WASTE MANAGEMENT PLAN

Project Details

Project Name:	Huntingwood Processing Expansion
Project Number:	250093
Project Location:	65 Huntingwood Drive, Huntingwood
Client:	Charter Hall Holdings Pty Ltd
Project Manager:	Steve Somerville
Date Work is to Commence (approx.)	Early 2022
Estimated Duration of Work:	18 Months
Name of Principal Contractor:	FDC Construction (NSW) Pty Ltd
Company Address:	22 – 24 Junction St, Forest Lodge 2037
ABN:	72 608 609 427

Approvals

Project Manager:	Steve Somerville	**Signature:**		**Date:**	
General Manager:	Sean Gibbeson	**Signature:**		**Date:**	
Divisional IMS Manager:	Joe Abraham	**Signature:**		**Date:**	

Rev Date	REVISION DESCRIPTION	PM's INITIALS (acceptance of changes)
30/06/21	Revision A – Project Start	

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1. Overview

This report has been prepared in accordance with the technical requirements of the Secretary's Environmental Assessment Requirements (SEARs) for the design, construction and operation of a processing facility located at 65 Huntingwood drive, Huntingwood. This report addresses the following SEARs:

1) Details of the quantities and classification of all waste streams to be generated on site during the development.

2) Details of the waste management strategy for construction and ongoing operational waste generated, including plans of waste storage and collection areas.

3) The measures the would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the NSW Waste Avoidance and Resource Recovery Strategy 2014 – 2021.

The purpose of this Waste Management Plan is also to outline the proposed method to deal with construction waste throughout the entire construction phase of the building from demolition and excavation through to building fitout, landscaping and handover as well as the operational waste that the existing and proposed facilities produce.

The method of dealing with construction and operational waste is consistent throughout to ensure that our environmental obligations are being met. The tables in section 9 of this report indicate the estimated quantities of waste to be generated and the Figures 1 and 2 on the following pages nominate stockpile/collection points.

The plan outlines how we propose to achieve the project requirements.

2. Environmental Management and Compliance

FDC offer a waste management service in accord with the Protection of the Environment Operations Act 1997 and the Waste Minimisation and Management Act 1995.

Clients of FDC are secure in the knowledge that their waste is being disposed of according to environmental protection legislation and the principles of ecologically sustainable development. FDC has in place, as a major part of our business, a materials recovery and recycling programme that exceeds the objectives of the waste minimisation and management legislation.

3. Waste Regulatory Framework

3.1 Legislation

The disposal of wastes in New South Wales is under the control of the Environmental Protection Authority. The EPA administers the Protection of the Environment Operations Act and associated legislation and regulations.

3.2 Due Diligence

Companies and individuals are required to act with due diligence in respect of the disposal of the waste they generate. Companies and individuals are exercising due diligence by using appropriate organisations to dispose of waste.

Due diligence may be considered to be the legal opposite of negligence. If due diligence is not exercised then negligence may be considered to have occurred. Due diligence applies to both a requirement to act and to a failure to act, thus commission and omission of actions. Due diligence applies to companies, company Directors and employees. Due diligence means that companies and individuals have all the reasonable means to ensure that legal obligations have been met.

For waste management, due diligence requires both the waste producer and the waste collector to mutually exercise:

a) Duty of care, and
b) Duty of disclosure

3.3 Waste Avoidance and Recovery Strategy 2014 – 2021

The NSW Government's Waste Avoidance and Resource Recovery strategy is a key component of the Government's vision for the environmental, social and economic future of the state. The strategy is based on long-term targets across six results areas as follows:

1) Avoid and Reduce Waste Generation
2) Increase Recycling
3) Divert More Waste from Landfill
4) Manage Problem Wastes Better
5) Reduce Litter
6) Reduce Illegal Dumping

The strategy also targets the following:

- Increased recycling rates for construction and demolition waste to 80%
- Increased recycling rates for commercial and industrial waste to 70%

It is anticipated that the waste minimization measures in the following sections will assist the Project to meet these targets. Waste reporting and audits can be used to determine the actual percentage of wastes that have been recycled during the demolition and construction stages of the project.

