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# Appendix E

## Infrastructure plan

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YOUR PROJECT. OUR PRIORITY.

8 Styles Street

Kurri Kurri, NSW 2327

*Integrated Resource Recovery Centre (IRRC)*

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**INFRASTRUCTURE DELIVERY,  
MANAGEMENT AND STAGING PLAN**  
*(Rev B)*

Impact Project Management Pty Ltd  
October 2025

Prepared for:



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## 2. Executive Summary

The Infrastructure Delivery Management and Staging Plan for the Kurri Kurri Integrated Resource Recovery Centre (IRRC) outlines a comprehensive pathway to develop a cutting-edge facility capable of processing up to 450,000 tonnes of waste annually. This transformative project aligns with national and state goals to improve resource recovery, encourage circular economy practices, and support sustainable waste management.

The IRRC is designed to act as a vital infrastructure asset within the Hunter Region, meeting rising waste management needs while maintaining environmental and operational standards. By boosting the facility's capacity and adopting advanced technologies, the IRRC aims to divert about 382,500 tonnes of waste each year from landfills (≈85% recovery rate), substantially contributing to waste reduction goals.

### **Key highlights of this plan include:**

- The plan outlines a phased construction strategy to reduce disruptions, maintain operational continuity, and meet milestones effectively. Each phase, from site preparation to utility integration, has been crafted to comply with regulatory standards and industry best practices.
- Advanced fire protection measures—including fire hydrants (Building Code of Australia [BCA] Clause E1.3; AS 2419.1 – Fire Hydrant Installations), automatic sprinkler systems where required (BCA Clause E1.5; AS 2118.1 – Automatic Fire Sprinkler Systems), and detection and alarm systems (BCA Clause E2.2; AS 1670.1 – Fire Detection, Warning, Control and Intercom Systems)—will mitigate risks associated with waste processing. All systems will be designed and maintained per NSW Fire Safety Guidelines and verified through the Annual Fire Safety Statement (AFSS) process, ensuring regulatory compliance and operational resilience.

- To accommodate increased capacity, upgrades will include a 1500 kilovolt-ampere (kVA) kiosk substation built in accordance with Ausgrid and New South Wales (NSW) Distribution Network Service Provider (DNSP) standards, as well as BCA Part G3 – Electricity Networks. Firefighting water supply will continue using the existing dedicated fire water storage tanks in compliance with BCA Clauses E1.3 and E1.5 and AS 2419.1 – Fire Hydrant Installations. Future municipal utility connections for potable water and wastewater will be coordinated with Hunter Water and adhere to the Plumbing Code of Australia (PCA) requirements. All upgrades will be planned with staged Construction Certificate (CC) approvals to ensure operational continuity and meet the Annual Fire Safety Statement (AFSS) obligations.

This plan addresses the requirements set forth by the Secretary’s Environmental Assessment Requirements (SEARs) and demonstrates a commitment to sustainable development, operational efficiency, and regulatory compliance. Key objectives include:

- Detailed infrastructure staging and coordination with utility providers such as Ausgrid and Hunter Water.
- Compliance with safety and operational guidelines to mitigate potential impacts.
- Development of a scalable, efficient facility that aligns with regional and state waste management strategies.

### 3. Background Documentation

#### Key documents reviewed for this report include:

- *The Scoping Report for Kurri Kurri Integrated Resource Recovery Centre (May 2024)* provides an overview of the project's scope, site, staging, and objectives.
- *Ausgrid Electrical Requirement Letters (February 2023)* - Details the electrical Infrastructure requirements, including possible configurations for maximum demand. (*Annexure F - Ausgrid – Preliminary Enquiry – Response Letters*)
- *Hunter Water - SEARs comments on proposed State Significant Development (SSD-71547218) – Kurri Kurri Integrated Resource Recovery Centre - Styles Street, KURRI KURRI (June 2024)* (*Annexure D - Hunter Water SEARs advice - SSD 71547218*)
- *Structural Plans by Thomas and Associates Consulting Pty Ltd (Rev M, August 2025)* - Outlines site layout, building designs, access paths, fire systems, and utility placements. (*Annexure A – Architectural Plans by Thomas and Associates Consulting Pty Ltd (Rev O - 2025)*)
- *Max Demand Calculations for Electrical, Wet Fire and Potable Water by Marline Building Services Engineers* - Outlines the estimated maximum electrical demand breakdown.
- Annexure H - Maximum Demand Calc P2)

## 4. Introduction

The Integrated Resource Recovery Centre (IRRC) significantly upgrades the existing Resource Recovery Facility (RRF) in Kurri Kurri, New South Wales. Located in a designated heavy industrial zone, the project increases waste processing capacity from 90,000 to 450,000 tonnes annually, aligning with national and state waste management policies. The IRRC will unify operations across five neighbouring properties: Lot 1DP1128108 - 1 Styles Street, Lot 5 -DP1309128 - 8 Styles Street, Lot 6 -DP1251190 - 10 Styles Street, Lot 3 -DP586741 - 147 Mitchell Avenue, and Lot 4 -DP586741 -145 Mitchell Avenue, creating a central hub for efficient, large-scale resource recovery activities. The development aims to meet the growing demand for waste management services across the State while making a meaningful contribution to Australia’s circular economy goals. By increasing recovery rates to 85%, the IRRC is expected to divert 382,500 tonnes of waste from landfill each year, helping to reduce environmental impacts and produce valuable resources. Its strategic location allows smooth integration with existing transport routes and utility services, thanks to its proximity to the Hunter Expressway and municipal utilities.

Key site upgrades include:

- Upgrade and addition of advanced automated and manual sorting equipment (enhancing the existing systems).
- Construction of new material storage bays, auxiliary operations areas, and residual waste processing buildings.
- Enhanced fire suppression systems, including hydrants and connections to existing water storage tanks.
- Infrastructure to improve accessibility, such as weighbridges, new access points, and delineated parking for heavy vehicles and staff.

The project is classified as State Significant Development under the Environmental Planning and Assessment Act 1979 and adheres to strict environmental and safety standards. Its phased approach ensures operational continuity while meeting regulatory requirements. The project will be funded by the company where Central Waste Station is a subsidiary, First Sentier Investors (Australia) Services Pty Ltd (trading as Igneo Infrastructure Partners). Igneo Infrastructure Partners is the unlisted infrastructure arm of the First Sentier Investors Group (“FSI”), one of Australia’s largest asset managers, overseeing more than A\$217 billion (as at 30 June 2022) for institutional investors, pension funds, wholesale distributors and platforms, financial planners and their clients worldwide. FSI is ultimately owned by Mitsubishi UFJ Financial Group.

## 5. Infrastructure Requirements and Servicing Strategies

Central Waste Plant Pty Ltd has consulted key stakeholders, including accredited Level 3 service provider (ASP3) engineers, Marline (building services engineers), and other specialists, to evaluate the capacity of existing infrastructure against the proposed facility's power and water requirements. These initial assessments consider the operational load of new equipment and planned site expansions, ensuring technical feasibility and compliance with regulations.

### 5.1. Electrical Servicing

The IRRC requires electrical infrastructure upgrades to support its expanded operational capacity. A high-level assessment by an ASP3 designer, in collaboration with Marline (building services engineers), confirmed that upgrades are necessary to facilitate the proposed expansion.

Direct Engineering (ASP3 Designer) submitted two preliminary enquiries to Ausgrid during the early design phase, which resulted in response letters identifying potential upgrade requirements. See *Annexure F - Ausgrid – Preliminary Enquiry – Response Letters*.

The concept design has captured Ausgrid's recommendations from these referenced letters. The revised electrical layout aligns with the response for 135 Mitchell Avenue, with a new application to be submitted to Ausgrid for a 1500 kilo-Volt (kV) Amps (A) connection, aligning with the Electricity Authorities (Ausgrid's) capacity. The ASP1 Electrical Infrastructure scope will include the following:

- 11kV cabling (underground), including installation of a new 11kV straight-through joint North of Styles Street, and;
- Replacement of existing HV joint located at Mitchell Avenue, incorporating the undergrounding of the existing overhead electricity line along the frontage of Mitchell Avenue (Necessary to facilitate safe and unobstructed heavy vehicle access to the new site entry at 147 Mitchell Avenue).

The updated design advises two geographically segregated Low Voltage (LV) supply zones: See *Figure 1 – Ausgrid Concept Design*:

- The existing 1500kVA (Identified as HS78823 in *Annexure B - Concept Electrical Plan - CWS Kurri Kurri*) kiosk will supply Lot 1 DP1309128 - 8 Styles Street, Lot 6 - DP1251190 - 10 Styles Street, and Lot 3 - DP586741 - 147 Mitchell Avenue, including the new Weighbridge Shed, Offices and the existing Workshop (proposed for metal processing in the future). The total calculated load of 1263A (excluding 90% diversity) is within the 2000A rating of the existing kiosk and switchboard.

- A new 1500kVA kiosk substation will service Lot 1 - DP1128108 - 1 Styles Street and Lot 4 - DP586741 - 145 Mitchell Avenue, supporting the proposed Residual Waste Recovery Plant Shed in line with Marline’s maximum demand calculations.

Refer to Annexure B - Concept Electrical Plan - CWS Kurri Kurri for the Concept Electrical Design and to Annexure F - Ausgrid – Preliminary Enquiry – Response Letters and Annexure G - Central Waste - Facility Material Movement Diagram for preliminary Letters.

### Ausgrid Network Requirements

The facility will have an upgraded electrical service configuration to meet operational demand:

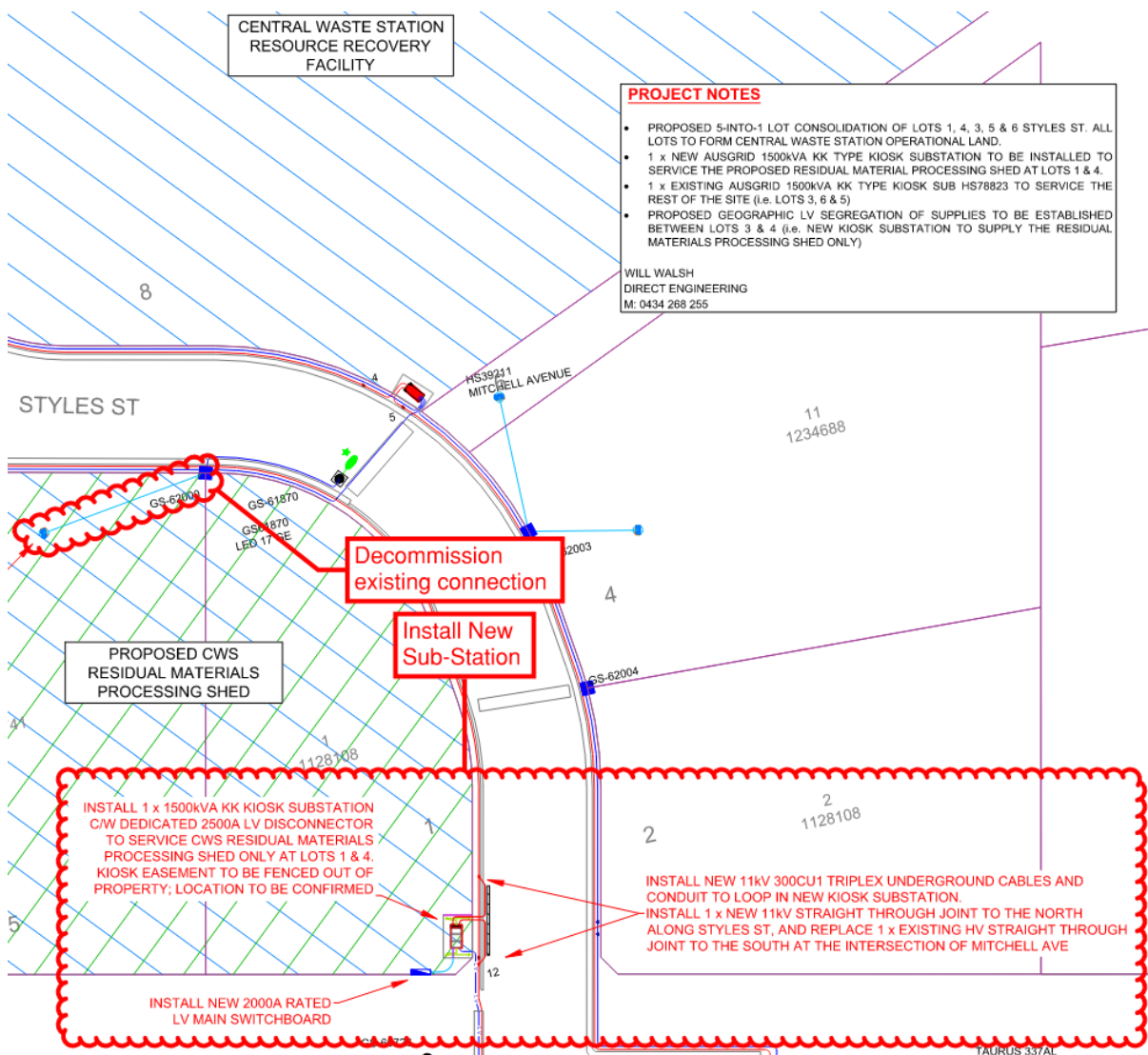


Figure 1 – Ausgrid Concept Design

### *New 1500 KVA Kiosk Substation*

- Installation of a 1500kVA KK Kiosk substation with a dedicated 2500A LV disconnecter to serve the new Residual Waste Recovery Plant shed only at Lot 1 - DP1128108 - 1 Styles Street and Lot 4 - DP586741 - 145 Mitchell Avenue.
- Install new 11kV 300cu1 triplex underground cables and conduit to loop in the new kiosk substation to the Ausgrid infrastructure.
- Install an 11kv straight-through joint to the North along Styles St and replace the existing HV straight-through joint to the south at the intersection of Mitchell Ave.

### *Substation and Transformer Placement*

- The existing 1500kVA KK-type Kiosk Sub HS78823, located at the North/West corner of Lot 1 DP1309128 of 8 Styles Street, will stay in its current position. However, the existing main switchboard will need localised modifications based on detailed design to fit the larger LV submain cables and protective devices.
- The new 1500kVA KK Type Kiosk, equipped with a dedicated 2500A LV disconnecter to service the Automated Processing Plant located in the south-west corner, will require an easement benefiting Ausgrid within the current Lot 1 - DP1128108 - 1 Styles Street. Ausgrid will maintain it as per Ausgrid's NW000-S0065: NS212 Integrated Support Requirements for Ausgrid Network Assets.
- The New 2000A-rated LV Main Switchboard will be installed outside the Residual Waste Recovery Plant shed. All installations will be as per design by a suitably qualified ASP3 Designer and completed by a suitably qualified ASP1 Electrical Contractor, in accordance with Ausgrid's NW000-S0022: NS114 Electrical Design and Construction Standards for Chamber Sub Stations, including fire safety setbacks and compliance with structural safety measures.
- The Existing service to lot 1 DP1309128, fed through the pillar from 1500kVA Kiosk Sub HS39211, will be decommissioned and not utilised to supply power to the facility.

## 5.2. Water / Sewer Servicing

The IRRC will require upgrades to hydraulic infrastructure to support increased capacity and service new facility structures, including fire safety and suppression systems and based on flow and pressure tests from Hunter Water, Marline (building services engineers) assessed the existing Hunter Water infrastructure to evaluate its capacity to meet projected water and wastewater demands.

Based on hydraulic maximum load calculations, the hydraulic engineers developed a preliminary design incorporating existing service locations and outlining the necessary upgrades, ensuring the infrastructure can support the IRRC's complete operational requirements. (see *Annexure I - Concept Hydraulic Plan*).

Hunter Water has been consulted throughout the design process, with inputs provided by Hunter Water in response to the SEARs application. (see *Annexure D - Hunter Water SEARs advice - SSD 71547218*). The Project Delivery Team and Site Principles met with Hunter Water on August 19th, 2025, to discuss existing infrastructure planning before lodgement of the S50 application per Hunter Water's approval pathway.

### *Wet Fire*

Given the critical nature of wet fire safety, a suitably qualified Hydraulic Engineer has completed investigations and design work to assess fire system requirements and confirm the proposed expansion's compatibility with the existing infrastructure. (see *Annexure I - Concept Hydraulic Plan*).

The facility has a 999,000-litre underground storage tank to support the fire sprinklers and an above-ground pump room with two diesel pumping engines. These engines drive vertical turbine pumps (primary and backup) that supply water to the sprinkler system at engineered pressures and flows, servicing the site's existing facilities.

Marline (Hydraulic Engineers) has assessed the site's existing wet fire infrastructure and confirmed that the current system can adequately accommodate the additional Fire Hose Reels, Fire Hydrants, and Fire Sprinklers needed to adequately cover the wet fire requirements for the IRRC's expansion.

- The servicing strategy will address operational Wet Fire safety requirements, noting:
- Hunter Water has sufficient capacity for pressure and flow to support the water infrastructure needed to support the new fire hydrant system demands.
- Existing firefighting water storage tanks with a capacity of 0.999ML and backup pump

systems will be used to ensure regulatory-compliant fire suppression.

### Potable Water Requirements

The Mechanical Engineers (Marline) have assessed the current maximum demand of the proposed upgrades on the Potable Water requirement by reviewing the upgrades fixture list and their respective water demands. They have determined that the Potable Water requirement is 1.6 litres per second as a maximum demand and confirm that this assessment is within the capacity of the existing infrastructure to support, indicating no upgrades are necessary. Only a local potable water tap-in is required. See *Figure 2 Max Water Demands*.

FIXTURE LIST					
FIXTURES	No.	FIXTURE UNITS SANITARY	LOADING UNITS WATER	SANITARY TOTAL FIXTURE UNITS	WATER TOTAL FIXTURE UNITS
WATER CLOSET	9	4	2	36	18
BASIN	9	1	1	9	9
SINK - KITCHEN (STANDARD TAP)	3	3	3	9	9
SHOWER	3	2	2	6	6
HOSE TAPS (20mm)	5	-	8	-	40
FIRE HOSE REELS ASSUME TWO OPERATING	6	-	15	-	90
TOTAL				60 FIXTURE UNITS	172 1.586 L/S
PIPE SIZE				100	40
METER SIZE					32
THIS CHART IS FOR HYDRAULIC CALCULATION PURPOSES ONLY. IT IS NOT TO BE USED AS A FIXTURE SCHEDULE					

WATER DEMAND	
BUILDING CLASSIFICATION	5/8
LARGEST FIRE COMPARTMENT FLOOR AREA	4800m <sup>2</sup>
FIRE REQUIREMENTS	
FIRE SPRINKLER	12 L/s
FIRE HYDRANTS	30 L/s
TOTAL FIRE REQUIREMENTS	42 L/s
POTABLE WATER	1.6 L/s

Figure 2 Max Water Demands

### *Sewer Requirements*

The facility is currently serviced by a 450mm trunk sewer main (servicing Kurri Kurri), which runs through Lot 6 - DP1251190 - 10 Styles Street and into Lot 3 - DP586741 - 147 Mitchell Avenue (Hunter Water Asset Locations – see Annexure C). An existing sewer manhole on this main has been identified as a connection point to support the wastewater needs of the new Weighbridge and Automated Processing Plant Shed. See *Annexure A – Architectural Plans by Thomas and Associates Consulting Pty Ltd (Rev O - 2025) – Drawing A102*

Hunter Water has been engaged through the SSD application process, with preliminary advice provided via the SEARs application notification through the NSW Planning Portal. (see - *Annexure D - Hunter Water SEARs advice - SSD 71547218*). Hunter Water raised potential access issues and suggested relocating the sewer main to ensure clear servicing access. The team is in ongoing consultation with Hunter Water to establish sewer augmentation parameters and identify the responsible party. Hunter Water previously approved the existing fence next to the trunk main. Hunter Water's current network expansion, due to extensive planned development in the surrounding area, is being considered in the assessment of the Trunk Main.

The site will feature:

- Interconnection with existing 450mm Trunk Sewer Main.
- Possible Connection and Relocation of 450 Trunk Sewer Main.
- Connection to Hunter Water's newly constructed Trunk Sewer Main.

### 5.3. Road upgrade

A new deceleration lane is proposed along the northern side of Mitchell Avenue to accommodate heavy vehicles making left turns into the facility's new primary access point located at Lot 3 – DP586741 (147 Mitchell Avenue). The deceleration lane into 147 Mitchell Avenue was designed by EMM Consulting in accordance with section 5.2.2 of Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections (Austroads 2023). Furthermore, in accordance with section 7.3 of TfNSW Design of Roads and Streets (TfNSW 2024), the design speed is equal to the posted speed at speed limits of 50 km/h. For a design speed limit of 50 km/h, the minimum deceleration lane length is 40 m, including taper. Consultation has been undertaken with Cessnock City Council's Infrastructure and Development Services team to review the concept access arrangement. Council's feedback confirmed that formal consent (under Section 138 Roads Act) will be required for all works within the Mitchell Avenue Road reserve, which is a Council-owned asset.

Additionally, existing overhead electrical infrastructure along Mitchell Avenue's frontage will be undergrounded to meet clearance requirements for heavy vehicle movements. This task has been identified as a key early-stage utility upgrade and will be coordinated with Ausgrid through a suitably qualified ASP3 Designer and the relevant staging sections of work.

## 6. Development Staging

The Infrastructure Staging and Delivery Plan for the IRRC has been created to ensure smooth operations while reducing disruptions to waste processing. The project will be carried out in five main stages, as shown in the breakdown below:

- **Stage 1.1 & 1.2**– Expand waste processing capacity to 170,000 tonnes annually and initiate the approval application process for authority service infrastructure upgrades and lot consolidation within the project area.
- **Stage 2** – Construction of New Weighbridge and New Entry / Exit to Mitchell Ave
- **Stage 3** – Existing RRF Phased Upgrades and Construction
  - Phase 1 – Demolition of Existing Weighbridge Facilities and Delivery of Entry / Exit on Styles Street within Lot 5
  - Phase 2 – Construction of Existing Automated Processing Plant Shed & New Awning Construction
  - Phase 3 - Final New Extension to the Automated Processing Plant Shed and Integration of New Equipment
  - Phase 4 - Construction of Waste Storage Awnings
  - Phase 5 - Construction of Remaining Awning Structure
- **Stage 4** – Construction of New Residual Waste Recovery Plant Shed
- **Stage 5** – Existing Workshop Upgrade

Once the scope is confirmed upon completion of detailed design, moving towards the staged CC's, a structured 24-month construction timeline will be expanded during the detailed design phase.

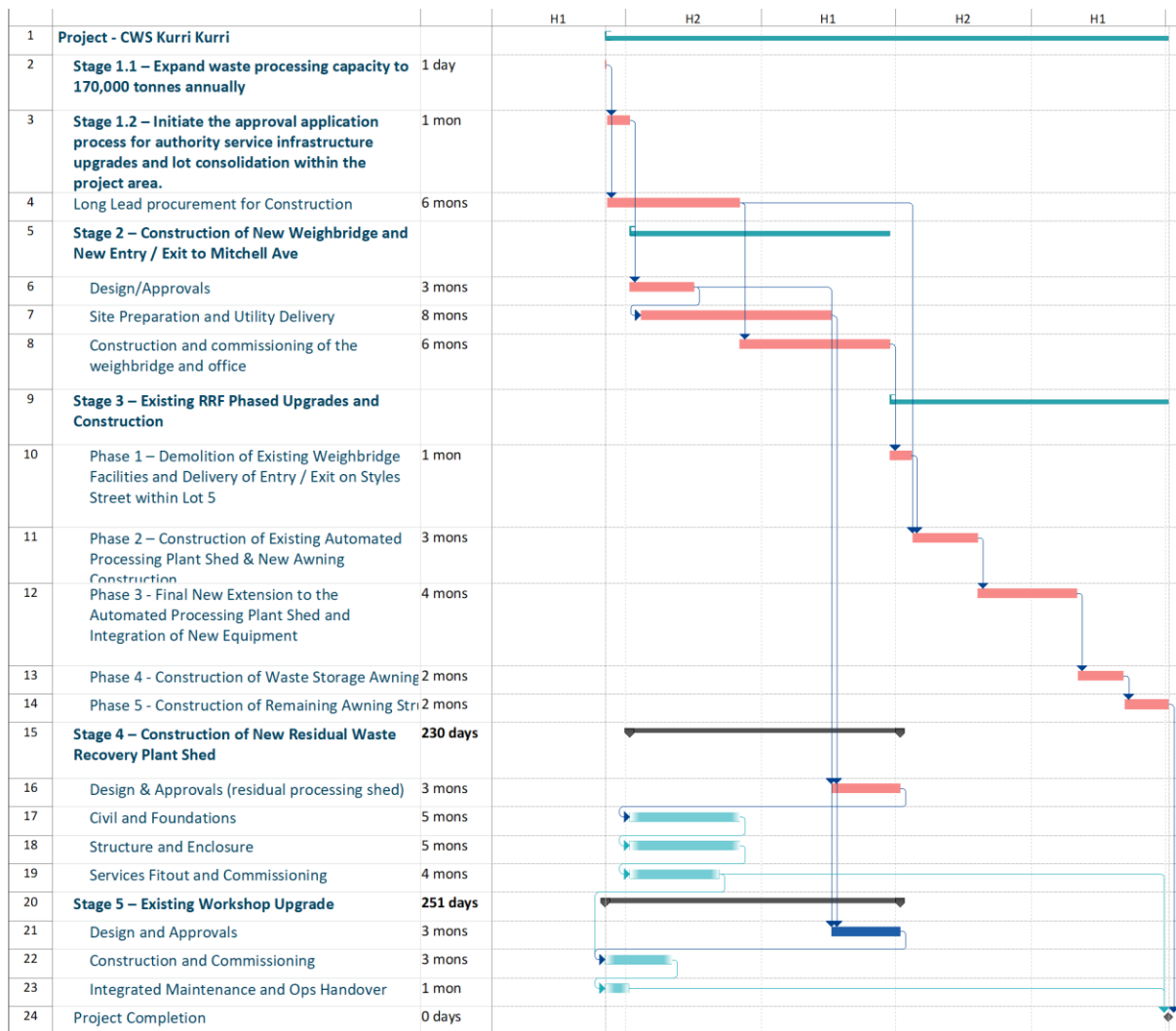


Figure 3 – Indicative Project Program, depicted below outlines an indicative delivery program. This program will be executed and overseen by an externally engaged Project Management Firm, ensuring details are expanded and confirmed to drive the success of the project within the timeframes shown.

