St. - Bay 7	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP07	Loco St. - Bay 7	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP07 1.5	Loco St. South - Bay 7	19/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP08	Loco St. - Bay 5	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP08	Loco St. - Bay 5	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP08_1.5	Loco St. South - Bay 5	16/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP09	Loco St. - Bay 4	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP09	Loco St. - Bay 4	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP09 1.5	Loco St. South - Bay 4	19/06/2017	550933	<0.008335	0.015	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.02667	<0.008335	0.5001	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.03834	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP10	Loco St. - Bay 3	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP10	Loco St. - Bay 3	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP10_1.5	Loco St. South - Bay 3	16/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP10_3.0	Loco St. South - Bay 3	16/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP11	Loco St. - Bay 2	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP11	Loco St. - Bay 2	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
VP12	Loco St. - Bay 1	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
QC01 (VP12)	Loco St. - Bay 1	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
VP12	Loco St. - Bay 1	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV01	Bay 11 South	4/05/2016	499538	<0.08334	0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV01	Bay 11 South	30/05/2017	548344	<0.008335	0.1384	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV02	Bay 13 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV02	Bay 13 North	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV03	Bay 13 Central	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	0.3333	<0.08334	<0.08334	<0.08334	<0.08334	0.1833	<0.08334
SV03	Bay 13 Central	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.4001	<0.008335	<0.008335	<0.008335	<0.008335	0.4334	<0.008335
SV04	Bay 11 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
QC01 (SV04)	Bay 11 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV04	Bay 11 North	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV05	Bay 9 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV05	Bay 9 North	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV06	Bay 9 South	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV06	Bay 9 South	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV07	Bay 13 South	4/05/2016	499538	<0.08334	1.1	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	0.7667	<0.08334	<0.08334	<0.08334	<0.08334	0.5	<0.08334
SV07	Bay 13 South	30/05/2017	548344	<0.008335	0.03001	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.1284	<0.008335	<0.008335	<0.008335	<0.008335	0.1117	<0.008335
SV08	Bay 11 Central	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV08	Bay 11 Central	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV09	Bay 9 Central	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV09	Bay 9 Central	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV10	Bay 15 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV10	Bay 15 North	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
QC06 (SV10)	Bay 15 North	24/05/2017	167815	-	-	-	-	-	-	-	<0.08335	-	-	-	-	-	<0.08335	-	-	-	-	-	-	<0.08335	-	-	-	-	<0.08335	-
SV11	Bay 14/15 Central	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV11	Bay 14/15 Central	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
QC05 (SV11)	Bay 14/15 Central	24/05/2017	547611	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV12	Bay 15 South	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV12	Bay 15 South	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV13	Bay 7 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV13	Bay 7 North	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
QC02 (SV13)	Bay 7 North	24/05/2017	167815	-	-	-	-	-	-	-	<0.08335	-	-	-	-	-	<0.08335	-	-	-	-	-	-	<0.08335	-	-	-	-	<0.08335	-
SV14	Bay 6 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0

Table E: Soil Vapour Analytical Results
Project Name: 51142
Project Number: Locomotive Workshop LTEMP

				BTEX				PAHs	Monocyclic Aromatic Hydrocarbons									Misc. Hydrocarbons				Chlorinated Benzenes						Org. Alcohols	Misc. Ind. Chem.
				Benzene	Ethylbenzene	Toluene	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	Dibromomethane	Tribromomethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-Dichlorobenzene	Chlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Isopropyl alcohol	Hexachlorobutadiene
				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				0.08	0.08	0.08	0.25	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.83	0.08	0.08	0.08	0.08	0.01	0.08	0.08	0.08	0.08	0.08	0.08	1.67	0.08
NEPM 2013 HIL Comm/Ind. D Indoor Air (Attenuation Factor 0.1)																													
NEPM 2013 HIL Comm/Ind. D Soil Vapour																													
NEPM 2013 Soil Vapour HSL D - Sand 0 to <1m				4	1300	4800	840	3																					
Sample ID	**Location**	**Date**	**Lab Report**																											
VP01	Loco St. - Bay 14	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP01	Loco St. - Bay 14	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP02	Loco St. - Bay 12/13	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP02	Loco St. - Bay 12/13	18/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP02_1.7	Loco St. South - Bay 12/13	16/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.02501	<0.08335#1	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	-	<0.008335
VP03	Loco St. - Bay 11/12	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP03	Loco St. - Bay 11/12	18/05/2017	547283	<0.008335	0.03334	0.04668	0.12	<0.008335	0.2667	0.06501	<0.008335	<0.008335	<0.008335	0.02834	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP03 1.5	Loco St. South - Bay 11/12	19/06/2017	550933	<0.008335	0.01334	0.04834	0.05001	<0.08335#1	0.02	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	-	<0.008335
VP04	Loco St. - Bay 10	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP04	Loco St. - Bay 10	18/05/2017	547283	<0.008335	0.1834	0.2667	0.6668	<0.008335	1.184	0.2834	0.015	0.03834	0.02334	0.1434	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP05	Loco St. - Bay 8	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP05	Loco St. - Bay 8	18/05/2017	547283	<0.008335	0.1134	0.1467	0.4501	<0.008335	0.9169	0.2167	0.01167	0.03001	0.02	0.1	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP06	Loco St. - Bay 7/8	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP06	Loco St. - Bay 7/8	18/05/2017	547283	<0.008335	0.09335	0.1517	0.3334	<0.008335	0.4334	0.1117	<0.008335	0.02	<0.008335	0.06168	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP06_1.5	Loco St. South - Bay 7/8	16/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.02501	<0.08335#1	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	--	<0.008335
VP07	Loco St. - Bay 7	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP07	Loco St. - Bay 7	18/05/2017	547283	<0.008335	0.01334	0.03334	0.03667	<0.008335	0.1284	0.02501	<0.008335	<0.008335	<0.008335	0.01334	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP07 1.5	Loco St. South - Bay 7	19/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.02501	<0.08335#1	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	-	<0.008335
VP08	Loco St. - Bay 5	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP08	Loco St. - Bay 5	18/05/2017	547283	<0.008335	0.03501	0.06501	0.1317	<0.008335	0.2667	0.06335	<0.008335	<0.008335	<0.008335	0.02667	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP08_1.5	Loco St. South - Bay 5	16/06/2017	550933	<0.008335	<0.008335	0.01334	<0.02501	<0.08335#1	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	-	<0.008335
VP09	Loco St. - Bay 4	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP09	Loco St. - Bay 4	18/05/2017	547283	<0.008335	0.1017	0.2	0.3334	<0.008335	0.5168	0.1234	<0.008335	0.02167	<0.008335	0.06335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP09 1.5	Loco St. South - Bay 4	19/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.02501	<0.08335#1	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	-	<0.008335
VP10	Loco St. - Bay 3	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP10	Loco St. - Bay 3	18/05/2017	547283	<0.008335	0.015	0.01667	0.07835	<0.008335	0.3667	0.06668	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP10_1.5	Loco St. South - Bay 3	16/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.02501	<0.08335#1	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	-	<0.008335
VP10_3.0	Loco St. South - Bay 3	16/06/2017	550933	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	-	<0.008335
VP11	Loco St. - Bay 2	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP11	Loco St. - Bay 2	18/05/2017	547283	<0.008335	0.06335	0.1134	0.2501	<0.008335	0.4168	0.1017	<0.008335	<0.008335	<0.008335	0.05168	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
VP12	Loco St. - Bay 1	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
QC01 (VP12)	Loco St. - Bay 1	13/02/2017	534159	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
VP12	Loco St. - Bay 1	18/05/2017	547283	<0.008335	0.02334	0.07335	0.1067	<0.008335	0.1834	0.03834	<0.008335	<0.008335	<0.008335	0.02167	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV01	Bay 11 South	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV01	Bay 11 South	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	0.03667	0.02	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV02	Bay 13 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV02	Bay 13 North	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.02501	<0.08335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV03	Bay 13 Central	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV03	Bay 13 Central	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.02501	<0.08335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV04	Bay 11 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
QC01 (SV04)	Bay 11 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV04	Bay 11 North	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.02501	<0.08335	0.03334	0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV05	Bay 9 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV05	Bay 9 North	30/05/2017	548344	<0.008335	<0.008335	0.01667	<0.02501	<0.08335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV06	Bay 9 South	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV06	Bay 9 South	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV07	Bay 13 South	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV07	Bay 13 South	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV08	Bay 11 Central	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV08	Bay 11 Central	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.02501	<0.08335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV09	Bay 9 Central	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV09	Bay 9 Central	30/05/2017	548344	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	0.03001	0.02	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV10	Bay 15 North	4/05/2016	499538	<0.08334	0.8167	0.3667	5.667	<0.08334	4.5	2.667	0.4	0.4333	0.4	1.117	0.5167	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV10	Bay 15 North	24/05/2017	547469	<0.008335	<0.008335	0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
QC06 (SV10)	Bay 15 North	24/05/2017	167815	<0.03334	<0.08335	<0.08335	-	<0.08335	-	-	-	<0.08335	-	-	-	<0.08335	-	-	-	-	-	-	-	-	-	<0.08335	-	-	<0.08335	-
SV11	Bay 14/15 Central	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	0.1167	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV11	Bay 14/15 Central	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
QC05 (SV11)	Bay 14/15 Central	24/05/2017	547611	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV12	Bay 15 South	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV12	Bay 15 South	24/05/2017	547469	<0.008335	<0.008335	0.01334	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV13	Bay 7 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV13	Bay 7 North	24/05/2017	547469	<0.008335	<0.008335	0.01667	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
QC02 (SV13)	Bay 7 North	24/05/2017	167815	<0.03334	<0.08335	<0.08335	-	<0.08335	-	-	-	<0.08335	-	-	-	<0.08335	-	-	-	-	-	-	-	-	-	<0.08335	-	-	<0.08335	-
SV14	Bay 6 North	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV14	Bay 6 North	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
QC04 (SV14)	Bay 6 North	24/05/2017	167815	<0.03334	<0.08335	<0.08335	-	<0.08335	-	-	-	<0.08335	-	-	-	<0.08335	-	-	-	-	-	-	-	-	-	<0.08335	-	-	<0.08335	-
SV15	Bay 6 South	4/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV15	Bay 6 South	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
QC03 (SV15	Bay 6 South	24/05/2017	547611	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV16	Bay 7 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV16	Bay 7 Central	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335

Table E: Soil Vapour Analytical Results
Project Name: 51142
Project Number: Locomotive Workshop LTEMP

				Chlorinated Alkanes																	Chlorinated Alkenes									
				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-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromochloromethane	Bromodichloromethane	Carbon tetrachloride	Chloroform	dibromochloromethane	Trichlorofluoromethane	1,1-Dichloroethene	1,1-dichloropropene	2-chlorotoluene	Tetrachloroethene	4-chlorotoluene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride
				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
EQL				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	0.08	0.08
NEPM 2013 HIL Comm/Ind. D Indoor Air (Attenuation Factor 0.1)					23[#2]																			0.8[#2]		0.03[#2]			0.008[#2]	0.01[#2]
NEPM 2013 HIL Comm/Ind. D Soil Vapour					230																			8		0.3			0.08	0.1
NEPM 2013 Soil Vapour HSL D - Sand 0 to <1m																														
Sample ID	**Location**	**Date**	**Lab Report**																											
SV17	Bay 5 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	10.67	<0.08334
SV17	Bay 5 Central	23/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.01667	<0.008335	<0.008335	<0.008335	<0.008335	1.667	<0.008335
SV18	Bay 3 North	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV18	Bay 3 North	23/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV19	Bay 4 North	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV19	Bay 4 North	23/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV20	Bay 4 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
QC02 (SV20)	Bay 4 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV20	Bay 4 Central	23/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV21	Bay 4 Central/North	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV21	Bay 4 Central/North	23/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV22	Bay 4A South	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	0.1667	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV22	Bay 4A South	23/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV23	Bay 1 North	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV23	Bay 1 North	22/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV24	Bay 2 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV24	Bay 2 Central	22/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV25	Bay 1 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV25	Bay 1 Central	22/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV26	Bay 4A/5 South	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	0.9167	<0.08334	<0.08334	<0.08334	<0.08334	0.25	<0.08334
SV26	Bay 4A/5 South	24/05/2017	547611	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.08335	<0.008335	<0.008335	<0.008335	<0.008335	0.08502	<0.008335
SV27	Bay 1 South	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV27	Bay 1 South	22/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV31	Bay 4A Central	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV31	Bay 4A Central	23/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV32	Bay 6 Central	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	0.4333	<0.08334	<0.08334	<0.08334	<0.08334	0.2333	<0.08334
QC03 (SV32)	Bay 6 Central	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV32	Bay 6 Central	23/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV33	Bay 6 South	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334
SV33	Bay 6 South	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.08835	<0.008335	<0.008335	<0.008335	<0.008335	0.1667	<0.008335
SV34	Bay 5 Central	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	6.167	<0.08334
SV34	Bay 5 Central	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335
SV35	Bay 4A/5 Central/South	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	2.333	<0.08334
SV35	Bay 4A/5 Central/South	23/05/2017	547469	<0.008335	0.03334	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	1.084	<0.008335	<0.008335	<0.008335	<0.008335	5.835	<0.008335
SV36	Bay 4A/5 South	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	3.167	<0.08334	<0.08334	<0.08334	<0.08334	0.5667	<0.08334
SV36	Bay 4A/5 South	23/05/2017	547283	<0.008335	0.06168	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	0.4834	<0.008335	<0.008335	<0.008335	<0.008335	0.16	<0.008335

Env Stds Comments

#1:Oregon Department of Environmental Quality Guidelines factor of 0.001 applied to commercial buildings, based on a detailed study of soil vapour / building vapour measurements.
#2:Factor of 0.1 conversion used from indoor air to soil vapour

Table E: Soil Vapour Analytical Results
Project Name: 51142
Project Number: Locomotive Workshop LTEMP

				BTEX				PAHs	Monocyclic Aromatic Hydrocarbons									Misc. Hydrocarbons				Chlorinated Benzenes						Org. Alcohols	Misc. Ind. Chem.
				Benzene	Ethylbenzene	Toluene	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	Dibromomethane	Tribromomethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-Dichlorobenzene	Chlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Isopropyl alcohol	Hexachlorobutadiene
				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				0.08	0.08	0.08	0.25	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.83	0.08	0.08	0.08	0.08	0.01	0.08	0.08	0.08	0.08	0.08	0.08	1.67	0.08
NEPM 2013 HIL Comm/Ind. D Indoor Air (Attenuation Factor 0.1)																													
NEPM 2013 HIL Comm/Ind. D Soil Vapour																													
NEPM 2013 Soil Vapour HSL D - Sand 0 to <1m				4	1300	4800	840	3																					
Sample ID	**Location**	**Date**	**Lab Report**																										
SV17	Bay 5 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV17	Bay 5 Central	23/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV18	Bay 3 North	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV18	Bay 3 North	23/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV19	Bay 4 North	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV19	Bay 4 North	23/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV20	Bay 4 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
QC02 (SV20)	Bay 4 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV20	Bay 4 Central	23/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV21	Bay 4 Central/North	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV21	Bay 4 Central/North	23/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV22	Bay 4A South	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV22	Bay 4A South	23/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV23	Bay 1 North	5/05/2016	499538	<0.08334	<0.08334	0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV23	Bay 1 North	22/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV24	Bay 2 Central	5/05/2016	499538	<0.08334	<0.08334	0.25	0.4333	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV24	Bay 2 Central	22/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV25	Bay 1 Central	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV25	Bay 1 Central	22/05/2017	547283	<0.008335	<0.008335	0.01334	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV26	Bay 4A/5 South	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV26	Bay 4A/5 South	24/05/2017	547611	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV27	Bay 1 South	5/05/2016	499538	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV27	Bay 1 South	22/05/2017	547283	<0.008335	<0.008335	0.01334	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV31	Bay 4A Central	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV31	Bay 4A Central	23/05/2017	547469	0.2334	0.04001	0.4168	0.2667	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV32	Bay 6 Central	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
QC03 (SV32)	Bay 6 Central	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV32	Bay 6 Central	23/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV33	Bay 6 South	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV33	Bay 6 South	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV34	Bay 5 Central	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV34	Bay 5 Central	24/05/2017	547469	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV35	Bay 4A/5 Central/South	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV35	Bay 4A/5 Central/South	23/05/2017	547469	<0.008335	<0.008335	0.02501	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335
SV36	Bay 4A/5 South	20/05/2016	501366	<0.08334	<0.08334	<0.08334	<0.25	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.8334	<0.08334	<0.08334	<0.08334	<0.08334	-	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<0.08334	<1.667	<0.08334
SV36	Bay 4A/5 South	23/05/2017	547283	<0.008335	<0.008335	<0.008335	<0.02501	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.08335	<0.008335	<0.008335	-	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.008335	<0.1667	<0.008335

Env Stds Comments

#1:Oregon Department of Environmental Quality Guidelines factor of 0.001 applied to commercial buildings, based on a detailed study of soil vapour / building vapour measurements.
#2:Factor of 0.1 conversion used from indoor air to soil vapour

Table F: Groundwater Analytical Results
Project Number: 51142
Project Name: Locomotive Workshop LTEMP

| | Metals & Metalloids | | | | | | | | Chlorinated Alkanes | | | | | | | |

Table F: Groundwater Analytical Results
Project Number: 51142
Project Name: Locomotive Workshop LTEMP

	TRHs (NEPC 2013) - Silica Gel	BTEX					Polycyclic Aromatic Hydrocarbons																	Monocyclic Aromatic Hydrocarbons										Miscellaneous Hydrocarbons								Chlorinated Benzenes							
	>C10 - C16 less Naphthalene (F2)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene (Total)	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b,k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Total)	Total Positive PAHs	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	4-isopropyl toluene	Bromobenzene	Isopropylbenzene	n-butyl benzene	n-propyl benzene	sec-butyl benzene	Styrene	tert-butyl benzene	1,2-dibromoethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Bromoform	Bromomethane	Cyclohexane	Dibromomethane	Iodomethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-Dichlorobenzene	Chlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobenzene
	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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZG (2018) Marine water 95% toxicant DGVs																																																	
NEPM 2013 GIL - Drinking Water		1	300	800			600					0.01																				30					250[#8]	1					30	30	1500	300		40	
NEPM 2013 GIL - Fresh Waters		950				350														16																							3[#10]	85[#10]	160		260	60	
NEPM 2013 GIL - Marine Waters		500[#15]																		50[#15]																								20[#13]						
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m	1000[#17]	800	NL	NL			NL													NL																													
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 4 to <8m	1000[#17]	800	NL	NL			NL													NL																													
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 8m+	1000[#17]	900	NL	NL			NL													NL																													
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 2 to <4m	NL	5000	NL	NL			NL													NL																													
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 4 to <8m	NL	5000	NL	NL			NL													NL																													
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 8m+	NL	5000	NL	NL			NL													NL																													
NEPM 2013 GIL - Recreational		10	3000	8000			6000					0.1																				300		10			2500	10							15000	3000		400	

Sample ID	Date	Location																																																
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MW149	2/05/2003	Lot 12	-	<1	<1	950	-	-	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3	4/04/2014	Lot 12	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3	24/03/2015	Lot 12	<50	<1	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW301	31/05/2005	Lot 12	-	<1	<1	4	-	-	5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
MW301	2/08/2012	Lot 12	-	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
MW301	31/01/2014	Lot 12	<10	<1	<1	<1	<2	<1	-	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	-
MW315	31/05/2005	Lot 12	<3	<1	<1	<1	-	-	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	0.8	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
MW50	27/05/1993	Lot 12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW513	16/12/2010	Lot 12	-	<1	<1	<1	<2	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	-
MW513	12/01/2011	Lot 12	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW513	14/12/2011	Lot 12	-	<1	<1	<1	<2	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	-
MW56	27/05/1993	Lot 12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW606	14/11/2007	Lot 12	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW619	2/08/2012	Lot 12	-	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
MW619	5/02/2013	Lot 12	210	<1	<1	<1	<2	<1	<3	4	<1	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	-
MW619	16/07/2013	Lot 12	230	<1	<1	<1	<2	<1	<3	4	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	4.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	-
MW619	31/01/2014	Lot 12	<50	<1	<1	<1	<2	<1	<3	2	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW619	24/03/2015	Lot 12	<50	<1	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW625	2/08/2012	Lot 12	-	<1	<1	<1	<2	<2	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	-
MW625	5/02/2013	Lot 12	<50	<1	<1	<1	<2	<2	<3	<1	<1	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	-
MW625	16/07/2013	Lot 12	<50	<1	<1	<1	<2	<2	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1

Table F: Groundwater Analytical Results
Project Number: 51142
Project Name: Locomotive Workshop LTEMP

				Polychlorinated Biphenyls								Phenols	Miscellaneous Industrial Chemicals	Organochlorine Pesticides																						Organophosphorus Pesticides								
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	Phenols (Total)	Hexachlorobutadiene	Aldrin	Aldrin + Dieldrin (Sum of Total)	4,4-DDE	alpha-BHC	Dieldrin	beta-BHC	DDD	DDT	alpha-Chlordane	DDT+DDE+DDD (Sum of Total)	Chlordane	Delta-BHC	gamma-Chlordane	Endosulfan alpha	Endosulfan beta	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor Epoxide	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Ethoprophos	Fenitrothion	Fonnel
				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
ANZG (2018) Marine water 95% toxicant DGVs																					0.009[#3]																							
NEPM 2013 GIL - Drinking Water													0.7		0.3					9			2									0.3			10		4	5	7	4	1	7	
NEPM 2013 GIL - Fresh Waters							0.3[#10]		0.01[#10]											0.006[#10]			0.03[#10]							0.01[#10]		0.01[#10]			0.01[#10]		0.01		0.15			0.2	
NEPM 2013 GIL - Marine Waters																														0.004[#13]					0.009[#13]								
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																																											
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 4 to <8m																																											
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 8m+																																											
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 2 to <4m																																											
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 4 to <8m																																											
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 8m+																																											
NEPM 2013 GIL - Recreational													7		3					90			20									3		3000	100	100		40	50	70	40	10	70	
Sample ID	**Date**	**Location**																																									
MW101	2/05/2003	Area 1	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	-	-	<0.4	-	-	<0.4	-	-	-	-	-	-	-	<0.4	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-	<0.2
MW101	3/05/2010	Area 1	<2	<2	<2	<2	<2	<2	<2	0	-	<1	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW101	20/12/2010	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW101	12/01/2011	Area 1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-
MW101	14/12/2011	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.2	-	-	-	-	-	-	-	-	-
MW102	3/05/2010	Area 1	<2	<2	<2	<2	<2	<2	<2	0	-	<1	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW102	20/12/2010	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW102	12/01/2011	Area 1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-
MW102	14/12/2011	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.2	-	-	-	-	-	-	-	-	-
MW103	19/03/2010	Area 1	<2	<2	<2	<2	<2	<2	<2	0	-	<1	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW103	20/12/2010	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW103	12/01/2011	Area 1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-
MW103	14/12/2011	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.2	-	-	-	-	-	-	-	-	-
MW103	2/08/2012	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW103	5/02/2013	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW103	16/07/2013	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW103	31/01/2014	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW103	25/03/2015	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW49	27/05/1993	Area 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWAH1	3/08/2012	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MWAH1	6/02/2013	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MWAH1	16/07/2013	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MWAH1	31/01/2014	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MWAH1	30/03/2015	Area 1	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4	29/09/1994	Area 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5	29/09/1994	Area 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6	29/09/1994	Area 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW107	19/03/2010	Area 4	<2	<2	<2	<2	<2	<2	<2	0	-	<1	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW107	20/12/2010	Area 4	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW107	12/01/2011	Area 4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.005	<0.005	<0.005	<0.005	0.0052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-
MW107	14/12/2011	Area 4	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.2	-	-	-	-	-	-	-	-	-
MW107	2/08/2012	Area 4	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW107	5/02/2013	Area 4	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW107	16/07/2013	Area 4	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW107	30/01/2014	Area 4	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW107	24/03/2015	Area 4	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW105	19/03/2010	Area 5	<2	<2	<2	<2	<2	<2	<2	0	-	<10	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW106	19/03/2010	Area 5	<2	<2	<2	<2	<2	<2	<2	0	-	<1	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW106	20/12/2010	Area 5	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW106	12/01/2011	Area 5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-
MW106	14/12/2011	Area 5	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.2	-	-	-	-	-	-	-	-	-
MW04	25/01/2001	Area 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW20	27/05/1993	Area 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW03	25/01/2001	Lot 12	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1	4/04/2014	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	-	<0.2	<0.4	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	-	<0.2
MW1	24/03/2015	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW104	3/05/2010	Lot 12	<2	<2	<2	<2	<2	<2	<2	0	-	<10	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW104	20/12/2010	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW104	12/01/2011	Lot 12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-
MW104	14/12/2011	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.2	-	-	-	-	-	-	-	-	-
MW104	2/08/2012	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW104	5/02/2013	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW104	16/07/2013	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW104	31/01/2014	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW104	24/03/2015	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW149	2/05/2003	Lot 12	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	-	<0.4	-	-	<0.4	-	-	-	-	-	-	-	<0.2	-	-	<0.2	<0.2	-	-	-	-	<0.2	<0.2	-	-
MW3	4/04/2014	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	-	<0.2	<0.4	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	-	<0.2
MW3	24/03/2015	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW301	31/05/2005	Lot 12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	-	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW301	2/08/2012	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW301	31/01/2014	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW315	31/05/2005	Lot 12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	-	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	-
MW50	27/05/1993	Lot 12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW513	16/12/2010	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-
MW513	12/01/2011	Lot 12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-
MW513	14/12/2011	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.2	-	-	-	-	-	-	-	-	-
MW56	27/05/1993	Lot 12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW606	14/11/2007	Lot 12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW619	2/08/2012	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW619	5/02/2013	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW619	16/07/2013	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
MW619	31/01/2014	Lot 12	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2

Table F: Groundwater Analytical Results
Project Number: 51142
Project Name: Locomotive Workshop LTEMP

	Metals & Metalloids								Chlorinated Alkanes																															Chlorinated Alkenes											TPHs (NEPC 1999)					TPHs (NEPC 1999) - Silica Gel			TRHs (NEPC 2013)					
	Arsenic (Total)	Cadmium	Chromium (Total)	Copper	Lead	Mercury (Inorganic)	Nickel	Zinc	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-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromochloromethane	Bromodichloromethane	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dichlorodifluoromethane	Dichloromethane	Trichlorofluoromethane	1,1,2,2-tetrachloroethylene	1,1-Dichloroethene	1,1-dichloropropene	2-chlorotoluene	3-chloropropene	4-chlorotoluene	cis-1,2-dichloroethene	cis-1,3-dichloropropene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl Chloride	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Total)	C10-C14 Fraction (SG)	C15-C28 Fraction (SG)	C29-C36 Fraction (SG)	C10-C16 Fraction	C16-C34 Fraction	C34-C40 Fraction	>C16-C10 Fraction	C6 - C10 less BTEX (F1)
	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	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
ANZG (2018) Marine water 95% toxicant DGVs				1.3[#1]	4.4[#1]			15[#2]			1900																																																	
NEPM 2013 GIL - Drinking Water	10	2[#8]	50	2000[#8]	10[#8]	1	20[#8]	3000								3					250[#9]	3		250[#9]		250[#9]		4		50	30									0.3																			
NEPM 2013 GIL - Fresh Waters		0.2[#8]		1.4[#8]	3.4[#8]	0.06[#10]	11[#8]	8[#11]			6500																																																	
NEPM 2013 GIL - Marine Waters		0.7[#12]		1.3[#8]	4.4[#8]	0.1[#13]	7[#8]	15[#14]			1900																																																	
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																																																																1000[#16]
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 4 to <8m																																																														1000[#16]
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 8m+																																																														1000[#16]
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 2 to <4m																																																														6000[#16]
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 4 to <8m																																																														6000[#16]
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 8m+																																																														7000[#16]
NEPM 2013 GIL - Recreational	100	20	500	20000	100	10	200	30,000								30					2500	30		2500		2500		40		500	300									200[#7]	3																		

| Sample ID | Date | Location | | | | | | | | | | | | | | | | | | |

Table F: Groundwater Analytical Results
Project Number: 51142
Project Name: Locomotive Workshop LTEMP

			TRHs (NEPC 2013) - Silica Gel	BTEX					Polycyclic Aromatic Hydrocarbons																Monocyclic Aromatic Hydrocarbons										Miscellaneous Hydrocarbons								Chlorinated Benzenes							
			>C10 - C16 less Naphthalene (F2)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene (Total)	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b,k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Total)	Total Positive PAHs	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	4-isopropyl toluene	Bromobenzene	Isopropylbenzene	n-butyl benzene	n-propyl benzene	sec-butyl benzene	Styrene	tert-butyl benzene	1,2-dibromoethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Bromoform	Bromomethane	Cyclohexane	Dibromomethane	Iodomethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-Dichlorobenzene	Chlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobenzene
			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	µg/L	µg/L	µg/L	µg/L	µg/L
ANZG (2018) Marine water 95% toxicant DGVs																																																		
NEPM 2013 GIL - Drinking Water				1	300	800			600					0.01																				30				250[#8]	1					30	30	1500	300		40	
NEPM 2013 GIL - Fresh Waters				950				350														16																						3[#10]	85[#10]	160		260	60	
NEPM 2013 GIL - Marine Waters				500[#15]																		50[#15]																							20[#13]						
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m			1000[#17]	800	NL	NL			NL													NL																												
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 4 to <8m			1000[#17]	800	NL	NL			NL													NL																												
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 8m+			1000[#17]	900	NL	NL			NL													NL																												
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 2 to <4m			NL	5000	NL	NL			NL													NL																												
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 4 to <8m			NL	5000	NL	NL			NL													NL																												
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 8m+			NL	5000	NL	NL			NL													NL																												
NEPM 2013 GIL - Recreational				10	3000	8000			6000					0.1																				300		10			2500	10						15000	3000		400	
Sample ID	**Date**	**Location**																																															
MW118	2/05/2003	Lot 9	-	<1	<1	<1	-	-	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	-	<0.5	<0.5	1	<0.5	<0.5	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14	3/04/2014	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14	24/03/2015	Lot 9	<50	<1	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW15	3/04/2014	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW15	3/04/2014	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW15	24/03/2015	Lot 9	<50	<1	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16	27/05/1993	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16	24/03/2015	Lot 9	<50	<1	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW25	27/05/1993	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW315	3/08/2012	Lot 9	-	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW318	12/08/2005	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318	20/09/2005	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318	14/11/2007	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318D	2/07/2007	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318S	2/07/2007	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322	31/05/2005	Lot 9	-	<1	<1	<1	-	-	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	0	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
MW322	12/08/2005	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322	20/09/2005	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322	2/07/2007	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322	14/11/2007	Lot 9	-	<1	<1	<1	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW503	7/02/2008	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW503	3/05/2010	Lot 9	-	<1	<1	<1	<2	<1	<2	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	-	<1	-	<1	<1	<1	<1	<1	<1	<1	<0.2
MW503	15/12/2010	Lot 9	-	<1	<1	<1	-	-	<3	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW503	16/12/2010	Lot 9	-	<1	<1	<1	<2	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW503	12/01/2011	Lot 9	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW503	14/12/2011	Lot 9	-	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW503	2/08/2012	Lot 9	-	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW503	5/02/2013	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW503	17/07/2013	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW503	30/01/2014	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW504	24/03/2015	Lot 9	<50	<1	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW507	7/02/2008	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW507	5/02/2013	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW507	17/07/2013	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW507	30/01/2014	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW507	24/03/2015	Lot 9	<50	<1	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW508	7/02/2008	Lot 9	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW508	5/03/2010	Lot 9	-	<10	<10	<10	-	-	<30	-	-	-	-	<1	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW508	19/03/2010	Lot 9	-	<10	<10	<10	<20	<10	<20	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	-	<1	<100	-	<10	-	<10	<10	<10	<10	<10	<10	<10	<0.2
MW508	8/06/2010	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW508	16/12/2010	Lot 9	-	<1	<1	<1	<2	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW508	12/01/2011	Lot 9	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW508	14/12/2011	Lot 9	-	<1	<1	<1	<2	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW508	2/08/2012	Lot 9	-	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
MW508	17/07/2013	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW508	30/01/2014	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW508	24/03/2015	Lot 9	<50	<1	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW511	7/02/2008	Lot 9	<50	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW511	2/08/2012	Lot 9	-	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
MW511	5/02/2013	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<5	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW511	17/07/2013	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<10	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-
MW511	30/01/2014	Lot 9	<50	<1	<1	<1	<2	<1	<3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW511	24/03/2015	Lot 9	<50	<1	<1	<1	<2	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW513	7/02/2008	Lot 9	<50	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW513	24/03/2015	Lot 9	<50	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW01	25/01/2001	Off-site	-	<1	<2	<2	-	-	<2	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW02	25/01/2001	Off-site	-	<1	<2	<2	-	-	<2	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1	29/09/1994	Off-site	-	<20	<20	<20	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1	25/01/2001	Off-site	-	<1	<2	<2	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2	27/05/1993	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2	29/09/1994	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318	31/05/2005	Off-site	-	<1	<1	<1	-	-	<3	2	2	1	2	0.9	3	0.6	2	<0.5	5.9	4	<0.5	3	6.2	6.9	-	39.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
MW319	31/05/2005	Off-site	-	<1	<1	<1	-	-	<3	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2
MW319	12/08/2005	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW319	20/09/2005	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW401A	2/07/2007	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW401A	14/11/2007	Off-site	-	<1	<1	<1	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW401A	17/07/2013	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW402A	2/07/2007	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW402A	14/11/2007	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW402B	2/07/2007	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW402B	14/11/2007	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW403B	2/07/2007	Off-site	<50	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW403C	2/07/2007	Off-site	<50	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW42	27/05/1993	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW602	14/11/2007	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW603	14/11/2007	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW604	14/11/2007	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW605	14/11/2007	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6	27/05/1993	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-A	26/03/2008	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-B	26/03/2008	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-C	26/03/2008	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-D	26/03/2008	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-E	26/03/2008	Off-site	-	<1	<1	<1	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Env Stds Comments
#1:H
#2:C,H
#3:B
#4:B,H
#5:B
#6:C
#7:Adopted from WHO Drinking Water Guideline 2011
#8:TV Calculated using hardness of 30mg/L CaCO3, refer to ANZECC & ARMCANZ (2000) for site specific hardness
#9:TV adopted from the ADWG (2011) Updated March 2015.
* Data presented in ES (2014a)

#10:Possible bioaccumulation & secondary poisoning, refer to ANZECC & ARMCANZ (2000) for further guidance.
#11:TV Calculated using hardness of 30mg/L CaCO3. May not protect key species from chronic toxicity. Refer to ANZECC & ARMCANZ (2000) for site specific hardness and further guidance.
#12:TV Calculated using hardness of 30mg/L CaCO3, possible bioaccumulation & secondary poisoning. Refer to ANZECC & ARMCANZ (2000) for site specific hardness and further guidance.
#13:Possible bioaccumulation & secondary poisoning, refer to ANZECC & ARMCANZ (2000) for further guidance.
#14:TV Calculated using hardness of 30mg/L CaCO3, TV May not protect key species from chronic toxicity. Refer to ANZECC & ARMCANZ (2000) for site specific hardness and further guidance.
#15:TV May not protect key species from chronic toxicity, refer to ANZECC & ARMC

Table F: Groundwater Analytical Results
Project Number: 51142
Project Name: Locomotive Workshop LTEMP

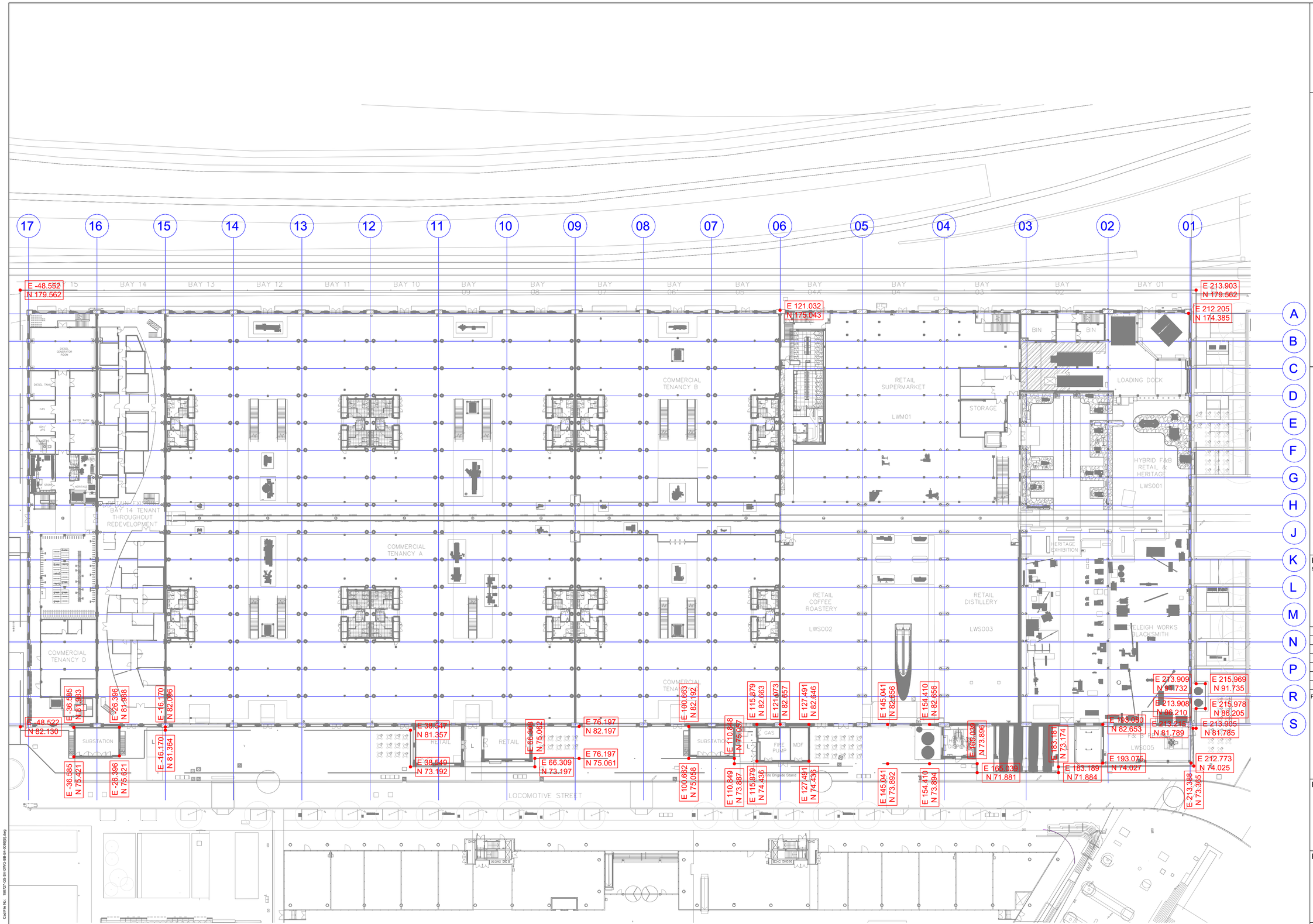
	Polychlorinated Biphenyls								Phenols	Miscellaneous Industrial Chemicals	Organochlorine Pesticides																					Organophosphorus Pesticides								
	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Total)	Phenols (Total)	Hexachlorobutadiene	Aldrin	Aldrin + Dieldrin (Sum of Total)	4,4-DDE	alpha-BHC	Dieldrin	beta-BHC	DDD	DDT	alpha-Chlordane	DDT+DDE+DDD (Sum of Total)	Chlordane	delta-BHC	gamma-Chlordane	Endosulfan alpha	Endosulfan beta	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor Epoxide	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Ethoprophos	Fenitrothion	Fonnel
	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
ANZG (2018) Marine water 95% toxicant DGVs																																	0.009[#3]								
NEPM 2013 GIL - Drinking Water										0.7		0.3						9			2										0.3		10		4	5	7	4	1	7	
NEPM 2013 GIL - Fresh Waters				0.3[#10]		0.01[#10]												0.006[#10]			0.03[#10]								0.01[#10]		0.01[#10]		0.01		0.15			0.2	
NEPM 2013 GIL - Marine Waters																											0.004[#13]						0.009[#13]								
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 2 to <4m																																									
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 4 to <8m																																									
NEPM 2013 Groundwater HSL A&B for Vapour Intrusion - Sand 8m+																																									
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 2 to <4m																																									
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 4 to <8m																																									
NEPM 2013 Groundwater HSL D for Vapour Intrusion - Sand 8m+																																									
NEPM 2013 GIL - Recreational										7		3						90			20									3		3000	100	100		40	50	70	40	10	70	

Sample ID	Date	Location																																										
MW118	2/05/2003	Lot 9	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	-	-	<0.4	-	-	<0.4	-	-	-	-	-	-	-	<0.2	-	-	<0.2	<0.2	-	-	-	-	<0.2	<0.2	-	-
MW14	3/04/2014	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	<0.2	<0.4	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW14	24/03/2015	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW15	3/04/2014	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	<0.2	<0.4	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW15	3/04/2014	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	<0.2	<0.4	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW15	24/03/2015	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16	27/05/1993	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16	24/03/2015	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW25	27/05/1993	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW315	3/08/2012	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW318	12/08/2005	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318	20/09/2005	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318	14/11/2007	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318D	2/07/2007	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318S	2/07/2007	Lot 9	-	-	-	-	-	-	-	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322	31/05/2005	Lot 9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	-	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW322	12/08/2005	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322	20/09/2005	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322	2/07/2007	Lot 9	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322	14/11/2007	Lot 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW503	7/02/2008	Lot 9	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW503	3/05/2010	Lot 9	<2	<2	<2	<2	<2	<2	<2	0	-	<1	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-
MW503	15/12/2010	Lot 9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	-	<0.02	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-
MW503	16/12/2010	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-
MW503	12/01/2011	Lot 9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	-	-	-	-	-	-	-	-	-
MW503	14/12/2011	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.2	-	-	-	-	-	-	-	-	-	-
MW503	2/08/2012	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW503	17/07/2013	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW503	30/01/2014	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW503	24/03/2015	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW508	7/02/2008	Lot 9	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW508	5/03/2010	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	<0.02	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-
MW508	19/03/2010	Lot 9	<2	<2	<2	<2	<2	<2	<2	0	-	<10	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-
MW508	8/06/2010	Lot 9	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW508	16/12/2010	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-
MW508	12/01/2011	Lot 9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-
MW508	14/12/2011	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.2	-	-	-	-	-	-	-	-	-	-
MW508	2/08/2012	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW508	17/07/2013	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW508	30/01/2014	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
MW508	24/03/2015	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW511	7/02/2008	Lot 9	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW511	2/08/2012	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW511	5/02/2013	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW511	17/07/2013	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW511	30/01/2014	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	<1	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.6	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
MW511	24/03/2015	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW513	7/02/2008	Lot 9	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW513	24/03/2015	Lot 9	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW01	25/01/2001	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW02	25/01/2001	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1	29/09/1994	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1	25/01/2001	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2	27/05/1993	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2	29/09/1994	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW318	31/05/2005	Off-site	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	-	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW319	31/05/2005	Off-site	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	-	<0.2	0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
MW319	12/08/2005	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW319	20/09/2005	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW401A	2/07/2007	Off-site	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW401A	14/11/2007	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW401A	17/07/2013	Off-site	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW402A	2/07/2007	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW402A	14/11/2007	Off-site	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW402B	2/07/2007	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW402B	14/11/2007	Off-site	<2	<2	<2	<2	<2	<2	<2	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW403B	2/07/2007	Off-site	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW403C	2/07/2007	Off-site	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW42	27/05/1993	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW602	14/11/2007	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW603	14/11/2007	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW604	14/11/2007	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW605	14/11/2007	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW66	27/05/1993	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-A	26/03/2008	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-B	26/03/2008	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-C	26/03/2008	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-D	26/03/2008	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWP208A-E	26/03/2008	Off-site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Env Stds Comments
#1:H
#2:C,H
#3:B
#4:B,H
#5:B
#6:C
#7:Adopted from WHO Drinking Water Guideline 2011
#8:TV Calculated using hardness of 30mg/L CaCO3, refer to ANZECC & ARMCANZ (2000) for site specific hardness
#9:TV adopted from the ADWG (2011) Updated March 2015.
* Data presented in ES (2014a)

#10:Possible bioaccumulation & secondary poisoning, refer to ANZECC & ARMCANZ (2000) for further guidance.
#11:TV Calculated using hardness of 30mg/L CaCO3. May not protect key species from chronic toxicity. Refer to ANZECC & ARMCANZ (2000) for site specific hardness and further guidance.
#12:TV Calculated using hardness of 30mg/L CaCO3, possible bioaccumulation & secondary poisoning. Refer to ANZECC & ARMCANZ (2000) for site specific hardness and further guidance.
#13:Possible bioaccumulation & secondary poisoning, refer to ANZECC & ARMCANZ (2000) for further guidance.
#14:TV Calculated using hardness of 30mg/L CaCO3, TV May not protect key species from chronic toxicity. Refer to ANZECC & ARMCANZ (2000) for site specific hardness and further guidance.
#15:TV May not protect key species from chronic toxicity, refer to ANZECC & ARMCANZ (2000) for further guidance.
#16:To obtain F1 subtract the sum of BTEX from C6-C10.
#17:To obtain F2 subtract naohthalene from >C10-C16.
#18:Multiple factor not applied

Appendix B Survey Plans



NORTH (APPROX)

LEGEND

GRIDS

NOTES:

1. ALL MARKS PLACED ARE ACCURATE AND CORRECT AT DATE OF SURVEY.

2. IF MARKS ARE PLACED PRIOR TO STRESSING, GEOSURV TAKE NO RESPONSIBILITY FOR THE ACCURACY OF THOSE MARKS PLACED ONCE STRESSING HAS BEEN CARRIED OUT.

3. CONSTRUCTION WORKS MUST BE RELATED TO THE BENCHMARK ONLY AND NOT LEVELS OF STRUCTURES SHOWN ON THIS PLAN.

4. IT IS THE SOLE RESPONSIBILITY OF THE BUILDER TO MAINTAIN THE INTEGRITY OF MARKS TO BE USED BY CONTRACTORS PRIOR TO USE.