4. Recycling

Recycling is a vital means whereby Australia's natural resources are conserved and efficiently utilised. FDC aim is to develop a waste management system centred on resource recovery and recycling.

4.1 Option 1: On-site Recycling

The efficiency of on-site recycling depends on the anticipated waste stream types and quantity along with space being available (and suitable) to house the bins required.

The on-site separation of scrap metals such as aluminum, copper pipe and wire, lead and steel is viable. Bins will be identified clearly on sites to aid in the separation of materials. FDC will work together to reduce waste coming to site.

Site conditions permitting separate on-site bins for cardboard and paper are also possible and FDC have committed to provide a paper bin for use on site for this purpose.

FDC feel that off-site recycling is the more viable option for all other wastes.

4.2 Option 2: Off-site Recycling

Off-site recycling is the most appropriate course of action for mixed waste streams and sites with minimum room or access difficulties.

At the landfill and recycling facility, it is possible to sort and recycle wastes coming in. This sorting and recycling includes the recovery and production of the following materials:

- Paper/cardboard Glass
- Steel – OSI and Black Iron
- Non-ferrous metals such as: lead, copper, electrical cable, brass and aluminium, all of which are sorted and sent to the appropriate processing plants.
- Timber, such as formwork pallets, hardwood, oregon and the like are sorted for reuse with the remainder being processed to make woodchip.
- Plasterboard and Gyprock are transformed into soil conditioners. Green waste is transformed into mulch.
- Problem waste such as tree stumps and plastics are all processed or recycled to avoid the potential problems that wastes such as these cause at landfills.

All hard-core materials such as bricks, mortar, concrete, dirt, soil, sand, tiles and stone are either stacked for reuse or reprocessed into high quality raw materials such as road base, aggregates for drainage, fill sand, soil and turf underlay etc.

5. Definitions of Waste

5.1 Wastes

Wastes are described by many different names and come in many different types i.e. industrial, commercial, building and demolition, clinical, solid, domestic, putrescible, non-putrescible, hazardous, household, inert, municipal and trade waste. They are defined for regulatory purposes in the Protection of the Environment Operations Act.

For practical purposes, New South Wales has adopted a waste management hierarchy that prioritises ecological sustainable waste solutions.

The hierarchy consists of:

1. Avoiding waste
2. Reusing materials
3. Recycling and reprocessing materials
4. Waste disposal

6. Waste Management

Wastes need to be managed in order to comply with every aspect of the legislation covering wastes. The waste management service provided by FDC is a total waste management service. By engaging FDC to manage wastes, a waste generator has exercised complete due diligence. FDC assumes the responsibility and requirement for the correct collection, transport, storage and disposal of wastes.

Soil materials to be disposed of offsite (if applicable), will be classified and managed in accordance with the NSW EPA (2014) Waste Classification Guidelines.

The waste management service of FDC covers all aspects of all wastes, a complete and thorough service to assist industry, a significant service that is keeping Australia clean.

Arnott's Biscuits Limited is the operator of the existing and proposed food processing facility. Ongoing management of waste is a current requirement of the existing site that is managed by staff via existing waste contracts. The ongoing waste management is proposed to continue under the same requirements, contracts and processes. The existing and proposed waste storage and collection areas for the operation of the facility is attached to this report.

7. Ecologically Sustainable Development

Ecologically sustainable development as the fundamental tenant of Australian business stems from the Intergovernmental Agreement of the Environment between Australian Commonwealth, State, Territory and Local Governments on ecologically sustainable development made in May 1992. FDC fully endorses and is committed to the four principles which constitute ecologically sustainable development.

7.1 Principle 1: The Precautionary Principle

For general hard wastes, there is a great deal of scientific certainty concerning their treatment, storage, transport and disposal. Such materials, in general, have been used by society for millennia. For special wastes, FDC applies the measures and procedures for handling and disposal required by NSW legislation. These measures and procedures are designed to ensure the known and suspected effects of such materials are controlled.