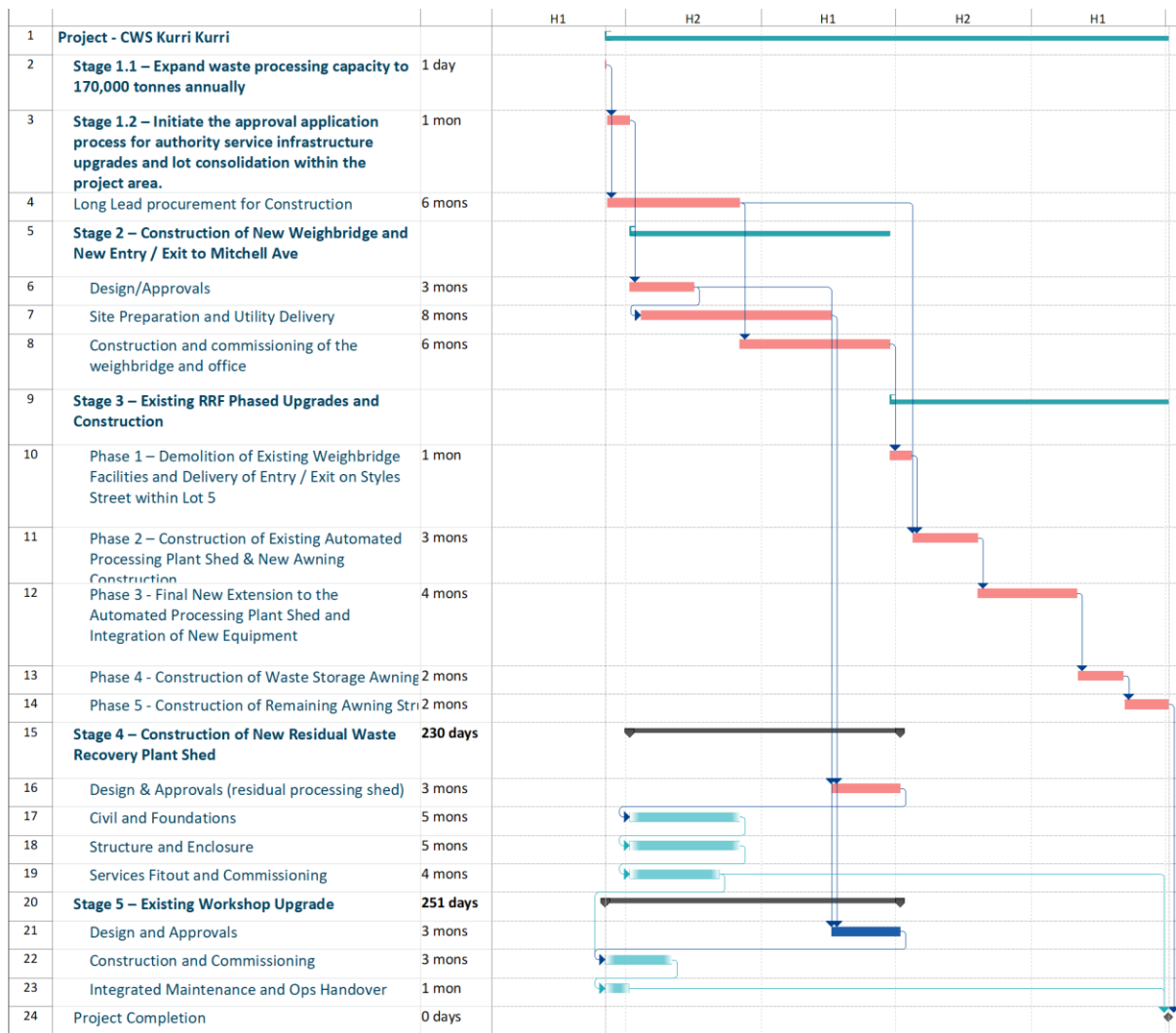


Figure 3 – Indicative Project Program

## 6.1. Stage 1.1 - Expand Waste Processing Capacity to 170,000 Tonnes Per Annum

CWS aims to raise its processing capacity from 90,000 to 170,000 TPA immediately after the SSD approval, by utilising existing infrastructure and making minor operational tweaks. No infrastructure expansion is needed for this initial throughput increase.

The RRF has a much higher potential throughput than what is allowed under the current development approval. The processing plant operates from Monday to Friday for about 6 hours daily, with the rest of the 8-hour shift taken up by breaks and housekeeping.

To achieve the target of 170,000 TPA, daily shifts would be extended to 10 hours over 6 days each week. The RRF can process an average of 75 T per hour, amounting to over 225,000 TPA based on the conservative hourly capacity for 10 hours and 300 days per year. Therefore, reaching the additional throughput would be feasible with the current RRF.

The following outlines how the increase will be achieved:

- The existing automated processing plant can handle up to 75 tonnes per hour, significantly exceeding the proposed volume.
  - Note: only 74.5% of the total waste delivered to the site is processed through the existing automated processing plant. The rest includes concrete (tipped directly into the yard for crushing), soils, aggregate, and other manually extracted materials such as steel and PVC Plastics.
- The amount of waste currently received at the RRF is only limited by the site's existing approval, and there is an unmet demand for additional waste recycling in the region to increase to 170,000 TPA instantly.
- The additional off-site waste sorting and storage facilities in Cardiff and Muswellbrook, introduced since the original approval, improve the processing capacity of the Kurri base facility through pre-sorting, allowing larger waste deliveries to the IRRC in a single truck delivery.
- Ongoing improvements since 2015 have boosted operational efficiency and lifted recovery rates.
- The proposed increase in throughput to 170,000 TPA will not significantly alter traffic volume because there will be a shift to receiving a larger proportion of waste using large-volume semi-trailers from external transfer stations, rather than skip trucks and hook lift trucks. As such, the increase will not place additional demand on existing utility infrastructure, except for increased electricity use due to longer plant operating hours.

## 6.2. Stage 1.2 - Initiate Service infrastructure Applications and Lot Consolidation

These applications will start once the SSD Approval is issued. Site preparation for the IRRC involves consolidating the lots to support the necessary infrastructure for future development stages.

The following steps outline the scope of work:

- Finalise utilities design with suitably qualified designers and submission of utility applications to relevant authorities for feedback, design approval, and finalisation, comprising:
  - Ausgrid
  - Hunter Water
  - NSW Fire Service
  - Cessnock City Council
- DP plans and 88B for consolidating the following lots, including utility land contributions necessary for authority utility infrastructure and Cessnock City Council.
  - Lot 1 DP1128108 - 1 Styles Street
  - Lot 1 DP1309128 - 8 Styles Street
  - Lot 6 DP1251190 - 10 Styles Street
  - Lot 3 DP586741 - 147 Mitchell Avenue
  - Lot 4 DP586741 - 145 Mitchell Avenue.

It is noted that the Project Team has had early discussions with the Council about consolidating the lots. The Council has expressed in-principal support for merging the lots.

## Graphical Representation

- The infrastructure plan for Stage 1 includes layouts of the consolidated lots, the positioning of the new permanent substation, and utility corridors. The graphical representations illustrate:
  - Concept Electrical Layout. See *Annexure B - Concept Electrical Plan - CWS Kurri Kurri*
  - Hunter Water Asset Locations – ARCGIS. See *Annexure C - Hunter Water Asset Locations - ARCGIS*
  - Hunter Water SEARS Advice – SSD 71547218. See *Annexure D - Hunter Water SEARS advice - SSD 71547218*

### 6.3. Stage 2: Site Preparation, Utility Delivery and Weighbridge Construction - Lot 3 (DP586741)

The facility will continue operating at a capacity of 170,000 tonnes per annum throughout construction. The staging has been considered to accommodate ongoing operations at this capacity. Temporary services in the form of Electricity (Temporary power connection and board) and Water (extended from existing site potable water supply) will be installed off existing site supplies, to support Stages 2 to 5; until permanent service connections are commissioned through Ausgrid and Hunter Water upon *approval* of the lot amalgamation, subject to a separate DA process through Cessnock Council. Stage 2 Area shown in *Figure 5 – Stage 2 Temporary Access*.

The existing shed shown in *Figure 4 – Stage 2 Figure 4 –*, will be demolished and decommissioned. Major upgrades include new weighbridges (for incoming and outgoing vehicles), an office shed, a slip lane, and a new entry and exit point on Mitchell Avenue to improve access and traffic flow. A temporary access route from Lot 6 DP1251190 - 10 Styles Street to Lot 5 DP1251190 - 8 Styles Street is shown. In, a system will be established to manage truck movements during the weighbridge transition in Stage 3, minimising downtime and ensuring efficient logistics.

A new deceleration lane is proposed along the northern side of Mitchell Avenue to accommodate heavy vehicles making left-hand turns into the facility's primary access point at Lot 3 – DP 586741 (147 Mitchell Avenue).

The upgrade forms part of the Stage 2 – Phase 2 infrastructure works and includes:

- Construction of a deceleration/slip lane and upgraded entry/exit configuration;
- Installation of new weighbridges (inbound and outbound) and an office shed;
- Establishment of new on-site car and truck parking areas and a pedestrian walkway;
- Demolition of the existing shed shown in Figure 4 – Stage 2; and
- Temporary access connection between Lot 6 DP 1251190 (10 Styles Street) and Lot 5 DP 1251190 (8 Styles Street) to support interim logistics and weighbridge commissioning.

These works have been sequenced as part of this Stage and Phase to maintain operational continuity at 170,000 TPA, with truck movements managed via a temporary traffic system until the new access becomes fully operational.

A Section 138 approval under the *Roads Act 1993* will be sought during the Stage 2 – Phase 2 works period to align with the infrastructure delivery schedule and ensure coordination with the site’s ongoing operational needs.

#### Delivery Staging

<b>Activity</b>	<b>Responsible Party</b>	<b>Timeframe</b>
Finalisation of detailed access and deceleration lane design drawings	Civil Designer / EMM Consulting	Q1 2026
Submission of Section 138 Roads Act application to Cessnock City Council	Impact Project Management on behalf of the Proponent	Q2 2026
Council assessment and approval	Cessnock City Council	Q3 2026
Construction of deceleration lane, tie-ins, weighbridges, and associated drainage	Head Contractor	Q3–Q4 2026

Upon completion, all car and truck parking at 147 Mitchell Avenue and 10 Styles Street, along with the associated pedestrian walkway and upgraded entry/exit arrangements, will be commissioned and handed over for Council inspection.

See the Staging plan for details. (See *Annexure E - Staging Plan*)





The following steps outline the detailed scope of work:

- **Utility Arrangements:**
  - Electrical Infrastructure: The main infrastructure will supply the site continuously, based on the current power supply at this stage, through authority approval, subject to minor site-specific disconnections to facilitate demolition and temporary power connections to support the construction of the new Weighbridge and related offices, carried out by a suitably licensed electrician.
    - Authority Electrical Substations: The ASP3 Design for the proposed new substation, as referenced in *4.1 Electrical Servicing* will be completed by this stage, and construction of the new Substation and associated cabling as approved by Ausgrid, will commence by a suitably qualified ASP1 Contractor. See *Annexure B - Concept Electrical Plan - CWS Kurri Kurri*
    - Installation of Electrical Substations and Transformer Infrastructure: Electrical works, including the 1500A LV configuration, will be installed following Ausgrid requirements. The KL kiosk and KR HVC substations will be integrated to support both standard and peak operational loads, as detailed in Ausgrid Response Letters 700008251 and 700008252. See *Annexure F - Ausgrid – Preliminary Enquiry – Response Letters*.
  - Water Supply: Temporary construction water will be supplied via temporary U-PVC extensions installed by a licensed plumber from existing potable water sources on site, as follows:
    - 1x connection adjacent to the existing sprinkler pump house for dust suppression during the demolition of the existing weighbridge and to assist in finishing the new proposed concrete pavement under the weighbridge; and
    - 1x existing connection augmented around the demolition of the existing shed, to facilitate the construction of the new slip lane and weighbridge/office.

- Final Testing and Utility Readiness: All utility systems, including water, wastewater, and electrical, will undergo testing and commissioning. Interim on-site electrical connections will stay operational until authority approvals require connection for the release of some OC's, and septic systems will stay operational until municipal sewer connections are established, which is expected by 2026 as part of Hunter Water's upgrades.
  - On commissioning and as required, water and power infrastructure will be formally handed over to Hunter Water and Ausgrid for ongoing operation, ensuring regulatory compliance and long-term serviceability.
  
- **Demolition of the existing shed/container on Lot 3 DP 586741:**
  - Demolition to facilitate the construction of the new weighbridge and office shed.
  - Remove redundant structures, including recycling concrete slabs within the existing shed.
  - Clearing and grading of hardstand areas to prepare for infrastructure installation.
  
- **Construction of Weighbridge, Office Shed, Slip Lane, and New Entry/Exit off Mitchell Avenue:**
  - Establishing preliminary services such as electrical lead-ins, water lines, and sewer lines to support new structures before foundation installation, ensuring readiness for commissioning.
  - Constructing foundational elements in compliance with the relevant authorities' standards for the new slip lane off Mitchell Avenue.
  - Installing the foundation and structures for the slip lane, entry/exit, and weighbridge/office shed according to approved plans.
  - Completing the construction of the Weighbridge through a staged OC process and commissioning it accordingly, ready for operations. s

- **Completion of Hardstand Civil Infrastructure:**
  - Designing parking facilities and access routes for the Stage 3 switch.
  - Establishing a temporary entry point from Lot 6-DP1251190 - 10 Styles Street to Lot 5-DP1251190 - 8 Styles Street, as shown in (Figure 2), behind the existing weighbridge to facilitate a thoroughfare for operational traffic, leading into Stage 3.

### **Deliverables**

Upon completion of stage 2, the following deliverables will be achieved:

- Installation of conduits, temporary electrical substations, and water feeds to maintain a continuous supply during construction.
- Interim connections for electricity, water, and wastewater in place until permanent authority connections are commissioned.
- Demolition and removal of the existing shed and redundant structures.
- Recycling of concrete slabs where possible.
- Cleared, graded, and levelled hardstand areas ready for permanent infrastructure installation.
- Constructed slip lane foundations and preliminary access routes for construction and operational traffic.
- Temporary entry established from Lot 6 (10 Styles Street) to Lot 5 (8 Styles Street) as a thoroughfare during transition works.
- Completed construction of the new weighbridge and office shed, commissioned through the staged Occupation Certificate (OC) process.
- A fully functional slip lane and a new Mitchell Avenue entry/exit were constructed and integrated into site logistics.

- Installed and operational preliminary site Fire safety, which may include equipment such as fire extinguishers. These Temporary Fire Safety measures will be tasked to the Head Contractor and managed through the following obligations under the Work Health and Safety Act 2011 (NSW) and WHS Regulation 2017:
  - WHS Management Plan (WHSMP)
  - Safe Work Method Statements (SWMS)
  - Emergency Management Plan (EMP)
  - Traffic Management Plan (TMP), Etc.
- Fully implemented traffic management measures to maintain safe and uninterrupted vehicle movements during construction and transition into Stage 3.

See the Staging plan for construction. (See *Annexure E - Staging Plan*)

6.4. Stage 3.1: Phase 1 – Demolition of Existing Weighbridge Facilities and Delivery of Entry / Exit on Styles Street within Lot 5

Stage 3 - Figure 6 - Stage 3- Construction will be divided into five phases to minimise impact on the IRRC operations while maintaining an output of up to 170,000 TPA. Phase 1 - Figure 7 - Stage 3 - Phase 1 will focus on establishing a controlled process for decommissioning and removing the existing weighbridge, ensuring uninterrupted traffic flow from Stage 2 into the current Automated Processing Plant Shed. At the same time, the former weighbridge entry and exit on Styles Street will be dismantled to allow for the construction of a new awning at that location.

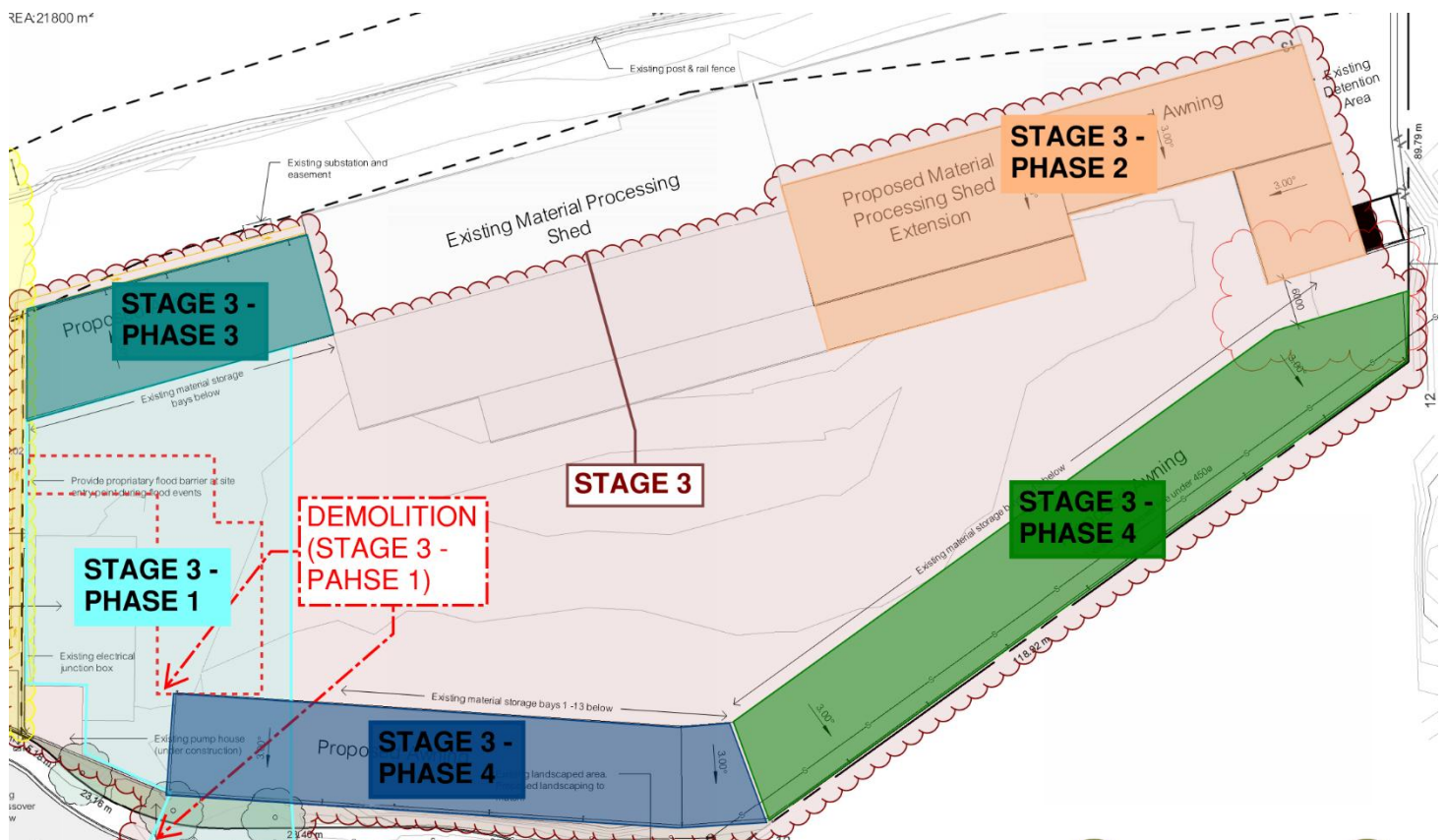


Figure 6 - Stage 3



- **Deconstruction of Existing Entry and Exit into 8 Styles Street:**
  - Remove the existing gate structure and driveway to enable Stage 4 landscaping.
  - Installation of a new boundary wall and construction of the proposed awning.
  - Recycling of removed gates, hardware, and concrete materials within the facility.
- **Civil Installation and Hardstand Rectification:**
  - Repairs and levelling of the existing hardstand to provide a stable surface for constructing the new awning.
- **Construction of Proposed Awning:**
  - Installation of foundation and structural components in compliance with relevant authority approvals.
  - Construction of the new awning to provide additional storage capacity.

### **Deliverables**

The completion of Stage 3 - Phase 1 will result in the following:

- Decommissioned and removed weighbridge facility, clearing the site for new infrastructure development.
- Fully functional and rerouted traffic system, ensuring uninterrupted facility operations.
- Installed boundary wall and awning, enhancing facility layout and operational efficiency.

## 6.5. Stage 3.2: Phase 2 - Automated Processing Plant Shed Extension and New Awning Construction

Phase 2 of Stage 3 - *Figure 8 - Stage 3 – Phase 2*, involves extending the existing Automated Processing Plant Shed and constructing a new awning adjoining the detention area of the shed. The shed extension will increase covered floor space to enhance material handling efficiency and create safer, weather-protected work zones. The new awning will boost operational flexibility by offering sheltered space for vehicle loading, unloading, and temporary material laydown, reducing congestion within the central processing areas.

This phase has been planned to ensure all core waste processing functions stay operational throughout construction, with temporary logistics arrangements to divert traffic and maintain throughput. The design and staging of these works aim to increase the facility's processing capacity, improve operational resilience, and support the transition towards future throughput milestones without interrupting existing services.

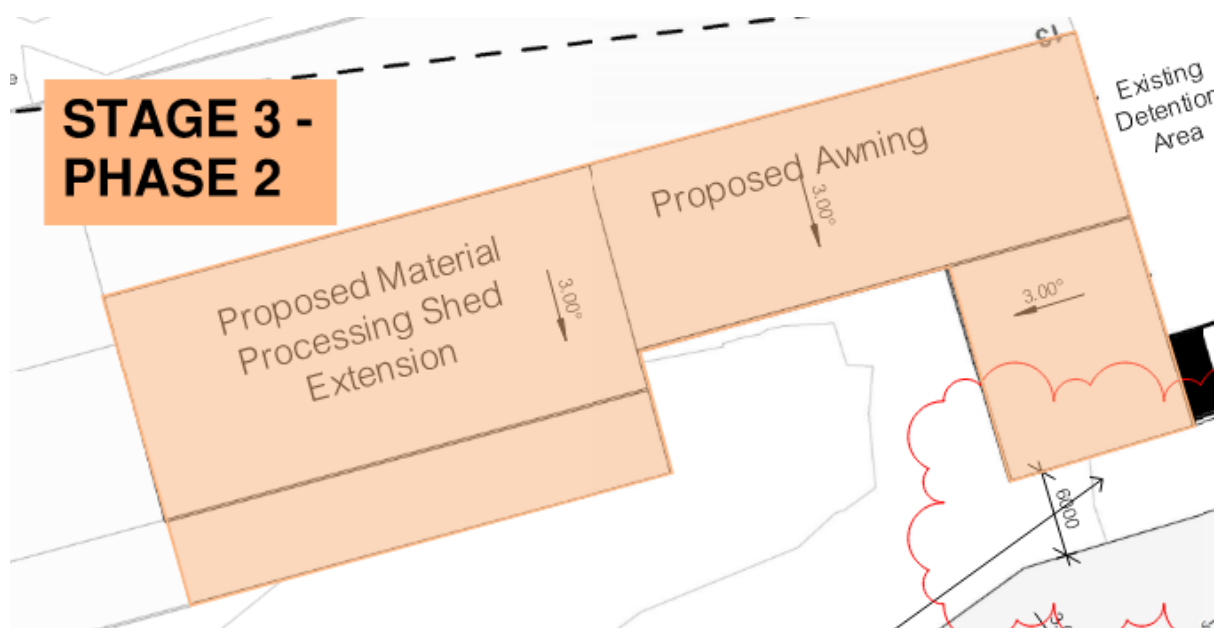


Figure 8 - Stage 3 – Phase 2

The scope of work includes the following:

- **Structural Extension of Automated Processing Plant Shed:**
  - Site preparation and foundation works to support the shed extension, ensuring structural stability and seamless integration with the existing facility.
  - Install a new structural framework and roofing system that match the existing shed specifications for load capacity, fire safety compliance, and long-term durability.
  - Provision of new building services infrastructure, including lighting, ventilation, and electrical systems, to support increased processing capacity and ensure a safe, compliant working environment.
- **Construction of New Awning:**
  - Site grading and preparation works to establish suitable foundations for the awning structure.
  - Erection of structural steel framework, roofing, and integrated drainage systems to ensure durability and prevent water ingress.
  - Operational integration with existing facility functions, providing additional covered storage and processing areas to enhance flexibility and throughput.
- **Utility and Civil Works:**
  - Connect electrical, plumbing, and stormwater drainage services to the extended shed and awning areas.
  - Modifying access pathways and circulation routes to accommodate expanded operations while maintaining safe and efficient traffic flow across the site.

## Deliverables

The completion of Stage 3, Phase 2, will result in the following:

- Completed awning structures provide extra space for material handling and processing activities.
- An optimised site layout ensuring seamless IRRC operations while integrating the new infrastructure.
- Finalised utility connections supporting the extended structure's electrical, plumbing, and stormwater needs.

6.6. Stage 3.3: Phase 3 – Final New Extension to the Automated Processing Plant Shed and Integration of New Equipment

Phase 3 of Stage 3 - *Figure 9 - Stage 3 – Phase 3*, involves completing the final extension of the Automated Processing Plant Shed, marking the full delivery of the proposed upgrade to this element. This will allow the installation of the new resource recovery plant equipment, significantly improving material handling efficiency and helping the facility achieve its target capacity of 450,000 TPA.

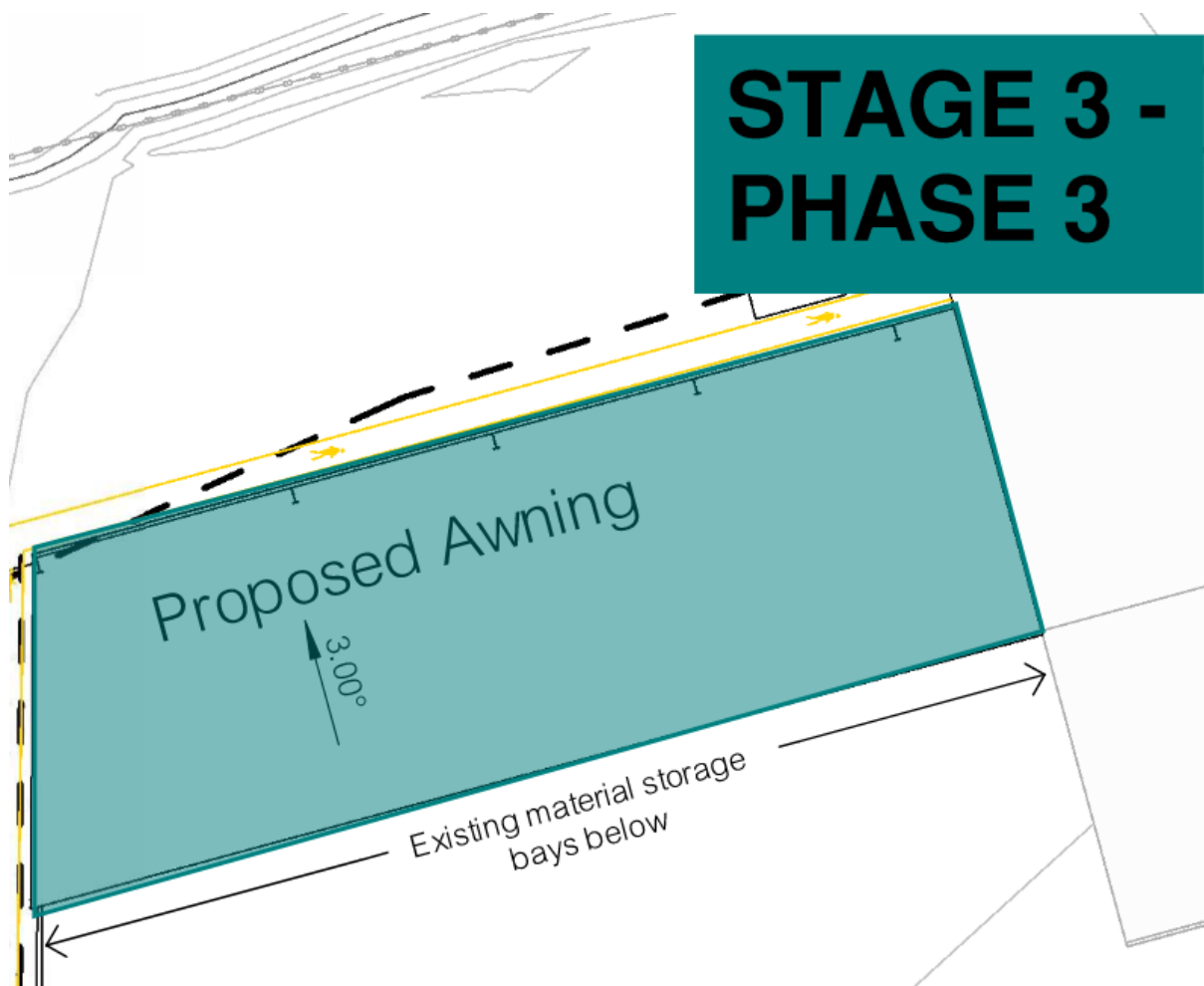


Figure 9 - Stage 3 – Phase 3

The scope of work includes the following:

- **Final Structural Extension of Automated Processing Plant Shed:**
  - Site preparation and foundation works to support the extended shed structure.
  - Integrating a new structural framework and roofing to match existing shed specifications.
  - Install new lighting, ventilation, and electrical systems to facilitate extended operations.
- **Completion of Civil and Utility Works:**
  - Extension of existing electrical, plumbing, and drainage systems to support the expanded shed.
  - Hardstand construction and paving to improve vehicle movement within the processing area.