5. THIS SURVEY IS FOR SETOUT PURPOSES ONLY AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE

6. PLAN HAS BEEN PRODUCED AS A PRIORITY AS PER BUILDERS REQUEST. FOR CLARITY OF THE OFFSET MARKS SHOWN PLEASE ENLARGE SECTION OF THE PLAN WHEN PRINTING. SEEK CLARIFICATION FROM GEOSURV IF UNSURE OF THE OFFSET OR THE DIRECTION OF THE OFFSET TO THE LOCATION OF THE MARK PLACED

PLANS USED:

SA-AR-DWG-BB-B4-0530[L]

REV.	DATE	AMENDMENTS	INT.
B	30/10/20	Point Amendments	ARF
A	19/10/20	Issued to Client	ARF
PRE	19/10/20	Preliminary Issue	ARF

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PREPARED FOR:

MIRVAC CONSTRUCTIONS PTY LTD

PLAN OF:

STAGE 1D
VALIDATION SURVEY
APT B4 BUILDING
2 LOCOMOTIVE STREET
EVELEIGH,NSW

ORIGINAL SIZE:	A1		
SCALE:	1:400	CO-ORD:	SITE
DATUM:	SITE	ORIG DATUM:	ADOPTED
SURVEY BY:	-	DATE:	-
DRAWN BY:	ARF	DATE:	19/10/20
CHECKED BY:	GP	DATE:	19/10/20
APPROVED BY:	JT	DATE:	19/10/20

DRAWING #: GS-SV-DWG-BB-B4-0086

REV: B

Cad File No: 190727-GS-SV-DWG-BB-B4-0086[B].dwg
Plot Date: 30 October 2020 - 2:18 PM

SKETCH

FOR INFORMATION ONLY

03 02 01

D E F G H

DIRT 21.56 GRANITE 21.68 GRANITE 21.62 DIRT 21.51 GRANITE 21.58 DIRT 21.42 DIRT 21.47 DIRT 21.58 GRANITE 21.66 GRANITE 21.67 DIRT 21.42 DIRT 21.48 GRANITE 21.59 GRANITE 21.60 DIRT 21.49 DIRT 21.47 DIRT 21.39 GRANITE 21.58 DIRT 21.27 GRANITE 21.52 GRANITE 21.55 DIRT 21.44 GRANITE 21.57 DIRT 21.46 GRANITE 21.57 DIRT 21.33 DIRT 21.39 GRANITE 21.59 DIRT 21.50 GRANITE 21.61 DIRT 21.49 GRANITE 21.61 DIRT 21.50 GRANITE 21.61 DIRT 21.46 GRANITE 21.60 GRANITE 21.60 DIRT 21.49 DIRT 21.48 GRANITE 21.60 GRANITE 21.57 DIRT 21.40 DIRT 21.39 DIRT 21.41 GRANITE 21.56 DIRT 21.51 GRANITE 21.62 DIRT 21.43 GRANITE 21.56 GRANITE 21.46 DIRT 21.30 DIRT 21.43 GRANITE 21.54 GRANITE 21.52 DIRT 21.41 GRANITE 21.57 DIRT 21.47 DIRT 21.37 GRANITE 21.60 GRANITE 21.66 DIRT 21.53 DIRT 21.35 GRANITE 21.55 DIRT 21.37 GRANITE 21.54 GRANITE 21.67 DIRT 21.55 DIRT 21.38 GRANITE 21.57 GRANITE 21.58 DIRT 21.44 GRANITE 21.57 DIRT 21.39 GRANITE 21.56 GRANITE 21.60 DIRT 21.46 GRANITE 21.59 DIRT 21.46 GRANITE 21.60 DIRT 21.50 GRANITE 21.56 DIRT 21.45 GRANITE 21.62 DIRT 21.50 DIRT 21.45 GRANITE 21.58 DIRT 21.48 DIRT 21.37 GRANITE 21.57 GRANITE 21.57 DIRT 21.31 DIRT 21.34 DIRT 21.50 DIRT 21.54 GRANITE 21.66 DIRT 21.43 GRANITE 21.62 DIRT 21.52 GRANITE 21.63 GRANITE 21.64 DIRT 21.52 GRANITE 21.59 DIRT 21.44 DIRT 21.50 GRANITE 21.61 GRANITE 21.56 DIRT 21.46 DIRT 21.39 GRANITE 21.55 GRANITE 21.58 DIRT 21.47 DIRT 21.47 GRANITE 21.58 DIRT 21.52 GRANITE 21.62

Civil File No: BAY1-2-ASBUILT-LEVELS.dwg

Plot Date: 13 January 2022 - 7:01 AM

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AS-BUILT

BAY 1 AND 2
SURFACE LEVELS
ATP LOCOMOTIVE

LEGEND:

× SURVEYED POINT
9.800 RL SURVEYED

PREPARED FOR:

MIRVAC

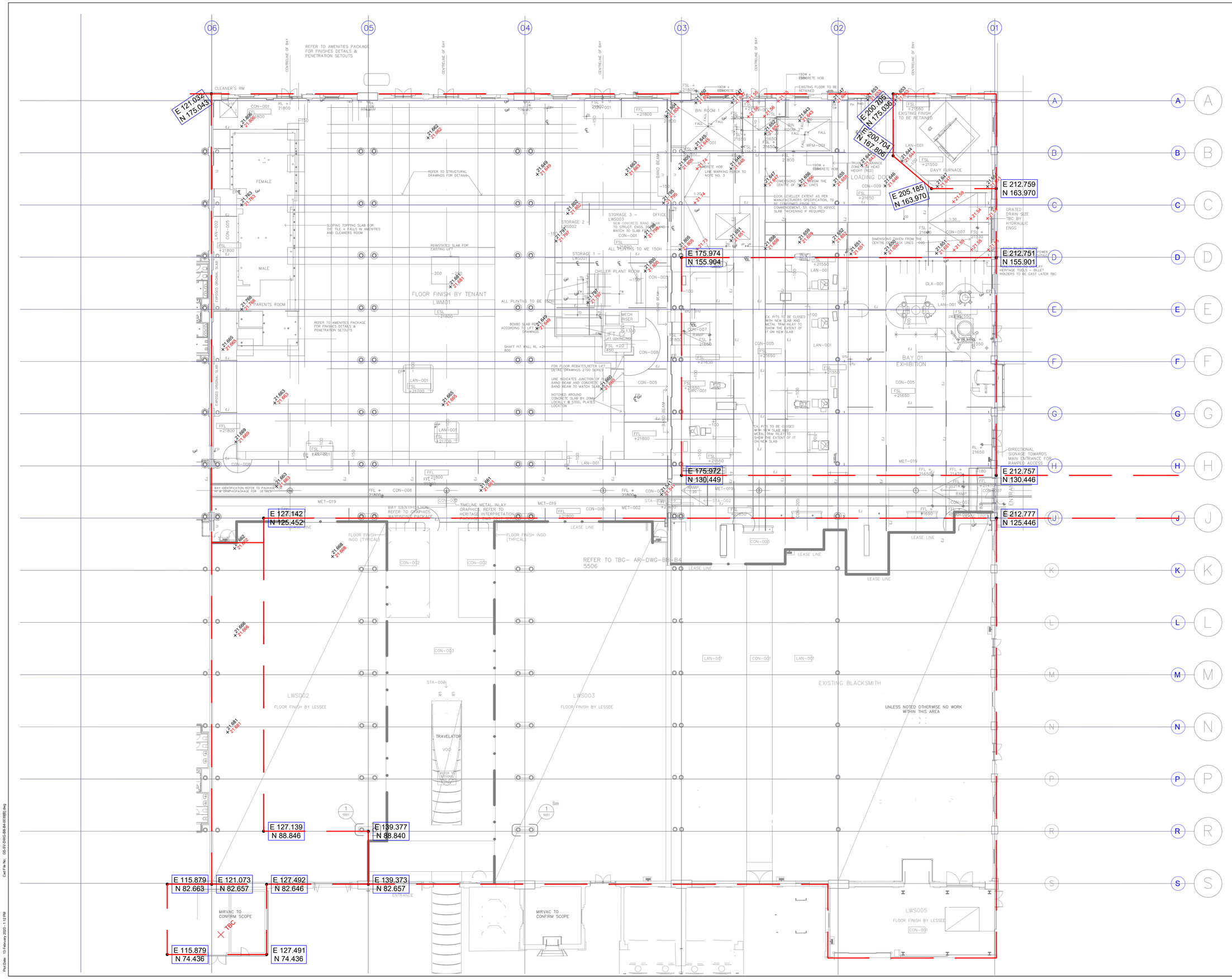
PLANS USED FOR SETOUT:

CONTROL GRIDS

NOTES:

1. ALL MARKS PLACED ARE ACCURATE AND CORRECT AT DATE OF SURVEY.
2. IF MARKS ARE PLACED PRIOR TO STRESSING, GEOSURV TAKE NO RESPONSIBILITY FOR THE ACCURACY OF THOSE MARKS PLACED ONCE STRESSING HAS BEEN CARRIED OUT.
3. CONSTRUCTION WORKS MUST BE RELATED TO THE BENCHMARK ONLY AND NOT LEVELS OF STRUCTURES SHOWN ON THIS SKETCH PLAN.
4. IT IS THE SOLE RESPONSIBILITY OF THE BUILDER TO MAINTAIN THE INTEGRITY OF MARKS TO BE USED BY CONTRACTORS PRIOR TO USE.
5. THIS SURVEY IS FOR SETOUT PURPOSES ONLY AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE
6. THIS SKETCH PLAN HAS BEEN PRODUCED AS A PRIORITY AS PER BUILDERS REQUEST. FOR CLARITY OF THE OFFSET MARKS SHOWN PLEASE ENLARGE SECTION OF THE PLAN WHEN PRINTING. SEEK CLARIFICATION FROM GEOSURV IF UNSURE OF THE OFFSET OR THE DIRECTION OF THE OFFSET TO THE LOCATION OF THE MARK PLACED

ORIGINAL SIZE:	A3
SCALE: 8.421274	CO-ORD:
DATUM: AHD	ORIG DATUM:
SURVEY BY: LB	DATE OF SURVEY: 22.12.2021
DRAWN BY: LB	DATE OF PLAN: 22.12.2021
CHECKED BY:	DATE:
SKETCH REF: XXXXXX-XX-XX	SHEET: 1 of 1



NORTH (APPROX)

LEGEND

- BOUNDARY
- GRIDS
- TENANCY BOUNDARIES
- × 9.800 — SURVEYED POINT / 9.800 RL SURVEYED
- × 26.970 / 0.010 — AS-BUILT POINT SHOWING ACTUAL RL & HEIGHT DIFFERENCE TO DESIGN
- 0.010 — INDICATES 10mm HIGH
- -0.010 — INDICATES 10mm LOW

BOUNDARIES NOT DEFINED

× TBC TO BE CONFIRMED

NOTES:

1. ALL MARKS PLACED ARE ACCURATE AND CORRECT AT DATE OF SURVEY.

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PLANS USED:

TBG-AR-DWG-BB-B4-2105 [12] - DWG
TBG-AR-DWG-BB-B4-1016 [G] - DWG - TENANCY BOUNDARIES

REV.	DATE	AMENDMENTS	INT.
C	13/02/20	Southern Area Added	TJ
B	12/02/20	Easting and Northing Added	TJ
A	11/02/20	Issued to Client	NDB
PRE	11/02/20	Preliminary Issue	NDB

PREPARED BY:

geosurv. Land & Construction Surveyors

GEOSURV PTY LTD
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tel: 1300 354 675
fax: 1300 859 564
e-mail: info@geosurv.com.au

www.geosurv.com.au

PREPARED FOR:

MIRVAC CONSTRUCTIONS PTY LTD

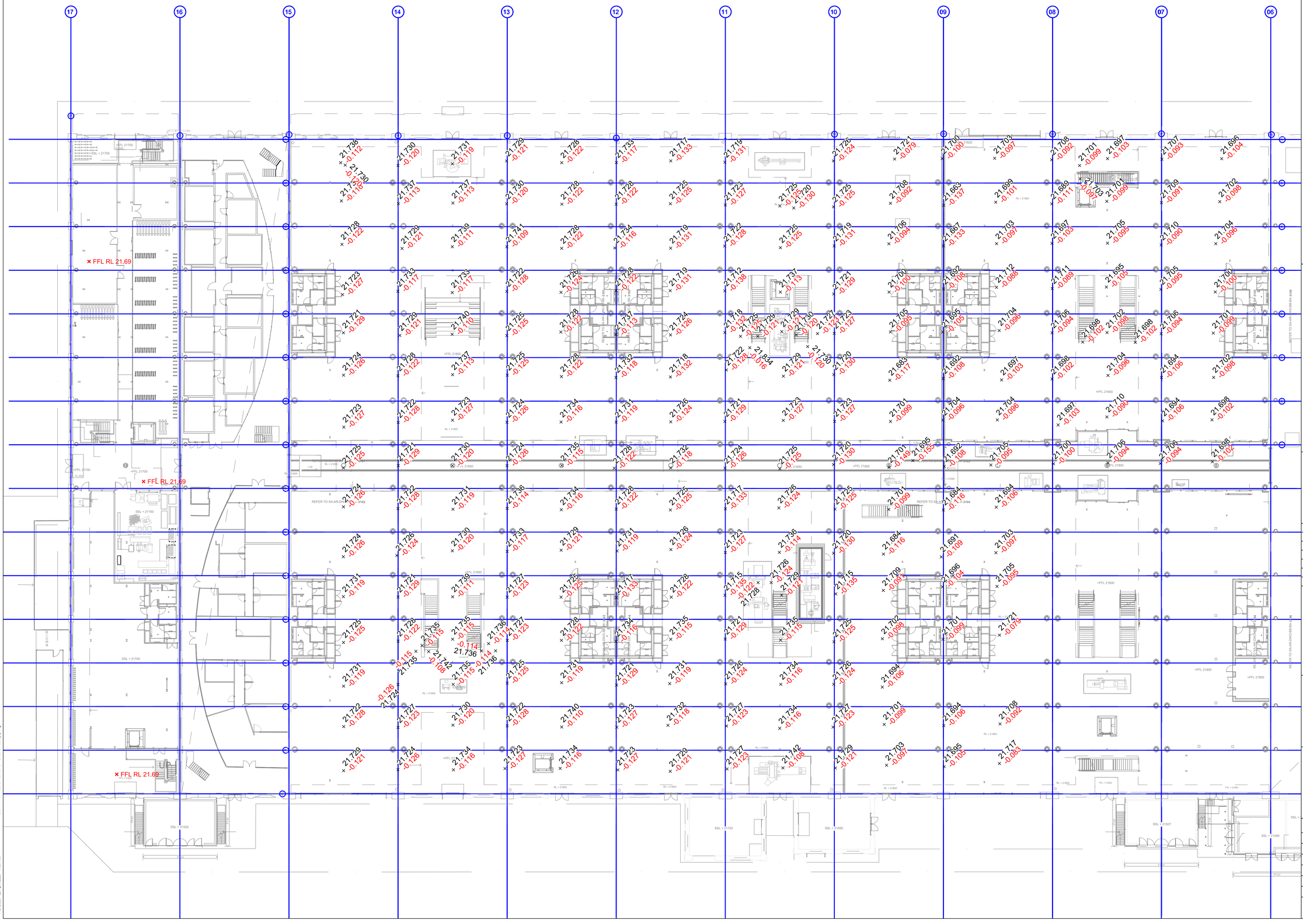
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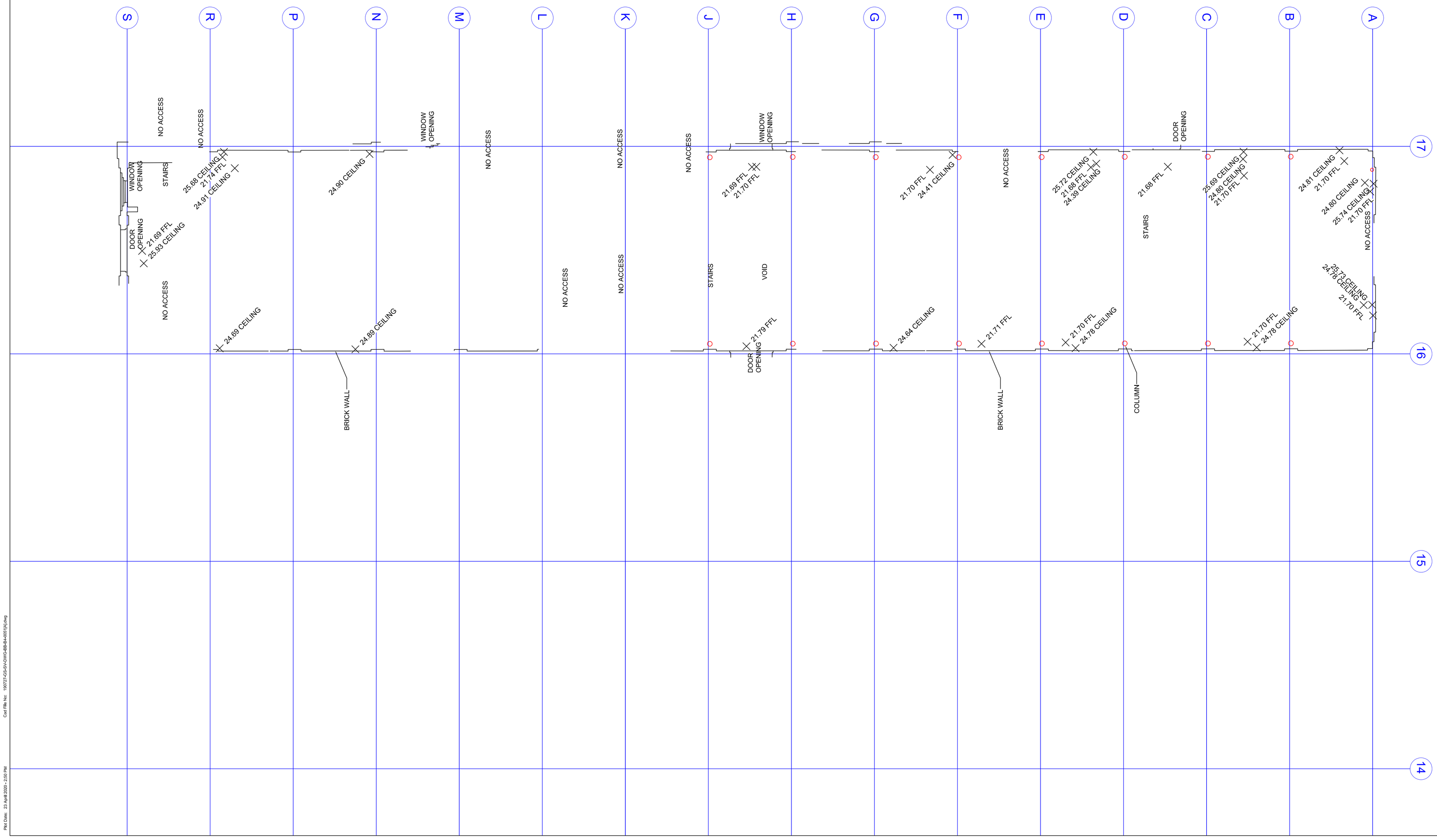
AS-BUILT SCAN DATA
CONCRETE LOADING DOCK BAYS 1 - 6
GROUND LEVEL
APT B4 BUILDING
2 LOCOMOTIVE STREET
EVELEIGH,NSW

ORIGINAL SIZE:	A1		
SCALE:	1:100	CO-ORD:	SITE
DATUM:	SITE	ORIG DATUM:	ADOPTED
SURVEY BY:	PU	DATE:	11/02/20
DRAWN BY:	NDB	DATE:	11/02/20
CHECKED BY:	JT	DATE:	11/02/20
APPROVED BY:	JT	DATE:	11/02/20

DRAWING #: GS-SV-DWG-BB-B4-0039 REV: B

Plot Date: 13 February 2020 - 1:12 PM
Cad File No: GS-SV-DWG-BB-B4-0039[B].dwg


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FFL RL 21.69
FFL RL 21.69
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RL = 21800
RL = 21850



NORTH (APPROX)

LEGEND

GRIDS
WALLS
COLUMNS

NOTES:

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PLANS USED:

SA-AR-DWG-BB-B4-2110[J]

REV.	DATE	AMENDMENTS	INT.
A	23/04/20	Issued to Client	GPAP
PRE	23/04/20	Preliminary Issue	GPAP

PREPARED BY:

geosurv
Land & Construction Surveyors

GEOSURV PTY LTD
ABN 99 121 987 004

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ROYAL EXCHANGE NSW 1225
tel: 1300 554 675
fax: 1300 859 564
e-mail: info@geosurv.com.au

www.geosurv.com.au

PREPARED FOR:

MIRVAC CONSTRUCTIONS PTY LTD

PLAN OF:

AS - BUILT SCAN DATA
GROUND FLOOR - CUT AT RL 25.030
BAY 15
APT B4 BUILDING
LOCOMOTIVE WORKSHOP
2 LOCOMOTIVE STREET EVELEIGH, NSW

ORIGINAL SIZE: A1

SCALE:	1:75	CO-ORD:	SITE
DATUM:	SITE	ORIG DATUM:	ADOPTED
SURVEY BY:	NR	DATE:	23/04/20
DRAWN BY:	GPAP	DATE:	23/04/20
CHECKED BY:	NR	DATE:	23/04/20
APPROVED BY:	NR	DATE:	23/04/20

DRAWING #: GS-SV-DWG-BB-B4-0051

REV: A

Cad File No: 190727-GS-SV-DWG-BB-B4-0051[W].dwg

Plot Date: 23 April 2020 - 2:09 PM

NORTH (APPROX)

LEGEND

GRIDS

+21.562 AS BUILT FINAL GRAVEL RL'S.

NOTES:

1. ALL MARKS PLACED ARE ACCURATE AND CORRECT AT DATE OF SURVEY.

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PLANS USED:

TBG-AR-DWG-BB-B4-2106 [25]

REV.	DATE	AMENDMENTS	INT.
A	29/07/20	Issued to Client	DP
PRE	29/07/20	Preliminary Issue	DP

PREPARED BY:

geosurv
Land & Construction Surveyors
GEOSURV PTY LTD
ABN 99 121 987 004
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ROYAL EXCHANGE NSW 1225
tel: 1300 554 675
fax: 1300 859 564
e-mail: info@geosurv.com.au
www.geosurv.com.au

PREPARED FOR:

MIRVAC CONSTRUCTIONS PTY LTD

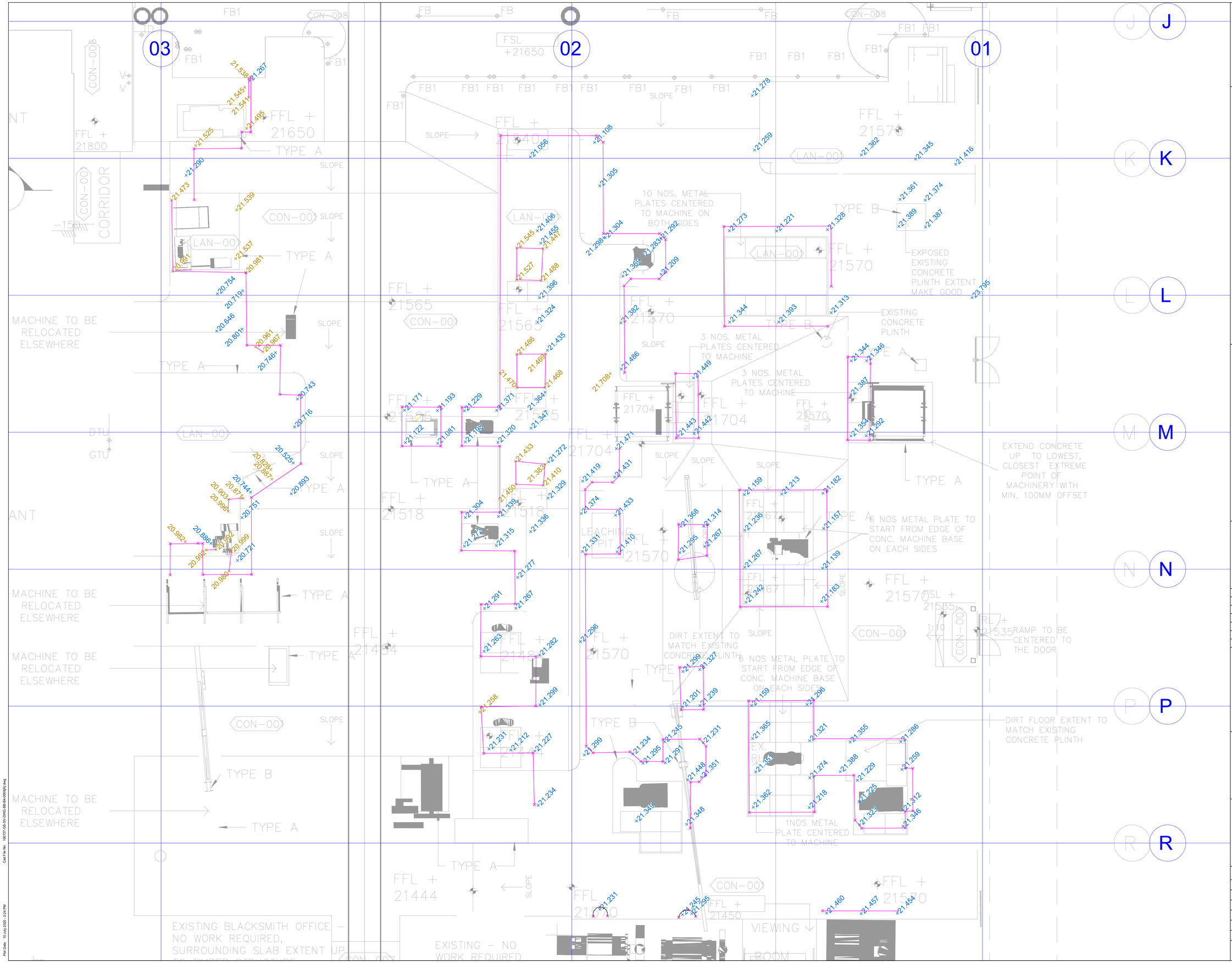
PLAN OF:

AS - BUILT BLACKSMITH
FINAL GRAVEL RL'S.
APT B4 BUILDING
LOCOMOTIVE WORKSHOP
2 LOCOMOTIVE STREET EVELEIGH, NSW

ORIGINAL SIZE:	A1		
SCALE:	1:75	CO-ORD:	SITE
DATUM:	SITE	ORIG DATUM:	ADOPTED
SURVEY BY:	JT	DATE:	28/07/20
DRAWN BY:	DP	DATE:	29/07/20
CHECKED BY:	JT	DATE:	29/07/20
APPROVED BY:	JT	DATE:	29/07/20

DRAWING #: GS-SV-DWG-BB-B4-0072 REV: A

Cad File No: 190727-GS-SV-DWG-BB-B4-0072[A].dwg
Plot Date: 29 July 2020 - 5:08 PM



NORTH (APPROX)

LEGEND

GRIDS

EDGE BOARD

+21.396 AS BUILT SUB BASE RL

+21.488 AS BUILT CONCRETE RL

NOTES:

1. ALL MARKS PLACED ARE ACCURATE AND CORRECT AT DATE OF SURVEY.

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PLANS USED:

TBG-AR-DWG-BB-B4-2106-DWG [19]

REV.	DATE.	AMENDMENTS	INT.
A	10/07/20	Issued to Client	DP

PREPARED BY:

geosurv
Land & Construction Surveyors
GEOSURV PTY LTD
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fax: 1300 859 564
www.geosurv.com.au
e-mail: info@geosurv.com.au

PREPARED FOR:

MIRVAC CONSTRUCTIONS PTY LTD

PLAN OF:

AS - BUILT
BAYS 1 & 2 SUB-BASE FOR GRAVEL AREAS
ATP B4 BUILDING
LOCOMOTIVE WORKSHOP
2 LOCOMOTIVE STREET EVELEIGH, NSW

ORIGINAL SIZE:	A1		
SCALE:	1:75	CO-ORD:	SITE
DATUM:	SITE	ORIG DATUM:	ADOPTED
SURVEY BY:	JT	DATE:	09/07/20
DRAWN BY:	DP	DATE:	10/07/20
CHECKED BY:	JT	DATE:	10/07/20
APPROVED BY:	JT	DATE:	10/07/20
DRAWING #:	GS-SV-DWG-BB-B4-0069	REV:	A

Cad File No: 190727-GS-SV-DWG-BB-B4-0069[A].dwg
Plot Date: 10 July 2020 - 2:24 PM

SKETCH

FOR INFORMATION ONLY

03 02 01

D E F G H

DIRT 21.56 GRANITE 21.68 GRANITE 21.62 DIRT 21.51 GRANITE 21.58 DIRT 21.42 DIRT 21.47 DIRT 21.58 GRANITE 21.66 GRANITE 21.67 DIRT 21.42 DIRT 21.48 GRANITE 21.59 GRANITE 21.60 DIRT 21.49 DIRT 21.47 DIRT 21.39 GRANITE 21.58 DIRT 21.27 GRANITE 21.52 GRANITE 21.55 DIRT 21.44 GRANITE 21.57 DIRT 21.46 GRANITE 21.57 DIRT 21.33 DIRT 21.39 GRANITE 21.59 DIRT 21.50 GRANITE 21.61 DIRT 21.49 GRANITE 21.61 DIRT 21.50 GRANITE 21.61 DIRT 21.46 GRANITE 21.60 GRANITE 21.60 DIRT 21.49 DIRT 21.48 GRANITE 21.60 GRANITE 21.57 DIRT 21.40 DIRT 21.39 DIRT 21.41 GRANITE 21.56 DIRT 21.51 GRANITE 21.62 DIRT 21.43 GRANITE 21.56 GRANITE 21.46 DIRT 21.30 DIRT 21.43 GRANITE 21.54 GRANITE 21.52 DIRT 21.41 GRANITE 21.57 DIRT 21.47 DIRT 21.37 GRANITE 21.60 GRANITE 21.66 DIRT 21.53 DIRT 21.35 GRANITE 21.55 DIRT 21.37 GRANITE 21.54 GRANITE 21.67 DIRT 21.55 DIRT 21.38 GRANITE 21.57 GRANITE 21.58 DIRT 21.44 GRANITE 21.57 DIRT 21.39 GRANITE 21.56 GRANITE 21.60 DIRT 21.46 GRANITE 21.59 DIRT 21.46 GRANITE 21.60 DIRT 21.50 GRANITE 21.56 DIRT 21.45 GRANITE 21.62 DIRT 21.50 DIRT 21.45 GRANITE 21.58 DIRT 21.48 DIRT 21.37 GRANITE 21.57 GRANITE 21.57 DIRT 21.31 DIRT 21.34 DIRT 21.50 DIRT 21.54 GRANITE 21.66 DIRT 21.43 GRANITE 21.62 DIRT 21.52 GRANITE 21.63 GRANITE 21.64 DIRT 21.52 GRANITE 21.59 DIRT 21.44 DIRT 21.50 GRANITE 21.61 GRANITE 21.56 DIRT 21.46 DIRT 21.39 GRANITE 21.55 GRANITE 21.58 DIRT 21.47 DIRT 21.47 GRANITE 21.58 DIRT 21.52 GRANITE 21.62

Civil File No: BAY1-2-ASBUILT-LEVELS.dwg

Plot Date: 13 January 2022 - 7:01 AM

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AS-BUILT

BAY 1 AND 2
SURFACE LEVELS
ATP LOCOMOTIVE

LEGEND:

× SURVEYED POINT
9.800 RL SURVEYED

PREPARED FOR:

MIRVAC

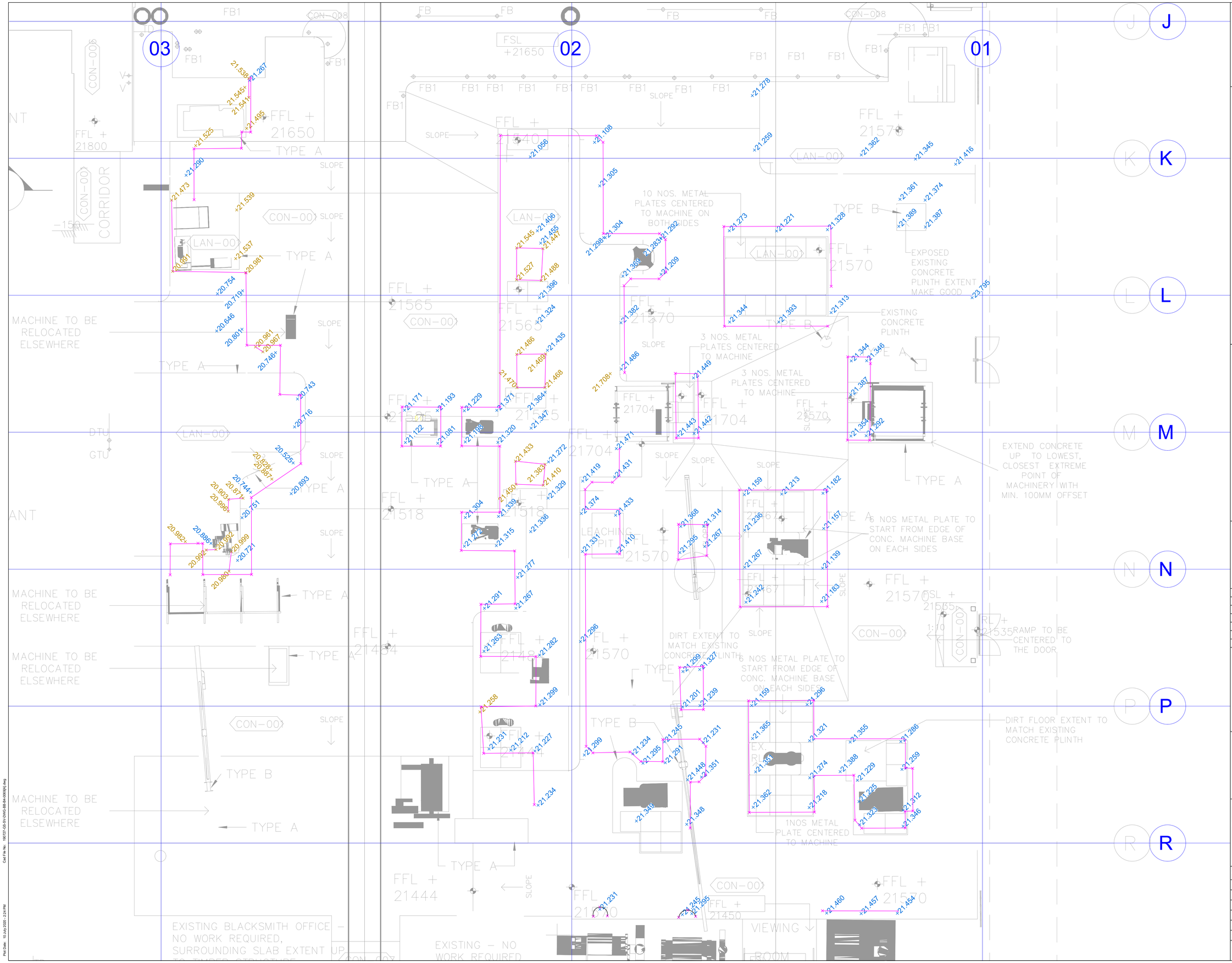
PLANS USED FOR SETOUT:

CONTROL GRIDS

NOTES:

1. ALL MARKS PLACED ARE ACCURATE AND CORRECT AT DATE OF SURVEY.
2. IF MARKS ARE PLACED PRIOR TO STRESSING, GEOSURV TAKE NO RESPONSIBILITY FOR THE ACCURACY OF THOSE MARKS PLACED ONCE STRESSING HAS BEEN CARRIED OUT.
3. CONSTRUCTION WORKS MUST BE RELATED TO THE BENCHMARK ONLY AND NOT LEVELS OF STRUCTURES SHOWN ON THIS SKETCH PLAN.
4. IT IS THE SOLE RESPONSIBILITY OF THE BUILDER TO MAINTAIN THE INTEGRITY OF MARKS TO BE USED BY CONTRACTORS PRIOR TO USE.
5. THIS SURVEY IS FOR SETOUT PURPOSES ONLY AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE
6. THIS SKETCH PLAN HAS BEEN PRODUCED AS A PRIORITY AS PER BUILDERS REQUEST. FOR CLARITY OF THE OFFSET MARKS SHOWN PLEASE ENLARGE SECTION OF THE PLAN WHEN PRINTING. SEEK CLARIFICATION FROM GEOSURV IF UNSURE OF THE OFFSET OR THE DIRECTION OF THE OFFSET TO THE LOCATION OF THE MARK PLACED

ORIGINAL SIZE:	A3
SCALE: 8.421274	CO-ORD:
DATUM: AHD	ORIG DATUM:
SURVEY BY: LB	DATE OF SURVEY: 22.12.2021
DRAWN BY: LB	DATE OF PLAN: 22.12.2021
CHECKED BY:	DATE:
SKETCH REF: XXXXXX-XX-XX	SHEET: 1 of 1



NORTH (APPROX)

LEGEND

GRIDS

EDGE BOARD

+21.396 AS BUILT SUB BASE RL

+21.488 AS BUILT CONCRETE RL

NOTES:

1. ALL MARKS PLACED ARE ACCURATE AND CORRECT AT DATE OF SURVEY.

2. IF MARKS ARE PLACED PRIOR TO STRESSING, GEOSURV TAKE NO RESPONSIBILITY FOR THE ACCURACY OF THOSE MARKS PLACED ONCE STRESSING HAS BEEN CARRIED OUT.

3. CONSTRUCTION WORKS MUST BE RELATED TO THE BENCHMARK ONLY AND NOT LEVELS OF STRUCTURES SHOWN ON THIS PLAN.

4. IT IS THE SOLE RESPONSIBILITY OF THE BUILDER TO MAINTAIN THE INTEGRITY OF MARKS TO BE USED BY CONTRACTORS PRIOR TO USE.

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6. PLAN HAS BEEN PRODUCED AS A PRIORITY AS PER BUILDERS REQUEST. FOR CLARITY OF THE OFFSET MARKS SHOWN PLEASE ENLARGE SECTION OF THE PLAN WHEN PRINTING. SEEK CLARIFICATION FROM GEOSURV IF UNSURE OF THE OFFSET OR THE DIRECTION OF THE OFFSET TO THE LOCATION OF THE MARK PLACED

PLANS USED:

TBG-AR-DWG-BB-B4-2106-DWG [19]

REV.	DATE.	AMENDMENTS	INT.
A	10/07/20	Issued to Client	DP

PREPARED BY:

geosurv
Land & Construction Surveyors
GEOSURV PTY LTD
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tel: 1300 554 675
fax: 1300 859 564
www.geosurv.com.au
e-mail: info@geosurv.com.au

PREPARED FOR:

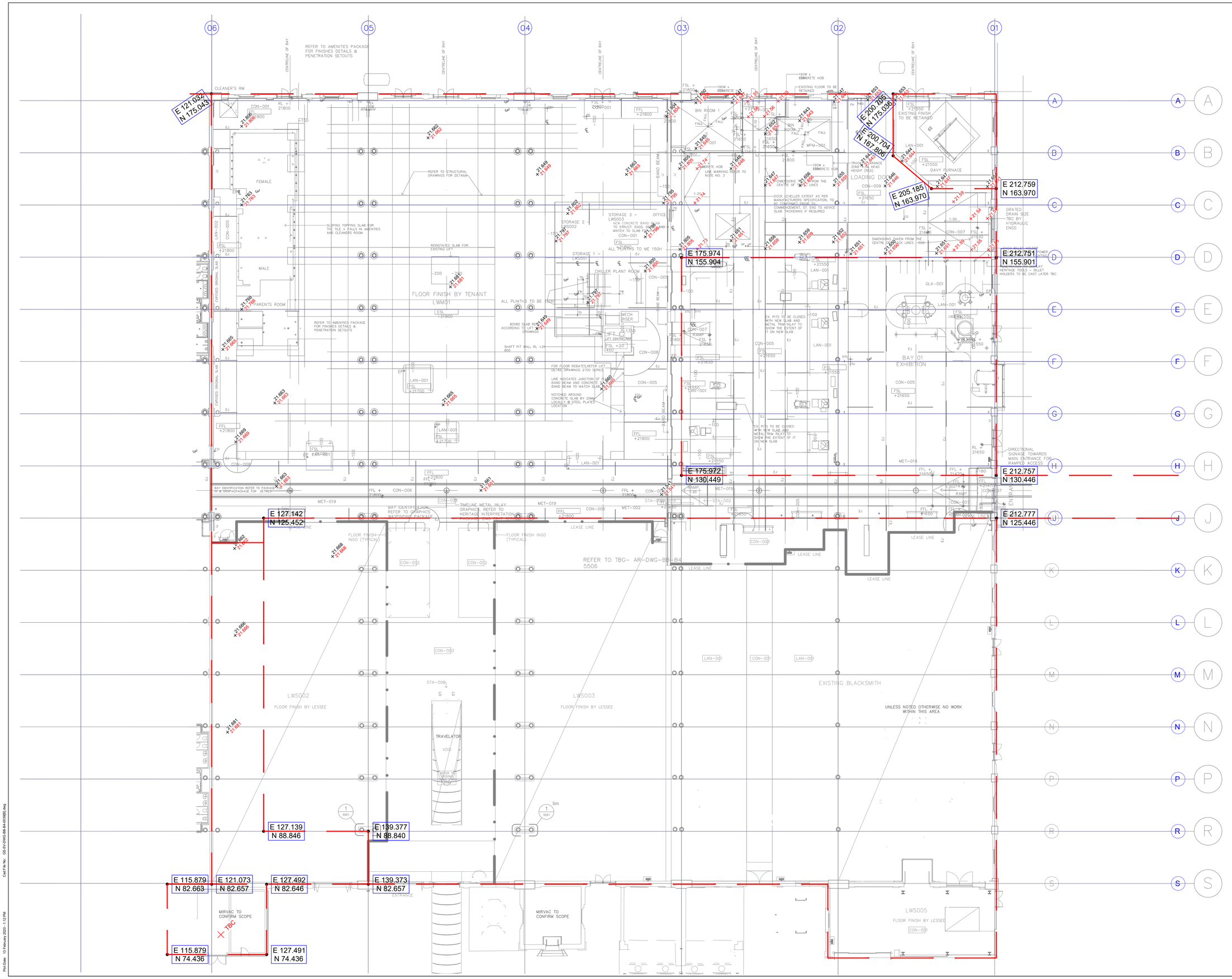
MIRVAC CONSTRUCTIONS PTY LTD

PLAN OF:

AS - BUILT
BAYS 1 & 2 SUB-BASE FOR GRAVEL AREAS
ATP B4 BUILDING
LOCOMOTIVE WORKSHOP
2 LOCOMOTIVE STREET EVELEIGH, NSW

ORIGINAL SIZE:	A1		
SCALE:	1:75	CO-ORD:	SITE
DATUM:	SITE	ORIG DATUM:	ADOPTED
SURVEY BY:	JT	DATE:	09/07/20
DRAWN BY:	DP	DATE:	10/07/20
CHECKED BY:	JT	DATE:	10/07/20
APPROVED BY:	JT	DATE:	10/07/20
DRAWING #:	GS-SV-DWG-BB-B4-0069	REV:	A

Cad File No: 190727-GS-SV-DWG-BB-B4-0069[A].dwg
Plot Date: 10 July 2020 - 2:24 PM



NORTH (APPROX)

LEGEND

- BOUNDARY
- GRIDS
- TENANCY BOUNDARIES
- × 9.800 — SURVEYED POINT / 9.800 RL SURVEYED
- × 26.970 / 0.010 — AS-BUILT POINT SHOWING ACTUAL RL & HEIGHT DIFFERENCE TO DESIGN
- 0.010 — INDICATES 10mm HIGH
- -0.010 — INDICATES 10mm LOW

BOUNDARIES NOT DEFINED

× TBC TO BE CONFIRMED

NOTES:

1. ALL MARKS PLACED ARE ACCURATE AND CORRECT AT DATE OF SURVEY.

2. IF MARKS ARE PLACED PRIOR TO STRESSING, GEOSURV TAKE NO RESPONSIBILITY FOR THE ACCURACY OF THOSE MARKS PLACED ONCE STRESSING HAS BEEN CARRIED OUT.

3. CONSTRUCTION WORKS MUST BE RELATED TO THE BENCHMARK ONLY AND NOT LEVELS OF STRUCTURES SHOWN ON THIS PLAN.

4. IT IS THE SOLE RESPONSIBILITY OF THE BUILDER TO MAINTAIN THE INTEGRITY OF MARKS TO BE USED BY CONTRACTORS PRIOR TO USE.

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PLANS USED:

TBG-AR-DWG-BB-B4-2105 [12] - DWG
TBG-AR-DWG-BB-B4-1016 [G] - DWG - TENANCY BOUNDARIES

REV.	DATE	AMENDMENTS	INT.
C	13/02/20	Southern Area Added	TJ
B	12/02/20	Easting and Northing Added	TJ
A	11/02/20	Issued to Client	NDB
PRE	11/02/20	Preliminary Issue	NDB

PREPARED BY:

geosurv. Land & Construction Surveyors

GEOSURV PTY LTD
ABN 99 121 987 004

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ROYAL EXCHANGE NSW 1225
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e-mail: info@geosurv.com.au

www.geosurv.com.au

PREPARED FOR:

MIRVAC CONSTRUCTIONS PTY LTD

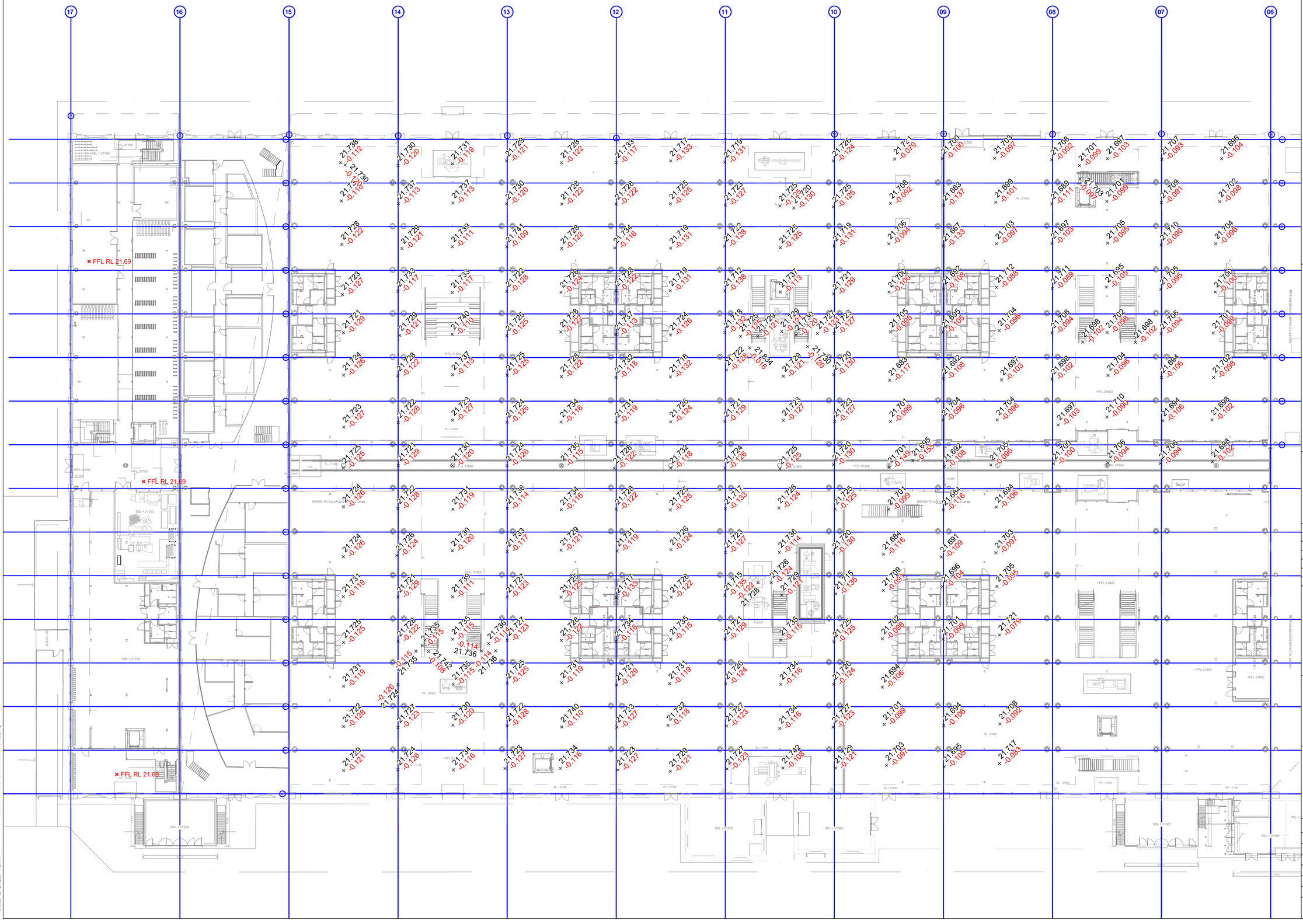
PLAN OF:

AS-BUILT SCAN DATA
CONCRETE LOADING DOCK BAYS 1 - 6
GROUND LEVEL
APT B4 BUILDING
2 LOCOMOTIVE STREET
EVELEIGH,NSW

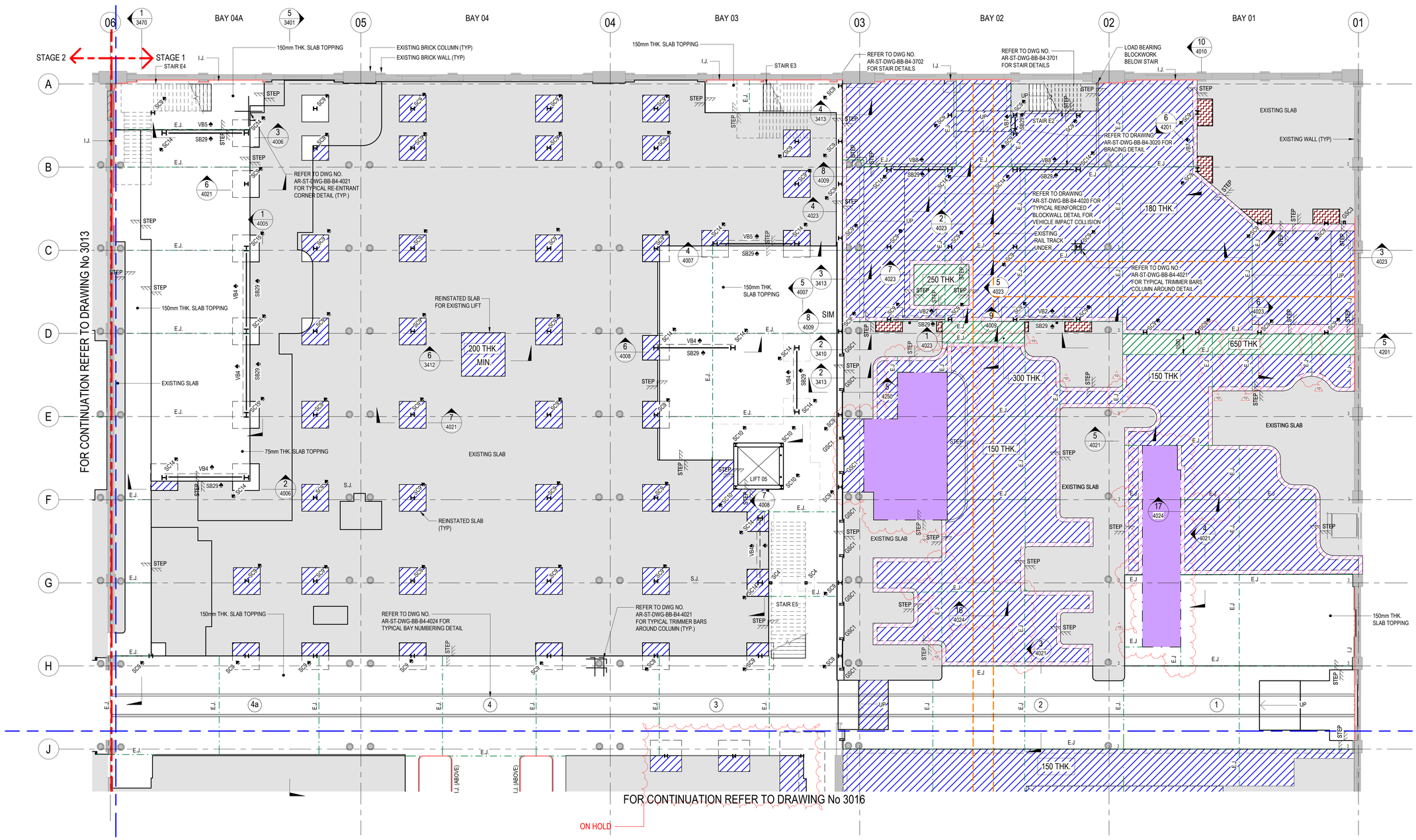
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SCALE:	1:100	CO-ORD:	SITE
DATUM:	SITE	ORIG DATUM:	ADOPTED
SURVEY BY:	PU	DATE:	11/02/20
DRAWN BY:	NDB	DATE:	11/02/20
CHECKED BY:	JT	DATE:	11/02/20
APPROVED BY:	JT	DATE:	11/02/20

DRAWING #: GS-SV-DWG-BB-B4-0039 REV: B

Plot Date: 13 February 2020 - 1:12 PM
Cad File No: GS-SV-DWG-BB-B4-0039[B].dwg


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FFL RL 21.69
FFL RL 21.69
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RL = 21800
RL = 21850

Appendix C Design Plans



NOTES

1. FOR STRUCTURAL NOTES, REFER TO DWG NO. AR-ST-DWG-BB-B4-1020 TO 1022.
2. FOR STAIR DETAILS, REFER TO DWG NO. AR-ST-DWG-BB-B4-3700 TO 3703.
3. FOR LIFT DETAILS, REFER TO DWG NO. AR-ST-DWG-BB-B4-3710 TO 3712. EXISTING GRADE SLAB THICKNESS TO BE CONFIRMED BY CONTRACTOR.
4. EXISTING UNDERGROUND SERVICES TO BE CHECKED & CONFIRMED BY CONTRACTOR.
5. ALL REINSTATED GROUND SLAB SHALL MATCH EXISTING. REFER TO DWG NO. AR-ST-DWG-BB-B4-3410 FOR TYPICAL DETAILS.
6. ALL NEW SLAB ON GRADE TO BE REINFORCED WITH SL92 MESH U.N.O. SLAB > 150 REINFORCED WITH SL102 TOP MESH.
7. FOR TYPICAL SLAB ON GRADE DETAILS, REFER TO DRAWING NO. AR-ST-DWG-BB-B4-4021.
8. MEMBERS MARKED WITH " * " SYMBOL ARE TO BE PRECAMBERED TO EQUALIZE INITIAL DEAD LOAD DEFLECTION REFER TO PROFILE PLAN FOR PRECAMBERING AMOUNTS.
9. FOR NEW COLUMNS ALONG EXISTING WALL: CUT-SLOT ON EXISTING BLOCKWALL TO ALLOW INSTALLATION OF NEW COLUMNS ABOVE EXISTING GROUND BEAM. TIE THE EXISTING BLOCKWORK TO THE NEW COLUMNS.
10. FOR BRACING DETAILS, REFER TO DWG NO. AR-ST-DWG-BB-B4-4005 TO 4011.
11. FOR TYPICAL SLAB TOPPING DETAILS, REFER TO DWG NO. AR-ST-DWG-BB-B4-4022.
12. REFER TO ARCHITECT DRAWINGS FOR SET-OUT OF NEW COLUMNS. THE SET-OUT OF NEW BORED PILES TO ALIGN WITH THE NEW COLUMNS.
13. REFER TO ARCHITECT DRAWINGS FOR ALL FLOOR LEVELS, FALLS AND STEPS.

LEGEND

- C.J. — DENOTES POUR BREAK CONSTRUCTION JOINT
- D.J. — DENOTES DOWEL JOINT
- E.J. — DENOTES EXPANSION JOINT
- S.J. — DENOTES SAW JOINT
- I.J. — DENOTES ISOLATION JOINT
- DENOTES EXISTING RAILTRACK UNDER
- ♠ DENOTES STEEL MEMBER TO BE APPLIED WITH INTUMESCENT PAINT TO ACHIEVE FRL OF 120 MINUTES AS REQUIRED IN THE FIRE ENGINEERING REPORT REF. 2017/1330-R5.0. REFER TO ARCHITECTURAL SPECIFICATION: TBG-AR-SPC-BB-B4-0345 FOR DETAILS OF THE INTUMESCENT PAINT SPECIFICATION
- DENOTES REINSTATED SLAB TO MATCH EXISTING GROUND SLAB
- DENOTES SLAB SOIL TO BE REINSTATED UPON COMPLETION OF PILING WORKS AND INSTALLATION OF STEEL COLUMN
- DENOTES REINSTATED SLAB THICKENING
- DENOTES SLAB EDGE THICKENING REFER TO DRAWING NO. AR-ST-DWG-BB-B4-4021
- DENOTES FOUNDATION AND SLAB BY OTHERS

COLUMN SCHEDULE (RETAIL)		
MARK	MEMBER SIZE	REMARKS
SC5	200UC59.5	
SC9	250UC72.9	-
SC10	200UC46.2	-
SC13	310UC96.8	-
SC14	310UC118	-
SC15	310UC158	-

STEEL STRUT SCHEDULE (RETAIL)		
MARK	MEMBER SIZE	REMARKS
SB29	310UB40.4	STEEL STRUT

STEEL BRACING SCHEDULE (RETAIL)		
MARK	MEMBER SIZE	REMARKS
HB1	50x50x5EA	HORIZONTAL X-BRACING
HB2	75x75x6EA	HORIZONTAL X-BRACING
VB2	125x125x12EA	VERTICAL X-BRACING
VB4	300PFC	VERTICAL X-BRACING
VB5	250PFC	VERTICAL X-BRACING
VB7	200PFC	VERTICAL X-BRACING
VB8	200UC59.5	VERTICAL X-BRACING
VB13	150PFC	VERTICAL X-BRACING

ON HOLD

ZONE E - GROUND FLOOR GENERAL ARRANGEMENT PLAN

1 : 125

NOTES:

ALL DIMENSIONS MUST BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION COMMENCING

notes

ALL EXISTING CONDITIONS TO BE CHECKED ON SITE.
ALL DIMENSIONS AND SETOUTS TO BE VERIFIED PRIOR TO COMMENCEMENT ON SITE. ALL OMISSIONS OR DISCREPANCIES TO BE NOTIFIED TO THE ARCHITECT.