7.2 Principle 2: Inter-generational Equity

Resource recovery and recycling as carried out by FDC together with corresponding savings in fossil fuel energy and more efficient use of landfill sites are direct, positive and practical measures to provide for inter-generational (future generations) and intra-generational (present generation) equity.

7.3 Principle 3: Conservation of Biological Diversity and Ecological Integrity

Disposal of waste by FDC is at a designed licensed landfill site. The site has detailed rehabilitation plans to ensure the biological diversity and ecological integrity of the site and its environs. The recovery and recycling of resources conserves resources and consequently minimises the impact of the initial production of resources on the biological diversity and ecological integrity of land.

7.4 Principle 4: Improved Valuation and Pricing of Environmental Resources

FDC applies control measures in the treatment, storage, transport and disposal of waste materials to minimise air, water and noise pollution. These control measures are the means whereby the valuation of the environmental resources of air quality, water quality and area amenity is enhanced.

8. Conclusion

FDC's clients can feel secure in the knowledge that their waste is being disposed of and recycled according to environmental protection legislation and the principles of ecologically sustainable development.

Recycling Reports are a key feature of FDC's waste management services and can be provided to clients at the end of each month indicating the recycling results achieved by individual sites. This allows our clients the confidence of knowing they are achieving Government standards and meeting all reporting requirements.