## Deliverables

The completion of Stage 3, Phase 3, will result in the following:

- Completed site preparation and foundation works for structural stability.
- Fully integrated structural framework and roofing, consistent with existing shed specifications.
- Commissioned lighting, ventilation, and electrical systems to support extended operations.
- Extended electrical, plumbing, and drainage systems connected to the expanded shed.
- Constructed hardstand and paving, improving vehicle circulation and operational efficiency in processing areas.
- Installed conveyor systems (infeed, transfer, elevated) with Variable Speed Drives (VSDs) for optimised throughput and energy efficiency.
- Operational automated sorting plant.
- Installed material chutes and bunkers for segregated waste.
- Fully integrated electrical and mechanical connections.
- Commissioned safety systems: guarding, emergency stops, dust suppression, and acoustic/noise reduction measures, in compliance with Work Health and Safety (WHS) requirements.

6.7. Stage 3.4: Phase 4 - Construction of Waste Storage Awnings

Stage 3 of Phase 4 - *Figure 10 - Stage 3 – Phase 4*, Focuses on constructing awnings for the existing storage bays next to Lot 11-DP1234688 - 4 Styles Street. These improvements will offer extra weather protection and enhance operational oversight and efficiency.

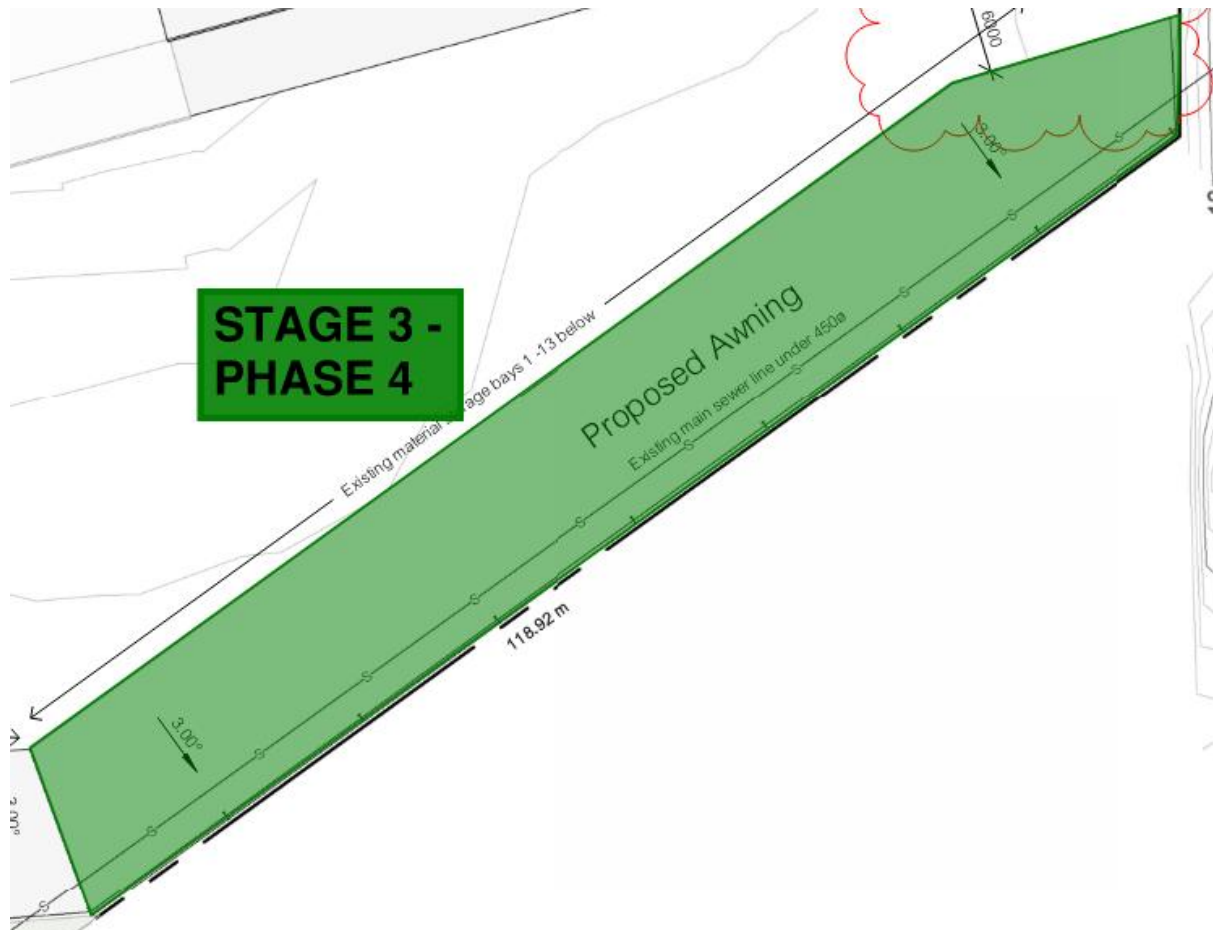


Figure 10 - Stage 3 – Phase 4

The scope of work includes:

- **Construction of Storage Bay Awnings:**
  - Site preparation and foundation works to support new awning structures, including ground compaction and subgrade stabilisation.
  - Additional reinforced concrete footings will be constructed to anchor the awning framework and support extended concrete buttress walls.
  - Extension of existing concrete buttress walls to increase storage bay containment capacity and enhance structural resilience.
  - Upgrading adjoining hardstand areas with increased slab thickness and reinforcement to accommodate higher load-bearing requirements from heavy vehicles and stored materials.
  - Install structural steel framework and roofing systems to provide durable, weather-protected storage bays, designed per relevant Australian Standards for structural integrity and wind loads.
  - Integration with existing stormwater and site drainage systems to ensure proper runoff management and prevent water pooling within and around the storage bays.
  - Coordination with existing operational activities to stage works, maintaining access to other storage and processing areas during construction.

## Deliverables

The completion of Stage 3, Phase 4, will result in the following:

- Finished weather-protected storage bay awnings, protecting stored materials from rain, wind, and other environmental elements.
- Enhanced storage capacity and containment by extending concrete buttress walls and upgrading structural systems.
- Reinforced hardstand areas to support heavy vehicle movements and higher load-bearing requirements.
- Integrated stormwater management, ensuring compliant and efficient drainage that prevents water pooling and safeguards storage integrity.
- Enhanced workflow and operational efficiency through safer, more resilient, and better-organised storage infrastructure.
- Smooth integration into facility operations, maintaining waste processing activities during and after construction.

6.8. Stage 3.5: Phase 5 - Construction of Remaining Awning Structure

Stage 3 of Phase 5 - *Figure 11 - Stage 3 – Phase 5* involves constructing the remaining awning next to Styles Street, providing extra covered space for material handling and processing operations, and ensuring weather protection and increased site efficiency by creating fully covered material storage bays for the existing RRF.

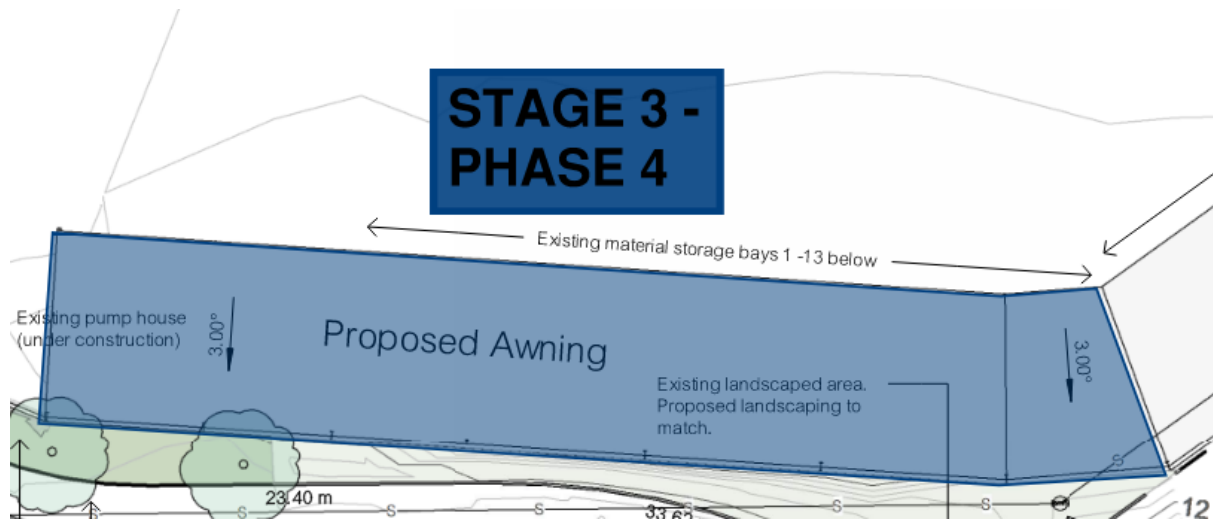


Figure 11 - Stage 3 – Phase 5

The scope of work includes:

- **Construction of Storage Bay Awnings:**
  - Site preparation and foundation works to support new awning structures, including subgrade stabilisation and concrete footing installation.
  - Installed structural steel framework and roofing systems to deliver durable, weather-protected storage areas designed per Australian wind and structural loading standards.
  - Integration with existing stormwater and drainage infrastructure to prevent water pooling and ensure compliant runoff management
- **Application to Increase Throughput to 450,000 TPA:**
  - A Partial Occupation Certificate from the Principal Certifying Authority will be obtained to increase the facility's approved throughput from 170,000 to 450,000 TPA, supported by the improved processing capacity and upgraded services provided during this phase.

### **Deliverables**

The completion of Stage 3, Phase 5, will result in:

- Fully built storage bay awnings next to Styles Street, providing complete weather protection for stored materials.
- Fully covered material storage bays for the existing Residual Resource Facility (RRF), improving environmental performance and operational resilience.
- Better material handling efficiency, with sheltered storage enabling operations to continue during bad weather.
- Integrated drainage systems that effectively manage stormwater and maintain site safety.
- Increased throughput from 170,000 to 450,000 TPA.

## 6.9. Stage 4: New Residual Waste Recovery Plant Shed Construction and Infrastructure Integration

The final stage - *Figure 12 - Stage 4*, involves major site upgrades to complete and prepare the facility for full operational use. Works include removing the existing driveway, demolishing the current awning, and constructing a new Residual Waste Recovery Plant Shed with related access and infrastructure. A new entry and exit point will be created at the bend in Styles Street to enhance traffic flow, safety, and logistics efficiency. Once finished, these works will enable the issuance of the Final Occupation Certificate, indicating the project is ready for long-term operations.

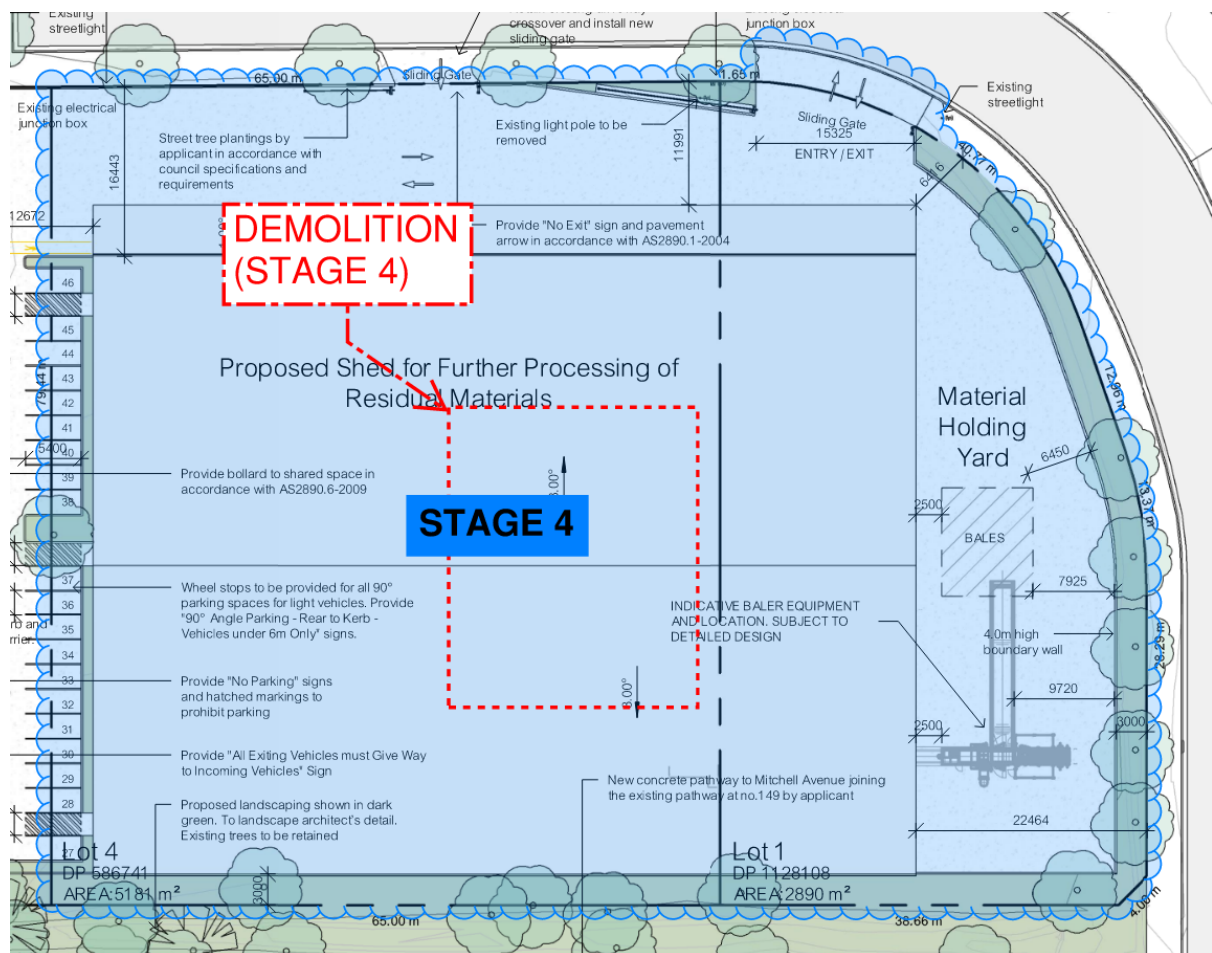


Figure 12 - Stage 4

The activities for Stage 4 include:

- **Deconstruction and Access Reconfiguration**
  - Safely deconstruct and remove the existing awning.
  - Remove the current driveway to allow for the new access layout.
  - Build a new entry and exit point on Styles Street to enhance safety and traffic flow.
- **Construction of Residual Waste Recovery Plant Shed**
  - Site clearing, preparation, and foundation works.
  - Construction of the new processing shed, including structural steelwork, roofing, and cladding.
  - Installation of internal services (electrical, mechanical, fire protection, water, and drainage).
  - Fit out and installation of new waste recovery processing equipment.
- **Installation of Hardstands, Landscaping, and Car Parks**
  - Developing hardstand areas to support operational traffic, equipment movement, and storage.
  - Construction of formalised car parking areas to accommodate staff and visitors.
  - Landscaping works to improve environmental sustainability, site amenity, and compliance with planning conditions
- **Integration of New Processing Plant**
  - Install conveyor systems, including conveyors, to facilitate the continuous movement of waste streams through the processing line. Conveyors will optimise throughput and be adaptable to differing waste streams.
  - Fully automated shedding plant sorted into bays through Air Separating, optical technology, magnetic separators, screens and eddy current separators to enable efficient recovery of mixed waste streams.
  - Material chutes and bunkers for segregated storage are installed and designed for modular adaptation.

- Electrical and mechanical connections connect the new processing equipment with the facility's existing operations. This will provide centralised monitoring, automated control, and real-time performance reporting to improve operational efficiency.
- Integration of safety systems, including guarding, emergency stops, dust suppression units, and noise reduction measures, ensuring compliance with Work Health and Safety (WHS) regulations and maintaining safe operating conditions for staff.

### **Deliverables**

The completion of Stage 4 will result in:

- Residual Waste Recovery Plant Shed: Construct the new processing shed, including foundations, structure, services, and installation of new equipment to support increased throughput.
- Hardstands, Landscaping, and Car Parks: Develop operational hardstands, formalised car parking, and landscaping to support site function and visual amenity.
- Commission applicable utility services to support new site functions.
- Compliance Certifications: Certify all installations in line with regulatory standards.
- Installation of a fully integrated Automated Plant to the New Recovery Shed that enhances facility capacity, compliance, and operational efficiency.
- Complete final safety and operational testing to ensure readiness.

## 6.10. Stage 5: Upgrade to Metal Processing Shed

With the completion of the facility's primary infrastructure and material processing unit, further upgrades will be carried out to enhance waste processing capabilities, including integrating the Metal Processing Plant *Figure 13 - Stage 5*. The upgrade to the existing workshop will not require structural footprint modifications, but repurposing the workshop will improve operational efficiency, enabling the processing of metals, including copper wire.

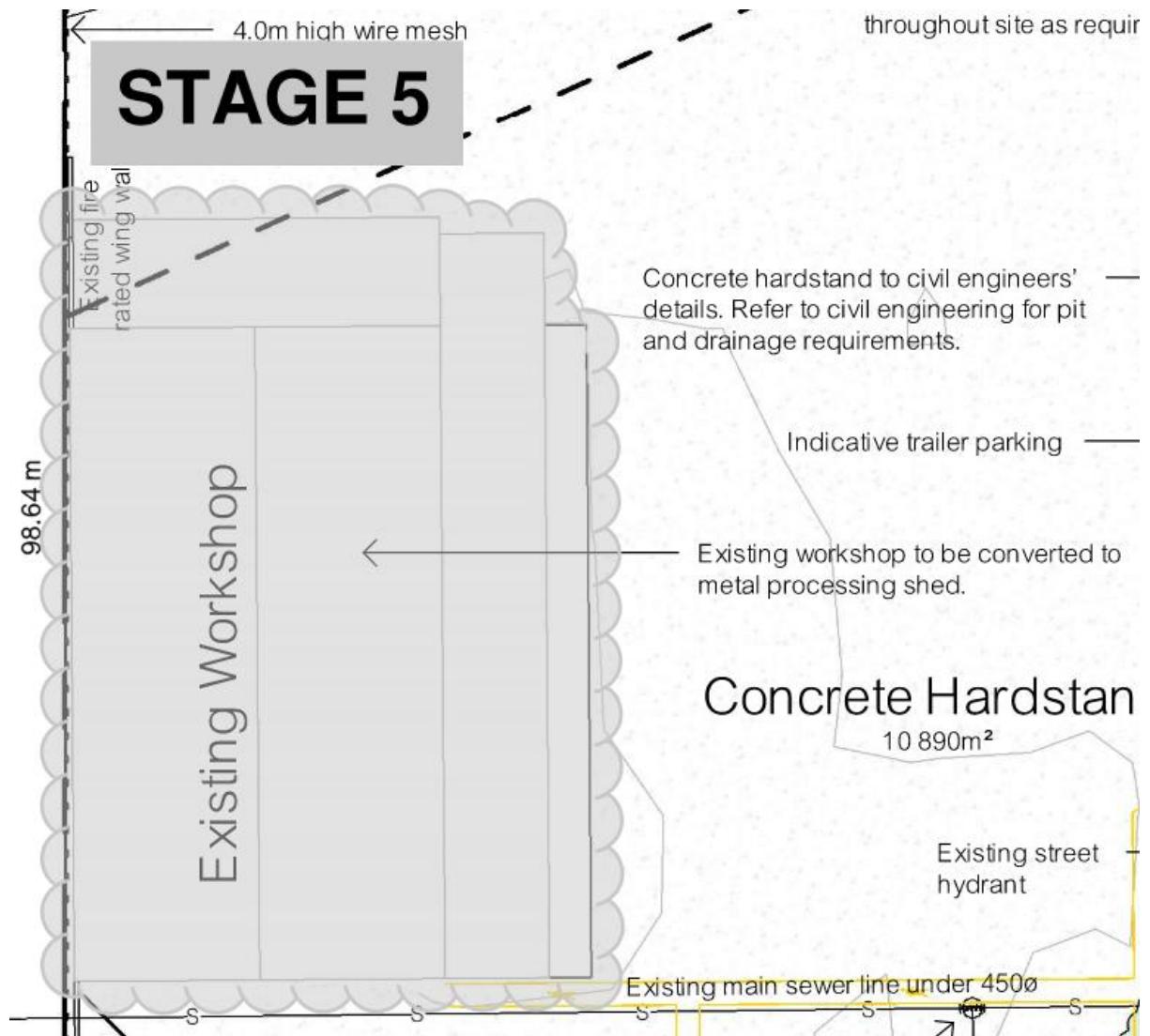


Figure 13 - Stage 5

## 7. Conclusion

The Kurri Kurri Integrated Resource Recovery Centre is a comprehensive and strategically important project that tackles regional waste management issues while supporting broader sustainability and economic objectives. This plan details the infrastructure and operational strategies needed to enhance waste processing capacity to 450,000 tonnes per year - *Figure 14 - Concept Facility*.

The proposed upgrades to utilities, fire safety measures, and waste processing capabilities establish the IRRC as a benchmark facility for environmental and operational excellence. Through its staged approach, the project minimises disruptions while maintaining compliance with strict regulatory standards.