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key plan



rev	date	description	by	chk
J	23-11-18	ISSUED FOR TENDER	EA	JL
0	20-12-18	ISSUED FOR CONSTRUCTION-STAGE 1 (RETAIL)	AL	JL
1	16-01-19	ISSUED FOR CONSTRUCTION-STAGE 1 (RETAIL)	JC	JL
2	18-03-19	ISSUED FOR CONSTRUCTION	JC	JL
3	02-04-19	ISSUED FOR CONSTRUCTION	MV	JL
4	17-04-19	ISSUED FOR CONSTRUCTION	MV	JL
5	19-09-19	ISSUED FOR CONSTRUCTION	MM	JL
6	14-10-19	ISSUED FOR CONSTRUCTION	MM	JL
7	18-10-19	ISSUED FOR CONSTRUCTION	CL	JL
8	29-11-19	ISSUED FOR CONSTRUCTION	MM	JL
9	16-04-20	ISSUED FOR CONSTRUCTION	MM	JL
10	04-06-21	ISSUED FOR CONSTRUCTION	MM	JL

structural consultant
ARCADIS
Level 16, 580 George St, Sydney NSW 2000
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MIRVAC
Level 28, 200 George St
Sydney NSW 2000

project
LOCOMOTIVE WORKSHOP - BUILDING 4
2 Locomotive St, Eveleigh NSW 2015

principal architect
SISSONS ARCHITECTS
Studio 5, 81 Alexander St, Crows Nest, NSW 2065
Tel. 02 9460 8002

retail architect
BUCHAN
Level 7, 7 Kelly St, Ultimo, NSW 2007
Tel. 02 9566 1611

drawing title
GENERAL ARRANGEMENT PLAN
GROUND LEVEL - ZONE E

status
ISSUED FOR CONSTRUCTION

project no.	scale	date
10004164	As indicated @B1	04-06-21

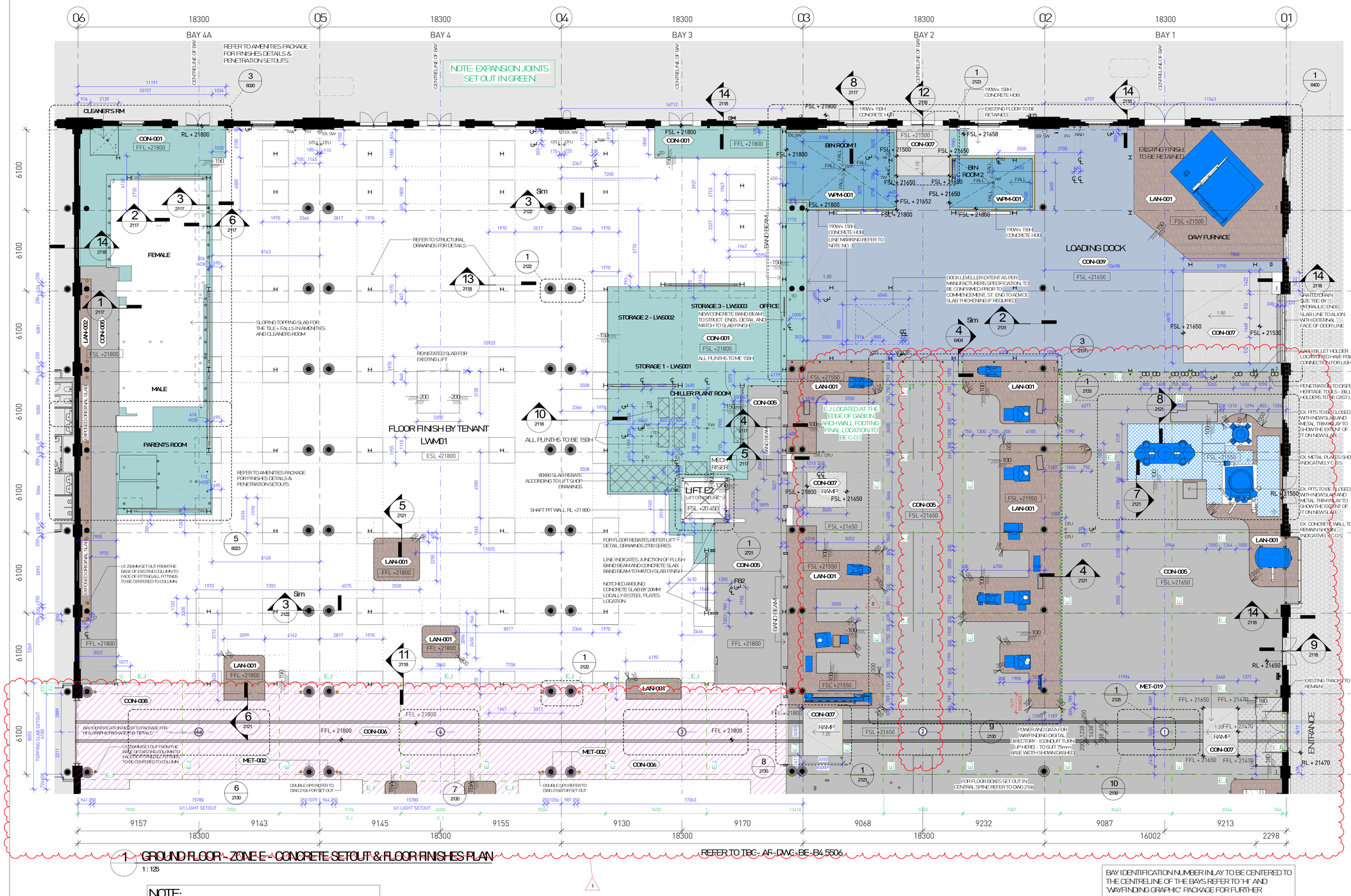
drawing no. AR-ST-DWG-BB-B4-3015 rev 10

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original sheet size B1 = 1000 x 707mm

04/06/2021 10:34:32 am

7/28/2020 4:39:55 PM



1 GROUND FLOOR - ZONE E - CONCRETE SETOUT & FLOOR FINISHES PLAN

1 : 125

REFER TO TBG-AR-DWG-BB-B4-5506

NOTE:
FOR STEEL SETOUT REFER TO 2126 to 2128

BAY IDENTIFICATION NUMBER INLAY TO BE CENTERED TO THE CENTRELINE OF THE BAYS REFER TO 'HI' AND 'WAYFINDING GRAPHIC' PACKAGE FOR FURTHER DETAILS; FOR ALL TEXT IN LAYS EXTENTS AND SETOUT DETAILS REFER 'HI' DWG 0217 SERIES

FLOOR FINISHES LEGEND

North

- CON-001 - STEEL TROWEL FINISH, ACHIEVE P3 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL
- CON-005 - HONED CONCRETE FINISH - CONCRETE WITH SMALL SIZED AGGREGATE WITH 0.5MM LIGHT HONED FINISH, SEALED WITH CLEAR MATT SEALER. ACHIEVE P3 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL.
- CON-006 - HYDRONIC SLAB IN HONED CONCRETE FINISH CONCRETE WITH SMALL SIZED AGGREGATE WITH 0.5MM LIGHT HONED FINISH, SEALED WITH CLEAR MATT SEALER. ACHIEVE P3 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL.
- CON-007 - CHISELED CONCRETE TO RAMP TO ACHIEVE P4 SLIP RATING AND TO BE TESTED ON SITE 5MM GROOVES @ 20MM C/L

A
- EXISTING CONCRETE - HONED, CLEANED AND PATCHED TO ACHIEVE P4 SLIP RATING AND TO BE TESTED FOR APPROVAL.
- CON-009 - STEEL TROWEL FINISH, ACHIEVE P5 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL.
- WPM-001 - ARDEX WPM 908 , TRAFFICABLE WATERPROOFING MEMBRANE. CONTINUES 300MM UP ADJOINING WALLS.

B
- LAN-001 - INDUSTRIAL SAND AND GRAVEL MIX TO BLACKSMITH WORKSHOP
- GLA-001 - TOUGHENED GLAZED PANEL -P1 SLIP RESISTANT
- HERITAGE STEEL PLATES 900MM X 900MM
- METAL/CONCRETE FOOTING TO BE RETAINED

C
- CONCRETE PLINTHS ; REFER TO MECH. ENG. DETAILS
- CONCRETE HOB ; REFER TO MECH. ENG. DETAILS
- EXISTING METAL PLATES
- MET-002 - MET-002 - OXIDISED MILD STEEL TRACK IN LAY
- MET-007 - MET-007 - OXIDISED MILD STEEL FLOOR PLATE

D
- EXPANSION JOINT FOR TILES WITH BRASS TRIM
- EXPANSION JOINT FILLING TO MATCH CONCRETE COLOUR
- ISOLATION JOINTS
- SAW CUT JOINT

E
- DTU - DRAINAGE TURN UP
- CO - CLEAR OUT
- GTU - GAS TURN UP
- EP + - ELECTRIC POINT
- FB + - RECESSED FLOOR BOX ON HONED CONCRETE WITH OXIDISED STEEL GROMET
- FB1 + - RECESSED FLOOR BOX IN COVERED AREAS
- FH - FIRE HYDRANT
- RWO - RAIN WATER OUTLET

F
- TD - TURNDISH
- TW - TRADE WASTE
- TWV - TRADE WASTE VENT
- TWVP - TRADE WASTE VENT PIPE
- STU - SANITARY TURN UP
- V - VENT
- H - NEW STEEL COLUMN

G
- EXISTING STRUCTURAL COLUMN
- EXISTING STRUCTURAL COLUMN
- ESL - EXISTING SLAB LEVEL
- FSL - FINISH SLAB LEVEL
- FFL - FINISH FLOOR LEVEL
- U1 - UPLIGHT

NOTES

H
1. DRAWINGS TO BE READ AND PRINTED IN COLOUR.
2. NOMINATED CODES SHOULD BE CROSS REFERENCED WITH THE ARCHITECTURAL SCHEDULES.
3. LINE MARKING - 100 WIDE AT 600 CTC WITH YELLOW PAINT.
4. ALL NEW GROUND SLABS TO HAVE NECESSARY TRAFFICABLE DAMP PROOF MEMBRANE UNDER SLAB UNLESS OTHERWISE STATED.
5. REFER TO AS-3340 CONCRETE FINISHES SPECIFICATIONS.
6. ALL EXPOSED CONCRETE FINISHES TO HAVE CLEAR PENETRATIVE SEALER. REFER TO AS-0340 CONCRETE FINISHES SPECIFICATIONS.
7. REFER TO DWG 2117 & 2118 FOR CONCRETE DETAILS.
8. REFER TO STRUCTURAL DRAWINGS.
9. REFER TO DWG 5551 FOR EXISTING COLUMN DETAILS.
10. ALIGN EXPANSION JOINTS TO BARRIES WHERE POSSIBLE.
11. REFER TO STRUCTURAL ENGINEER'S DRAWINGS FOR ALL SLAB AND BEAM THICKNESS, AND COLUMN SIZES. THICKNESS AND UNDERSIDE R.L'S ARE PROVIDED FOR COORDINATION PURPOSES ONLY.
12. REFER TO STRUCTURAL ENGINEER AND GEOTECH ENGINEER'S DRAWINGS FOR PILE SIZES AND DEPTHS.
13. REFER TO HYDRAULIC ENGINEER'S DRAWING FOR SETOUT OF ALL FLOOR WASTES, SANITARY AND STORMWATER DRAINAGE PENETRATIONS AND ALL INVERT LEVELS. FINAL DIMENSIONS OF HYDRAULICS WASTE AND DRAINAGE TO BE ADVISED BY HYDRAULIC CONTRACTOR DURING SHOP DRAWING PHASE.
14. REFER TO CIVIL ENGINEER'S DRAWINGS AND SPECIFICATION FOR ALL INTERFACE REQUIREMENTS WITH EXTERNAL AND PUBLIC DOMAIN WORKS.
15. MOVEMENT JOINTS REFER TO STRUCTURAL ENGINEER'S DRAWINGS.
16. REFER TO DWG 1/5551 FOR EXISTING COLUMN DETAILS.
17. DRAWING TO BE READ IN CONJUNCTION WITH HERITAGE INTERPRETATION PACKAGE.
18. 100MM SETBACK FROM ANY ADDITIONAL HERITAGE MACHINERY FOOTINGS IF FOUND

notes

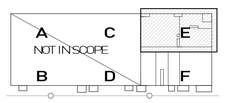
ALL EXISTING CONDITIONS TO BE CHECKED ON SITE.
ALL OMISSIONS OR DISCREPANCIES TO BE NOTIFIED TO THE ARCHITECT.

NOMINATED ARCHITECT: ANTHONY PALAMARA NSW ARN 7274

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DRAWING BEST PRINTED IN COLOUR

key plan



REVISION 22

1 EXPANSION JOINTS UPDATED BASED ON LATEST ARCADIS ADVICE

2 TRACKS AND QUOTES UNDER REVIEW

rev	date	description	by	chk
12	15.11.19	CONSTRUCTION CERTIFICATE	SW	SW
13	13.12.19	FOR CONSTRUCTION	PM	MH
14	30.03.2020	FOR CONSTRUCTION	SB	SB
15	07.04.2020	FOR CONSTRUCTION	SW	SW
16	27.05.2020	FOR CONSTRUCTION	SB	SB
17	17.06.2020	FOR CONSTRUCTION	SB	SB
18	23.06.2020	FOR CONSTRUCTION	AB	SB
19	24.06.2020	FOR CONSTRUCTION	AB	SB
20	30.06.2020	FOR CONSTRUCTION	AB	AB
21	23.07.2020	FOR CONSTRUCTION	SB	SB
22	28.07.2020	FOR CONSTRUCTION	SB	SB

client
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Tel. +61 2 9080 8000

LOCOMOTIVE WORKSHOPS
2 Locomotive St, Eveleigh NSW 2015

retail & heritage interpretation architect
BUCHAN
Level 1, 7 Kelly St, Ultimo NSW 2007
Tel. 02 9566 1611

principal architect
SISSONS
5/81 Alexander St, Crows Nest NSW 2065
Tel. 02 9460 8002

drawing title
CONCRETE SETOUT & FLOOR FINISHES - GROUND - ZONE E

status
FOR CONSTRUCTION

project no.	scale	date
217150	As indicated @B1	28.07.2020

drawing no. TBG-AR-DWG-BB-B4-2105 | rev 22

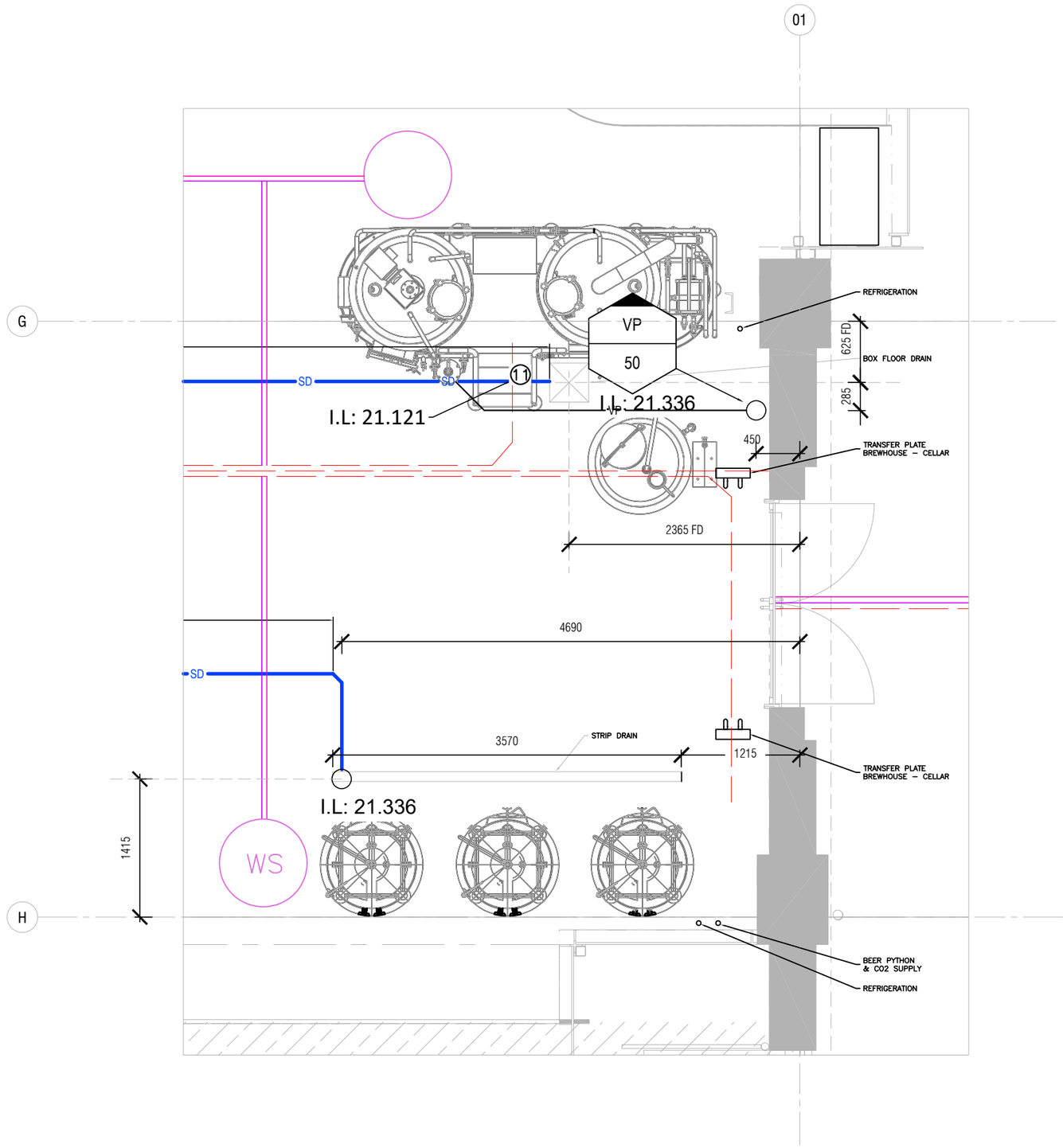
B1 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 DO NOT SCALE DIMENSIONS FROM DRAWING

original sheet size: B1 – 1000 x 707mm

PLEASE NOTE:
1. PROVISION FOR COLD WATER AND GAS WILL REMAIN HIGH LEVEL - NO IN-GROUND WORKS REQUIRED

2. THIS DRAWING IS FOR COORDINATION ONLY. FOR SERVICES DRAWINGS REFER TO SERVICES CONSULTANTS DRAWINGS

3. THIS DRAWING IS MEANT TO BE PRINTED IN COLOUR



LEGEND

- IN-GROUND STRUCTURAL
- IN-GROUND HYDRAULIC SERVICES
- IN GROUND PYTHON CONDUITS (Ø200mm)
- IN-GROUND ELECTRICAL CAST-IN CONDUIT Ø25mm
- IN-GROUND COMMS CAST-IN CONDUIT Ø20mm
- IN GROUND A/V CAST-IN CONDUIT Ø50mm
- WS WAITER STATION LOCATION - PROVISION OF POWER + DATA
- STG REMOVABLE STAGE LOCATION - PROVISION OF POWER + AV

01 IN-GROUND SERVICES/STRUCTURE OVERLAY PLAN - BREWERY
SCALE 1:50 @ A3

SGB GROUP
35 HALE ST, BOTANY, NSW 2019 - PH:1300 55 44 56

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Figured dimensions must be used in preference to scaled dimensions
Any discrepancies to be brought to the immediate attention of SGB Group
Perspective images presented are artists impression only and should not be taken as a true representation of the final constructed space

Status **DESIGN DEVELOPMENT**

amendment	revision	date
ISSUE FOR COORDINATION	A	09.09.21

Client **AVC**

Project **SOUTH EVELEIGH TAVERN**
South Eveleigh Locomotive Workshop - Bays 1&2 North
8 Locomotive St, Eveleigh NSW 2015

North

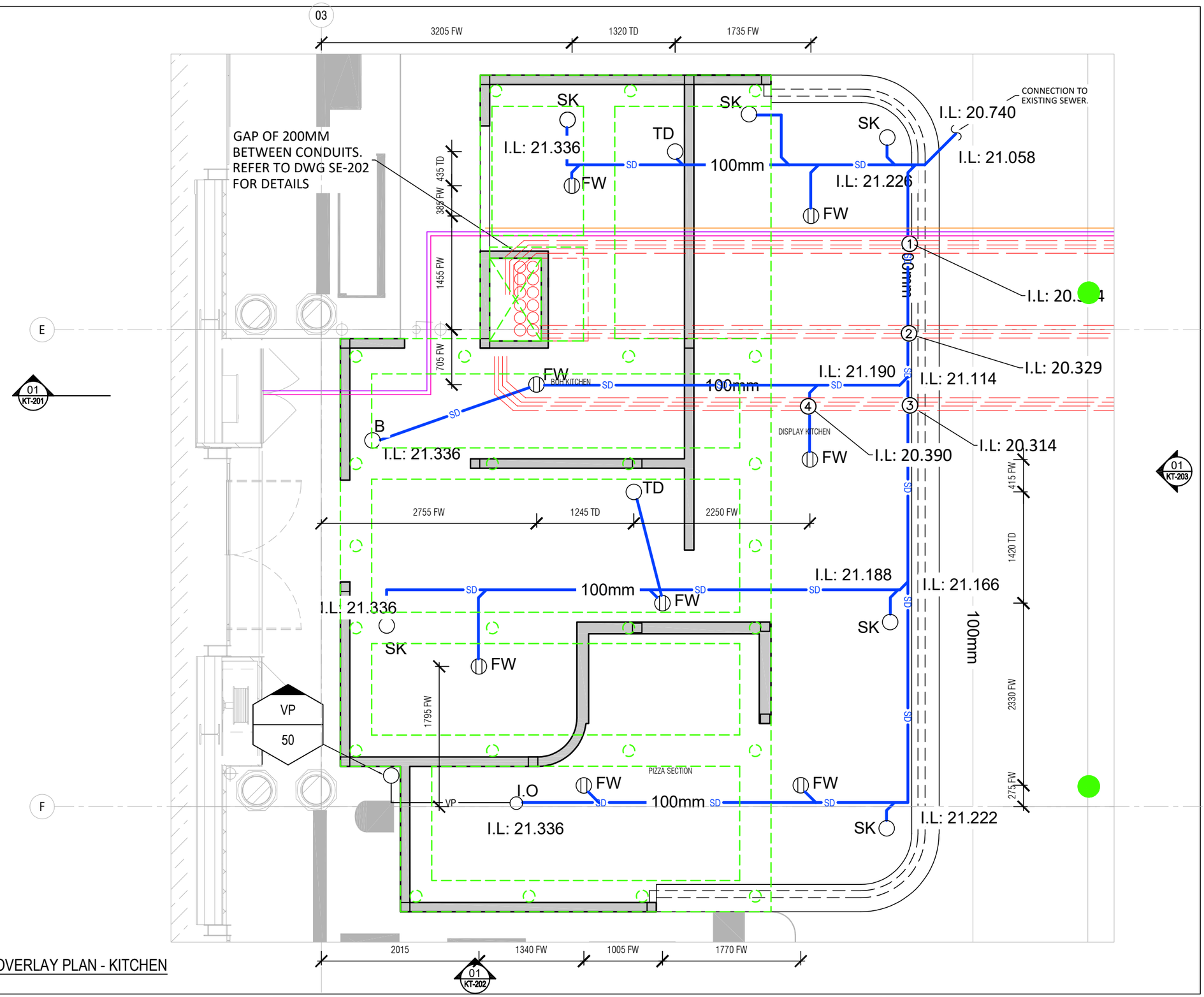
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IN-GROUND SERVICES/STRUCTURE OVERLAY PLAN - BREWERY

Scale	Drawn By	Date	Drawing Number	Revision
1:50 @ A3	AC	01.03.21	SE-BW-105	A

PLEASE NOTE:
1. PROVISION FOR COLD WATER AND GAS WILL REMAIN HIGH LEVEL - NO IN-GROUND WORKS REQUIRED

2. THIS DRAWING IS FOR COORDINATION ONLY. FOR SERVICES DRAWINGS REFER TO SERVICES CONSULTANTS DRAWINGS

3. THIS DRAWING IS MEANT TO BE PRINTED IN COLOUR



LEGEND

- IN-GROUND STRUCTURAL
- IN-GROUND HYDRAULIC SERVICES
- IN GROUND PYTHON CONDUITS (Ø200mm)
- IN-GROUND ELECTRICAL CAST-IN CONDUIT Ø25mm
- IN-GROUND COMMS CAST-IN CONDUIT Ø20mm
- IN GROUND A/V CAST-IN CONDUIT Ø50mm
- WS — WAITER STATION LOCATION - PROVISION OF POWER + DATA
- STG — REMOVABLE STAGE LOCATION - PROVISION OF POWER + AV

01 — IN-GROUND SERVICES/STRUCTURE OVERLAY PLAN - KITCHEN
SCALE 1:50 @ A3

SGB GROUP
35 HALE ST, BOTANY, NSW 2019 - PH:1300 55 44 56

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Status **DESIGN DEVELOPMENT**

amendment	revision	date
ISSUE FOR COORDINATION	A	19.05.21
ISSUE FOR COORDINATION	B	07.06.21
ISSUE FOR COORDINATION	C	08.06.21
ISSUE FOR COORDINATION	D	17.06.21
ISSUE FOR CONSTRUCTION	E	20.08.21

Client **AVC**

Project **SOUTH EVELEIGH TAVERN**
South Eveleigh Locomotive Workshop - Bays 1&2 North
8 Locomotive St, Eveleigh NSW 2015

North

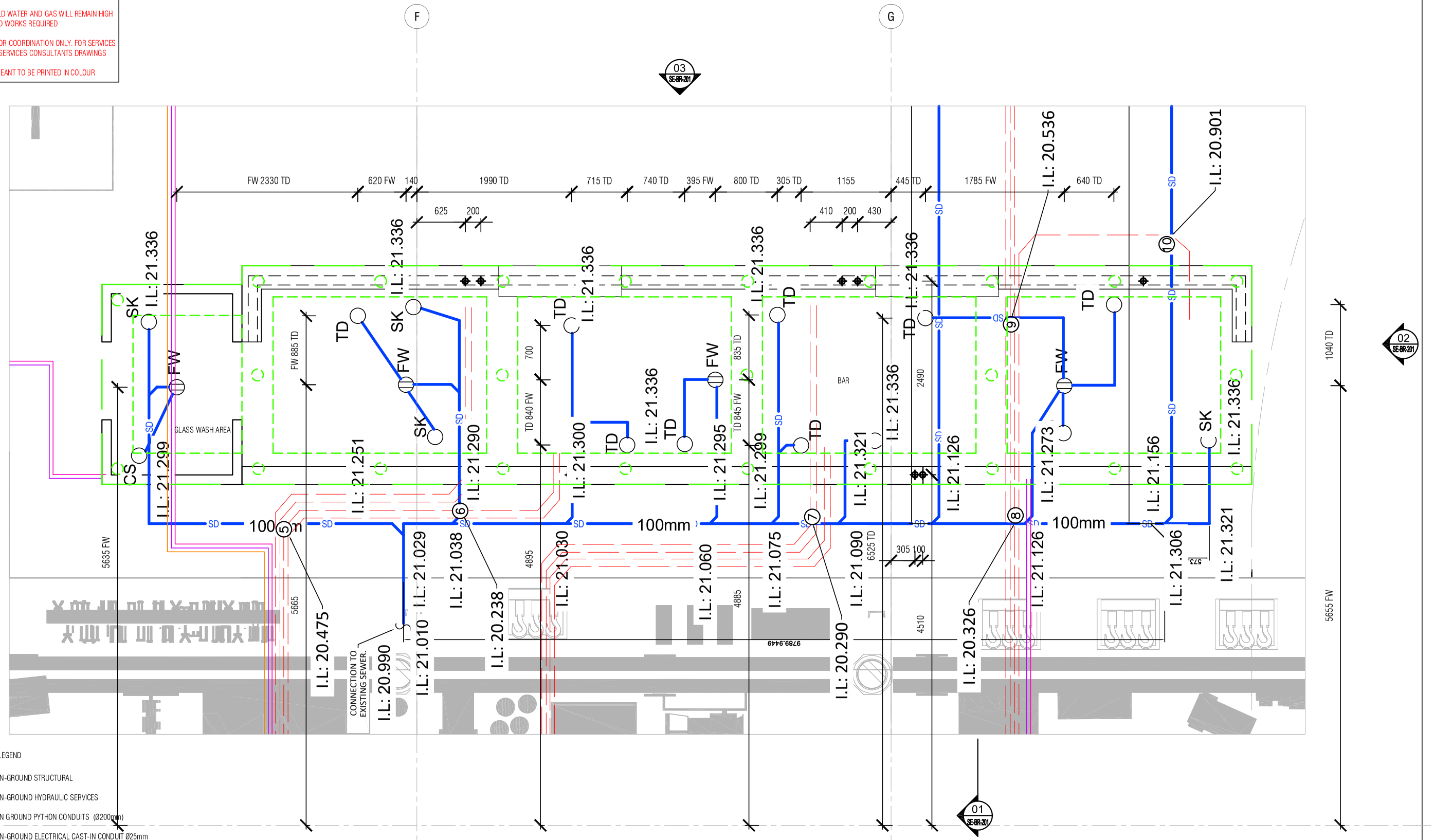
Drawing Title
IN-GROUND SERVICES/STRUCTURE OVERLAY PLAN - KITCHEN

Scale	Drawn By	Date	Drawing Number	Revision
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- (WS) WAITER STATION LOCATION - PROVISION OF POWER + DATA
- (STG) REMOVABLE STAGE LOCATION - PROVISION OF POWER + AV

01 IN-GROUND SERVICES/STRUCTURE OVERLAY PLAN - BAR

SCALE 1:50 @ A3

SGB GROUP
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ISSUE FOR COORDINATION	D	17.06.21
ISSUE FOR CONSTRUCTION	E	20.08.21
ISSUE FOR CONSTRUCTION	F	06.09.21

Client **AVC**

Project **SOUTH EVELEIGH TAVERN**
South Eveleigh Locomotive Workshop - Bays 1&2 North
8 Locomotive St, Eveleigh NSW 2015

North

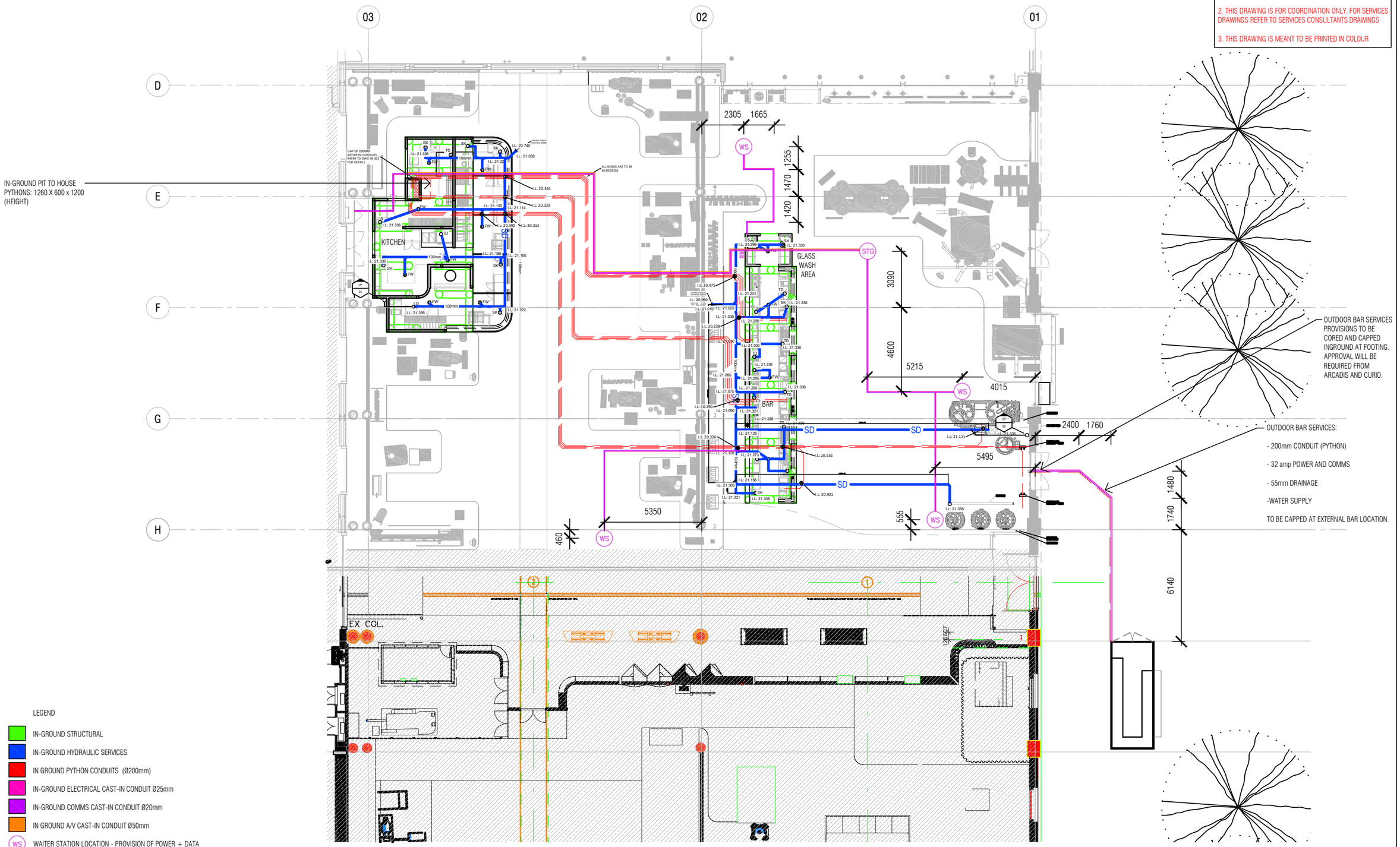
Drawing Title
IN-GROUND SERVICES/STRUCTURE OVERLAY PLAN - BAR

Scale	Drawn By	Date	Drawing Number	Revision
1:50 @ A3	AC	01.03.21	**SE-BR-105**	**F**

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01 IN-GROUND SERVICES/STRUCTURE OVERLAY PLAN
SCALE 1:200 @ A3

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Status **DESIGN INTENT**

amendment	revision	date
ISSUE FOR COORDINATION	A	19.05.21
ISSUE FOR COORDINATION	B	07.06.21
ISSUE FOR COORDINATION	C	08.06.21
ISSUE FOR COORDINATION	D	09.06.21
ISSUE FOR COORDINATION	E	17.06.21
ISSUE FOR COORDINATION	F	13.07.21

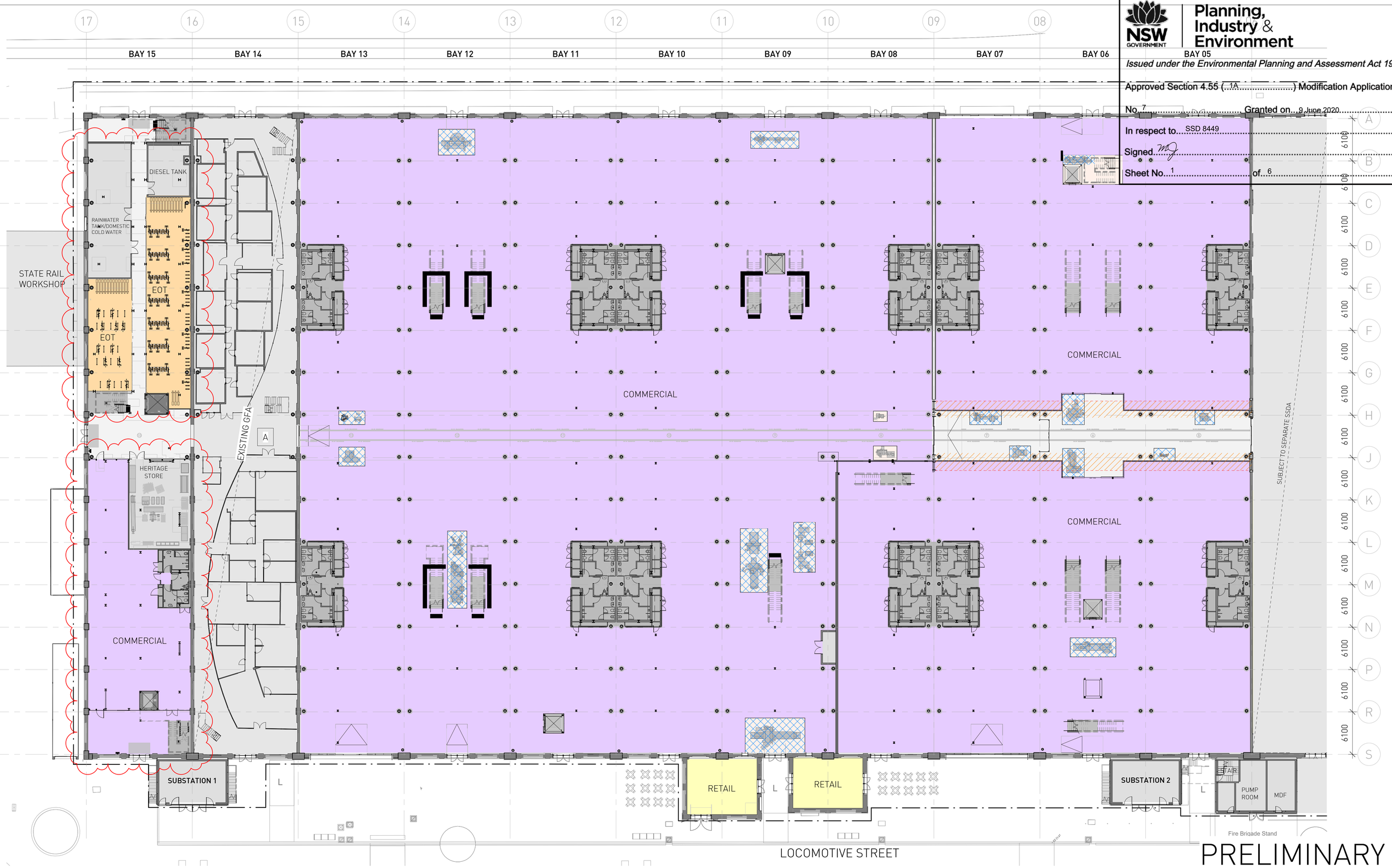
Client **AVC**

Project **SOUTH EVELEIGH TAVERN**
South Eveleigh Locomotive Workshop - Bays 1&2 North
8 Locomotive St, Eveleigh NSW 2015

North

Drawing Title
IN-GROUND SERVICES/STRUCTURE OVERLAY PLAN

Scale	Drawn By	Date	Drawing Number	Revision
1:200 @ A3	AC	01.03.21	**SE-105**	**F**



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Approved Section 4.55 (...1A.....) Modification Application

No. 7 Granted on.. 9 June 2020

In respect to... SSD 8449

Signed.....

Sheet No.. 1 of.. 6

6/04/2020 6:12:45 PM

PRELIMINARY

Architect

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DRAWING NOTES

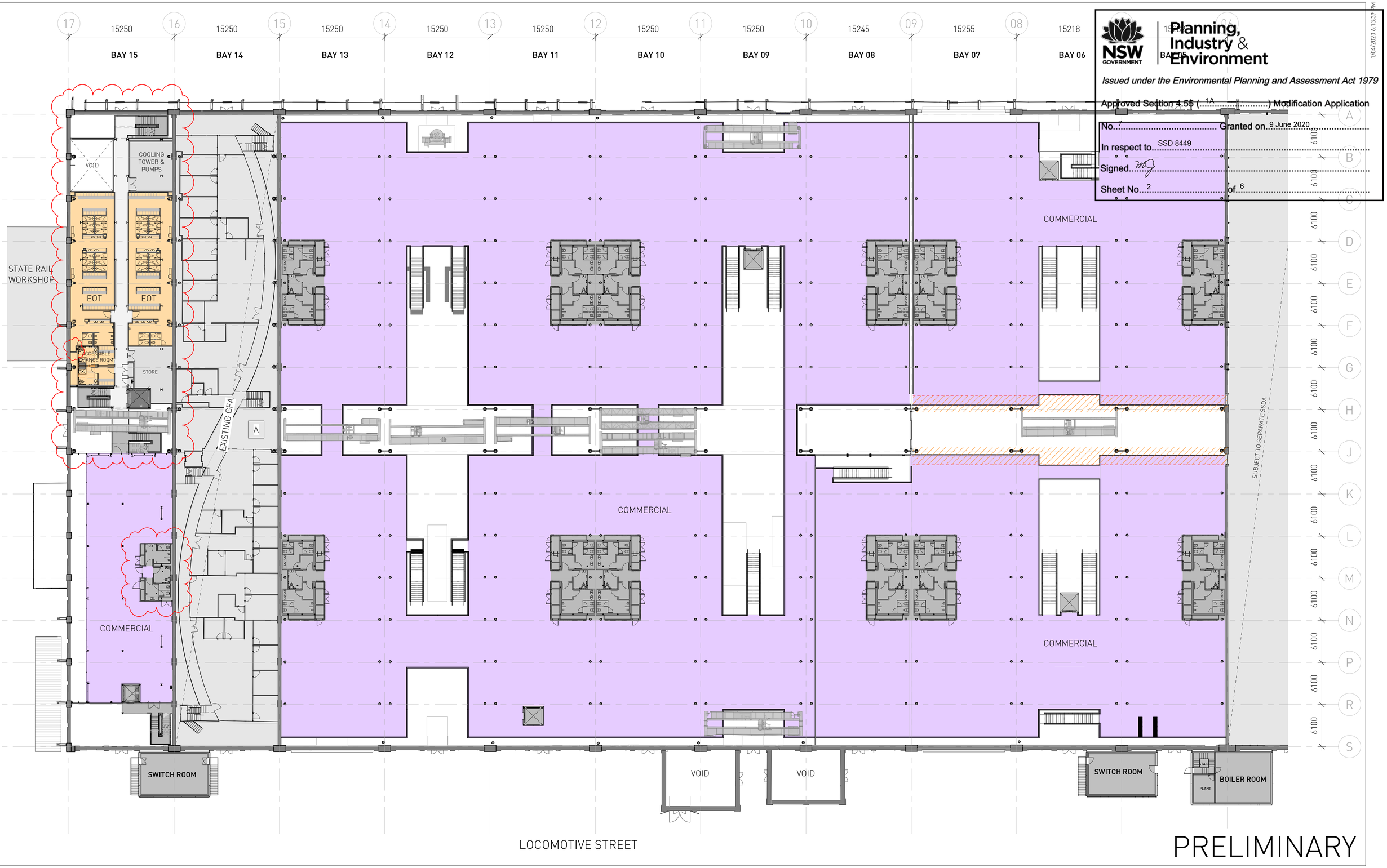
- A Bay 14 lease expiry 2019 to 2023 (options).
- B Removal of existing roof sheeting for proposed cooling tower plant below.
- C Removal of existing roof sheeting to create opening for proposed sky lights.
- D Removal of existing roof access systems.
- E Refurbishment and upgrade of existing metal roof sheeting
- F Removal of polycarbonate roof material.
- G Existing heritage timber doors to be retained internally in open position, new external door to opening.
- H Existing metal profile sheet cladding to be upgraded.
- J Remove external wall cladding to plant annexes prior to upgrade, retain blockwork behind.
- K Reinstate window where bricked in.
- L Proposed lift / travelator service pit.
- M Proposed skylight
- N Proposed roof access system

LEGEND

- Visual Sight Line Zone - 1200mm maximum height allowed
- Heritage Item
- Site Boundary

Client: MIRVAC			Project: LOCOMOTIVE WORKSHOP - BAYS 5-15 2 Locomotive St, Eveleigh NSW 2015	Drawing Title: PROPOSED PLAN - GROUND FLOOR	
Scale: 1 : 250 @A1 (Half Scale @ A3)	Rev Date: 01/02/20	North		Project No.: 16-002	Drawing No.: SA-AR-DWG-BB-B4-0230 / Rev: FF

A1



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No. 7 Granted on 9 June 2020

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1/04/2020 6:13:39 PM

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DRAWING NOTES

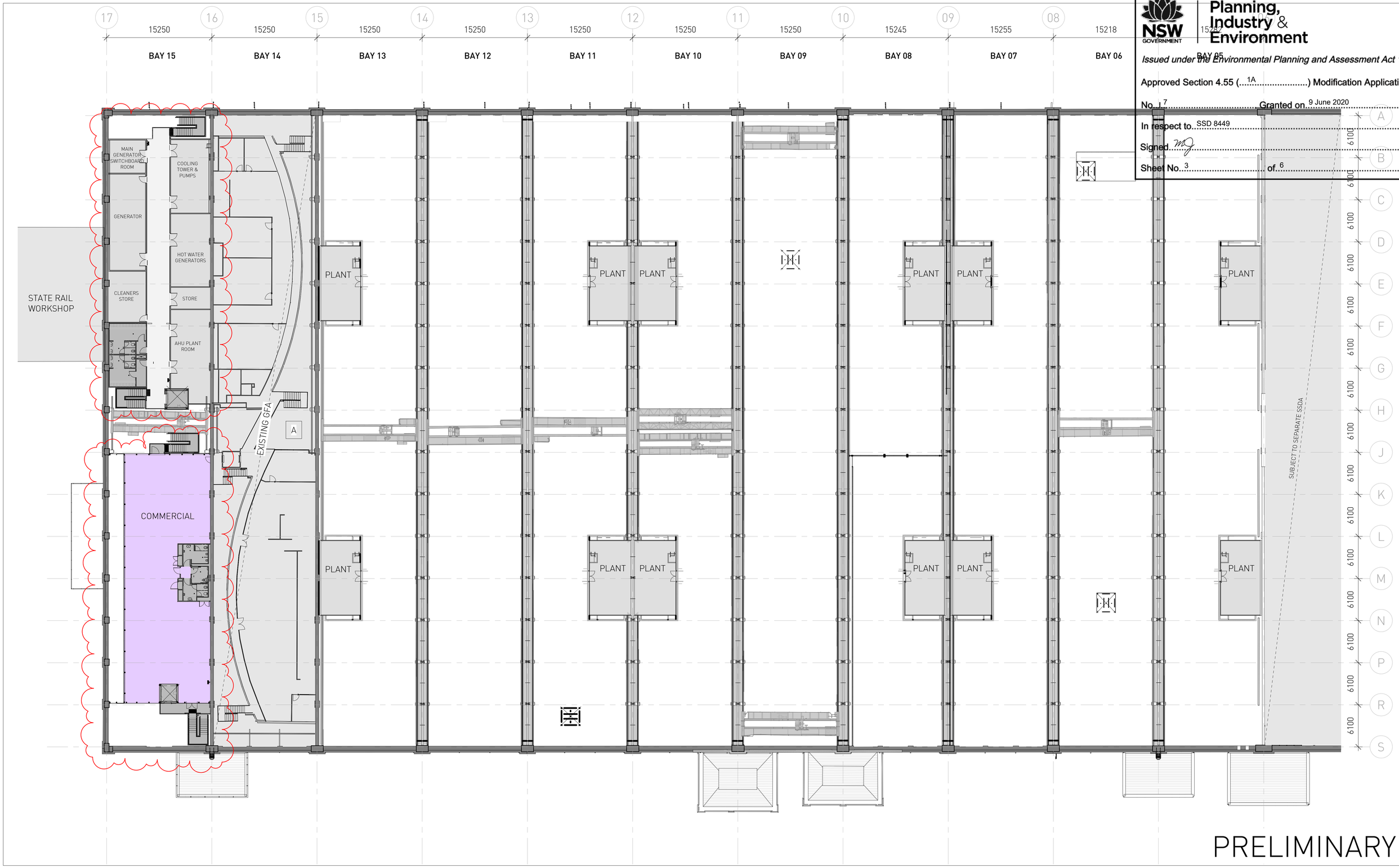
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- K Reinstate window where bricked in.
- L Proposed lift / travelator service pit.
- M Proposed skylight
- N Proposed roof access system

LEGEND

- Visual Sight Line Zone - 1200mm maximum height allowed
- Heritage Item
- Site Boundary

Client: MIRVAC			Project: LOCOMOTIVE WORKSHOP - BAYS 5-15 2 Locomotive St, Eveleigh NSW 2015	Drawing Title: PROPOSED PLAN - FIRST FLOOR	
Scale: 1 : 250 @A1 (Half Scale @ A3)	Rev Date: 01/02/20	North		Project No.: 16-002	Drawing No.: SA-AR-DWG-BB-B4-0231 / Rev: CC

A1



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09/04/2020 6:14:06 PM

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N Proposed roof access system

LEGEND

Visual Sight Line Zone - 1200mm maximum height allowed

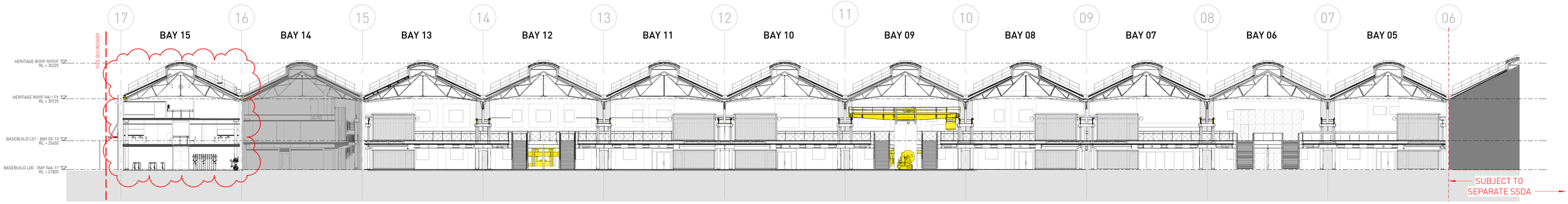
Heritage Item

Site Boundary

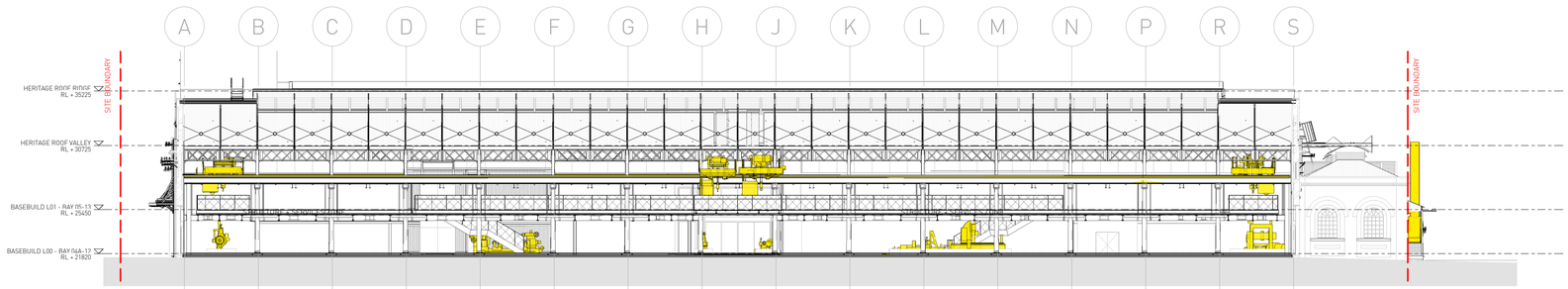
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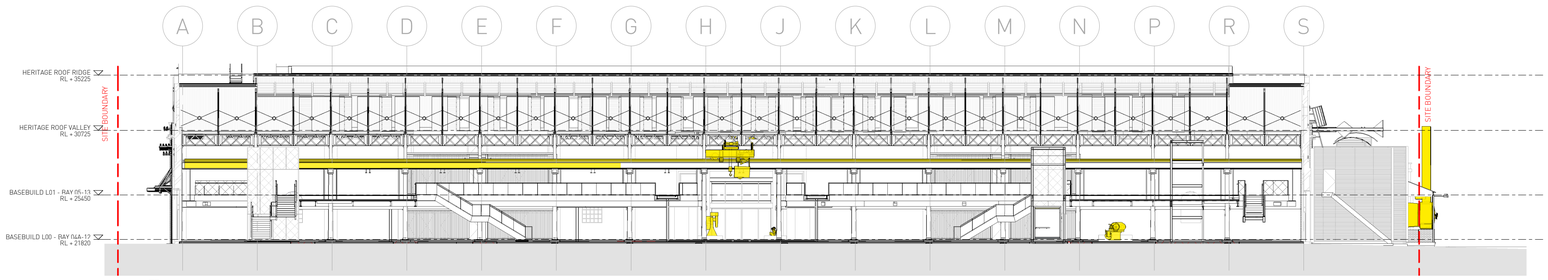
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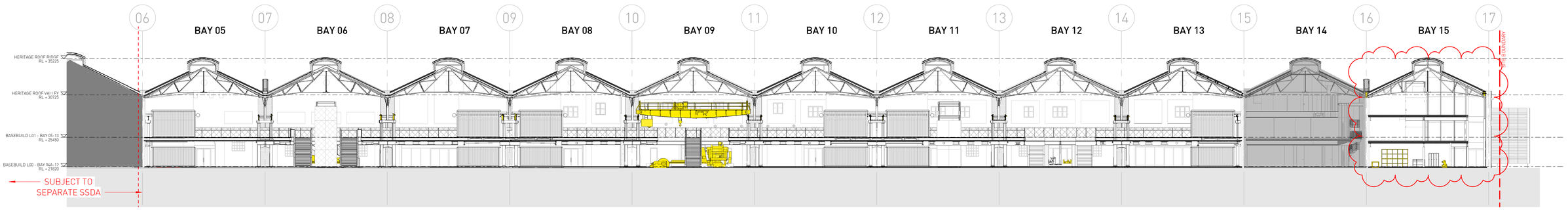
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1 : 250



2 CROSS SECTION - BAY 09 - PROPOSED
1 : 250



3 CROSS SECTION - BAY 06 - PROPOSED
1 : 250



4 LONG SECTION B - COMMERCIAL - PROPOSED
1 : 250

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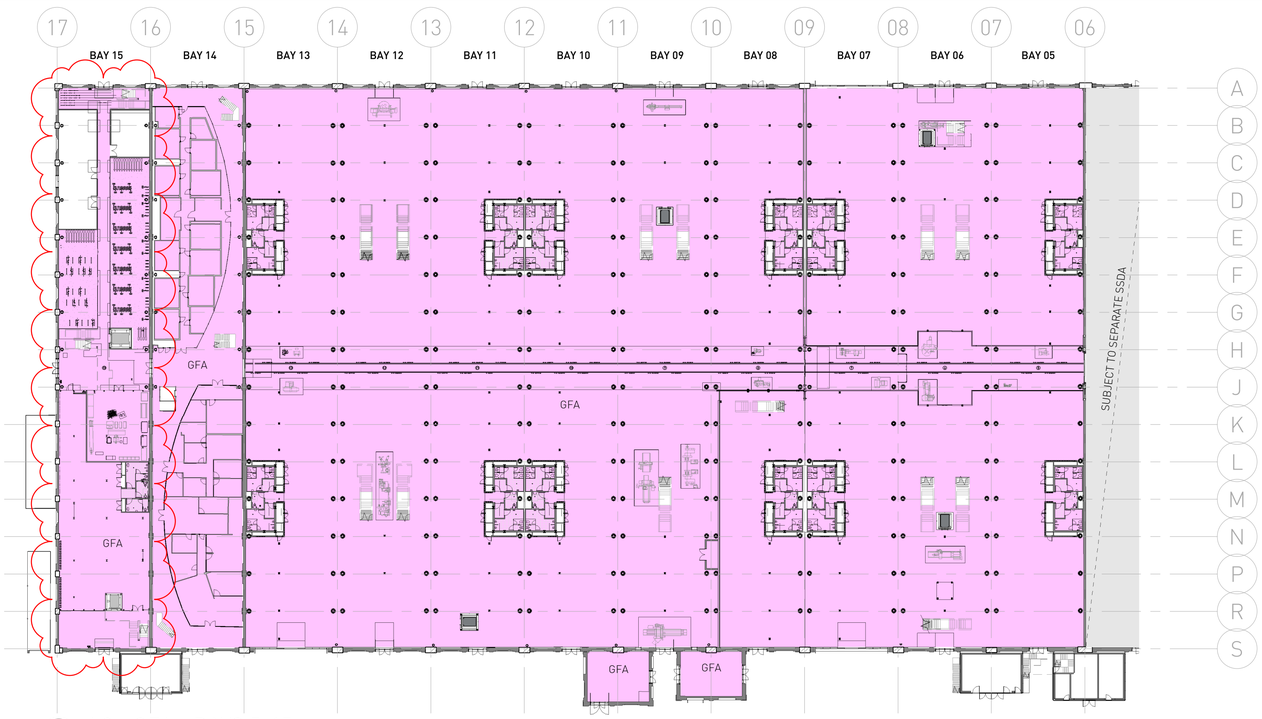
Client: MIRVAC

Project: LOCOMOTIVE WORKSHOP - BAYS 5-15
2 Locomotive St, Eveleigh NSW 2015

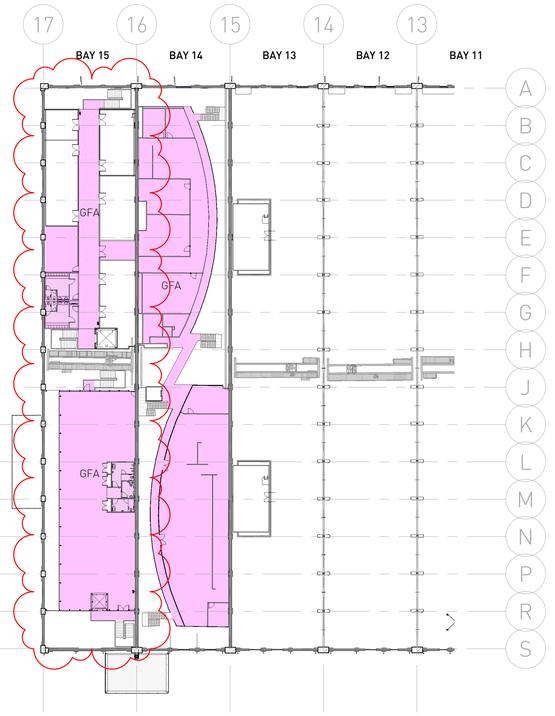
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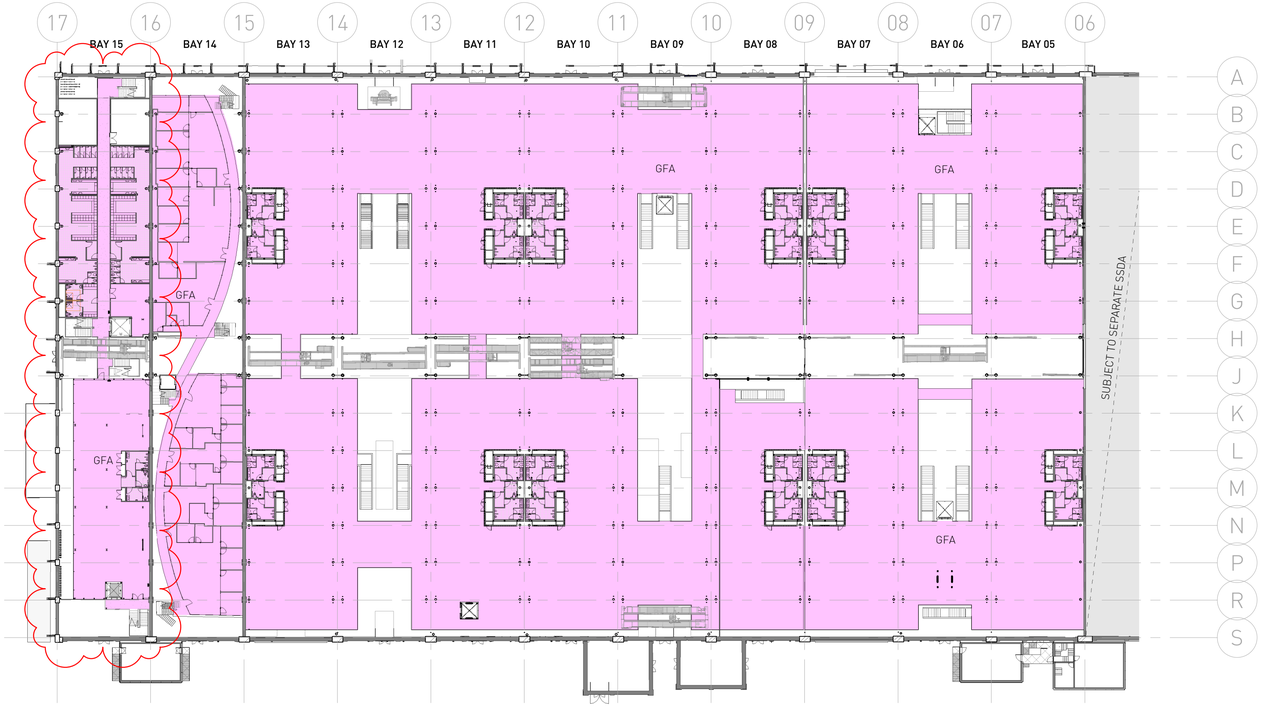
A1



1 L0 - GFA - BAYS 5-15
1 : 500



3 L2 - GFA - BAYS 5-15
1 : 500



2 L1 - GFA - BAYS 5-15
1 : 500

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Sheet No..5..... of..6.....