9. Waste Estimates

Refer to the tables on the following page

STAGE 1- CONSTRUCTION STAGE

Project: Huntingwood Processing Expansion

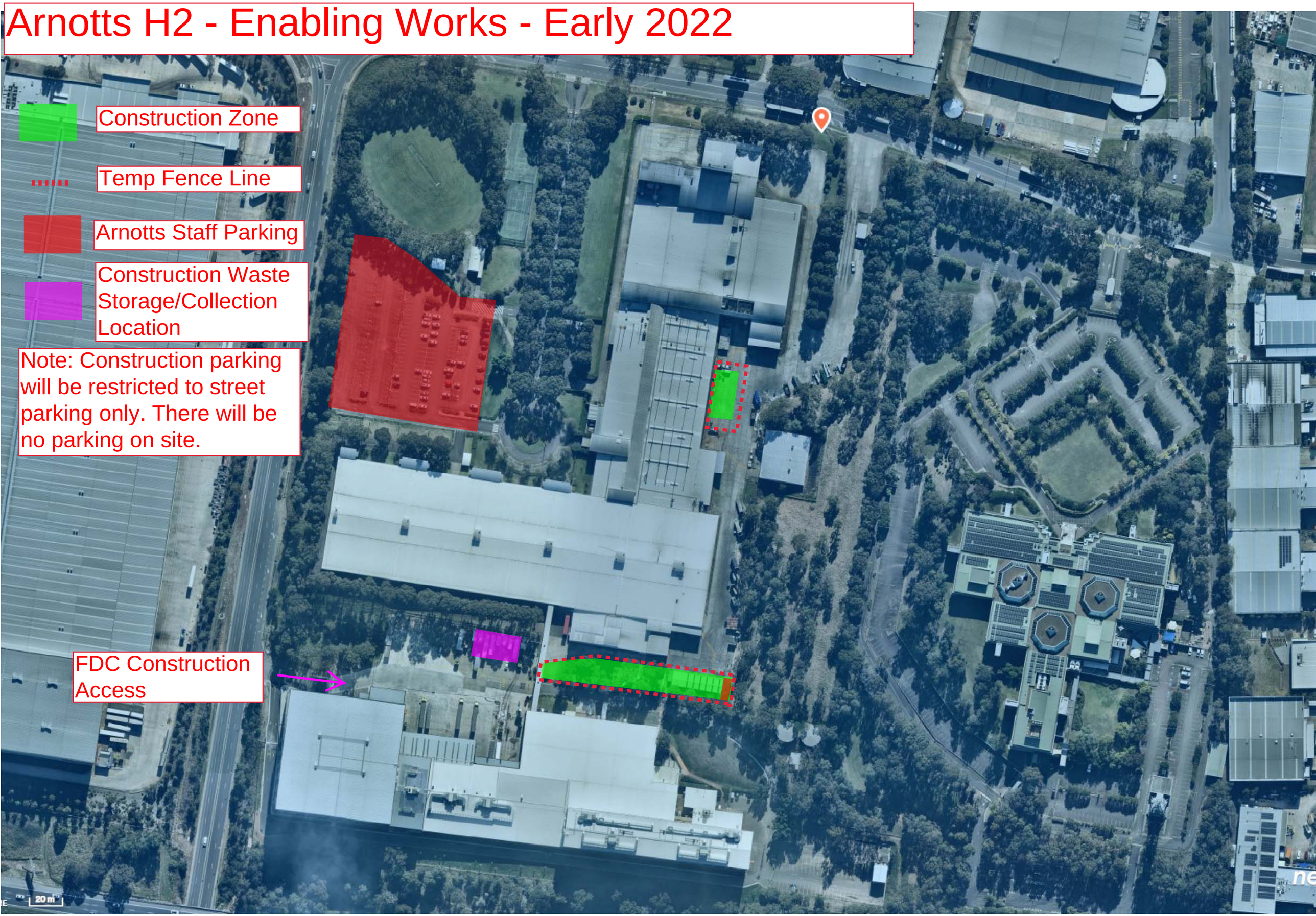
Waste to be Generated		DESTINATION		
		REUSE AND RECYCLING		DISPOSAL
Type of Material	Estimated Volume (m^3)	**ON-SITE** • Specify proposed reuse or on- site recycling methods.	**OFF-SITE** • Specify contractor and recycling outlet.	• Specify contractor and landfill site.
Excavation Material	23,000m^3 of import fill	Equal cut to fill on site proposed with balance of material to be imported. Keep and reuse topsoil where possible.		
Green Waste	500m^3	Nominated planting and tree material to be chipped and re-used on site where possible.	Use off site as mulch if possible.	
Concrete	100m^3	Crush and use on site in fill. Surplus Concrete to be removed from site.	To be crushed and recycled.	
Timber	20m^3	Chip timber and use in landscaping where possible.	Recycled via waste transfer depot through bin contractor for recycling.	

Plaster board	50m^3		Excess/waste plaster board to be removed from site	To landfill via waste transfer depot through bin contractor.
General construction waste	500m^3		Recycled or removed from site through bin contractor	
Cardboards and Paper		Cardboard/paper bin dedicated to site.	Recycled via waste transfer depot (site rubbish skip service)	
Other- Putrescible waste				To landfill via waste transfer depot through bin contractor.
Non-recyclable waste				To landfill via waste transfer depot through bin contractor.
Metals	20m^3	All existing metalwork to be removed from site.	Recycled via waste transfer depot through bin contractor for recycling.	

STAGE 2- USE OF PREMISES (Existing and Proposed) Project: Huntingwood Processing Expansion

MATERIALS ON-SITE		DESTINATION	
		REUSE AND RECYCLING	DISPOSAL
Expected Waste Materials	Estimated Volume per week (m^3)	• On-Site Storage and Treatment	• Specify contractor and landfill site.
General Waste	130m3	5 x 1.5m^3 Bins Emptied Weekly 1 x 3m^3 Hook Bins Emptied Weekly 2 x 30m^3 Hook Bins Emptied Weekly 2 x 30m^3 Compactors Emptied Weekly	Landfill or equivalent
Comingled Waste	2.5m3	Compactor, emptied ~3x/wk	Recycling Facilities
Metal Waste	5m3	15m3 Steel bin emptied once every three weeks	
Cardboard	73m3	2 x 35m^3 Compactors Emptied Weekly 1 x 3m^3 Emptied Weekly	
Hazardous Waste	8m3	4 x 2m^3 Marrell Bins Emptied Weekly 2m^3 Grease trap Emptied Quarterly	