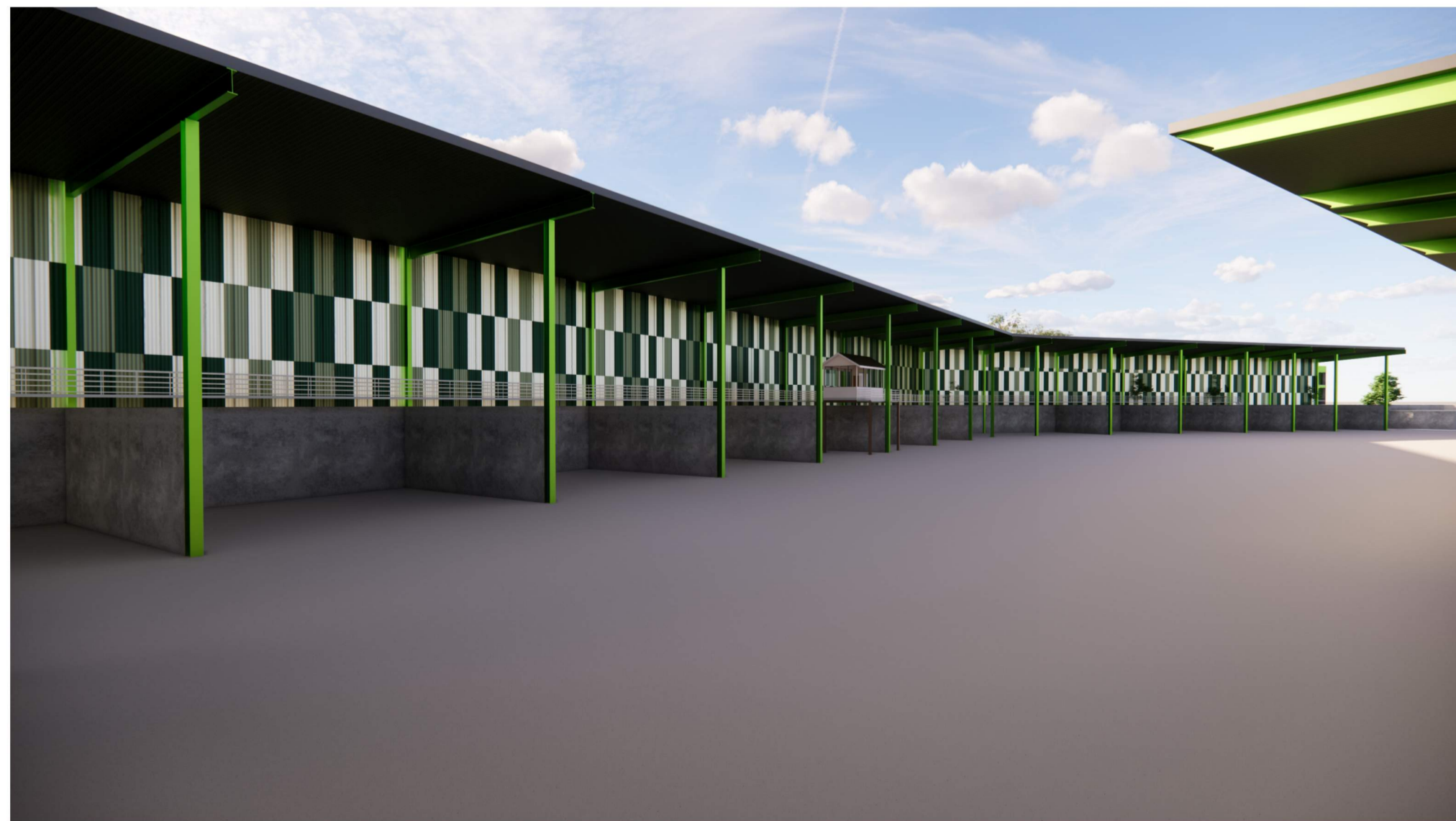
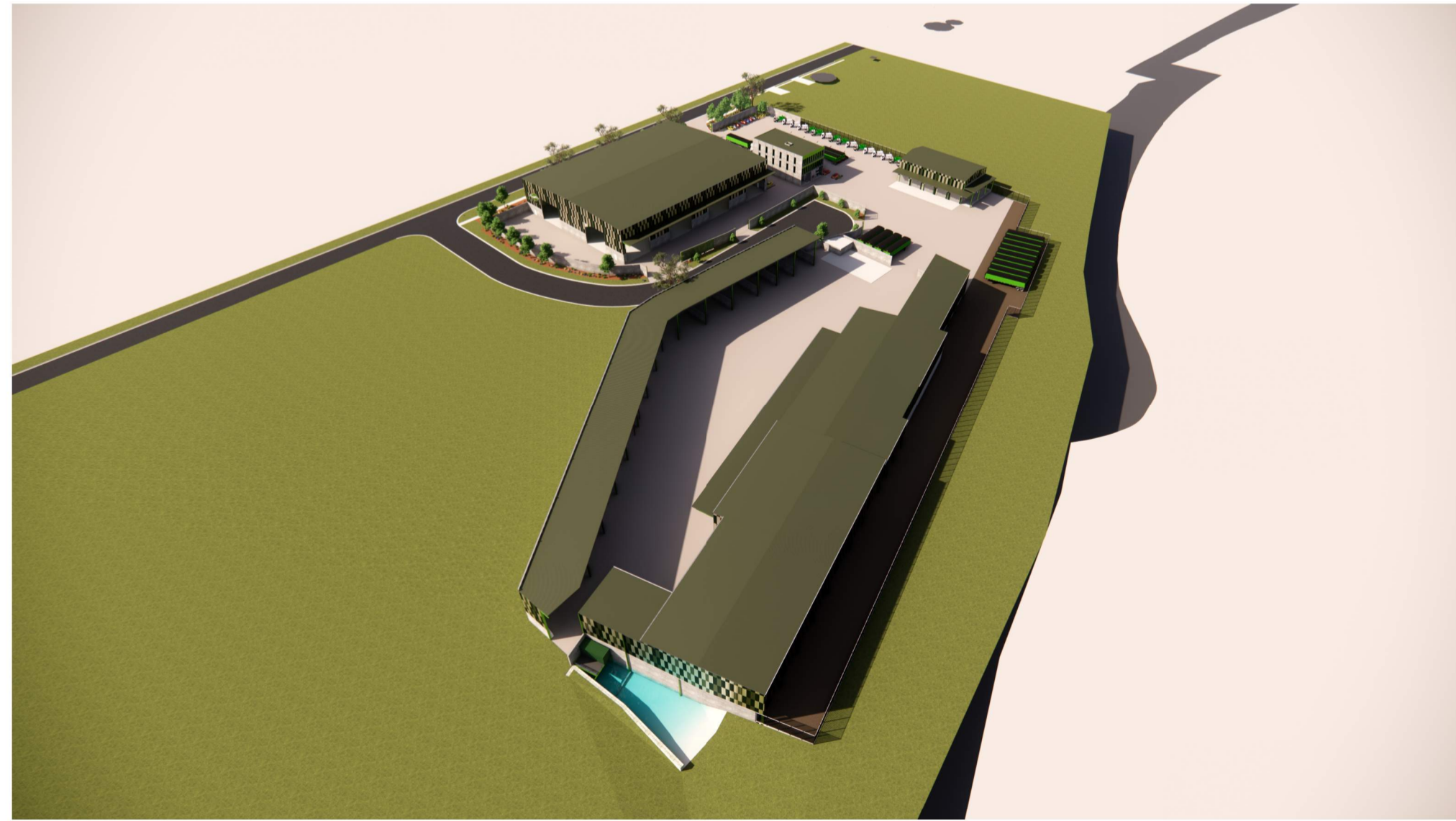
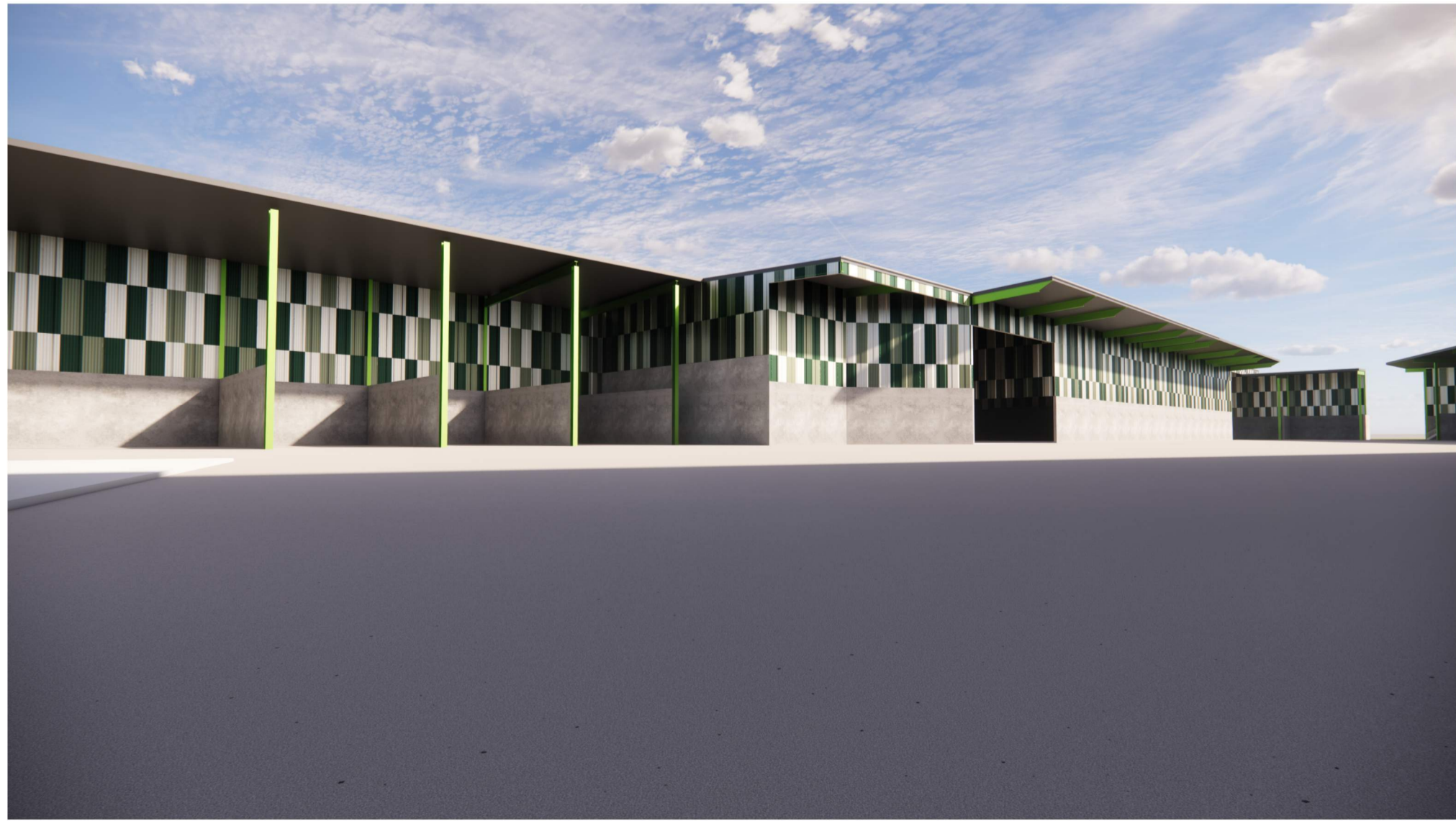
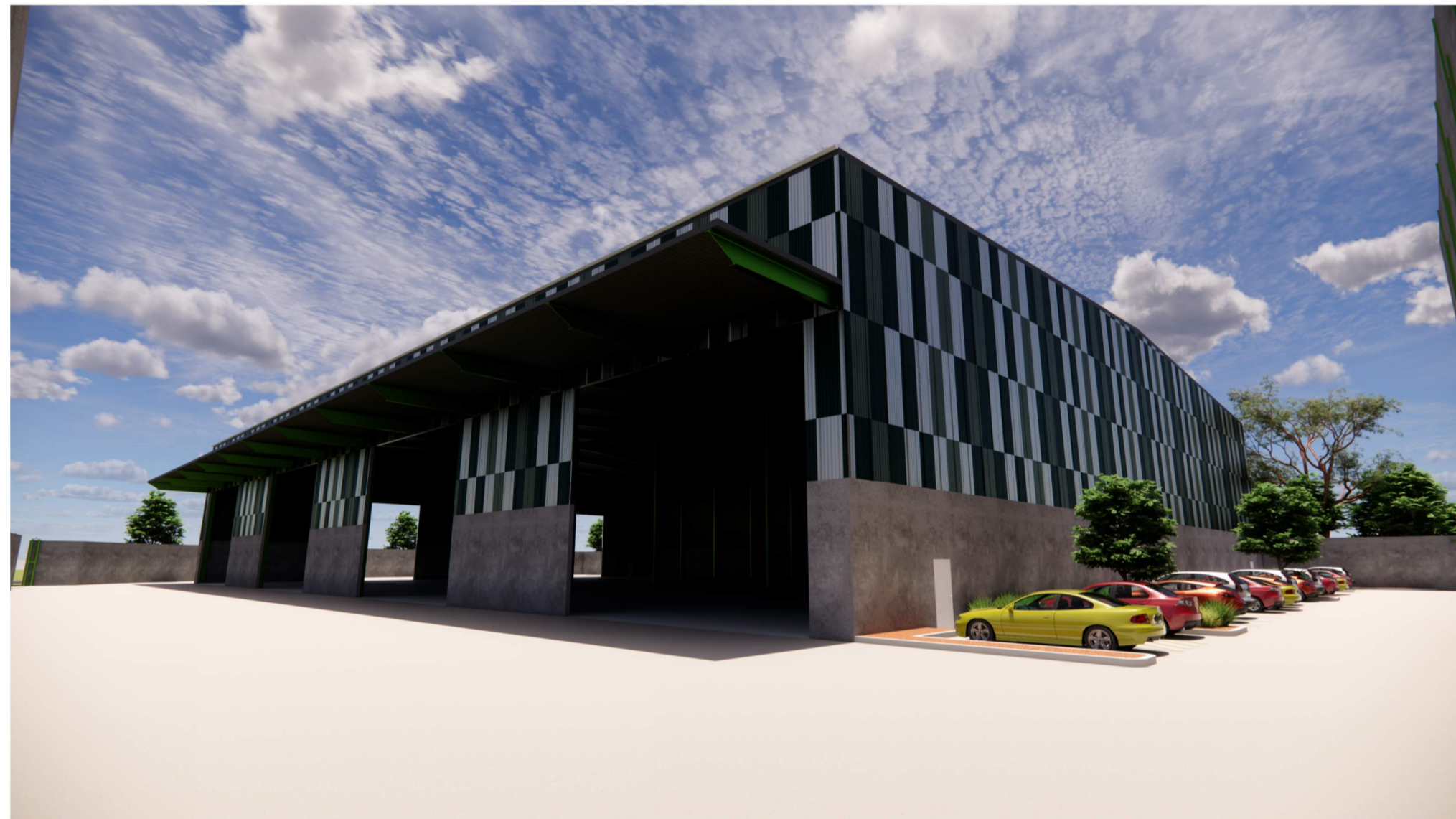
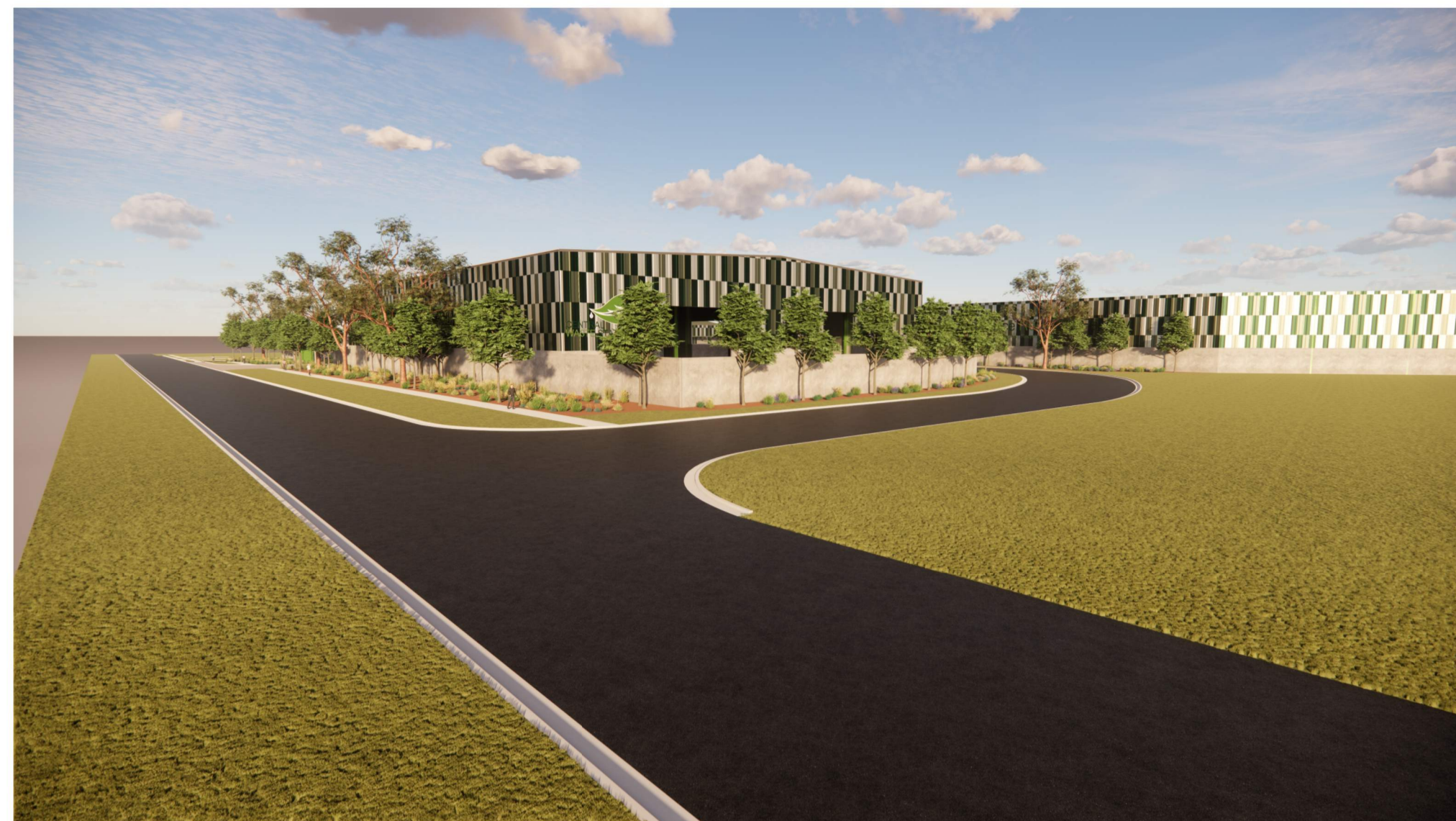


*Figure 14 - Concept Facility*

## 8. Annexures

8.1. Annexure A – Architectural Plans by Thomas and Associates Consulting Pty Ltd  
(Rev O - 2025)







Swamp or Fishery Creek

Existing Deletion Area

Existing Material Processing Shed

Existing Workshop

Styles Street

Mitchell Avenue

Existing hydrant to be relocated  
 Existing yard control room to be relocated on site  
 Existing weighbridge and buildings to be demolished and removed from site

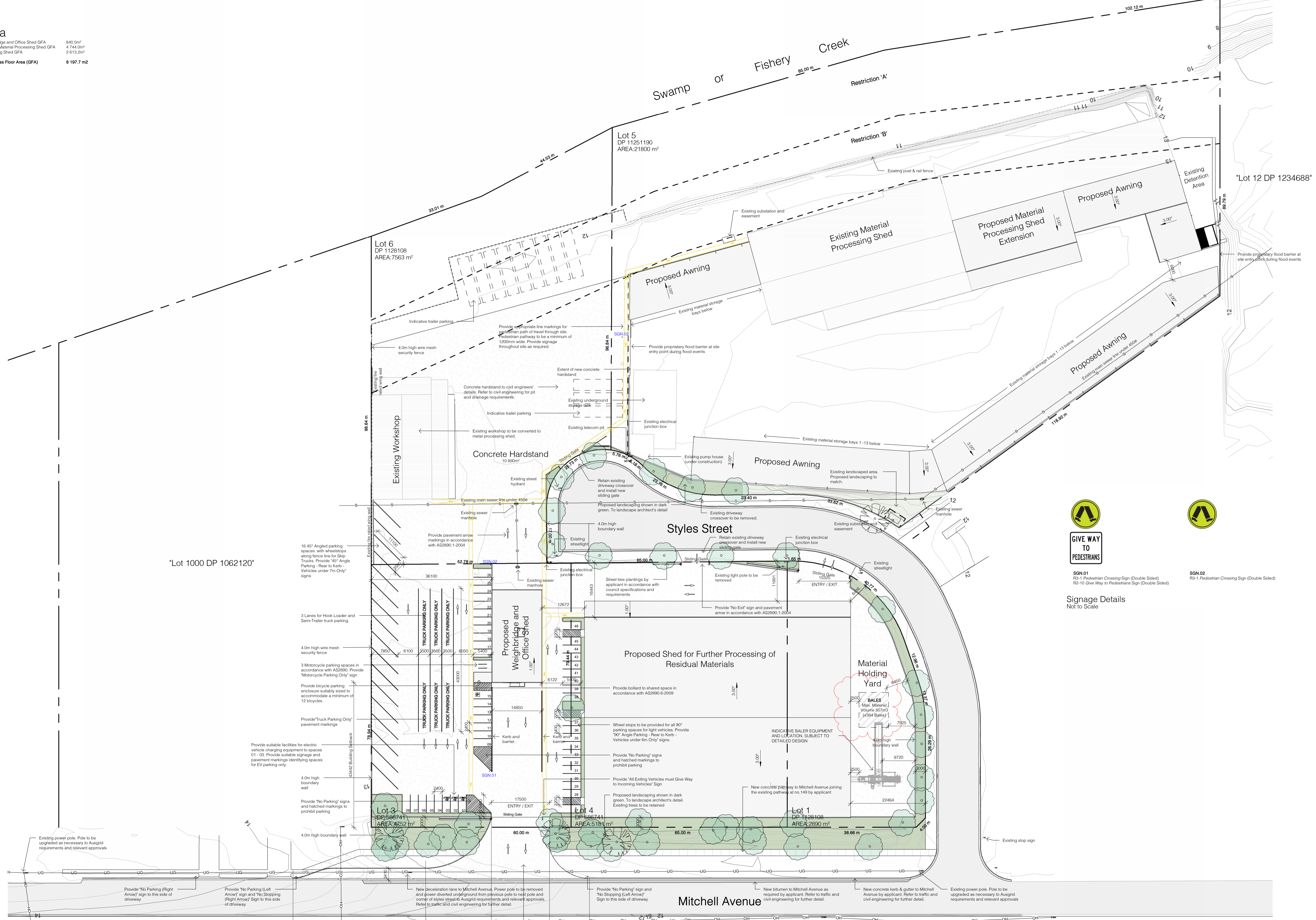
Existing shed to be demolished and removed from site

Existing building to be demolished and removed from site

Existing awning to be demolished and removed from site

Existing demountables and deck to be demolished and removed from site

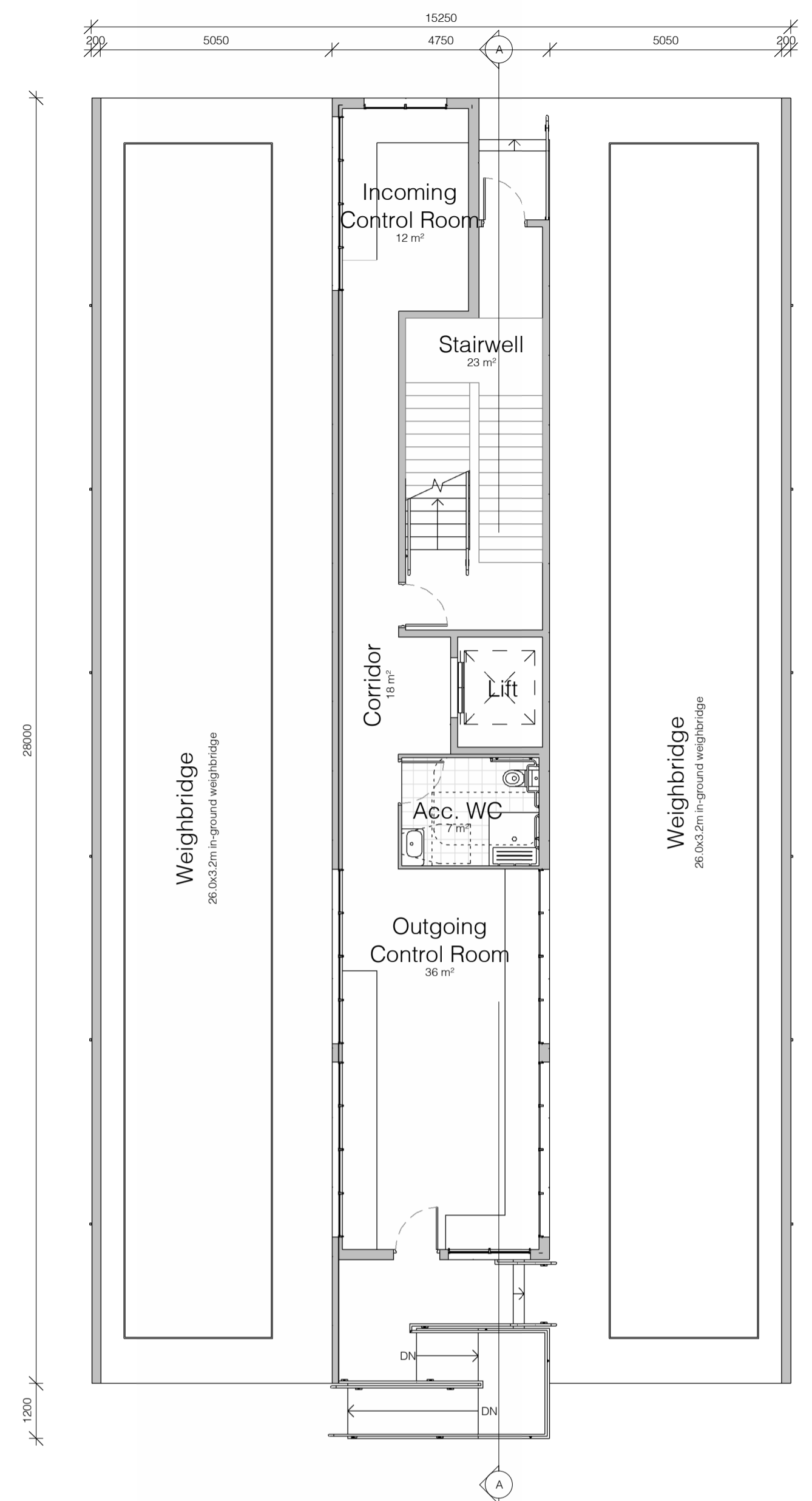
**Area**  
 Weighbridge and Office Shed GFA 840.5m<sup>2</sup>  
 Residual Material Processing Shed GFA 4,744.0m<sup>2</sup>  
 Processing Shed GFA 2,613.2m<sup>2</sup>  
**Total Gross Floor Area (GFA) 8,197.7 m<sup>2</sup>**



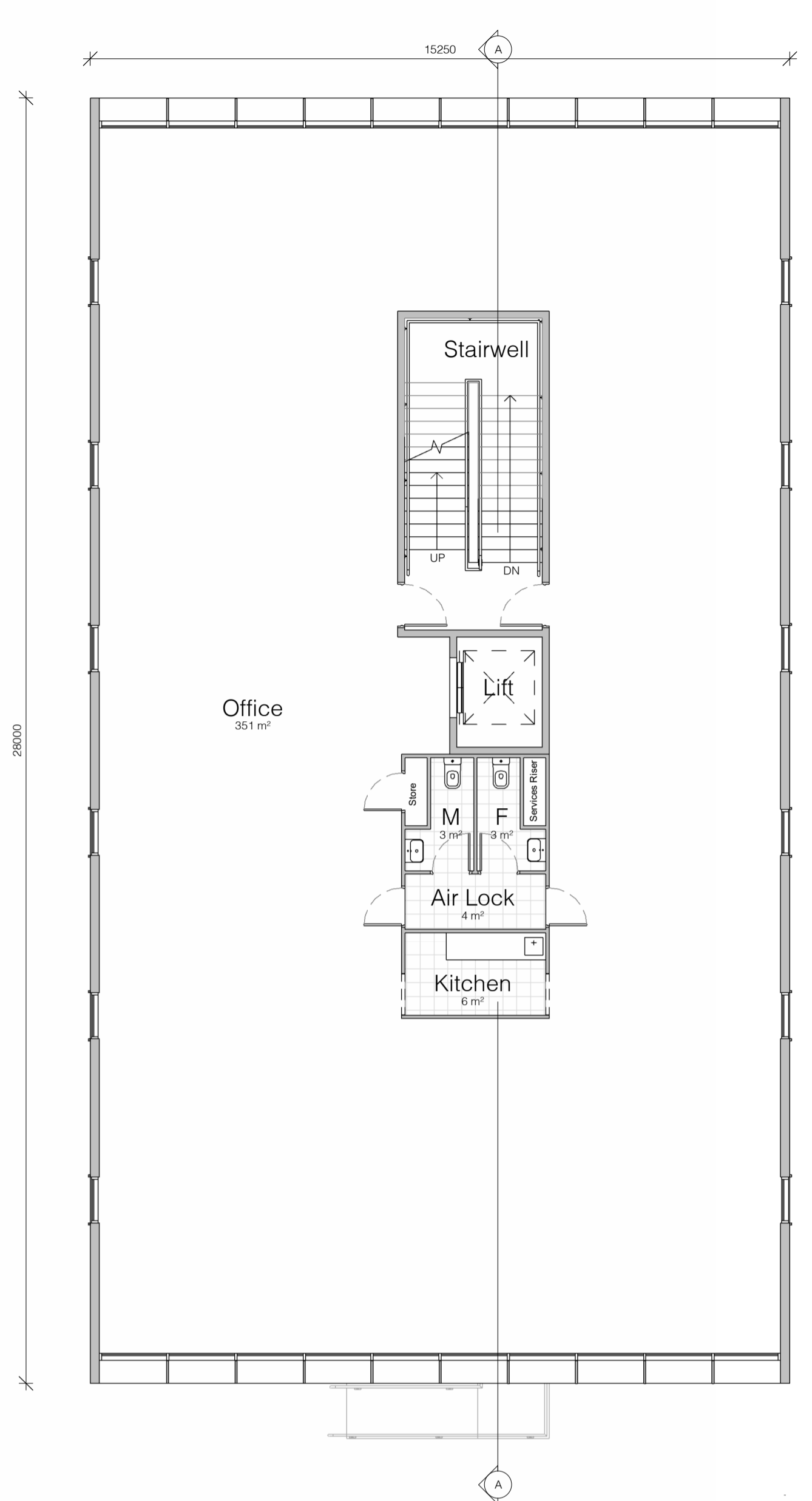
**Signage Details**  
 Not to Scale

**Proposed Site Plan**  
 Scale: 1 : 500

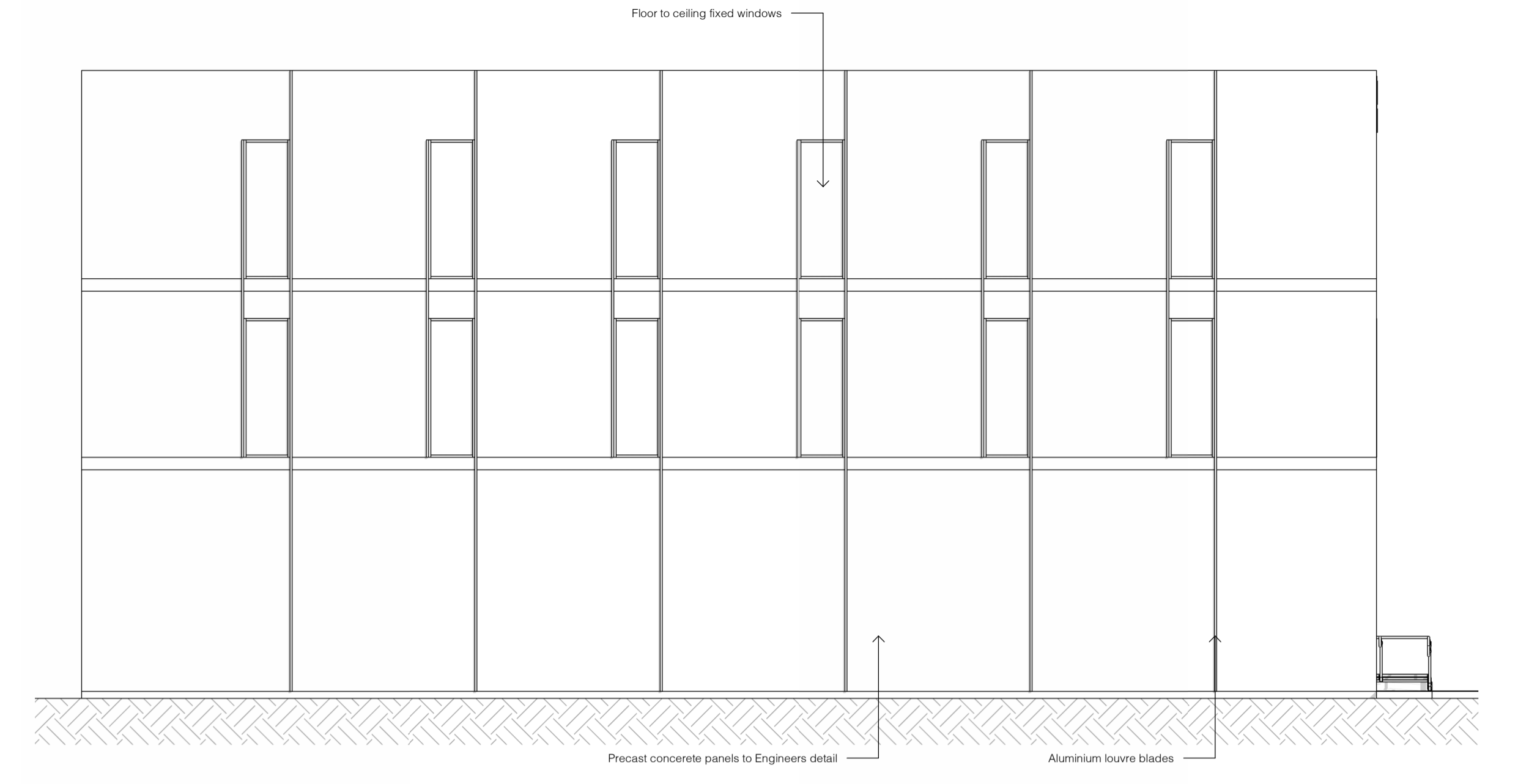
<b>Area</b>	
Ground Floor Office Area	116.0m <sup>2</sup>
1st Floor Office Area	386.2m <sup>2</sup>
2nd Floor Office Area	386.2m <sup>2</sup>
<b>Total</b>	<b>1 199.4m<sup>2</sup></b>
<b>Gross Floor Area</b>	<b>840.5m<sup>2</sup></b>