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www.sissonsarchitects.com

TOTAL GFA AREAS BAYS 5-15 BY USE (sq.m)

COMMERCIAL	27,302
RETAIL	156
TOTAL	27,458

TOTAL GFA AREAS BAYS 5-15 BY LEVEL (sq.m)

LEVEL 02	1,348
LEVEL 01	11,518
LEVEL 00	14,592
TOTAL	27,458

Client: MIRVAC

Project: LOCOMOTIVE WORKSHOP
2 Locomotive St, Eveleigh NSW 2015

Drawing Title: GFA PLANS BAYS 5-15

Scale: 1 : 500 @A1 (Half Scale @ A3)

Rev Date: 22/01/20

North

Project No.: 16-002

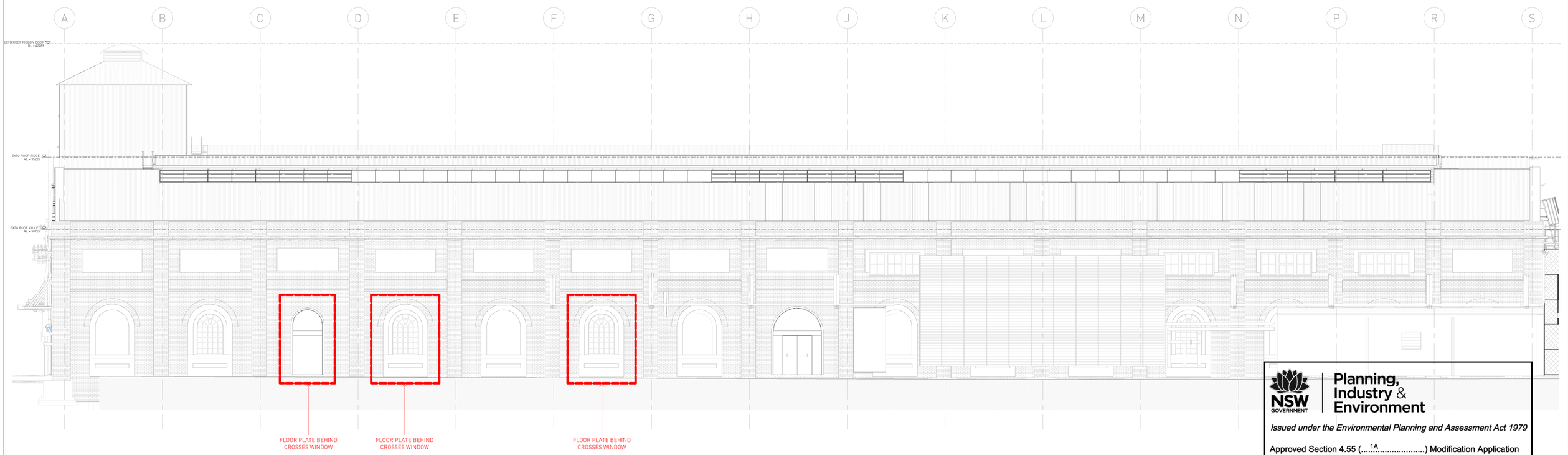
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Rev: W

A1

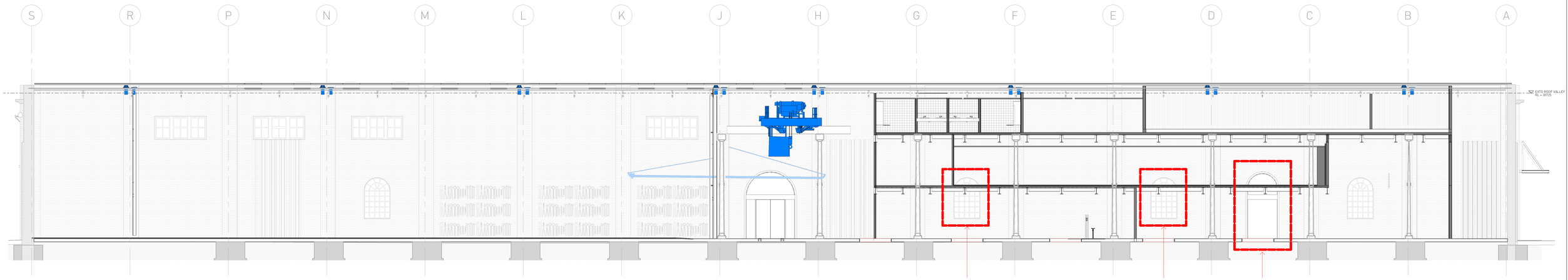
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31/03/2020 12:18:58 PM



2 SK_0867 SECTION - BAY 15 WEST FACADE
1 : 100

ONLY AREAS IN RED OUTLINE ARE TO FORM PART OF MODIFICATION APPROVAL. SKETCH IS FOR INFORMATION PURPOSES FOR RTS.



1 SK_0867 SECTION - BAY 15 - WEST WALL
1 : 100

ONLY AREAS IN RED OUTLINE ARE TO FORM PART OF MODIFICATION APPROVAL. SKETCH IS FOR INFORMATION PURPOSES FOR RTS.

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Signed.....

Sheet No..6..... of..6.....

SISSONS

SISSONS ARCHITECTS Pty Ltd
ABN: 31 621 375 129
NOMINATED ARCHITECT: NICK SISSON NSW ARB 7210

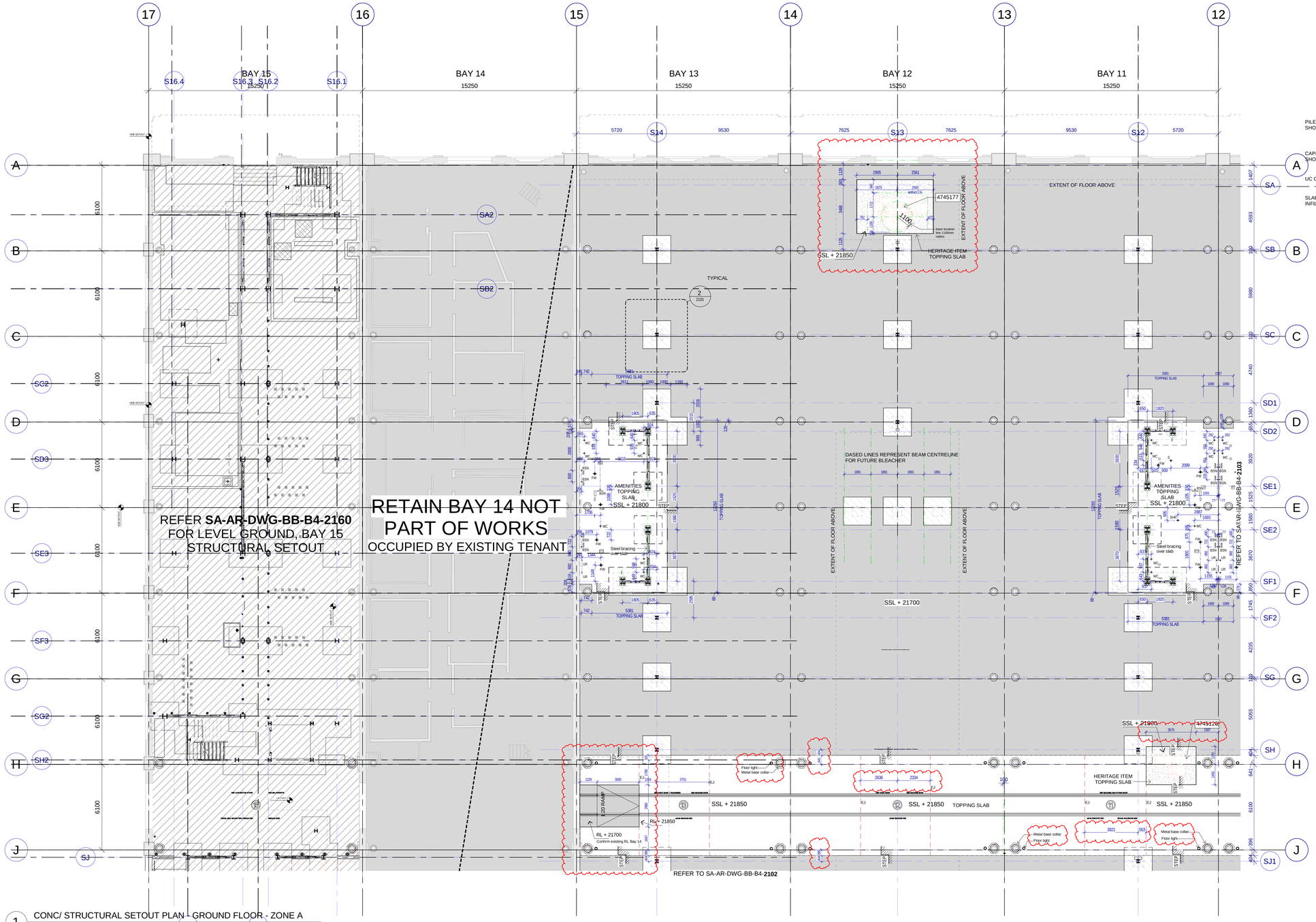
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Client: MIRVAC	Scale: 1 : 100 @B1	Drawing Title: BAY 15 SECTION - WEST WALL	Issue Date: 31/03/20
Project: LOCOMOTIVE WORKSHOP	Project No.: 16-002		Drawing No.: SK_0867

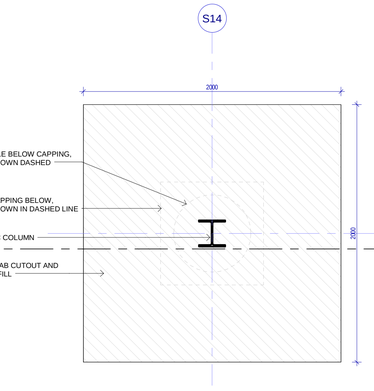
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16/10/2020 12:54:08 PM

North



1 CONC/ STRUCTURAL SETOUT PLAN - GROUND FLOOR - ZONE A
1 : 125



2 Plan Detail - Typical UC Column Placement
1 : 20

CO-ORDINATION NOTES - CONCRETE

1. Penetration & Structure
Refer to hydraulic engineer's drawing for setout of all floor wastes, sanitary and storm water drainage penetrations and all invert levels. Final size & location of penetrations in structure is subject to information, coordination & sign off by services Subcontractors.

2. Cast in plates
Cast in plates as per Structural Consultant requirements & to be co-ordinated with relevant Subcontractor.

3. Cast in conduits
All conduit sizes are nominal, to be confirmed by the relevant Subcontractor.

4. Wet area floor wastes
Shower outlets & floor outlets marked on plan are to have a 900mm dia, 30mm deep local depression feathered towards the outside

5. Amenities Slabs
Slabs for amenities on level 02 are to incorporate a nominal minimal slope of 1:200 towards the drainage outlet. Maintain the minimum required structural slab thickness at the lowest point, as indicated by the Structural Engineer.

GENERAL NOTES - CONCRETE

1. Drawing References
The Contractor must refer to other relevant documents including but not limited to the following:
1.1 General Arrangement drawings
1.2 Fire Compartmentation drawings
1.3 Concrete Setout drawings
1.4 Electrical Consultants drawings
1.5 Hydraulic Consultant drawings
1.6 Mechanical Consultants drawings
1.7 Structural Consultants drawings
1.8 Civil Consultants drawings
1.9 Fire Consultants drawings

2. Other References
Design Compliance: refer Structural Consultant specification
Material Selection: refer Architectural specification and Structural Consultant specification

3. Drawing rules, setout and dimensioning
3.1 The setout dimensions reflect Architectural intent. If a dimension is inconsistent with the structural sizing confirm before proceeding.
3.2 SRL's shown on plans which apply to multiple levels refer only to the lowest level. For other slab levels refer to the Architectural sections.

GRAPHICS LEGEND - CONCRETE

- Extent of Reinstated Floor Slab. RL to match existing
- Existing Foundations
- Precast Rebate, Near Side
- Existing Slab
- Fire Hydrant
- BL-E — Blockout for baluster fixing
- STEP — Step in slab
- FOLD — Fold in slab

ABBREVIATIONS

BOF	Bottom of Footing (Piling Cap or Ground Beam)	STC	Steel Column
CJ	Construction Joint	TOF	Top of Footing (Piling Cap or Ground Beam)
FS	Fire Stair	TOH	Top of Hob
HL	High Level	TOK	Top of Kerb
MJ	Movement Joint	TOW	Top of Wall
HR	Hanger Rod	WJ	Wet Joint in Precast Wall
HITP	Heritage Item Topping Slab	ExT	DENOTES EXISTING TIMBER COLUMN
		ExST	DENOTES EXISTING STEEL COLUMN

PENETRATION LEGEND - CONCRETE

B	Vanity Basin Waste Penetration	S	Kitchen Sink Penetration
CON	Condensate Pipe Penetration	SP	Sewer Pipe
DO	Drainage Outlet	SW	Stormwater Pipe
DP	Down Pipe	SWO	Stormwater Outlet
FH	Fire Hydrant	SWP	Stormwater Pitt
FHR	Fire Hose Reel Penetration	TD	Tundish
FW	Floor Waste Penetration	VP	Vent Pipe
HC	Hose Cock	WC	Toilet Penetration
OF	Overflow		
SHR	Shower Penetration		

DO — DP — Cast in pipe

- Communications Riser
- Electrical Riser
- Gas Flue
- Hydraulic Riser
- Hydraulic Zone
- Lobby Relief Riser
- Lobby Supply Riser
- Mechanical Riser
- Man Hole
- Refrigerant Riser
- Stair Pressurisation Riser

notes
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key plan



rev	date	description	by	chk
6	11.09.19	POD FLOOR LEVELS RECTIFIED, DIMENSIONS ADJUSTED	GY	RD
7	16.09.19	ISSUED FOR CONSTRUCTION APPROVAL	GY	RD
8	19.11.19	PLINTHS ADDED TO BASE OF STAIR, HYDRAULIC SETOUTS ADDED TO PODS, LIFT SETOUT UPDATED TO MATCH LIFT DRAWINGS, REINSTATED SLAB UPDATED AS PER STRUCTRAL FOOTING DESIGN	PC	RD
9	12.02.20	TOPPING SLAB SETOUT UPDATED, SHOWER FLOOR WASTE ADDED, SLAB TOPPING ADDED, SLAB TOPPING UNDER STAIRS REMOVED	PC	RD
10	26.02.20	HERITAGE ITEM SETOUT UPDATED	PC	RD
11	16.10.20	Concrete topping slab update GF, EJ locations shown	RD	

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drawing title
STRUCTURAL SETOUT PLAN - GROUND - ZONE A

status
PRELIMINARY

project no.	scale	date
16-002	As indicated @B1	10/31/17

drawing no. SA-AR-DWG-BB-B4-2101 rev 11

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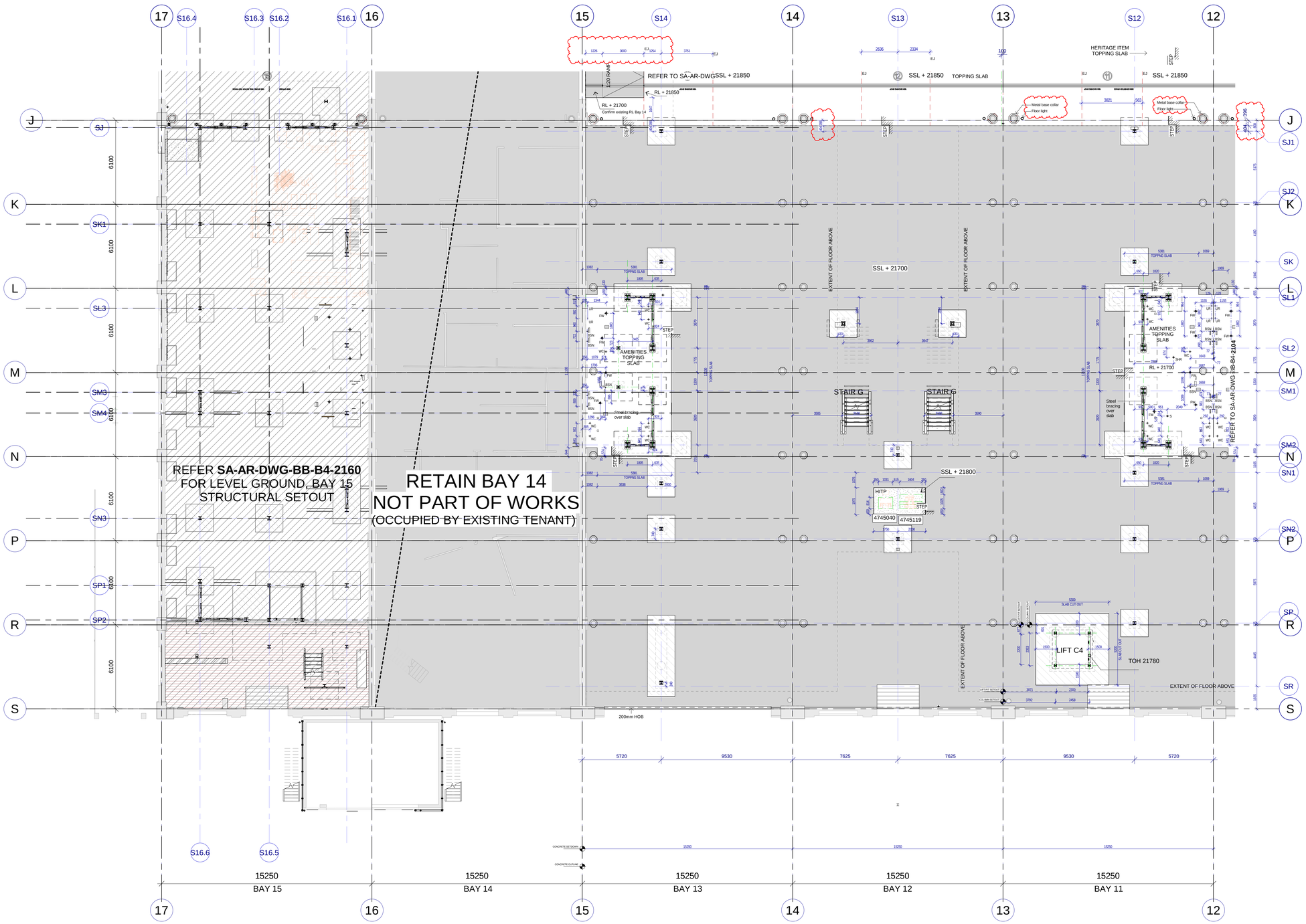
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North

1 CONC/ STRUCTURAL SETOUT PLAN - GROUND FLOOR - ZONE B

1 : 125



CO-ORDINATION NOTES - CONCRETE

1. Penetration & Structure
Refer to hydraulic engineer's drawing for setout of all floor wastes, sanitary and storm water drainage penetrations and all invert levels. Final size & location of penetrations in structure is subject to information, coordination & sign off by services Subcontractors.

2. Cast in plates
Cast in plates as per Structural Consultant requirements & to be co-ordinated with relevant Subcontractor.

3. Cast in conduits
All conduit sizes are nominal, to be confirmed by the relevant Subcontractor.

4. Wet area floor wastes
Shower outlets & floor outlets marked on plan are to have a 900mm dia, 30mm deep local depression feathered towards the outside

5. Amenities Slabs
Slabs for amenieties on level 02 are to incorporate a nominal minimal slope of 1:200 towards the drainage outlet. Maintain the minimum required structural slab thickness at the lowest point, as indicated by the Structural Engineer.

GENERAL NOTES - CONCRETE

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1.2 Fire Compartmentation drawings
1.3 Concrete Setout drawings
1.4 Electrical Consultants drawings
1.5 Hydraulic Consultant drawings
1.6 Mechanical Consultants drawings
1.7 Structural Consultants drawings
1.8 Civil Consultants drawings
1.9 Fire Consultants drawings

2. Other References
Design Compliance: refer Structural Consultant specification
Material Selection: refer Architectural specification and Structural Consultant specification

3. Drawing rules, setout and dimensioning
3.1 The setout dimensions reflect Architectural intent. If a dimension is inconsistent with the structural sizing confirm before proceeding.
3.2 SRL's shown on plans which apply to multiple levels refer only to the lowest level. For other slab levels refer to the Architectural sections.

GRAPHICS LEGEND - CONCRETE

- Extent of Reinstated Floor Slab. RL to match existing
- Existing Foundations
- Precast Rebate, Near Side
- Existing Slab
- Fire Hydrant
- BL-B Blockout for baluster fixing
- STEP Step in slab
- FOLD Fold in slab

ABBREVIATIONS

BOF	Bottom of Footing (Piling Cap or Ground Beam)	STC	Steel Column
CJ	Construction Joint	TOF	Top of Footing (Piling Cap or Ground Beam)
FS	Fire Stair	TOH	Top of Hob
HL	High Level	TOK	Top of Kerb
MJ	Movement Joint	TOW	Top of Wall
HR	Hanger Rod	WJ	Wet Joint in Precast Wall
HITP	Heritage Item Topping Slab	ExT	DENOTES EXISTING TIMBER COLUMN
		ExST	DENOTES EXISTING STEEL COLUMN

PENETRATION LEGEND - CONCRETE

B	Vanity Basin Waste Penetration	S	Kitchen Sink Penetration
CON	Condensate Pipe Penetration	SP	Sewer Pipe
DO	Drainage Outlet	SW	Stormwater Pipe
DP	Down Pipe	SWO	Stormwater Outlet
FH	Fire Hydrant	SWP	Stormwater Pit
FHR	Fire Hose Reel Penetration	TD	Tundish
FW	Floor Waste Penetration	VP	Vent Pipe
HC	Hose Cock	WC	Toilet Penetration
OF	Overflow		
SHR	Shower Penetration		

DO DP — Cast in pipe

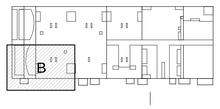
- Communications Riser
- Electrical Riser
- Gas Flue
- Hydraulic Riser
- Hydraulic Zone
- Lobby Relief Riser
- Lobby Supply Riser
- Mechanical Riser
- Man Hole
- Refrigerant Riser
- Stair Pressurisation Riser

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rev	date	description	by	chk
5	20.08.19	COLUMNS UPDATED TO SUIT TENANT FITOUT, LIFT LOCATION UPDATED, COLUMNS ADDED	PC	RD
6	22.08.19	COLUMN & LIFT SETOUTS UPDATED, STAIR SUPPORT COLUMNS ADDED	PC	RD
7	11.09.19	POD SLAB LEVEL RL SHOWN, STAIR SUPPORT COLUMN POSITION AMENDED	GY	RD
8	16.09.19	LIFT SHAFT FRAMING AND SET OUTS UPDATED	GY	RD
9	19.11.19	PLINTHS ADDED TO BASE OF STAIR, HYDRAULIC SETOUTS ADDED TO PODS, LIFT SETOUT UPDATED TO MATCH LIFT DRAWINGS, REINSTATED SLAB UPDATED AS PER STRUCTRAL FOOTING DESIGN	PC	RD
10	10.03.20	COLUMNS ROTATED, FLOOR WASTES ADDED, HERITAGE ITEM SETOUT ADDED	PC	RD
11	16.10.20	Concrete topping slab update GF, EJ locations shown	RD	

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drawing title
STRUCTURAL SETOUT PLAN - GROUND - ZONE B

status
PRELIMINARY

project no.	scale	date
16-002	1 : 125 @B1	10/31/17

drawing no. SA-AR-DWG-BB-B4-2102 rev 11

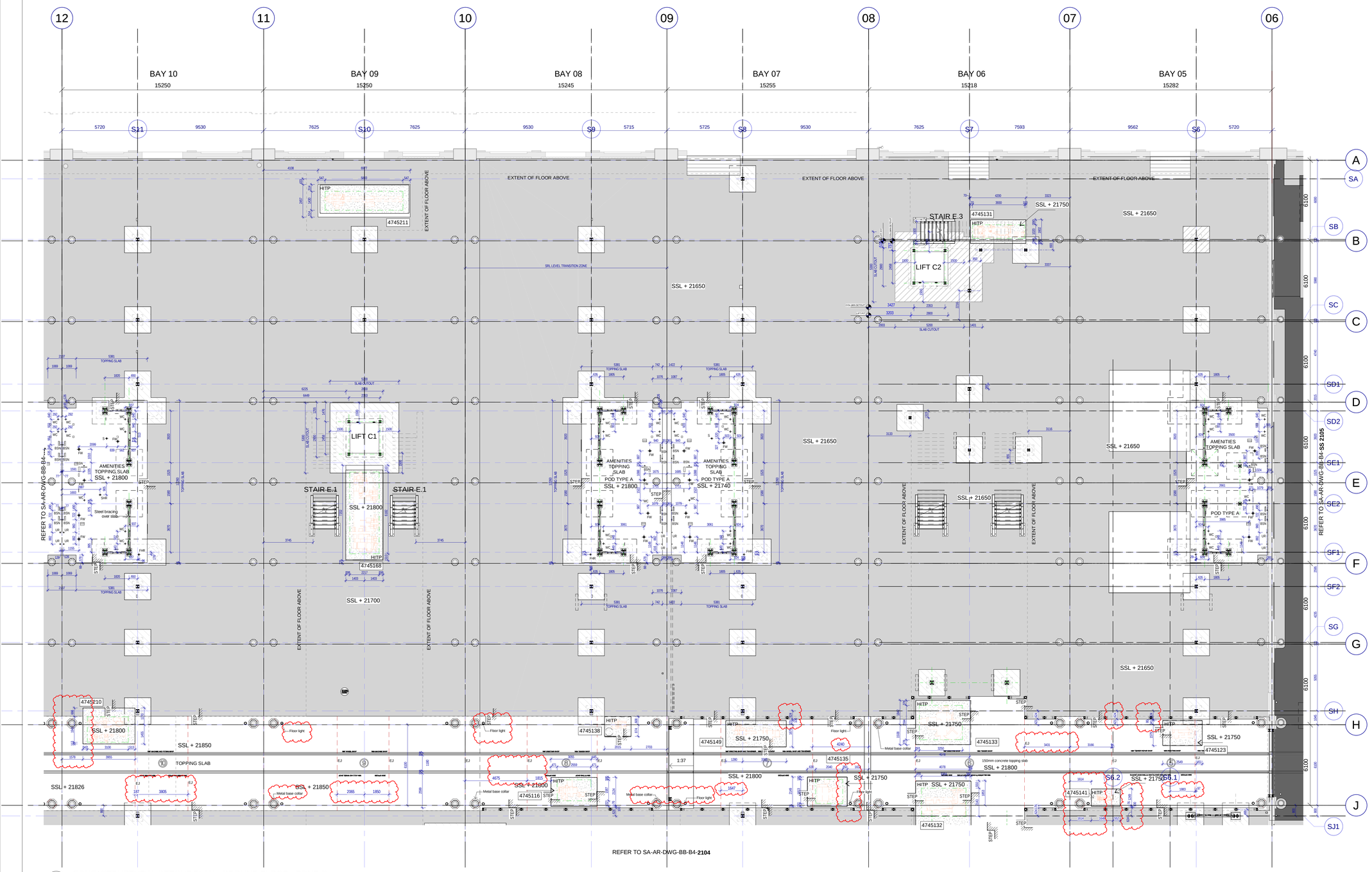
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North



VV CONC/ STRUCTURAL SETOUT PLAN - GROUND FLOOR - ZONE C

1 : 125

CO-ORDINATION NOTES - CONCRETE

1. Penetration & Structure
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GENERAL NOTES - CONCRETE

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1.4 Electrical Consultants drawings
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1.7 Structural Consultants drawings
1.8 Civil Consultants drawings
1.9 Fire Consultants drawings

2. Other References
Design Compliance: refer Structural Consultant specification
Material Selection: refer Architectural specification and Structural Consultant specification

3. Drawing rules, setout and dimensioning
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GRAPHICS LEGEND - CONCRETE

- Extent of Reinstated Floor Slab. RL to match existing
- Existing Foundations
- Precast Rebate, Near Side
- Existing Slab
- Fire Hydrant
- BL-B / CS — Blockout for baluster fixing
- STEP — Step in slab
- FOLD — Fold in slab

ABBREVIATIONS

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CJ	Construction Joint	TOF	Top of Footing (Piling Cap or Ground Beam)
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FW	Floor Waste Penetration	VP	Vent Pipe
HC	Hose Cock	WC	Toilet Penetration
OF	Overflow		
SHR	Shower Penetration		

DO / DP — Cast in pipe

- Communications Riser
- Electrical Riser
- Gas Flue
- Hydraulic Riser
- Hydraulic Zone
- Lobby Relief Riser
- Lobby Supply Riser
- Mechanical Riser
- Man Hole
- Refrigerant Riser
- Stair Pressurisation Riser

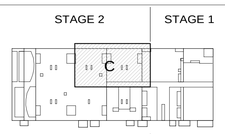
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rev	date	description	by	chk
6	22.08.19	LIFT LOCATION AMENDED (20mm), BRIDGE SUPPORT COLUMNS UPDATED & SETOUT ADDED, COLUMN ADDED	PC	RD
7	11.09.19	POD SLAB LEVELS RECTIFIED, LIFT SETOUT LINES RECTIFIED	GY	RD
8	16.09.19	LIFT SHAFT FRAMING AND SET OUTS UPDATED	GY	RD
9	19.11.19	PLINTHS ADDED TO BASE OF STAIR, HYDRAULIC SETOUTS ADDED TO PODS, LIFT SETOUT UPDATED TO MATCH LIFT DRAWINGS, REINSTATED SLAB UPDATED AS PER STRUCTRAL FOOTING DESIGN, STAIRS UPDATED, COLUMN LOCATIONS UPDATED	PC	RD
10	26.02.20	HERITAGE ITEM SETOUT ADDED, TOPPING SLAB UPDATED, SHOWER WASTE ADDED	PC	RD
11	16.10.20	Concrete topping slab update GF, EJ locations shown	RD	

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drawing title
STRUCTURAL SETOUT PLAN - GROUND - ZONE C

status
PRELIMINARY

project no.	scale	date
16-002	1 : 125 @B1	10/31/17

drawing no. SA-AR-DWG-BB-B4-2103 rev 11

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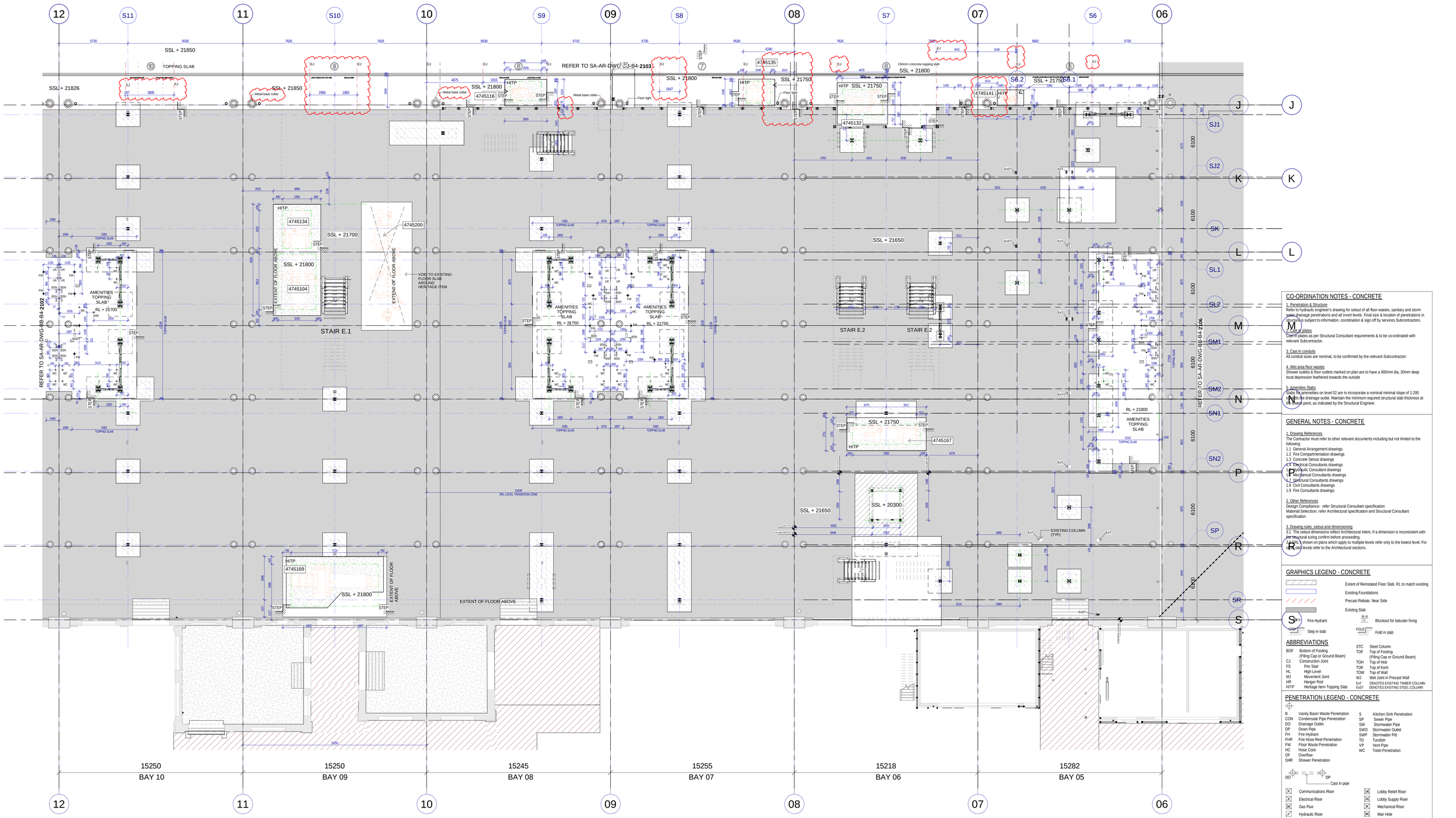
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North

1 CONC/ STRUCTURAL SETOUT PLAN - GROUND FLOOR - ZONE D

1 : 125



CO-ORDINATION NOTES - CONCRETE

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HC	Hose Cock	WC	Toilet Penetration
OF	Overflow		
SHR	Shower Penetration		

DO — DP — Cast in pipe

- Communications Riser
- Electrical Riser
- Gas Flue
- Hydraulic Riser
- Hydraulic Zone
- Lobby Relief Riser
- Lobby Supply Riser
- Mechanical Riser
- Man Hole
- Refrigerant Riser
- Stair Pressurisation Riser

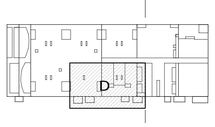
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rev	date	description	by	chk
7	10.03.20	COLUMNS ROTATED, FLOOR WASTES ADDED, HERITAGE ITEM SETOUT ADDED	PC	RD
8	13.05.20	CANTEEN AREA STRUCTURE UPDATED, ISSUE FOR SERVICE COORDINATION	HY	RD
9	03.06.20	HERITAGE ITEM SETOUT - ZONE D	HY	
10	12.06.20	BAY 5 STEEL SETOUT UPDATED	HY	
11	29.06.20	HERITAGE ITEM SETOUT UPDATED	HY	
12	13.07.20	BAY 5 CANTEEN AREA - SERVICES PENO. & LAYOUT UPDATED	HY	
13	03.08.20	BAY 5 CANTEEN AREA - COLUMN POSITIONS, TIMBER STRUCTURE AS PER SURVEY, SIZE OF PLATFORM AND MECH. RISERS PENO. UPDATED	HY	
14	16.10.20	Concrete topping slab update GF, EJ locations shown	RD	

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drawing title
STRUCTURAL SETOUT PLAN - GROUND - ZONE D

status
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project no.	scale	date
16-002	1 : 125 @B1	10/31/17

drawing no.
SA-AR-DWG-BB-B4-2104

rev
14

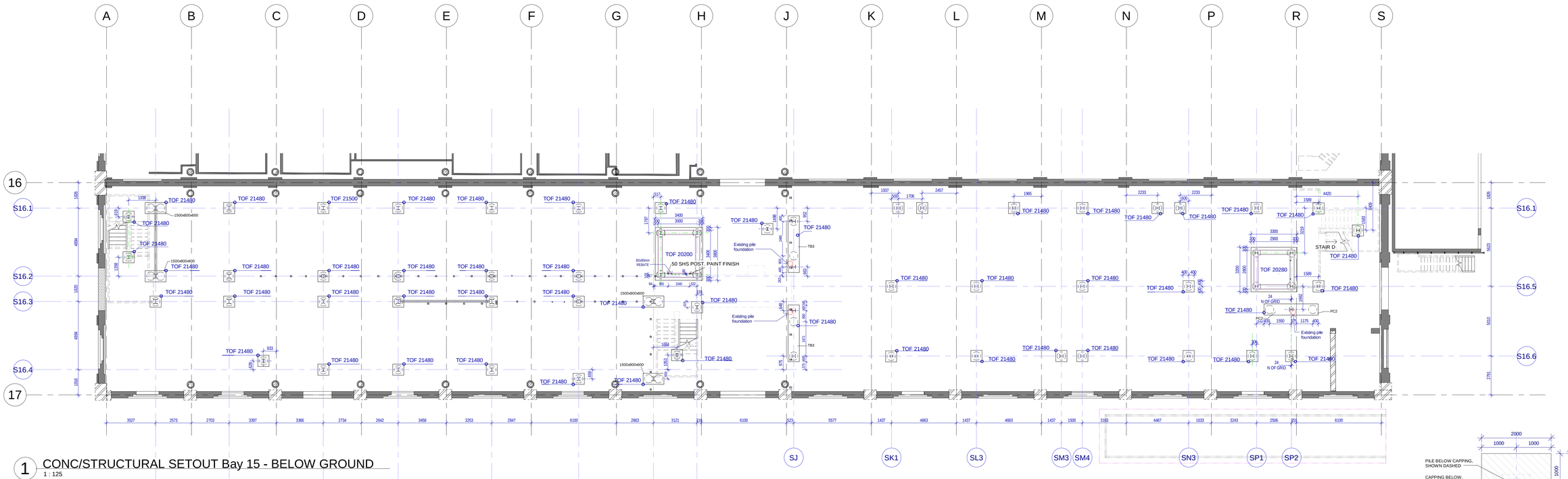
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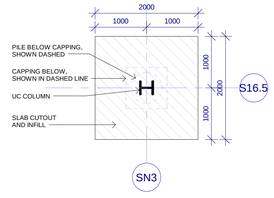
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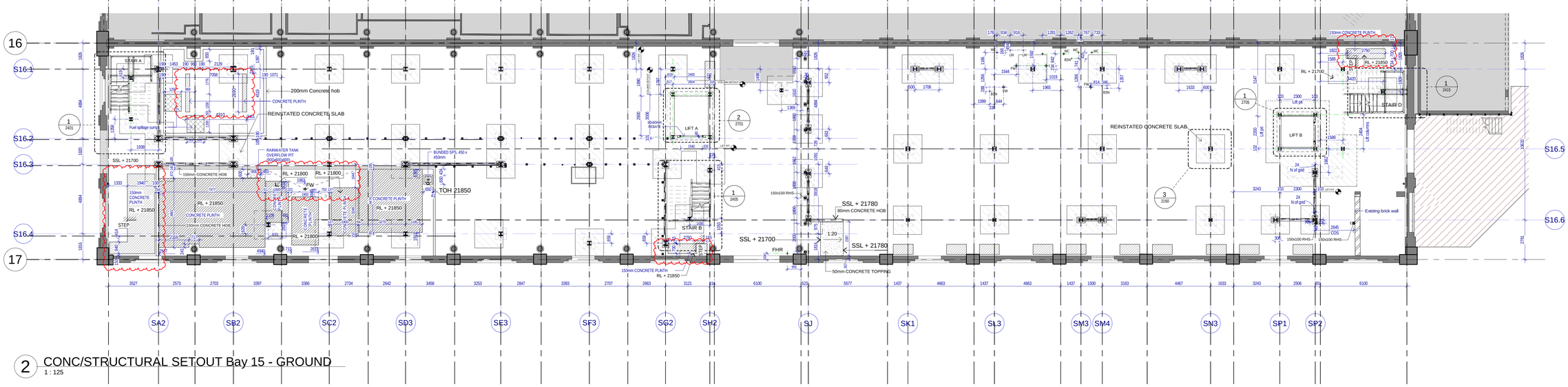
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1 CONC/STRUCTURAL SETOUT Bay 15 - BELOW GROUND
1 : 125



3 Typical Column/Footing placement
1 : 50



2 CONC/STRUCTURAL SETOUT Bay 15 - GROUND
1 : 125

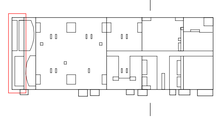
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key plan



rev	date	description	by	chk
1	23.03.20	Bay15 Stucture setout. Issue for construction	RD	RD
2	07.05.20	STAIR D - RELOCATED & LANDING WIDENED, ISSUE FOR CONSTRUCTION	HY	
3	05.06.20	BAY 15 STRUCTURE SETOUT AMENDMENTS	RD	
4	29.06.20	Bay 15 FH GLAZING ETOUT	RD	
5	30.07.20	BAY 15 FOUNDATIONS AMENDED, PLINTHS ADDED IN TANK ROOM	RD	
6	11.09.20	ISSUE FOR CONSTRUCTION - DIESEL TANK ROOM PLINTH ADDED, FW AND FALLS SHOWN IN RAINWATER TANK ROOM SHOWN,STANDING HERITAGE BEAM PLINTH ADDED	GY	

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drawing title
STRUCTURAL SETOUT PLAN BAY 15 - Footings and Ground Level

status
FOR CONSTRUCTION

project no.	scale	date
16-002	As indicated @B1	03/19/20

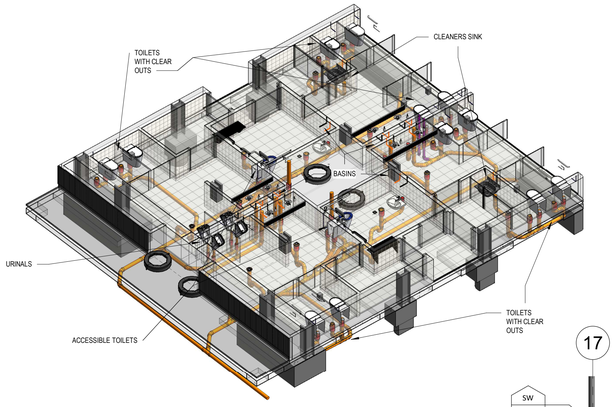
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SA-AR-DWG-BB-B4-2160

rev
6

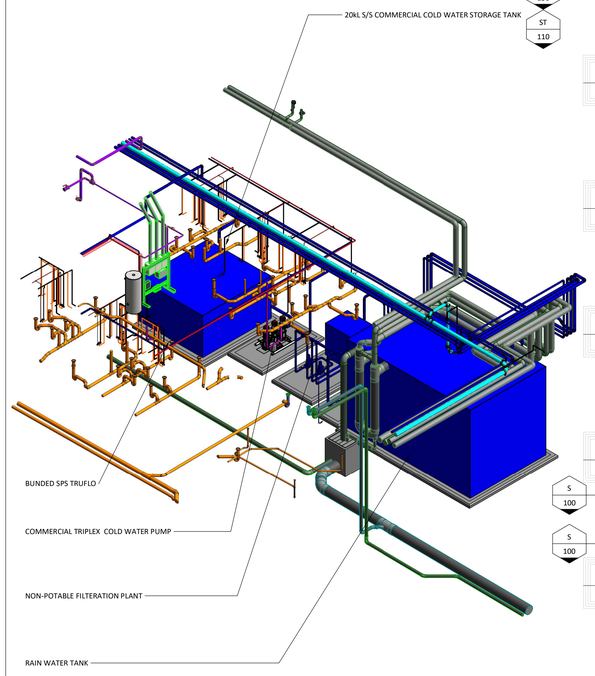
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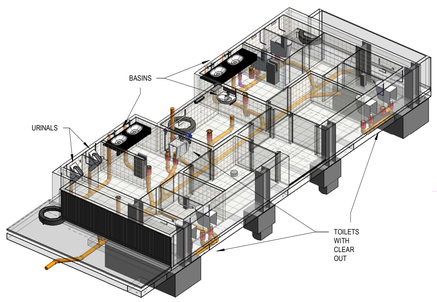
TRIAL MODE - Click here for more information