Arnotts H2 - Enabling Works - Early 2022



Arnotts H2
Stage 1 - Site Layout

Duration: From Q2 2022 for Approximately 6 Months

Construction Zone

Perimeter Fence

H1 Access Route

Arnotts Staff Parking

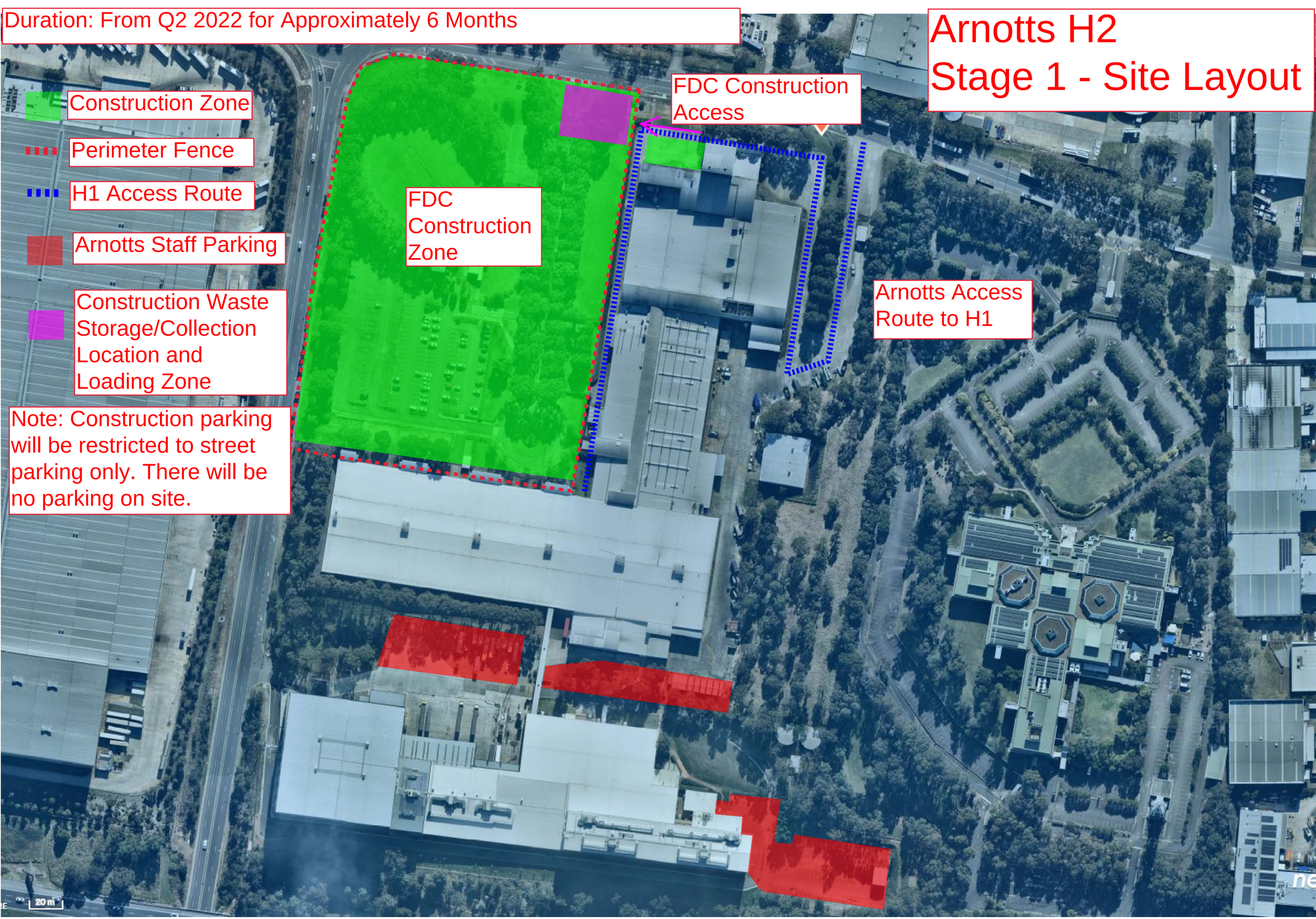
Construction Waste Storage/Collection Location and Loading Zone

Note: Construction parking will be restricted to street parking only. There will be no parking on site.