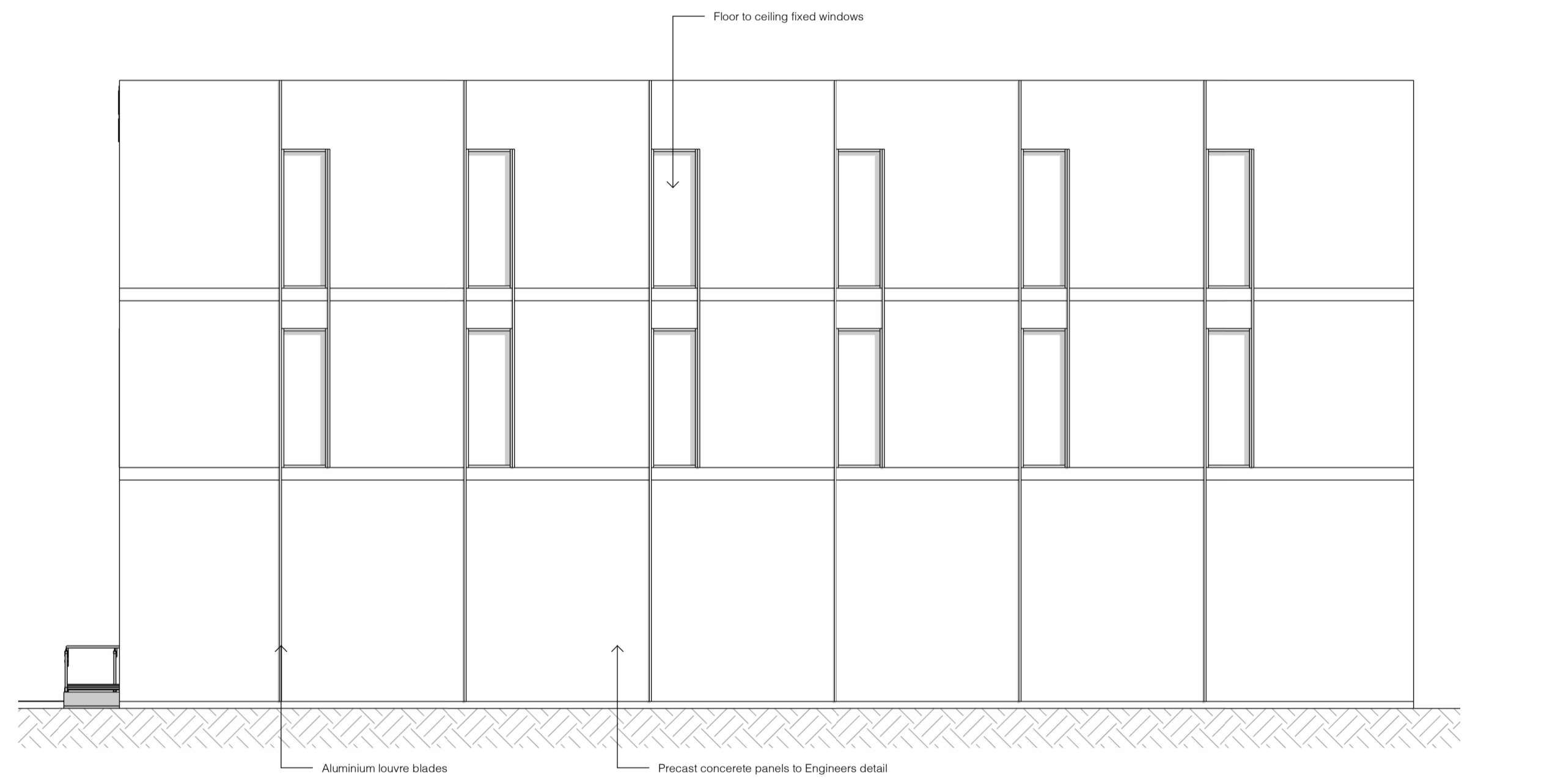
Weighbridge Shed - Ground Floor Plan  
Scale: 1 : 100



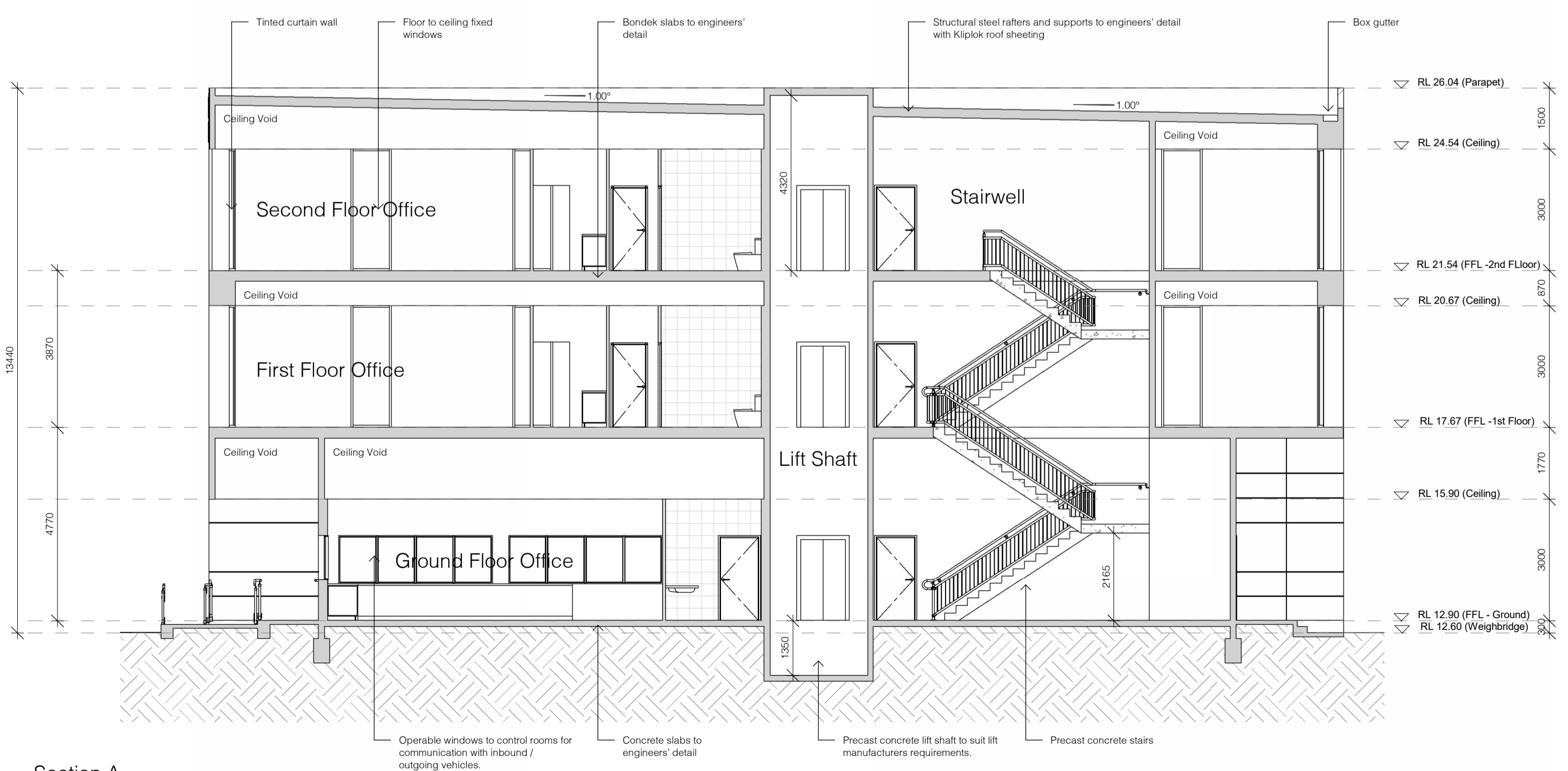
Weighbridge Shed - 1st / 2nd Floor Plan  
Scale: 1 : 100



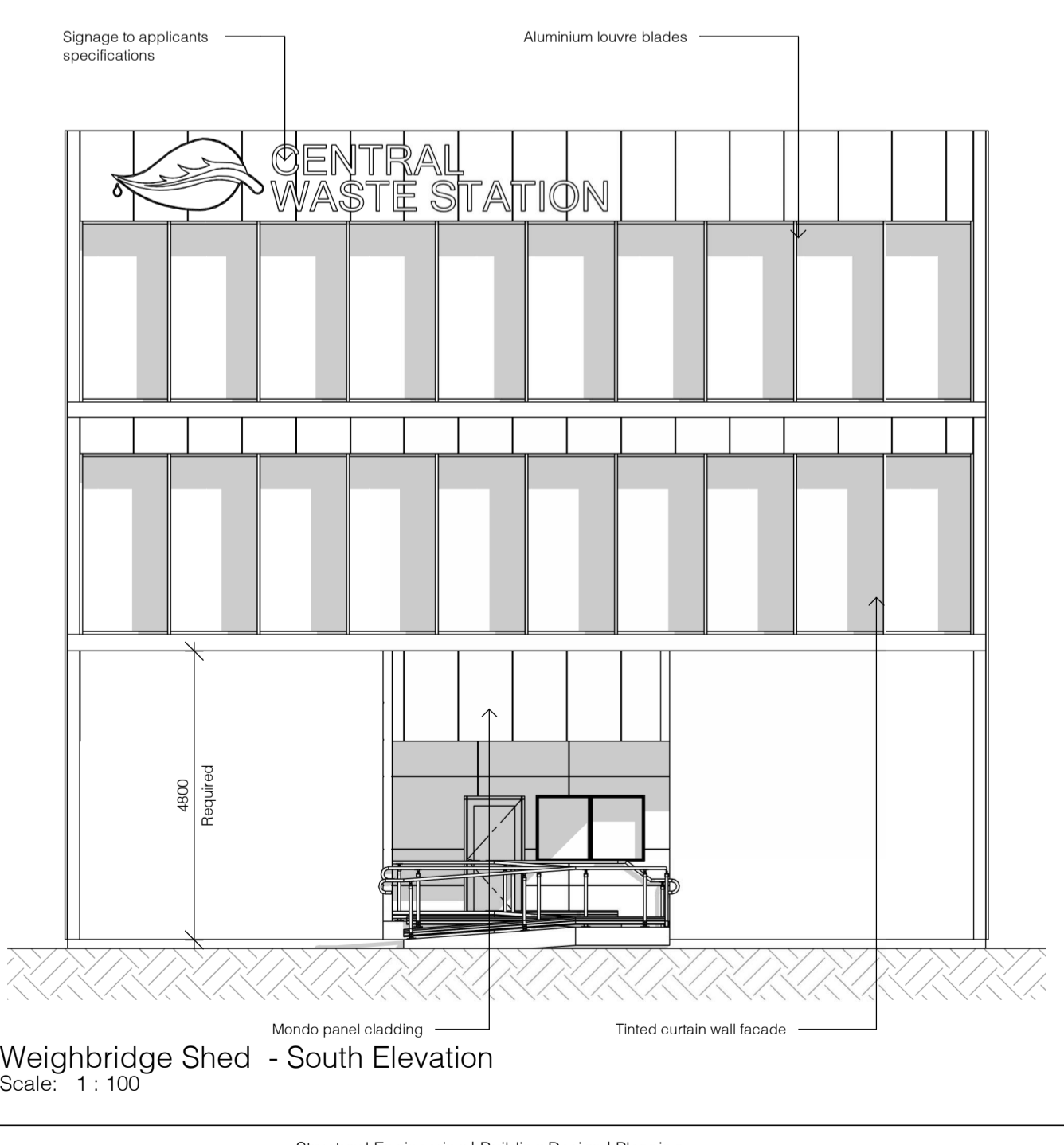
Weighbridge Shed - West Elevation  
Scale: 1 : 100



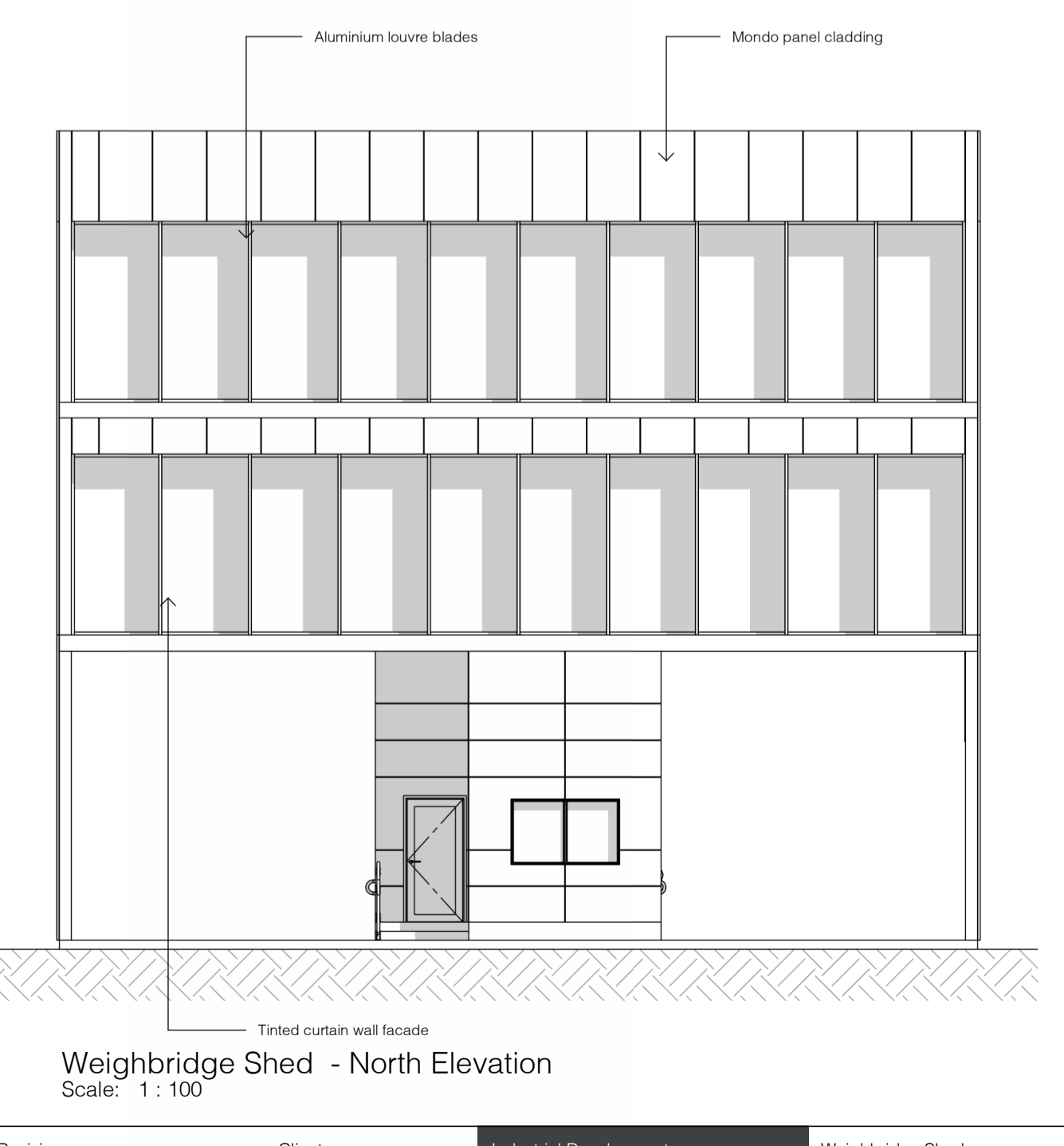
Weighbridge Shed - East Elevation  
Scale: 1 : 100



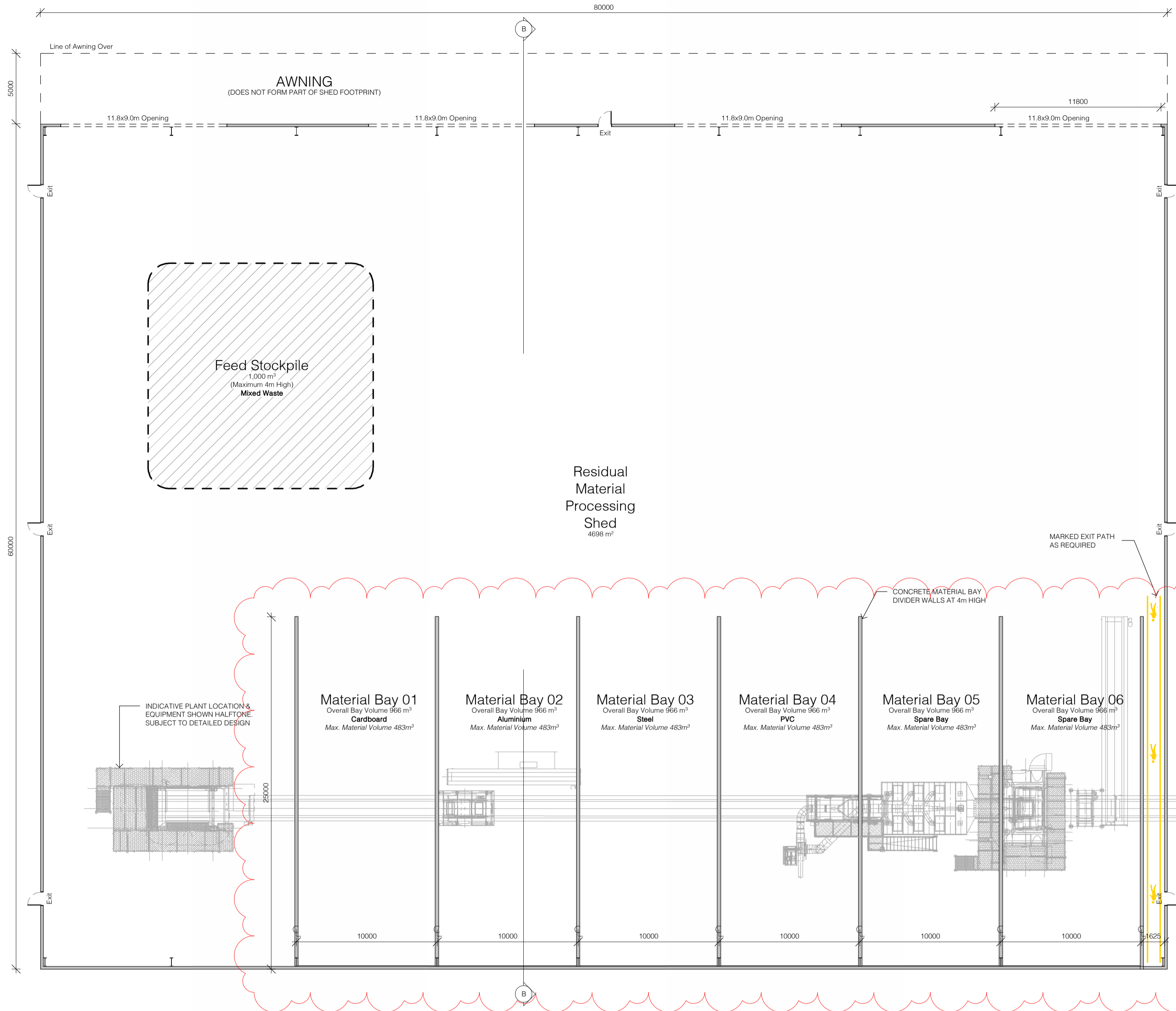
Section A  
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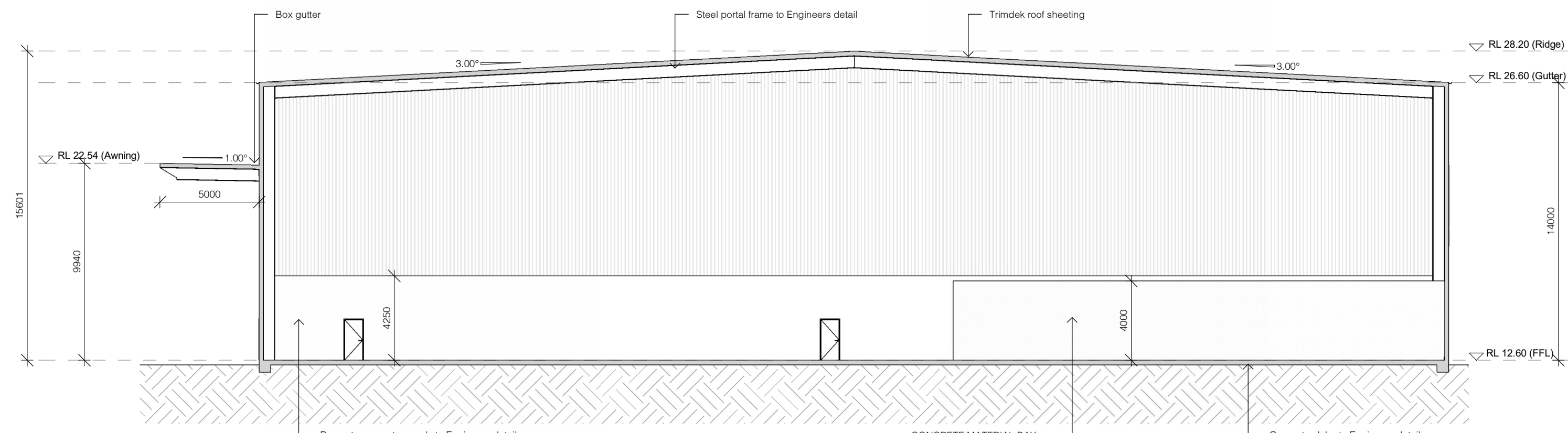
Weighbridge Shed - South Elevation  
Scale: 1 : 100



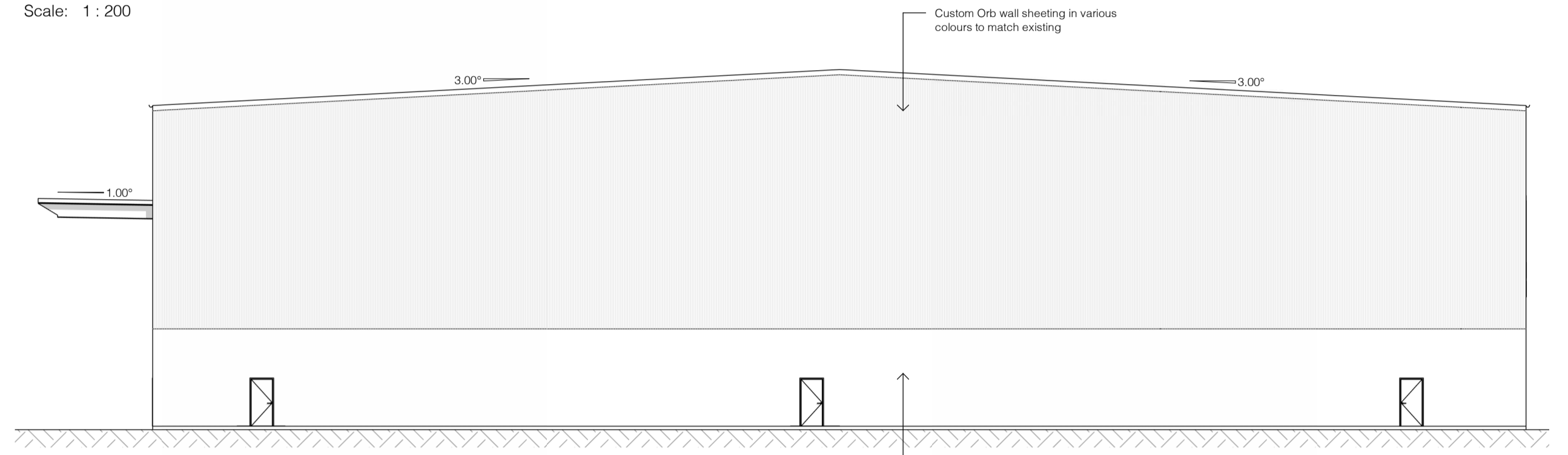
Weighbridge Shed - North Elevation  
Scale: 1 : 100



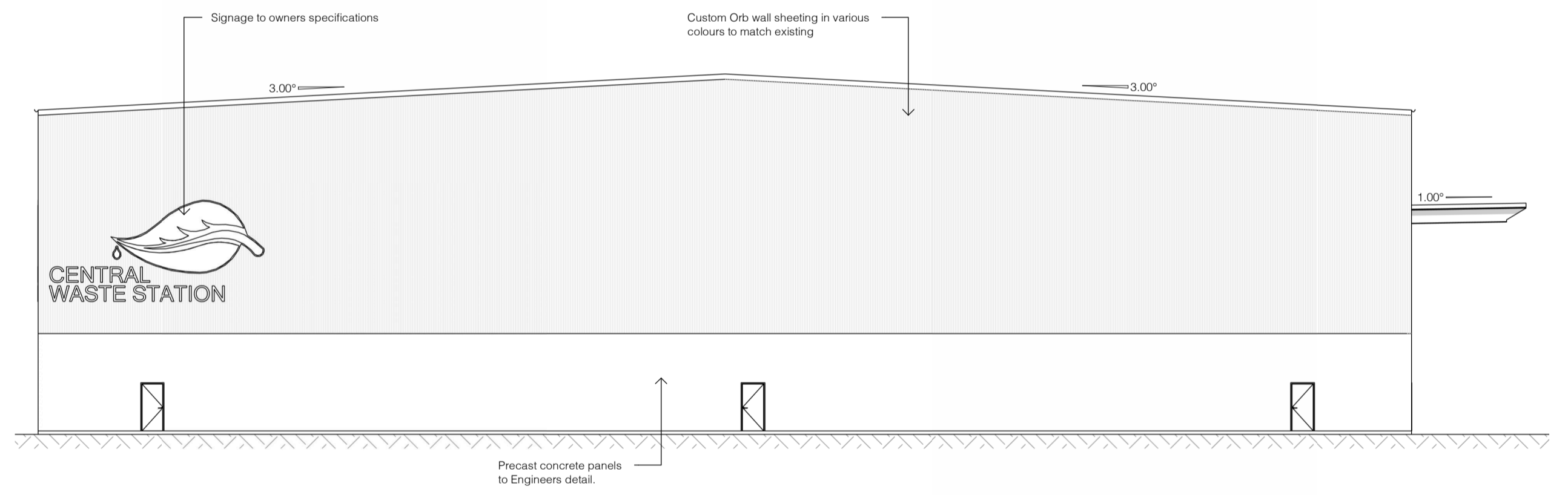
Residual Material Processing Shed - Ground Floor Plan  
Scale: 1 : 200