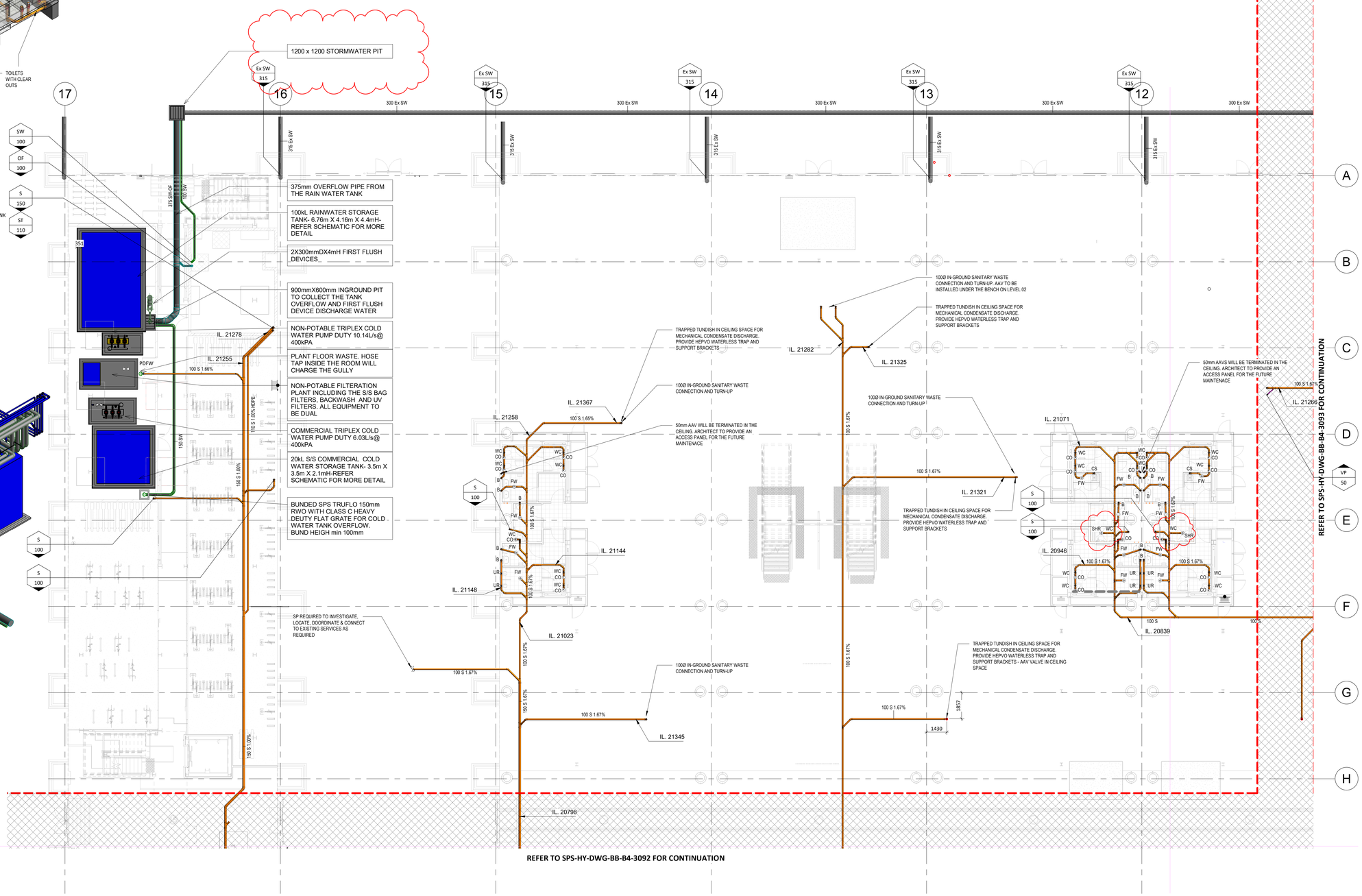


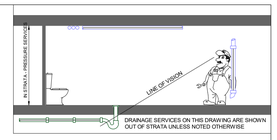
INGROUND DRAINAGE ZONE A 3D DETAIL 2



BAY 15 PLANT 3D DETAIL







INGROUND DRAINAGE ZONE A 3D DETAIL 1

REV	DESCRIPTION	DRAWN	APP'D	DATE
7	FOR CONSTRUCTION	ZUZ	SBA	03.08.20
6	FOR CONSTRUCTION	DM	SBA	06.05.20
5	QUANTIUM ADDITIONAL IN GROUND TUNDISH	SBA	SBA	14.02.20
4	FOR CONSTRUCTION APPROVAL	JHK	SBA	22.11.19
3	QUANTIUM LAYOUT UPDATED	DM	SBA	17.10.19
2	ADDITIONAL CLEANER SINK	DM	SBA	25.09.19
1	FOR CONSTRUCTION	DM	SBA	20.09.19
0	FOR CONSTRUCTION	DM	SBA	13.09.19

Client. mirvac
Address: Level 28, 200 George St Sydney NSW 2000

Retail Architect. BUCHAN
Address: Level 1, Kelly St Ultimo NSW 2007
Phone: 02 9566 1611

Principal Architect. SISSONS
Address: 5/8 Alexander St Crows Nest, NSW 2065
Phone: 02 9460 8002

WOOD & GRIEVE ENGINEERS NOW PART OF Stantec

ARCHITECT/CLIENT

PROJECT	TITLE
LOCOMOTIVE WORKSHOP 2 LOCOMOTIVE STREET, EVELEIGH NSW 2015	HYDRAULIC SERVICES - INGROUND FLOOR DRAINAGE SERVICES - ZONE A

SMART PLUMBING SOLUTIONS Pty Ltd

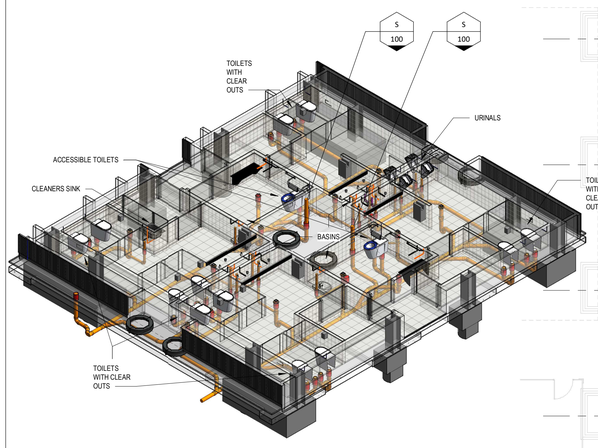
CONSTRUCTION

HYDRAULIC SERVICES

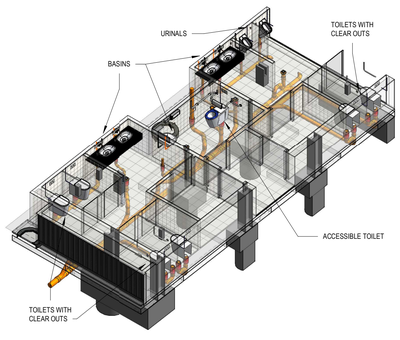
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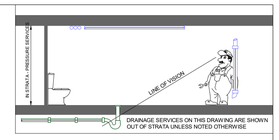
TRIAL MODE - Click here for more information



INGROUND DRAINAGE ZONE B 3D DETAIL 2



INGROUND DRAINAGE ZONE B 3D DETAIL 1



REFER TO SPS-HY-DWG-BB-B4-3091 FOR CONTINUATION

REFER TO SPS-HY-DWG-BB-B4-3094 FOR CONTINUATION

17 16 15 14 13 12

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IL. 20506
IL. 20723
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IL. 20312
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IL. 20922
IL. 20096
IL. 19679
IL. 19880
IL. 21123
IL. 21212

VP 65 TERMINATE IN CEILING WITH AN AAV
VP 50
VP 100
TWVP 100
S 100
100

150 S 1.00%
150 S 2.1%
150 S 1.65%
100 S 1.67%
225 Ex S ES
225 ES
300 Ex SW eSTW
300 ES SW eSTW
300 Ex SW 0.50% eSTW
300 STW
110 TW 1.67%

PROVIDE WASTE SPIGOT FOR CONNECTION OF DISCHARGE FROM DISHWASHER TO SINK(TYPICAL IN ALL KITCHEN SINK JOINERIES)

100Ø IN-GROUND SANITARY WASTE CONNECTION AND TURN-UP

TRAPPED TUNDISH IN CEILING SPACE FOR MECHANICAL CONDENSATE DISCHARGE. PROVIDE HEPVO WATERLESS TRAP AND SUPPORT BRACKETS - AAV VALVE IN CEILING SPACE

KITCHEN WASTE PIPE IN JOINERY CONNECT TO EXISTING TURN UP

PROVIDE DRAINAGE TURN UP FOR SAFETRAY. SAFEWASTE WITH HEPVO WATERLESS TRAP AND SUPPORT BRACKETS

PROVIDE DRAINAGE TURN UP FOR SAFETRAY. SAFEWASTE WITH HEPVO WATERLESS TRAP AND SUPPORT BRACKETS - AAV TO BE INSTALLED IN CEILING

100Ø IN-GROUND SANITARY WASTE CONNECTION AND TURN-UP WITH GULLY

100Ø IN-GROUND SANITARY WASTE CONNECTION AND TURN-UP - AAV TO BE INSTALLED IN JOINERY IN HIGH LEVEL

50mm AAV WILL BE TERMINATED IN THE CEILING. ARCHITECT TO PROVIDE AN ACCESS PANEL FOR THE FUTURE MAINTENACE

WATERLESS TUNDISH WITH 100MM IN GROUND PIPE

100mm BT with overflow gully and IPMF low lvel vent. 20mm HT to be installed to charge the gully

150Ø SEWER BOUNDARY TRAP COMPLETED WITH LOW LEVEL VENT"IPMF" AND OVEFLOW GULLY. LOCATION OF THEM TBC

NEW 1200x1200mm STORMWATER PIT INCLUDED TWO OCEAN PROTECT 460 STORMFILTERS- INVERT LEVEL 18.900. WIER OVERFLOW BY OCEAN PROTECT

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REV	DESCRIPTION	DRAWN	APPD	DATE
6	FOR CONSTRUCTION	ZUZ	SBA	03.08.20
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1	FOR CONSTRUCTION	DM	SBA	20.09.19
0	FOR CONSTRUCTION	DM	SBA	13.09.19

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B

WOOD & GRIEVE ENGINEERS
NOW PART OF Stantec

ARCHITECT/CLIENT

LOCOMOTIVE WORKSHOP
2 LOCOMOTIVE STREET, EVELEIGH
NSW 2015

PROJECT

HYDRAULIC SERVICES - INGROUND FLOOR DRAINAGE SERVICES - ZONE B

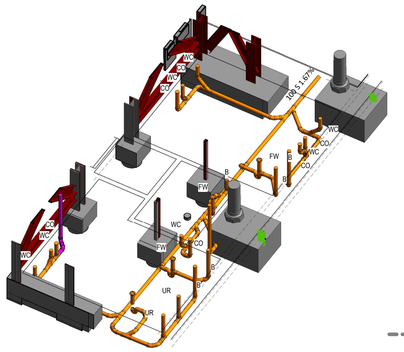
TITLE

SMART PLUMBING SOLUTIONS Pty Ltd

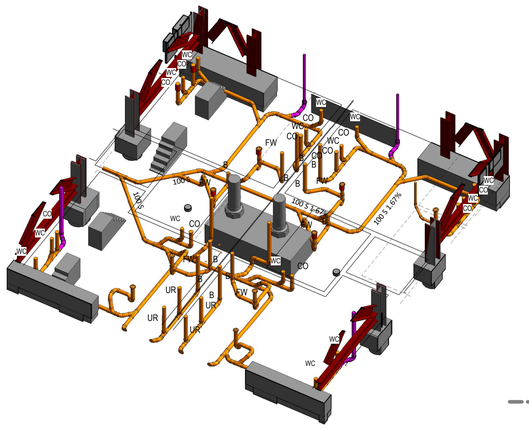
CONSTRUCTION

HYDRAULIC SERVICES

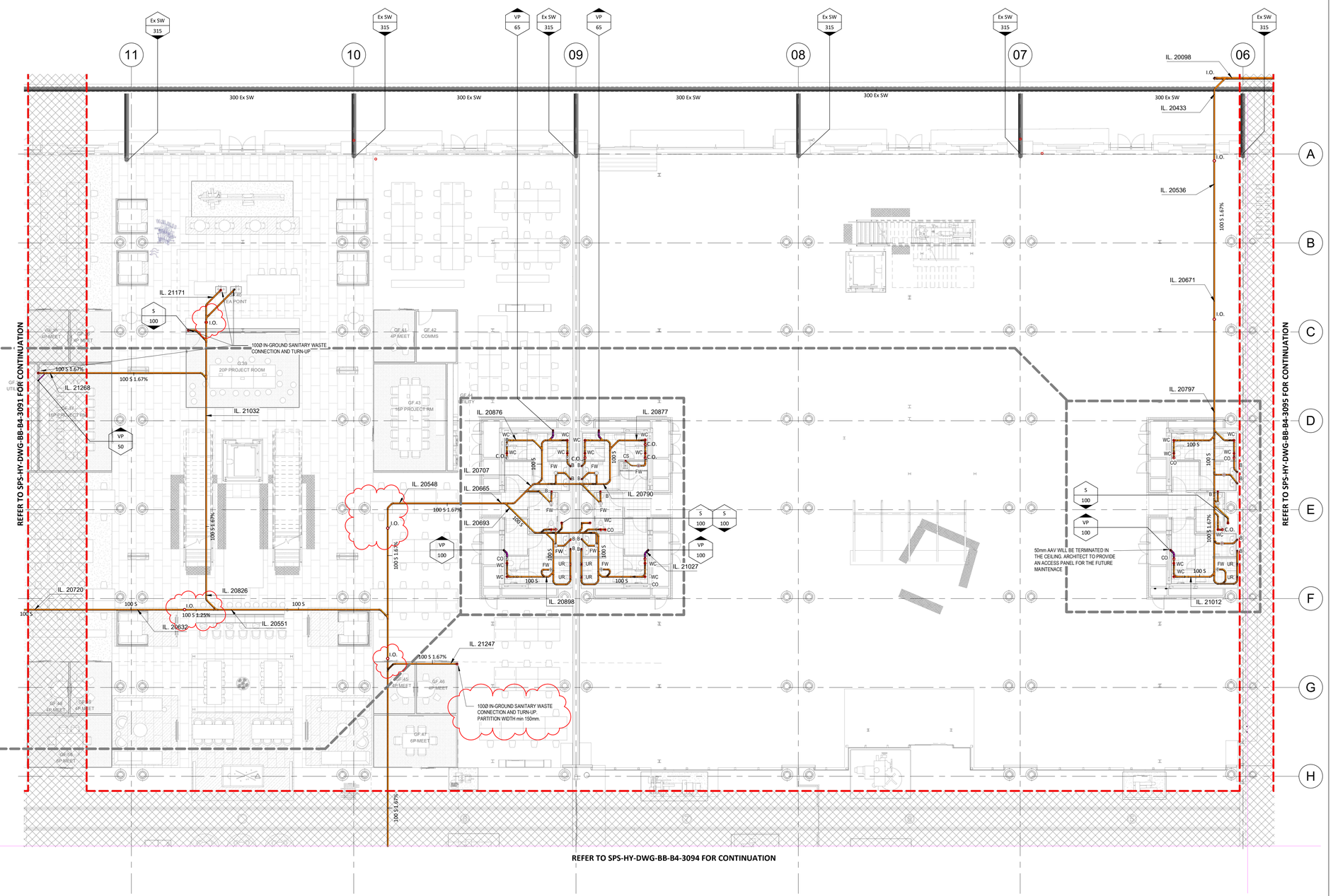
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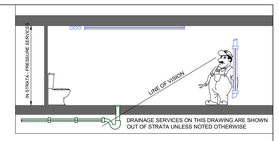


GROUND FLOOR ZONE C BATHROOM 2 DRAINAGE COORDINATION VIEW



GROUND FLOOR ZONE C BATHROOM 1 DRAINAGE COORDINATION VIEW





ALL IN-GROUND ROUTES TO AVOID, WHERE POSSIBLE. IMPACT TO HERITAGE SUBSTRUCTURE OR OBJECTS FOUND ON-SITE.

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REV	DESCRIPTION	DRAWN	APPD	DATE
7	FOR CONSTRUCTION APPROVAL	JHK	SBA	22.11.19
6	QUANTIUM LAYOUT UPDATED	DM	SBA	17.10.19
5	ADDITIONAL CLEANER SINK	DM	SBA	25.09.19
4	FOR CONSTRUCTION	DM	SBA	20.09.19
3	RE ISSUED FOR CONSTRUCTION	DM	SBA	13.09.19
2	RE ISSUED FOR CONSTRUCTION	DM	SBA	03.09.19
1	FOR CONSTRUCTION	DM	SBA	16.08.19
0	FOR CONSTRUCTION	DM	SBA	24.07.19
B	PROGRESS ISSUE	DM	SBA	19.07.19
A	PROGRESS ISSUE	DM	SBA	02.07.19

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C

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ARCHITECT/CLIENT

PROJECT: LOCOMOTIVE WORKSHOP
2 LOCOMOTIVE STREET, EVELEIGH
NSW 2015

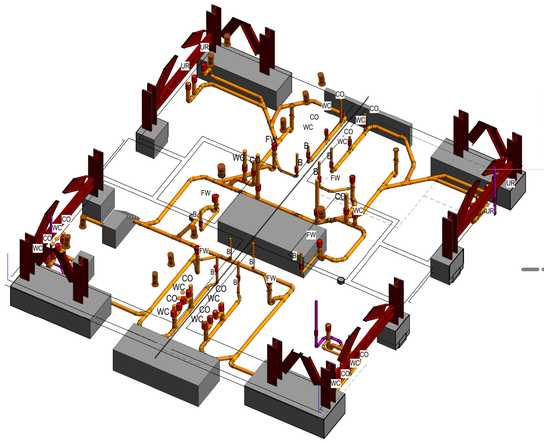
TITLE: HYDRAULIC SERVICES - INGROUND FLOOR DRAINAGE SERVICES - ZONE C

SMART PLUMBING SOLUTIONS Pty Ltd

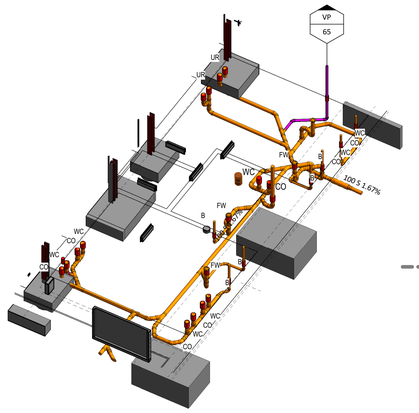
CONSTRUCTION

HYDRAULIC SERVICES

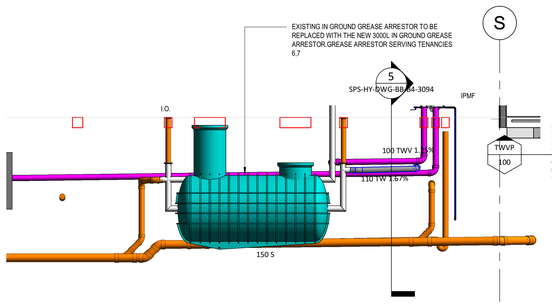
SCALE @ B1	PROJECT No	DRAWING No	REV
As indicated	42673	SPS-HY-DWG-BB-B4-3093	7



GROUND FLOOR ZONE D BATHROOM 1 COORDINATION VIEW

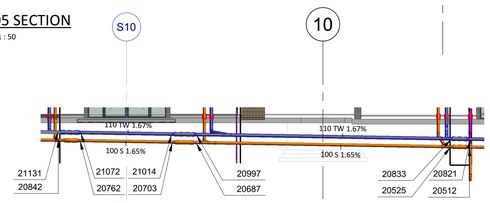


GROUND FLOOR ZONE D BATHROOM 2 COORDINATION VIEW



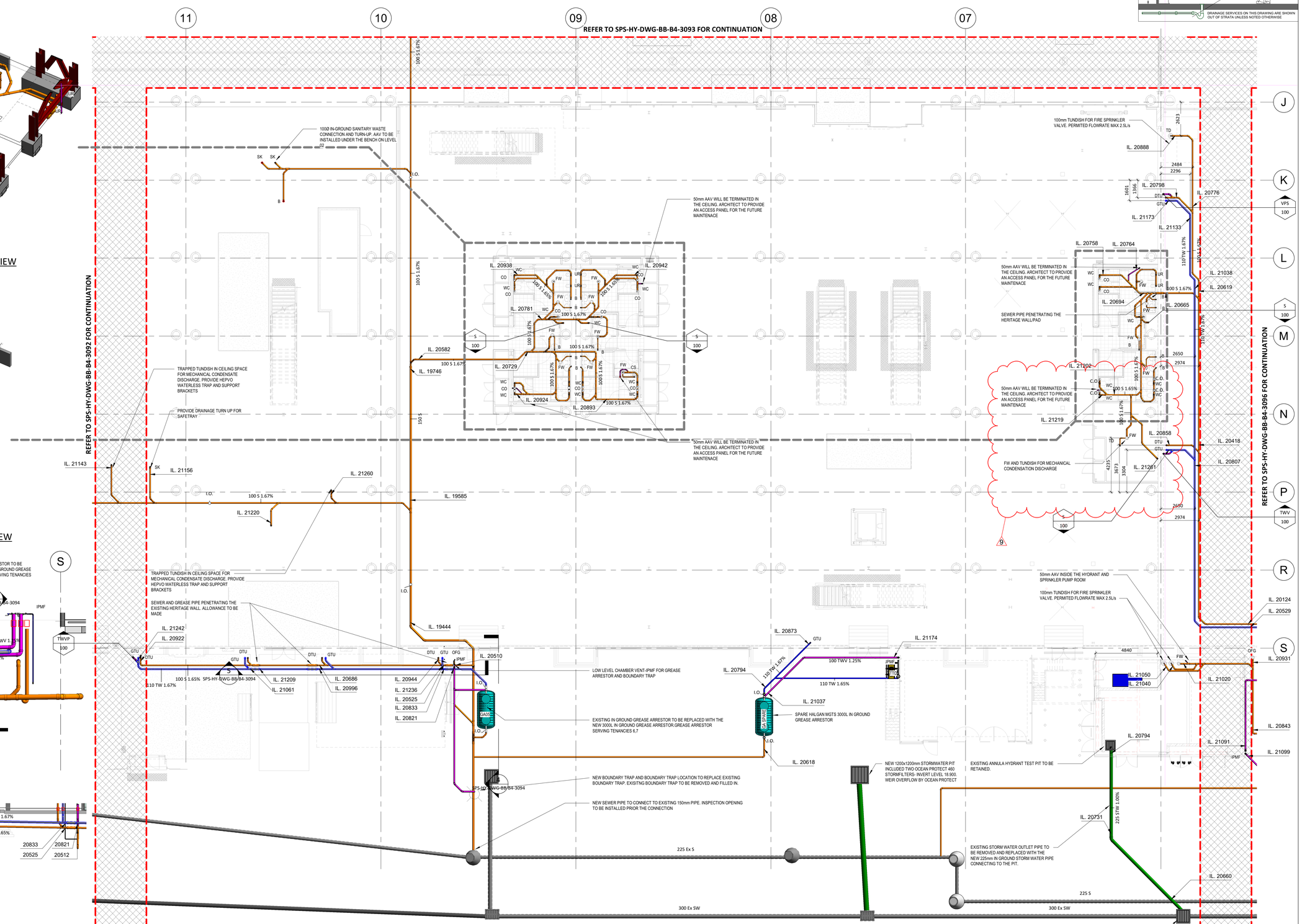
GA 05 SECTION

SCALE - 1 : 50



WALL PENETRATION SECTION VIEW

SCALE - 1 : 100


11
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REFER TO SPS-HY-DWG-BB-B4-3093 FOR CONTINUATION
REFER TO SPS-HY-DWG-BB-B4-3092 FOR CONTINUATION
REFER TO SPS-HY-DWG-BB-B4-3096 FOR CONTINUATION
J
K
L
M
N
P
R
S
100Ø IN-GROUND SANITARY WASTE CONNECTION AND TURN-UP. AAV TO BE INSTALLED UNDER THE BENCH ON LEVEL 02
I.O.
50mm AAV WILL BE TERMINATED IN THE CEILING. ARCHITECT TO PROVIDE AN ACCESS PANEL FOR THE FUTURE MAINTENACE
IL. 20938
IL. 20942
IL. 20781
IL. 20729
IL. 20924
IL. 20893
IL. 20582
IL. 19746
TRAPPED TUNDISH IN CEILING SPACE FOR MECHANICAL CONDENSATE DISCHARGE. PROVIDE HEPVO WATERLESS TRAP AND SUPPORT BRACKETS
PROVIDE DRAINAGE TURN UP FOR SAFETRAY
IL. 21143
IL. 21156
IL. 21260
IL. 19585
IL. 21220
100mm TUNDISH FOR FIRE SPRINKLER VALVE. PERMITED FLOWRATE MAX 2.5L/s
IL. 20888
IL. 20798
IL. 20776
IL. 21173
IL. 21133
IL. 20758
IL. 20764
IL. 21038
IL. 20619
IL. 20694
IL. 20665
SEWER PIPE PENETRATING THE HERITAGE WALL/PAD
IL. 21202
IL. 21219
IL. 20858
IL. 20418
IL. 20807
IL. 21261
FW AND TUNDISH FOR MECHANICAL CONDENSATION DISCHARGE
IL. 20660
50mm AAV INSIDE THE HYDRANT AND SPRINKLER PUMP ROOM
IL. 20124
IL. 20529
IL. 20931
IL. 21020
IL. 21050
IL. 21040
IL. 20843
IL. 21091
IL. 21099
IL. 20794
EXISTING ANNULA HYDRANT TEST PIT TO BE RETAINED.
TRAPPED TUNDISH IN CEILING SPACE FOR MECHANICAL CONDENSATE DISCHARGE. PROVIDE HEPVO WATERLESS TRAP AND SUPPORT BRACKETS
SEWER AND GREASE PIPE PENETRATING THE EXISTING HERITAGE WALL. ALLOWANCE TO BE MADE
IL. 21242
IL. 20922
IL. 21209
IL. 21061
IL. 20686
IL. 20996
IL. 19444
IL. 20944
IL. 21236
IL. 20525
IL. 20833
IL. 20821
IL. 20510
LOW LEVEL CHAMBER VENT-IPMF FOR GREASE ARRESTOR AND BOUNDARY TRAP
EXISTING IN GROUND GREASE ARRESTOR TO BE REPLACED WITH THE NEW 3000L IN GROUND GREASE ARRESTOR.GREASE ARRESTOR SERVING TENANCIES 6,7
GA05
NEW BOUNDARY TRAP AND BOUNDARY TRAP LOCATION TO REPLACE EXISTING BOUNDARY TRAP. EXSITNG BOUNDARY TRAP TO BE REMOVED AND FILLED IN.
SPS-HY-DWG-BB-B4-3094
NEW SEWER PIPE TO CONNECT TO EXISTING 150mm PIPE. INSPECTION OPENING TO BE INSTALLED PRIOR THE CONNECTION
IL. 20873
IL. 21174
IL. 20794
IL. 21037
SPARE HALGAN MGTS 3000L IN GROUND GREASE ARRESTOR
IL. 20618
NEW 1200x1200mm STORMWATER PIT INCLUDED TWO OCEAN PROTECT 460 STORMFILTERS- INVERT LEVEL 18.900. WEIR OVERFLOW BY OCEAN PROTECT
EXISTING STORM WATER OUTLET PIPE TO BE REMOVED AND REPLACED WITH THE NEW 225mm IN GROUND STORM WATER PIPE CONNECTING TO THE PIT.
IL. 20731
225 STW 1.00%
225 Ex S
300 Ex SW
225 S
300 Ex SW
900X900 IN GROUND STORMWATER PIT TO BE INSTALLED 1500mm (DEPTH)
IL. 21127
IL. 21123
IL. 21119
IL. 21115
IL. 21111
IL. 21107
IL. 21103
IL. 21099
IL. 21095
IL. 21091
IL. 21087
IL. 21083
IL. 21079
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IL. 21067
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A.B.N. 75 165 145 764

FREDON AIR (NSW) PTY LTD

15th April 2020

Level 28, 200 George St.,
Sydney NSW 2000

Attention: Ms Erin Doyle

Dear Erin,

Stage 1

Bays 1-4a

RE: Project "Australian Technology Park – Building 4 Locomotive Workshops" Retail Ventilation Rates

Ventilation is being provided to Retail Spaces as part of the Fredon's scope within the Locomotive Workshops redevelopment.

These rates are based on the requirements of AS 1668.2:2012 as referenced in NCC/BCA 2016.

A further 50% outside air improvement has been applied above the minimum required rates.

This is summarised in Attachment A.

The historical development for Retail spaces was carried out in approximately 1998. Ventilation rates at this time were based on the requirements of AS 1668.2:1991. The minimum OA rate of 7.5l/s per person (assuming filtration as per Appendix D) has not changed between Australian Standard revisions.

At this time there was no Outside Air improvement requirements under Green Star or equivalent.

As such it would be assumed in lieu of historical ventilation data being available that the 50% outside air improvement in current redevelopment would result in an increase in outside air and overall ventilation being delivered to the space compared to historical.

Regards,

David Womersley
Project Manager

David Womersley

FREDON AIR (NSW) PTY LTD

ATP - Locomotive Workshops

For Information

Rev. 01 15/04/2020

FREDON AIR (NSW)

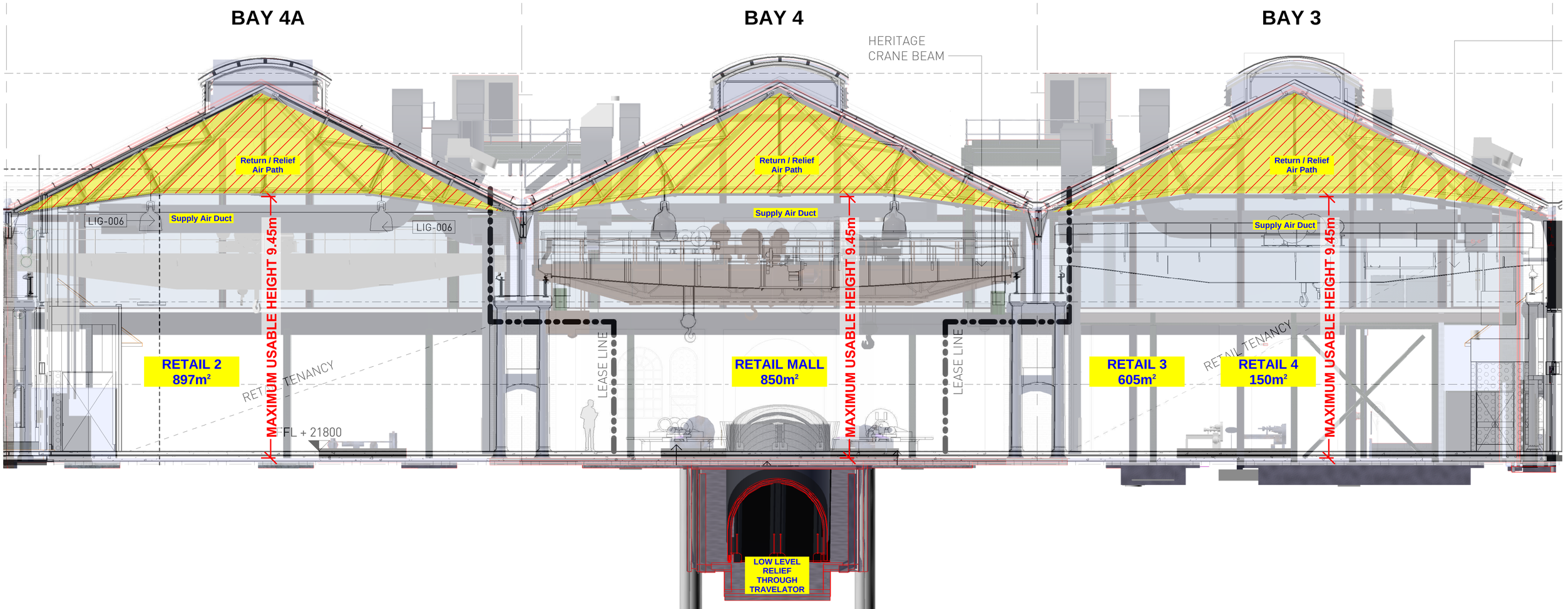
RETAIL VENTILATION RATES

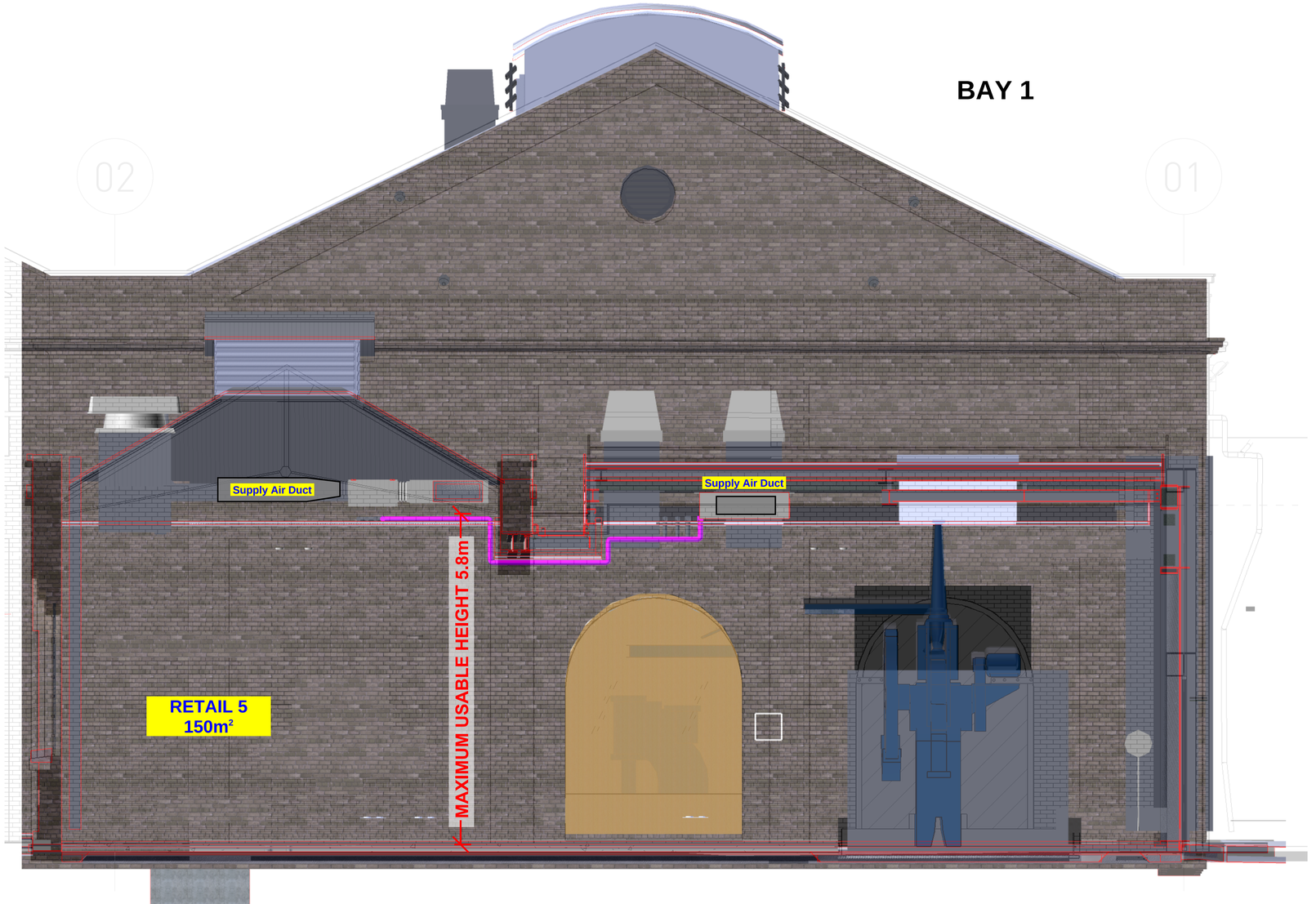
Mech. Unit	Retail #	Location	Area [m²]	Occupancy [m²/Person]	O/A Required[(1)] [L/s]	O/A Selection[(2)] [L/s]	S/A Volume [L/s]	Height [m]	Volume [m³]	ACH [No./Hr]	Description
-	**LWS001**	GF Bay 01-02	945	-	Natural Vent.						
AHU-B40R-0401	**LWS002**	GF Bay 4a South	897	3.5	1922	2883	8000	9.45	8477	3.40	
AHU-B40R-0402	**LWS003**	GF Bay 3 South	605	3.5	1296	1945	6400	9.45	5717	4.03	
	LWS004	GF Bay 3 South	150	3.5	321	482	1600	9.45	1418	4.06	
FCU-B400-0101 & 02	**LWS005**	GF Bay 1 South (outside)	150	3.5	321	482	2200	5.80	870	9.10	
PAC-B400-0901	**LWS006**	GF Bay 09 South (outside)	73	3.5	156	235	750	6.40	467	5.78	
PAC-B400-1001	**LWS007**	GF Bay 10 South (outside)	83	3.5	178	267	1330	6.40	531	9.01	
AHU-B40R-0403	**Mall** (Common Area)	*GF Bay 4 South - transient*	850	5	1275	1913	2500	9.45	8033	1.12	
AHU-B40R-0404 & 05 OAF-B401-0201	**LWE001**	L1 - Top Education	1500	8	1406	4800	6790	4.10	6150	3.97	Occupancy 1:8 under Base Building. CZ AHU upgraded to 100% OA to cater for fitout additional occupancy (approx. 1:2.36) Nominal ACH does not account for installed ceilings at 2700 AFFL through part of fitout reducing volume and increasing ACH in the fitout space
GEF-B40R-0101 & 02 GEF-B40R-0201 & 02	**Blacksmith**	GF Bay 01-02 South	1613	10	1613	1613	20000	9.45	15243	4.72	Exhaust via 4 off roof mounted fans @ 5,000L/s each, make up (outside) air from doors, windows and roof louvres

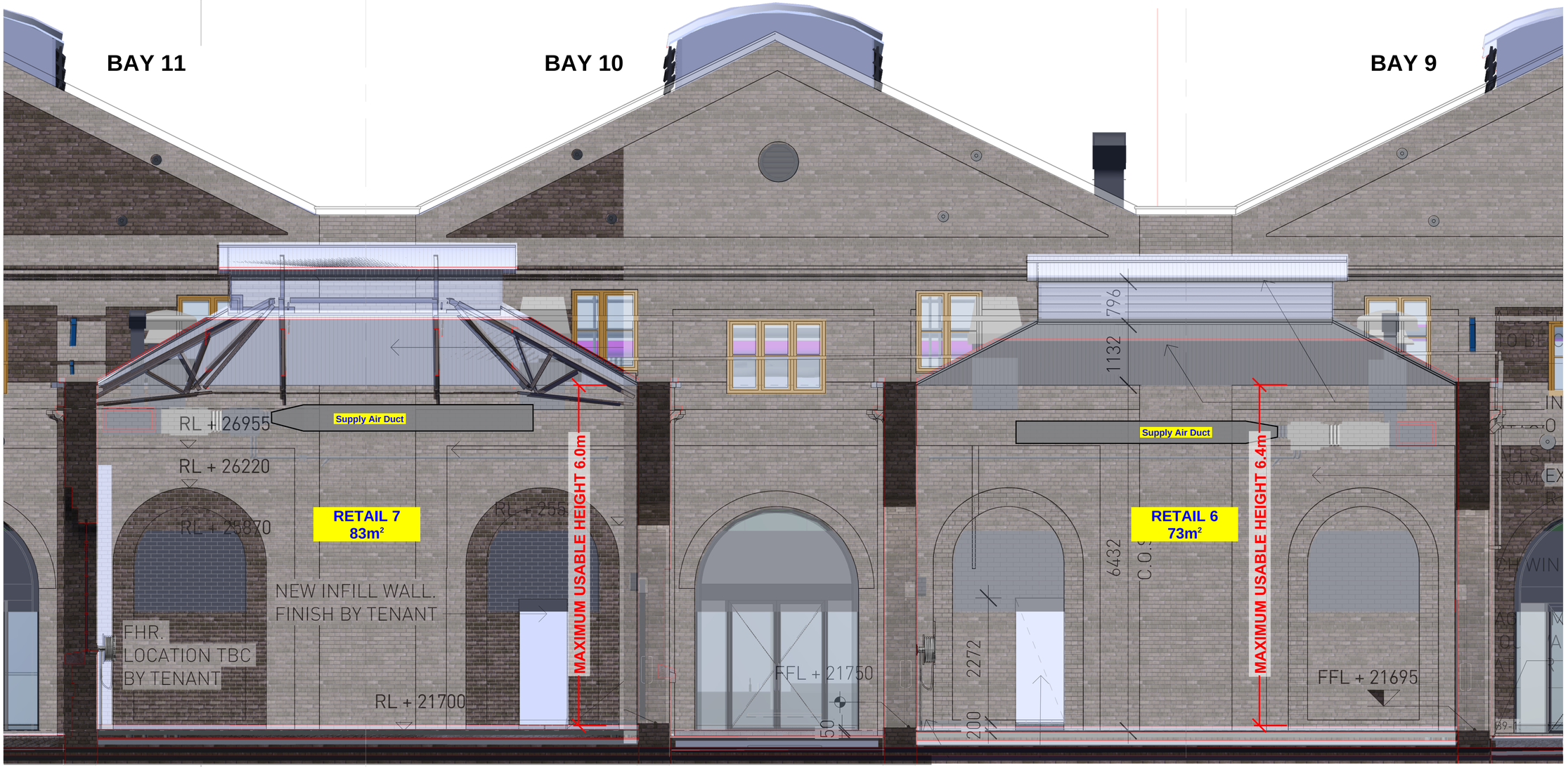
Note:

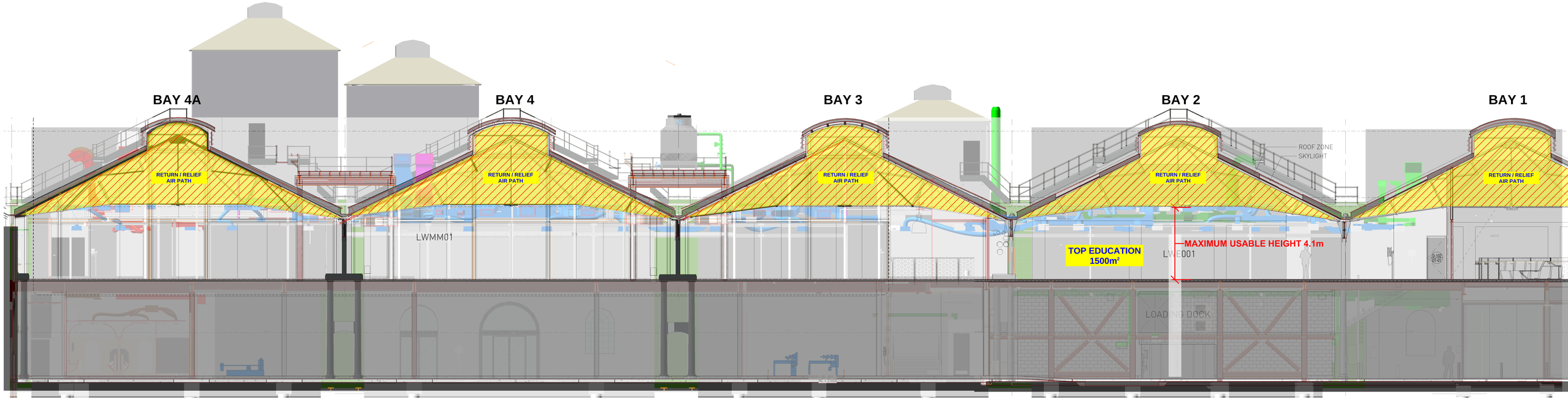
(1) AS 1668.2:2012 Minimum 7.5l/s OA per Appendix D with filtration supplied

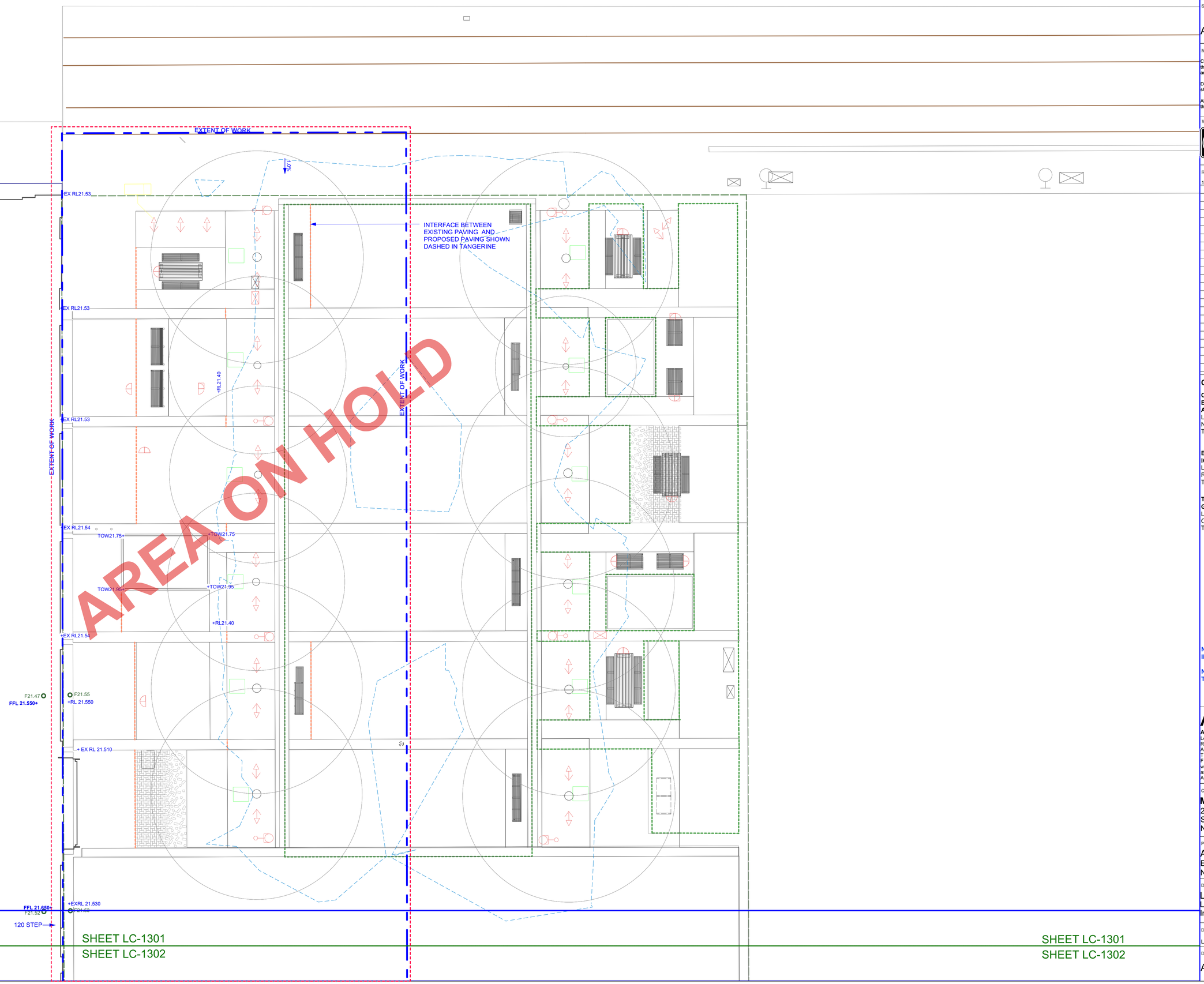
(2) Selected for 50% OA improvement


BAY 4A
BAY 4
BAY 3
HERITAGE
CRANE BEAM
Return / Relief
Air Path
Supply Air Duct
LIG-006
LIG-006
MAXIMUM USABLE HEIGHT 9.45m
RETAIL TENANCY
RETAIL 2
897m²
FFL + 21800
LEASE LINE
RETAIL MALL
850m²
LEASE LINE
RETAIL 3
605m²
RETAIL TENANCY
RETAIL 4
150m²
LOW LEVEL
RELIEF
THROUGH
TRAVELATOR


BAY 1
02
01
Supply Air Duct
Supply Air Duct
MAXIMUM USABLE HEIGHT 5.8m
RETAIL 5
150m²


BAY 11
BAY 10
BAY 9
RL + 26955
Supply Air Duct
RL + 26220
RL + 25870
RETAIL 7
83m²
NEW INFILL WALL.
FINISH BY TENANT
FHR.
LOCATION TBC
BY TENANT
RL + 21700
MAXIMUM USABLE HEIGHT 6.0m
FFL + 21750
796
1132
Supply Air Duct
RETAIL 6
73m²
6432
2272
200
MAXIMUM USABLE HEIGHT 6.4m
FFL + 21695


BAY 4A
BAY 4
BAY 3
BAY 2
BAY 1
RETURN / RELIEF AIR PATH
RETURN / RELIEF AIR PATH
RETURN / RELIEF AIR PATH
RETURN / RELIEF AIR PATH
RETURN / RELIEF AIR PATH
ROOF ZONE
SKYLIGHT
LWMM01
TOP EDUCATION 1500m²
LWE001
MAXIMUM USABLE HEIGHT 4.1m
LOADING DOCK



STATUS

AFC

NOTES

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1	03/09/2020	APPROVED FOR CONSTRUCTION

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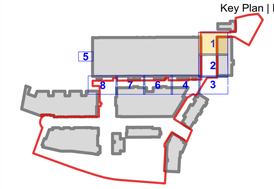
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Key Plan | NTS



NOTE: NEW PAVING TO FINISH FLUSH WHERE INTERFACE WITH EXISTING

NOTE: LOCATION OF ALL UNDERGROUND SERVICES TO BE CONFIRMED ON SITE

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CLIENT

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PROJECT

AUSTRALIAN TECHNOLOGY PARK
EVELEIGH
NSW 2015

DRAWING

Levels and Grading
Locomotive Sheds
Innovation Plaza North

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1301

REVISION 1



STATUS

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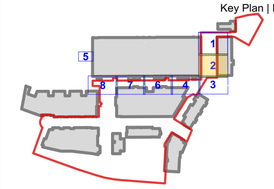
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EVELEIGH
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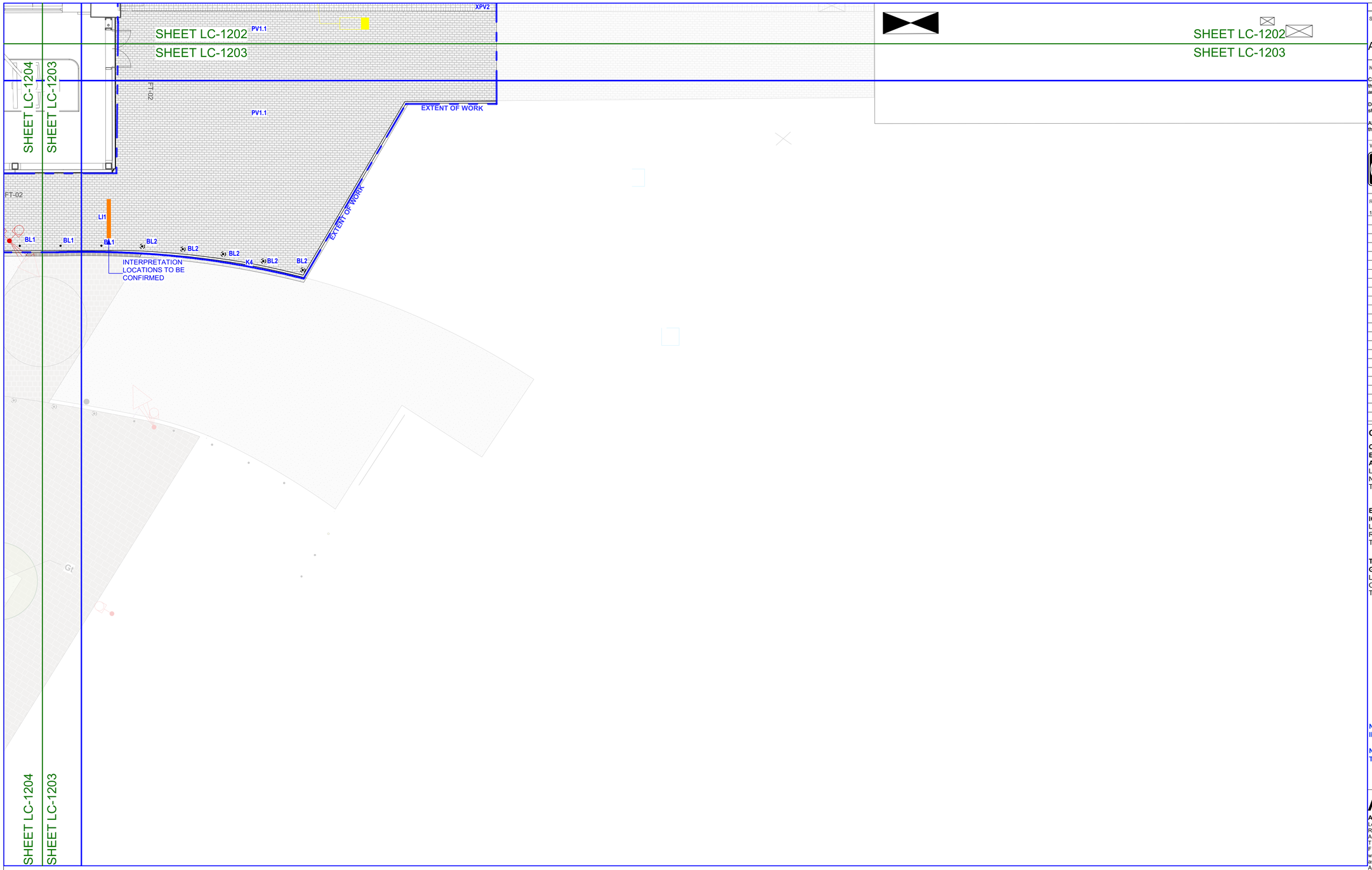
DRAWING