FDC Construction Zone

FDC Construction Access

Arnotts Access Route to H1



Duration: From Q3 2022 Until Completion

Arnotts H2
Stage 2 - Site Layout

Construction Zone

Perimeter Fence

H1 Access Route

Arnotts Staff Parking

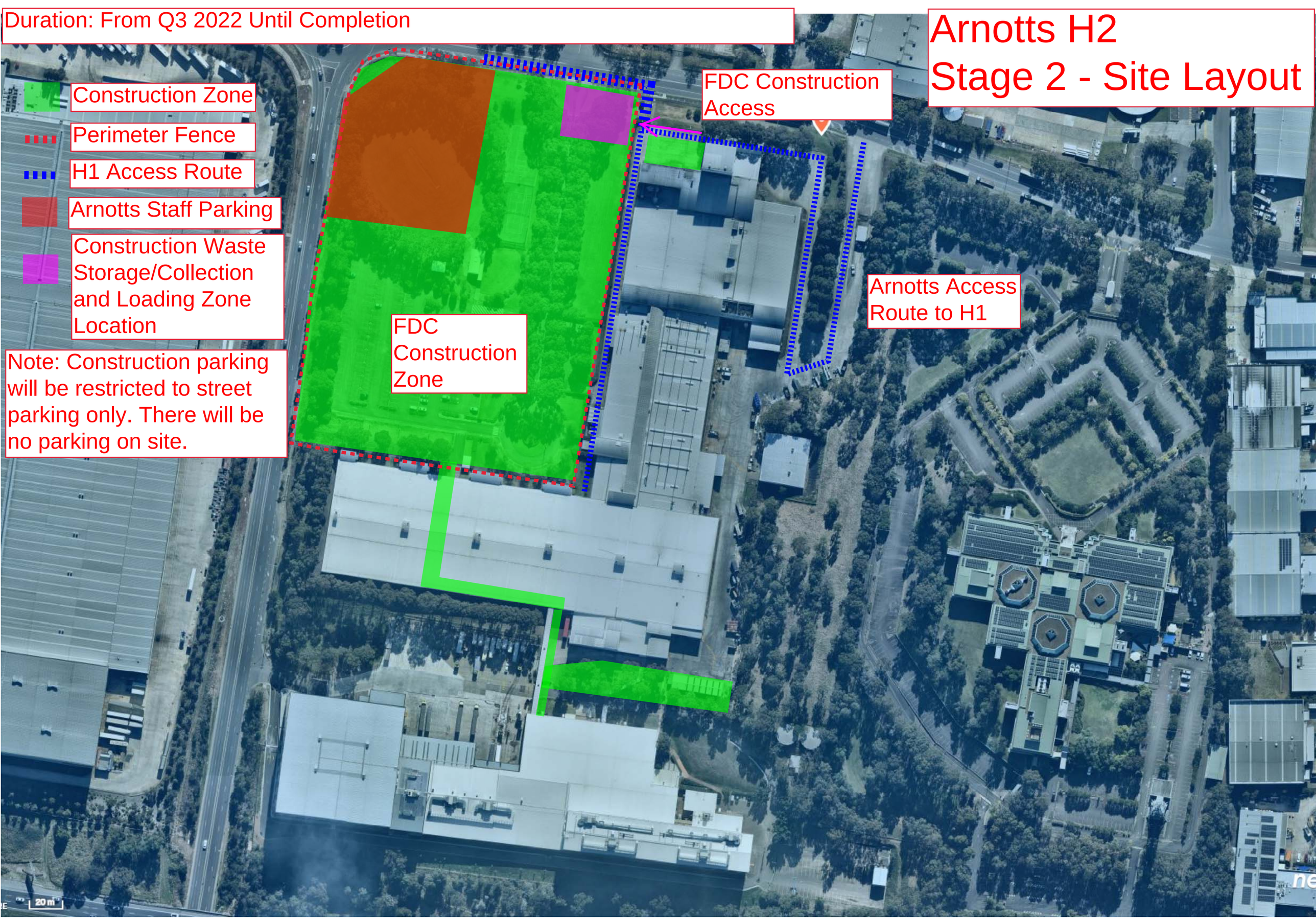
Construction Waste Storage/Collection and Loading Zone Location