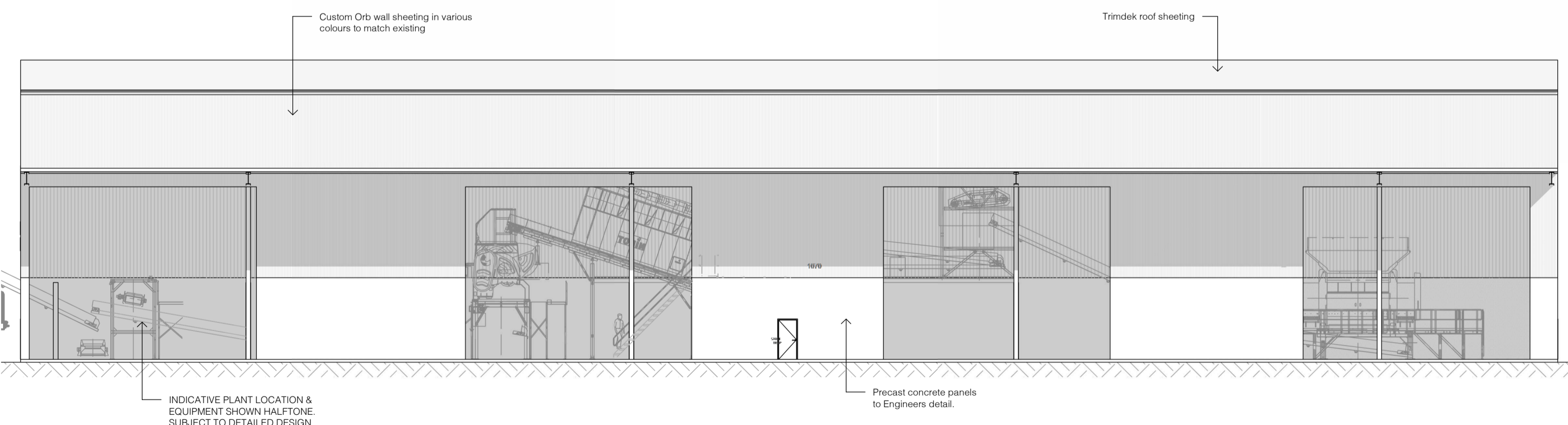
Section B  
Scale: 1 : 200



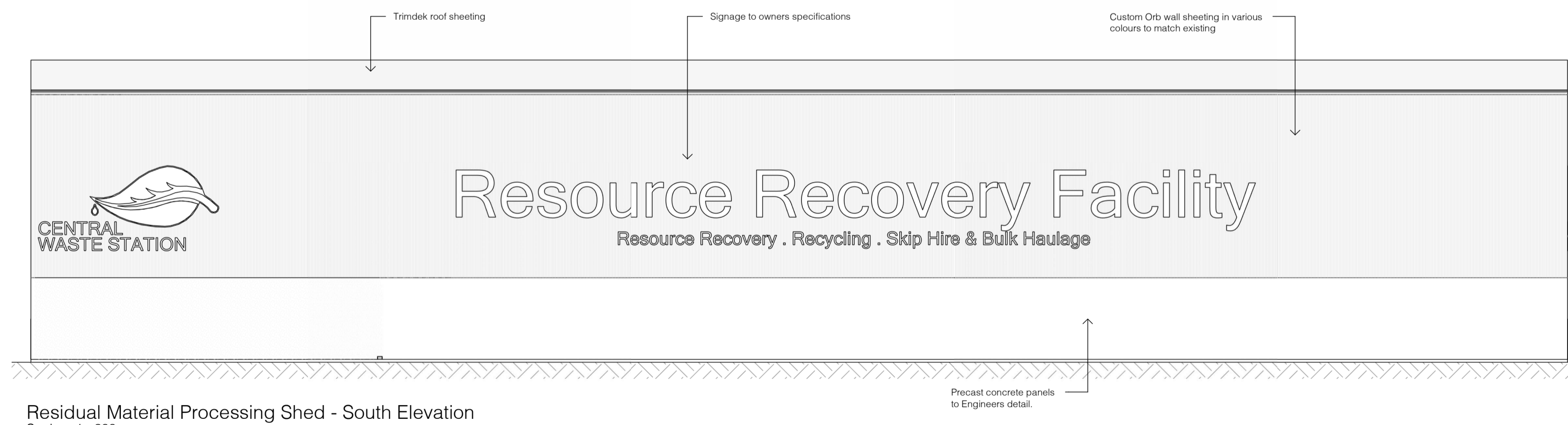
Residual Material Processing Shed - West Elevation  
Scale: 1 : 200



Residual Material Processing Shed - East Elevation  
Scale: 1 : 200



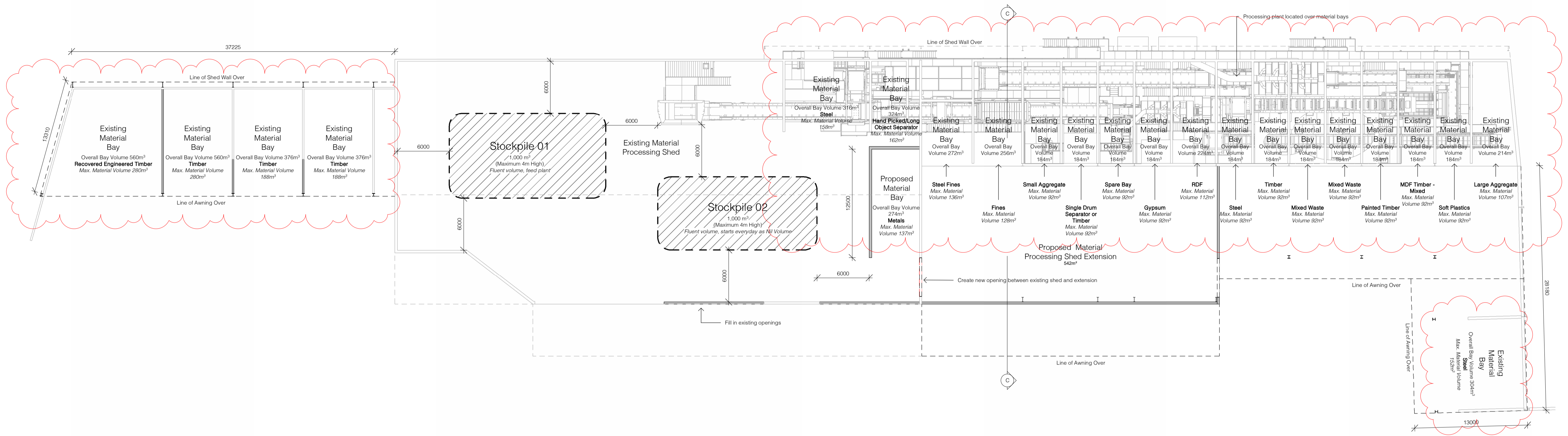
Residual Material Processing Shed - North Elevation  
Scale: 1 : 200



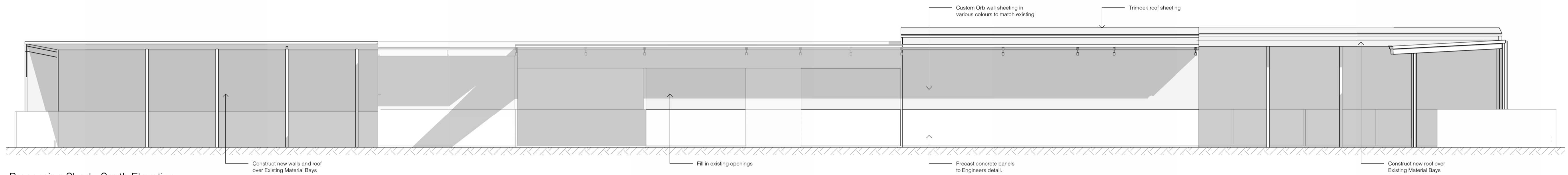
Residual Material Processing Shed - South Elevation  
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Area

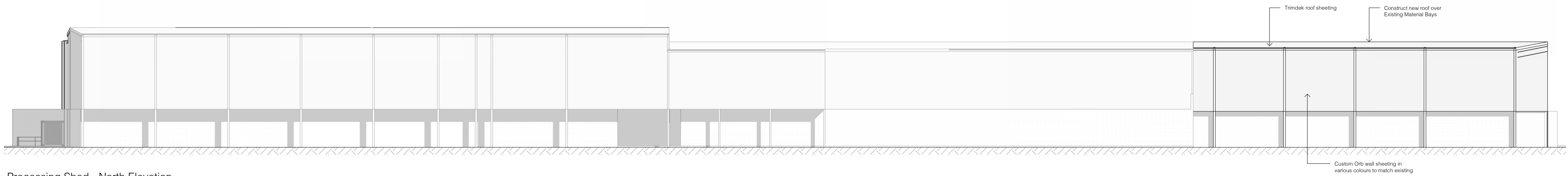
Floor Area 4 800m<sup>2</sup>  
Gross Floor Area 4 744m<sup>2</sup>



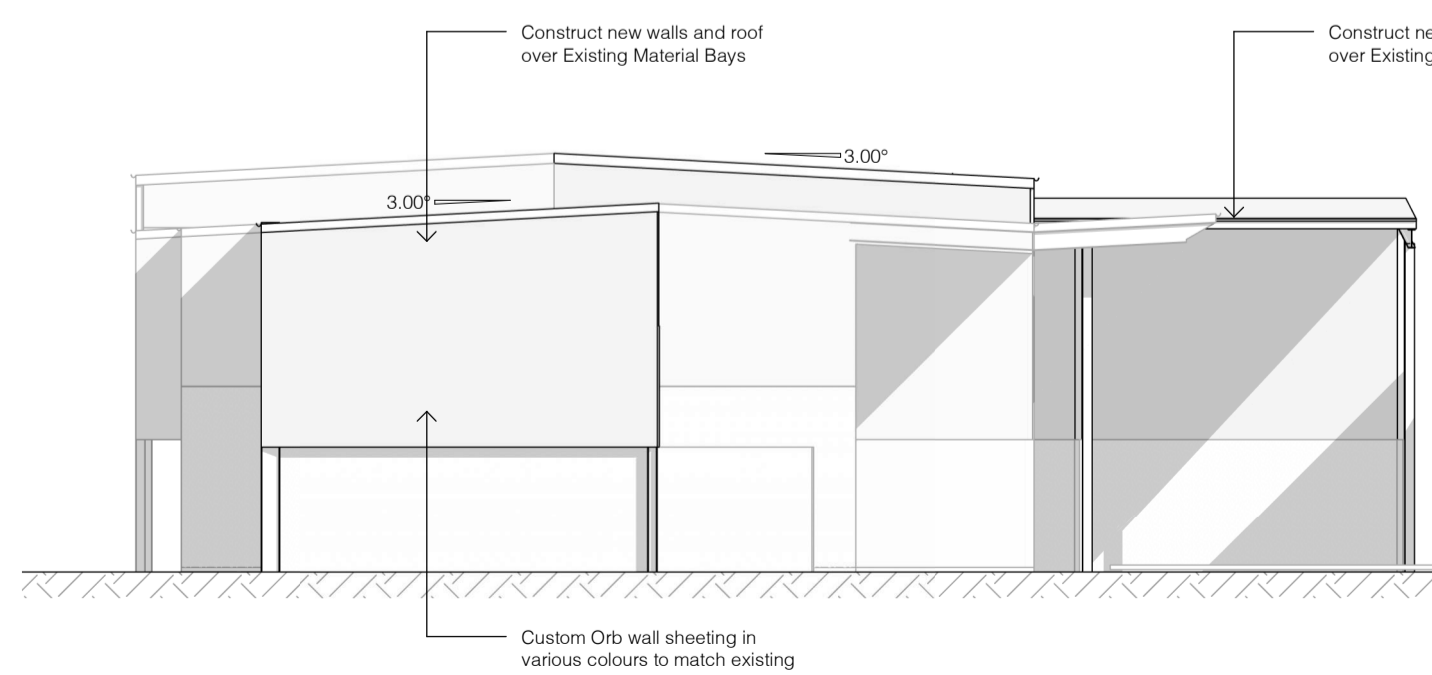
Processing Shed - Ground Floor Plan  
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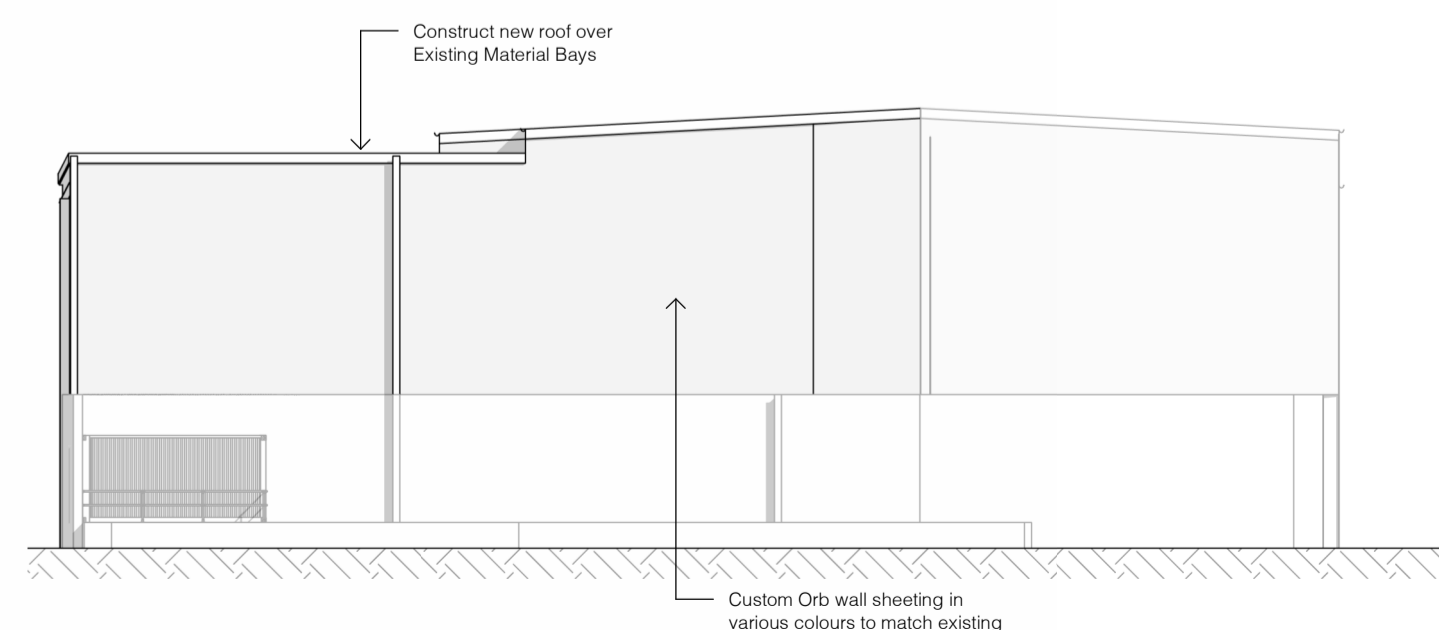
Processing Shed - South Elevation  
Scale: 1 : 250



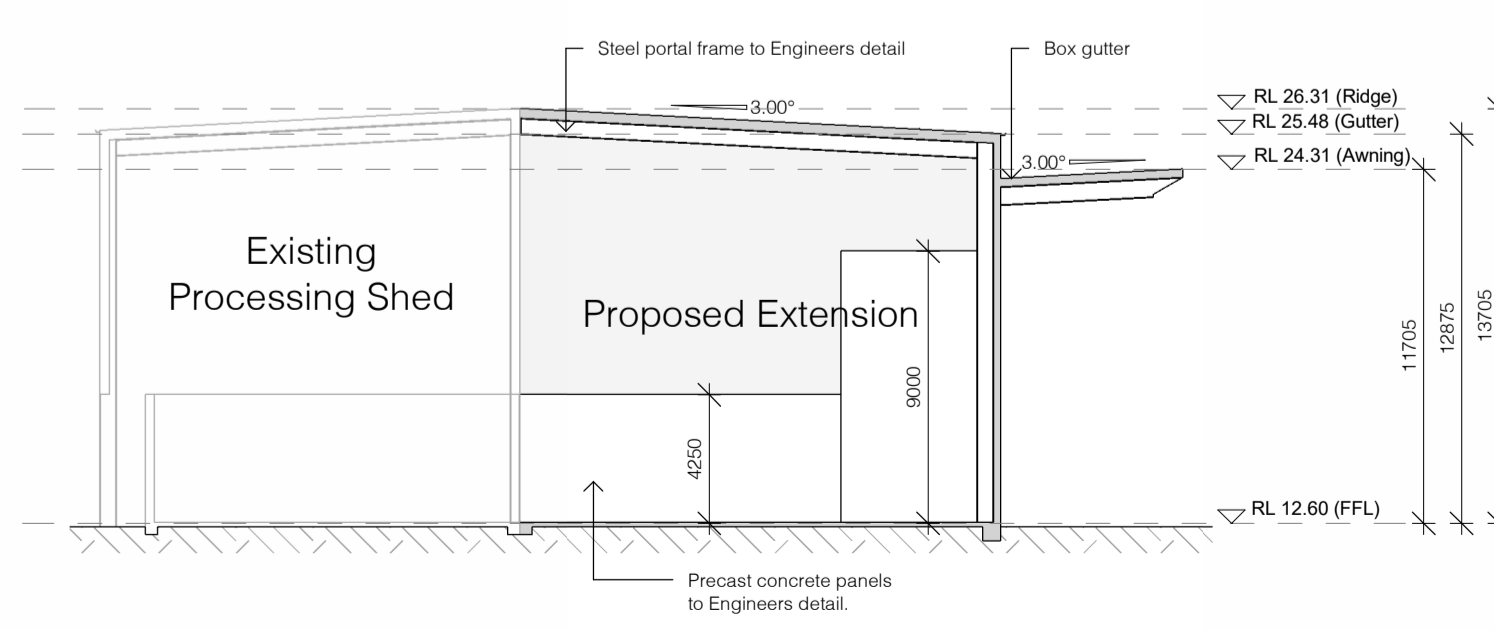
Processing Shed - North Elevation  
Scale: 1 : 250



Processing Shed - West Elevation  
Scale: 1 : 250

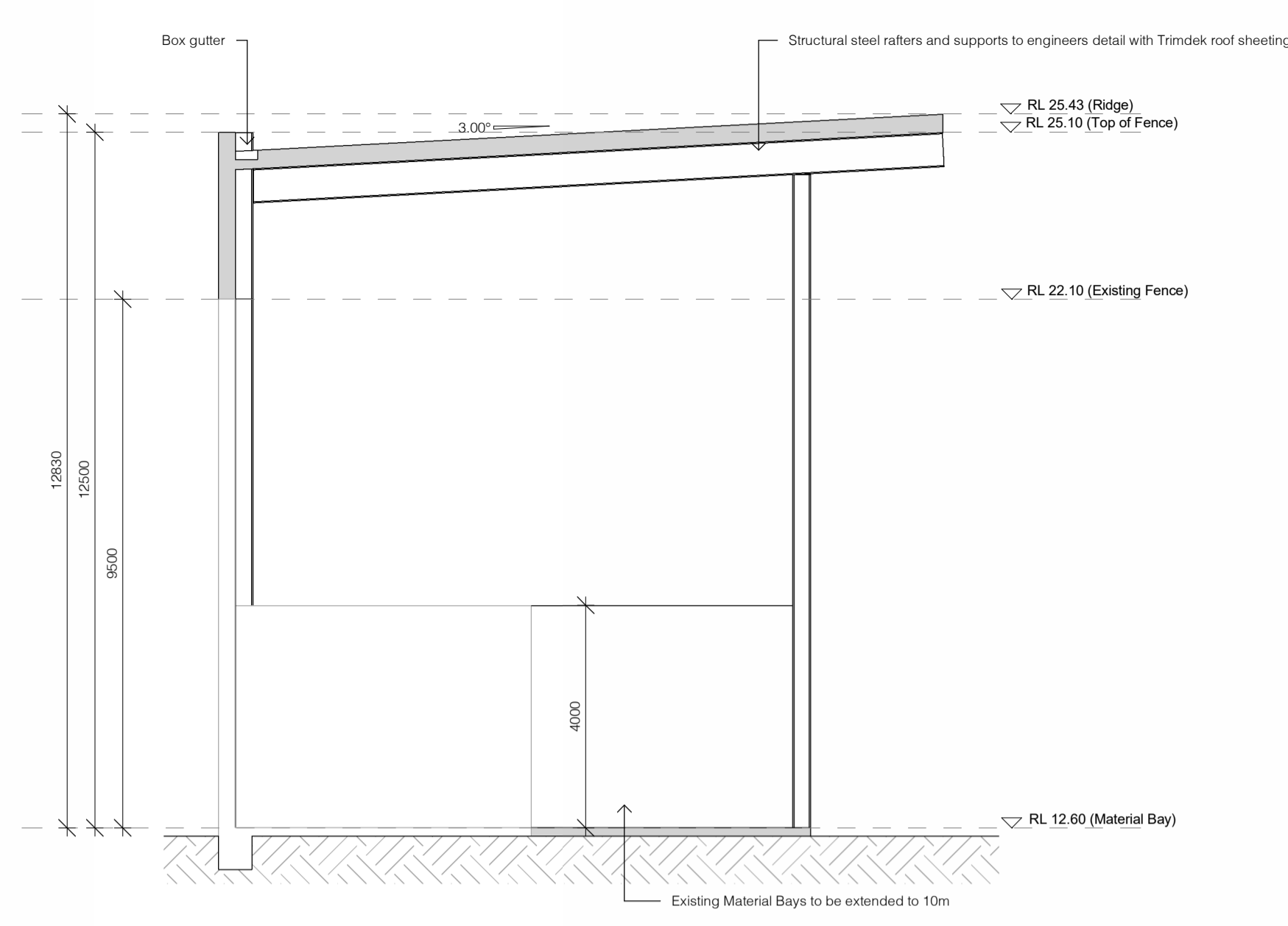


Processing Shed - East Elevation  
Scale: 1 : 250

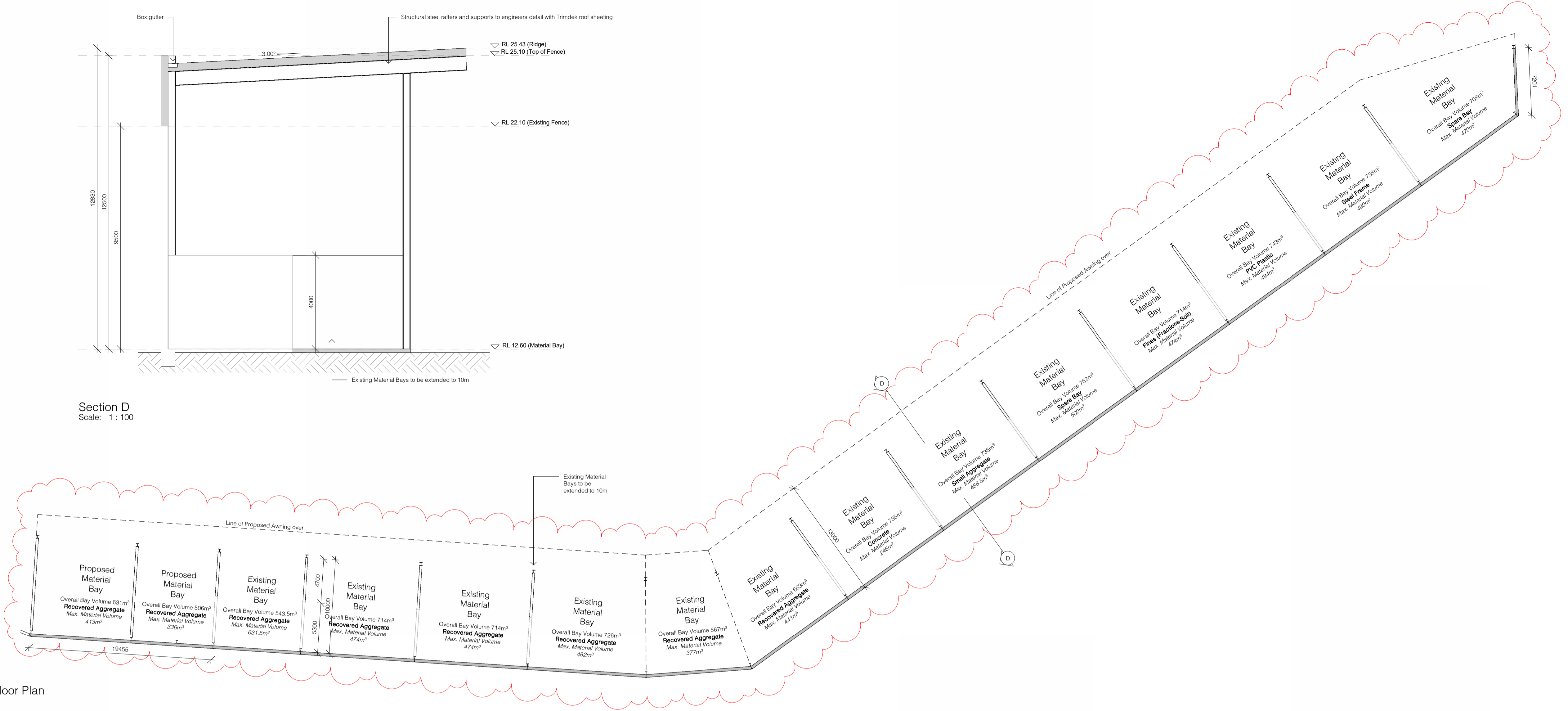


Section C  
Scale: 1 : 250

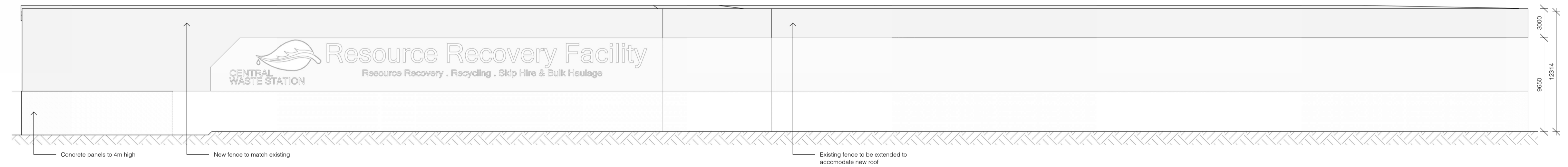
Area	
Existing Shed Area	2 618.1m²
Proposed Extension Area	545.3m²
<b>Total Gross Floor Area</b>	<b>3 163.4m²</b>
	<b>2 613.2m²</b>



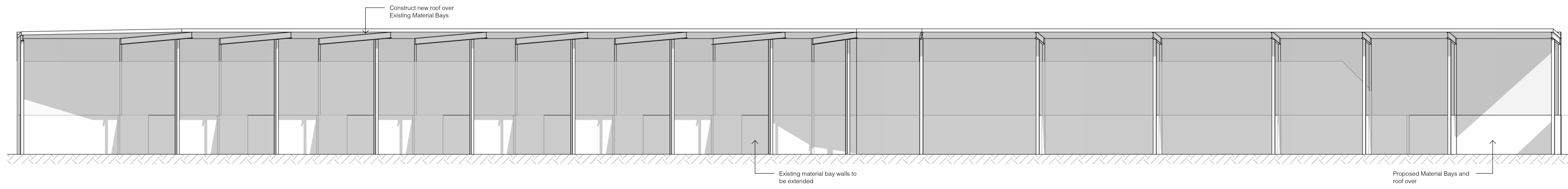
Section D  
Scale: 1 : 100



Material Storage Bays - 1st Floor Plan  
Scale: 1 : 250

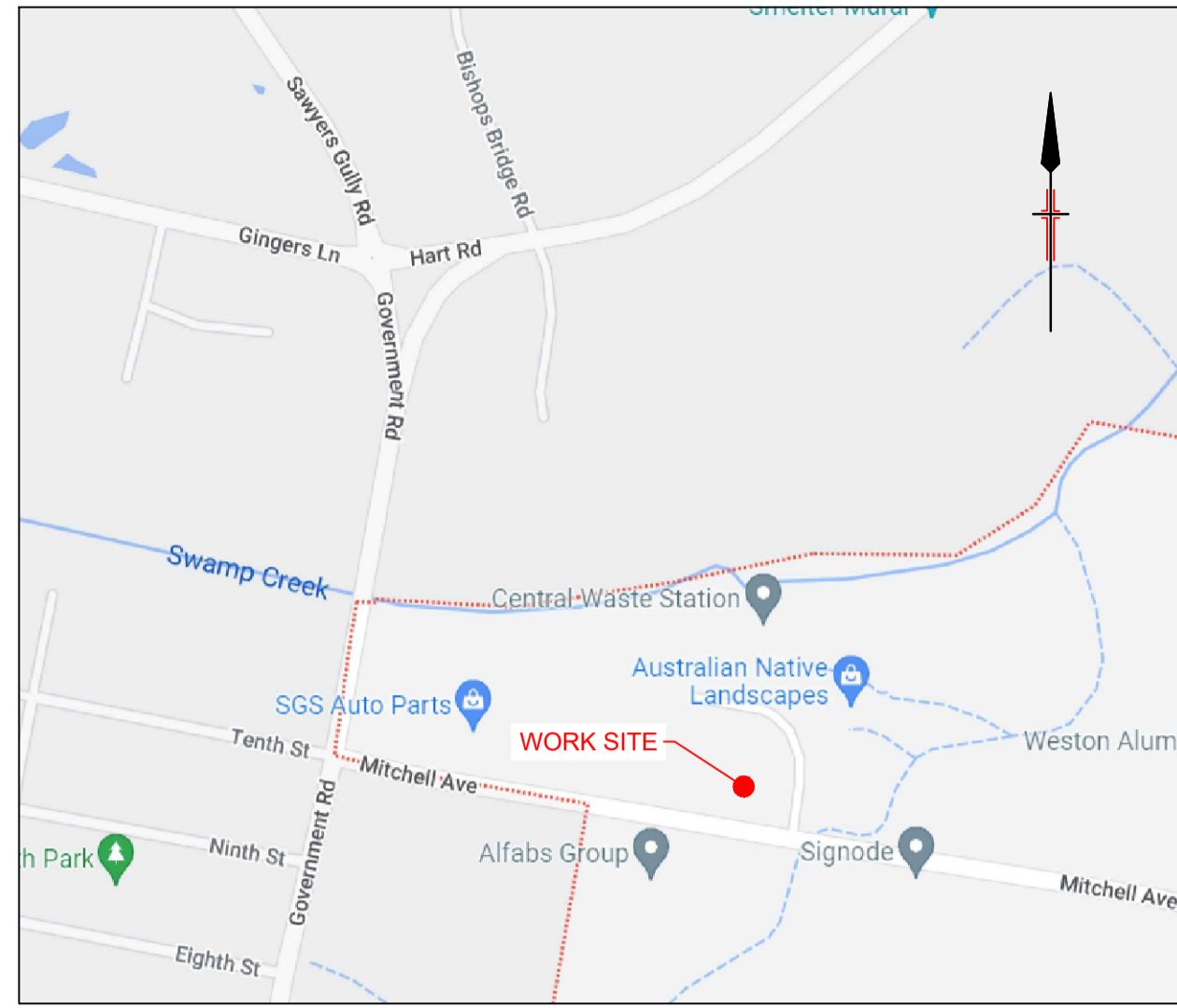


Material Storage Bays - South Elevation (Styles Street)  
Scale: 1 : 250



Material Storage Bays - North Elevation  
Scale: 1 : 250

## 8.2. Annexure B - Concept Electrical Plan - CWS Kurri Kurri



LOCALITY SKETCH  
N.T.S.