Levels and Grading
Locomotive Sheds
Innovation Plaza South

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DRAWING NO. AS-LS-DWG-BB-LC-1302

REVISION 1



NOTE: REFER TO ELECTRICAL ENGINEER'S DOCUMENTATION FOR SETOUT OF LIGHT POLES

STATUS

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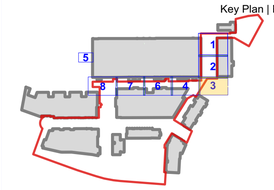
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Key Plan | NTS



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PROJECT

AUSTRALIAN TECHNOLOGY PARK
EVELEIGH
NSW 2015

DRAWING

Materials and Finishes
Locomotive Sheds
Locomotive Street East

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1203

REVISION 1



STATUS

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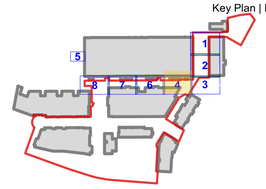
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Key Plan | NTS



NOTE: NEW PAVING TO FINISH FLUSH WHERE INTERFACE WITH EXISTING

NOTE: LOCATION OF ALL UNDERGROUND SERVICES TO BE CONFIRMED ON SITE

NOTE: REFER TO ELECTRICAL ENGINEER'S DOCUMENTATION FOR SETOUT OF LIGHT POLES

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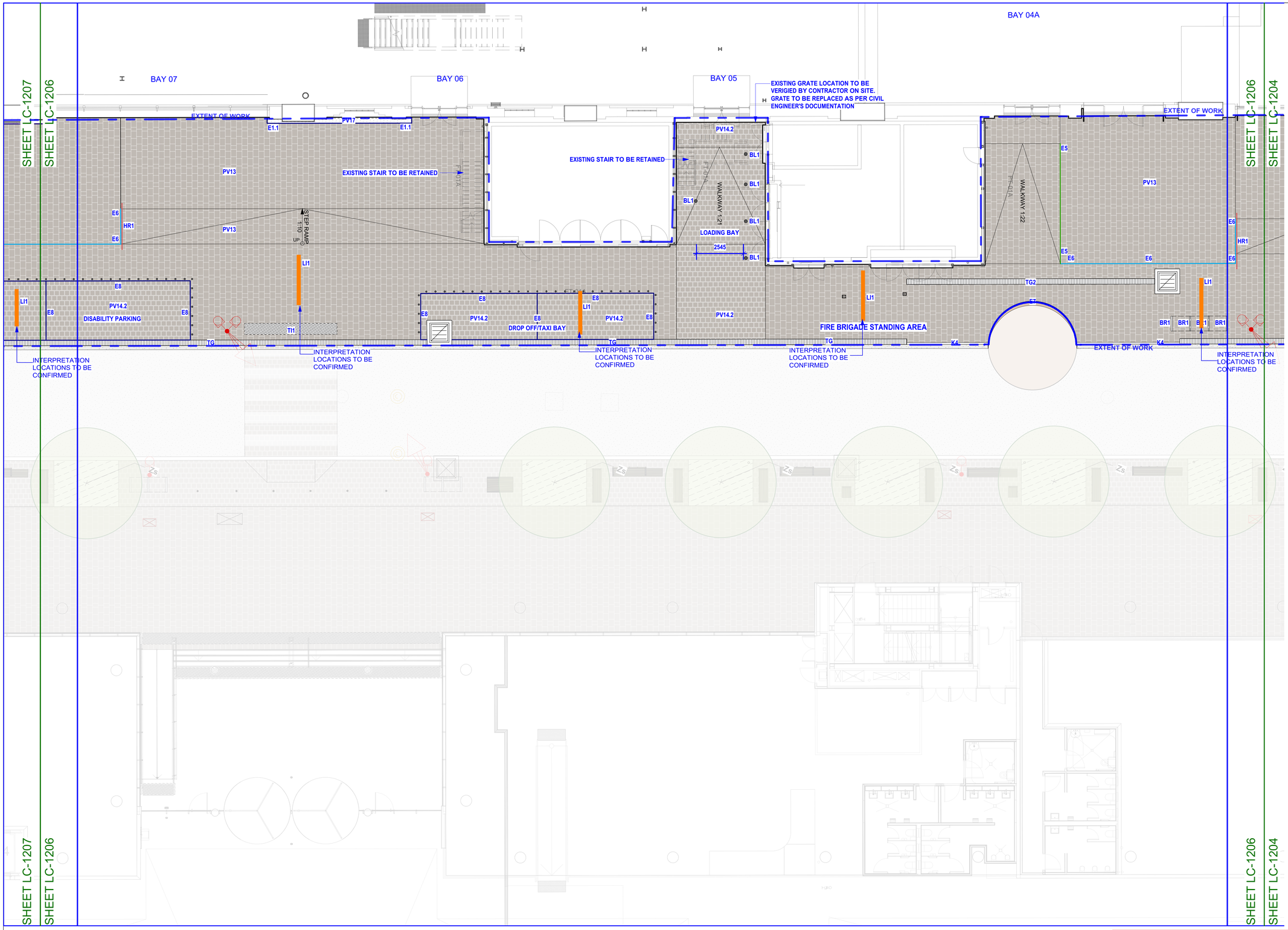
DRAWING

Materials and Finishes
Locomotive Sheds
Locomotive Street | Bay 01-04

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1204

REVISION 1



NOTE: REFER TO ELECTRICAL ENGINEER'S DOCUMENTATION FOR SETOUT OF LIGHT POLES

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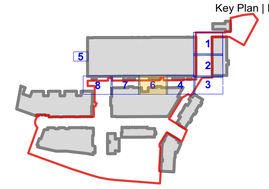
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Key Plan | NTS



NOTE: NEW PAVING TO FINISH FLUSH WHERE INTERFACE WITH EXISTING

NOTE: LOCATION OF ALL UNDERGROUND SERVICES TO BE CONFIRMED ON SITE

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CLIENT

MIRVAC
200 GEORGE STREET
Sydney
NSW 2000

PROJECT

AUSTRALIAN TECHNOLOGY PARK
EVELEIGH
NSW 2015

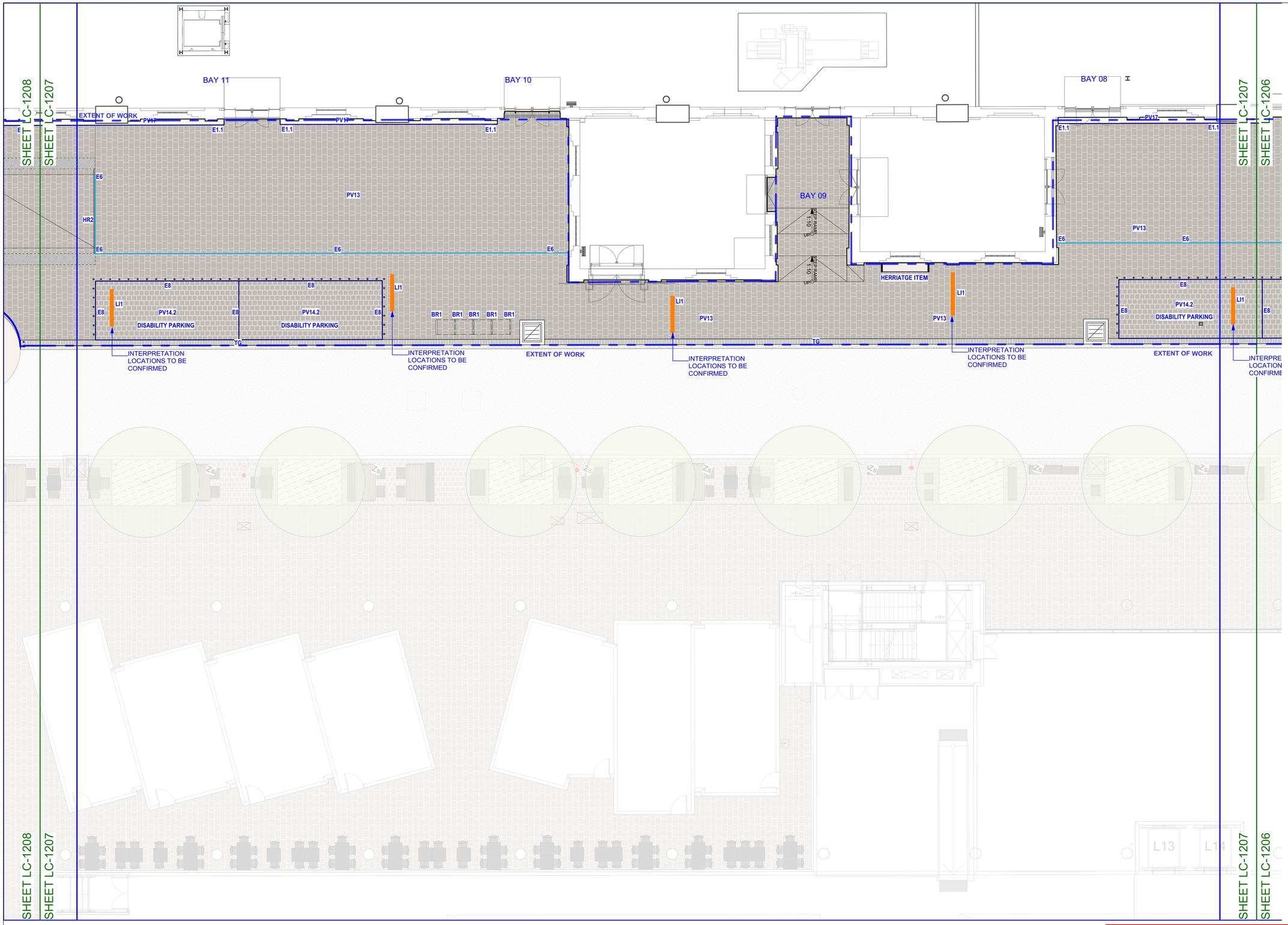
DRAWING

Materials and Finishes
Locomotive Sheds
Locomotive Street | Bay 04A-07

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1206

REVISION 1



NOTE: REFER TO ELECTRICAL ENGINEER'S DOCUMENTATION FOR SETOUT OF LIGHT POLES

STATUS

AFC

NOTES

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1	03/09/2020	APPROVED FOR CONSTRUCTION

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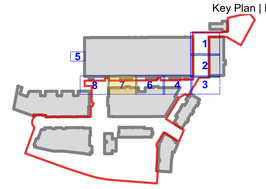
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Key Plan | NTS



NOTE: NEW PAVING TO FINISH FLUSH WHERE INTERFACE WITH EXISTING

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PROJECT

AUSTRALIAN TECHNOLOGY PARK
EVELEIGH
NSW 2015

DRAWING

Materials and Finishes
Locomotive Sheds
Locomotive Street | Bay 08-11

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1207

REVISION 1

SHEET LC-1209

SHEET LC-1208

BAY 15

BAY 14

BAY 13

BAY 12

FHR

EXISTING STAIR TO BE RETAINED

FT-01A

INTERPRETATION LOCATIONS TO BE CONFIRMED

WALKWAY 127

EXISTING STAIR TO BE RETAINED

LINEMARKING TO ROUNDABOUT REFER TO CIVIL ENGINEER'S DOCUMENTATION

PV13

PV12

K4

LI1

E8

PV14.2

LOADING BAY

E1.1

PV17

E5

E6

HR2

RAMP 1:14

UP

TI1

E7

G

EXTENT OF WORK

100M WIDE FLUSH CONCRETE EDGE TO MATCH EDGE INSTALLED EASTERN END OF LOCOMOTIVE STREET

INTERPRETATION LOCATIONS TO BE CONFIRMED

INTERPRETATION LOCATIONS TO BE CONFIRMED

Zs

AF

Hp

SHEET LC-1208

SHEET LC-1207

NOTE: REFER TO ELECTRICAL ENGINEER'S DOCUMENTATION FOR SETOUT OF LIGHT POLES

STATUS

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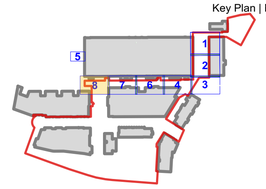
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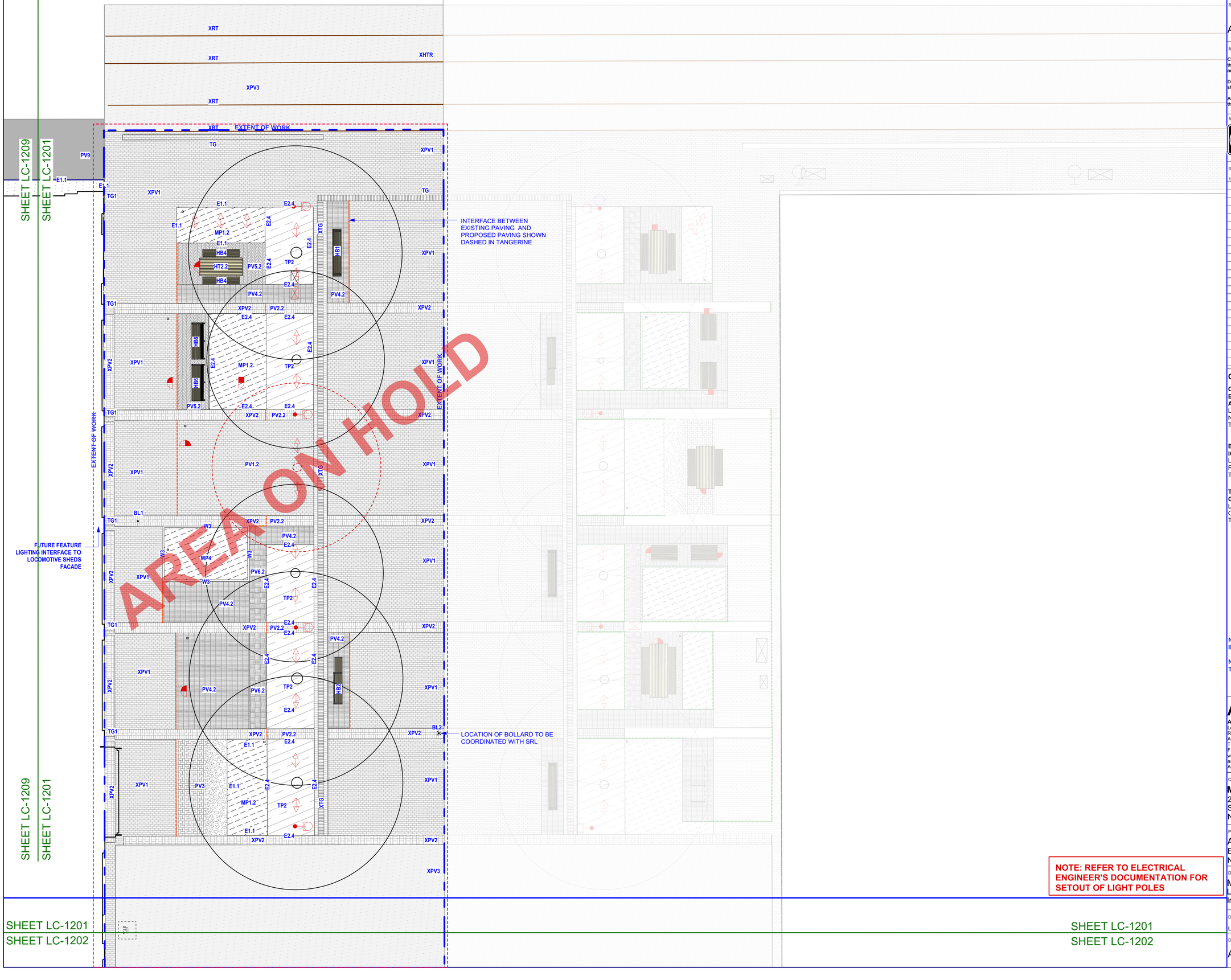
DRAWING

Materials and Finishes
Locomotive Sheds
Locomotive Street | Bay 12-15

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1208

REVISION 1



NOTE: REFER TO ELECTRICAL ENGINEER'S DOCUMENTATION FOR SETOUT OF LIGHT POLES

STATUS

AFC

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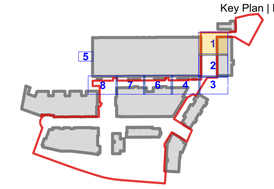
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Key Plan | NTS



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PROJECT

AUSTRALIAN TECHNOLOGY PARK
EVELEIGH
NSW 2015

DRAWING

Materials and Finishes
Locomotive Sheds
Innovation Plaza North

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1201

REVISION 1

SHEET LC-1201
SHEET LC-1202

SHEET LC-1202
SHEET LC-1203

204 203

SHEET LC-1201
SHEET LC-1202

NOTE: REFER TO ELECTRICAL ENGINEER'S DOCUMENTATION FOR SETOUT OF LIGHT POLES

SHEET LC-1202
SHEET LC-1203

STATUS

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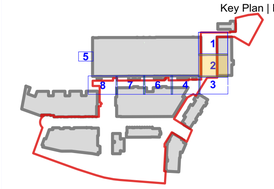
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PROJECT

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EVELEIGH
NSW 2015

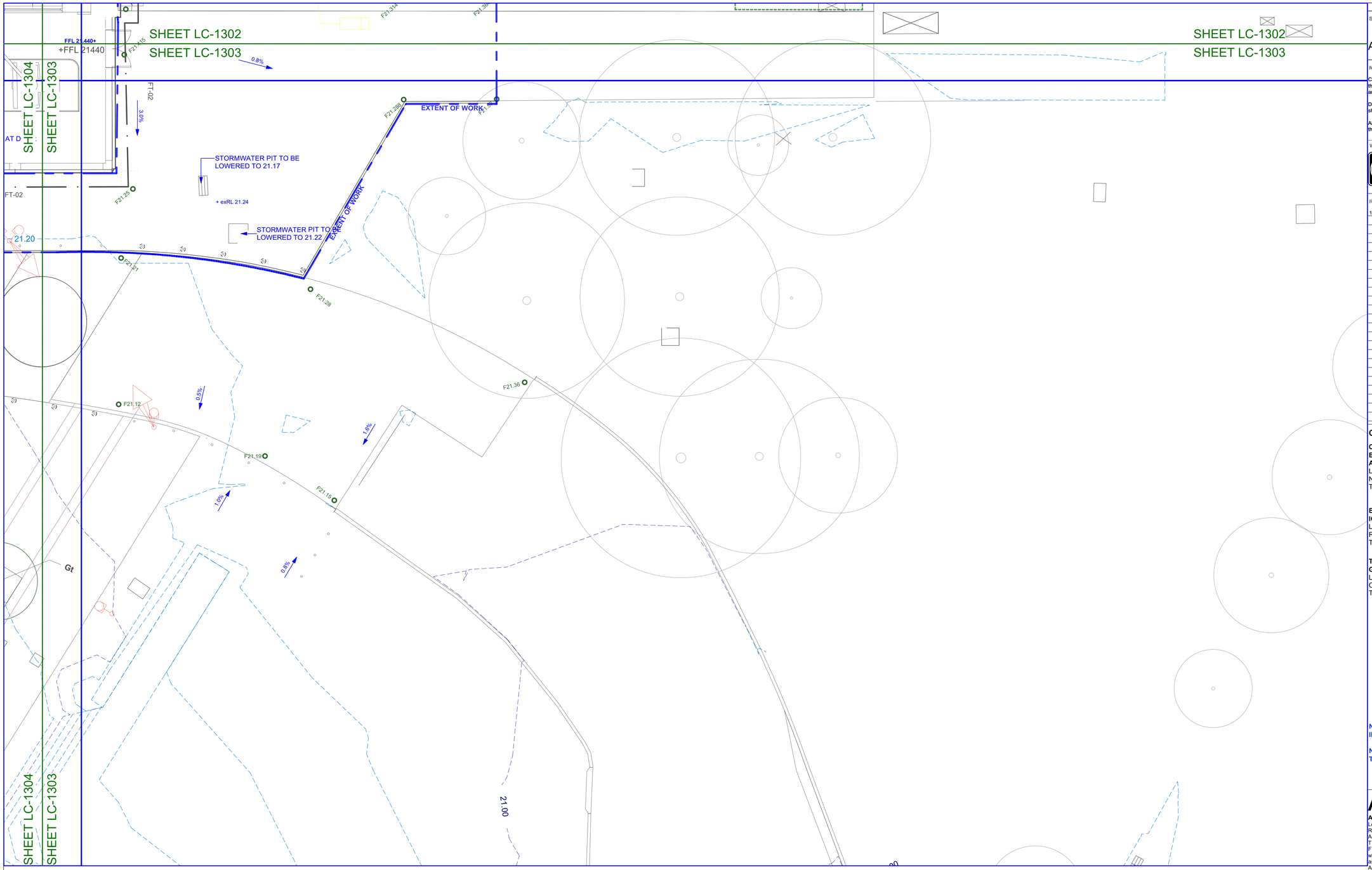
DRAWING

Materials and Finishes
Locomotive Sheds
Innovation Plaza South

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1202

REVISION 1



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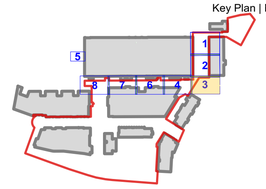
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Key Plan | NTS



NOTE: NEW PAVING TO FINISH FLUSH WHERE INTERFACE WITH EXISTING

NOTE: LOCATION OF ALL UNDERGROUND SERVICES TO BE CONFIRMED ON SITE

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EVELEIGH
NSW 2015

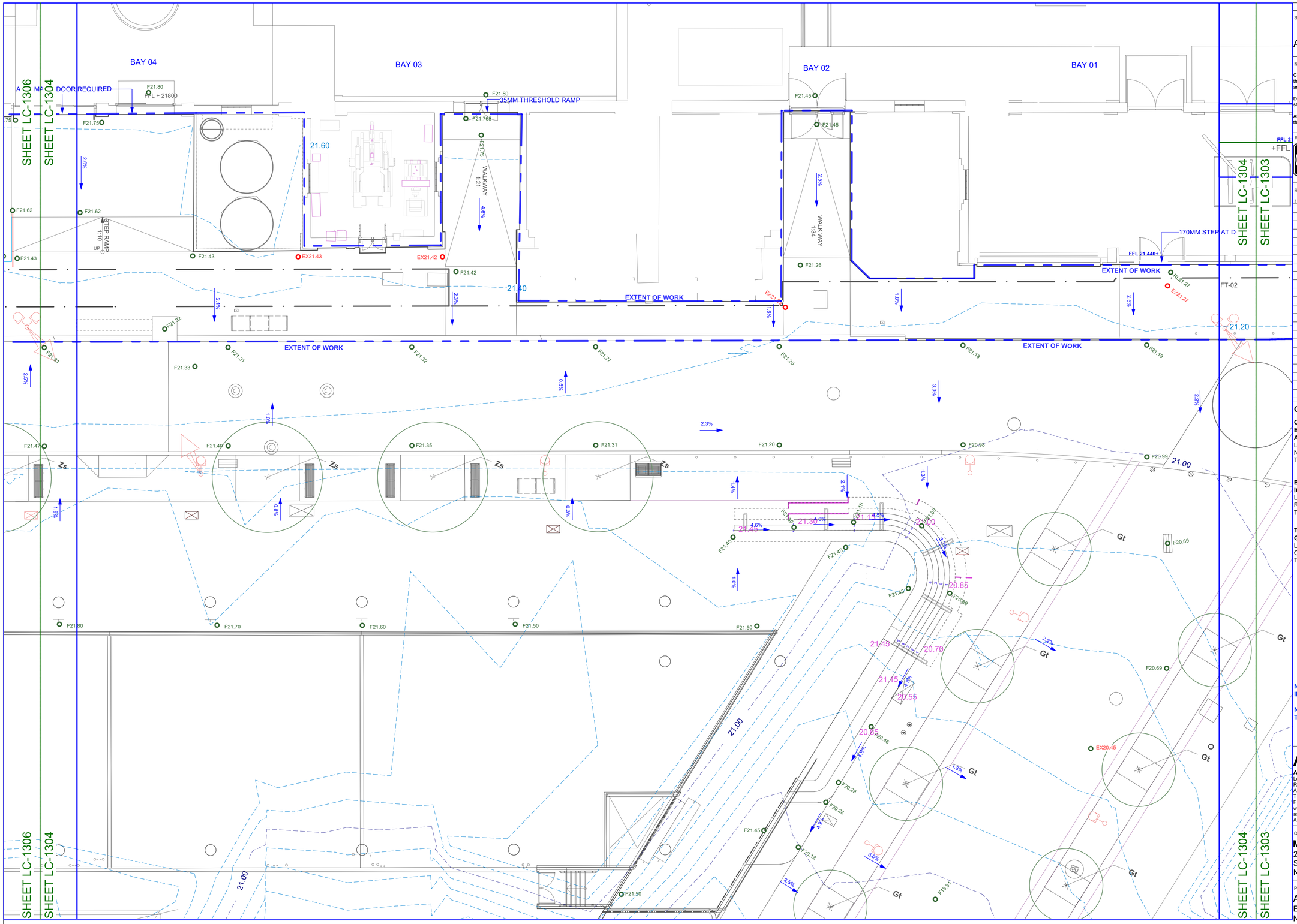
DRAWING

Levels and Grading
Locomotive Sheds
Locomotive Street East

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1303

REVISION 1



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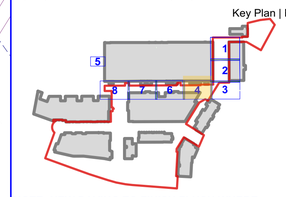
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Key Plan | NTS



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EVELEIGH
NSW 2015

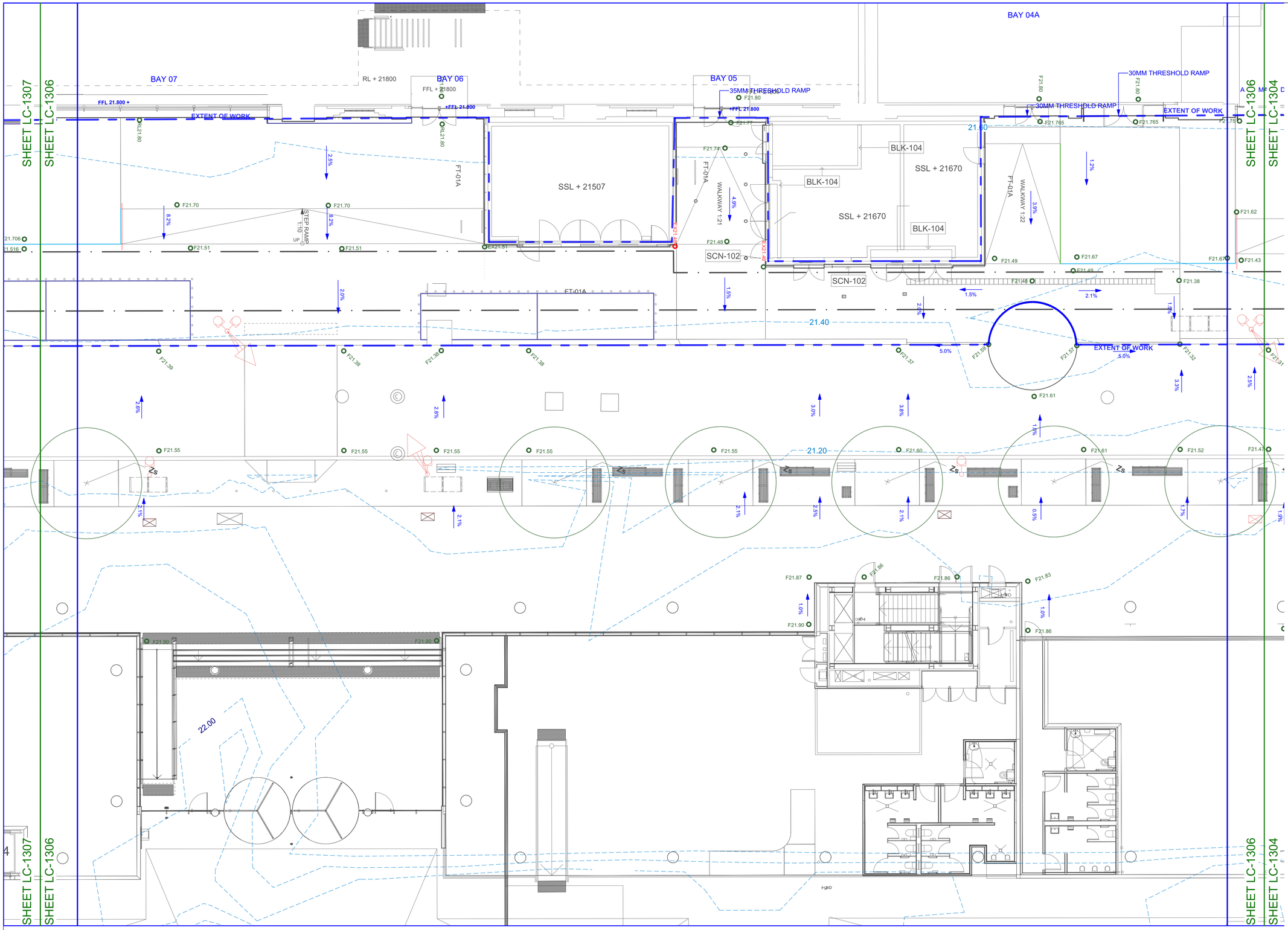
DRAWING

Levels and Grading
Locomotive Sheds
Locomotive Street | Bay 01-04

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1304

REVISION 1



STATUS

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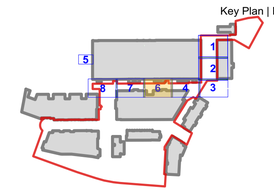
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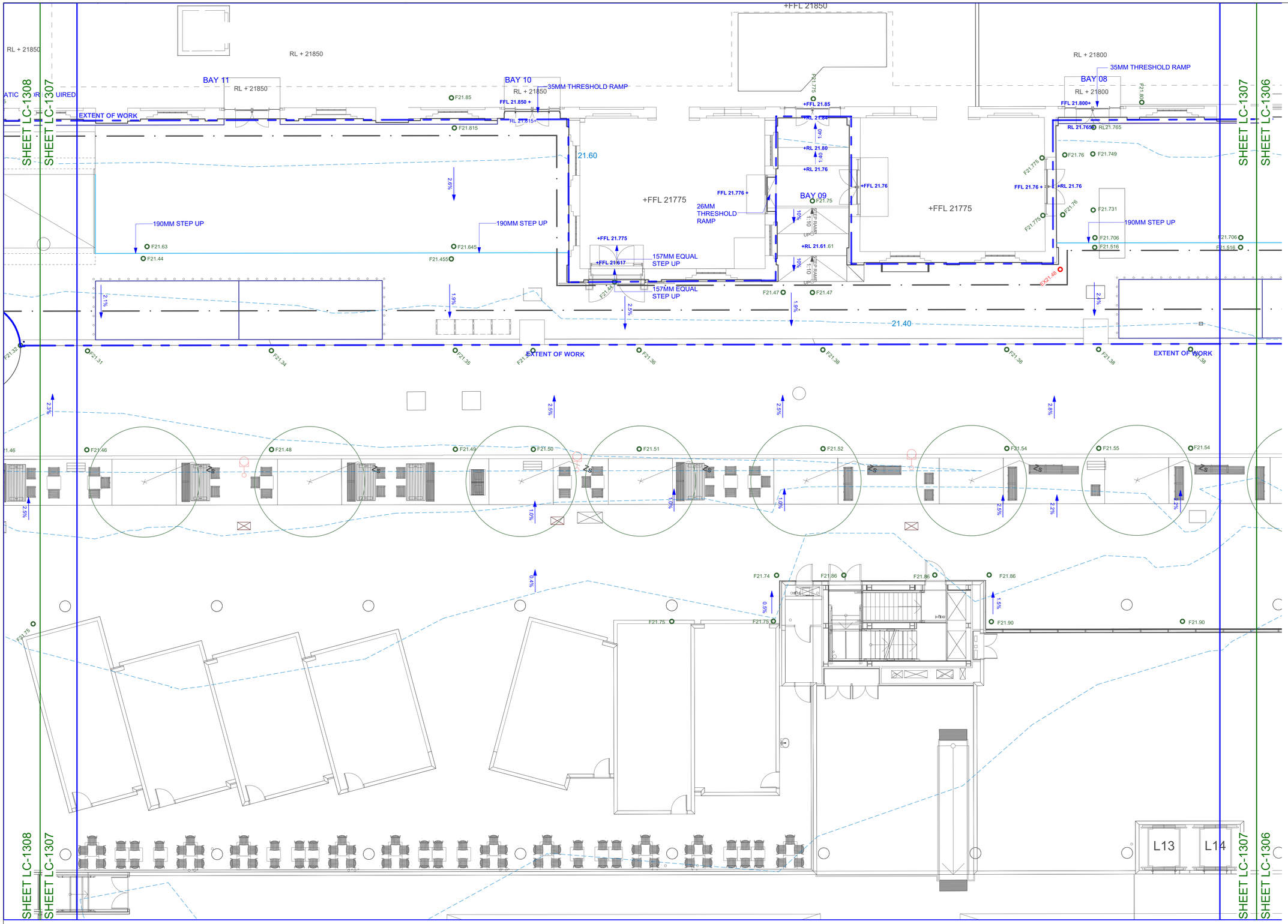
DRAWING

Levels and Grading
Locomotive Sheds
Locomotive Street | Bay 04A-07

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LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1306

REVISION 1



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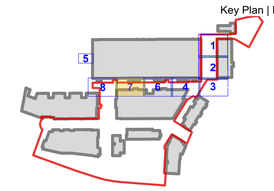
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Key Plan | NTS



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EVELEIGH
NSW 2015

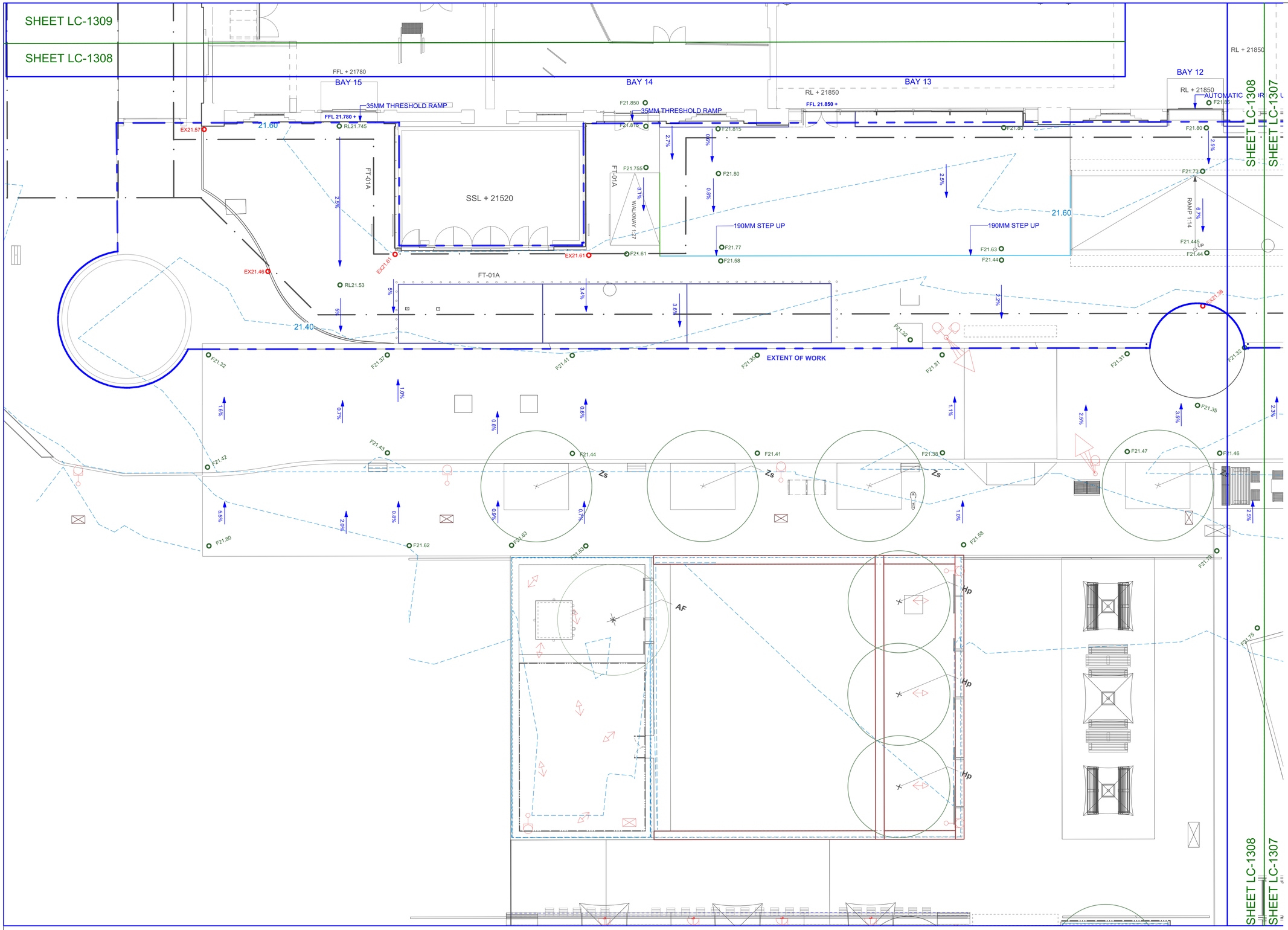
DRAWING

Levels and Grading
Locomotive Sheds
Locomotive Street | Bay 08-11

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1307

REVISION 1



STATUS

AFC

NOTES

Check all dimensions and site conditions prior to commencement of any work, the purchasing or ordering of any materials, fitting, plant services or equipment and the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the landscape architect for clarification.

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WARNING

DIAL BEFORE YOU DIG www.1100.com.au

Services shown on this drawing are approximate only. The exact location is to be confirmed on site by contractor prior to commencement of work.

REV	DATE	AMENDMENTS
A	03/09/2020	APPROVED FOR CONSTRUCTION

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T (+61) 2 9439 1777

ACCESSIBILITY
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106/56, Bowman Street
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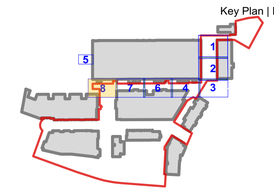
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Chatswood, NSW 2067
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STRUCTURAL ENGINEER
ARUP
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Sydney, NSW 2000
T (+61) 2 9320 9320

Key Plan | NTS



NOTE: NEW PAVING TO FINISH FLUSH WHERE INTERFACE WITH EXISTING

NOTE: LOCATION OF ALL UNDERGROUND SERVICES TO BE CONFIRMED ON SITE

ASPECT Studios™
ASPECT Studios Pty Ltd
Level 1,78-80 George St
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Australia
T 02 9699 7182
F 02 9699 7192
www.aspect.net.au
aspectsydney@aspect.net.au
ABN 11 120 219 561

CLIENT

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Sydney
NSW 2000

PROJECT

AUSTRALIAN TECHNOLOGY PARK
EVELEIGH
NSW 2015

DRAWING

Levels and Grading
Locomotive Sheds
Locomotive Street | Bay 12-15

DRAWN	CHECKED	SCALE @ A1
LT	NB | DH	1:100

DRAWING NO. AS-LS-DWG-BB-LC-1308

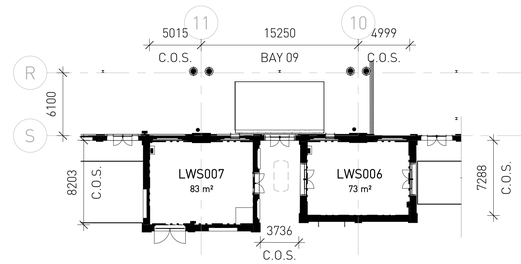
REVISION 1

REFER TO DWG 1105
FOR ZONE E

REFER TO DWG 1106
FOR ZONE F



1 GROUND FLOOR GENERAL ARRANGEMENT PLAN
1 : 250



2 TENANCY LWS 006 & LWS 007
1 : 250

North

12/02/2020 12:36:18 PM

TD	TURNDISH
FSL:	FINISH SLAB LEVEL
SSL:	SLAB SOFFIT LEVEL
FFL:	FINISHED FLOOR LEVEL
BSL:	BEAM SOFFIT LEVEL
GLZ-X	GLAZING - REFER TO DWG 4200 SERIES FOR DETAILS
NSC:	NEW STEEL COLUMN
ESC:	EXISTING STEEL COLUMN
BOL:	BOLLARD
UL:	UPLIGHT
HDB	HOUSE DISTRIBUTION BOARD
BS	AGED BRASS STRIP
	HERITAGE ITEM TO RETAIN IN SITU
	VOID
	NOT IN SCOPE
	6000MM CLEAR SERVICE & PUBLIC ACCESS EASEMENT
	EXISTING COLUMNS & WALLS
	LEASE LINE
	EXPANSION JOINT FOR TILES WITH BRASS TRIM
	EXPANSION JOINT FILLING TO MATCH CONCRETE COLOUR
	ISOLATION JOINTS
	SAW CUT JOINT
	BARRIER

NOTES

- FOR FACADE & ROOF SCOPE REFER TO SISSONS DRAWINGS 3000 - 4000 SERIES
- FOR PUBLIC DOMAIN WORKS REFER TO ASPECT STUDIOS DRAWINGS 1300 SERIES
- FOR STRUCTURAL ENGINEERS DETAILS REFER TO ARCADIS DRAWINGS 1700 - 4000 SERIES
- FOR TRAVELATOR & GLASS BRIDGE REFER TO SISSONS DRAWINGS 2740 - 2745
- FOR STEEL BARRIER LASER CUT TEXT LOCATION REFER TO DRAWINGS 0101 & 0102

H	NEW STEEL COLUMN
	EXISTING STRUCTURAL COLUMN
	EXISTING STRUCTURAL COLUMN

REVISION 4 -
NEW FIRE RATED DOOR ADDED TO CLEANERS ROOM

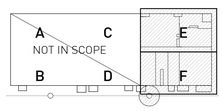
notes

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key plan



rev	date	description	by	chk
G	20.12.18	FOR CONSTRUCTION - PRIMARY STEEL ONLY	SB	SB
H	15.05.19	TOP ED SERVICES COORDINATION	MC	SB
I	20.05.19	FOR PRELIMINARY TENDER	SW	SB
J	29.05.19	ISSUED FOR INFORMATION	SB	SB
K	27.06.19	FOR INFORMATION	SW	SB
L	16.08.19	FOR CONSTRUCTION CERTIFICATE	MM	SW
M	09.10.19	FOR CONSTRUCTION CERTIFICATE -04	SW	SW
1	28.10.19	FOR CONSTRUCTION	MM	SW
2	29.10.19	CONSTRUCTION CERTIFICATE	AA	SW
3	15.11.19	CONSTRUCTION CERTIFICATE	SW	SW
4	12.02.2020	FOR CONSTRUCTION	SW	SW

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principal architect
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Tel. 02 9460 8002

drawing title
OVERALL GA PLAN - GROUND

status
FOR CONSTRUCTION

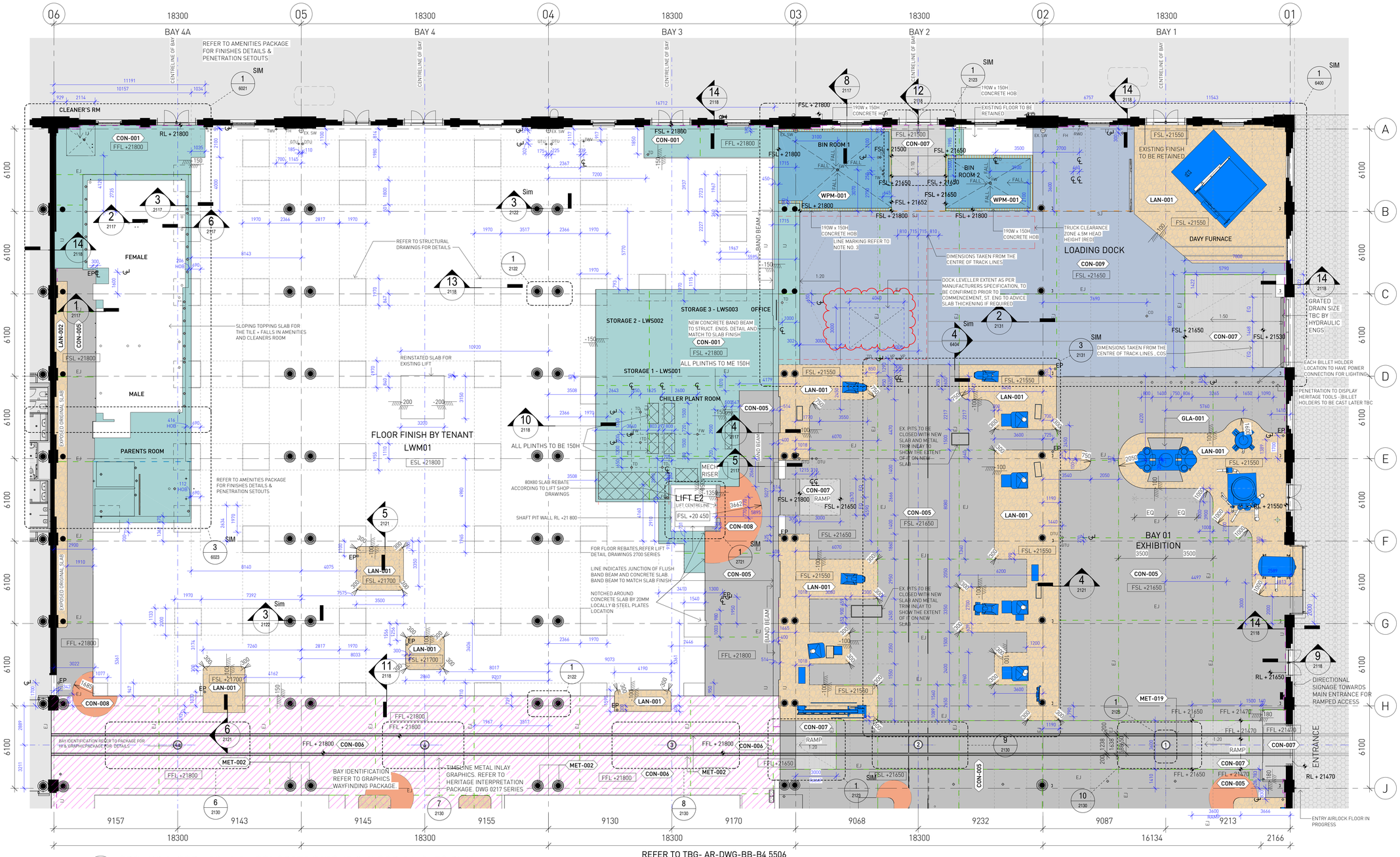
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217150	As indicated @B1	12.02.2020

drawing no.
TBG-AR-DWG-BB-B4-1016

rev
4

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original sheet size B1 = 1000 x 707mm



1 GROUND FLOOR - ZONE E - CONCRETE SETOUT & FLOOR FINISHES PLAN

1 : 125

NOTE:
FOR STEEL SETOUT REFER TO 2126 to 2128

BAY IDENTIFICATION NUMBER INLAY TO BE CENTERED TO THE CENTRELINE OF THE BAYS REFER TO 'HI' AND 'WAYFINDING GRAPHIC' PAKAGE FOR FURTHER DETAILS; FOR ALL TEXT INLAYS EXTENTS AND SETOUT DETAILS REFER 'HI' DWG 0217 SERIES

FOUNDATION FOR FOR NEW JIB CRANE LOCATION TBC

LOWLEVEL LIGHTING PROVISION TO BE CONFIRMED BY LIGHTING SPECIALIST

FLOOR FINISHES LEGEND

- CON-001 - STEEL TROWEL FINISH. ACHIEVE P3 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL
- CON-005 - HONED CONCRETE FINISH - CONCRETE WITH SMALL SIZED AGGREGATE WITH 0.5MM LIGHT HONED FINISH. SEALED WITH CLEAR MATT SEALER. ACHIEVE P3 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL
- CON-006 - HYDRONIC SLAB IN HONED CONCRETE FINISH CONCRETE WITH SMALL SIZED AGGREGATE WITH 0.5MM LIGHT HONED FINISH. SEALED WITH CLEAR MATT SEALER. ACHIEVE P3 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL
- CON-007 - CHISELLED CONCRETE TO RAMP TO ACHIEVE P4 SLIP RATING AND TO BE TESTED ON SITE 5MM GROOVES @ 20MM C/L
- CON-008 - HONED CONCRETE FINISH WITH NUTS & BOLTS. P3 SLIP RATING
- CON-009 - STEEL TROWEL FINISH. ACHIEVE P5 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL
- WPM-001 - ARDEX WPM 908 , TRAFFICABLE WATERPROOFING MEMBRANE. CONTINUES 300MM UP ADJOINING WALLS
- LAN-001 - INDUSTRIAL SAND AND GRAVEL MIX TO BLACKSMITH WORKSHOP
- GLA-001 - TOUGHENED GLAZED PANEL -P1 SLIP RESISTANT
- EXISTING FOOTING OR METAL FLOOR PLATE
- CONCRETE PLINTHS ; REFER TO MECH. ENG. DETAILS
- CONCRETE HOB ; REFER TO MECH. ENG. DETAILS
- STA-002 - STA-002 - BRASS TACTILE INDICATOR TO AS1428
- MET-007 - MET-007 - OXIDISED MILD STEEL FLOOR PLATE
- EXPENSION JOINT FOR TILES WITH BRASS TRIM
- EXPANSION JOINT FILLING TO MATCH CONCRETE COLOUR
- ISOLATION JOINTS
- SAW CUT JOINT

DTU	DRAINAGE TURN UP
CO	CLEAR OUT
GTU	GAS TURN UP
EP +	ELECTRIC POINT
FB +	RECESSED FLOOR BOX ON HORNED CONCRETE WITH OXIDISED STEEL GROMET
FB1 +	RECESSED FLOOR BOX IN TENANCIES
FH	FIRE HYDRANT
RWO	RAIN WATER OUTLET
TD	TURNDISH
TW	TRADE WASTE
TWV	TRADE WASTE VENT
TWVP	TRADE WASTE VENT PIPE
STU	SANITARY TURN UP
V	VENT
H	NEW STEEL COLUMN
	EXISTING STRUCTURAL COLUMN
	EXISTING STRUCTURAL COLUMN
ESL	EXISTING SLAB LEVEL
FSL	FINISH SLAB LEVEL
FFL	FINISH FLOOR LEVEL

NOTES

1. DRAWINGS TO BE READ AND PRINTED IN COLOUR.
2. NOMINATED CODES SHOULD BE CROSS REFERENCED WITH THE ARCHITECTURAL SCHEDULES.
3. LINE MARKING - 100 WIDE AT 600 CTC WITH YELLOW PAINT.
4. ALL NEW GROUND SLABS TO HAVE NECESSARY TRAFFICABLE DAMP PROOF MEMBRANE UNDER SLAB UNLESS OTHERWISE STATED.
5. REFER TO AS-0340 CONCRETE FINISHES SPECIFICATIONS.
6. ALL EXPOSED CONCRETE FINISHES TO HAVE CLEAR PENETRATIVE SEALER. REFER TO AS-0340 CONCRETE FINISHES SPECIFICATIONS.
7. REFER TO DWG 2117 &2118 FOR CONCRETE DETAILS.
8. REFER TO STRUCTURAL DRAWINGS.
9. REFER TO DWG 5551 FOR EXISTING COLUMN DETAILS.
10. ALIGN EXPANSION JOINTS TO BARRIES WHERE POSSIBLE.
11. REFER TO STRUCTURAL ENGINEER'S DRAWINGS FOR ALL SLAB AND BEAM THICKNESSES, AND COLUMN SIZES. THICKNESSES AND UNDERSIDE RL'S ARE PROVIDED FOR COORDINATION PURPOSES ONLY.
12. REFER TO STRUCUTRAL ENGINEER AND GEOTECH ENGINEER'S DRAWINGS FOR PILE SIZES AND DEPTHS.
13. REFER TO HYDRAULIC ENGINEER'S DRAWING FOR SETOUT OF ALL FLOOR WASTES, SANITARY AND STORM WATER DRAINAGE. PENETRATIONS AND ALL INVERT LEVELS. FINAL DIMENSIONS OF HYDRAULICS WASTE AND DRAINAGE TO BE ADVISED BY HYDRAULIC CONTRACTOR DURING SHOP DRAWING PHASE.
14. REFER TO CIVIL ENGINEER'S DRAWINGS AND SPECIFICATION FOR ALL INTERFACE REQUIREMENTS WITH EXTERNAL AND PUBLIC DOMAIN WORKS.
15. MOVEMENT JOINTSREFER TO STRUCTURAL ENGINEER'S DRAWINGS.
16. REFER TO DWG 1/5551 FOR EXISTING COLUMN DETAILS.
17. DRAWING TO BE READ IN CONJUNCTION WITH HERITAGE INTERPRETATION PACKAGE.
18. 100MM SETBACK FROM ANY ADDITIONAL HERITAGE MACHINERY FOOTINGS IF FOUND