Note: Construction parking will be restricted to street parking only. There will be no parking on site.

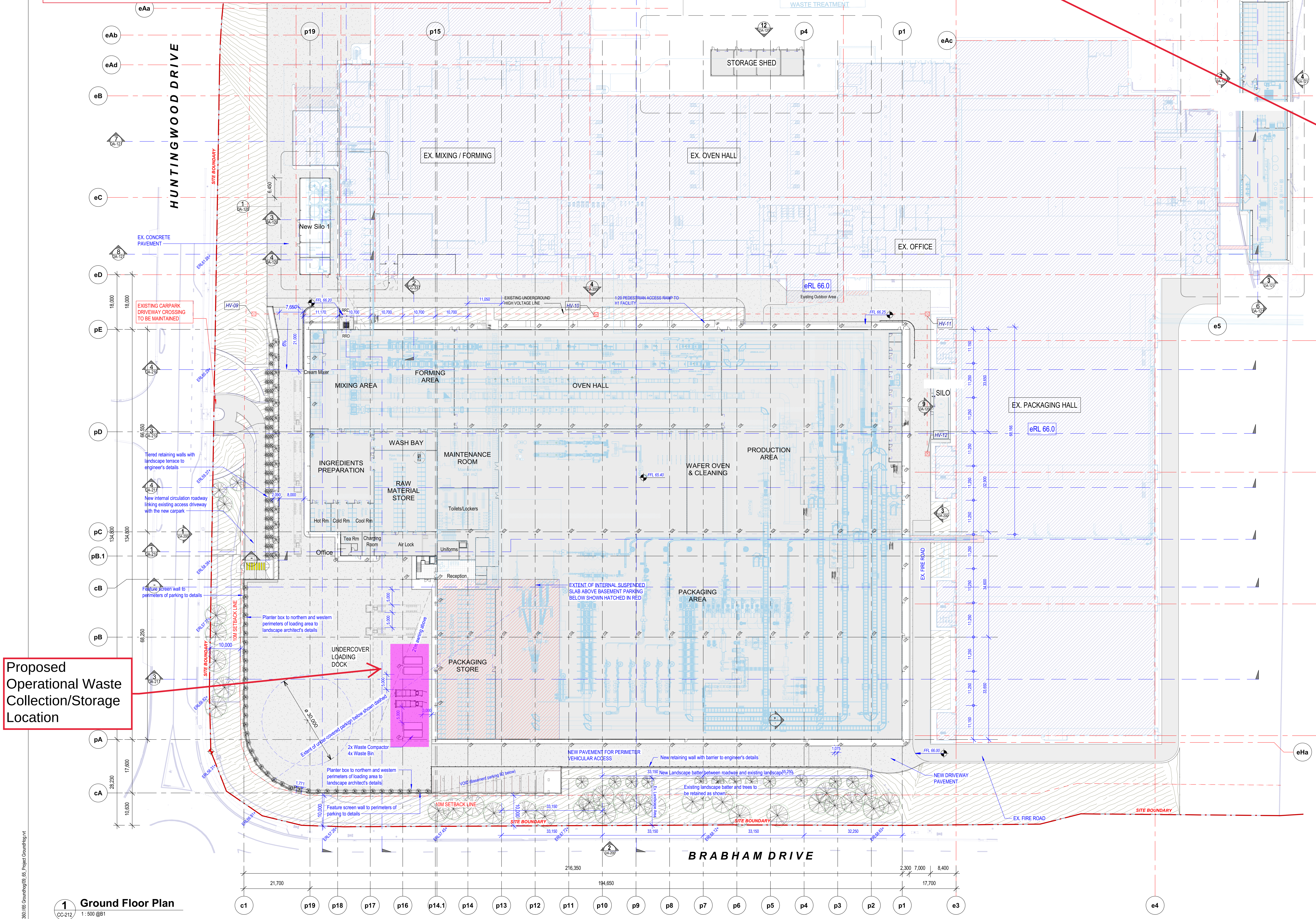
FDC Construction Access

FDC Construction Zone

Arnotts Access Route to H1



Huntingwood Processing Expansion - Operational Waste Storage / Collection Locations



1 Ground Floor Plan
CC-212 | 1 : 500 @B1

TOTAL DEVELOPMENT AREA	
TOTAL SITE AREA	163,933 sqm
TOTAL BUILDING AREA (Existing & New)	104,342 sqm
TOTAL SITE COVERAGE	63.65%

BUILDING AREA SUMMARY (SEARs)	
SITE AREA	163,933 sqm
Ex. HIGH BAY STORAGE & PACKAGING WAREHOUSE (At southern end of the site fronting M4 Motorway)	Approx. 19,089 sqm
Ex. MANUFACTURING BUILDING (At nothern end of the site fronting Huntingwood Drive)	Approx. 39,943 sqm (Estimate)
TOTAL ESTIMATED EXISTING BUILDING AREA	59,032 sqm
PROPOSED MANUFACTURING BUILDING (GROUND FLOOR)	23,695 sqm
PROPOSED INTERNAL WALKWAYS & PLATFORM	800 sqm
PROPOSED AMENITIES (1ST FLOOR LEVEL)	1,080 sqm
PROPOSED PLANT ROOM (2ND FLOOR LEVEL)	2,435 sqm
PROPOSED BASEMENT CAPARK (2 levels)	14,710 sqm
PROPOSED SILO 1 (4 levels)	1,000 sqm
PROPOSED CHOCOLATE MANUFACTURING BLDG.	1,200 sqm
PROPOSED STORAGE SHED	270 sqm