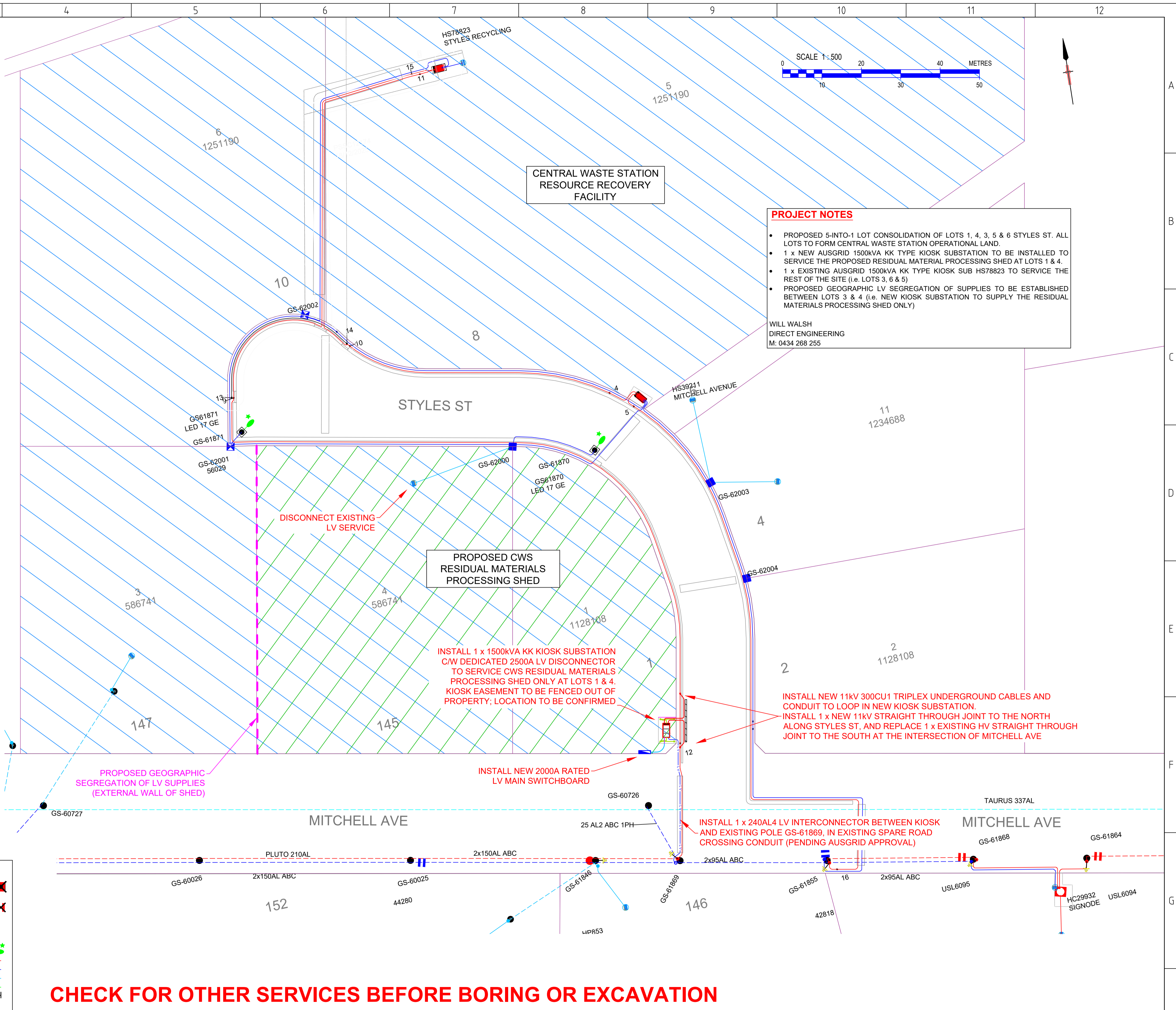
ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH AUSGRID'S NETWORK STANDARDS

GENERAL NOTATIONS

- FOR IDENTIFICATION AND JOINTING PURPOSES ALL CABLE ENDS SHALL BE LABELLED AT THE TERMINATION LOCATIONS AND IN JOINT BAYS DURING CABLE INSTALLATION. THE CABLES MUST BE LABELED AS PER CERTIFIED DESIGN DRAWING
- CLAIMS FOR VARIATIONS TO THE COST OF NON-CONTESTABLE WORKS, INCLUDING ROCK EXCAVATION, WILL NOT BE ACCEPTED UNLESS VERIFIED ON SITE BY AUSGRID WHILE THE WORKS ARE IN PROGRESS.
- THE ASP/1 IS RESPONSIBLE FOR UNDERTAKING SATISFACTORY CONSULTATION WITH ALL LOCAL CUSTOMERS WHO MAY POTENTIALLY BE AFFECTED BY THE CONSTRUCTION WORKS INCLUDING ALL ALTERATIONS TO SERVICE MAINS.
- THE ASP/1 MUST MINIMISE THE IMPACT OF THE WORKS ON THE ELECTRICITY SUPPLY TO CUSTOMERS AND INTERRUPTIONS TO SUPPLY MUST BE AVOIDED WHEREVER POSSIBLE. AT LEAST FOUR (4) CLEAR BUSINESS DAYS NOTICE MUST BE PROVIDED TO ALL AFFECTED CUSTOMERS PRIOR TO ANY PLANNED INTERRUPTIONS TO THE ELECTRICITY SUPPLY. NOTICE MUST BE IN WRITING IN ACCORDANCE WITH CLAUSE 90 OF THE NATIONAL ENERGY RETAIL RULES.
- SPECIFIC PRIOR APPROVAL MUST BE SOUGHT FROM AUSGRID FOR ANY PLANNED ELECTRICITY SUPPLY INTERRUPTIONS WHERE THE PLANNED INTERRUPTION WILL EXCEED ONE (1) HOUR IN DURATION OR THE DURATION WILL BE LESS THAN ONE HOUR, BUT A SUITABLE TIME FOR THE INTERRUPTION CANNOT BE MUTUALLY AGREED TO WITH THE AFFECTED CUSTOMER(S).
- THE ASP/1 IS TO MAINTAIN ADEQUATE PUBLIC LIGHTING LEVELS FOR THE DURATION OF THE WORKS. IF NECESSARY, THE ASP/1 IS TO ARRANGE FOR SUITABLE TEMPORARY STREET LIGHTING TO BE PROVIDED UNTIL PERMANENT LIGHTING IS RE-ESTABLISHED.
- FOR KIOSK AND CHAMBER TYPE SUBSTATIONS IN THE HUNTER AREAS, ARRANGE PHASING OF 11KV AND LOW VOLTAGE TRANSFORMER TERMINATIONS TO ACHIEVE DYN 11 INTERCONNECTION CAPABILITIES.
- THE ASP/1 IS TO CO-ORDINATE THE MODIFICATION AND TESTING OF ANY REQUIRED PROTECTION RELAY WITH THE AUSGRID TECHNICAL SERVICES GROUP.
- THE ASP/1 IS REQUIRED TO COMPLY WITH THE CORRECT PROCEDURE(S) FOR WORKING WITH AND/OR NEAR ASBESTOS MATERIAL (REFER TO AUSGRID NUS 211 - WORKING WITH ASBESTOS PRODUCTS). THERE ARE NO KNOWN ASBESTOS MATERIALS ASSOCIATED WITH THE EXISTING AUSGRID ASSETS TO BE WORKED ON.

THIS INFORMATION INCLUDES DATA FROM THE NSW DIGITAL CADASTRAL DATABASE BY LAND AND PROPERTY INFORMATION © 2016, USED UNDER CREATIVE COMMONS LICENCE VERSION 4.0.

LEGEND		PROP.		EXIST.		REMOVE	
SUPPLY POINT	PROG. EXIST.	GROUND SUB	PROG. EXIST.	HV O/H	PROG. EXIST.	POLE	REMOVE
POLE	PROG. EXIST.	KIOSK SUB	PROG. EXIST.	HV U/G	PROG. EXIST.	GND SUB	REMOVE
POLE SUB	PROG. EXIST.	SEALED END	PROG. EXIST.	LV O/H	PROG. EXIST.	ABS	REMOVE
RECLOSER	PROG. EXIST.	PILLAR	PROG. EXIST.	LV U/G	PROG. EXIST.	U/S LINK	REMOVE
ABS	PROG. EXIST.	SW. PILLAR	PROG. EXIST.	SL O/H	PROG. EXIST.	PILLAR	REMOVE
HV U/S LINK	PROG. EXIST.	LV U/S LINK	PROG. EXIST.	SL U/G	PROG. EXIST.	JOINT	REMOVE
HOT LINE CLAMP	PROG. EXIST.	LINE TAPPING	PROG. EXIST.	SV O/H	PROG. EXIST.	SL STD.	REMOVE
HV UG/OH	PROG. EXIST.	LV UG/OH	PROG. EXIST.	AUX O/H	PROG. EXIST.	S/L	REMOVE
HV JOINT	PROG. EXIST.	LV JOINT	PROG. EXIST.	BDY	PROG. EXIST.	HV	REMOVE
HV CABLE	PROG. EXIST.	LV CABLE	PROG. EXIST.	ESMNT	PROG. EXIST.	LV	REMOVE
PRIVATE POLE	PROG. EXIST.	SL CABLE	PROG. EXIST.	WATER	PROG. EXIST.	SL	REMOVE
HV ELECTRODE	PROG. EXIST.	PEC SL	PROG. EXIST.	GAS	PROG. EXIST.	STAY	REMOVE
EARTH COND.	PROG. EXIST.	SL STD.	PROG. EXIST.	TELSTRA	PROG. EXIST.		
CONDUIT	PROG. EXIST.	STAY WIRE	PROG. EXIST.	SEWER	PROG. EXIST.		
		GROUND STAY	PROG. EXIST.	FENCE	PROG. EXIST.		



PRELIMINARY DRAWING  
ONLY  
NOT RELEASED FOR  
CONSTRUCTION

ASSOCIATED DRAWINGS	CERTIFICATION NUMBER	DESIGNED BY	WILL WALSH	1 x 1500kVA KL KIOSK SUB & 2500A LV DISCONNECTOR CWS RESIDUAL MATERIALS PROCESSING SHED STYLES ST, KURRI KURRI
		AUTH NO.	2579/02	
		SUBMIT DATE	31/01/2025	SIZE
		LGA	CESSNOCK	A1
		MAP REF.	NEW UBD MAP: 70 D16	AUSGRID PROJECT No.
		AUSGRID REF.	GS 64	**
		PRJTRK No.	PRJTRK	SHEETS
				1 of 1
				AM.
				A

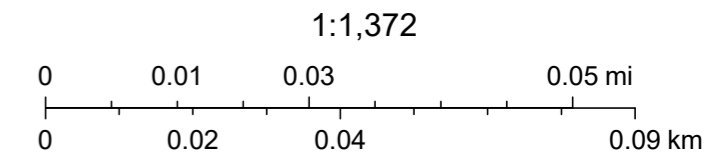
### 8.3. Annexure C - Hunter Water Asset Locations - ARCGis

# HWC Asset Locations



12/5/2024

- 
- 
- 
- 



8.4. Annexure D - Hunter Water SEARs advice - SSD 71547218



Hunter Water Corporation  
ABN 46 228 513 446

PO Box 5171  
HRMC NSW 2310  
36 Honeysuckle Drive  
NEWCASTLE NSW 2300  
1300 657 657 (T)  
(02) 4979 9625 (F)  
hunterwater.com.au

18 June 2024

HW Ref: HW2017-1215/18/64  
Your Ref: SSD - 71547218

Department of Planning, Industry and Environment  
submitted via the Major Projects Portal

Attention: Ellen Luu (Senior Environmental Assessment Officer, Industry Assessments)

Dear Susan

**SEARs comments on proposed State Significant Development (SSD-71547218) - Kurri Kurri Integrated Resource Recovery Centre - Styles Street, KURRI KURRI**

I refer to your request dated 4 June 2024, requesting Hunter Water's comments on the Secretary's Environmental Assessment Requirements (SEARs) relating to a State Significant Development (Reference SSD-71547218).

The development proposal is to expand the existing site operations on Lots 1, 8 and 10 Styles Street, 145 and 147 Mitchell Avenue, Kurri Kurri, as detailed in the Scoping Report (dated 7 May 2024) prepared by EMM and supporting documents.

As indicated in *Section 5.3 Engagement for previous application*, Hunter Water noted the presence of a 450mm trunk sewermain under the site and provided requirements for works over sewer assets, and subsequently registered an interest in the development proposal. The Proponent was requested to undertake further consultation with Hunter Water on this matter.

The trunk sewermain is a critical asset and a failure will have a significant impact on the residents of Weston and Abermain. The proposed awning structure on Lot 5 will impede our access to the sewermain for maintenance and repairs, and Hunter Water will require the Proponent to either:

- i. Relocate the awning clear of the sewermain to provide the necessary clearance to allow excavation of the sewermain; or
- ii. Relocate the sewermain clear of the awning to provide the necessary clearance to allow excavation of the sewer main.

Also, the proposed development has the potential to discharge trade waste to the local sewer network. Any trade waste discharge needs to be licenced with Hunter Water for compliance with our trade waste guidelines.

To ensure Hunter Water's concerns are adequately addressed, the Proponent will need to submit a Development Application to Hunter Water in accordance with Section 49 of the Hunter Water Act 1991 (the Act).

When Hunter Water's specific development requirements have been met, Hunter Water will issue a Compliance Certificate under Section 50 of the Act.

Should you have any further enquiries please contact me.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'B. Calderwood'.

BARRY CALDERWOOD

## **Account Manager Major Development**

Tel: 02 4979 9721  
Mobile: 0437 720 845  
Email: [barry.calderwood@hunterwater.com.au](mailto:barry.calderwood@hunterwater.com.au)



## **Attachment: Building Over Sewer Assets Policy**

### **BUILDING OVER SEWER ASSETS**

#### **PURPOSE**

Hunter Water maintains a network of sewer mains within its area of operation. Under its Operating Licence Hunter Water is required to meet specified levels of performance with respect to the operation of this sewerage system. The sewerage network requires regular maintenance to ensure its continued operation. Access to underground pipelines is a key factor in providing prompt and cost effective maintenance. The presence of a building or structure over a sewer main restricts or may preclude Hunter Water from accessing the asset for repairs.

#### **SCOPE**

This policy applies to all developments proposing to build over or adjacent to Hunter Water's sewer network assets.

#### **POLICY STATEMENT**

The policy of Hunter Water is to ensure compliance with the legislation (Hunter Water Act, 1991, as amended) and requires all sewer network assets to be diverted clear of proposed buildings, structures, landscaping and improvements so as to ensure ongoing access to operate and maintain the asset.

Where Hunter Water agrees that there may be a suitably low residual risk, Hunter Water may require that the asset be replaced in-situ with flexible and more durable plastic pipe prior to building works commencing. This work is at the landowner's expense and can usually be carried out by an accredited contractor. Where existing sewer mains are located on the development lot, the landowner is required to undertake work so that the sewer mains comply with the latest Hunter Water Edition, WSAA Design Manual guidelines.

#### **APPLICATION OF POLICY**

This policy applies to any development, subdivision, building (residential, commercial or industrial), or any structure proposed to be placed over or adjacent to a sewer asset of Hunter Water.

Where subdivision is proposed and the future building alignments are not known, Hunter Water requires the existing sewer mains to be relocated adjacent to boundaries in accordance with the latest Hunter Water Edition WSAA Design Manual

All footings crossing or adjacent to a sewer main should be strengthened or underpinned to prevent loading upon the sewer and to protect the stability of the structure in the event of subsidence of the sewer trench, collapse of the sewer, or excavation by Hunter Water to repair or maintain the sewer. In this regard, it may be necessary to consult a competent designer or structural engineer.

Special consideration to footing design should extend to land within the Zone of Influence. This is a nominal strip of land (usually about twice as wide as the sewer is deep) within which the sewer main is centrally located. Ground conditions are an important consideration in determining the likely zone of influence and it may be

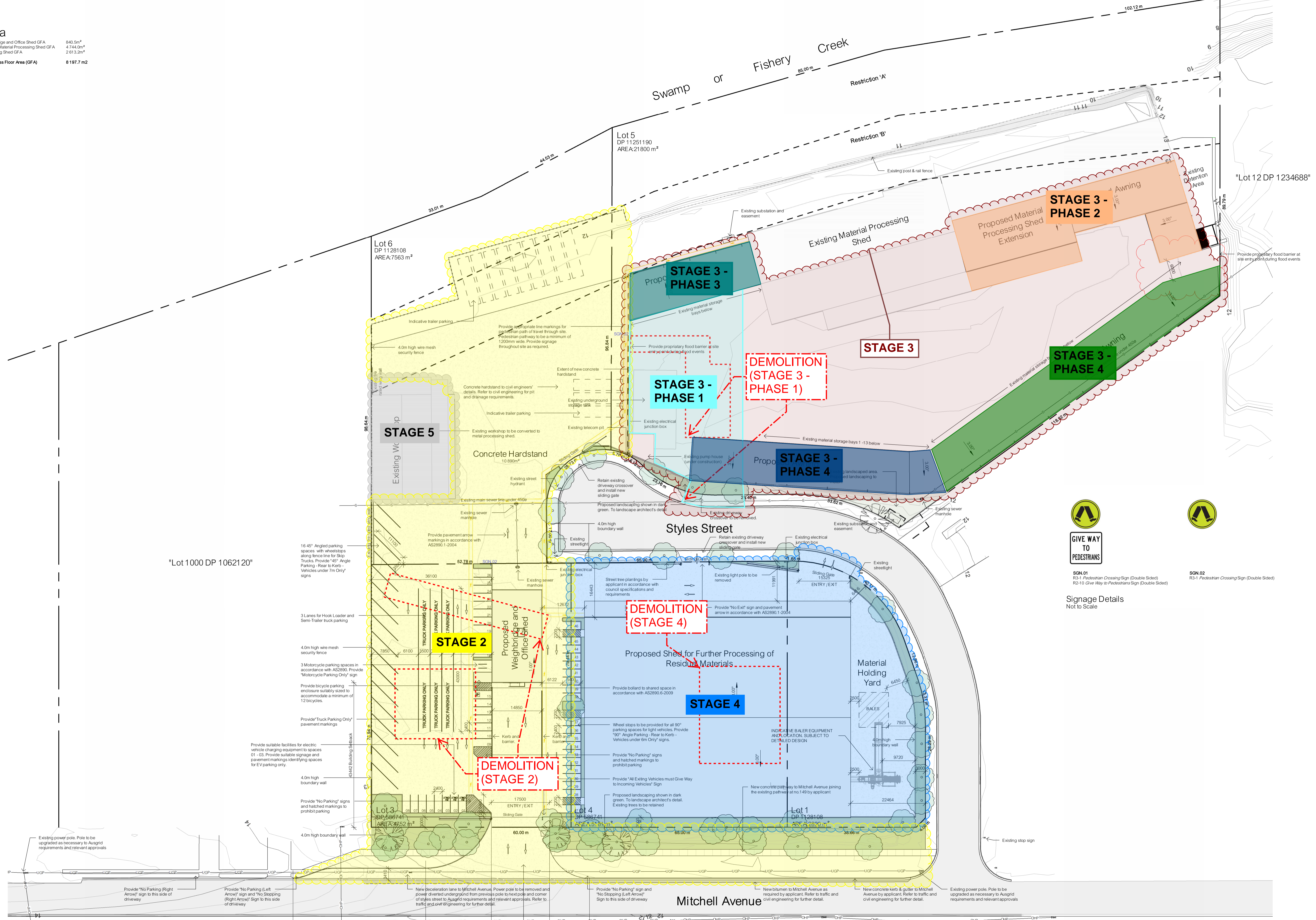
necessary for you to engage a qualified Geotechnical Engineer to determine the appropriate design parameters influencing the structural performance of proposed foundations, footings or piers. Hunter Water requires a minimum working clearance of 1.5 metres from the centre of any access chamber to a building wall.

The location of the sewer main can be determined from the plan attached to the Section 50 Notice of Requirements. A surveyor or building contractor engaged by the developer will confirm this location. Hunter Water Corporation will not accept responsibility for future maintenance on the shaft and/or branch contained in or under the structure. Conversion of the structure to a habitable area, with or without plumbing fixtures, is not compliant with Plumbing Code of Australia and Australian/New Zealand Standard 3500 (AS/NZS 3500:1).

Enquiries on Hunter Water Corporation's Building Over Sewer Assets Policy should be directed to Hunter Water's 1300 657 657 number.

## 8.5. Annexure E - Staging Plan

Area  
 Weighbridge and Office Shed GFA 840.5m<sup>2</sup>  
 Residual Material Processing Shed GFA 4744.0m<sup>2</sup>  
 Processing Shed GFA 2613.2m<sup>2</sup>  
**Total Gross Floor Area (GFA) 8197.7 m<sup>2</sup>**



Proposed Site Plan  
 Scale: 1 : 500

**THOMAS**  
 Structural Engineering | Building Design | Planning  
 Thomas and Associates Consulting Pty Ltd  
 4/114 Barton Street (PO Box 76) Kurri Kurri NSW 2327  
 P 02 4937 1562 E admin@thomas.com.au  
 www.thomas.com.au ABN 65 106 192 661

SSD Documentation

Revisions	Amendment to Material	Date	Initial	Client
M	Amendment to Material	21.8.25	AE	Central Waste
L	Bay Awning	19.8.25	AE	Central Waste
L	Plans & Material Bays	19.8.25	AE	Central Waste
L	Added to Residual Material Processing Shed			Central Waste
	Issue Description	Date	Initial	

Industrial Development  
 Project No. 230499  
 1, 8 & 10 Styles Street, 145-147 Mitchell Avenue, Kurri Kurri

Proposed Site Plan  
 Drawing No. A103  
 Issue M  
 21.8.25

## 8.6. Annexure F - Ausgrid – Preliminary Enquiry – Response Letters

## Preliminary Enquiry – Response Letter



7/02/23

Webform ref: 1223401

Direct Engineering Pty Ltd  
Attention: William Edward Walsh  
Via email: will.walsh@directengineering.com.au

Premises address: **CENTRAL WASTE STATION - 145 MITCHELL AVENUE, KURRI KURRI**  
Ausgrid AE Reference: **700008251**

Dear William Edward

I refer to your preliminary enquiry regarding the electricity connection at the above address and provide the following information.

- The Ausgrid 11kV network has the capacity to connect the proposed 1200amp LV phase low voltage electricity connection. An extension/augmentation of the Ausgrid network is required. Following is the likely work(s) required to provide the request capacity.
  - Installation of a KL kiosk substation via looped 11kV from feeder 80926.
- An extension/augmentation of the Ausgrid network is Contestable and requires the customer to engage accredited service providers to undertake the design and construction of the required works. Information on how to connect to the Ausgrid network can be found on our website at the following link: <https://www.ausgrid.com.au/Connections>
- Ausgrid is unable to provide costs or timeframes for Contestable works. However, accredited service providers may be able to provide the information.
- The electrical connection will require Ausgrid to provide auxiliary services that only Ausgrid can provide. The auxiliary services and the associated fee are detailed in the Ausgrid document **Alternative control services fee schedule**. The document is available on our website at the following link: <https://www.ausgrid.com.au/Connections/charges>

It should be noted that the above advise is based on Ausgrid's polices and network status as of today and are subject to change.

Connections to the Ausgrid network are governed by a set of laws and rules referred to as the National Energy Customer Framework (NECF). Included in the NECF is the National Electricity Rules (NER). Under these rules, a binding contract may only be formed after a connection application is lodged and Ausgrid has made a connection offer in response to that application. Accordingly, to make arrangements for the electricity connection of the development to the Ausgrid network you should lodge a completed connection application.

Should you require any further information please contact me.

Yours sincerely,

**Brian Mottley**

**Ausgrid**

Direct Telephone Number: 0249101411  
Email: brian.mottley@ausgrid.com.au

## Preliminary Enquiry – Response Letter



7/02/23

Webform ref: 1223390

Direct Engineering Pty Ltd  
Attention: William Edward Walsh  
Via email: will.walsh@directengineering.com.au

Premises address: **CENTRAL WASTE STATION 135 MITCHELL AVENUE, KURRI KURRI**  
Ausgrid AE Reference: **700008252**

Dear William Edward

I refer to your preliminary enquiry regarding the electricity connection at the above address and provide the following information.

- The Ausgrid network does not have the capacity to connect the proposed 4MVA 11kV electricity connection. An extension/augmentation of the Ausgrid network is required. Following is the likely work(s) required to provide the request capacity.
  - Installation of a KR HVC substation.
  - Connect to feeder 80920 with a normally open switch to feeder 80926. See connection diagram 1.
- An extension/augmentation of the Ausgrid network is Contestable and requires the customer to engage accredited service providers to undertake the design and construction of the required works. Information on how to connect to the Ausgrid network can be found on our website at the following link: <https://www.ausgrid.com.au/Connections>
- Ausgrid is unable to provide costs or timeframes for Contestable works. However, accredited service providers may be able to provide the information.
- The electrical connection will require Ausgrid to provide auxiliary services that only Ausgrid can provide. The auxiliary services and the associated fee are detailed in the Ausgrid document **Alternative control services fee schedule**. The document is available on our website at the following link: <https://www.ausgrid.com.au/Connections/charges>

It should be noted that the above advice is based on Ausgrid's policies and network status as of today and are subject to change.

Connections to the Ausgrid network are governed by a set of laws and rules referred to as the National Energy Customer Framework (NECF). Included in the NECF is the National Electricity Rules (NER). Under these rules, a binding contract may only be formed after a connection application is lodged and Ausgrid has made a connection offer in response to that application. Accordingly, to make arrangements for the electricity connection of the development to the Ausgrid network you should lodge a completed connection application.

Should you require any further information please contact me.