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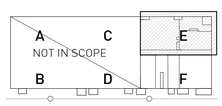
notes

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key plan



rev	date	description	by	chk
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4	11.10.19	FOR CONSTRUCTION	PM	SW
5	16.10.19	FOR CONSTRUCTION	SW	SW
6	18.10.19	FOR CONSTRUCTION	SW	SW
7	28.10.19	FOR CONSTRUCTION	PM	SW
8	29.10.19	CONSTRUCTION CERTIFICATE	AA	SW
9	30.10.19	FOR CONSTRUCTION	SW	SW
10	31.10.19	FOR CONSTRUCTION	AA	SW
11	07.11.19	EARTH FLOORING LOCATIONS	MC	MC
12	15.11.19	CONSTRUCTION CERTIFICATE	SW	SW
13	13.12.19	FOR CONSTRUCTION	PM	MH

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BUCHAN
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Tel. 02 9566 1611

principal architect
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Tel. 02 9460 8002

drawing title
CONCRETE SETOUT & FLOOR FINISHES - GROUND - ZONE E

status
FOR CONSTRUCTION

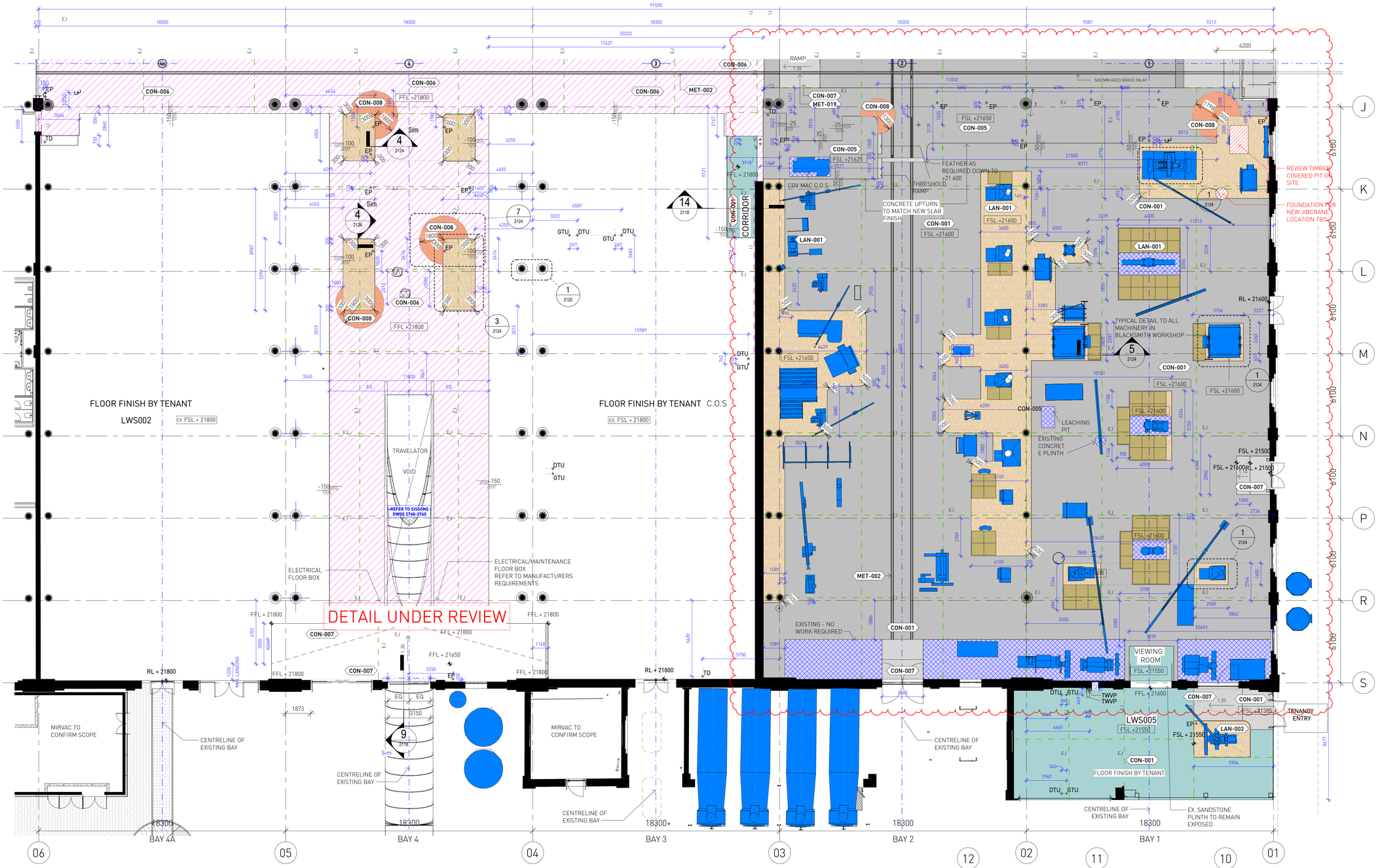
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drawing no. TBG-AR-DWG-BB-B4-2105 rev 13

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REFER TO TBG- AR-DWG-BB-B4 5505



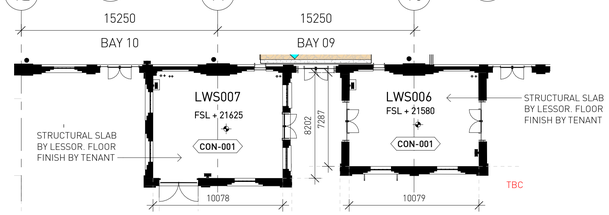
1 GROUND FLOOR - ZONE F - CONCRETE & FLOOR FINISHES PLAN

1 : 125

CONFIRM ALL TENANCY SERVICES PRIOR TO COMMENCEMENT

FOUNDATION FOR NEW JIB CRANE LOCATION TBC

NOTE:
FOR STEEL SETOUT REFER TO 2125 to 2127



2 TENANCY LWS006 & 7 FLOOR PLAN

1 : 200

FLOOR FINISHES LEGEND

- CON-001 - STEEL TROWEL FINISH. ACHIEVE P3 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL
- CON-005 - HONED CONCRETE FINISH - CONCRETE WITH SMALL SIZED AGGREGATE WITH 0.5MM LIGHT HONED FINISH, SEALED WITH CLEAR MATT SEALER. ACHIEVE P3 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL
- CON-006 - HYDRONIC SLAB IN HONED CONCRETE FINISH CONCRETE WITH SMALL SIZED AGGREGATE WITH 0.5MM LIGHT HONED FINISH. SEALED WITH CLEAR MATT SEALER. ACHIEVE P3 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL
- CON-007 - CHISELED CONCRETE TO RAMP TO ACHIEVE P4 SLIP RATING AND TO BE TESTED ON SITE 5MM GROOVES @ 20MM C/L
- CON-008 - HONED CONCRETE FINISH WITH NUTS & BOLTS. P3 SLIP RATING
- CON-09 - STEEL TROWEL FINISH. ACHIEVE P5 SLIP RATING AND TO BE TESTED ON SELECTED AREAS FOR APPROVAL
- WPM-001 - ARDEX WPM 908 , TRAFFICABLE WATERPROOFING MEMBRANE. CONTINUES 300MM UP ADJOINING WALLS
- LAN-001 - INDUSTRIAL SAND AND GRAVEL MIX TO BLACKSMITH WORKSHOP
- GLA-001 - TOUGHENED GLAZED PANEL -P1 SLIP RESISTANT
- HERITAGE STEEL PLATES 900MMX900MM
- METAL/CONCRETE FOOTING TO BE RETAINED
- CONCRETE PLINTHS ; REFER TO MECH. ENG. DETAILS
- CONCRETE HOB ; REFER TO MECH. ENG. DETAILS
- MET-002 - MET-002 - OXIDISED MILD STEEL TRACK INLAY
- MET-007 - MET-007 - OXIDISED MILD STEEL FLOOR PLATE
- EXPANSION JOINT FOR TILES WITH BRASS TRIM
- EXPANSION JOINT FILLING TO MATCH CONCRETE COLOUR
- ISOLATION JOINTS
- SAW CUT JOINT
- DTU DRAINAGE TURN UP
- CO CLEAR OUT
- GTU GAS TURN UP
- EP ELECTRIC POINT
- FB RECESSED FLOOR BOX ON HORNED CONCRETE WITH OXIDISED STEEL GROMET
- FB1 RECESSED FLOOR BOX IN TENANCIES
- FH FIRE HYDRANT
- RWO RAIN WATER OUTLET
- TD TURNDISH
- TW TRADE WASTE
- TWV TRADE WASTE VENT
- TWVP TRADE WASTE VENT PIPE
- STU SANITARY TURN UP
- V VENT
- H NEW STEEL COLUMN
- EXISTING STRUCTURAL COLUMN
- EXISTING STRUCTURAL COLUMN
- ESL EXISTING SLAB LEVEL
- FSL FINISH SLAB LEVEL
- FFL FINISH FLOOR LEVEL

NOTES

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18. 100MM SETBACK FROM ANY ADDITIONAL HERITAGE MACHINERY FOOTINGS IF FOUND

North

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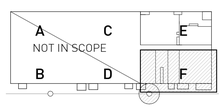
notes

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key plan



rev	date	description	by	chk
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11	15.11.19	CONSTRUCTION CERTIFICATE	SW	SW
12	13.12.19	FOR CONSTRUCTION	PM	MH
13	18.12.19	FOR CONSTRUCTION	PM	MH

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drawing title
CONCRETE SETOUT & FLOOR FINISHES - GROUND - ZONE F

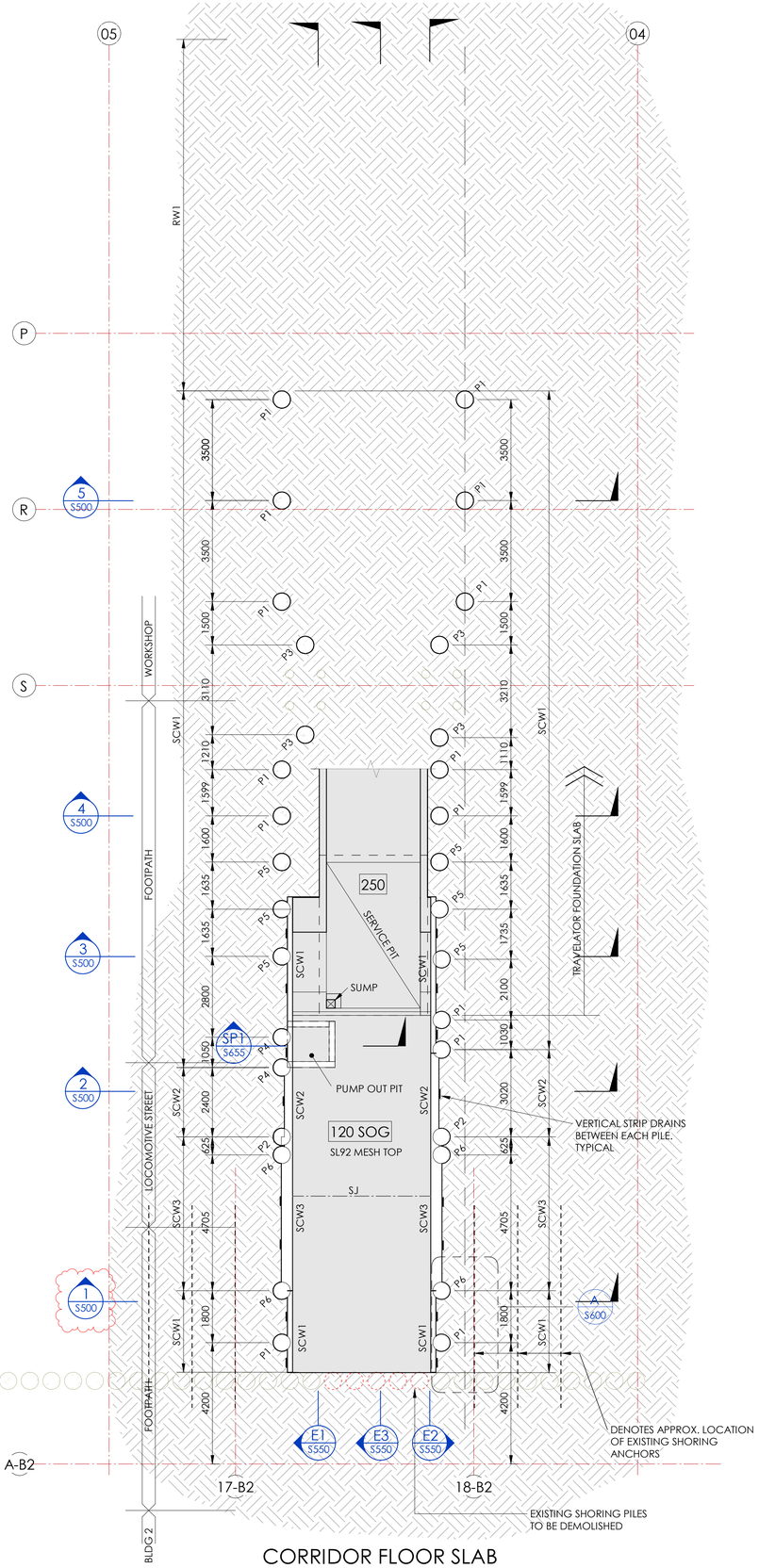
status
CONSTRUCTION CERTIFICATE

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scale As indicated @B1
date 18.12.19
drawing no. TBG-AR-DWG-BB-B4-2106
rev 13

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original sheet size B1 = 1000 x 707mm

No	DATE	DESCRIPTION	BY
D	08.11.19	ISSUED FOR CC	RL
E	13.11.19	ISSUE FOR FINAL APPROVAL	RL
F	10.12.19	ISSUED FOR CONSTRUCTION	RL
G	13.01.20	REVISED AS CLOUDED	RL
H	15.01.20	REVISED AS CLOUDED	RL



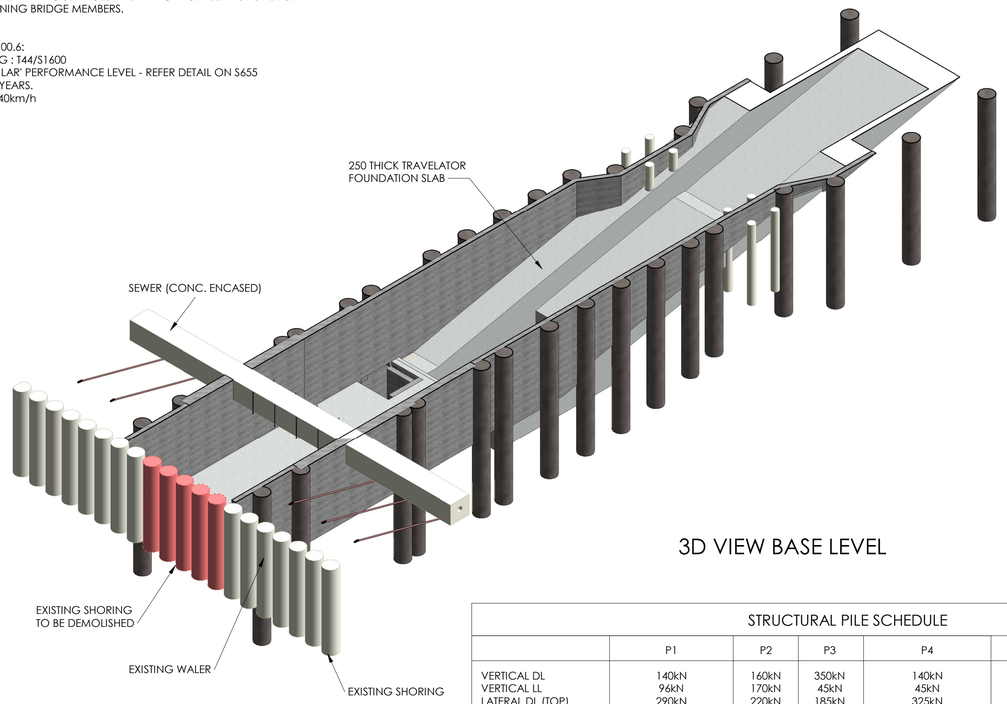
CORRIDOR FLOOR SLAB

SCALE 1 : 100

BRIDGE CONSTRUCTION SEQUENCE

1. EXPOSE LOCATION OF SERVICES VIA TRENCHING.
2. INSTALL PILES AS PER JN DOCUMENTION.
3. INSTALL CAPPING BEAM AS PER JN DOCUMENTION.
4. EXCAVATE TO TOP LEVEL OF SERVICES.
5. INSTALL B1 BEAMS.
6. INSTALL TEMPORARY SERVICE SUPPORTS TO B1 BEAMS.
7. EXCAVATE TO REMAINING SERVICES AND HANG FROM BEAMS AS PER 6.
8. INSTALL REMAINING BRIDGE MEMBERS.

BRIDGE NOTES:
DESIGN TO AS 5100.6:
TRAFFIC LOADING : T44/S1600
BARRIERS : 'REGULAR' PERFORMANCE LEVEL - REFER DETAIL ON S655
DESIGN LIFE : 10 YEARS.
TRAFFIC SPEED : 40km/h



3D VIEW BASE LEVEL

STRUCTURAL PILE SCHEDULE

	P1	P2	P3	P4	P5	P6 TEMP.	P6 PERM.
VERTICAL DL	140kN	160kN	350kN	140kN	140kN	0kN	200kN
VERTICAL LL	96kN	170kN	45kN	45kN	45kN	0kN	100kN
LATERAL DL (TOP)	290kN	220kN	185kN	325kN	265kN	260kN	280kN
LATERAL LL (TOP)	60kN	45kN	15kN	75kN	67kN	65kN	60kN
LATERAL DL (BTM)	145kN	220kN	185kN	210kN	160kN	175kN	210kN
LATERAL LL (BTM)	30kN	45kN	15kN	45kN	40kN	45N	40kN
BENDING DL	145 max. / -81min. kNm	325kNm	230kNm	335 max. / -72min. kNm	215 max. / -65min. kNm	170 max. / -145min. kNm	190 max. / -131min. kNm
BENDING LL	30 max. / -17 min. kNm	70kNm	20kNm	75 max. / -16 min. kNm	55 max. / -16 min. kNm	40 max. / -35 min. kNm	40 max. / -30 min. kNm
UNSUPPORTED LENGTH	4.6m	5.5m	5.4m	6.8m	5.9m	5.9m	5.9m
PROP LOAD DL						450kN	
PROP LOAD LL						110kN	

NOTE : ALL LOADS ARE WORKING LOADS, ULTIMATE LOADS NEED TO BE FACTORED ACCORDINGLY.
P3 LOAD CASE INTABLE IS THE PERMANENT SUPPORT CASE. THE TEMPORARY CASE WILL RESULT IN LOWER FORCES WITHIN THE PILES.
PERMANEMT LOAD CASES FOR P4 AND P5 TO ALLOW FOR 225/-120 kNm ULT MOMENT AND 350kN ULT VERTICAL LOAD.

ENSURE PILES P1,P2,P4 & P5 CONSIDER NO VERTICAL LOADS IN TEMPORARY CASE.

P6 PILE PROPS ARE ASSUMED TO BE 1400mm FROM UNDERSIDE OF CAPPING BEAM AND SIT ABOVE THE PERMANENT SLAB.

STRUCTURAL WALL SCHEDULE

TAG	WIDTH	TYPE	REO-HORIZ.	REO-VERT.
RW1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.
SCW1	180	SHOTCRETE	RL1018 MESH F.F.	
SCW2	285	SHOTCRETE	RL1018 MESH E.F. + N16-300 EXTRA F.F.	.
SCW3	390	SHOTCRETE	RL918 MESH R.F. + RL1118 & N16-200 HORIZ. EXTRA F.F.	.
W1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.

LEGEND : E.F. = EACH FACE
R.F. = REAR FACE
F.F = FRONT FACE

250mm THICK TRAVELATOR FOUNDATION SLAB NOTES

1. REFER TO ARCHITECTS DRAWINGS FOR ALL LEVELS, STEPS, SETDOWNS, FALLS ETC.
2. CONCRETE SLAB STRENGHT f'c=40MPa U.N.O.
3. ALL SLABS TO BE 250mm THICK U.N.O. POURED ON A VAPOUR BARRIER AND REINFORCED WITH N12-200 EACH WAY / EACH FACE.
4. WHERE ARCHITECTS DRAWINGS INDICATE FALLS IN SLAB, STRUCTURAL SIZES SHOWN ARE THE MINIMUM ALLOWABLE THICKNESS
5. REFER TO HYDRAULIC ENGINEERS DRAWINGS FOR PENETRATION SIZES AND LOCATIONS.

120mm THICK SLAB ON GROUND NOTES

1. REFER TO ARCHITECTS DRAWINGS FOR ALL LEVELS, STEPS, SETDOWNS, FALLS ETC.
2. CONCRETE SLAB STRENGHT = f'c=40 MPa U.N.O.
3. ALL INTERNAL SLABS TO BE 120mm THICK POURED ON A VAPOUR BARRIER NOMINAL SAND BLINDING ON WELL COMPACTED GROUND U.N.O.
4. ALL EXTERNAL SLABS TO BE 120mm THICK POURED ON WELL COMPACTED GROUND U.N.O.
5. WHERE ARCHITECTS DRAWINGS INDICATE FALLS IN SLAB, STRUCTURAL SIZES SHOWN ARE THE MINIMUM ALLOWABLE THICKNESS
6. ALL SLABS TO BE REINFORCED WITH SL92 FABRIC TOP THROUGHOUT U.N.O.
7. TR - DENOTES 3N12 (or 3-L11TM) 2000 LONG TIED TO UNDERSIDE OF TOP FABRIC.
8. PROVIDE VERTICAL ARTICULATION JOINTS IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE TO SUIT THE SITE AND TYPE OF CONSTRUCTION THIS FOOTING SYSTEM HAS BEEN DESIGNED FOR.

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CLIENT
MAINLAND CIVIL

STATUS
CONSTRUCTION

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DISCIPLINE
STRUCTURAL DESIGN R18

DRAWING TITLE
CORRIDOR BASE SLAB OUTLINE PLAN

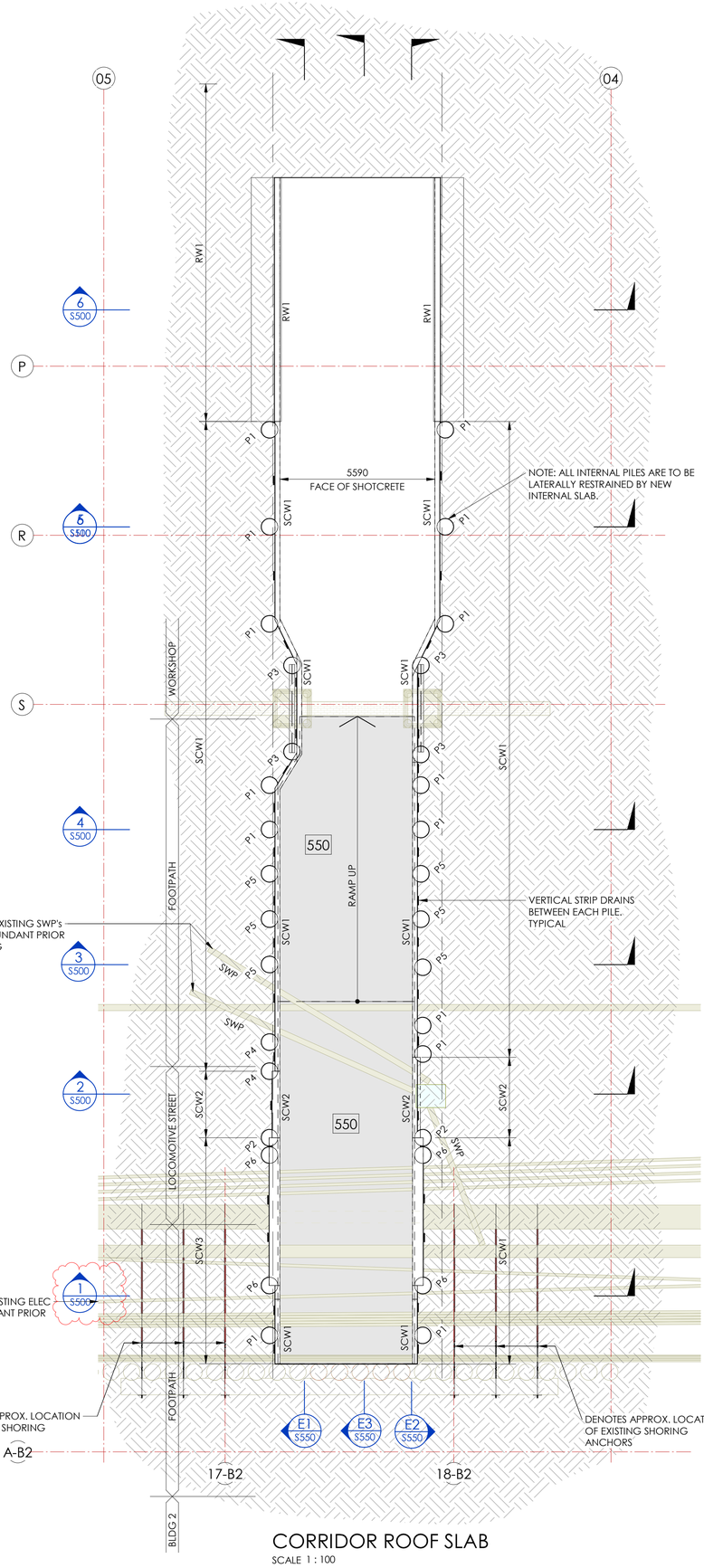
PROJECT
PROPOSED ATP TRAVELATOR STRUCTURE

ADDRESS
2 LOCOMOTIVE STREET EVELEIGH

PROJECT DETAILS
DESIGN C.G.
DRAWN R.L.
DATE SEPT 19
DRG SIZE A1
SCALE As indicated
PROJECT MGR M.M.
WWW.JN.COM.AU

19010921
S100 H

No	DATE	DESCRIPTION	BY
D	08.11.19	ISSUED FOR CC	RL
E	13.11.19	ISSUE FOR FINAL APPROVAL	RL
F	10.12.19	ISSUED FOR CONSTRUCTION	RL
G	13.01.20	REVISED AS CLOUDED	RL
H	15.01.20	REVISED AS CLOUDED	RL



CORRIDOR ROOF SLAB
SCALE 1 : 100

STRUCTURAL PILE SCHEDULE							
	P1	P2	P3	P4	P5	P6 TEMP.	P6 PERM.
VERTICAL DL	140kN	160kN	350kN	140kN	140kN	0kN	200kN
VERTICAL LL	96kN	170kN	45kN	45kN	45kN	0kN	100kN
LATERAL DL (TOP)	290kN	220kN	185kN	325kN	265kN	260kN	280kN
LATERAL LL (TOP)	60kN	45kN	15kN	75kN	67kN	65kN	60kN
LATERAL DL (BTM)	145kN	220kN	185kN	210kN	160kN	175kN	210kN
LATERAL LL (BTM)	30kN	45kN	15kN	45kN	40kN	45N	40kN
BENDING DL	145 max. / -81min. kNm	325kNm	230kNm	335 max. / -72min. kNm	215 max. / -65min. kNm	170 max. / -145min. kNm	190 max. / -131min. kNm
BENDING LL	30 max. / -17 min. kNm	70kNm	20kNm	75 max. / -16 min. kNm	55 max. / -16 min. kNm	40 max. / -35 min. kNm	40 max. / -30 min. kNm
UNSUPPORTED LENGTH	4.6m	5.5m	5.4m	6.8m	5.9m	5.9m	5.9m
PROP LOAD DL						450kN	
PROP LOAD LL						110kN	

NOTE : ALL LOADS ARE WORKING LOADS, ULTIMATE LOADS NEED TO BE FACTORED ACCORDINGLY.
P3 LOAD CASE INTABLE IS THE PERMANENT SUPPORT CASE. THE TEMPORARY CASE WILL RESULT IN LOWER FORCES WITHIN THE PILES.
PERMANEMT LOAD CASES FOR P4 AND P5 TO ALLOW FOR 225/-120 kNm ULT MOMENT AND 350kN ULT VERTICAL LOAD.

ENSURE PILES P1,P2,P4 & P5 CONSIDER NO VERTICAL LOADS IN TEMPORARY CASE.

P6 PILE PROPS ARE ASSUMED TO BE 1400mm FROM UNDERSIDE OF CAPPING BEAM AND SIT ABOVE THE PERMANENT SLAB.

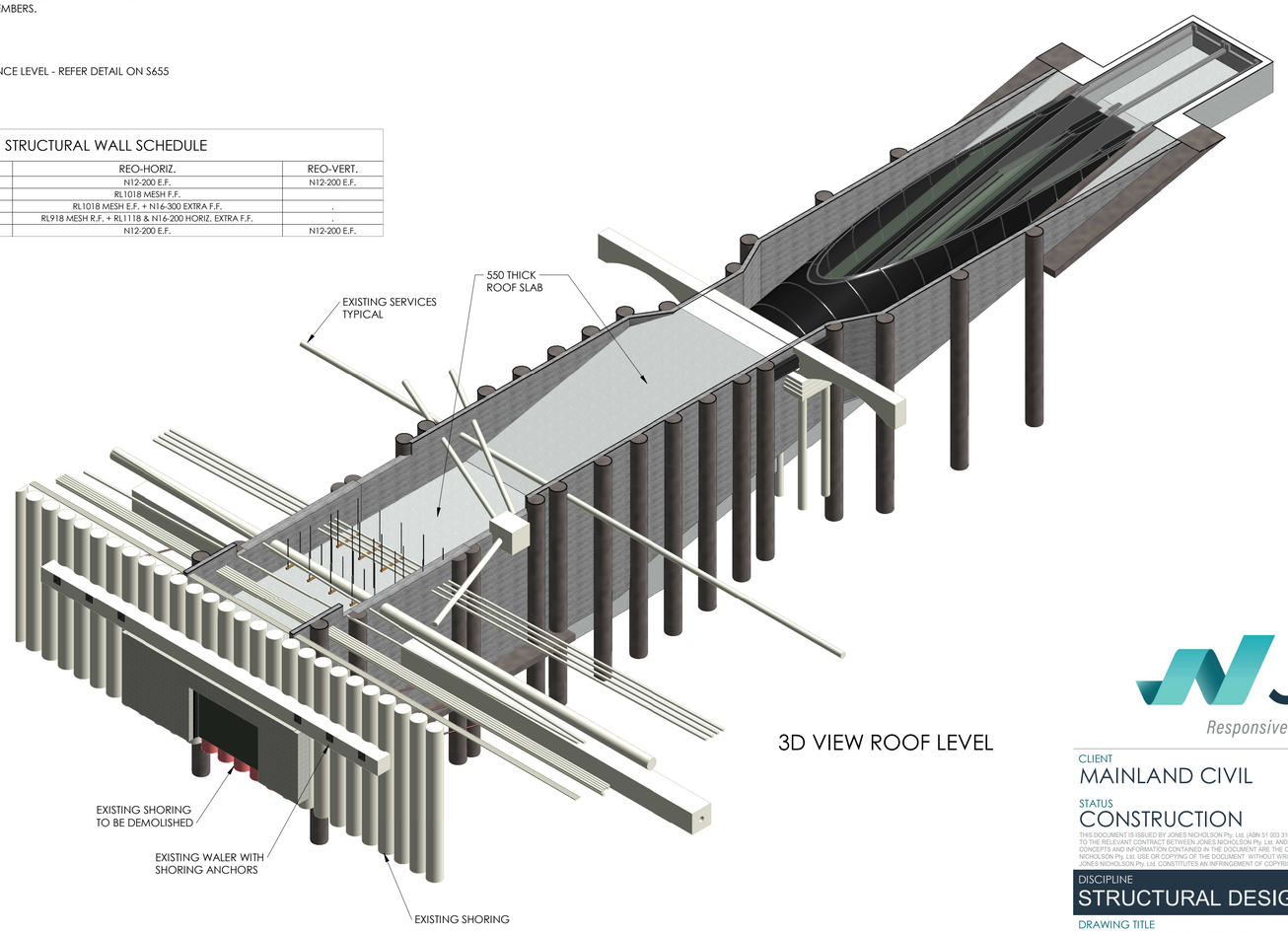
BRIDGE CONSTRUCTION SEQUENCE

1. EXPOSE LOCATION OF SERVICES VIA TRENCHING.
2. INSTALL PILES AS PER JN DOCUMENTION.
3. INSTALL CAPPING BEAM AS PER JN DOCUMENTION.
4. EXCAVATE TO TOP LEVEL OF SERVICES.
5. INSTALL B1 BEAMS.
6. INSTALL TEMPORARY SERVICE SUPPORTS TO B1 BEAMS.
7. EXCAVATE TO REMAINING SERVICES AND HANG FROM BEAMS AS PER 6.
8. INSTALL REMAINING BRIDGE MEMBERS.

BRIDGE NOTES:
DESIGN TO AS 5100.6:
TRAFFIC LOADING : T44/S1600
BARRIERS : 'REGULAR' PERFORMANCE LEVEL - REFER DETAIL ON S655
DESIGN LIFE : 10 YEARS.
TRAFFIC SPEED : 40km/h

STRUCTURAL WALL SCHEDULE				
TAG	WIDTH	TYPE	REO-HORIZ.	REO-VERT.
RW1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.
SCW1	180	SHOTCRETE	RL1018 MESH F.F.	
SCW2	285	SHOTCRETE	RL1018 MESH E.F. + N16-300 EXTRA F.F.	.
SCW3	390	SHOTCRETE	RL918 MESH R.F. + RL1118 & N16-200 HORIZ. EXTRA F.F.	.
W1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.

LEGEND : E.F. = EACH FACE
R.F. = REAR FACE
F.F = FRONT FACE



3D VIEW ROOF LEVEL

1. REFER TO ARCHITECTS DRAWINGS FOR ALL LEVELS, STEPS, SETDOWNS, FALLS ETC.
2. CONCRETE SLAB STRENGHT f'c=40MPa U.N.O.
3. ALL SLABS TO BE 550mm THICK U.N.O.
4. WHERE ARCHITECTS DRAWINGS INDICATE FALLS IN SLAB, STRUCTURAL SIZES SHOWN ARE THE MINIMUM ALLOWABLE THICKNESS
5. ALL ROOF SLABS TO BE WATERPROOFED TO ARCHITECTS DETAILS UNO.
6. REFER TO ARCHITECTURAL DRAWINGS FOR BALUSTRADE TYPES AND EXTENTS.
7. REFER TO MECHANICAL ENGINEERS DRAWINGS FOR PENETRATION SIZES AND LOCATIONS.

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MAINLAND CIVIL

STATUS
CONSTRUCTION

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DISCIPLINE
STRUCTURAL DESIGN R1.0

DRAWING TITLE
CORRIDOR ROOF SLAB OUTLINE PLAN

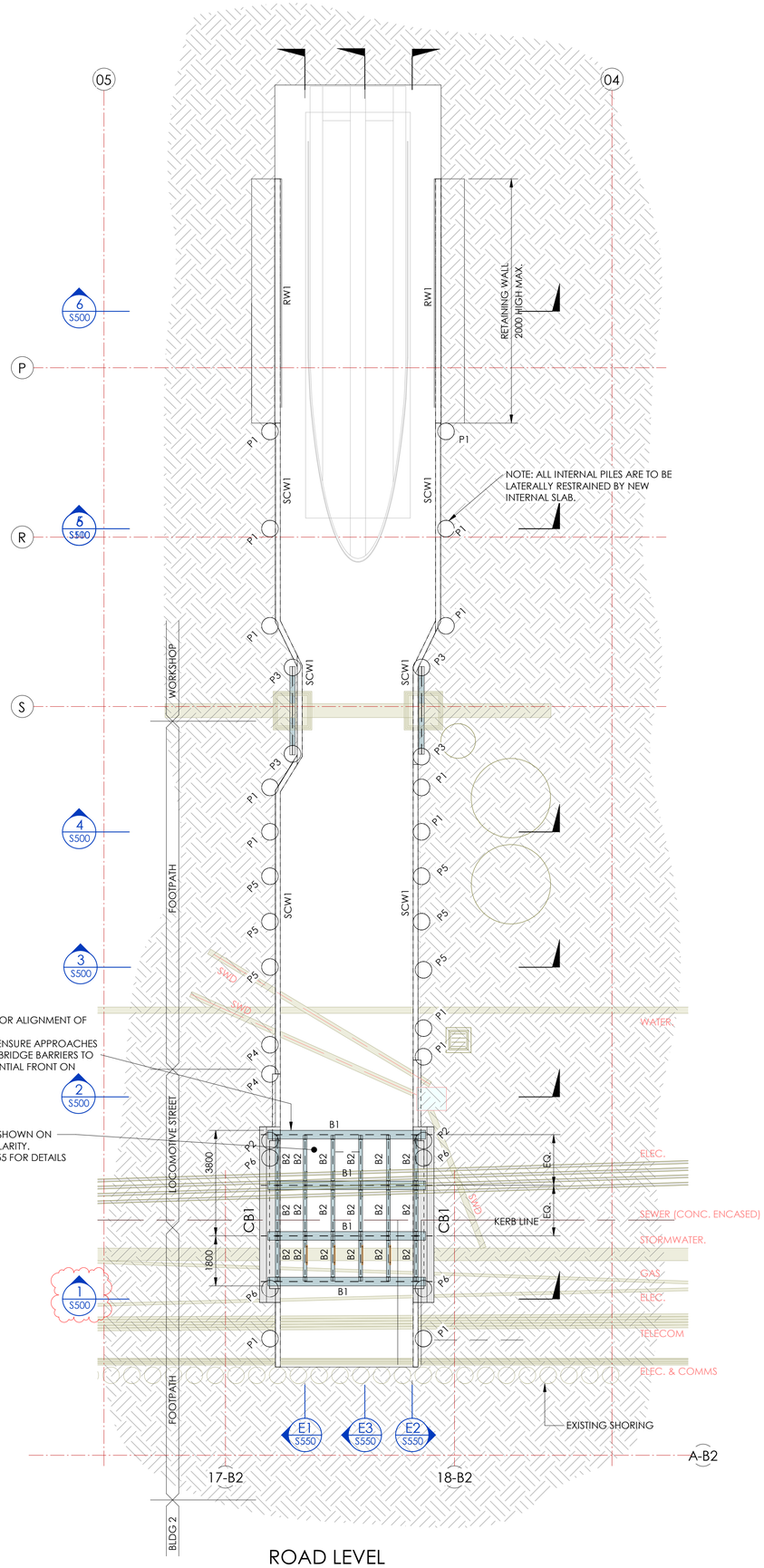
PROJECT
PROPOSED ATP TRAVELATOR STRUCTURE

ADDRESS
2 LOCOMOTIVE STREET EVELEIGH

PROJECT DETAILS
DESIGN C.G.
DRAWN R.L.
DATE SEPT 19
DRG SIZE A1
SCALE As indicated
PROJECT M.M.
MGR
WWW.JN.COM.AU

19010921
S200 H

No	DATE	DESCRIPTION	BY
D	08.11.19	ISSUED FOR CC	RL
E	13.11.19	ISSUE FOR FINAL APPROVAL	RL
F	10.12.19	ISSUED FOR CONSTRUCTION	RL
G	13.01.20	REVISED AS CLOUDED	RL
H	15.01.20	REVISED AS CLOUDED	RL



ROAD LEVEL
SCALE 1 : 100

BRIDGE CONSTRUCTION SEQUENCE

1. EXPOSE LOCATION OF SERVICES VIA TRENCHING.
2. INSTALL PILES AS PER JN DOCUMENTION.
3. INSTALL CAPPING BEAM AS PER JN DOCUMENTION.
4. EXCAVATE TO TOP LEVEL OF SERVICES.
5. INSTALL B1 BEAMS.
6. INSTALL TEMPORARY SERVICE SUPPORTS TO B1 BEAMS.
7. EXCAVATE TO REMAINING SERVICES AND HANG FROM BEAMS AS PER 6.
8. INSTALL REMAINING BRIDGE MEMBERS.

BRIDGE NOTES:
DESIGN TO AS 5100.6:
TRAFFIC LOADING : T44/S1600
BARRIERS : 'REGULAR' PERFORMANCE LEVEL - REFER DETAIL ON S655
DESIGN LIFE : 10 YEARS.
TRAFFIC SPEED : 40km/h

STRUCTURAL PILE SCHEDULE

	P1	P2	P3	P4	P5	P6 TEMP.	P6 PERM.
VERTICAL DL	140kN	160kN	350kN	140kN	140kN	0kN	200kN
VERTICAL LL	96kN	170kN	45kN	45kN	45kN	0kN	100kN
LATERAL DL (TOP)	290kN	220kN	185kN	325kN	265kN	260kN	280kN
LATERAL LL (TOP)	60kN	45kN	15kN	75kN	67kN	65kN	60kN
LATERAL DL (BTM)	145kN	220kN	185kN	210kN	160kN	175kN	210kN
LATERAL LL (BTM)	30kN	45kN	15kN	45kN	40kN	45N	40kN
BENDING DL	145 max. / -81min. kNm	325kNm	230kNm	335 max. / -72min. kNm	215 max. / -65min. kNm	170 max. / -145min. kNm	190 max. / -131min. kNm
BENDING LL	30 max. / -17 min. kNm	70kNm	20kNm	75 max. / -16 min. kNm	55 max. / -16 min. kNm	40 max. / -35 min. kNm	40 max. / -30 min. kNm
UNSUPPORTED LENGTH	4.6m	5.5m	5.4m	6.8m	5.9m	5.9m	5.9m
PROP LOAD DL						450kN	
PROP LOAD LL						110kN	

NOTE : ALL LOADS ARE WORKING LOADS, ULTIMATE LOADS NEED TO BE FACTORED ACCORDINGLY.
P3 LOAD CASE INTABLE IS THE PERMANENT SUPPORT CASE, THE TEMPORARY CASE WILL RESULT IN LOWER FORCES WITHIN THE PILES.
PERMANEMT LOAD CASES FOR P4 AND P5 TO ALLOW FOR 225/-120 kNm ULT MOMENT AND 350kN ULT VERTICAL LOAD.

ENSURE PILES P1,P2,P4 & P5 CONSIDER NO VERTICAL LOADS IN TEMPORARY CASE.

P6 PILE PROPS ARE ASSUMED TO BE 1400mm FROM UNDERSIDE OF CAPPING BEAM AND SIT ABOVE THE PERMANENT SLAB.

STRUCTURAL WALL SCHEDULE

TAG	WIDTH	TYPE	REO-HORIZ.	REO-VERT.
RW1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.
SCW1	180	SHOTCRETE	RL1018 MESH F.F.	
SCW2	285	SHOTCRETE	RL1018 MESH E.F. + N16-300 EXTRA F.F.	.
SCW3	390	SHOTCRETE	RL918 MESH R.F. + RL1118 & N16-200 HORIZ. EXTRA F.F.	.
W1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.

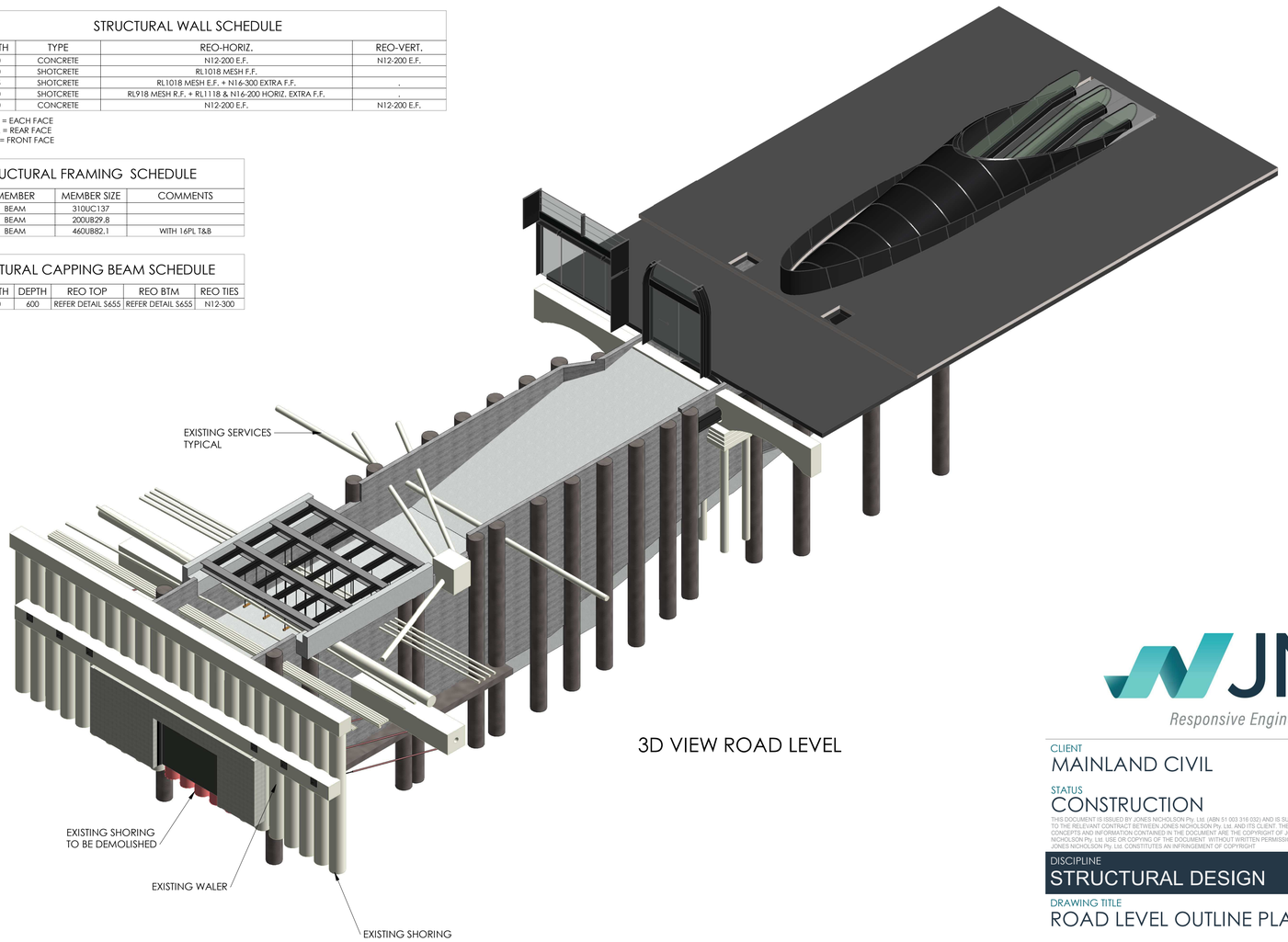
LEGEND : E.F. = EACH FACE
R.F. = REAR FACE
F.F = FRONT FACE

STRUCTURAL FRAMING SCHEDULE

TAG	MEMBER	MEMBER SIZE	COMMENTS
B1	BEAM	310UC137	
B2	BEAM	200UB29.8	
B3	BEAM	460UB82.1	WITH 16PL T&B

STRUCTURAL CAPPING BEAM SCHEDULE

TAG	WIDTH	DEPTH	REO TOP	REO BTM	REO TIES
CB1	750	600	REFER DETAIL S655	REFER DETAIL S655	N12-300



3D VIEW ROAD LEVEL

JN
Responsive Engineering

CLIENT
MAINLAND CIVIL

STATUS
CONSTRUCTION

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DISCIPLINE
STRUCTURAL DESIGN R18

DRAWING TITLE
ROAD LEVEL OUTLINE PLAN

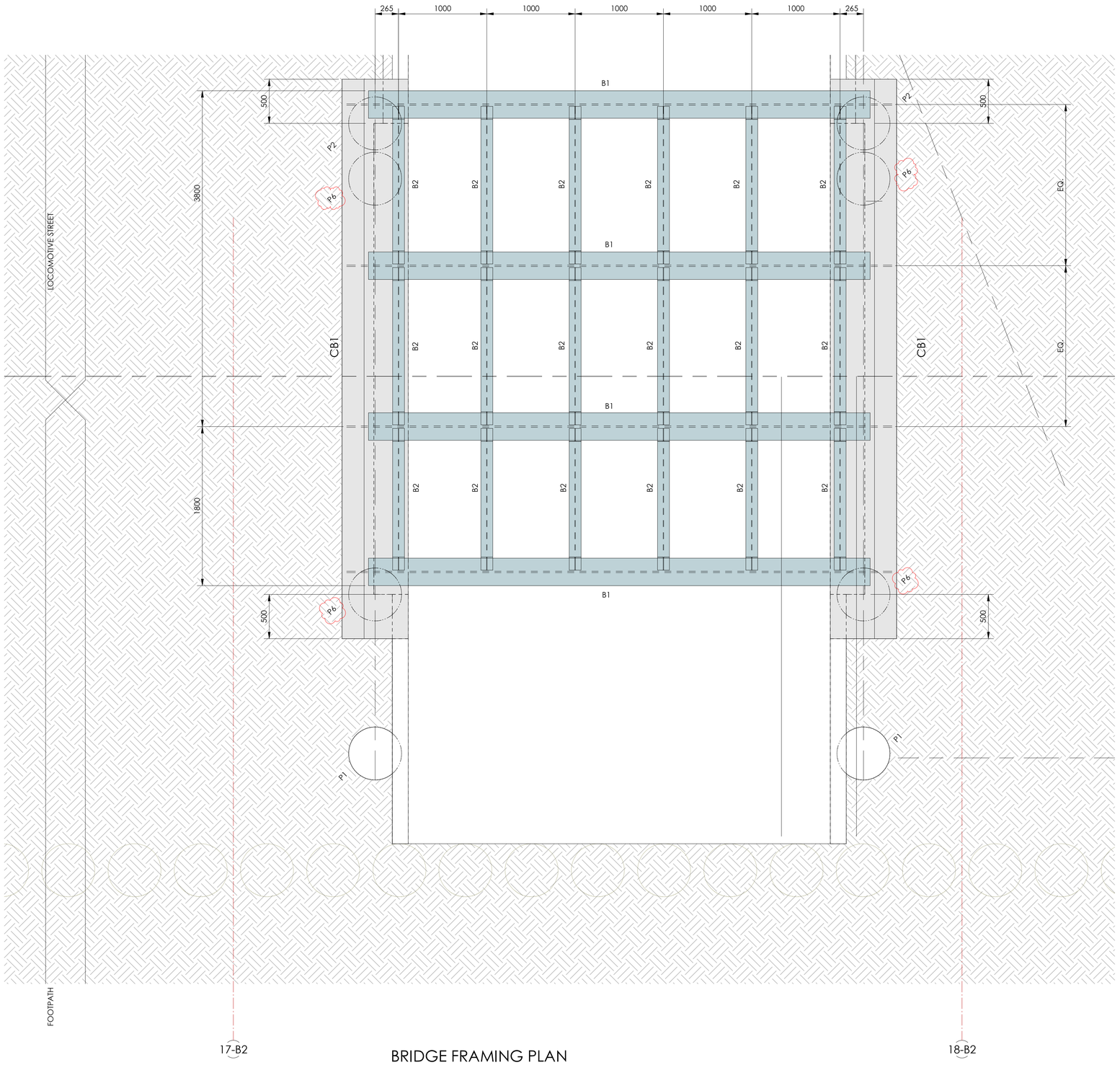
PROJECT
PROPOSED ATP TRAVELATOR STRUCTURE

ADDRESS
2 LOCOMOTIVE STREET EVELEIGH

PROJECT DETAILS
DESIGN C.G.
DRAWN R.L.
DATE SEPT 19
DRG SIZE A1
SCALE As indicated
PROJECT MGR M.M.
WWW.JN.COM.AU

19010921
S300 H

No	DATE	DESCRIPTION	BY
A	15.01.20	REVISED AS CLOUDED	RL



BRIDGE FRAMING PLAN

SCALE 1 : 25

STRUCTURAL FRAMING SCHEDULE

TAG	MEMBER	MEMBER SIZE	COMMENTS
B1	BEAM	310UC137	
B2	BEAM	200UB29.8	
B3	BEAM	460UB82.1	WITH 16PL T&B

STRUCTURAL CAPPING BEAM SCHEDULE

TAG	WIDTH	DEPTH	REO TOP	REO BTM	REO TIES
CB1	750	600	REFER DETAIL S655	REFER DETAIL S655	N12-300

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MAINLAND CIVIL

STATUS
PRELIMINARY

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DISCIPLINE
STRUCTURAL DESIGN R18

DRAWING TITLE
BRIDGE FRAMING PLAN

PROJECT
PROPOSED ATP TRAVELATOR STRUCTURE

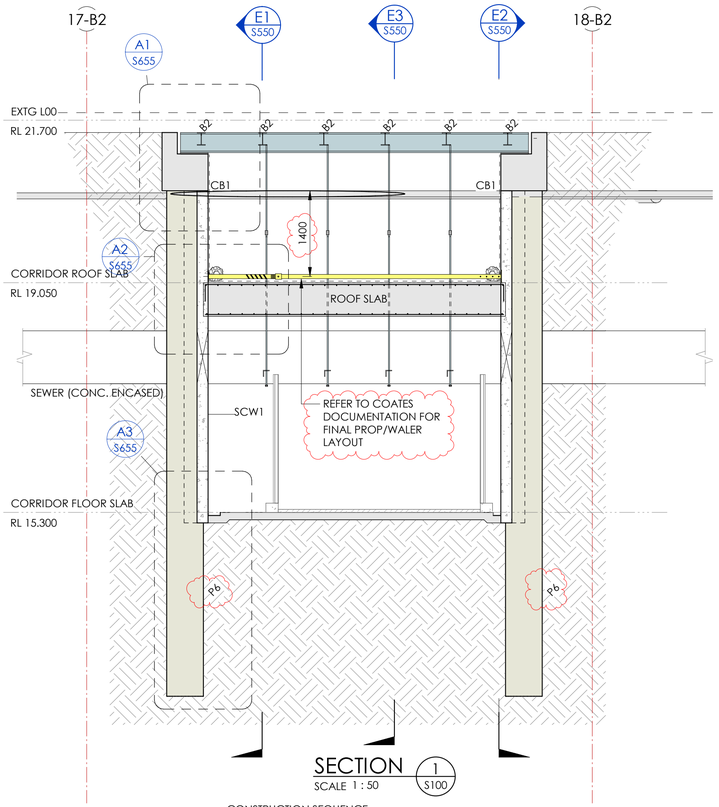
ADDRESS
2 LOCOMOTIVE STREET EVELEIGH

PROJECT DETAILS

DESIGN	C.G.
DRAWN	R.L.
DATE	SEPT 19
DRG SIZE	A1
SCALE	1 : 25
PROJECT MGR	M.M.
WWW.JN.COM.AU	

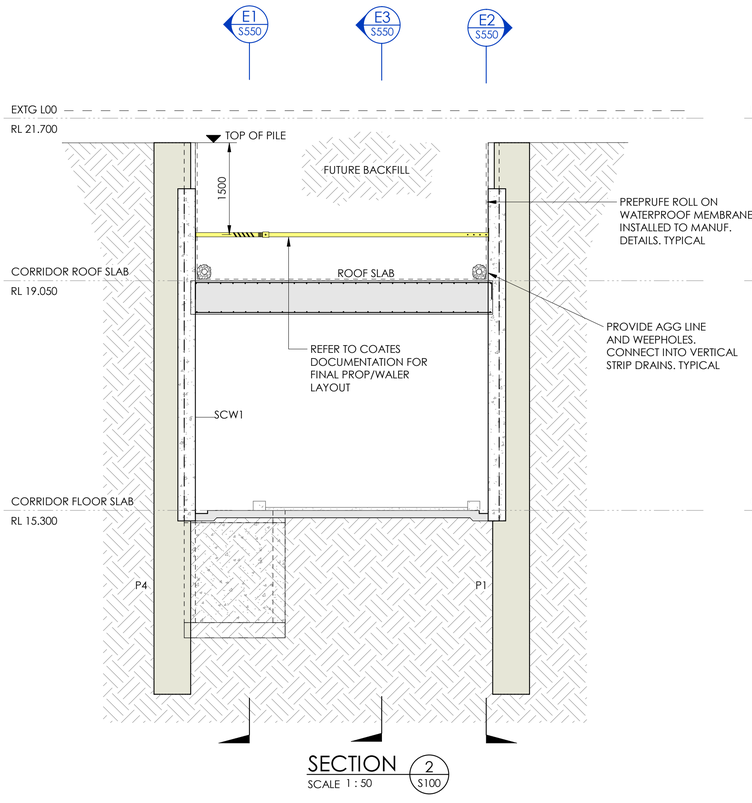
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S400 A

No	DATE	DESCRIPTION	BY
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C	08.11.19	ISSUED FOR CC	RL
D	13.11.19	ISSUE FOR FINAL APPROVAL	RL
E	10.12.19	ISSUED FOR CONSTRUCTION	RL
F	15.01.20	REVISED AS CLOUDED	RL

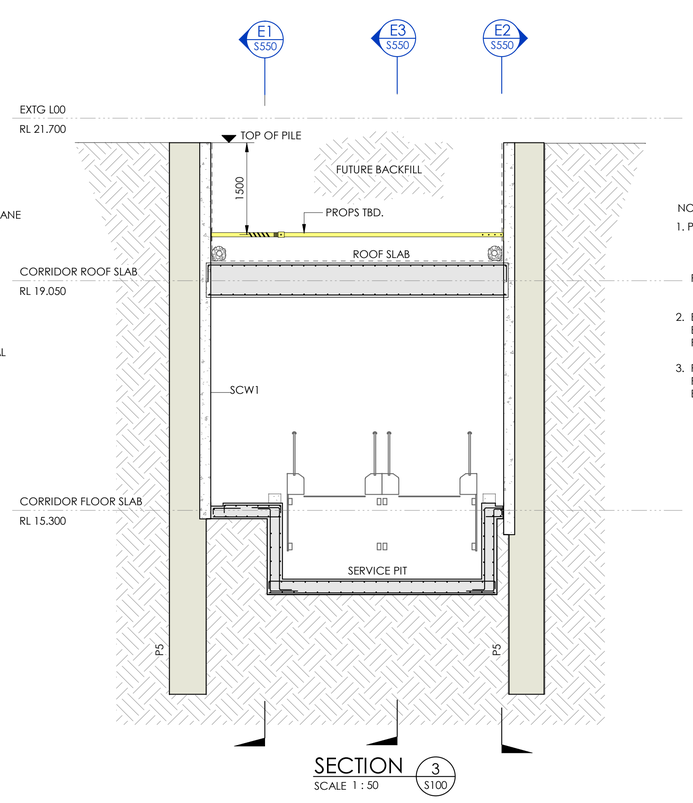


SECTION 1 S100
SCALE 1 : 50

CONSTRUCTION SEQUENCE
1. EXPOSE EXISTING SEWER PIPE.
2. HANG FROM NEW BRIDGE STRUCTURE AS SHOWN.
3. EXCAVATE AS REQUIRED.
4. ONCE BASE SLAB IS POURED, PROP SEWER FROM BELOW WITH 2x75kN SWL PROPS + 200UB18 SUPPORT. REMOVE TIES.
5. CAST IN ANCHOR PLATE TO NEW ROOF SLAB AS DETAILED.
6. RE-HANG SEWER & REMOVE PROPS.