PROPOSED CHOCOLATE SILO	120 sqm
TOTAL NEW BUILDING AREA	45,310 sqm
Ex. CAR PARKING	95 spaces
CAR PARKING PROVIDED	468 spaces
TOTAL CAR PARKING SPACE	563 spaces

* All existing and new building areas shown are high level estimates only

ALL LEVELS ARE INDICATIVE ONLY AND SHOULD BE READ IN CONJUNCTION WITH CIVIL ENGINEER'S DRAWINGS FOR FINAL LEVELS OF ALL EARTHWORKS.

ALL LEVELS ARE TO BE +/-1000MM

DEVELOPMENT APPLICATION

PROJECT: CHARTER HALL - HUNTINGWOOD
ADDRESS: Lot 1 DP866251, 65 HUNTINGWOOD DRIVE, HUNTINGWOOD, NSW 2148
PROJECT NUMBER: 200810

Rev	Description	Date
M	Coordination Issue	16.02.21
N	Cooridination Issue.	04.03.21
O	Cooridination Issue.	11.03.21
P	Cooridination Issue.	18.03.21
Q	SEARs application Issue	24.03.21
R	Draft planning submission set.	18.06.21

General Notes:-
Architectural drawings to be read in conjunction with all other consultants detailed drawings, specifications & reports.
Do not scale this drawing. Verify all dimensions on site.
Refer all discrepancies to HLA before commencing any work.

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DRAWING TITLE: Ground Floor (Manufacturing Level)
DRWN: AB
CHK: HL
DRAWING NUMBER: 200810- -DA-003- R