Yours sincerely,

**Brian Mottley**  
**Ausgrid**

Direct Telephone Number: 0249101411  
Email: [brian.mottley@ausgrid.com.au](mailto:brian.mottley@ausgrid.com.au)

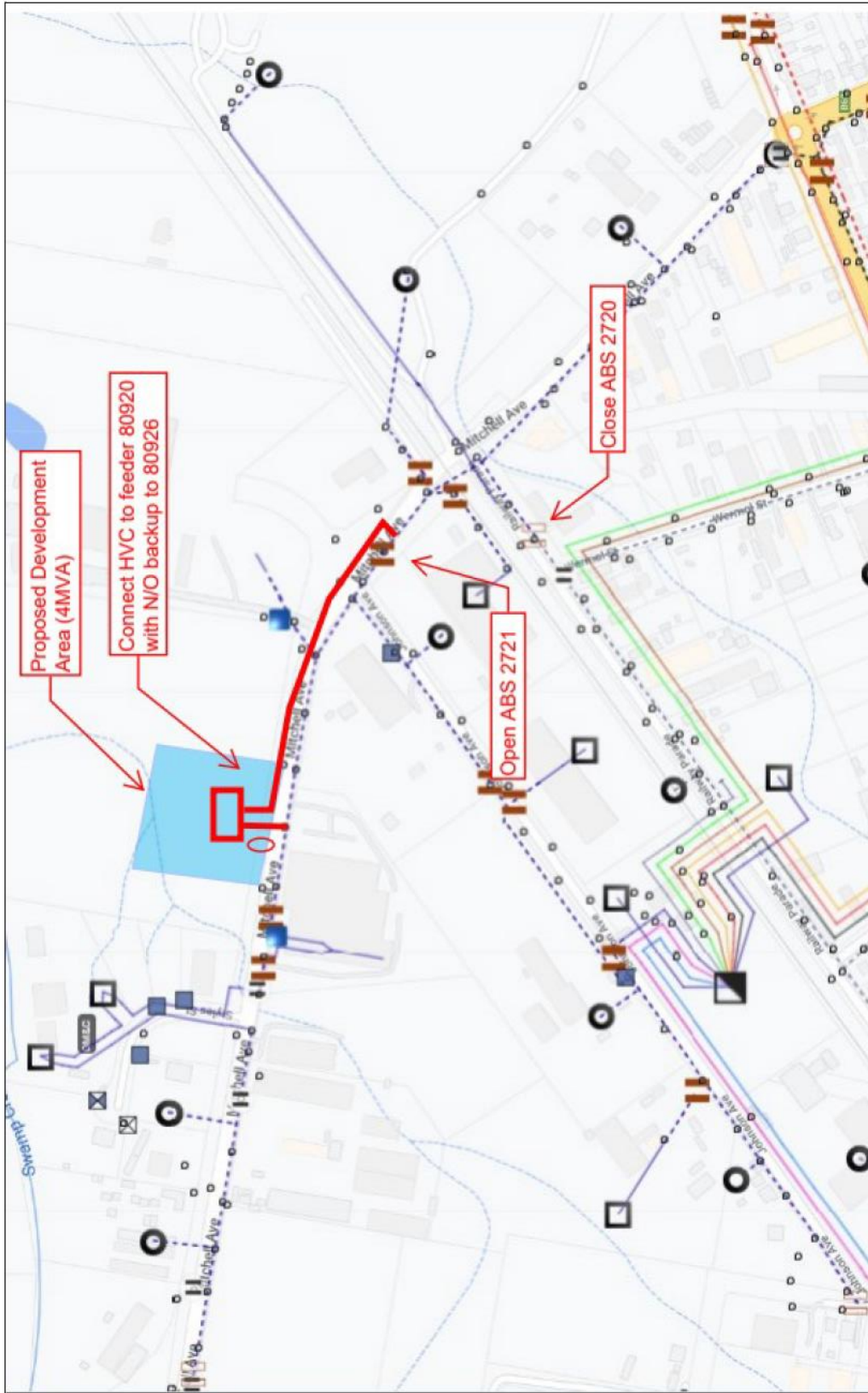
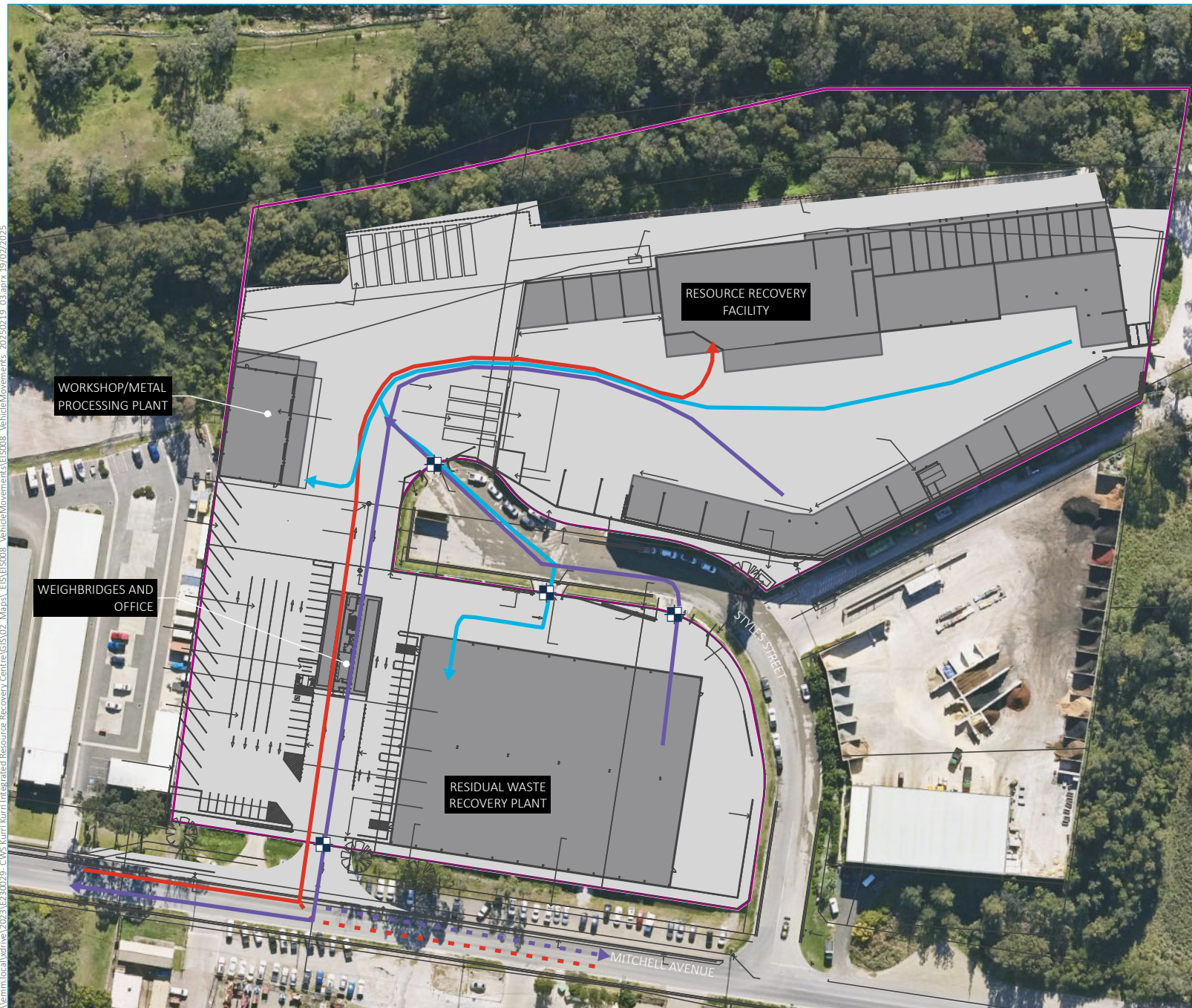


Diagram 1 – Connection Arrangement

## 8.7. Annexure G - Central Waste - Facility Material Movement Diagram



- KEY**
- Site boundary
  - Development footprint
  - Site element
  - Site access
  - Vehicle movement**
  - ➔ Incoming
  - - - Incoming trucks up to 19 m that service the local area
  - ➔ Internal movement
  - ➔ Outgoing
  - - - Outgoing trucks up to 19 m that service the local area
  - Proposed feature

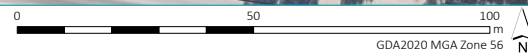
Vehicle movements

CWS Kurri Kurri Integrated Resource Recovery Centre Environmental Impact Statement Figure 6.X



\\emm.local\drive\2023\E230029 - CWS Kurri Kurri Integrated Resource Recovery Centre\GIS\02 - Maps\ - EIS\EIS008 - VehicleMovements\EIS008 - VehicleMovements - 20250219\_03.aprx.19/02/2025

Source: EMM (2025); CWS (2025); DCSSS (2023); GA (2009); MetroMap (2025)



## 8.8. Annexure H - Maximum Demand Calc P2

**Electrical Maximum Demand Estimation Summary**



**Project:** MN11870 - Industrial Development  
**Location:** 8 Styles St, Kurri Kurri  
**Date:** 16/01/2025  
**Revision:** 1

Address	Building	CATEGORY	Description	AREA (m <sup>2</sup> )	VA/m <sup>2</sup>	kVA	A/phase
1 Styles St + 145 Mitchell Ave	Residual Material Processing Shed	Light Industrial	Light, power & ventilaton = 30VA/m as per AS/NZS 3000 Table C3	4744.0	30.0	142	205
		Equipment	Load power requiremnts by Turmec			1532	2211
8 Styles St	Lot 12 DP1234688 Processing Shed Matierial Storage Bays	Existing Site Maximum Demand	Maximum demand from substation meter data (provided by ASP3 contact) (800A was site estimate)			655	945
		Light Industrial	Light & power = 15VA/m as per AS/NZS 3000 Table C3	2190.0	15.0	33	47
		Warehouses	Light & power = 5VA/m as per AS/NZS 3000 Table C3	2286.0	5.0	11	16
10 Styles St	Existing Workshop/Metal Processing Plant	Light Industrial Equipment	Light & power = 15VA/m as per AS/NZS 3000 Table C3 To be confirmed with client	895.0	15.0	13	19
147 Mitchell Ave	Weighbridge Shed	Offices	GND, 1F & 2F Light, power & AC = 100VA/m as per AS/NZS 3000 Table C3	888.0	100.0	89	128
		Light Industrial Special Equipment	Weighbridge - Light & power = 15VA/m as per AS/NZS 3000 Table C3 Marline Estimated Load for Special Equipment	311	15	5	7
						35	50
Site Lighting for 24hr Operations (future)	Site	External Site Lighting	Marline Estimated Load				
				<b>SUB TOTAL</b>	<b>11314.0</b>	<b>2549.3</b>	<b>3679.6</b>

**Extra Factors**  
 90% site diversity included to allow for diverse use of the site and spread of occupants across multiple uses

0.90      0.90      0.90

Note: Operational diversity considerations are based on estimated utilisation of industrial equipment, expected load profiles of the site, and staff numbers in select areas.  
 Note: No consideration of solar PV or co-generation has been considered as part of this study  
 Note: Recommended that site be designed with a HV connection to Ausgrid network if all lots are consolidated. If lots are not consolidated, multiple LV connections may be achievable.

<b>Site Total</b>	<b>2294.4 kVA</b>	<b>3311.7 A/phase</b>
<b>Proposed Supply Arrangement</b>	Recommended: min 1500 kVA Substation (Existing) for 8 Styles St + 1500 kVA Substation (New) for 1 Styles St + 145 Mitchell Ave	

## 8.9. Annexure I - Concept Hydraulic Plan

# Fire Services

## INDUSTRIAL DEVELOPMENT

8 STYLES STREET KURRI KURRI, 2327 NSW

### About Marline Engineering Newcastle

At Marline, we take a comprehensive approach when designing your new development.

With in-house electrical, mechanical and hydraulic engineers, Marline Engineering makes your engineering design needs a breeze. We are able to adjust, implement and create designs on AutoCAD and REVIT which makes it easy for contractors and builders to build our designs.

We advise you on the most affordable, practical and effective solutions and systems based on the site and legal factors.

As consulting engineers, Marline has also expanded the range of services to provide a wide range of building services disciplines including Air-conditioning, Electrical, Hydraulics, Fire Protection and Lift Services.

Marline has seen a huge amount of growth in the Energy sector. We provide services that go above and beyond the standard regulatory requirements and offer unique solutions to your Section J or JV3 Alternative solution reports. We also offer a fast NABERS and BEEC certification that ensures advertising for commercial properties are fully compliant with the CBD advertising rules and regulations.

With engineering consulting experience that dates back as far as 1975, we're one of the best engineering companies in Australia, and have developed the kind of projects that residential and commercial property developers benefit from.

Our Newcastle engineering firm continues to grow, however our team prides itself on every customer receiving the kind of high quality workmanship and personalised service that our company is known for.

To accommodate the expansion and demand for engineering services within Newcastle and throughout New South Wales, Marline Engineering has almost doubled the number of highly trained employees in the last five years.

Our engineering firm currently employs ten engineers, eight technical assistants and an office administrator. As a result, we continue to be leaders amongst engineering companies in Australia, with a large portfolio and a positive attitude.

PROJECT No:  
MN11870

CLIENT:  
CENTRAL WASTE STATION PTY LTD

ARCHITECT:  
THOMAS & ASSOCIATES CONSULTING PTY LTD

### DRAWING SCHEDULE

FS-00-000	COVER PAGE
FS-00-001	LEGEND & NOTES
FS-00-002	SITE SERVICES

**FOR INFORMATION**

**FIRE SERVICES**

FS-00-000

3

NOTE: SOME ITEMS MAY NOT BE USED

### LINETYPES - EXISTING

	SPRINKLER
	WINDOW DRENCHER
	DISUSE PIPE
	COLD WATER
	FIRE HYDRANT

### LINETYPES - NEW

	SPRINKLER
	WINDOW DRENCHER
	COLD WATER
	FIRE HYDRANT
	30m INTERNAL FIRE HYDRANT RUN
	60m EXTERNAL FIRE HYDRANT RUN
	10m FIRE HYDRANT SPRAY
	36m FIRE HOSE REEL RUN
	4m FIRE HOSE REEL SPRAY
	FIRE WALL
	SMOKE WALL

### SYMBOLS

	DELETED EXPOSED SPRINKLER
	EXISTING EXPOSED SPRINKLER
	NEW EXPOSED SPRINKLER
	DELETED CONCEALED SPRINKLER
	EXISTING CONCEALED SPRINKLER
	NEW CONCEALED SPRINKLER
	DELETED FULLY RECESSED CEILING SPRINKLER
	EXISTING FULLY RECESSED CEILING SPRINKLER
	NEW FULLY RECESSED CEILING SPRINKLER
	DELETED SIDE WALL SPRINKLER
	EXISTING SIDE WALL SPRINKLER
	NEW SIDE WALL SPRINKLER
	DELETED WINDOW/WALL WETTING DRENCHER
	EXISTING WINDOW/WALL WETTING DRENCHER
	NEW WINDOW/WALL WETTING DRENCHER
	ALARM STROBE
	FIRE INDICATOR PANEL
	SPRINKLER PUMP SET
	SPRINKLER VALVE SET
	SPRINKLER TEST POINT
	MONITORED ISOLATION VALVE COMPLETE WITH ACCESS PANEL FOR MAINTENANCE

### SYMBOLS - FIRE

	BOOSTER ASSEMBLY
	PUMP SET
	VALVE SET
	TEST POINT
	ALARM STROBE
	SINGLE PILLAR HYDRANT (INTERNAL)
	DOUBLE PILLAR HYDRANT (EXTERNAL)
	STREET HYDRANT
	FIRE HOSE REEL
	THRUST BLOCK
	FIRE INDICATOR PANEL
	FIRE TRUCK (MUST BE LOCATED MINIMUM 10m FROM BUILDING & MAXIMUM 20m FROM FEED HYDRANT).


### ABBREVIATIONS


e	EXISTING
DPH	DOUBLE PILLAR HYDRANT
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
SVS	SPRINKLER VALVE SET
WD	WINDOW DRENCHER
WDE	WINDOW DRENCHER EXTERNAL
WDI	WINDOW DRENCHER INTERNAL

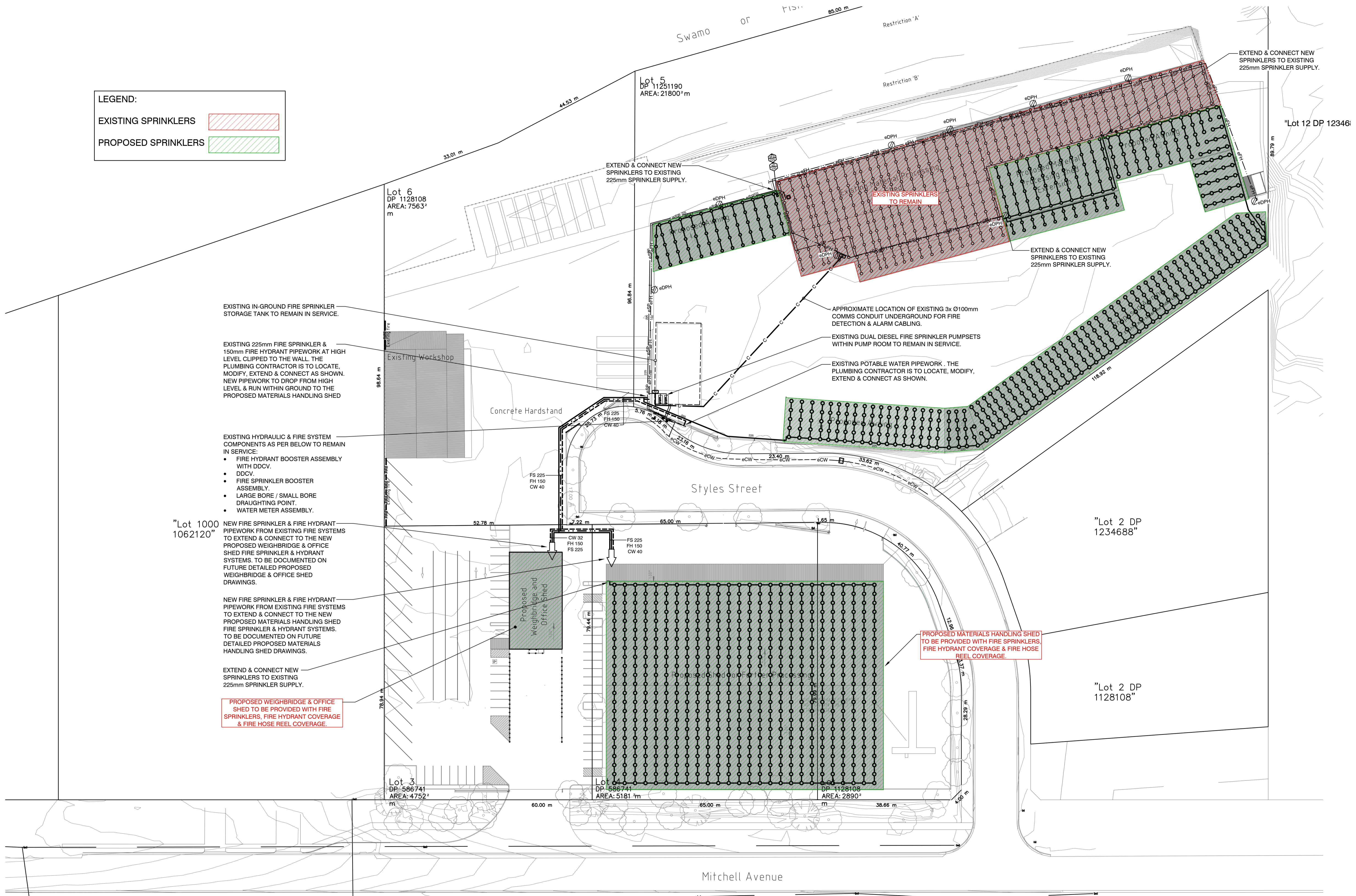
### GENERAL NOTES

- ALL RANGE PIPES TO ONE HEAD SHALL BE 25mm UNLESS NOTED OTHERWISE.
- ALLOW TO DRAIN DOWN. TEST, REFILL & COMMISSION THE SYSTEM & RECHARGE AS NECESSARY TO UNDERTAKE THE WORKS REQUIRED.
- ALLOW TO SUPPLY & INSTALL AS ADDITIONAL 20 SPRINKLER HEADS FOR COORDINATION.
- SPRINKLER HEAD IN CEILING SHALL BE LOW PROFILE MINIMATICS TYPE WITH TWO PIECE ESCUTCHEON PLATE. THE HEADS & ESCUTCHEON PLATES SHALL BE POWDER COATED TO A COLOUR NOMINATED BY THE ARCHITECT.
- NUMBER & LOCATIONS OF HEADS & PIPEWORK IS INDICATIVE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPLIANCE WITH AS2118. THE CONTRACTOR IS TO SUBMIT WORKSHOP DRAWINGS OF THE PROPOSED DESIGN & CALCULATIONS FOR APPROVAL PRIOR TO COMMENCEMENT OF WORKS. ALL SPRINKLERS TO BE LOCATED CLEAR OF ALL LIGHT FITTINGS, EXIT SIGNS ETC WHICH WILL IMPEDE OPERATION OF THE HEADS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FULLY COORDINATE THE LOCATION OF ALL SPRINKLER HEADS & PIPEWORK WITH OTHER SERVICES (ie. STRUCTURAL, LIGHT FITTINGS, SMOKE DETECTORS ETC) PRIOR TO THE INSTALLATION OF ANY WORKS.
- OPERATION & MAINTENANCE MANUALS, MANUALS & DRAWINGS SHALL BE PRODUCED & SUBMITTED IN ACCORDANCE WITH THE SUPERINTENDENT'S REQUIREMENTS.
- INSTALLATION TO COMPLY WITH THE REQUIREMENTS OF AS2118.
- NOTE VOID SPRINKLERS HEADS SHALL BE IN ACCORDANCE WITH THE HAZARD CLASSIFICATION REQUIRED UNDER AS2118.1-2017 AND INCORPORATE APPROVED PROTECTION METAL GUARD.
- SPRINKLER CONTRACTOR TO RUN WIRING TO FIP. COORDINATE WITH ELECTRICIAN.
- EXACT POSITION OF CEILING SPRINKLER HEADS SHALL BE DETERMINED FOLLOWING INSTALLATION OF ROOF TRUSSES & CONFIRMATION OF SKYLIGHT SHAFT LOCATIONS. COORDINATE WITH OTHER SERVICES & OBTAIN APPROVAL PRIOR TO INSTALLATION.
- (FCS) DENOTES FIRE STOP COLLAR WHERE PVC PIPE PENETRATES FIRE RATED WALL.
- FINAL SPACING & COVERAGE OF ROOF SPACE FIRE SPRINKLERS SHALL BE IN ACCORDANCE WITH AS2118.1 "LIGHT HAZARD" PROTECTION.
- FINAL SPACING & COVERAGE OF BELOW CEILING SPRINKLERS SHALL BE IN ACCORDANCE WITH AS2118.1.
- ALL SPRINKLER HEADS TO BE MIN 300mm FROM ANY SUPPLY AIR DIFFUSER.
- ALL SPRINKLER WITHIN 600mm OF A SUPPLY DIFFUSER TO BE RATED AT 79°C.
- ISOLATION VALVE AT WATER METER ASSEMBLY TO BE SECURED IN THE OPEN POSITION BY A PADLOCKED METAL STRAP AND AN ENGRAVED NON FERROUS METAL LABEL ATTACHED. LABEL TO BE ENGRAVED WITH 8mm UPPER CASE WORDING: 'FIRE SERVICE VALVE - CLOSE ONLY TO SERVICE FIRE HOSE REELS'.
- ALL SERVICES INSTALLED ADJACENT THE BUILDING ARE TO BE LOCATED OUTSIDE THE ZONE OF INFLUENCE AS PER AS3500.
- ALL HYDRANT PIPEWORK TO BE BLUE BRUTE CLASS 16 INGROUND OR GALVANIZED STEEL ABOVE GROUND TO COMPLY WITH AUSTRALIAN STANDARDS. ALL BLUE BRUTE PIPEWORK TO BE SUPPORTED BY THRUST BLOCKS.
- WHERE PIPEWORK IS LIKELY TO BE EXPOSED TO FIRE IN AN AREA WITHIN A BUILDING THAT IS NOT PROTECTED BY SPRINKLERS, PIPE-SUPPORTS SHALL BE INSTALLED WITH A MINIMUM FRL NOT LESS THAN 60/-. THE PIPE-SUPPORTS ARE REQUIRED TO HAVE A TEMPERATURE RESISTANCE OF NOT LESS THAN 500°C WHEN TESTED IN ACCORDANCE WITH AS1530.4.

**LEGEND:**

EXISTING SPRINKLERS 

PROPOSED SPRINKLERS 



EXISTING IN-GROUND FIRE SPRINKLER STORAGE TANK TO REMAIN IN SERVICE.

EXISTING 225mm FIRE SPRINKLER & 150mm FIRE HYDRANT PIPEWORK AT HIGH LEVEL CLIPPED TO THE WALL. THE PLUMBING CONTRACTOR IS TO LOCATE, MODIFY, EXTEND & CONNECT AS SHOWN. NEW PIPEWORK TO DROP FROM HIGH LEVEL & RUN WITHIN GROUND TO THE PROPOSED MATERIALS HANDLING SHED

EXISTING HYDRAULIC & FIRE SYSTEM COMPONENTS AS PER BELOW TO REMAIN IN SERVICE:

- FIRE HYDRANT BOOSTER ASSEMBLY WITH DDCV.
- DDCV.
- FIRE SPRINKLER BOOSTER ASSEMBLY.
- LARGE BORE / SMALL BORE DRAUGHTING POINT.
- WATER METER ASSEMBLY.

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NEW FIRE SPRINKLER & FIRE HYDRANT PIPEWORK FROM EXISTING FIRE SYSTEMS TO EXTEND & CONNECT TO THE NEW PROPOSED WEIGHBRIDGE & OFFICE SHED FIRE SPRINKLER & HYDRANT SYSTEMS. TO BE DOCUMENTED ON FUTURE DETAILED PROPOSED WEIGHBRIDGE & OFFICE SHED DRAWINGS.

NEW FIRE SPRINKLER & FIRE HYDRANT PIPEWORK FROM EXISTING FIRE SYSTEMS TO EXTEND & CONNECT TO THE NEW PROPOSED MATERIALS HANDLING SHED FIRE SPRINKLER & HYDRANT SYSTEMS. TO BE DOCUMENTED ON FUTURE DETAILED PROPOSED MATERIALS HANDLING SHED DRAWINGS.

EXTEND & CONNECT NEW SPRINKLERS TO EXISTING 225mm SPRINKLER SUPPLY.

**PROPOSED WEIGHBRIDGE & OFFICE SHED TO BE PROVIDED WITH FIRE SPRINKLERS, FIRE HYDRANT COVERAGE & FIRE HOSE REEL COVERAGE.**

EXTEND & CONNECT NEW SPRINKLERS TO EXISTING 225mm SPRINKLER SUPPLY.

EXISTING SPRINKLERS TO REMAIN

EXTEND & CONNECT NEW SPRINKLERS TO EXISTING 225mm SPRINKLER SUPPLY.

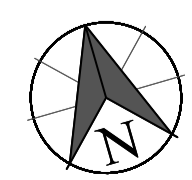
APPROXIMATE LOCATION OF EXISTING 3x Ø100mm COMMS CONDUIT UNDERGROUND FOR FIRE DETECTION & ALARM CABLING.

EXISTING DUAL DIESEL FIRE SPRINKLER PUMPSETS WITHIN PUMP ROOM TO REMAIN IN SERVICE.

EXISTING POTABLE WATER PIPEWORK. THE PLUMBING CONTRACTOR IS TO LOCATE, MODIFY, EXTEND & CONNECT AS SHOWN.

**PROPOSED MATERIALS HANDLING SHED TO BE PROVIDED WITH FIRE SPRINKLERS, FIRE HYDRANT COVERAGE & FIRE HOSE REEL COVERAGE.**

MECHANICAL — ELECTRICAL — HYDRAULIC — FIRE — ENERGY — NABERS — STORMWATER — SECTION J — BEEC



Rev	Date	Reason for Issue
3	21.10.25	FOR INFORMATION
2	10.10.25	FOR INFORMATION
1	09.10.25	FOR INFORMATION

SS	CB
CM	CB
CM	CB
Drawn	Design
Verify	

Project  
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