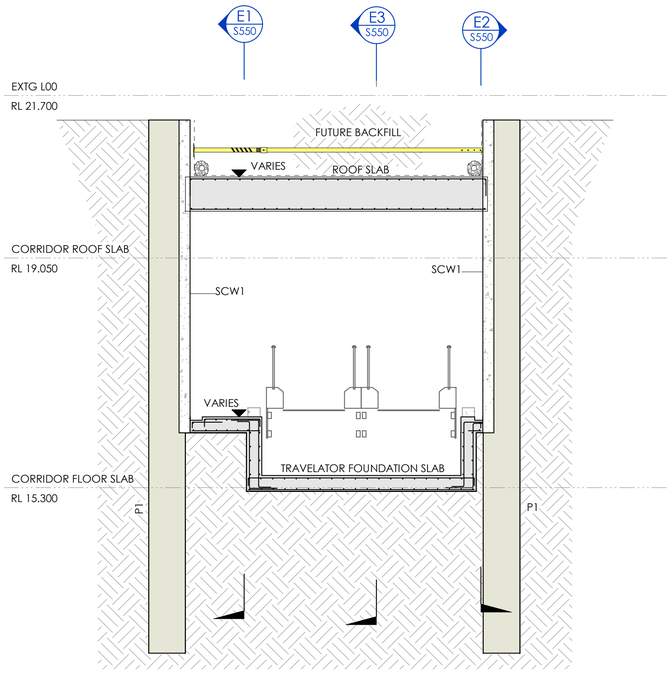


SECTION 2 S100
SCALE 1 : 50

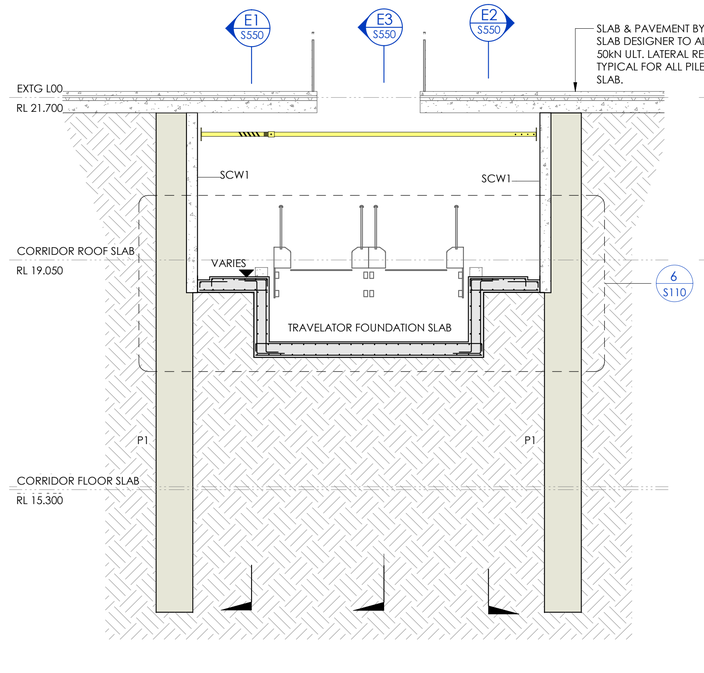


SECTION 3 S100
SCALE 1 : 50

NOTES:
1. PROP LOADS: 290 DL, 60kN LL SURCHARGE, 1kN/m VERTICAL — WORKING LOADS PER PILE, U.N.O.
   P4 PILE LOADS: 325kN DL, 75kN LL SURCHARGE
2. EACH PILE IS TO BE PROPPED IN THE TEMPORARY EXCAVATION SITUATION. PROPS MAY BE REMOVED ONCE PERMINATE CASE IS ACHIEVED.
3. PROP HEIGHTS MAY VARY TO AVOID RAMPED ROOF SLAB, SUBJECT TO REVIEW AND APPROVAL BY STRUCTURAL ENGINEER.

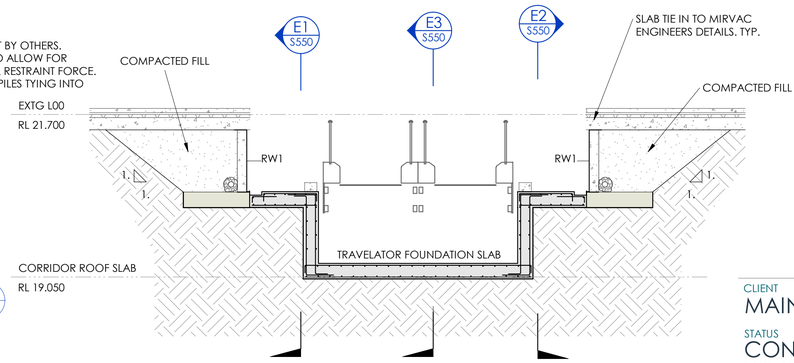


SECTION 4 S100
SCALE 1 : 50



SECTION 5 S100
SCALE 1 : 50

BACKFILL & PAVEMENT SPECIFICATIONS TO AT&L DESIGN DOCUMENTS



SECTION 6 S200
SCALE 1 : 50

STRUCTURAL FRAMING SCHEDULE

TAG	MEMBER	MEMBER SIZE	COMMENTS
B1	BEAM	310UC137	
B2	BEAM	200UB29.8	
B3	BEAM	460UB82.1	WITH 16PL T&B

STRUCTURAL WALL SCHEDULE

TAG	WIDTH	TYPE	REO-HORIZ.	REO-VERT.
RW1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.
SCW1	180	SHOTCRETE	RL1018 MESH F.F.	
SCW2	285	SHOTCRETE	RL1018 MESH E.F. + N16-300 EXTRA F.F.	-
SCW3	390	SHOTCRETE	RL918 MESH R.F. + RL1118 & N16-200 HORIZ. EXTRA F.F.	-
W1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.

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Responsive Engineering

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CONSTRUCTION

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DISCIPLINE
STRUCTURAL DESIGN R18

DRAWING TITLE
CORRIDOR SECTIONS - SHEET 1

PROJECT
PROPOSED ATP TRAVELATOR STRUCTURE

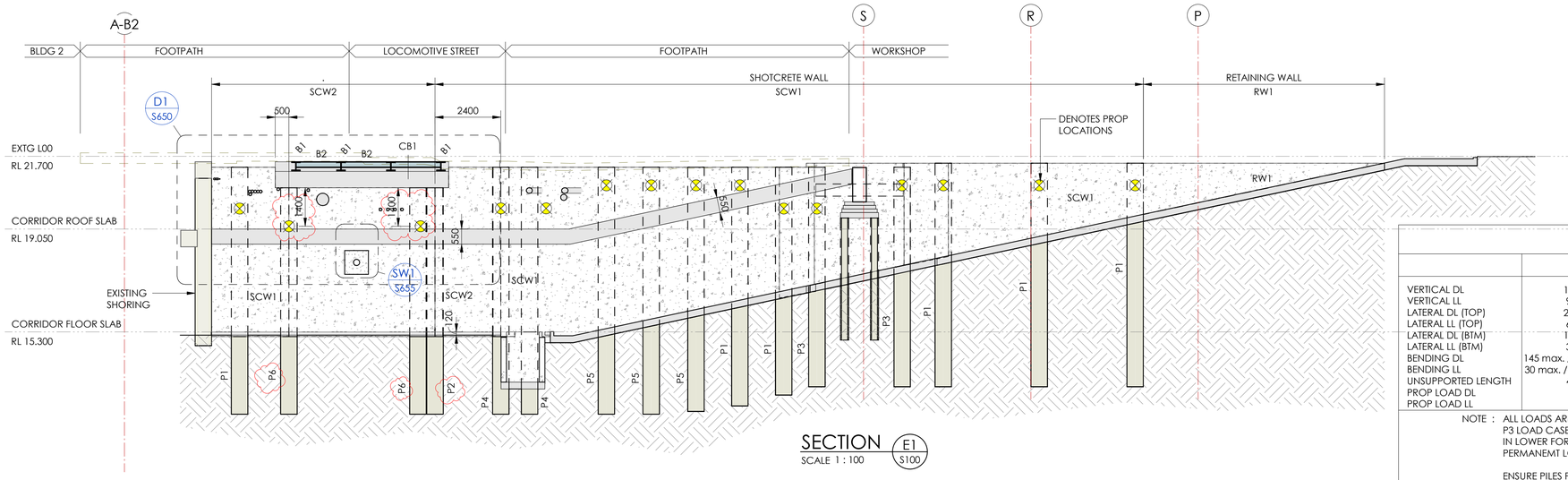
ADDRESS
2 LOCOMOTIVE STREET EVELEIGH

PROJECT DETAILS

DESIGN	C.G.	19010921
DRAWN	R.L.	
DATE	SEPT 19	
DRG SIZE	A1	
SCALE	1 : 50	S500 F
PROJECT MGR	M.M.	

WWW.JN.COM.AU

No	DATE	DESCRIPTION	BY
B	11.10.19	REISSUED FOR TENDER	RL
C	08.11.19	ISSUED FOR CC	RL
D	13.11.19	ISSUE FOR FINAL APPROVAL	RL
E	10.12.19	ISSUED FOR CONSTRUCTION	RL
F	15.01.20	REVISED AS CLOUDED	RL



SECTION E1
SCALE 1 : 100 S100

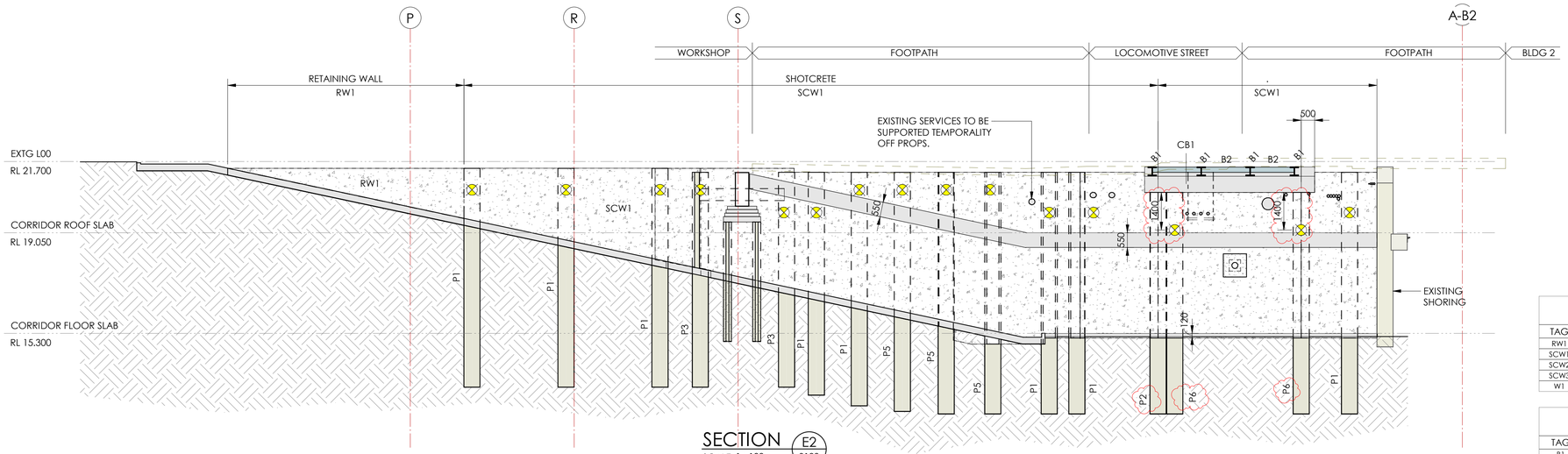
STRUCTURAL PILE SCHEDULE

	P1	P2	P3	P4	P5	P6 TEMP.	P6 PERM.
VERTICAL DL	140kN	160kN	350kN	140kN	140kN	0kN	200kN
VERTICAL LL	96kN	170kN	45kN	45kN	45kN	0kN	100kN
LATERAL DL (TOP)	290kN	220kN	185kN	325kN	265kN	260kN	280kN
LATERAL LL (TOP)	60kN	45kN	15kN	75kN	67kN	65kN	60kN
LATERAL DL (BTM)	145kN	220kN	185kN	210kN	160kN	175kN	210kN
LATERAL LL (BTM)	30kN	45kN	15kN	45kN	40kN	45N	40kN
BENDING DL	145 max. / -81min. kNm	325kNm	230kNm	335 max. / -72min. kNm	215 max. / -65min. kNm	170 max. / -145min. kNm	190 max. / -131min. kNm
BENDING LL	30 max. / -17 min. kNm	70kNm	20kNm	75 max. / -16 min. kNm	55 max. / -16 min. kNm	40 max. / -35 min. kNm	40 max. / -30 min. kNm
UNSUPPORTED LENGTH	4.6m	5.5m	5.4m	6.8m	5.9m	5.9m	5.9m
PROP LOAD DL						450kN	
PROP LOAD LL						110kN	

NOTE : ALL LOADS ARE WORKING LOADS, ULTIMATE LOADS NEED TO BE FACTORED ACCORDINGLY.
P3 LOAD CASE INTABLE IS THE PERMANENT SUPPORT CASE. THE TEMPORARY CASE WILL RESULT IN LOWER FORCES WITHIN THE PILES.
PERMANENMT LOAD CASES FOR P4 AND P5 TO ALLOW FOR 225/-120 kNm ULT MOMENT AND 350kN ULT VERTICAL LOAD.

ENSURE PILES P1,P2,P4 & P5 CONSIDER NO VERTICAL LOADS IN TEMPORARY CASE.

P6 PILE PROPS ARE ASSUMED TO BE 1400mm FROM UNDERSIDE OF CAPPING BEAM AND SIT ABOVE THE PERMANENT SLAB.



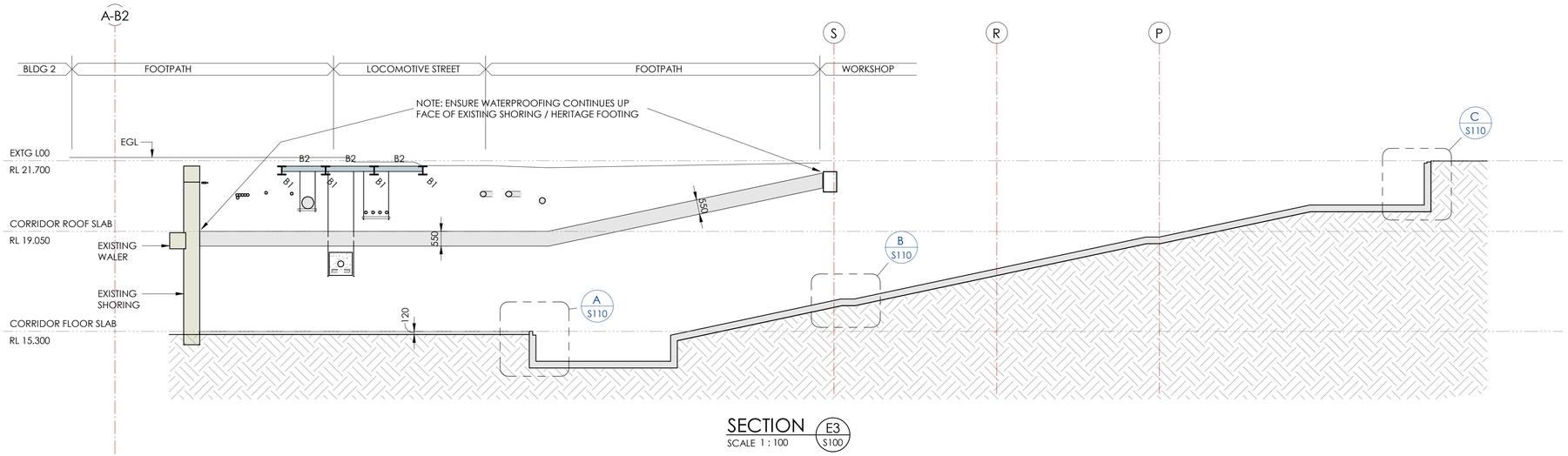
SECTION E2
SCALE 1 : 100 S100

STRUCTURAL WALL SCHEDULE

TAG	WIDTH	TYPE	REO-HORIZ.	REO-VERT.
RW1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.
SCW1	180	SHOTCRETE	RL1018 MESH F.F.	
SCW2	285	SHOTCRETE	RL1018 MESH E.F. + N16-300 EXTRA F.F.	.
SCW3	390	SHOTCRETE	RL918 MESH R.F. + RL1118 & N16-200 HORIZ. EXTRA F.F.	
W1	200	CONCRETE	N12-200 E.F.	N12-200 E.F.

STRUCTURAL FRAMING SCHEDULE

TAG	MEMBER	MEMBER SIZE	COMMENTS
B1	BEAM	310UC137	
B2	BEAM	200UB29.8	
B3	BEAM	460UB82.1	WITH 16PL T&B



SECTION E3
SCALE 1 : 100 S100

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DISCIPLINE
STRUCTURAL DESIGN R18

DRAWING TITLE
CORRIDOR ELEVATIONS

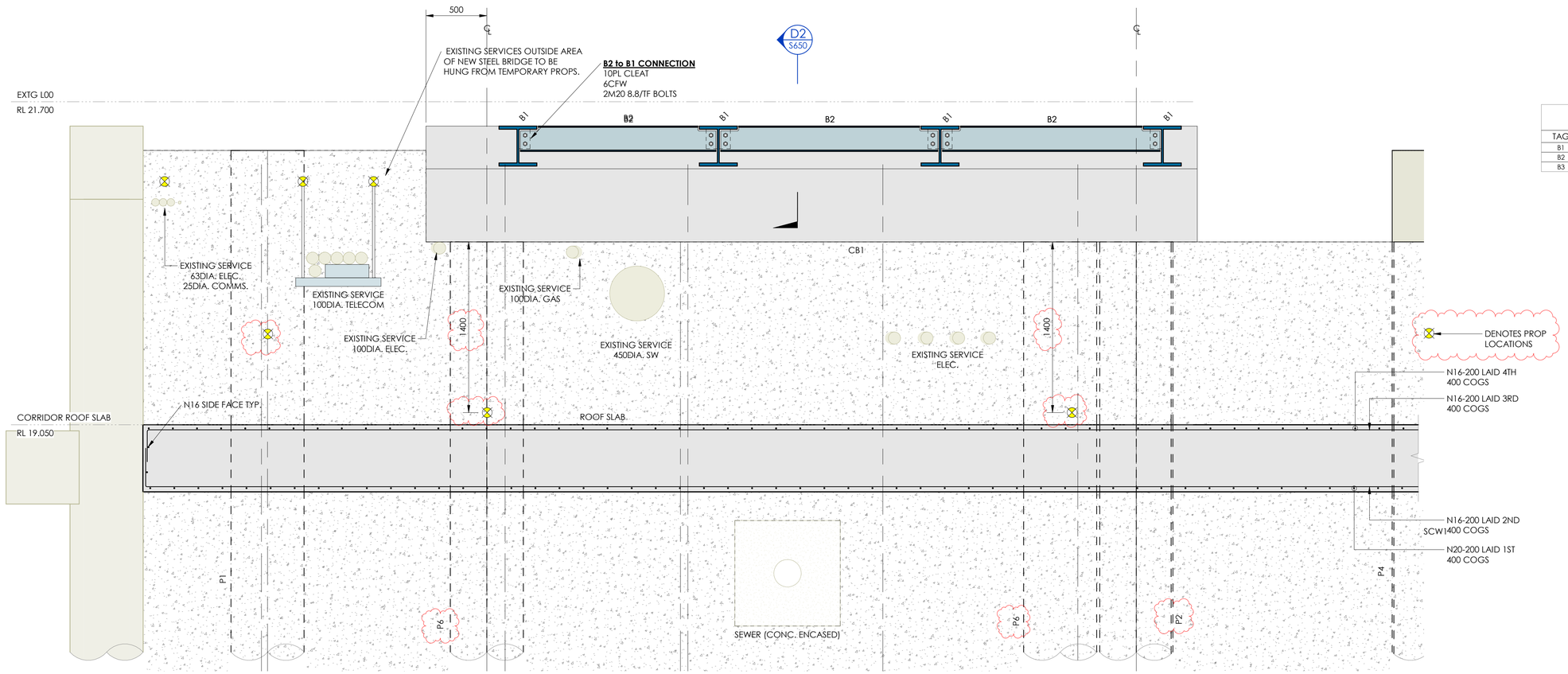
PROJECT
PROPOSED ATP TRAVELATOR STRUCTURE

ADDRESS
2 LOCOMOTIVE STREET EVELEIGH

PROJECT DETAILS
DESIGN C.G.
DRAWN R.L.
DATE SEPT 19
DRG SIZE A1
SCALE As indicated
PROJECT MGR M.M.
WWW.JN.COM.AU

19010921
S550 F

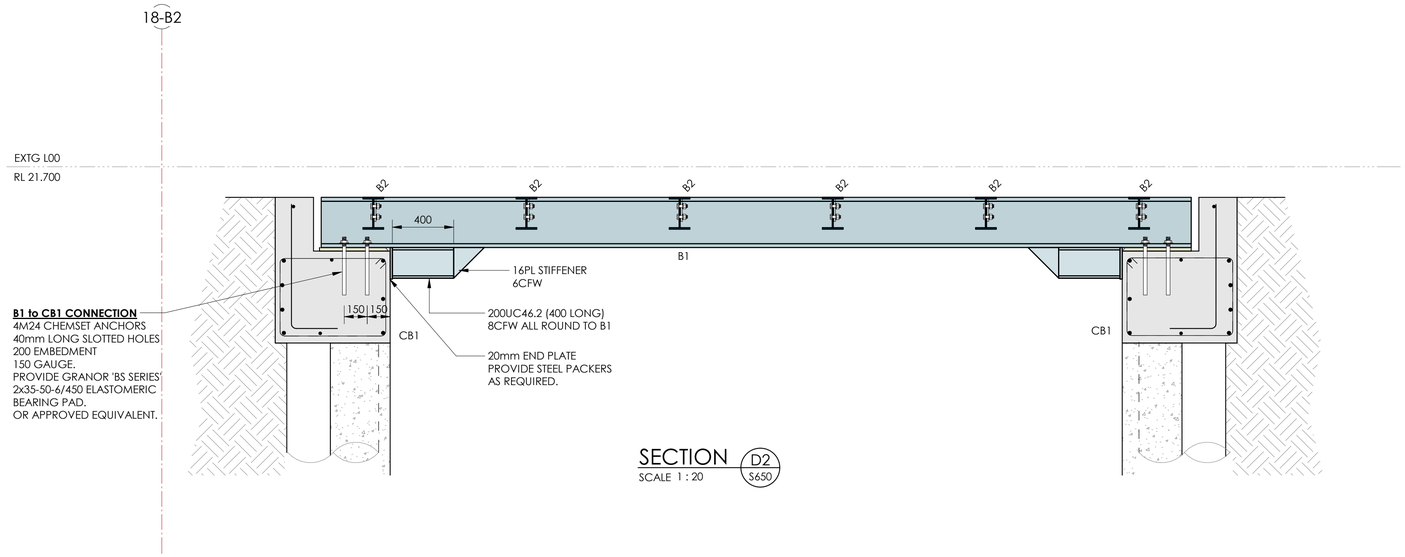
No	DATE	DESCRIPTION	BY
B	11.10.19	REISSUED FOR TENDER	RL
C	08.11.19	ISSUED FOR CC	RL
D	13.11.19	ISSUE FOR FINAL APPROVAL	RL
E	10.12.19	ISSUED FOR CONSTRUCTION	RL
F	15.01.20	REVISED AS CLOUDED	RL



STRUCTURAL FRAMING SCHEDULE

TAG	MEMBER	MEMBER SIZE	COMMENTS
B1	BEAM	310UC137	
B2	BEAM	200UB29.8	
B3	BEAM	460UB82.1	WITH 16PL T&B

DETAIL
SCALE 1 : 20 (D1 / S550)



SECTION
SCALE 1 : 20 (D2 / S650)

Responsive Engineering

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MAINLAND CIVIL

STATUS
CONSTRUCTION

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DISCIPLINE
STRUCTURAL DESIGN R18

DRAWING TITLE
SECTIONS & DETAILS - SHEET 1

PROJECT
PROPOSED ATP TRAVELATOR STRUCTURE

ADDRESS
2 LOCOMOTIVE STREET EVELEIGH

PROJECT DETAILS

DESIGN	C.G.
DRAWN	R.L.
DATE	SEPT 19
DRG SIZE	A1
SCALE	1 : 20
PROJECT MGR	M.M.

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19010921

S650 F

Appendix D Procedures

Site Surface Maintenance		EMP01
Responsibility:	Site Manager	
Frequency:	Continuous	
Objective:	To prevent potential exposure to environmental impact present in the sub-surface	

Procedure

The site surface shall be maintained, to prevent contact with impacted sub-surface soils. This shall include assurance that:

- Excavations shall not be undertaken;
- Stabilised DGB/crushed deco granite capping arrangement surrounding heritage display items, asphaltic hardstand and gravel capping material (>100 mm) located in the northern walkway portion of the site shall not be breached; and
- Concrete hardstand shall not be breached;

unless undertaken in accordance with the specific requirements of the LTEMP (**EMP02** and **EMP03**).

Regular inspection (six monthly) of the capping arrangement shall be undertaken by maintenance personnel as directed by the Site Manager to identify any obvious signs of breaches/ deterioration of the physical barrier (concrete pavement/heritage capping arrangement).

Should any of the above be noted during inspections, reinstatement of the surface condition will be required via implementation of **EMP03**. Further reference should be made to **EMP08** regarding contingency actions in the event of an incident/unintended breach of the surface resulting in exposure of impacted material to site workers/occupants.

A register of the completion of visual inspections and documentation associated with works completed subsequent to inspections identifying the need for reinstatement will be maintained by the Site Manager. External reporting of the register by the Site Manager is considered not necessary, however, the register will be made available to environmental/planning officers upon request in the event of a site inspection.

The register of inspections will include (but not be limited to) the following:

- Time and date of the inspection and/or incident;
- Details of any visual indications of capping layer breaches or deteriorations observed;
- Details regarding the cause (suspected or known) of the breach/deteriorations;
- Details and documentation associated with works undertaken in the reinstatement of surface condition in accordance with **EMP03**; and
- Details of any systems or procedures implemented to prevent similar breaches or deteriorations in the future.

In the event that the pavements are unintentionally breached during site activities, reinstatement in accordance with **EMP03** will be required to rectify the site management system.

Excavation Works		EMP02
Responsibility:	Site Manager	
Frequency:	As required for excavations beneath the physical barrier	
Objective:	To minimise exposure of contractors and site personnel to impacted sub-surface soils during future excavation works beneath the site.	

Procedure

Fill material impacted with asbestos, PAHs, TRH and heavy metals has been retained beneath the site detailed in **Appendix A**.

Given the heterogeneity of fill materials, historical industrial land use activities, and extensive observations of rubble and other building-material related inclusions on historical borehole logs, potential remains for asbestos impacts to occur within fill material as unexpected finds. As such, an unexpected finds protocol/procedure is required to manage any such unexpected finds (refer **to EMP13**).

Measures are required to be put in place to eliminate potential exposure to workers to impacted fill where their work requires that the physical barrier (concrete slab) is breached.

Potential exposure may occur in the event of a breach of the physical barrier consequent of the presence of contaminated soils via dermal contact, ingestion or inhalation.

Access to the subsurface material at the site will be controlled by way of a Works Permit provided by the Site Manager to the on-site workers, including site employees, subcontractors and infrastructure maintenance personnel (Water, gas, telecommunications *etc.* providers in addition to building and landscape maintenance personnel). Issue of a Works Permit will be dependent upon preparation of an appropriate Safe Work Method Statement (SWMS) including Job Safety Analysis in addition to any other appropriate documents which may be appropriate for the proposed works.

The SWMS to be submitted to the Site Manager shall include as a minimum:

- Contractors undertaking ground disturbance works on the site shall be notified prior to the commencement of any site works of the occurrence of PAH, TRH, heavy metal and asbestos impacted fill in selected areas of subsurface fill material beneath the site.
- Excavation/disturbance works shall only commence where appropriate precautions are taken, such as use of the correct PPE, as outlined below.
- Implementation of dust, noise and sediment control procedures as outlined in **EMP04** to **EMP06** inclusive during all site excavation works.
- The area of the excavation/disturbance shall be barricaded to prevent access of unprotected site personnel and contractors.

All workers likely to be in contact with contaminated soil beneath the marker layer are required to meet the applicable personal protective equipment (PPE) requirements as outlined below, and must have undertaken Occupational Health and Induction Training as defined in Part 8.2 of the *Work Health and Safety Regulation 2017* (or as updated). Any person required to directly contact soils shall be required to wear the following PPE:

- Overboots; and
- Gloves.

Should asbestos impacts be encountered, or excavation works are advanced in the vicinity of areas where asbestos is identified as retained at the site, then PPE requirements as outlined in **EMP13** are required to be implemented.

Excavated materials are to be separated during excavation works as applicable, into either concrete capping or alternative material, fill materials or natural soils. They are then to be stockpiled separately in a manner that minimises the potential for contamination of materials other than the impacted material at the site. In addition, impacted soils are to be placed either on an impermeable surface, such as builder's plastic, or within a skip or similar container during works to address the potential for impacts to areas surrounding the excavation.

At the completion of excavation/disturbance works, **EMP03** shall be implemented for the reinstatement of disturbed areas. Where materials (soil) disturbed during excavation works cannot be returned to the excavation, this material shall be disposed of off-site in accordance with the requirements of NSW EPA *Waste Classification Guidelines Part 1*: *Classifying Waste* (2014) or as updated by NSW EPA.

It is noted that implementation of the guideline requirements will include the completion of a waste classification assessment prior to off-site disposal of the material to a suitably licensed waste facility. Copies of all documentation, including the classification report, transport and waste facility dockets will be retained by the site manager.

The Site Manager, with specialist assistance as appropriate (qualified contaminated land/environmental consultant or alternatively the appointed Site Auditor), should undertake inspections at the commencement, during and following the completion of the works to confirm the following:

- The work has not resulted in any potential adverse human health or environmental impact; and
- The site capping system has been appropriately reinstated.

Reinstatement of Excavation Works	EMP03
Responsibility:	Site Manager
Frequency:	As required for future excavations within the site boundary
Objective:	To prevent exposure of site users to impacted sub-surface soils following the completion of future excavation works within impacted areas of the site.

Procedure

Following implementation of **EMP02: Excavation Works**, or where unintended breaches of the capping has occurred, site reinstatement works shall be undertaken in accordance with the following procedures.

Works associated with penetrations or intrusions of the permanent capping arrangement must ensure that reinstatement includes installation of a vapour proof seal (possibly including a membrane) such that potential vapour migration through a preferential pathway is minimized.

In all instances where impacted material is returned to excavated areas, this shall be completed directly from the storage container or impermeable surface in a manner which minimises the potential for contamination of the ground surface beyond the excavation footprint.

Any soil removed from the excavation shall be reinstated in the same stratigraphic sequence which it was removed in, or suitably clean materials be imported and used as backfill. In addition, the capping arrangement shall be re-instated to equivalent or greater thickness than the existing capping arrangement, where breaches occur.

The contractor will be responsible for installing a clean capping layer as discussed in **Section 2.2** and for supplying survey drawings as required to document the completion of installation of this layer during works.

The Site Manager, with specialist assistance as appropriate (qualified contaminated land/environmental consultant or alternatively the appointed Site Auditor, where required), will complete inspections during site activities to verify the completion capping layer installation during backfilling.

It is also noted that, in addition to site contamination management requirements, the Site Manager may require implementation of procedures to ensure the suitable compaction of backfilled areas.

Stormwater and Sediment	EMP04
Responsibility:	Site Manager
Frequency:	Continuously during any future Ground Disturbance works within the Site
Objective:	To minimise sediment migration during site maintenance, utility installation/maintenance works and / or future development works

Procedure

Sediment controls are required to prevent the generation and consequent migration of sediment from works areas and stockpiles that may potentially be formed by future ground disturbance works (e.g., installation of new/additional, underground utilities).

The following controls shall be implemented:

- During excavation works, all care must be taken to minimise the areas of concrete hardstand (physical barrier) disturbance which will result in exposed soil;
- Stockpiles will be placed on dedicated plastic-lined parts of the site to prevent contamination of exposed surface soils or spread of stockpiled material across remaining areas of the site;
- Stockpiles will be covered if left for more than 24 hours;
- Re- instatement of physical barrier in any resulting bare areas on the site as soon as practically possible;
- During excavation works, installation of sediment controls at down-gradient extent of the works area and in the vicinity of any on-site drainage structures (drains, pits, etc.), in accordance with Department of Housing '*Managing Urban Stormwater Soils and Construction'*. Appropriate inspection and maintenance of sediment controls will be completed for the duration of works; and
- Re-surfacing of reinstated excavations must be undertaken as soon as practically possible in accordance with the requirements as described in **EMP03: Reinstatement of Excavation Works**.

Dust	EMP05
Responsibility:	Site Manager
Frequency:	Continuously during any future excavation works
Objective:	To minimise dust emissions from site maintenance, utility installation/maintenance works and / or future development works

Procedure

The impacted soil underlying the site has been covered with a permanent physical barrier comprising concrete hardstand to form a complete and permanent barrier between general site users and the impacted soil. As such, any dusts which may be generated from the final finished ground levels at the site during normal site use will not be associated with contaminated material underlying the site.

During any future ground disturbance works which may include exposure of potentially impacted material, dust emissions require to be minimised to the extent that no dust emissions are visible at the works area boundaries. Controls for each potential dust generating activity that will occur during the site development shall be implemented:

- During ground disturbance works, all care must be taken to minimise the areas of exposed soil;
- Where visible dust is observed during excavation works, a fine water spray will be utilised to control the dust;
- Dust/shade cloth will be installed on all temporary construction fencing at the extent of the works area to minimise the potential for transport of dust beyond the works area boundaries; and
- Dust controls must be implemented around subsequent stockpiled soils. Any dust controls will require regular inspection and maintenance to ensure effective operation until stockpiled material is returned to the excavations or removed from site.

Re-surfacing of reinstated excavations must be undertaken as soon as practically possible.

<u>Stockpiling</u>

In the event that stockpiling of excavated material is necessary during works, the following should be implemented:

- Minimisation of stockpile heights and batters to reduce exposed faces;
- Minimising stockpiles with high proportion of fines at the stockpile surface;
- If left for more than 24 hours, the stockpile is required to be covered (**EMP04**); and
- Consideration of regular dampening stockpiles with a fine water spray or covering with appropriate geotextile material during unfavourable weather conditions.

<u>Trucks</u>

Where excavated material is subject to off-site disposal, all loads will be covered on the completion of loading and prior to vehicle movement off-site. Truck movements will be kept to a minimum and trucks will be required to use sealed (paved) surfaces whenever possible to minimise dust generation.

Training		EMP06
Responsibility:	Site Manager	
Frequency:	As required	
Objective:	Suitably trained personnel will be available to implement the requirements of the LTEMP	

Procedure

The Site Manager, or nominated responsible party, shall ensure that any personnel engaged in the implementation of nominated tasks for which the Site Manager is responsible within the LTEMP have been provided with adequate training to manage the Site Contamination and Hazardous Materials conditions which may be encountered during site ground disturbance activities.

The Site Manager shall maintain records of personnel engaged in the nominated tasks and their relevant training/qualifications for the period of three years in accordance with **EMP10**.

In the event of future maintenance and/or construction works which will require implementation of **EMP01** and subsequent environmental management procedures, the Site Manager will ensure that all site workers (including employees, contractors and subcontractors) are familiar with the relevant aspects of this LTEMP and its requirements.

Works involving contractors and subcontractors will be managed in accordance with **EMP07**.

Contractor / Subcontractor Management	EMP07
Responsibility:	Site Manager
Frequency:	As required
Objective:	Ensure that all persons who may be exposed to contaminated material are suitably aware of conditions and requirements of this LTEMP

Procedure

Where future maintenance and/or construction works resulting in ground disturbance as may be required at the site, will include excavation/disturbance of impacted soils, the Site Manager is required to ensure that Contractors and Sub-contractors are advised of potential safety and environmental issues on site during site-specific induction training. This induction will include the occupational health and safety responsibilities, requirements and controls for all (sub)contractors working on site. In addition, all site workers, including contractors and subcontractors will be made aware that they are required to implement the provisions of this LTEMP.

All subcontractor activities will be monitored by the Site Manager, or a nominated representative to ensure compliance with the requirements of this LTEMP.

They shall be solely responsible for the health and safety of their employees and shall comply with all applicable laws and regulations. All contractors and subcontractors are responsible for:

1. Providing their own personal protective equipment;
2. Training their employees in accordance with applicable laws;
3. Providing medical surveillance and obtaining medical approvals for their employees;
4. Ensuring their employees are advised of and meet the minimum requirements of this LTEMP and any other additional measures required by their site activities; and
5. Designating their own site safety officer.

All contractors/subcontractors must sign an acceptance form prior to commencing work on site.

Part 6.5 of the *Work Health and Safety Regulation 2017* required that an employer of employees undertaking construction work must ensure that the employees have completed induction training as specified by the Regulation. In addition, the Principal Contractor (if required) must not allow any person to carry out construction work unless he/she is satisfied that the person has undergone OHS induction training, including:

- General occupational health and safety training for construction work;
- Work activity-based health and safety training (job specific training); and
- Site specific health and safety induction training.

The Site Manager shall require all contractors completing such works to maintain, for each person carrying out construction/maintenance works, for a period of three years:

- A copy of relevant statements of OHS induction training, or a statement indicating that the Principal Contractor is satisfied that the relevant OHS induction training has been undertaken; and
- A brief description of the site-specific training undertaken by the person.

Contingency Plan		EMP08
Responsibility:	Site Manager	
Frequency:	As required	
Objective:	Ensure that in the event of unplanned exposure of impacted materials all appropriate measures are implemented to minimise the risk to on-site personnel and the environment.	

Procedure

In the event that site operations or conditions result in a significant accidental or unintentional breach of the physical barrier (concrete slab floor) without the prior preparation of specific works/management procedures and implementation of appropriate exposure minimisation measures, the following shall be implemented:

- Isolation of the affected area via the placement of temporary barriers or other appropriate measures (i.e. plastic sheeting, clean sand, etc.) to prevent exposure to site personnel;
- Implementation of **EMP02** and **EMP04** to **EMP05** inclusive, with respect to personnel and site management; and
- Implementation of **EMP03** and other relevant provisions of the LTEMP as soon as practicable to reinstate the integrity of the capping/cover layer.

In addition, in accordance with SSD8517 (Bays 1-4A) and SSD 8449 (Bays 5-15) consent condition A11, the Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the applicant becomes aware of an incident. Subsequent notification must be given, and reports submitted in accordance with the requirements set out in Appendix 1 of the consent conditions.

Following implementation of these procedures for rectification of the site, consideration shall be given to the requirements of **EMP06** and **EMP09** to **EMP12** inclusive, in relation to documentation and renewal of the LTEMP to minimise the potential for future exposure of impacted material. The incident shall be documented within the activity register as outlined in **EMP01**.

Where considered appropriate by the Site Manager, appointed contaminated land consultant and/or the Site Auditor, validation of the impacted area will be completed following a breach of the capping layer to demonstrate that contamination of areas within the site beyond the excavation has not resulted in conditions with unacceptable risks to site users or the environment. This may include inspections, and or soil sampling within the site and subsequent analysis of samples for identified contaminants of concern at the site.

Following reinstatement of the capping/cover (physical barrier) layer following a significant accidental or unintentional breach, a formal review of the incident will be undertaken by the Site Manager with specialist assistance as appropriate (construction, occupational hygienist, site contamination consultant, *etc.*). The review will be tasked with identifying the cause of the incident and providing recommendations on alternative procedures or systems to be implemented at the site and/or within the LTEMP to prevent/minimise the likelihood of the incident reoccurring. Dependent upon the review outcome, amendment to the LTEMP as outlined in **EMP12** may be appropriate.

Non-Compliances with LTEMP		EMP09
Responsibility:	Site Manager	
Frequency:	As required	
Objective:	To ensure the LTEMP is implemented as intended.	

Procedure

Non-compliances with the intent and procedures of the LTEMP may occur during the implementation of the LTEMP. Such non-compliances may include events such as failure to maintain the integrity of permanently paved areas.

Where a non-compliance is identified by a responsible organisation, they shall inform the affected organisations and DPIE via compliance@planning.nsw.gov.au of the non-compliance in writing within seven days after the site manager becomes aware of, or identifies any non-compliances. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the non-compliance. Where a non-compliance with the LTEMP is identified by another organisation (in the activities of an alternate organisation), then they shall have the responsibility of informing the non-complying party in writing of the non-compliance. The non-complying party will be required to rectify the non-conformity as soon as possible, as per the requirements of the relevant procedure(s) where non-compliance has occurred.

Detail of the action taken to rectify the non-compliance shall be provided to each of the affected organisations in writing. Where a non-compliance cannot be rectified, then the LTEMP will require to be reviewed as per the requirements of **EMP12** LTEMP Review.

Record Keeping		EMP10
Responsibility:	Site Manager	
Frequency:	As required	
Objective:	Records of the implementation of the LTEMP require to be retained.	

Procedure

The Site Manager shall be responsible for the maintenance of all documents relating to the implementation of the LTEMP. This shall include any additional assessment undertaken, registers for the maintenance of the LTEMP (site inspection forms, works approval checklists, revised plans, *etc.*) and any relevant correspondence between the Auditor, the Site Manager, Contractors and/or any other party.

All records shall be retained by the Site Manager throughout the time of implementation of the LTEMP. In the event that the role of Site Manager is transferred from one organisation to another, control of all relevant (historical and current) documents will be transferred for safe keeping to the current Site Manager.

Audit of LTEMP Implementation		EMP11
Responsibility:	Site Manager	
Frequency:	Once every 24 months	
Objective:	The implementation of the LTEMP requires to be audited in accordance with EPA guidance publications to identify areas of non-compliance or partial compliance with relevant legislation/regulations and/or the requirements of this plan.	

Procedure

An environmental audit shall be undertaken every two years from commencement of the LTEMP to ensure ongoing compliance with the LTEMP. The audit shall be undertaken by an appropriately qualified contractor/consultant in general compliance with the DEC '*Compliance Audit Handbook*' (DEC, Feb 2006) and identify areas of non-compliance or partial compliance with the requirements of:

- Relevant legislation / regulations; and
- This plan.

The findings of the audit should be documented and form the basis of the management review process (**EMP12: LTEMP Review**).

Specific tasks that will be undertaken as part of the audit include:

- Review of records generated by the Site Manager, and their respective contractors to ensure they meet the intended scope of the LTEMP;
- Review of records generated by infrastructure maintenance contractors in relation to services underlying the site, to ensure that their activities have met the intended scope of the LTEMP; and
- Periodic review and inspection of the standard of surface cover on the site.

Where a non-compliance is detected during the audit process, then the non-compliance shall be informed as per the requirements of **EMP09: Non-Compliances with LTEMP**.

The Site Manager is required to maintain records of the audit review.

LTEMP Review	EMP12
Responsibility:	Site Manager Site Owner
Frequency:	Once every 24 months or when otherwise required
Objective:	The LTEMP requires review to ensure its continued appropriateness to be used on the site

Procedure

A review of the LTEMP shall be undertaken biennially by an appropriately qualified contractor/consultant in conjunction with the Site Manager. This review shall consider:

- The results of the LTEMP Audit as outlined in **EMP11**;
- Any non-compliances with the LTEMP that have been unable to be resolved;
- Practicalities and efficiencies of management measures and whether there are more effective ways to improve environmental compliance;
- Any changes in state or national environmental protection legislation or guidelines that impact any part of the LTEMP; or
- Any proposed changes in land-use of the site or adjoining sites which may impact upon exposure pathways.

In the event that Mirvac cease to be recognised as the Site Manager, a complete review of the LTEMP document and compliance measures will be necessary to identify suitable replacement LTEMP compliance mechanisms.

In addition, where a review identifies items which are required to be modified, or added to the LTEMP, then a revision of the LTEMP shall be prepared by a suitably qualified person and endorsed by an appointed NSW EPA Accredited Site Auditor.

Asbestos (as an Unexpected Find or in Previously Identified Locations)		EMP13
Responsibility:	Site Manager	
Frequency:	As required	
Objective:	Provide documented procedures to manage asbestos impacts	

Procedure

In the event asbestos (or suspected asbestos containing material) is encountered as an unexpected find during excavation activities, all site works should be suspended, the area barricaded off and the Site Manager notified.

The Site Manager, or nominated responsible party, shall ensure adequate training is provided and Works Permits and associated SWMS as required under procedure **EMP02** are updated to be to address *Safe Work Australia 2020* and *Work Health and Safety Regulation 2017* requirements.

Should ground penetrations be advanced in areas where asbestos has been previously identified as retained within fill, in addition to the standard construction PPE in procedure **EMP02,** any person required to directly contact soils which contain asbestos shall be required to wear the following PPE:

- P2 (or higher) class half face respirator; and
- Disposable coveralls made from materials which provide adequate protection against fibre penetration;

Where works result in disturbance of potentially asbestos impacted materials, periodic air monitoring for asbestos fibres will be conducted by an Asbestos Consultant/Hygienist on two representative workers or plant during intrusive works to confirm no unacceptable risks are posed to site workers. Monitoring will be conducted in accordance with *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres*, 2nd Edition (NOHSC: 3003 [2005]) and SWA (2020). Detection limits above 0.01 fibres/mL will require work to cease and a review of control measures in that area.

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